NEA
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FINAL
FORMER STEWART AIR FORCE BASE (AFB)
HTRW INVESTIGATION

NEWBURGH, NEW YORK

Contract Number: DACW51-97-D-0010
Delivery Order No. 61

Prepared for:

U.S. Army Corps of Engineers
New York District
26 Federal Plaza
New York, New York 10278-0090

Prepared by:

Ogden Environmental and Energy Services Co., Inc.
Northern Ecological Associates, Inc.

MARCH 2000

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EXECUTIVE SUMMARY

Ogden Environmental and Energy Services Co., Inc. (Ogden) was assigned by Northern Ecological Associates, Inc. (NEA) to collect soil, ground water, sediment and surface water samples at the former Stewart Air Force Base (AFB), Newburgh, New York. The objective of the project was to supplement prior Hazardous, Toxic, and Radiological Waste (HTRW) investigations performed at the site and provide current information regarding the presence of HTRW contaminants associated with Area One, a former fuel tank farm, and Area Two, a former base landfill. In addition, the sampling program was designed to allow for an evaluation of the need for additional site characterization/remedial investigation or remedial action in these areas.

In accordance with the USACE-NYD approved Letter Work Plan (Ogden/NEA 1999), sampling activities were performed on October 13 and October 14, 1999. Within Area One, eight boreholes were advanced and a total of sixteen soil samples and one sample duplicate were collected; in addition, five ground water samples and one sample duplicate were obtained from the five existing monitoring wells located within this area. Area One samples were analyzed for volatile organic compounds (VOCs). Within Area Two, three sediment samples and three surface water samples (and duplicate samples from each matrix) were obtained within depositional (ponded) areas identified in the small tributary stream located to the east of the landfill. Area Two samples were analyzed for VOCs, semivolatile organic compounds (SVOCs), pesticides, PCBs, and metals.

Sample results were compared to current NYSDEC standards, *i.e.*, ***Recommended Cleanup Objectives for Soils*** (T.A.G.M. HWR-94-4046, January 24, 1994), ***Technical Guidance for Screening Contaminated Sediments for Sediments*** (Division of Fish and Wildlife/Division of Marine Resources, July 1994), and ***Ambient Water Quality Standards and Guidance Values*** for the surface and ground water data (T.O.G.S. 1.1.1, June 1998, as revised January 1999 and November 11, 1999).

The presence of fuel related contamination is evident in the results of analysis of soils and ground water within Area One. However, the concentration of contaminants in soil do not exceed NYSDEC cleanup objectives, and only limited ground water contamination was detected. While the detected ground water contamination exceeds quality standards, the contaminant concentrations are low, and do not appear to represent a concern relative to potential off-site human or ecological receptors.

A range of persistent contaminants (*i.e.*, polycyclic aromatic hydrocarbons (PAHs), pesticides, PCBs, and metals) were identified in sediment and surface water associated with the small tributary stream located to the east of the Area Two landfill. It is presumed that these contaminants are derived from surface water runoff from the landfill, discharge of ground water originating under the landfill, or both. Due to the presumed intermittent nature of the stream and

site access limitations, these constituents do not appear to represent a significant on-site risk to aquatic biota or potential human receptors.

A potential risk to off-site receptors exists from Area Two derived contamination in terms of: (1) downstream migration of contaminants to a presumably richer and more diverse aquatic population associated with a wetland area located to the south of State Route 207, and (2) migration of contaminants along deep ground water flow paths to adjacent domestic water supply wells.

In order to evaluate the potential for impact to off-site receptor populations, the following activities are recommended:

- Surface water and sediment sampling at several progressive downstream locations along the tributary stream (and at its discharge within the wetland area) for the target compounds identified during the Area Two HTRW investigation;

- Verification of the presence or absence of domestic water supply wells in the vicinity (east-southeast) of Area Two through detailed review of records and consultation with the Town of New Windsor Water Department; and

- If identified, sampling of local domestic water supply wells for the target compounds identified during the Area Two HTRW investigation.

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1.0 INTRODUCTION

The U.S. Army Corps of Engineers (USACE), under direction from the Superfund Act, implements The Defense Environmental Restoration Program (DERP). The goal of this program is to evaluate and remediate contamination at both active and formerly used defense sites (FUDS), the result of maintenance and manufacturing operations at these installations.

The USACE currently uses the Relative Risk Site Evaluation Program (RRSEP) to evaluate human health and ecological risk posed by potential DoD-related hazardous, toxic, and radiological waste (HTRW) at DERP sites, and compare potential hazards at a specific site with other sites throughout the nation for budget allocation purposes. HTRW analytical data must be collected at these sites to evaluate potential hazards using RRSEP.

Under Delivery Order 0061 of contract DACW51-97-D-0010 between Northern Ecological Associates, Inc. (NEA) and the U.S. Army Corps of Engineers - New York District (USACE-NYD), Ogden Environmental and Energy Services Co., Inc. (Ogden) was assigned to collect soil, ground water, sediment and surface water samples at the former Stewart Air Force Base (AFB), Newburgh, New York, in accordance with the USACE-NYD approved Work Plan (NEA/Ogden 1999). This report documents data collection activities at the former fuel tank farm and former base landfill located in the southern area of the AFB.

This report consists of the following six subsections: Site Background (Section 2.0), Sample Collection and Analysis (Section 3.0), Results and Discussion (Section 4.0), Conclusions and Recommendations (Section 5.0), References (Section 6.0), and Abbreviations and Acronyms (Section 7.0).

2.0 SITE BACKGROUND

2.1 SITE HISTORY

The project area is located at the former Stewart AFB (currently Stewart International Airport), located approximately 2.5 miles southwest of the City of Newburgh, Orange County, New York (Figure 2-1). Between 1939 and 1955, the United States of America acquired 1,899.94 acres fee and easements over 163.39 acres to establish Stewart AFB. The site was acquired by condemnation, purchase, and donation. The site was initially known as Stewart Field. In 1947, the site was transferred to the Air Force and the name was changed to Stewart AFB. The United States built runways, hangers, control towers, family housing units, barracks, command buildings, maintenance shops and all related ancillary buildings. The site was under DoD control during the period of DoD interest and ownership.

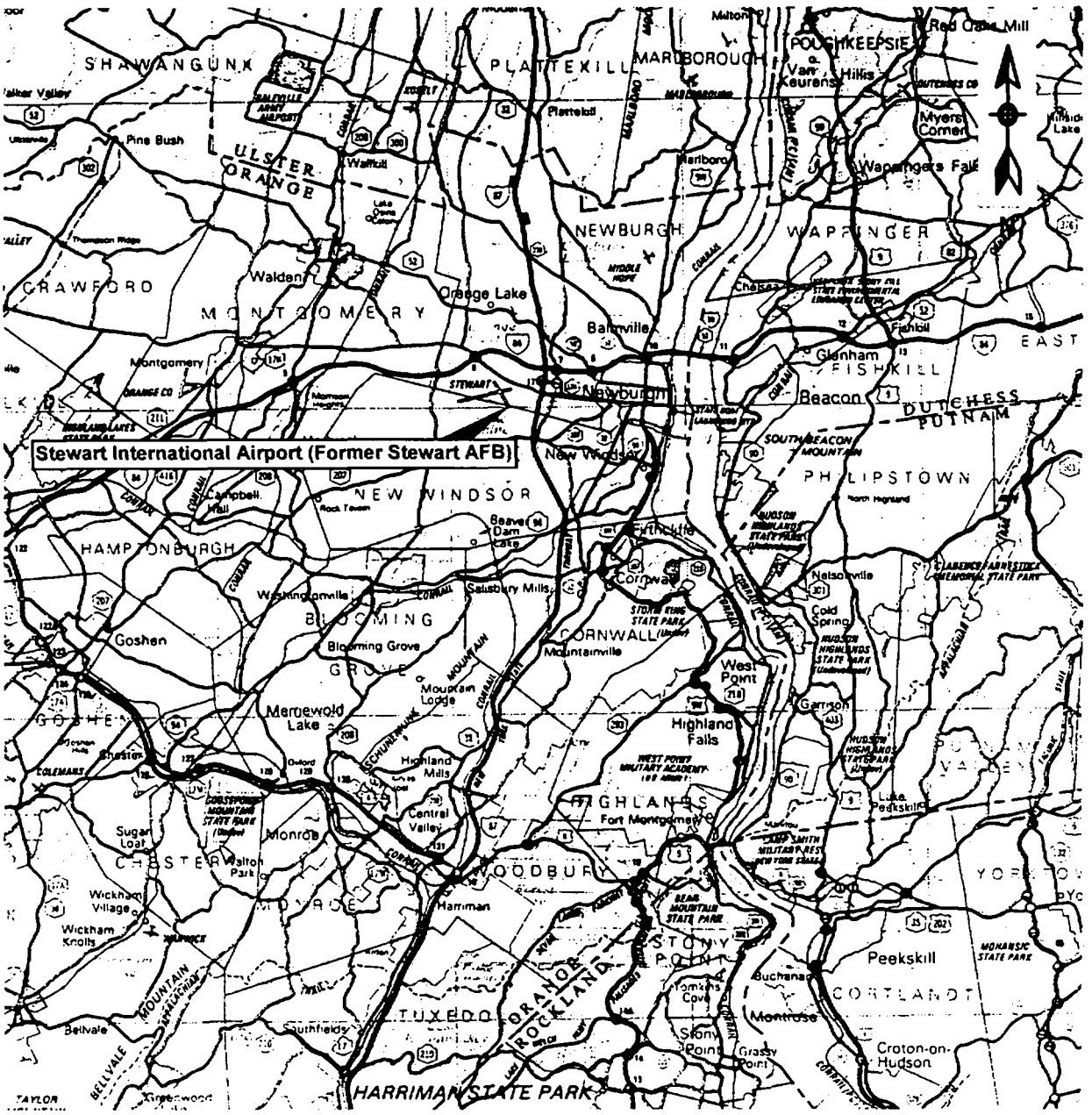
In June 1970, Stewart AFB was excessed to the General Services Administration (GSA) for disposal. By quitclaim deeds dated 26 July 1959, 16 October 1970, and 13 March 1974 and transfers dated 30 June 1971, 30 May 1972 and 8 January 1973, acreage was conveyed in fee and easement primarily (1,577.12 acres) to the Metropolitan Transit Authority (MTA), and transferred to the Department of the Army (320.30 acres); the latter currently remaining under the jurisdiction of the U.S. Military Academy (USMA) at West Point. The MTA deed restricted use to public airport purposes and contained a recapture clause. There was a provision requiring the grantee to keep and maintain the land and improvements for the use and benefit of the public as an airport, with the Federal Aviation Administration (FAA) having the authority to determine the useful life of any structure. There was no restoration provision.

By state legislature action, the acreage owned by the MTA was transferred to the New York State Department of Transportation (NYSDOT), which currently owns the airport site. Certain portions of the site are leased to others. One portion is leased to the New York Air National Guard (NYANG) and another portion is leased by Anheuser-Busch.

The Inventory Project Report (INPR), dated 30 June 1989, noted five areas at which site inspection had revealed potential HTRW, two of which represent the focus of this investigation, as follows (Figure 2-2):

Area One: A decommissioned (buried) fuel storage tank farm enclosed in a fenced area of approximately one-acre. Inspection revealed that there are ten 25,000-gallon tanks that formerly contained JP-4 aviation jet fuel. According to two reports by a private consultant contracted by Stewart International Airport, samples taken from various monitoring wells and borings indicated traces of distillate hydrocarbons in and adjacent to Area One. During construction of an Anheuser-Busch canning factory in 1987, NYSDOT encountered JP-4 contamination at the construction site located adjacent to Area One.

Area Two: The "old dump" for Stewart AFB, covering an area of approximately 2.8 acres. Part of this landfill had been exposed by excavation for a proposed road. Household garbage, demol-



0 4.75 9.5 miles

Approximate Scale

Source: New York State Atlas, NYSDOT, 1980
Orange County, P. 36
E.C. Jordan, 1988

Figure 2-1
Site Location Map
Former Stewart Air Force Base
Newburgh, New York

U.S. Army Corps of Engineers, New York District
DACW51-97-D-0010; Work Order No. 0061

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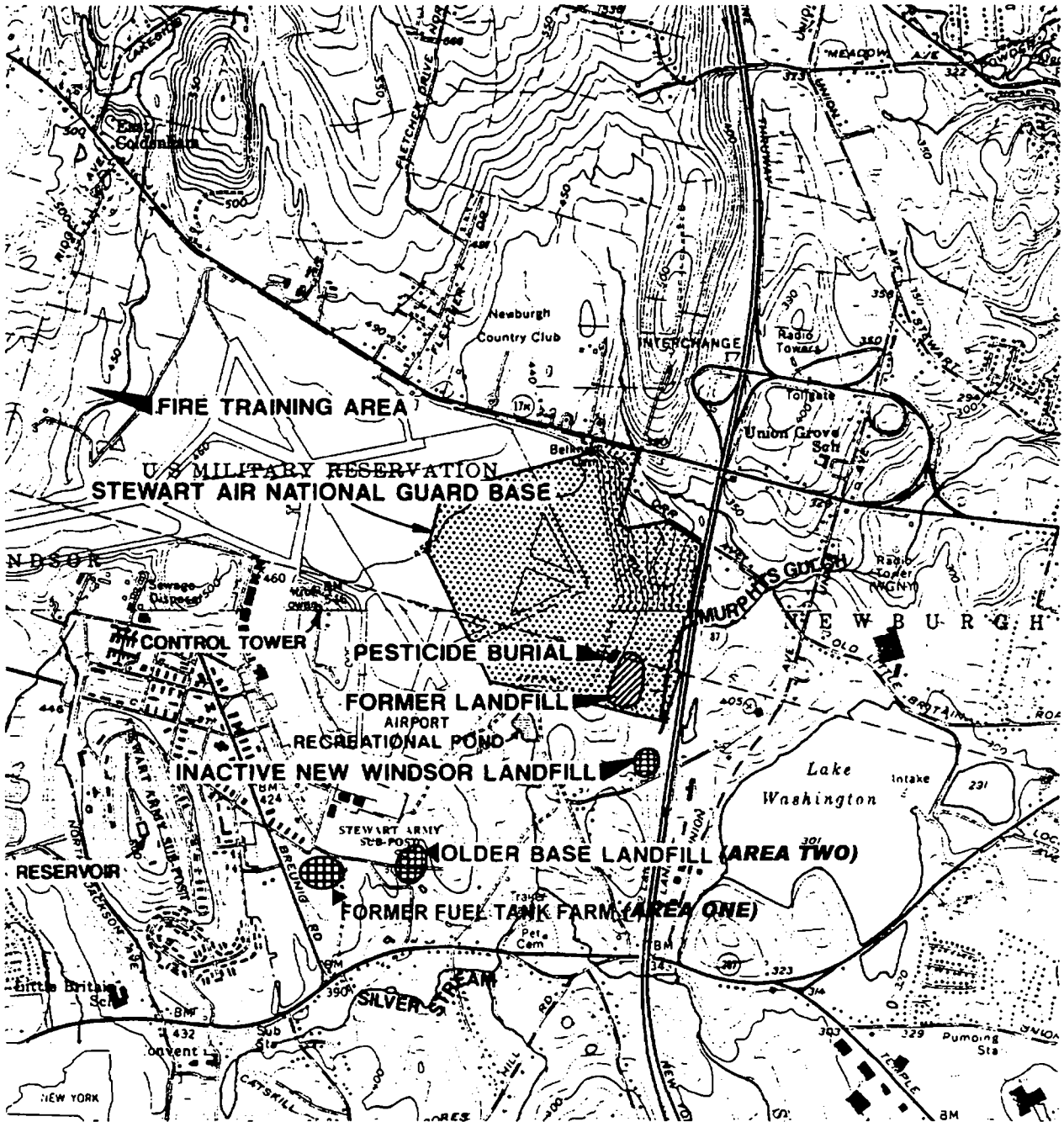

0 2,400 4,800 ft

Approximate Scale

Source: U.S. Geological Survey, 7.5 Minute Topographic Series; Newburgh, NY; Cornwall, NY
E.C. Jordan, 1988

Figure 2-2
Location of HTRW Investigation Areas
Former Stewart Air Force Base
Newburgh, New York

U.S. Army Corps of Engineers, New York District
DACW51-97-D-0010; Work Order No. 0061

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ished debris, and spent 105 mm blank artillery steel shell casings were observed lying on the surface. An intermittent stream runs along the eastern side of this area and past a trailer court on the southeastern boundary of the airport. Rusty colored water was seen seeping from the landfill into the stream. The stream was reported to flow into Lake Washington, the main reservoir for the City of Newburgh. Mr. Jack Stamant, the Chief Airport Engineer, had been alerted to the presence of the "orange fluid" in March 1988.

Current information and site inspection by Ogden and USACE personnel (September 20, 1999) has indicated that the three remaining areas identified in the INPR (Figure 2-2) either did not receive waste from Stewart AFB (*i.e.*, inactive Town of New Windsor Landfill), or are presently in the final stages of site remediation and closure (*i.e.*, the Stewart Air National Guard Base Former Landfill and Pesticide Burial area).

2.2 PRIOR SITE HTRW INVESTIGATIONS

No prior investigation data were available for review regarding prior site investigation at Areas One and Two. However, detailed data were reviewed regarding prior investigations at the former Air Force Landfill located on the New York Air National Guard (NYANG) Base, and an adjacent pesticide disposal area, both of which are located to the northeast of Area Two (Figure 2-2). Portions of these data are relevant to the current site investigation, and are summarized below (E.C. Jordan 1988).

In January 1994, NUS Corporation (NUS) under contract to the United States Environmental Protection Agency (USEPA) made an evaluation of ground water, surface water, soil, and sediment samples in the general area downgradient of the former Air Force Landfill and the adjacent inactive Town of New Windsor Landfill. Conclusions from this limited investigation included:

- The City of Newburgh's drinking water and water supply (Washington Lake) were free from hazardous substance contamination;
- Drinking water from private wells in the Town of New Windsor in the vicinity of Former Air Force Landfill and the inactive Town of New Windsor Landfill were free of hazardous substance contamination; and
- Surface water and sediments in Silver Stream, from its tributary origin at Stewart AFB to its diversion into the southern end of Washington Lake (Figure 2-2), were essentially free of hazardous substance contamination. Surface water, stream sediment, and soils in the vicinity of the former Air Force Landfill and the inactive Town of New Windsor Landfill contained several volatile organic compounds (VOCs) and pesticides; it was noted that these compounds could potentially impact Murphys's Gulch (Figure 2-2) downstream of the landfills.

Between September 1983 and March 1986, Dames and Moore conducted a series of investigations at the former Air Force Landfill, focusing on the pesticide disposal trench. Test pit excavations confirmed the presence of buried containers with various concentrations of DDT,

parathion, heptachlor, 2,4-D (2,4-dichlorophenoxy acetic acid), 2,4,5-T (2,4,5-trichlorophenoxy acetic acid), hydrofluoric acid, and sulfuric acid. Soil and ground water samples obtained from the installation of three monitoring wells adjacent to the pesticide pit indicated pesticide contamination to a depth of at least 45 ft below ground surface (bgs), and at least 30 ft from the disposal area. At that time, NYANG was believed to be implementing actions for removal of the pesticide and acid containers and some contaminated soils from the immediate vicinity of the disposal trench.

In support of a four phase Installation Restoration Program (IRP) at the Stewart NYANG base, E.C. Jordan Co. was assigned the task of acquiring site-specific data for the confirmation of contamination at the Former Air Force Landfill and adjacent pesticide disposal area. This work, performed primarily in the summer and fall of 1987, focused primarily on: (1) characterization of relevant geology and hydrogeology; (2) initial confirmation and quantification of contaminants; (3) identification of potential sources and receptors; and (4) determination of migration pathways.

Subsurface explorations were conducted at 11 locations, with multiple piezometers installed in the test borings at each location. In addition, four monitoring wells were installed as separate borings at four of the exploration locations. One water sample and three sediment samples also were collected. Eight soil samples were collected at depths ranging from 4 to 31 ft bgs from eight of the subsurface explorations. Ground water samples were collected once from each monitoring well. Samples were analyzed for VOCs, semivolatile organic compounds (SVOCs), pesticides/herbicides/polychlorinated biphenyl (PCBs), metals, chloride, fluoride, sulfate, and pH.

In addition to the above, geophysical investigations also were performed to map the extent of the former Air Force Landfill, and determine if a conductive plume of contaminated ground water emanating from the landfill could be identified. The magnetometer survey resulted in the identification of a landfill "footprint" on the order of 8.8 acres; the terrain conductivity survey was not able to differentiate shallow soil conductivity from the characteristics of deeper ground water flow.

- ***Site Geology and Hydrogeology***

Information from the subsurface investigations indicated a fairly uniform glacial till deposit over shale bedrock; the till ranged in thickness from several feet (near the eastern base of the former Air Force Landfill) to over 50 ft in the upland areas forming the western boundary of the landfill. The local geologic data conformed to published regional geologic conditions. The glacial till was determined to have a low to moderate permeability, with an average hydraulic conductivity of 4.2×10^{-5} cm/sec. The hydraulic gradient in the vicinity of the landfill was measured to be about 0.007 ft/ft. With an assumed porosity of 0.2, the average ground water velocity was estimated to be about 1.5 ft/yr. In general, the site is a recharge area above a shallow ground water system located in the till. The bedrock aquifer below the till is believed to be under confining conditions. Vertical ground water gradients between the bedrock and till are downward at most locations, ranging from 0.005 to 0.239; upward vertical gradients between

bedrock and till were noted in two lowland piezometer nests. Ground water flow in both the glacial till and bedrock is toward the east and southeast.

- ***Laboratory Analytical Results***

Results of chemical analysis of soil, sediment, ground water and surface water samples indicated that site contamination is apparently related to migration of the chlorinated pesticide residues 2,4'-DDT, 4,4'-DDT, 4,4'-DDD, and 4-4'-DDE from the disposal area. In the immediate vicinity of the disposal trench (pit), Dames and Moore had previously detected pesticide concentrations at low mg/kg concentrations in soils and at ug/L concentrations in ground water. Migration of pesticide residues was confirmed by E.C. Jordan in a ponded area approximately 450 ft northeast of the disposal trench area, at concentrations of low mg/kg in sediment, and ug/L in the surface water; pesticide contamination was not, however, detected in the monitoring wells installed at the eastern base of the Former Air Force Landfill. VOCs were identified in the ground water immediately downgradient of the landfill; however, only 1,1,1-trichloroethane (8.6 ug/L) was detected at a concentration above contract required detection limits (CRDLs).

- ***Preliminary Human Health Risk Assessment***

Based on the results of the initial site investigation, substantial migration of contaminants from the disposal area and landfill was not apparent. On-site soils and surface waters were not believed to represent plausible exposure pathways. Because municipal water is supplied to base personnel and most area residents, ground water was not expected to present a specific public health risk. The potential for deep migration of contaminants to wells located further downgradient than those sampled on site (coupled with a potential for vertical migration of contaminants from the till into the underlying bedrock), resulted in a recommendation for additional ground water sampling.

3.0 SAMPLE COLLECTION AND ANALYSIS

All data collection activities were completed at Stewart AFB in accordance with the site specific Letter Work Plan (LWP). The LWP (NEA/Ogden 1999) contained the following documents that described sample collection and analysis procedures: Management Plan, Field Sampling Plan, Quality Assurance Program Plan (QAPP), and Health and Safety Plan.

3.1 PROJECT OBJECTIVES

The objective of the sampling program was to supplement prior HTRW investigation performed at the site and/or provide current information regarding the presence of HTRW contaminants associated with Areas One and Two, to allow for an evaluation of the need for remedial action in these areas. In support of this objective, sixteen subsurface soil samples and five ground water samples (from existing wells) were collected in Area One, and three surface water samples and three sediment samples were obtained from depositional (ponded) areas in a stream located east of the Area Two landfill.

3.2 WORK PLAN MODIFICATIONS

Several modifications to the sampling specifications contained in the LWP were necessitated during the execution of project work due to various environmental conditions or constraints, as follows:

- **Area One:** No Modifications

- **Area Two:** ***Surface water and sediment samples***
  Four surface water/seep and sediment samples were specified in the LWP for collection adjacent to the Area Two landfill. Field reconnaissance of the area to the east of the landfill (topographic low) did not identify the presence of any seeps. Inspection of the stream corridor of a headwater tributary located to the east of the landfill identified three areas of sediment deposition (*i.e.*, ponded areas), where sample collection was feasible and appropriate. Consequently, three surface water and sediment samples were obtained from this area, rather than four samples specified in the LWP.

  Subsurface soil and ground water samples
  Three subsurface soil and three ground water samples were specified in the LWP for collection within the Area Two landfill. A hollow-stem auger drilling rig was mobilized to the Area Two landfill on October 14, 1999 for the collection of these samples. However, dense, compacted fill and construction debris limited penetration to a maximum of 10 ft through these materials. Several attempts were subsequently made to mobilize high torque air rotary drilling equipment to the site; however, local drilling contractor schedule constraints delayed mobilization until mid-January

2000. At that time, weather conditions (snow cover), and the lack of plowed access to the Area Two landfill precluded initiation of work. Consequently, no subsurface soil or ground water samples were obtained from the landfill.

3.3 SAMPLING PROCEDURES

Subsurface soil, sediment, surface water, and/or ground water sampling was performed at the two investigation areas. Sample locations are indicated on Figures 3-1 and 3-2, and survey coordinates of the borings and sample points (including the existing Area One wells) are contained in Table 3-1. Protocols for the sampling of each media, and the sample matrix associated with each investigation area are described below. A summary of daily sampling and quality control (QC) activities is contained in the Project Daily Chemical Quality Control Reports (DCQCRs) contained in Appendix A. In addition to sample duplicate collection, specified below by matrix, one matrix spike/matrix spike duplicate was obtained for each of the aqueous matrices, and three trip blanks and one field (rinsate) blank were processed for laboratory analysis.

3.3.1 Subsurface Soil Sampling

On October 14, 1999, sixteen soil samples and one sample duplicate were obtained from eight boreholes advanced within the former fuel tank area (Area One) using a Geoprobe®. The location of soil borings were determined in the field based on prior consultation with the USACE-NYD Technical Manager. Soil samples were obtained continuously within each boring from ground surface to the water table. General sampling procedures at each soil boring location were as follows:

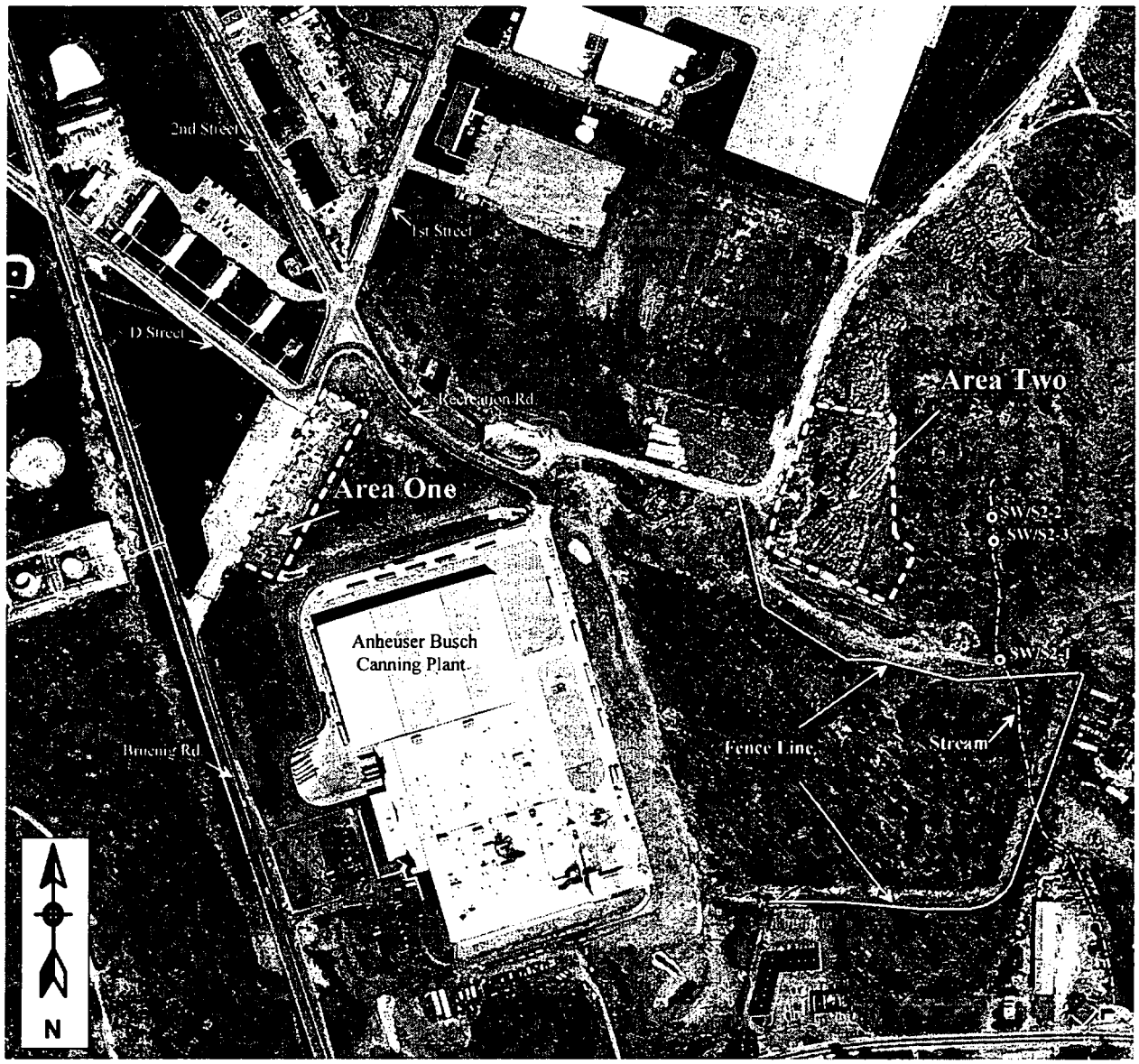
(1) Soil core was collected continuously in core samplers to the water table using direct push techniques.

(2) Soil lithology and characteristic features were described on a soil boring log. Core samples were field screened for total organic vapor concentration (TOVC) using a photo-ionization detector (PID).

(3) Two soil samples were obtained from each boring for chemical analysis based on (1) the sample increment exhibiting the highest recorded PID reading; and (2) the sample increment located immediately above the ground water table interface.

(4) Once test penetrations were completed, boreholes were filled to ground surface with a bentonite slurry.

Soil boring logs are contained in Appendix B.



Legend:
⊙ Surface Water/Sediment Sample Locations

0 400 800 ft
Approximate Scale

Source:
Robinson Aerial Survey 20-2861
Grevas & Hildreth, P.C. Land Surveyors, February 2000

Figure 3-1
Location of Study Areas One and Two
Area Two Surface Water/Sediment Sample Locations
Former Stewart Air Force Base
Newburgh, New York

U.S. Army Corps of Engineers, New York District
DACW51-97-D0010; Work Order No. 0061

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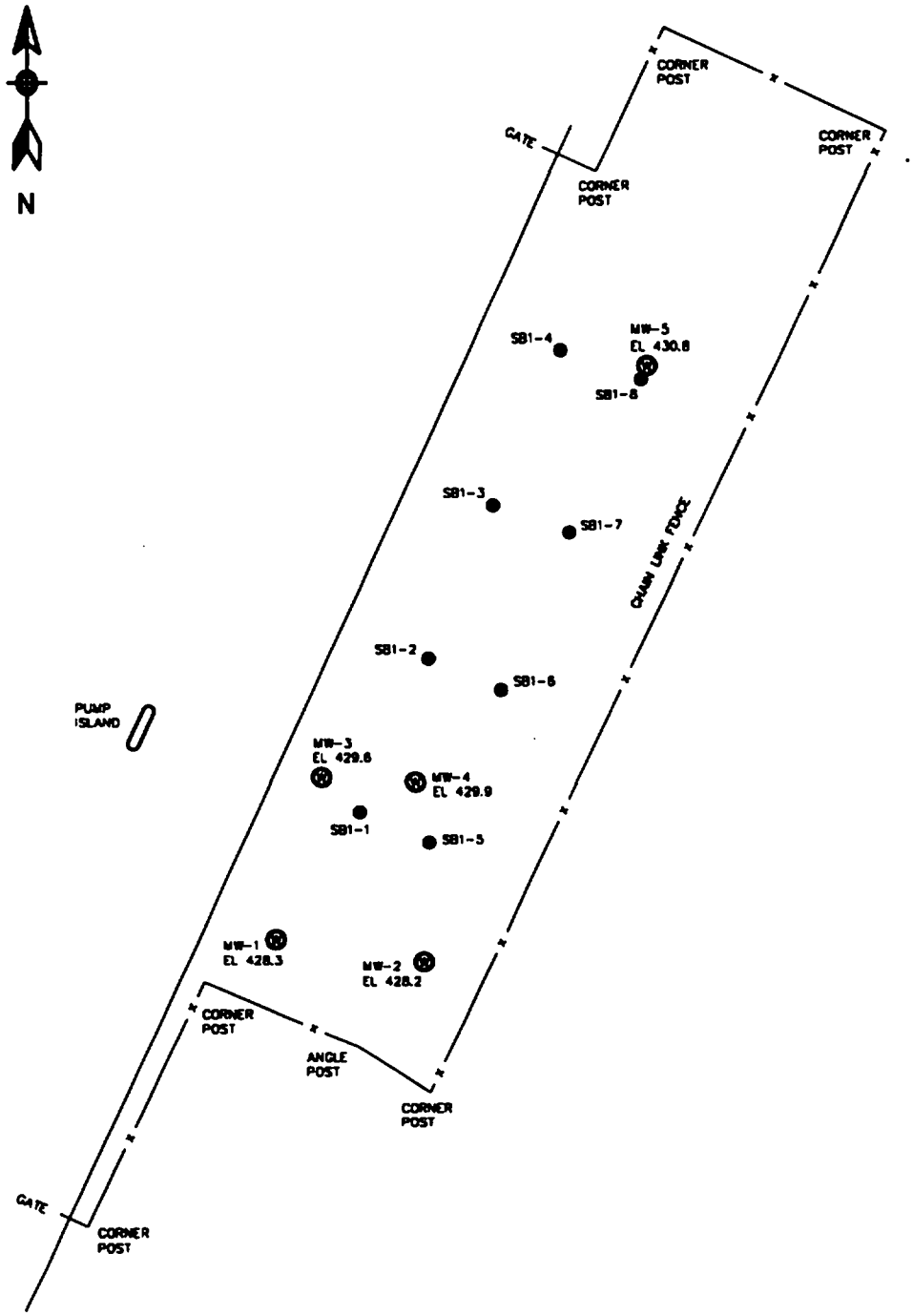

Legend:
- Existing Monitoring Wells
- Soil Boring Locations

0 75 150 ft
Scale

Source:
Grevas & Hildreth, P.C. Land Surveyors
February 2000

Figure 3-2
Sample Locations
Area One - Former Fuel Tank Farm
Former Stewart Air Force Base
Newburgh, New York

U.S. Army Corps of Engineers, New York District
DACW51-97-D0010; Work Order No. 0061

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Table 3-1: Survey Coordinates

Well ID	Easting	Northing
SB1-1	564,454.80	542,681.16
SB1-2	564,483.19	542,744.79
SB1-3	564,509.59	542,808.34
SB1-4	564,537.23	542,872.77
SB1-5	564,483.23	542,668.47
SB1-6	564,512.94	542,732.09
SB1-7	564,540.93	542,796.99
SB1-8	564,570.12	542,860.34
MW-1	564,420.33	542,628.97
MW-2	564,481.11	542,619.59
MW-3	564,439.32	542,695.63
MW-4	564,477.77	542,693.63
MW-5	564,572.59	542,866.14
S2-1/SW2-1	566,177.50	542,450.71
S2-2/SW2-2	566,136.77	542,779.79
S2-3/SW2-3	566,147.03	542,722.18

Site Survey performed by Grevas & Hildreth, P.C., February 2000.

3.3.2 Surface Water and Sediment Sampling

Within Area Two, three sediment samples, one duplicate sediment sample, three surface water samples, and one duplicate surface water sample were obtained for laboratory analysis on October 13 and October 14, 1999. Surface water samples were obtained directly as grab samples within depositional (ponded) areas in the stream located east of the Area Two landfill. Sediment samples were collected using a stainless steel trowel from the ponded areas within which the surface water samples were obtained. Since the surface water and sediment samples were obtained from the same locations in a flowing stream, the surface water samples were collected first to minimize sample turbidity.

3.3.3 Ground Water Sampling

Five ground water samples and a sample duplicate were obtained from the five existing monitoring wells located within Area One on October 13, 1999. Wells were purged with a peristaltic pump and/or disposable Teflon® bailers until field parameters (temperature, conductivity, pH) measured in the discharge stream stabilized, or more than three well volumes were evacuated. Samples for laboratory analysis were obtained using a disposable Teflon® bailer at each well. Well purging and sampling logs are contained in Appendix C.

3.4 SAMPLE ANALYTICAL REQUIREMENTS

A summary of sample analytical requirements for the HTRW investigation at the Stewart AFB project site (as modified per Section 3.2) is contained in Table 3-2. Laboratory analytical services were provided by Severn Trent Laboratories (STL) of Whippany, New Jersey. STL is currently certified by the USACE-MRD. All analyses were performed in accordance with the USEPA Test Methods of Evaluating Solid Wastes (SW-846, 3rd Edition). Laboratory analytical methods are specified in Table 3-3. Data quality protocols were specified Section 4.1.2 (Data Quality Protocols) of the LWP. Sample maintenance, preservation, and handling procedures were implemented in accordance with Section 4.3 (Sample Documentation, Custody, and Shipping) of the LWP.

Table 3-2: Summary of Sample Analytical Requirements

Sample Designation	Sample Matrix	Sample Quantity	Sample Analytical Parameters	Field QA/QC Samples	Laboratory QA/QC Samples
Area One: SB1-1-x through SB1-8-x	Soil	16	TCL-VOC	1 Duplicate 1 Trip Blank	1 Matrix Spike\ Matrix Spike Dupe
Area One: MW-1 through MW-5	Ground Water	5	TCL-VOC	1 Duplicate 1 Trip Blank	1 Matrix Spike\ Matrix Spike Dupe
Area Two: S2-1 through S2-3	Sediment	3	TCL: VOC, SVOC, pesticide/PCB, TAL metals	1 Duplicate 1 Trip Blank 1 Field Blank	1 Matrix Spike\ Matrix Spike Dupe
Area Two: SW2-1 through SW2-3	Surface Water	3	TCL: VOC, SVOC, pesticide/PCB, TAL metals	1 Duplicate	1 Matrix Spike\ Matrix Spike Dupe

NOTE: Modified from LWP to reflect actual sample collection.

Table 3-3: Sample Preservatives, Holding Times, and Sample Container Requirements

Parameter	Matrix	Analytical Method	Sample Preservation	Analytical Holding Times	Container (# / sample)
TCL Volatiles	Soil	8260	Cool 4° C	14 days	(1) Glass, wide-mouth, teflon lined cap, 4 oz
TCL Volatiles	Water	8260	Cool 4° C No headspace	7 days	(3) Glass vial, teflon lined septum cap, 40 ml (unpreserved)
TCL Semivolatiles (BN/AE)	Soil	8270	Cool 4° C	Extraction: 14 days[1] Analysis: 40 days[1]	(1) Glass, wide-mouth, 8 oz
TCL Semivolatiles (BN/AE)	Water	8270	Cool 4° C	Extraction: 7 days[1] Analysis: 40 days[1]	(1) Glass, amber, teflon lined cap, 1 L
TCL Pesticides/PCBs	Soil	8081/8082	Cool 4° C	Extraction: 14 days[1] Analysis: 40 days[1]	(1) Glass, wide-mouth, 8 oz
TCL Pesticides/PCBs	Water	8081/8082	Cool 4° C	Extraction: 7 days[1] Analysis: 40 days[1]	(1) Glass, amber, teflon lined cap, 1 L
TAL Metals	Soil	6010, 7471[2]	Cool 4° C	180 days 26 days [2]	(1) Glass, wide-mouth, 8 oz
TAL Metals	Water	6010, 7471[2]	Cool 4° C HNO_3 pH < 2	180 days 26 days [2]	(1) Glass, wide-mouth, 8 oz

[1] Days from validated time of sample collection.
[2] Mercury.

4.0 RESULTS AND DISCUSSION

Analytical results are discussed separately as Area One and Area Two in the ensuing text, and compared to current NYSDEC standards, *i.e.*, ***Determination of Soil Cleanup Objectives and Cleanup Levels*** for soils (T.A.G.M. HWR-94-4046, January 24, 1994), ***Technical Guidance for Screening Contaminated Sediments*** for sediments (Division of Fish and Wildlife/Division of Marine Resources, July 1994), and ***Ambient Water Quality Standards and Guidance Values*** for the surface and ground water data (T.O.G.S. 1.1.1, June 1998, as revised January 1999 and November 11, 1999).

4.1 ANALYTICAL RESULTS

A summary of all analytical results are contained in Table 4-1 through Table 4-12. Tables 4-1 and 4-2 summarize all non-qualified analytical data exceeding NYSDEC Standards and/or Guidance Values. Tables 4-3 through 4-12 summarize all laboratory analytical data results. These tables are segregated by test panel (*i.e.*, volatile organic compounds, semi-volatile organic compounds, pesticide/PCBs, and metals) and sampling area (Area One and Area Two). Tables 4-3 and 4-4 pertain to soils and ground water data from Area One and Tables 4-5 through 4-12 pertain to sediment and surface water data from Area Two.

4.1.1 Area One: Former Fuel Tank Farm

The results of analysis for the soil samples collected in Area One are presented in Table 4-3. Analysis for volatile organic compounds revealed elevated concentrations above the NYDEC Soil Cleanup Objective for acetone (*i.e.*, 320 ug/kg at SB1-1-2; NYDEC Soil Cleanup Objective concentration = 200 ug/kg). However, acetone was also detected in the laboratory method blank and is believed to be associated with laboratory contamination.

Ground water sample results are contained in Table 4-4. Ground water samples from this area were collected from five existing monitoring wells, MW-1 through MW-5. Analysis for volatile organic compounds revealed elevated concentrations above the NYSDEC Ambient Water Quality Standards and Guidance Values for cis-1,2-dichloroethene in MW-1 (26 ug/L; NYSDEC Standard = 5 ug/L) and benzene (13 ug/L (29 ug/L Sample Duplicate); NYSDEC Standard = 1 ug/L)

4.1.2 Area Two: Former Base Landfill

The results of analysis for the sediment samples collected in Area Two are presented in Tables 4-5 through 4-8. None of the sediment samples collected from this area contained any volatile organic compounds above the criteria outlined in the NYSDEC Technical Guidance for Screening Contaminated Sediments. Table 4-1 presents the sediment samples analyzed for semi-volatile organic compounds, pesticides/PCBs, and metals that contained elevated concentrations above the NYSDEC Technical Guidance for Screening Contaminated Sediments. All data for these samples are contained in Tables 4-6, 4-7, and 4-8.

TABLE 4-1
SUMMARY OF SOIL/SEDIMENT ANALYTICAL DATA EXCEEDING NYSDEC STANDARDS AND GUIDANCE VALUES
FORMER STEWART AFB, NEWBURGH, NEW YORK

Sample Designation	S2-1-01	S2-2-01	S2-3-01	NYSDEC Criteria [2]								NYSDEC Criteria - mg/kg [7]	
				Benthic Aquatic Life Acute Toxicity		Benthic Aquatic Life Chronic Toxicity		Human Health Bioaccumulation		Wildlife Bioaccumulation			
Investigation Area	TWO	TWO	TWO	SC[3]	SC[4]	SC[3]	SC[4]	SC[3]		SC[3]	SC[4]		
Units	ug/kg	ug/kg	ug/kg	ug/gOC	ug/kg	ug/gOC	ug/kg	ug/gOC	SC[4] ug/kg	ug/gOC	ug/kg	LEL [8]	SEL [8]
SEMI-VOLATILE ORGANIC COMPOUNDS													
Benzo[a]Anthracene	***250 J***	63 J	***9,500***	NA	NA	NA	NA	1.3	65	NA	NA		
Benzo[a]Pyrene	***300 J***	56 J	***8,500***	NA	NA	NA	NA	1.3	65	NA	NA		
Benzo[b]Fluoranthene	***250 J***	54 J	***6,800***	NA	NA	NA	NA	1.3	65	NA	NA		
Benzo[k]Fluoranthene	***400 J***	***75 J***	***9,000***	NA	NA	NA	NA	1.3	65	NA	NA		
Indeno[1,2,3-Cd]Pyrene	***190 J***	35 J	***4,200***	NA	NA	NA	NA	1.3	65	NA	NA		
PESTICIDES													
Dieldrin	***29 J***	***7.7***	-- U (190)	NA	NA	NA	NA	0.1	5	0.77[5]	38.5		
4,4'-DDD	***170***	***16***	***810***	NA	NA	NA	NA	0.01[5]	0.5	1	50		
4,4'-DDE	***86***	***12***	***160***	NA	NA	NA	NA	0.01[5]	0.5	1	50		
4,4'-DDT	***72***	***26***	***1,400***	1,100[6]	55,000	1[6]	50	0.01[5]	0.5	1	50		
PCBs													
Aroclor-1254	-- U (92.8)	-- U (41.1)	***121***	2,760.8[6]	138,040	19.3[6]	965	0.0008	0.04	1.4	70		
METALS													
Arsenic	***12.3***	2.73	***10.2***									6.0	33.0
Cadmium	***2.15***	***0.638***	***0.756 B***									0.6	9.0
Copper	***26.3***	9.72	***33.0***									16.0	110
Iron	***61,000 ****	9,970	***90,300***									20,000	40,000
Lead	***37.8***	26.5	***50.7***									31.0	110.0
Nickel	***17.7***	7.83	***21.4***									16.0	50.0
Zinc	***171***	35.1	***234***									120	270
Manganese	**8,490 ***	285	**4,600**									460	1,100

U = Indicates that the compound was analyzed for but not detected (detection limit)
J = Indicates an estimated concentration.
B = Result is between the MDL and the Reporting Limit (RL).
* = Duplicate RPD outside of control range
NA = Not Available

Bold Italicized = Exceeds Regulatory Criteria.

[1] = New York State Department of Environmental Conservation, HWR-94-4046, Recommended Cleanup Objective
[2] = New York State Department of Environmental Conservation, Division of Fish and Wildlife / Division of Marine Resources, Technical Guidance for Screening Contaminated Sediments - July 1994
[3] = SC_{oc} : Organic Carbon (OC) normalized sediment criterion.
[4] = SC : Sediment criterion based on F_{oc} = 5% (50g/kg).
[5] = Proposed criteria values.
[6] = Sediment criteria is based on water criteria taken from TOGS 1.1.1. If a water quality criterion was not listed in TOGS 1.1.1, then an EPA criterion was used. These are annotated with [6].
[7] = New York State Department of Environmental Conservation, Division of Fish and Wildlife / Division of Marine Resources, Technical Guidance for Screening Contaminated Sediments - July 1994
A sediment is considered contaminated if either criterion is exceeded. If both are exceeded the sediment is considered severely impacted. If only the Lowest Effect Level criterion is exceeded, the impact is considered moderate.
[8] = LEL = Lowest Effect Level; SEL = Severe Effect Level

TABLE 4-2
SUMMARY OF SURFACE/GROUND WATER ANALYTICAL DATA EXCEEDING NYSDEC STANDARDS AND GUIDANCE VALUES
FORMER STEWART AFB, NEWBURGH, NEW YORK

Sample Designation	MW-1-01	MW-2-01	SW2-1-01	SW2-2-01	SW2-3-01	NYSDEC Criteria [1]	NYSDEC Criteria [3] - ug/L					
Investigation Area	ONE	ONE	TWO	TWO	TWO	SDW(g) [2]						
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	H(WS)[4]	H(FC)[5]	A(C)[6]	A(A)[7]	W[8]	E[9]
VOLATILE ORGANIC COMPOUNDS - AREA ONE												
Benzene	-- U (5)	***13***				1						
Cis-1,2-Dichloroethene	***26***	-- U (5)				5						
PESTICIDES - AREA TWO												
alpha BHC			***0.0098 J***	***0.0263***	***0.0304 P***		0.01	0.002	NA	NA	NA	NA
beta BHC			***0.01***	***0.0171***	***0.0155***		0.04	0.007	NA	NA	NA	NA
delta BHC			-- U (0.01)	***0.00809 J***	-- U (0.0103)		0.04	0.008	NA	NA	NA	NA
4,4'-DDD			***0.03***	***0.0266***	***0.0732***		0.3	0.00008	NA	NA	0.000011[10]	NA
Dieldrin			***0.02***	***0.0348***	-- U (0.0206)		0.004	6E-07	0.056	0.24	NA	NA
Heptachlor			***0.00885 J***	-- U (0.01)	-- U (0.0103)		0.04	0.0002	NA	NA	NA	NA
Heptachlor epoxide			-- U (0.01)	-- U (0.01)	-- U (0.0103)		0.03	0.0003	NA	NA	NA	NA
METALS - AREA TWO												
Aluminum			77.0 B	***457***	***655***		NA	NA	100	NA	NA	NA
Iron			***1,380***	***20,300***	***37,500***		NA	NA	300	300	NA	300
Manganese			***4,320***	***9,370***	***9,630***		NA	NA	NA	NA	NA	300

U = Indicates that the compound was analyzed for but not detected (detection limit)
J = Indicates an estimated concentration.
B = Result is between the MDL and the Reporting Limit (RL).
P = Indicates that the quantitative results from the two GC columns differ by more than 25 percent.

NA = Not Available

Bold Italicized = Exceeds Regulatory Criteria.

[1] = Division of Water Technical and Operational Guidance Series Ambient Water Quality Standards and Guidance Values
[2] = Values developed for the protection of a drinking water source (groundwater).
[3] = Division of Water Technical and Operational Guidance Series Ambient Water Quality Standards and Guidance Values
[4] = Values developed for the protection of a drinking water source (surface water).
[5] = Values developed for the protection of human consumption of fish (fresh waters).
[6] = Values developed for the protection of fish propagation (fresh waters).
[7] = Values developed for the protection of fish survival (fresh waters).
[8] = Values developed for wildlife protection (fresh waters).
[9] = Values developed for protection of aesthetics (fresh waters).
[10] = Refers to the sum of p,p'-DDD, p,p'-DDE and p,p'-DDT.

TABLE 4-3
AREA ONE: FORMER FUEL TANK FARM
SOIL VOLATILE ORGANIC COMPOUND ANALYTICAL DATA - ug/kg
FORMER STEWART AFB, NEWBURGH, NEW YORK

Sample Designation	SB1-1-1-01	SB1-1-2-01	SB1-2-1-01	SB1-2-2-01	SB1-3-1-01	SB1-3-2-01	SB1-4-1-01	SB1-4-2-01	SB1-4-2-02[a]	SB1-5-1-01	SB1-5-2-01	SB1-6-1-01	SB1-6-2-01	SB1-7-1-01	SB1-7-2-01	SB1-8-1-01	SB1-8-2-01	NYSDEC Criteria [1]
Depth (feet)	3.0 - 4.0	6.0 - 6.5	3.0 - 4.0	6.0 - 7.0	2.0 - 3.0	5.0 - 6.0	3.0 - 4.0	4.0 - 6.0	4.0 - 6.0	3.0 - 4.0	7.0 - 8.0	3.0 - 4.0	7.0 - 8.0	2.0 - 3.0	4.0 - 5.0	3.0 - 4.0	6.0 - 7.0	ug/kg
Matrix	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
Acetone	46 B	320 B	23	– U (58)	– U (12)	– U (12)	4 JB	– U (11)	– U (12)	76 B	– U (11)	24 B	49	6 JB	– U (12)	4 JB	10 J	200
Benzene	– U (5)	– U (6)	– U (5)	38	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	60
Bromodichloromethane	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	NA
Bromoform	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	NA
Bromomethane	– U (11)	– U (11)	– U (11)	– U (58)	– U (12)	– U (12)	– U (11)	– U (11)	– U (12)	– U (11)	– U (11)	– U (11)	– U (11)	– U (11)	– U (12)	– U (11)	– U (11)	NA
2-Butanone	– U (11)	– U (11)	– U (11)	– U (58)	– U (12)	– U (12)	– U (11)	– U (11)	– U (12)	8 J	– U (11)	– U (11)	– U (11)	– U (11)	– U (12)	– U (11)	– U (11)	300
Carbon Disulfide	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	2,700
Carbon Tetrachloride	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	600
Chlorobenzene	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	1,700
Chlorodibromomethane	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	NA
Chloroethane	– U (11)	– U (11)	– U (11)	– U (58)	– U (12)	– U (12)	– U (11)	– U (11)	– U (12)	– U (11)	– U (11)	– U (11)	– U (11)	– U (11)	– U (12)	– U (11)	– U (11)	1,900
Chloroform	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	300
Chloromethane	– U (11)	– U (11)	– U (11)	– U (58)	– U (12)	– U (12)	– U (11)	– U (11)	– U (12)	– U (11)	– U (11)	– U (11)	– U (11)	– U (11)	– U (12)	– U (11)	– U (11)	NA
1,1-Dichloroethane	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	200
1,2-Dichloroethane	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	100
1,1-Dichloroethene	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	400
Cis-1,2-Dichloroethene	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	250
Trans-1,2-Dichloroethene	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	300
1,2-Dichloropropane	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	300
Cis-1,3-Dichloropropene	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	300
Trans-1,3-Dichloropropene	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	300
Ethylbenzene	10	490	5 J	1,100	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	5,500
2-Hexanone	– U (11)	– U (11)	– U (11)	– U (58)	– U (12)	– U (12)	– U (11)	– U (11)	– U (12)	– U (11)	18	– U (11)	– U (11)	– U (11)	– U (12)	– U (11)	– U (11)	NA
4-Methyl-2-Pentanone	– U (11)	– U (11)	– U (11)	– U (58)	– U (12)	– U (12)	– U (11)	– U (11)	– U (12)	– U (11)	– U (11)	– U (11)	– U (11)	– U (11)	– U (12)	– U (11)	– U (11)	1,000
Methylene Chloride	– U (5)	– U (6)	6	– U (29)	10	– U (6)	– U (6)	6 B	8	5 J	– U (6)	– U (5)	6	9 B	9	5 JB	6	100
Styrene	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	NA
1,1,2,2-Tetrachloroethane	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	600
Tetrachloroethene	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	1,400
Toluene	– U (5)	3 J	– U (5)	5 J	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	1,500
1,1,1-Trichloroethane	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	800
1,1,2-Trichloroethane	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	NA
Trichloroethylene	– U (5)	– U (6)	– U (5)	– U (29)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	700
Vinyl Chloride	– U (11)	– U (11)	– U (11)	– U (58)	– U (12)	– U (12)	– U (11)	– U (11)	– U (12)	– U (11)	– U (11)	– U (11)	– U (11)	– U (11)	– U (12)	– U (11)	– U (11)	200
Xylenes (Total)	– U (5)	200	– U (5)	860	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	– U (6)	– U (6)	– U (6)	– U (6)	– U (5)	1,200

U = Indicates that the compound was analyzed for but not detected (detection limit)
J = Indicates an estimated concentration.
B = Analyte is found in the method blank as well as the sample.
[a] = Field Duplicate
[1] = New York State Department of Environmental Conservation, HWR-94-4046
Recommended Cleanup Objective

TABLE 4-4
AREA ONE: FORMER FUEL TANK FARM
GROUND WATER VOLATILE ORGANIC COMPOUND ANALYTICAL DATA - ug/L
FORMER STEWART AFB, NEWBURGH, NEW YORK

Sample Designation	MW-1-01	MW-2-01	MW-2-02[a]	MW-3-01	MW-4-01	MW-5-01	NYSDEC Criteria [1] SDW(g) [2] ug/L
Matrix	Water	Water	Water	Water	Water	Water	
Acetone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50
Benzene	-- U (5)	***13***	***29***	-- U (5)	-- U (5)	-- U (5)	1
Bromodichloromethane	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	50
Bromoform	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	50
Bromomethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	5
2-Butanone (MEK)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50
Carbon Disulfide	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	NA
Carbon Tetrachloride	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
Chlorobenzene	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
Chloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	5
Chloroform	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	7
Chloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	5
Chlorodibromomethane	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
1,1-Dichloroethane	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
1,2-Dichloroethane	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	0.6
1,1-Dichloroethene	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
Cis-1,2-Dichloroethene	***26***	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
Trans-1,2-Dichloroethene	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
1,2-Dichloropropane	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	1
Cis-1,3-Dichloropropene	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	0.4[3]
Trans-1,3-Dichloropropene	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	0.4[3]
Ethylbenzene	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
2-Hexanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50
4-Methyl-2-Pentanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA
Methylene Chloride	-- U (6)	-- U (6)	-- U (6)	-- U (6)	-- U (6)	-- U (6)	5
Styrene	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
1,1,2,2-Tetrachloroethane	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
Tetrachloroethene	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
Toluene	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
1,1,1-Trichloroethane	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
1,1,2-Trichloroethane	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	1
Trichloroethylene	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5
Vinyl Chloride	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	2
Xylenes (Total)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	-- U (5)	5[4]

U = Indicates that the compound was analyzed for but not detected (detection limit)
NA = Not Available

Bold Italicized = Exceeds Regulatory Criteria.

[a] = Field Duplicate
[1] = Division of Water Technical and Operational Guidance Series, Ambient Water Quality Standards and Guidance Values
[2] = Values developed for the protection of a drinking water source (groundwater).
[3] = Applies to the sum of cis- and trans-1,3-dichloropropene.
[4] = This standard is listed for 1,2-, 1,3- and 1,4-Xylene.

TABLE 4-5
AREA TWO: FORMER BASE LANDFILL
SEDIMENT VOLATILE ORGANIC COMPOUND ANALYTICAL DATA - ug/kg
FORMER STEWART AFB, NEWBURGH, NEW YORK

Sample Designation	S2-1-01	S2-1-02[a]	S2-2-01	S2-3-01	NYSDEC Criteria [1]							
					Benthic Aquatic Life Acute Toxicity		Benthic Aquatic Life Chronic Toxicity		Human Health Bioaccumulation		Wildlife Bioaccumulation	
Matrix	SOIL	SOIL	SOIL	SOIL	SC_{oc}[2] ug/gOC	SC[3] ug/kg	SC_{oc}[2] ug/gOC	SC[3] ug/kg	SC_{oc}[2] ug/gOC	SC[3] ug/kg	SC_{oc}[2] ug/gOC	SC[3] ug/kg
Acetone	– U (25)	– U (23)	– U (12)	– U (23)	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	0.6	30	NA	NA
Bromodichloromethane	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane	– U (25)	– U (23)	– U (12)	– U (23)	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	– U (25)	– U (23)	– U (12)	– U (23)	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	0.6[4]	30	NA	NA
Chlorobenzene	– U (12)	– U (12)	– U (6)	– U (11)	34.6	1,730	3.5	175	NA	NA	NA	NA
Chloroethane	– U (25)	– U (23)	– U (12)	– U (23)	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	– U (25)	– U (23)	– U (12)	– U (23)	NA	NA	NA	NA	NA	NA	NA	NA
Chlorodibromomethane	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	0.7[4]	35	NA	NA
1,1-Dichloroethene	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	0.02[4]	1	NA	NA
Cis-1,2-Dichloroethene	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
Trans-1,2-Dichloroethene	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
Cis-1,3-Dichloropropene	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
Trans-1,3-Dichloropropene	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	– U (25)	– U (23)	– U (12)	– U (23)	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	– U (25)	– U (23)	– U (12)	– U (23)	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	0.3[4]	15	NA	NA
Tetrachloroethene	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	0.8	40	NA	NA
Toluene	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	0.6[4]	30	NA	NA
Trichloroethylene	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	2	100	NA	NA
Vinyl Chloride	– U (25)	– U (23)	– U (12)	– U (23)	NA	NA	NA	NA	0.07[4]	4	NA	NA
Xylenes (Total)	– U (12)	– U (12)	– U (6)	– U (11)	NA	NA	NA	NA	NA	NA	NA	NA

U = Indicates that the compound was analyzed for but not detected (detection limit)
NA = Not Available
[a] = Field Duplicate

[1] = New York State Department of Environmental Conservation, Division of Fish and Wildlife / Division of Marine Resources Technical Guidance for Screening Contaminated Sediments - July 1994
[2] = Sediment Criteria - ug/gOC (Organic Carbon)
[3] = Fraction of organic carbon assumed to be 5 percent.
[4] = Proposed criteria values.

TABLE 4-6
AREA TWO: FORMER BASE LANDFILL
SEDIMENT SEMI-VOLATILE ORGANIC COMPOUND ANALYTICAL DATA - ug/kg
FORMER STEWART AFB, NEWBURGH, NEW YORK

Sample Designation	S-2-1-01	S-2-1-02[a]	S2-2-01	S2-3-01	NYSDEC Criteria [1]							
					Benthic Aquatic Life Acute Toxicity		Benthic Aquatic Life Chronic Toxicity		Human Health Bioaccumulation		Wildlife Bioaccumulation	
					SC_{oc}[2] ug/gOC	SC[3] ug/kg	SC_{oc}[2] ug/gOC	SC[3] ug/kg	SC_{oc}[2] ug/gOC	SC[3] ug/kg	SC_{oc}[2] ug/gOC	SC[3] ug/kg
Matrix	SOIL	SOIL	SOIL	SOIL								
Acenaphthene	24 J	34 J	17 J	760 J	NA	NA	140[5] [6]	7,000	NA	NA	NA	NA
Acenaphthylene	16 J	20 J	7 J	310 J	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	50 J	64 J	27 J	440 J	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[a]Anthracene	***250 J***	***340 J***	63 J	***9,500***	NA	NA	NA	NA	1.3	65	NA	NA
Benzo[a]Pyrene	***300 J***	***400 J***	56 J	***8,500***	NA	NA	NA	NA	1.3	65	NA	NA
Benzo[b]Fluoranthene	***250 J***	***380 J***	54 J	***6,800***	NA	NA	NA	NA	1.3	65	NA	NA
Benzo[g,h,i]Perylene	150 J	170 J	30 J	3,000 J	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[k]Fluoranthene	***400 J***	***480 J***	***75 J***	***9,000***	NA	NA	NA	NA	1.3	65	NA	NA
Benzoic acid	120 J	130 J	-- U (2,000)	-- U (15,000)	NA	NA	NA	NA	NA	NA	NA	NA
Benzylalcohol	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-Chloroethoxy)Methane	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-Chloroethyl)Ether	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	0.03[4]	1.5	NA	NA
Bis(2-Ethylhexyl)Phthalate	84 JB	160 JB	36 JB	290 JB	NA	NA	199.5	9,975	NA	NA	NA	NA
4-Bromophenyl-Phenylether	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
Butyl Benzyl Phthalate	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	57 J	53 J	8 J	490 J	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	420 J	590 J	79 J	12,000	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-Methylphenol	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
4-Chorophenylphenyl Ether	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz[a,h]Anthracene	60 J	63 J	14 J	1,400 J	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	16 J	17 J	7 J	240 J	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl Phthalate	18 JB	-- U (890)	7 JB	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl Phthalate	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butylphthalate	120 JB	350 JB	42 JB	5,200 B	NA	NA	NA	NA	NA	NA	NA	NA
Di-N-Octyl Phthalate	20 JB	19 JB	8 JB	36 JB	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-Methylphenol	-- U (4,600)	-- U (4,300)	-- U (2,000)	-- U (15,000)	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethyl Phenol	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	-- U (4,600)	-- U (4,300)	-- U (2,000)	-- U (15,000)	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	-- U (1,900)	-- U (1,800)	-- U (850)	-- U (6,300)	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	120	6,000	12	600	NA	NA	NA	NA
1,3-Dichlorobenzene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	120	6,000	12	600	NA	NA	NA	NA
1,4-Dichlorobenzene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	120	6,000	12	600	NA	NA	NA	NA
Fluoranthene	830 J	790 J	140 J	16,000	NA	NA	1,020[5][6]	51,000	NA	NA	NA	NA
Fluorene	38 J	51 J	27 J	780 J	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	9,081[5]	454,050	5,570[5]	278,500	15[4]	750	12[4]	600
Hexachlorobutadiene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	55	2,750	5.5	275	0.3[4]	15	4[4]	200
Hexachlorocyclopentadiene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	44	2,200	4.4	220	NA	NA	NA	NA
Hexachloroethane	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
Indeno[1,2,3-Cd]Pyrene	***190 J***	***220 J***	35 J	***4,200***	NA	NA	NA	NA	1.3	65	NA	NA
Isophorone	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnapthalene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	-- U (4,600)	-- U (4,300)	-- U (2,000)	-- U (15,000)	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	-- U (4,600)	-- U (4,300)	-- U (2,000)	-- U (15,000)	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	-- U (4,600)	-- U (4,300)	-- U (2,000)	-- U (15,000)	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	-- U (4,600)	-- U (4,300)	-- U (2,000)	-- U (15,000)	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-Di-N-Propylamine	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-Oxybis(1-Chloropropane)	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	-- U (4,600)	-- U (4,300)	-- U (2,000)	-- U (15,000)	100	5,000	40	2,000	NA	NA	NA	NA
Phenanthrene	290 J	300 J	65 J	2,500 J	NA	NA	120[5][6]	6,000	NA	NA	NA	NA
Phenol	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	0.6[7]/0.5[8]	30[7]/25[8]	NA	NA	NA	NA
Pyrene	570 J	830 J	140 J	19,000	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	-- U (4,600)	-- U (4,300)	-- U (2,000)	-- U (15,000)	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	-- U (940)	-- U (890)	-- U (420)	-- U (3,100)	910	45,500	91	4,550	NA	NA	NA	NA

U = Indicates that the compound was analyzed for but not detected (detection limit)
J = Indicates an estimated concentration.
B = Analyte is found in the method blank as well as the sample
NA = Not Available

Bold Italicized = Exceeds Regulatory Criteria.

[a] = Field Duplicate

[1] = New York State Department of Environmental Conservation, Division of Fish and Wildlife / Division of Marine Resources Technical Guidance for Screening Contaminated Sediments - July 1994
[2] = Sediment Criteria - ug/gOC (Organic Carbon)
[3] = Fraction of organic carbon assumed to be 5 percent.
[4] = Proposed criteria values.
[5] = Sediment criteria is based on water criteria taken from TOGS 1.1.1. If a water quality criterion was not listed in TOGS 1.1.1, then an EPA criterion was used.
[6] = EPA proposed sediment quality criterion for the protection of benthic organisms.
[7] = Total chlorinated phenols.
[8] = Total unchlorinated phenols.

TABLE 4-7
AREA TWO: FORMER BASE LANDFILL
SEDIMENT PESTICIDE/PCB ANALYTICAL DATA - ug/kg
FORMER STEWART AFB, NEWBURGH, NEW YORK

					NYSDEC Criteria [1]							
					Benthic Aquatic Life Acute Toxicity		Benthic Aquatic Life Chronic Toxicity		Human Health Bioaccumulation		Wildlife Bioaccumulation	
Sample Designation	S2-1-01	S2-1-02[a]	S2-2-01	S2-3-01	SC_{oc}[2]	SC[3]	SC_{oc}[2]	SC[3]	SC_{oc}[2]	SC[3]	SC_{oc}[2]	SC[3]
Matrix	SOIL	SOIL	SOIL	SOIL	ug/gOC	ug/kg	ug/gOC	ug/kg	ug/gOC	ug/kg	ug/gOC	ug/kg
PESTICIDES												
Aldrin	-- U (23)	***12 J***	-- U (2.1)	-- U (95)	NA	NA	NA	NA	0.1	5	0.77[4]	38.5
alpha BHC	-- U (23)	-- U (20)	-- U (2.1)	-- U (95)	NA	NA	NA	NA	NA	NA	NA	NA
beta BHC	-- U (23)	-- U (20)	-- U (2.1)	-- U (95)	NA	NA	NA	NA	NA	NA	NA	NA
delta BHC	-- U (23)	-- U (20)	-- U (2.1)	-- U (95)	NA	NA	NA	NA	NA	NA	NA	NA
gamma BHC	-- U (23)	-- U (20)	-- U (2.1)	-- U (95)	NA	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	-- U (23)	-- U (20)	-- U (2.1)	-- U (95)	1.4[5][6]	70	0.03[5][6]	1.5	0.001[6]	0.5	0.006[4][6]	0.3
gamma-Chlordane	-- U (23)	-- U (20)	-- U (2.1)	-- U (95)	1.4[5][6]	70	0.03[5][6]	1.5	0.001[6]	0.5	0.006[4][6]	0.3
Dieldrin	***29 J***	***38 J***	***7.7***	-- U (190)	NA	NA	NA	NA	0.1	5	0.77[4]	38.5
4,4'-DDD	***170***	***210***	***16***	***810***	NA	NA	NA	NA	0.01[4]	0.5	1	50
4,4'-DDE	***86***	***110***	***12***	***160***	NA	NA	NA	NA	0.01[4]	0.5	1	50
4,4'-DDT	***72***	***46***	***26***	***1,400***	1,100[5]	55,000	1[5]	50	0.01[4]	0.5	1	50
Endosulfan I	-- U (23)	-- U (20)	-- U (2.1)	-- U (95)	0.78[8]	39	0.03[8]	1.5	NA	NA	NA	NA
Endosulfan II	-- U (47)	-- U (41)	-- U (4.2)	-- U (190)	0.78[8]	39	0.03[8]	1.5	NA	NA	NA	NA
Endosulfan sulfate	-- U (47)	-- U (41)	-- U (4.2)	-- U (190)	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	-- U (47)	-- U (41)	-- U (4.2)	-- U (190)	NA	NA	4[5][7]	200	0.8	40	0.8[4]	40
Endrin Aldehyde	-- U (47)	-- U (41)	-- U (4.2)	-- U (190)	NA	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	-- U (47)	-- U (41)	-- U (4.2)	-- U (190)	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	-- U (23)	-- U (20)	-- U (2.1)	-- U (95)	13.1[5]	655	0.1[5]	5	0.0008[4]	0.04	0.03	1.5
Heptachlor epoxide	-- U (23)	-- U (20)	-- U (2.1)	-- U (95)	13.1[5]	655	0.1[5]	5	0.0008[4]	0.04	0.03	1.5
Methoxychlor	-- U (230)	-- U (200)	-- U (21)	-- U (950)	NA	NA	0.6	30	NA	NA	NA	NA
Toxaphene	-- U (1,200)	-- U (1,000)	-- U (100)	-- U (4,700)	3.2	160	0.01	0.5	0.02[4]	1	NA	NA
PCBs												
Aroclor-1016	-- U (92.8)	-- U (82.3)	-- U (41.1)	-- U (74.9)	2,760.8[5]	138,040	19.3[5]	965	0.0008	0.04	1.4	70
Aroclor-1221	-- U (92.8)	-- U (82.3)	-- U (41.1)	-- U (74.9)	2,760.8[5]	138,040	19.3[5]	965	0.0008	0.04	1.4	70
Aroclor-1232	-- U (92.8)	-- U (82.3)	-- U (41.1)	-- U (74.9)	2,760.8[5]	138,040	19.3[5]	965	0.0008	0.04	1.4	70
Aroclor-1242	-- U (92.8)	-- U (82.3)	-- U (41.1)	-- U (74.9)	2,760.8[5]	138,040	19.3[5]	965	0.0008	0.04	1.4	70
Aroclor-1248	-- U (92.8)	-- U (82.3)	-- U (41.1)	-- U (74.9)	2,760.8[5]	138,040	19.3[5]	965	0.0008	0.04	1.4	70
Aroclor-1254	-- U (92.8)	-- U (82.3)	-- U (41.1)	***121***	2,760.8[5]	138,040	19.3[5]	965	0.0008	0.04	1.4	70
Aroclor-1260	-- U (92.8)	-- U (82.3)	-- U (41.1)	-- U (74.9)	2,760.8[5]	138,040	19.3[5]	965	0.0008	0.04	1.4	70

U = Indicates that the compound was analyzed for but not detected (detection limit)
J = Indicates an estimated concentration.
NA = Not Available

Bold Italicized = Exceeds Regulatory Criteria.

[a] = Field Duplicate

[1] = New York State Department of Environmental Conservation, Division of Fish and Wildlife / Division of Marine Resources, Technical Guidance for Screening Contaminated Sediments - July 1994
[2] = Sediment Criteria - ug/gOC (Organic Carbon)
[3] = Fraction of organic carbon assumed to be 5 percent.
[4] = Proposed criteria values.
[5] = Sediment criteria is based on water criteria taken from TOGS 1.1.1. If a water quality criterion was not listed in TOGS 1.1.1, then an EPA criterion was used.
[6] = Value for 'Chlordane'.
[7] = EPA proposed sediment quality criterion for the protection of benthic organisms.
[8] = Value for 'Endosulfan'.

TABLE 4-8
AREA TWO: FORMER BASE LANDFILL
SEDIMENT METALS ANALYTICAL DATA - mg/kg
FORMER STEWART AFB, NEWBURGH, NEW YORK

Sample Designation	S2-1-01	S2-1-02[a]	S2-2-01	S2-3-01	NYSDEC Criteria - mg/kg [1]	
Matrix	SOIL	SOIL	SOIL	SOIL	Lowest Effect Level	Severe Effect Level
Aluminum	8,020 *N	7,640 *N	3,350	7,270	NA	NA
Antimony	-- U (0.396)	-- U (0.347)	-- U (0.173)	-- U (0.317)	2	25
Arsenic	***12.3***	***11.7***	2.73	***10.2***	6	33
Barium	136	134	14.1	178	NA	NA
Beryllium	-- U (0.0618)	-- U (0.0541)	0.188 B	-- U (0.0494)	NA	NA
Cadmium	***2.15***	***1.84***	***0.638***	***0.756 B***	0.6	9
Calcium	13,900	13,000	87,900	6,780	NA	NA
Chromium	13.8 *	13.4 *	10.2	15.7	26.0	110
Cobalt	6.31 B	6.59 B	2.76 B	5.90 B	NA	NA
Copper	***26.3***	***26.2***	9.72	***33.0***	16	110
Iron	***61,000 ****	***61,700 ****	9,970	***90,300***	20,000	40,000
Lead	***37.8***	***38.2***	26.5	***50.7***	31	110
Magnesium	3,340	3,430	44,400	3,450	NA	NA
Nickel	***17.7***	***18.2***	7.83	***21.4***	16	50
Potassium	931 B*	706 B*	267 B	751 B	NA	NA
Selenium	2.31	2.79	-- U (0.530)	5.42	NA	NA
Silver	-- U (0.192)	-- U (0.168)	-- U (0.0838)	-- U (0.153)	1	2.2
Sodium	218 B	120 B	-- U (50.6)	-- U (92.5)	NA	NA
Thallium	2.38 B	1.34 B	-- U (0.315)	5.37	NA	NA
Vanadium	23.1	22.5	6.44	31.1	NA	NA
Zinc	***171***	***169***	35.1	***234***	120	270
Manganese	**8,490 ***	**8,350 ***	285	**4,600**	460	1,100
Mercury	0.122	0.109	-- U (0.0415)	0.107	0.15	1.3

U = Result is below the Method Detection Limit (MDL). (MDL)
B = Result is between the MDL and the Reporting Limit (RL).
N = Spike recovery (%R) outside of control range
* = Duplicate RPD outside of control range
NA = Not Available
SB = Site Background

Bold Italicized = Exceeds Regulatory Criteria.

[a] = Field Duplicate
[1] = New York State Department of Environmental Conservation, Division of Fish and Wildlife / Division of Marine Resources
Technical Guidance for Screening Contaminated Sediments - July 1994
A sediment is considered contaminated if either criterion is exceeded. If both are exceeded the sediment is considered severely impacted.
If only the Lowest Effect Level criterion is exceeded, the impact is considered moderate.

Elevated concentrations of a suite of semivolatile organic compounds[1] and pesticides (4,4'-DDD, 4,4'-DDE, and 4,4'-DDT) were detected at all three sample locations, dieldrin was detected at two sample locations (S2-1 and S2-2), and an elevated concentration of one PCB constituent (Aroclor-1254) was detected at one sample location (S2-3). The highest concentrations (generally by an order of magnitude) were detected at S2-3, located due east of the center of the landfill within a marshy area straddling the small tributary, directly downstream of a deposit of boulder-sized rubble. Concentrations of these constituents exceeded the human health bioaccumulation criteria for the PAHs, and the human health bioaccumulation and wildlife bioaccumulation criteria for the pesticides and PCB. Several inorganic constituents (metals) also exceeded the sediment screening criteria, as follows: cadmium exceeded the lowest effect level (LEL) criteria at all three sample locations; copper, nickel, zinc, arsenic, manganese, and lead exceeded the LEL at sample locations S2-1 and S2-3; and iron exceeded both the LEL and severe effect level (SEL) at sample locations S2-1 and S2-3. As was the case with the organic compounds, the highest metals concentrations were generally associated with sample location S2-3.

Table 4-2 presents the surface water samples that contained elevated concentrations above the NYSDEC's Ambient Water Quality Standards and Guidance Values. Elevated concentrations were detected in all three sample locations for several pesticides and metals. All surface water sample results are contained in Tables 4-9 through 4-12.

At sample location SW2-1, the pesticides alpha BHC and heptachlor (estimated concentrations) and beta BHC exceeded criteria for the human consumption of fish, the pesticide 4,4'-DDD exceeded both the human consumption of fish and wildlife protection criteria, and the pesticide dieldrin exceeded both the drinking water and human consumption of fish criteria. At sample location SW2-2, alpha BHC and dieldrin exceeded both the drinking water and human consumption of fish criteria, beta BHC and delta BHC (estimated concentration) exceeded the human consumption of fish criteria, and 4,4'-DDD exceeded both the human consumption of fish and wildlife protection criteria. At sample location SW2-3, alpha BHC exceeded both the drinking water and human consumption of fish criteria, beta BHC exceeded the human consumption of fish criteria, and 4,4'-DDD exceeded both the human consumption of fish and wildlife protection criteria.

Relative to the metals, aluminum exceeded the protection of fish propagation criteria at sample locations SW2-2 and SW2-3, iron exceeded the fish propagation, fish survival, and aesthetic criteria at all sample locations, and manganese exceeded the aesthetic criteria at all sample locations. It should be noted that elevated iron and manganese concentrations in ground water and surface water are typically associated with the formation geology of the project area (Frimpter 1972).

[1] Primarily polycyclic aromatic hydrocarbons (PAHs), including one or more of the following compounds: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene.

TABLE 4-9
AREA TWO: FORMER BASE LANDFILL
SURFACE WATER VOLATILE ORGANIC COMPOUND ANALYTICAL DATA - ug/L
FORMER STEWART AFB, NEWBURGH, NEW YORK

Sample Designation	SW-2-1-01	SW-2-1-02[a]	SW2-2-01	SW2-3-01	TB-1014991	TB-1014992	TB-1014993	FB-101499	NYSDEC Criteria [1] - ug/L					
Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	H(WS)[2]	H(FC)[3]	A(C)[4]	A(A)[5]	W[6]	E[7]
Acetone	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	50	NA	NA	NA	NA	NA
Benzene	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	1	10	210	760	NA	NA
Bromodichloromethane	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	50	NA	NA	NA	NA	NA
Bromoform	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	50	NA	NA	NA	NA	NA
Bromomethane	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	5	NA	NA	NA	NA	NA
2-Butanone	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	NA	NA	NA	NA	NA	NA
Carbon Disulfide	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	60	NA	NA	NA	NA	NA
Carbon Tetrachloride	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	0.4	NA	NA	NA	NA	NA
Chlorobenzene	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	5	400	5	NA	NA	20/50[11]
Chloroethane	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	5[8]	NA	NA	NA	NA	NA
Chloroform	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	7	NA	NA	NA	NA	NA
Chloromethane	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	NA	NA	NA	NA	NA	NA
Chlorodibromomethane	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	50	NA	NA	NA	NA	NA
1,1-Dichloroethane	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	5	NA	NA	NA	NA	NA
1,2-Dichloroethane	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	0.6	NA	NA	NA	NA	NA
1,1-Dichloroethene	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	0.07	NA	NA	NA	NA	NA
Cis-1,2-Dichloroethene	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	5	NA	NA	NA	NA	NA
Trans-1,2-Dichloroethene	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	5	NA	NA	NA	NA	NA
1,2-Dichloropropane	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	1	NA	NA	NA	NA	NA
Cis-1,3-Dichloropropene	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	0.4[9]	NA	NA	NA	NA	NA
Trans-1,3-Dichloropropene	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	0.4[9]	NA	NA	NA	NA	NA
Ethylbenzene	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	5	NA	17	150	NA	NA
2-Hexanone	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	50	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	NA	NA	NA	NA	NA	NA
Methylene Chloride	– U (6)	– U (6)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	5	200	NA	NA	NA	NA
Styrene	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	5[8]	NA	NA	NA	NA	50
1,1,2,2-Tetrachloroethane	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	0.2	NA	NA	NA	NA	NA
Tetrachloroethene	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	0.7	1	NA	NA	NA	NA
Toluene	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	5	6,000	100	480	NA	NA
1,1,1-Trichloroethane	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	5	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	1	NA	NA	NA	NA	NA
Trichloroethylene	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	5	40	NA	NA	NA	NA
Vinyl Chloride	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	– U (10)	0.3	NA	NA	NA	NA	NA
Xylenes (Total)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	– U (5)	5[10]	NA	65	590	NA	NA

U = Indicates that the compound was analyzed for but not detected (detection limit)
J = Indicates an estimated concentration.
NA = Not Available

[a] = Field Duplicate

[1] = Division of Water Technical and Operational Guidance Series
Ambient Water Quality Standards and Guidance Values
[2] = Values developed for the protection of a drinking water source (surface water).
[3] = Values developed for the protection of human consumption of fish (fresh waters).
[4] = Values developed for the protection of fish propagation (fresh waters).
[5] = Values developed for the protection of fish survival (fresh waters).
[6] = Values developed for wildlife protection (fresh waters).
[7] = Values developed for protections of aesthetics (fresh waters).
[8] = This substance did not receive a review beyond determining that it is in a principal organic contaminant class and that it does not have a more stringent Specific MCL.
[9] = Applies to the sum of cis- and trans-1,3-dichloropropene.
[10] = Applies to the sum of 1,2-, 1,3-, and 1,4-xylene.
[11] = Potable Water, Aesthetics / Aquatic Life, Aesthetics

TABLE 4-10
AREA TWO: FORMER BASE LANDFILL
SURFACE WATER SEMI-VOLATILE ORGANIC COMPOUND ANALYTICAL DATA - ug/L
FORMER STEWART AFB, NEWBURGH, NEW YORK

Sample Designation	SW2-1-01	SW2-1-02[a]	SW2-2-01	SW2-3-01	FB-101499	NYSDEC Criteria [1] - ug/L					
Matrix	WATER	WATER	WATER	WATER	WATER	H(WS)[2]	H(FC)[3]	A(C)[4]	A(A)[5]	W[6]	E[7]
Phenol	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	1[8]
Bis(2-Chloroethyl)Ether	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	0.03	NA	NA	NA	NA	NA
2-Chlorophenol	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	3	NA	5[9]	NA	NA	20
1,4-Dichlorobenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	3	NA	5[9]	NA	NA	30
1,2-Dichlorobenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	3	NA	5[9]	NA	NA	NA
2-Methylphenol	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
2,2'-Oxybis(1-Chloropropane)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
4-Methylphenol	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
N-Nitroso-Di-N-Propylamine	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	NA	NA	NA	NA	NA
Hexachloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	5	0.8	NA	NA	NA	NA
Nitrobenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	0.4	NA	NA	NA	NA	30
Isophorone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	NA	NA	NA	NA	NA
2-Nitrophenol	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
2,4-Dimethyl Phenol	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	1,000	NA	NA	NA	1[8]
Bis(2-Chloroethoxy)Methane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	5[10]	NA	NA	NA	NA	NA
2,4-Dichlorophenol	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	5[10]	NA	NA	NA	NA	1[8]
1,2,4-Trichlorobenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	5[10]	NA	5[11]	NA	NA	10[11]
Naphthalene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	13	110	NA	10
4-Chloroaniline	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	5[10]	NA	NA	NA	NA	NA
Hexachlorobutadiene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	0.5	0.01	1.0	NA	NA	NA
4-Chloro-3-Methylphenol	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
2-Methylnapthalene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	4.7	42	NA	NA
Hexachlorocyclopentadiene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	-- U (50)	-- U (50)	-- U (50)	-- U (50)	-- U (50)	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	10
2-Nitroaniline	-- U (50)	-- U (50)	-- U (50)	-- U (50)	-- U (50)	5[10]	NA	NA	NA	NA	NA
Dimethyl Phthalate	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	NA	NA	NA	NA	NA
Acenaphthylene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	0.07	NA	NA	NA	NA	NA
3-Nitroaniline	-- U (50)	-- U (50)	-- U (50)	-- U (50)	-- U (50)	5[10]	NA	NA	NA	NA	NA
Acenaphthene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	5.3	48	NA	20
2,4-Dinitrophenol	-- U (50)	-- U (50)	-- U (50)	-- U (50)	-- U (50)	10	400	NA	NA	NA	1[8]
4-Nitrophenol	-- U (50)	-- U (50)	-- U (50)	-- U (50)	-- U (50)	5[10]	NA	NA	NA	NA	NA
Dibenzofuran	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	5[10]	NA	NA	NA	NA	NA
Diethyl Phthalate	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	NA	NA	NA	NA	NA
4-Chorophenylphenyl Ether	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
Fluorene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	NA	0.54	4.8	NA	NA
4-Nitroaniline	-- U (50)	-- U (50)	-- U (50)	-- U (50)	-- U (50)	5[10]	NA	NA	NA	NA	NA
4,6-Dinitro-2-Methylphenol	-- U (50)	-- U (50)	-- U (50)	-- U (50)	-- U (50)	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	NA	NA	NA	NA	NA
4-Bromophenyl-Phenylether	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	0.04	0.00003	NA	NA	NA	NA
Pentachlorophenol	-- U (50)	-- U (50)	-- U (50)	-- U (50)	-- U (50)	NA	NA	2.45[12]	3.19[12]	NA	1[8]
Phenanthrene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	NA	5.0	45	NA	NA
Anthracene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	NA	3.8	35	NA	NA
Carbazole	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
Di-n-butylphthalate	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	NA	NA	NA	NA	NA
Fluoranthene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
Pyrene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	NA	4.6	42	NA	NA
Butyl Benzyl Phthalate	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	5	NA	NA	NA	NA	NA
Benzo[a]Anthracene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	0.002	NA	0.03	0.23	NA	NA
Chrysene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	0.002	NA	NA	NA	NA	NA
Bis(2-Ethylhexyl)Phthalate	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	5	NA	0.6	NA	NA	NA
Di-N-Octyl Phthalate	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	50	NA	NA	NA	NA	NA
Benzo[b]Fluoranthene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	0.002	NA	NA	NA	NA	NA
Benzo[k]Fluoranthene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	0.002	NA	NA	NA	NA	NA
Benzo[a]Pyrene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	0.002	0.0012	NA	NA	NA	NA
Indeno[1,2,3-Cd]Pyrene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	0.002	NA	NA	NA	NA	NA
Dibenz[a,h]Anthracene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA
Benzo[g,h,i]Perylene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	NA	NA	NA	NA	NA	NA

U = Indicates that the compound was analyzed for but not detected (detection limit)
NA = Not Available

[a] = Field Duplicate

[1] = Division of Water Technical and Operational Guidance Series
Ambient Water Quality Standards and Guidance Values
[2] = Values developed for the protection of a drinking water source (surface water).
[3] = Values developed for the protection of human consumption of fish (fresh waters).
[4] = Values developed for the protection of fish propagation (fresh waters).
[5] = Values developed for the protection of fish survival (fresh waters).
[6] = Values developed for wildlife protection (fresh waters).
[7] = Values developed for protections of aesthetics (fresh waters)
[8] = Value for total phenols.
[9] = Applies to the sum of 1,2-, 1,3- and 1,4-dichlorobenzene.
[10] = This substance did not receive a review beyond determining that it is in a principal organic contaminant class and that it does not have a more stringent Specific MCL.
[11] = Applies to the sum of 1,2,3-, 1,2,4- and 1,3,5-trichlorobenzene.
[12] = Assumed pH 6.00.

TABLE 4-11
AREA TWO: FORMER BASE LANDFILL
SURFACE WATER PESTICIDE/PCB ANALYTICAL DATA - ug/L
FORMER STEWART AFB, NEWBURGH, NEW YORK

Sample Designation	SW2-1-01	SW2-1-02[a]	SW2-2-01	SW2-3-01	FB-101499	NYSDEC Criteria [1] - ug/L					
Matrix	WATER	WATER	WATER	WATER	WATER	H(WS)[2]	H(FC)[3]	A(C)[4]	A(A)[5]	W[6]	E[7]
PESTICIDES											
Aldrin	-- U (0.01)	-- U (0.01)	-- U (0.01)	-- U (0.0103)	-- U (0.0111)	0.002	0.001[8]	NA	NA	NA	NA
alpha BHC	***0.0098 J***	-- U (0.01)	***0.0263***	***0.0304 P***	-- U (0.0111)	0.01	0.002	NA	NA	NA	NA
beta BHC	***0.01***	***0.02***	***0.0171***	***0.0155***	-- U (0.0111)	0.04	0.007	NA	NA	NA	NA
delta BHC	-- U (0.01)	0.00794 J	***0.00809 J***	-- U (0.0103)	-- U (0.0111)	0.04	0.008	NA	NA	NA	NA
gamma BHC	-- U (0.01)	-- U (0.01)	-- U (0.01)	-- U (0.0103)	-- U (0.0111)	0.05	0.008	NA	0.95	NA	NA
4,4'-DDD	***0.03***	***0.04***	***0.0266***	***0.0732***	-- U (0.0222)	0.3	0.00008	NA	NA	0.000011[9]	NA
4,4'-DDE	-- U (0.02)	-- U (0.02)	-- U (0.02)	-- U (0.0206)	-- U (0.0222)	0.2	0.00007	NA	NA	0.000011[9]	NA
4,4'-DDT	-- U (0.02)	-- U (0.02)	-- U (0.02)	-- U (0.0206)	-- U (0.0222)	0.2	0.00001	NA	NA	0.000011[9]	NA
Dieldrin	***0.02***	***0.02***	***0.0348***	-- U (0.0206)	-- U (0.0222)	0.004	0.0000006	0.056	0.24	NA	NA
Endosulfan I	-- U (0.01)	-- U (0.01)	-- U (0.01)	-- U (0.0103)	-- U (0.0111)	NA	NA	0.009[10]	0.22[10]	NA	NA
Endosulfan II	-- U (0.02)	-- U (0.02)	-- U (0.02)	-- U (0.0206)	-- U (0.0222)	NA	NA	0.009[10]	0.22[10]	NA	NA
Endosulfan sulfate	-- U (0.02)	-- U (0.02)	-- U (0.02)	-- U (0.0206)	-- U (0.0222)	NA	NA	NA	NA	NA	NA
Endrin	-- U (0.02)	***0.02 J***	-- U (0.02)	-- U (0.0206)	-- U (0.0222)	0.2	0.002	0.036	0.086	NA	NA
Endrin Aldehyde	-- U (0.02)	-- U (0.02)	-- U (0.02)	-- U (0.0206)	-- U (0.0222)	5[11]	NA	NA	NA	NA	NA
Endrin ketone	-- U (0.02)	-- U (0.02)	-- U (0.02)	-- U (0.0206)	-- U (0.0222)	5[11]	NA	NA	NA	NA	NA
Heptachlor	***0.00685 J***	***0.01***	-- U (0.01)	-- U (0.0103)	-- U (0.0111)	0.04	0.0002	NA	NA	NA	NA
Heptachlor epoxide	-- U (0.01)	-- U (0.01)	-- U (0.01)	-- U (0.0103)	-- U (0.0111)	0.03	0.0003	NA	NA	NA	NA
Methoxychlor	-- U (0.1)	-- U (0.1)	-- U (0.1)	-- U (0.103)	-- U (0.111)	35	NA	0.03	NA	NA	NA
Toxaphene	-- U (0.5)	-- U (0.5)	-- U (0.5)	-- U (0.515)	-- U (0.556)	0.06	0.000006	0.005	1.6	NA	NA
alpha-Chlordane	-- U (0.01)	-- U (0.01)	-- U (0.01)	-- U (0.0103)	-- U (0.0111)	0.05[12]	0.00004[12]	NA	NA	NA	NA
gamma-Chlordane	-- U (0.01)	-- U (0.01)	-- U (0.01)	-- U (0.0103)	-- U (0.0111)	0.05[12]	0.00004[12]	NA	NA	NA	NA
PCBs											
Aroclor-1016	-- U (0.200)	-- U (0.200)	-- U (0.200)	-- U (0.206)	-- U (0.222)	0.09[13]	0.000001[13]	NA	NA	0.00012[13]	NA
Aroclor-1221	-- U (0.200)	-- U (0.200)	-- U (0.200)	-- U (0.206)	-- U (0.222)	0.09[13]	0.000001[13]	NA	NA	0.00012[13]	NA
Aroclor-1232	-- U (0.200)	-- U (0.200)	-- U (0.200)	-- U (0.206)	-- U (0.222)	0.09[13]	0.000001[13]	NA	NA	0.00012[13]	NA
Aroclor-1242	-- U (0.200)	-- U (0.200)	-- U (0.200)	-- U (0.206)	-- U (0.222)	0.09[13]	0.000001[13]	NA	NA	0.00012[13]	NA
Aroclor-1248	-- U (0.200)	-- U (0.200)	-- U (0.200)	-- U (0.206)	-- U (0.222)	0.09[13]	0.000001[13]	NA	NA	0.00012[13]	NA
Aroclor-1254	-- U (0.200)	-- U (0.200)	-- U (0.200)	-- U (0.206)	-- U (0.222)	0.09[13]	0.000001[13]	NA	NA	0.00012[13]	NA
Aroclor-1260	-- U (0.200)	-- U (0.200)	-- U (0.200)	-- U (0.206)	-- U (0.222)	0.09[13]	0.000001[13]	NA	NA	0.00012[13]	NA

U = Indicates that the compound was analyzed for but not detected (detection limit)
J = Indicates an estimated concentration.
P = Indicates that the quantitative results from the two GC columns differ by more than 25 percent.
NA = Not Available

Bold Italicized = Exceeds Regulatory Criteria

[a] = Field Blank

[1] = Division of Water Technical and Operational Guidance Series
Ambient Water Quality Standards and Guidance Values
[2] = Values developed for the protection of a drinking water source (surface water).
[3] = Values developed for the protection of human consumption of fish (fresh waters).
[4] = Values developed for the protection of fish propagation (fresh waters).
[5] = Values developed for the protection of fish survival (fresh waters).
[6] = Values developed for wildlife protection (fresh waters).
[7] = Values developed for protections of aesthetics (fresh waters).
[8] = Applies to the sum of Aldrin and Dieldrin.
[9] = Applies to the sum of p,p'-DDD, p,p'-DDE, and p,p'-DDT.
[10] = Value for 'Endosulphan'.
[11] = This substance did not receive a review beyond determining that it is in a principal organic contaminant class and that it does not have a more stringent Specific MCL.
[11] = Value for 'Chlordane'.
[12] = Applies to the sum of these substances.
[13] = Applies to the sum of PCBs

TABLE 4-12
AREA TWO: FORMER BASE LANDFILL
SURFACE WATER METALS ANALYTICAL DATA - ug/L
FORMER STEWART AFB, NEWBURGH, NEW YORK

Sample Designation	SW2-1-01	SW2-1-02[a]	SW2-2-01	SW2-3-01	FB-101499	NYSDEC Criteria [1] - ug/L					
Matrix	WATER	WATER	WATER	WATER	WATER	H(WS)[2]	H(FC)[3]	A(C)[4]	A(A)[5]	W[6]	E[7]
Aluminum	77.0 B	78.9 B	***457***	***655***	13.6 B	NA	NA	100	NA	NA	NA
Antimony	– U (2.39)	– U (2.39)	– U (2.39)	– U (2.39)	– U (2.39)	3	NA	NA	NA	NA	NA
Arsenic	– U (4.18)	– U (4.18)	– U (4.18)	– U (4.18)	– U (4.18)	50	NA	150[8]	340[8]	NA	NA
Barium	58.6	60.1	115	198	– U (0.631)	1,000	NA	NA	NA	NA	NA
Beryllium	0.530 B	0.560 B	0.360 B	– U (0.177)	0.230 B	3	NA	1,100[9]	NA	NA	NA
Cadmium	– U (0.190)	– U (0.190)	0.480 B	1.03 B	– U (0.190)	5	NA	2.76[9]	5.70[9]	NA	NA
Calcium	134,000	137,000	140,000	149,000	131 B	NA	NA	NA	NA	NA	NA
Chromium	– U (0.239)	0.480 B	1.23 B	1.74 B	– U (0.239)	50	NA	98.77[9]	759.31[9]	NA	NA
Cobalt	0.580 B	0.580 B	2.21 B	1.41 B	– U (0.347)	5[10]	NA	NA	NA	NA	NA
Copper	1.18 B	1.19 B	4.82 B	5.13 B	0.730 B	200	NA	12.08[9]	18.70[9]	NA	NA
Iron	***1,380***	***1,500***	***20,300***	***37,500***	– U (52.5)	NA	NA	300	300	NA	300
Lead	– U (0.957)	– U (0.957)	1.31 B	3.84	– U (0.957)	50	NA	5.53[9]	141.96[9]	NA	NA
Magnesium	16,200 *	16,700 *	15,200	17,200	34.9 B	35,000	NA	NA	NA	NA	NA
Manganese	***4,320***	***4,330***	***9,370***	***9,630***	1.37 B	NA	NA	NA	NA	NA	300
Nickel	1.58 B	1.37 B	5.76 B	4.75 B	0.730 B	100	NA	69.97[9]	629.94[9]	NA	NA
Potassium	3,280 B	3,300 B	3,520 B	3,730 B	47.5 B	NA	NA	NA	NA	NA	NA
Selenium	2.88 B	2.17 B	4.10 B	– U (2.04)	– U (2.04)	10	NA	4.6[11]	NA	NA	NA
Silver	– U (0.303)	– U (0.303)	– U (0.303)	– U (0.303)	– U (0.303)	50	NA	0.1[12]	7.42[9]	NA	NA
Sodium	16,200 *	16,700 *	12,700	16,400	– U (283)	NA	NA	NA	NA	NA	NA
Thallium	– U (2.80)	– U (2.80)	– U (2.80)	– U (2.80)	– U (2.80)	0.5	NA	8[10]	20	NA	NA
Vanadium	0.200 B	0.280 B	0.890 B	2.63 B	– U (0.189)	NA	NA	14[10]	190[10]	NA	NA
Zinc	16.4 B	12.0 B	62.6	82.2	30.8	2,000	NA	111.32[9]	157.72[9]	NA	5,000
Mercury	– U (0.200)	– U (0.200)	– U (0.200)	– U (0.200)	– U (0.200)	0.7	0.0007[13]	0.77[13]	1.4[13]	0.0026[13]	NA

U = Result is below the Method Detection Limit (MDL). (MDL)
B = Result is between the MDL and the Reporting Limit (RL).
* = Duplicate RPD outside of control range
NA = Not Available

Bold Italicized = Exceeds Regulatory Criteria.

[a] = Field Blank

[1] = Division of Water Technical and Operational Guidance Series Ambient Water Quality Standards and Guidance Values
[2] = Values developed for the protection of a drinking water source (surface water).
[3] = Values developed for the protection of human consumption of fish (fresh waters).
[4] = Values developed for the protection of fish propagation (fresh waters).
[5] = Values developed for the protection of fish survival (fresh waters).
[6] = Values developed for wildlife protection (fresh waters).
[7] = Values developed for protections of aesthetics (fresh waters).
[8] = Dissolved Arsenic form.
[9] = Assumed hardness is 142 mg/L (Frimpter, 1972)
[10] = Apply to acid-soluble form.
[11] = Aquatic type standard applies to dissolved form.
[12] = Applies to ionic silver.
[13] = Applies to dissolved form.

4.2 DATA QUALITY

4.2.1 Laboratory Analysis

There were two laboratory analytical data packages prepared to document the results of analysis performed on samples obtained from Stewart AFB (20990-94106 and 20990-94127). These data packages are contained in Appendix D. A series of minor data quality issues were identified through review of the data packages, and are outlined in the Case Narratives associated with the data packages contained in Appendix D, and the ensuing discussions. None of these issues were judged to significantly affect data usability, and no data were rejected as a result of this review.

- *Accuracy*

This data quality indicator is defined as a measure of closeness of an observed concentration to the true value, and is evaluated in terms of matrix spike/matrix spike duplicate (MS/MSD) and blank spike recoveries (%R).

Data Package 20990-94106

One aqueous MS/MSD (GW-W18AMS) exhibited recovery outside the internal laboratory control limit for the volatile organic compound chlorobenzene. One soil MS/MSD (SBLKJQ) exhibited recovery outside the internal laboratory control limit for the semivolatile organic compound hexachlorobutadiene. One aqueous MS/MSD (SW-2-1-01) exhibited recovery slightly outside the internal laboratory control limit for the pesticide endrin. One soil MS/MSD (MW3D-SO-44) exhibited recoveries slightly outside internal laboratory control limits for the pesticides gamma-BHC, aldrin, dieldrin, and endrin. One aqueous MS/MSD (SW-2-1-01) exhibited recoveries slightly outside internal laboratory control limits for the metals calcium, magnesium, manganese, and sodium. One soil MS/MSD (FLOOR#1W) exhibited recoveries outside internal laboratory control limits for aluminum; associated data for samples S2-1-01 and S2-1-02 were flagged with a 'N' data qualifier (spike result outside of control range). In all cases, internal laboratory blank spike analyses were within control limits. With the exception of dieldrin in soil (sediment) none of the out of range organic constituents were detected in site media. Estimated concentrations of dieldrin reported for samples S2-1-01 and S2-1-02 (sample duplicate) may be slightly elevated related to their true value.

Relative to pesticide analysis for water samples SW2-1-01 and SW2-1-02 (sample duplicate), breakdown standards for 4,4'-DDT exceeded the method specified criteria on both instrument columns. These samples were reanalyzed; however, due to a failure of the laboratory LIMS system, reanalysis could not be performed until after extract holding times had been exceeded. Low level concentrations of 4,4'-DDD were detected in both the initial analysis and reanalysis of both samples. Methoxychlor and 4,4'-DDT were not detected in either the initial analysis or reanalysis. These results serve to qualitatively confirm the presence and absence, respectively, of these compounds in these samples. Due to the absence of 4,4'-DDT (to break down to 4,4'-DDD) in these samples, the

quantitation of 4,4'-DDD can be assumed to be accurate. For these reasons, the initial analysis sample results are provided in Tables 4-2 and 4-11.

Data Package 20990-94127

One aqueous MS/MSD (MW-7) exhibited recoveries outside of internal laboratory control limits for the semivolatile organic compounds 2-chlorophenol, 1,4-dichlorobenzene, n-nitroso-di-n-propylamine, 1,2,4-trichlorobenzene, 4-chloro-3-methylphenol, acenaphthene, and 4-nitrophenol. One soil MS/MSD (SBLKJQ) exhibited recovery outside the internal laboratory control limit for the semivolatile organic compound hexachlorobutadiene. One aqueous MS/MSD (SW2-3-01) exhibited recovery slightly outside the internal laboratory control limit for the pesticide endrin. One aqueous MS/MSD (SW-2-1-01) exhibited recoveries outside internal laboratory control limits for the metals calcium and manganese. One soil MS/MSD (14457MSD) exhibited recoveries outside internal laboratory control limits for the metals antimony, barium, calcium, copper, iron, nickel, and zinc. This MS/MSD was not a project-specific sample; consequently, associated project specific sample data were not qualified (in accordance with laboratory QC protocols). In all cases, internal laboratory blank spike analyses were within control limits. None of the out of range organic constituents were detected in site media.

- ***Precision***

This data quality indicator is defined as a measure of reproducibility or variability of a measurement under a given set of conditions, and is evaluated in terms of the relative percent difference (RPD) between field duplicate sample analyses, laboratory duplicate (replicate) analyses, and matrix spike/matrix spike duplicate sample analyses. Variability relative to duplicate sample analysis is often a function of field sampling procedures or the characteristics of the sample matrix (*i.e.*, the ability or lack thereof to fully homogenize the sample prior to division into sample aliquots). With the limited exceptions noted below relative to inorganic analysis, RPD data were within control limits for all sample data.

Data Package 20990-94106

One soil MS/MSD (FLOOR#1W) exhibited RPDs outside internal laboratory control limits for the metals aluminum, iron, chromium, magnesium, and potassium; associated data for samples S2-1-01 and S2-1-02 were flagged with a '*' data qualifier (RPD outside of control range). One aqueous MS/MSD (SW-2-1-01) exhibited RPDs outside internal laboratory control limits for the metals manganese, and sodium; associated data for samples S2-1-01 and S2-1-02 were flagged with a '*' data qualifier (RPD outside of control range).

Data Package 20990-94127

One soil MS/MSD (14457MSD) exhibited RPDs outside internal laboratory control limits for the metals arsenic, cadmium, copper, lead, and thallium. This duplicate was not

a project-specific sample; consequently, associated project specific sample data were not qualified (in accordance with laboratory QC protocols). Field duplicate sample analysis is discussed in Section 4.2.2.

- ***Representativeness***

This data quality indicator is defined as the extent to which data measure the objective of the data collection. It is less quantitatively defined than accuracy or precision and represents the ability of sample collection and handling steps to accurately reflect site characteristics. As such, it is controlled primarily by sampling program design and is influenced by field QA/QC sample results (Section 4.2.2). The executed sampling program, targeted to areas of previously documented or suspected HTRW contamination, is believed to provide a representative characterization of actual site conditions.

- ***Comparability***

This data quality indicator is a measure of the equivalence of data. Comparability for sampling involves application of consistent sample designs and time periods, while comparability for laboratory analyses encompasses issues related to different methodologies, detection limits, laboratories, units of measure, and sample preparation procedures. The potential for comparability concerns were minimized through the design of the QAPP and sampling methodologies. Standardized sampling techniques and analytical methods were used to attain project objectives. Comparability also was enhanced through the use of a USACE approved and New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for all analyses.

- ***Completeness***

This data quality indicator is defined as the measure of the amount of unusable data resulting from a data collection activity. All samples collected in the field are accounted for in the sample data packages and the data is 100 percent complete from a deliverables standpoint, as tracked through the sample chain-of-custody process. Based on evaluation of laboratory data packages, analytical data for samples obtained from the project site are judged to be virtually 100 percent complete (*i.e.*, while certain data subsets were qualified, no data were rejected).

4.2.2 Field QA/QC Samples

One field (rinsate) blank sample, three trip blank samples, and four sample duplicates (1 ground water, 1 surface water, 1 soil, and 1 sediment) were obtained during sample collection activities. No compounds were detected above detection limit in any of the field QA/QC blanks, indicating that sample equipment decontamination and sample processing protocols were implemented consistently and appropriately.

With the exception of several semivolatile organic compounds (phthalates), the majority of sediment sample duplicate data exhibited a relative percent difference (RPD) within 60 percent. Elevated RPD is often associated with soil and sediment sampling programs due to heterogeneity

of the soil matrix and contaminant distribution. Surface water samples for one pesticide (heptachlor) and one metal (chromium) also exhibited elevated RPDs. This is likely attributable to varying turbidity levels in the recovered grab samples resulting from a shallow water depth at each sample location. One ground water duplicate sample exhibited an elevated RPD for one constituent (benzene).

4.3 OVERVIEW OF LAND USE/WATER SUPPLY

The property on which Area One is located is a restricted (fenced and locked) area located adjacent to a fuel filling station. A manufacturing plant is located south of Area One beyond a wooded buffer (Anheuser Busch canning plant). An above ground fuel storage is located to the west across Bruenig Road. Undeveloped land and the access roadway to Area Two (Recreation Road) is located to the east. Various administrative buildings are located north of Area One. A wooded area borders Area Two to the north, south, and east. Construction is being conducted west of Area Two.

Municipal water is supplied to base personnel and most of the neighboring Town of New Windsor residential and commercial areas. However, according to the Town of New Windsor Water Department (personal communication, February 2000), some properties located immediately to the east-southeast of Area Two obtain their potable water supply from individual domestic wells (it is assumed that these properties consist of trailer homes located adjacent to Square Hill Road).

4.4 FATE AND TRANSPORT

4.4.1 Contaminants of Concern

- ***Area One***

The only contaminant detected in Area One soils in excess of NYDEC Recommended Cleanup Objective was acetone. Since acetone also was detected in the method blank, it is likely that lab contamination is the source of the observed elevated concentration.

Two contaminants were detected in Area One ground water in excess of NYSDEC Ambient Water Quality Standards and Guidance Values, *i.e.*, benzene at MW-2, and cis-1,2-dichloroethene at MW-1.

Benzene is widely used in the United States as a chemical component of plastics, resins, synthetic fibers, rubbers, lubricants, dyes, detergents, drugs, and pesticides. It is also a natural component of crude oil and gasoline. The major effect of benzene from long-term exposure is on the blood, and includes damage to bone marrow and a decrease in red blood cells, resulting in anemia. It also can affect the immune system. It is not known whether benzene exposure affects the developing fetus in women or fertility in men. The Department of Health and Human Services has determined that benzene is a known human carcinogen (ATSDR 1997).

1,2 dichloroethene exists in two forms, cis-1,2-dichloroethene and trans-1,2-dichloroethene. The chemical is used most often in the production of solvents and chemical mixtures, and is released to the environment primarily from chemical factories, landfills, hazardous waste sites, and from the burning of vinyl-containing objects. In animal studies, high doses of 1,2-dichloroethene resulted in death; lower doses caused adverse effects on the blood and liver. Long-term effects on humans from exposure to low concentrations of 1,2-dichloroethene are unknown. The chemical has not been shown to effect fertility in animals or humans, and cis-1,2-dichloroethene is not classifiable as to its human carcinogenicity (ATSDR 1997).

- ***Area Two***

Analytical analyses of sediment samples from Area Two identified the following organic compounds at concentrations above standards listed in NYSDEC's Technical Guidance for Screening Contaminated Sediments: five semivolatile organic (PAH) compounds (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, and indeno[1,2,3-cd]pyrene), four pesticides (dieldrin, 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT), one PCB constituent (Aroclor-1254), and several metals (arsenic, cadmium, copper, iron, lead, nickel, zinc, and manganese).

The PAHs, consisting of compounds with a series of joined benzene rings, are typically associated with petroleum products, asphalt, coal tar, and creosote, and result from the incomplete combustion of fossil fuel. Studies in animals have shown that PAHs can cause harmful effects on skin, body fluids, and the immune system after both short- and long-term exposure. These effects have not been reported in humans. The U.S. Department of Health and Human Services has determined that PAHs may reasonably be anticipated to be carcinogens (ATSDR 1996).

Dieldrin is an insecticide that was widely used between 1950-1970 for soil and seed treatment, to control disease vectors (mosquitoes), and for the treatment of wood and the mothproofing of woolen products. Aldrin, a similar insecticide, chemically breaks down to dieldrin in the environment. Most uses of dieldrin were banned in 1975 (termite control use was permitted until 1987); currently, dieldrin is no longer produced or imported into the United States. Studies in animals indicate that dieldrin may reduce the body's ability to resist infection. The ingestion of moderate levels of dieldrin over long periods of time my cause convulsions, due to bioaccumulation in body tissues. The long-term effects of exposure to low levels of dieldrin is not known. The International Agency for Research on Cancer has determined that dieldrin is not classifiable as to its carcinogenicity to humans; there is no direct evidence that dieldrin causes cancer in humans (ATSDR 1993).

DDT was a manufactured chemical widely used to control insects on agricultural crops. It does not occur naturally in the environment. DDE is a contaminant byproduct formed in the manufacture of DDT; it has no commercial use. DDT tends to bind with soils and does not tend to migrate to ground water. DDT in soil usually breaks down to form DDD or DDE. DDT bioaccumulates in the fatty tissues of fish, birds, and other animals. Acute exposure to DDT at elevated concentrations affects the nervous system (tremors and seizures). Chronic exposures at low concentrations does not appear to result in any adverse effects. DDT may reasonably be

anticipated to be a carcinogen. Liver cancer has been seen in animals that were fed DDT, but studies of DDT exposed workers did not show increases in cancer (ATSDR 1995).

The abbreviation PCB refers to polychlorinated biphenyls. PCBs are a family of man-made chemicals that contain 209 individual chlorinated compounds (cogeners) with varying toxicity. Some commercial PCB mixtures are known in the United States by their industrial trade name, Aroclor (*e.g.*, Aroclor-1254). In the past, PCBs were widely used in hydraulic fluids and as coolants and lubricants in transformers, capacitors, and other electrical equipment (*e.g.*, fluorescent lighting fixtures). The manufacture of PCBs was stopped in the United States in 1977 because of evidence that they accumulate in the environment and cause harmful effects. Eating contaminated fish is a primary source of PCB exposure to humans. In animal experiments, skin exposure and ingestion of PCB mixtures has resulted in liver, stomach, and thyroid gland injuries, and anemia, acne, and reproductive system problems. It is not known whether PCBs may cause birth defects or reproductive problems in people, nor is it known whether PCBs are a human carcinogen (ATSDR 1997).

Arsenic is found naturally at low levels in the environment. It is primarily a component with oxygen, chlorine and sulfur compounds (inorganic arsenic compounds). In plants and animals it combines with carbon and hydrogen, forming various organic arsenic compounds. Organic arsenic compounds are generally less harmful than the inorganic compounds. Organic arsenic bioaccumulates in shellfish and fish, but most arsenic in fish is not toxic. Arsenic is a known carcinogen; ingesting inorganic arsenic increases the risk of skin cancer and tumors of the bladder, kidney, liver, and lung. High concentrations (> 60 mg/L) of inorganic arsenic in food or water can be fatal. Lower levels of inorganic arsenic exposure may cause nausea, vomiting and diarrhea, decreased production of red and white blood cells, abnormal heart rhythm, and blood vessel damage. Chronic low level exposure may result in a darkening of the skin and the appearance of corns or warts on the torso and extremities (ATSDR 1993).

Cadmium is a natural element found in all soil and rocks. This metal is used in batteries, pigments, metal coatings, and plastics. Cadmium enters the body by absorbing through the stomach, intestine or lung walls after ingestion or inhalation. Inhalation is the greatest exposure route (*i.e.*, 30 to 50 percent of the metal inhaled is absorbed into the blood stream). Cadmium is strongly retained in the body and bioaccumulates as exposure continues. Ingesting and inhaling high doses of cadmium causes severe irritation of the lungs, stomach, and intestines. Effects of long-term, low-level exposure to cadmium include kidney, liver, and lung damage, lung cancer, and high blood pressure. Since such high exposures are rare today, effects from long-term, low-level exposure are of greater concern (ATSDR 1993).

Copper is a naturally occurring metal used for electrical wiring, some water pipes, and is mixed with other metals to make alloys. In addition, this metal is an essential element for all living organisms. Long-term exposure to copper dust can result in headaches, dizziness, nausea, and diarrhea and the irritation of the nose, mouth, and eyes. Consuming water with high levels of copper can result in vomiting, diarrhea, stomach cramps, and nausea. Exposure to very high levels of copper can result in liver and kidney damage and possibly death. Children are especially sensitive to exposure to copper. Children exposed to high levels of this metal may experience liver damage and death. Copper is not a known carcinogen (ATSDR 1990).

Lead is a naturally occurring metal used in the production of batteries, ammunition, and metal products. The use of lead in products such as gasoline, paints and ceramic products, caulking, and pipe solder has decreased in recent years due to health concerns associated with exposure to lead. These effects include decreased reaction time, weakness in fingers, wrists, or ankles, and damage to the kidneys, immune system, central nervous system, and almost every other organ in the human body. Children and unborn children are especially sensitive to exposure to high levels of lead. Such exposure may result in premature birth, smaller babies, decreased mental ability, learning difficulties, and reduced growth. Based on tests done on rats, certain forms of lead (*i.e.*, lead acetate and lead phosphate) may be human carcinogens (ATSDR 1993).

Nickel is a very abundant element, and is found primarily combined with oxygen (oxides) or sulfur (sulfides). Much of the nickel in the environment is found in soils and sediments because nickel has an affinity for soil materials containing iron or manganese. Nickel does not appear to accumulate in fish, plants, or animals used for food. The most common adverse health affect of nickel in humans is an allergic reaction. Ingestion of highly contaminated water (> 100,000 times normal concentration levels) has resulted in stomachaches and effects to blood and kidneys in humans. Eating or drinking large amounts of nickel has been reported to cause lung disease in dogs and rats, and to affect the stomach, blood, liver, kidneys, immune system, and reproduction and development in rats and mice (ATSDR 1997).

Zinc is an ubiquitous element, found in air, soil, water, and all foods. Commercially, zinc is used as a coating to prevent rust, in dry cell batteries, and mixed with other metals to make alloys. Although zinc is an essential element for the human body, too much zinc (generally levels over 10 to 15 times the recommended dietary allowance) is harmful. The short-term effects of ingesting large concentrations of zinc include stomach cramps, nausea, and vomiting. Over the long-term, such exposure can cause anemia, pancreas damage, and decrease the levels of high density lipoprotein cholesterol (the good form of cholesterol) in the body. Inhaling large amounts of zinc can cause a short-term disease called mental fume fever, which affects the lungs and body temperature. In addition, animals fed large amounts of zinc became infertile or had smaller babies. It is not known how this information compares to the effects of zinc on human reproduction (ATSDR 1995).

Analytical analyses of surface water samples from Area Two identified the following organic compounds (pesticides) at concentrations above standards listed in NYSDEC's Ambient Water Quality Standards and Guidance Values: alpha benzene hexachloride (BHC), beta BHC, delta BHC, 4,4'-DDD, dieldrin, heptachlor, and heptachlor epoxide.

BHC is currently referred to as hexachlorocyclohexane (HCH). The chemical exists in eight different forms (isomers), including alpha-, beta-, and gamma- (also called lindane). Lindane was used as an insecticide on fruit, vegetable, and forest crops, and is still used in ointments to treat head and body lice, and scabies. Lindane has not been produced in the United States since 1977. It is still imported to and formulated in the United States. Levels of exposure to HCH that produce harmful health effects are generally much higher than normally received by the general population. Animals fed high levels of HCH had convulsions and some became comatose; liver and kidney effects and a reduced ability to fight infection resulted from moderate doses. The Department of Health and Human Services has determined that HCH may reasonably be anticipated to be a carcinogen (ATSDR 1995).

Heptachlor is a pesticide that was used extensively in the past for killing insects in homes, buildings, and on food crops, especially corn. Its use slowed in the 1970s and stopped in 1988. Most of the health effects data regarding heptachlor is derived from studies of mice and rats. High doses in these animals resulted in adverse effects to the liver and adrenal gland, and fertility problems were observed. Potential fertility effects in humans are not known. The International Agency for Research on Cancer has determined that heptachlor is not classifiable as to its carcinogenicity to humans because insufficient data are available to establish a clear assessment (ATSDR 1993).

4.4.2 Potential Receptors

- ***Area One***

The results of ground water sampling within Area One indicated the presence of two VOCs (benzene and cis-1,2-dichloroethene) at concentrations in excess of ground water quality standards. Based on the low level of this contamination (maximum concentration of 26 ug/L), it is expected that natural processes (advection, dispersion, sorption, and microbiological degradation) would act to degrade these constituents to non-detectable concentrations within several hundred feet of Area One. Given the presumed direction of ground water flow (*i.e.*, south/southeast based on regional drainage patterns), and the adjacent land use (undeveloped land or commercial/industrial), it is not believed that there are any plausible human or ecological receptors for the identified contamination.

- ***Area Two***

The results of sediment and surface water sampling in the tributary stream located to the east of Area Two indicate the presence of PAHs, PCBs, pesticides, and metals at concentrations that exceed wildlife protection/wildlife bioaccumulation, drinking water, and/or human consumption of fish criteria. It is presumed that these contaminants are derived from surface water runoff from the landfill, discharge of ground water originating under the landfill, or both. Potential receptors include aquatic biota and humans (assuming that the tributary stream would be used as a water supply source or fishery). The latter is not believed to be credible due to: (1) the tributary appears to be an intermittant stream (*i.e.*, it is not mapped on the U.S. Geological Survey 7.5 Minute Topographic Series, and exhibits a maximum width on the order of two feet), (2) access to the former air force base property is restricted, and (3) the local potable water supply is derived either from a municipal utility or domestic wells. The apparent intermittant nature of the stream would also act to mitigate against a diverse aquatic biota receptor population in the immediate area.

While the concentrations of detected contaminants in surface water and sediment decrease in a downstream direction, a number of constituents are still present at concentrations exceeding criteria at sample location S2-1/SW2-1 (located adjacent to the fence line separating the former air force base property from the leased Anheuser Busch property). Migration of contaminants further to the south (to a wetland area located south of State Route 207) may act to impact the richer aquatic receptor population located in that area.

In addition, while it is assumed that the tributary stream would act as a hydraulic barrier to the migration of contaminants in shallow ground water flow, no information is available regarding the nature of potential deeper ground water flow paths (or the quality of water associated with the deeper ground water). Since some of the contaminants identified in the tributary sediments and surface water are not readily degraded naturally, and local water department records indicate the possible presence of domestic supply wells adjacent to Area Two, a potential human receptor population may exist in that area.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The presence of fuel related contamination is evident in the results of analysis of soils and ground water within Area One. However, the concentration of contaminants in soil do not exceed NYSDEC cleanup objectives, and only limited ground water contamination was detected. While the detected ground water contamination exceeds quality standards, the contaminant concentrations are low, and do not appear to represent a concern relative to potential off-site human or ecological receptors.

A range of persistent contaminants (*i.e.*, PAHs, pesticides, PCBs, and metals) were identified in sediment and surface water associated with a small tributary stream located to the east of the Area Two landfill. It is presumed that these contaminants are derived from surface water runoff from the landfill, discharge of ground water originating under the landfill, or both. Due to the presumed intermittant nature of the stream and site access limitations, these constituents do not appear to represent a significant on-site risk to aquatic biota or potential human receptors.

A potential risk to off-site receptors exists from Area Two derived contamination in terms of: (1) downstream migration of contaminants to a presumably richer and more diverse aquatic population associated with a wetland area located to the south of State Route 207, and (2) migration of contaminants along deep ground water flow paths to adjacent domestic water supply wells.

In order to evaluate the potential for impact to off-site receptor populations, the following activities are recommended:

- Surface water and sediment sampling at several progressive downstream locations along the tributary stream (and at its discharge within the wetland area) for the target compounds identified during the Area Two HTRW investigation;

- Verification of the presence or absence of domestic water supply wells in the vicinity (east-southeast) of Area Two through detailed review of records and consultation with the Town of New Windsor Water Department; and

- If identified, sampling of local domestic water supply wells for the target compounds identified during the Area Two HTRW investigation.

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7.0 ABBREVIATIONS AND ACRONYMS

%R	Percent Recovery
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)
CoC	Contaminant of Concern
DCE	Cis, 1-2 dichloroethene
AFB	Air Force Base
ATSDR	Agency for Toxic Substances and Disease Registry
BECR	Biological, Environmental, and Cultural Resources
BN/AE	Base Neutral-Acid Extractable Compound (*i.e.*, SVOC)
BRAC	Base Realignment and Closure program
DCQCR	Daily Chemical Quality Control Report
DSMOA/CA	Defense State Memorandum of Agreement/Cooperative Agreements program
DERP	Defense Environmental Restoration Program
DO	Dissolved Oxygen; Delivery Order
DoD	Department of Defense
FUDS	Formerly Used Defense Sites
GPS	Global Positioning System
GSA	General Services Administration
HTRW	Hazardous, Toxic, and Radiological Waste
IAG	Interagency Agreement
IRP	Installation Restoration Program
LEL	Lowest Effect Level
LWP	Letter Work Plan
mg/kg	Milligrams per kilogram (parts per million; soil matrix)
mg/L	Milligrams per liter (parts per million; aqueous matrix)
MRD	Missouri River Division
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NEA	Northern Ecological Associates, Inc.
NYD	New York District
NYSDEC	New York State Department of Environmental Conservation
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PPE	Personal Protective Equipment
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Program Plan
RPD	Relative Percent Difference
RRSEP	Relative Risk Site Evaluation Program
RSCO	Recommended Soil Cleanup Objective (NYSDEC)
SARA	Superfund Amendments and Reauthorization Act
SEL	Severe Effect Level
SOPs	Standard Operating Procedures
STL	Severn Trent Laboratories
SVOC	Semivolatile Organic Compound

TAL	Target Analyte List
TCE	Trichloroethene
TCL	Target Compound List
TIC	Tentatively Identified Compound
TOC	Total Organic Carbon
TPH	Total Petroleum Hydrocarbon
ug/kg	Micrograms per kilogram (parts per billion; soil matrix)
ug/L	Micrograms per liter (parts per billion; aqueous matrix)
USACE	United States Army Corps of Engineers
USDA-SCS	United States Department of Agriculture-Soil Conservation Service; currently, USDA-NRCS (Natural Resources Conservation Service)
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

APPENDIX A

PROJECT DAILY CHEMICAL QUALITY CONTROL REPORTS

DAILY CHEMICAL QUALITY CONTROL REPORT

PROJECT DCQCR REPORT NO: 1

DATE: 10/13/99

USACE PROJECT MANAGER: Mark Lulka

PROJECT: Stewart AFB, Newburgh, NY

OGDEN JOB NUMBER: 7-7076-0061

CONTRACT: DACW51-97-D-0010

DELIVERY ORDER: 61

DAY:	SUN	MON	TUE	WED	THUR	FRI	SAT
				X			

WEATHER:	CLEAR	HAZY	CLOUDY	RAIN	SNOW
	X		X		

TEMP:	< 32 F	32 - 50 F	50 - 70 F	70 - 85 F	> 85 F
			X		

WINDS:	CALM	MODERATE	HIGH
	X		

HUMIDITY:	DRY	MODERATE	HUMID
	X		

SUB-CONTRACTORS ON-SITE:

N/A

EQUIPMENT ON-SITE:

pump, disposal bailers, field sampling equipment, OVM

WORK PERFORMED (INCLUDING SAMPLING):

Five groundwater samples were collected from 5 wells by using dedicated plastic bailers in three monitoring wells. All monitoring wells were purged more than three volumes of before collect groundwater sample. Groundwater quality standard was also measured while purging groundwater.

Groundwater samples ~~cooler with 4°C~~ were shipped to STL, Whippany NJ.

In addition to collecting groundwater samples, a surface water sample & sediment sample were collected from a ponded area in a stream located southeast of Area Two (landfill).

DAILY CHEMICAL QUALITY CONTROL REPORT

(CONTINUATION SHEET)

PROJECT: Stewart AFB, Newburgh, NY DATE: 10/13/99

OGDEN JOB NUMBER: 7-7076-0061 PROJECT DCQCR REPORT NO: 1

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

OVM was calibrated before sampling activity one duplicate (Groundwater) and one MS/MSD (Groundwater) were collected for QA/QC purpose. In addition, a duplicate surface water sample + sediment sample were collected for QA/QC purposes.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Level D - hard hat, coveralls, surgical gloves.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTIONS TAKEN:

N/A (None)

SPECIAL NOTES:

N/A (None)

TOMORROW'S EXPECTATIONS:

N/A (None)

SIGNATURE: [illegible] TITLE: Project Geologist

DAILY CHEMICAL QUALITY CONTROL REPORT

PROJECT DCQCR REPORT NO: 2

DATE: 10/14/99

USACE PROJECT MANAGER: Mark Lulka

PROJECT: Stewart AFB, Newburgh, NY

OGDEN JOB NUMBER: 7-7076-0061

CONTRACT: DACW51-97-D-0010

DELIVERY ORDER: 61

DAY:	SUN	MON	TUE	WED	THUR	FRI	SAT
					X		

WEATHER:	CLEAR	HAZY	CLOUDY	RAIN	SNOW
	X		X		

TEMP:	< 32 F	32 - 50 F	50 - 70 F	70 - 85 F	> 85 F
		X			

WINDS:	CALM	MODERATE	HIGH
			X

HUMIDITY:	DRY	MODERATE	HUMID
	X		

SUB-CONTRACTORS ON-SITE:

Terraprobe, Inc., Kendall drilling inc.

EQUIPMENT ON-SITE:

Truck Geoprobe rig, Hollow stem Auger rig, field vehicles, field sampling equipments etc.

WORK PERFORMED (INCLUDING SAMPLING):

Total sixteen soil samples were collected from eight soil borings by using geoprobe rig in Area 1 (fuel storage tank farm). In Area 2 (old dump), Hollow stem Auger rig was used to collect groundwater sample. Due to fill material (concrete, steel etc), drilling was refused. After completion of the drilling, all soil borings were sealed by bentonite slurry.
Soil sample coolers with 4°c temp were shipped to STL Whippany, New Jersey
Soil classification were described in the soil boring logs with PID reading.
In addition, two surface water and two sediment samples were collected from ponded areas in a stream located northeast of and east of Area Two (landfill).

DAILY CHEMICAL QUALITY CONTROL REPORT

(CONTINUATION SHEET)

PROJECT: Stewart AFB, Newburgh, NY

DATE: 10/14/99

OGDEN JOB NUMBER: 7-7076-0061

PROJECT DCQCR REPORT NO: 2

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

OVM calibrated before start the activity
one duplicate, one field blank and one MS/MSD
were collected for QA/QC purpose.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Level D - hardhat, coveralls, surgical gloves, steel toe
boot etc.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTIONS TAKEN:

In Area 2 (old dump), drilling refusal due to
land fill material.
Air rig will be used at later date

SPECIAL NOTES:

N/A (None)

TOMORROW'S EXPECTATIONS:

N/A (None)

SIGNATURE: [illegible]

TITLE: Project Geologist.

ER 1110-1-263 (1 APRIL 1996)

DAILY CHEMICAL QUALITY CONTROL REPORT

PROJECT DCQCR REPORT NO: 3

DATE: 10/15/99

USACE PROJECT MANAGER: Mark Lulka

PROJECT: Stewart AFB, Newburgh, NY

OGDEN JOB NUMBER: 7-7076-0061

CONTRACT: DACW51-97-D-0010

DELIVERY ORDER: 61

DAY:	SUN	MON	TUE	WED	THUR	FRI	SAT
						X	

WEATHER:	CLEAR	HAZY	CLOUDY	RAIN	SNOW
	X				

TEMP:	< 32 F	32 - 50 F	50 - 70 F	70 - 85 F	> 85 F
			X		

WINDS:	CALM	MODERATE	HIGH
		X	

HUMIDITY:	DRY	MODERATE	HUMID
	X		

SUB-CONTRACTORS ON-SITE:

Bill Hildreth - Greves and Hildreth surveyes

EQUIPMENT ON-SITE:

Field vehicles.

WORK PERFORMED (INCLUDING SAMPLING):

Meeting with Mr Don Fegan, NYSDOT (Bld # 138) to get control point for surveying. show the location of Borings in Area 1 and Area 2. to Mr Bill Hildreth, Greves and Hildreth surveyor. Also show other points around the area 1 and area 2 which has to be surveyed.

DAILY CHEMICAL QUALITY CONTROL REPORT

(CONTINUATION SHEET)

PROJECT: Stewart AFB, Newburgh, NY DATE: 10/15/99

OGDEN JOB NUMBER: 7-7076-0061 PROJECT DCQCR REPORT NO: 3

QUALITY CONTROL ACTIVITIES (INCLUDING FIELD CALIBRATIONS):

N/A

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

Level D - hard hat coveralls, gloves, steel Toe Boot etc.

PROBLEMS ENCOUNTERED/CORRECTIVE ACTIONS TAKEN:

NONE

SPECIAL NOTES:

NONE

TOMORROW'S EXPECTATIONS:

N/A

SIGNATURE: [illegible] TITLE: Project Geologist

APPENDIX B

SOIL BORING LOGS

SOIL BORING LOG

PROJECT NUMBER: 770760061	PROJECT NAME: Stewart AFB, Newburgh, NY		DATE: 10/14/99
BORING NUMBER: SB1-1	COORDINATES:		DATE STARTED: 10/14/99
ELEVATION:	GWL: Depth:	Date/Time	DATE COMPLETED: 10/14/99
ENGINEER/GEOLOGIST: M. Patel	Depth:	Date/Time	PAGE 1 OF 1
DRILLING METHODS: Geoprobe			

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS PID
1	0-4' MC-1			Yellowish Brown and Gray SILT, little cmf Sand, trace Gravel w/ pieces of Rock.	F			
2								
3								4 ppm
4	4-8'							
5	MC-2			Moist-Wet, Pale Green CLAY, trace Silt, little mf Gravel (fill)	F			220 ppm,
6								G.W.L. - 6.5'
7								
8				End of the Boring at 8.0'				

NOTES: Note: MC - Micro core Drilling co. TerraProbe, Inc.

OGDEN ENVIRONMENTAL AND ENERGY SERVICES

SOIL BORING LOG

PROJECT NUMBER: 770760061	PROJECT NAME: Stewart AFB, Newburgh, NY		DATE: 10/14/99
BORING NUMBER: SB1-2	COORDINATES:		DATE STARTED: 10/14/99
ELEVATION:	GWL: Depth:	Date/Time	DATE COMPLETED: 10/14/99
ENGINEER/GEOLOGIST: M. Patel	Depth:	Date/Time	PAGE 1 OF 1
DRILLING METHODS:			

DEPTH (Ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS PID
1	0-4' MC-1		32"	Brown yellow to Grayish green CLAY, little mf Sand, little mf Gravel, trace silt & pieces of Rock	F			2 PPM
2								14 PPM
3								
4	4-8' MC-2		38"	Wet, grayish Green CLAY, little mf Sand, little mf Gravel	F			G.W.L ≅ 7.0'
5								
6								309 PPM
7					SM	7'		
8				End of the Boring at 8.0'				

NOTES: MC- Microcore

Drilling co. TerraProbe, Inc.

OGDEN ENVIRONMENTAL AND ENERGY SERVICES

SOIL BORING LOG

PROJECT NUMBER: 770760061	PROJECT NAME: Stewart AFB, Newburgh, NY		DATE: 10/14/99
BORING NUMBER: SB-3	COORDINATES:		DATE STARTED: 10/14/99
ELEVATION:	GWL: Depth:	Date/Time	DATE COMPLETED: 10/14/99
ENGINEER/GEOLOGIST: M. Patel	Depth:	Date/Time	PAGE 1 OF 1
DRILLING METHOD: Geoprobe			

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS PID
1	0-4' MC-1		40"	Dark Brown mf SAND, little Silt w/ piece of Rock, roots etc.	F			0 ppm
2								
3								
4	4-8' MC-2		38"	Wet, Dark Brown, little Silt, trace of Gravel.	SW			0 ppm
5								GWL ≈ 8.0' (7.5')
6								
7								
8				End of the Boring at 8.0'				

NOTES: MC - Microcore

Drilling co. Terraprobe, Inc.

OGDEN ENVIRONMENTAL AND ENERGY SERVICES

SOIL BORING LOG

PROJECT NUMBER: 770760061	PROJECT NAME: Stewart AFB, Newburgh, NY		
BORING NUMBER: SB1-4	COORDINATES:		DATE: 10/14/99
ELEVATION:	GWL: Depth:	Date/Time	DATE STARTED: 10/14/99
ENGINEER/GEOLOGIST: M. Patel	Depth:	Date/Time	DATE COMPLETED: 10/14/99
DRILLING METHODS: Geoprobe			PAGE 1 OF 1

DEPTH (Ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
1	0-4' MC-1		32"	Dry-Moist, Yellowish Brown mf SAND, little Silt w/ Piec of grass, Root etc.	F			
2								
3								
4	4-8' MC-2		48"	Wet, yellowish Brown, MF SAND, little Silt	SM			GWL-6.0' ±
5								
6								
7								
8				End of the boring at 8.0'				

NOTES: MC- Microcore

Drilling co. TerraProbe, Inc.

OGDEN ENVIRONMENTAL AND ENERGY SERVICES

SOIL BORING LOG

PROJECT NUMBER: 770760061	PROJECT NAME: Stewart AFB, Newburgh, NY	
BORING NUMBER: SB1-5	COORDINATES:	DATE: 10/14/99
ELEVATION:	GWL: Depth: Date/Time	DATE STARTED: 10/14/99
ENGINEER/GEOLOGIST: M. Patel	Depth: Date/Time	DATE COMPLETED: 10/14/99
DRILLING METHODS: Geoprobe		PAGE 1 OF 1

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
1	0-4' MC-1		35"	Yellow & Brown cmf SAND, little Silt, trace mf Gravel. trace clg w/ Pica & Rock, gravel etc	F			2.5 ppm
2								
3								
4	4-8' MC-2		48"	Moist-Wet, Grayish Green CLAY little Silt, trace mf Sand & Gravel	F			165 ppm GWL - 7.5'
5								
6								
7								
8								

NOTES: MC - Microcore

Drilling co. Terra Probe, Inc.

OGDEN ENVIRONMENTAL AND ENERGY SERVICES

SOIL BORING LOG

PROJECT NUMBER: 770760061	PROJECT NAME: Stewart AFB, Newburgh, NY		
BORING NUMBER: SB1-6	COORDINATES:		DATE: 10/14/99
ELEVATION:	GWL: Depth:	Date/Time	DATE STARTED: 10/14/99
ENGINEER/GEOLOGIST: M. Patel	Depth:	Date/Time	DATE COMPLETED: 10/14/99
DRILLING METHODS: Geoprobe			PAGE 1 OF 1

DEPTH (Ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS PID
1	0-4' MC-1		35"	Yellowish Brown. mf SAND, little mf Gravel. trace Clay & Silt w/ Pieces of Rock, moist	F			0 ppm
2								
3								
4	4-8' MC-2		40"	Moist-Wet. Gray & Green CLAY, little mf Sand, trace Silt trace mf Gravel w/ Pieces of Rock	F			0 ppm
5								
6								▼ GWL. 8.0(-)
7								
8				End of the Boring at 8.0'				

NOTES: MC: Microcore Drilling co. Terra Probe, Inc.

OGDEN ENVIRONMENTAL AND ENERGY SERVICES

SOIL BORING LOG

PROJECT NUMBER: 770760061	PROJECT NAME: Stewart AFB, Newburgh, NY	
BORING NUMBER: SB1-7	COORDINATES:	DATE: 10/14/99
ELEVATION:	GWL: Depth: Date/Time	DATE STARTED: 10/14/99
ENGINEER/GEOLOGIST: M. Patel	Depth: Date/Time	DATE COMPLETED: 10/14/99
DRILLING METHODS: Geoprobe.		PAGE 1 OF 1

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
1	0-4' MC-1		40'	Dark Brown mf SAND, little Silt w piece of mt, grass etc.	F SM	6"		0 ppm
2								
3								G.W.L - 5.0' ▼
4	4-8' MC-2		35"	Wet, Dark Brown mf SAND, little Silt	SM			
5								0 ppm
6								
7								
8				End of the Boring at 8.0'				

NOTES:
MC - Microcore

Drilling Co. ~~Microcore~~
Terra Probe, Inc.

OGDEN ENVIRONMENTAL AND ENERGY SERVICES

SOIL BORING LOG

PROJECT NUMBER: 770760061	PROJECT NAME: Stewart AFB, Newburgh, NY		
BORING NUMBER: SB1-8	COORDINATES:		DATE: 10/14/99
ELEVATION:	GWL: Depth:	Date/Time	DATE STARTED: 10/14/99
ENGINEER/GEOLOGIST: M. Patel	Depth:	Date/Time	DATE COMPLETED: 10/14/99
DRILLING METHODS: Geoprobe			PAGE 1 OF 1

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6"	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS PID
1	0-4' MC-1		30"	Dark Brown cmf SAND, some silt, trace f gravel, & pieces of root, grass etc.	F SM			0 ppm
2								
3								
4	4-8' MC-2		32"	Wet, Dark Brown mf SAND, little silt, trace clay	SM			0 ppm
5								
6								
7								
8				End of the Boring at 8.0'				

NOTES:
MC- Microcore

Drilling co. Terraprobe. Inc.

OGDEN ENVIRONMENTAL AND ENERGY SERVICES

APPENDIX C

WELL PURGING AND SAMPLING LOGS

Groundwater Sampling Data

Project Name: Stewart AFB
Location: Newburgh, NY
Weather conditions: Partly Sunny, Wind (NW) 52° to 60° F
Sample Team: Madhu Patel / Steve Posten / J. M.

Project Number: 770760061

Date: 10/13/99
Mon Tue (Wed) Thu Fri

Meter Calib. Data:

pH Meter S/N _____
Standards 4.01 7.00 10.00
Readings _____
Temp _____ %Temp°c _____
Dissolved O2 Meter S/N _____
Dissolved O2 Temp° _____ mg/L

Conductivity Meter S/N _____
Standards 1,000 umhos/cm 10,000 umhos/cm
Readings _____ TEMP°c _____

Sampling Description:
OTR Semi-Annual Monthly Weekly

Pre-Purge Reading
Permit No. _____
Well No. MW-1
pH 6.51
Temp°c 17.2°C
Cond. 0.816 mS/cm DO2 3.24 mg/L

Post Purge
pH 6.64
Temp°c 17°C
Cond. 0.712 DO2 1.90 mg/L

Sample Reading
Time: 6.60
pH 17°C 6.60
Temp°c 17.0°C
Cond. 0.715 DO2 1.85 mg/L

Distance from top of casing to grade (ft)=
Dia. of casing (in) = 4"
Depth to bottom (ft) = 10.45
Depth to water (ft) = 4.54
Water column (ft)= 5.91
Volume in casing (gal) = 3.858
Estimated volume to purge (gal)³= 11.57

Purging Begins: 0944
Purging Ends: 1105
Purge Rate (gpm) 0.17 GPM
Actual volume purged (gal) 11.5 gals

Sample Collected @ 1215
Sampling Ends @ 1220

Slow Recovery [Y] [N]
Purged Dry (Y) [N]

Elevation Recovered To: _____ Time: _____
ODOR [Y] [N] Type: Petro (Organic) Other

COLOR: clear, Organic
Comments:
Purged to dry

Pre-Purge Reading
Permit No. _____
Well No. MW-2
pH 7.05
Temp°c 16.8°C
Cond. 0.542 mS/cm DO2 1.73 mg/L

Post Purge
pH 7.65
Temp°c 16.9°C
Cond. 0.612 mS/cm DO2 2.15 mg/L

Sample Reading
Time: 7.40 1251
pH 0.712 7.65
Temp°c 16.8°C
Cond. 0.619 mS/cm DO2 2.10 mg/L

Distance from top of casing to grade (ft) =
Dia. of casing (in) = 4"
Depth to bottom (ft) = 10.40
Depth to water (ft) = 3.65
Water column (ft)= 6.75
Volume in casing (gal) = 4.4 gals
Estimated volume to purge (gal)³= ~~13~~ 20.25

Purging Begins: 1111
Purging Ends: 1245
Purge Rate (gpm) 0.14 GPM
Actual volume purged (gal) 13.16 GPM gals

Sample Collected @ 1255
Sampling Ends @ 1256

Slow Recovery (Y) [N]
Purged Dry [Y] (N)

Elevation Recovered To: _____ Time: _____
ODOR [Y] [N] Type: Petro Organic Other

COLOR: Grey to clear
Comments:
Purged & collected sample after parameter stabilization

Casing Dia	Gallons/Linear Ft	Casing Dia	Gallons/Linear Ft	Alternate Calculation
1"	0.0408	6"	1.4688	$(.163/h) \times (2/d)^2$
2"	0.1632	8"	2.6112	h = Water Column
3"	0.3672	10"	4.080	d = Casing diameter
4"	0.6528	12"	5.8752	

Project Name: Stewart AFB, Newburgh NY Project Number: 77076006/ Date: 10/13/99

Pre-Purge Reading
Permit No. MW-4
Well No. MW-4
pH 6.89
Temp 17.8°C
Cond. 0.585 mS/cm DO2 0.70 mg/l

Post Purge
pH 6.78
Temp 17.8°C
Cond. 0.595 mS/cm DO2 0.72 mg/l

Sample Reading
Time: 1440
pH 6.82
Temp 17.8°C
Cond. 0.575 DO2 0.70 mg/l

Distance from top of casing to grade (ft)=
Dia. of casing (in) = 4"
Depth to bottom (ft) = 13.98
Depth to water (ft) = 4.25
Water column (ft)= 9.73
Volume in casing (gal) = 6.35 gals
Estimated volume to purge (gal) = 17.05 gals

Purging Begins: 1330
Purging Ends: 1430
Purge Rate (gpm) 0.17 GPM
Actual volume purged (gal) 9 gals

Sample Collected @ 1440
Sampling Ends @ 1445

Slow Recovery [Y] [N]
Purged Dry [Y] [N]

Elevation Recovered To:_____ Time:_____
ODOR [Y] [N] Type: Petro Organic Other

COLOR: clear.
Comments:
Purged to Dry.

Pre-Purge Reading
Permit No.
Well No. MW-3
pH 6.94
Temp 17.4°C
Cond. 0.97 mS/cm DO2 1.84 mg/l

Post Purge
pH 6.72
Temp 17.3°C
Cond. 0.96 DO2 1.84 mg/l

Sample Reading
Time: 1635
pH 6.62
Temp 17.4°C
Cond. 0.95 mS/cm DO2 1.81 mg/l

Distance from top of casing to grade (ft) =
Dia. of casing (in) = 4"
Depth to bottom (ft) = 10.24
Depth to water (ft) = 2.6
Water column (ft)= 7.64
Volume in casing (gal) = 22.92
Estimated volume to purge (gal) = 22.92

Purging Begins: 1458
Purging Ends: 1630
Purge Rate (gpm) 0.17 GPM
Actual volume purged (gal) 13.64

Sample Collected @ 1635
Sampling Ends @ 1640

Slow Recovery [Y] [N]
Purged Dry [Y] [N]

Elevation Recovered To:_____ Time:_____
ODOR [Y] [N] Type: Petro Organic Other

COLOR: clear
Comments:
(almost dry)
Sheen

Pre-Purge Reading
Permit No.
Well No. MW-5
pH 6.52
Temp 17.3°C
Cond. 0.92 DO2 1.80 mg/l

Post Purge
pH 6.50
Temp 17.2°C
Cond. 0.95 DO2 1.72 mg/l

Sample Reading
Time: ~~1715~~ 1715
pH ~~17.3°C~~ 6.25
Temp 17.1°C
Cond. 0.95 mS/cm DO2 1.70 mg/l

Distance from top of casing to grade (ft) =
Dia. of casing (in) = 4"
Depth to bottom (ft) = 15.40
Depth to water (ft) = 2.08
Water column (ft)= 13.32
Volume in casing (gal) = 39.96
Estimated volume to purge (gal) =

Purging Begins: 16.50
Purging Ends: 17.15
Purge Rate (gpm) 1.6 GPM
Actual volume purged (gal) 40 gals

Sample Collected @ 17.15
Sampling Ends @ 17.20

Slow Recovery [Y] [N]
Purged Dry [Y] [N]

Elevation Recovered To:_____ Time:_____
ODOR [Y] [N] Type: Petro Organic Other

COLOR:
Comments:
Purged to dry
Sheen
Used Bailer to Purged Groundwater

APPENDIX D

LABORATORY DATA PACKAGES
(under separate cover)

NEA
NORTHERN ECOLOGICAL ASSOCIATES, INC

New York Office:
33 Park Street
Canton, New York 13617

Corporate Headquarters:
451 Presumpscot Street
Portland, Maine 04103

APPENDIX D, VOLUME I OF VI

FINAL
FORMER STEWART AIR FORCE BASE (AFB)
HTRW INVESTIGATION

NEWBURGH, NEW YORK

Contract Number: DACW51-97-D-0010
Delivery Order No. 61

Prepared for:

U.S. Army Corps of Engineers
New York District
26 Federal Plaza
New York, New York 10278-0090

Prepared by:

Ogden Environmental and Energy Services Co., Inc.
Northern Ecological Associates, Inc.

MARCH 2000

Committed To *Your* Success

Severn Trent Laboratories
628 Route 10
Whippany, NJ 07981

Tel: (973) 428-8181
Fax: (973) 428-5222

NYSDEC CATEGORY B

SAMPLING DATE OCTOBER 13, 1999

OGDEN ENVIRONMENTAL

PROJECT: STEWART AFB 770760061

PREPARED BY:

SEVERN TRENT LABORATORIES, INC.

(CERTIFICATION NUMBER 10997)

STL JOB NO: 20990-94106

VOLUME I OF III

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DECEMBER 13, 1999

20990-94106
OGDEN ENVIRONMENTAL
285 DAVIDSON AVENUE
SOMERSET , NJ 08873

ATTENTION: STEVE POSTEN

The following samples were received for analysis by STL-NJ (NY Cert.#10997). These samples were received on and labeled as follows:

STL Sample No.:	Client ID:	Date Received
94106001	MW-1-01	10/13/99
94106002	MW-2-01	10/13/99
94106003	MW-2-02	10/13/99
94106004	MW-2-03	10/13/99
94106005	MW-4-01	10/13/99
94106006	SW-2-1-01	10/13/99
94106007	SW-2-1-02	10/13/99
94106008	S-2-1-01	10/13/99
94106009	S-2-1-02	10/13/99
94106010	MW-3-01	10/13/99
94106011	MW-5-01	10/13/99

DATA RELEASE AUTHORIZED BY:

Carl W. Armbruster
Director of Operations

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Severn Trent Laboratories
628 Route 10
Whippany, NJ 07981

Tel: (973) 428-8181
Fax: (973) 428-5222

STL - WHIPPANY LAB CERTIFICATIONS

STL - NJ possesses the following regulatory certification and is currently certified to perform analysis in accordance with regulations pertaining to these certifications. Certificates are on file at the laboratory.

State/Agency Certification	Lab ID Number
CLP Organics Contract	68D50011
Connecticut	PH0722
Maryland	195
New Jersey	14530
New York	10997
North Carolina	339
Pennsylvania	68-355
Rhode Island	178
USDA Permit	S-3295 Revised
Delaware	NJ323

rpdata\stlcert.for

Last Updated: 8/18/99

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Subcontracting 1018

CASE NARRATIVE

Client: OGDEN ENVIRONMENTAL

Job No: 20990-94106

CASE NARRATIVE

VOLATILES:

No problems were encountered.

SEMIVOLATILES:

No problems were encountered.

GAS CHROMATOGRAPHY:

PESTICDES (WATER):
The confirmation column RTX-CLP II is used for retention time verification and pattern recognition only, not quantitation.

All samples final usable analyses were performed nine days outside of the extract holding time. These results are denoted with a "RR" after the client and laboratory ID's. Sample analyses was extracted within the holding time, but were not usable for final reporting are presented in this report. All accompanying QC information for the analyses is also provided in this report.

The ending continuing calibration checks b20da035 (INDA L3) and b20da036 (INDB) each have 1 compound over the 15% difference, Decachlorobiphenol at 16.54% (INDA) and 16.83 (INDB). The average of all the percent differences are less than 15% and per SW846 method 8000B the data is reportable.

PESTICIDES (SOIL):
Soil samples were analyzed with five-fold dilutions due to high concentrations of target compounds. Due to matrix interference, the matrix spike/matrix spike duplicate failed QC criteria. The blank spike met all QC criteria. The confirmation column DB608 is used for retention time verification and pattern recognition only, not quantitation.

PCB's:
No problems were encountered.

METALS:

Samples 94106008 (S-2-1-01) and 94106009 (S-2-1-02) were diluted five-fold for Manganese due to sample concentrations exceeding the calibration range. The detection limits were raised accordingly.

WET CHEMISTRY:

No analysis was performed.

SUBCONTRACTING:

The analysis for Semivolatiles was subcontracted to Severn Trent Laboratories, Inc., Monroe, Connecticut (NJ Cert. #46410).

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628 Route 10
Whippany NJ 07981

Tel: (973) 428-8181
Fax: (973) 428-5222

ORGANICS ANALYSIS
DATA AND SAMPLE QUALIFIERS

DATA QUALIFIERS:

U - Indicates that the compound was analyzed for but not detected.

J - This qualifier indicates an estimated concentration. This qualifier is used (1) when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, (2) when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the CRQL or PQL but greater than zero, and (3) when the retention time data indicate the presence of a compound that meets the Pesticide/Aroclor identification criteria, and the result is less than the CRQL or PQL but greater than zero.

B - This qualifier is used when the analyte is found in a method blank as well as the sample. It indicates possible sample contamination and warns the user to use caution when applying the results of this analyte.

E - Exceeds calibration curve

A - Indicates that a tentatively identified compound is a suspected Aldol-condensation product.

N - Indicates presumptive evidence of a compound. This qualifier is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all tentatively identified compound results. For generic classification of a tentatively identified compound, such as chlorinated hydrocarbon, the N code is not used.

D - This qualifier identifies all compounds identified in an analysis at a secondary dilution factor.

P - Indicates that the quantitative results from the two GC columns differed by more than 25 percent.

SAMPLE QUALIFIERS:

DL - Indicates that the analysis was performed at a secondary dilution.

RE - Rerun - Indicates that the analysis is a reinjection or a reextraction and reanalysis, usually due to a failed QC element in the initial analysis.

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METALS ANALYSIS
DATA QUALIFIERS

U - Result is below the Method Detection Limit (MDL)

B - Result is between the MDL and the RL (Reporting Limit). (Note that this flag does not have the same meaning as in Organics analysis).

CP-TR - Trace Inductively Coupled Argon Plasma.

ICAP - Inductively Coupled Argon Plasma.

FAA 6211
FAA 6398 - Graphite Furnace Atomic Absorption.

CV - Cold Vapor Atomic Absorption.

NR - Not Requested.

METHODOLOGY SUMMARY

VOLATILE ORGANICS

EPA SW846 Method 8260B is used for the analysis of Volatile Organics. Helium is bubbled through a sample contained in a specifically designed purging chamber. The purgeables are efficiently transferred from the sample to the vapor phase. The vapor is swept through a sorbent column where the purgeables are trapped. After purging is completed, the sorbent column is heated and backflushed with Helium to desorb the purgeables onto a gas chromatographic column. The gas chromatograph is temperature programmed to separate the purgeables which are then detected with a mass spectrometer. The holding time for aqueous samples is fourteen (14) days from the date of collection, providing that the samples are preserved to pH <2 with HCl (seven (7) days otherwise). The holding time for soil samples is also fourteen (14) days from collection.

SEMIVOLATILE ORGANICS - WATER

EPA SW846 Methods 3510C and 8270C are used for the extraction and analysis of Semivolatile Organics. Measured volumes of sample are pH adjusted to >12. The sample aliquots are then serially extracted with Methylene Chloride. The Methylene Chloride extracts are concentrated and analyzed by GC/MS. The holding time for extraction is seven (7) days from date of collection. The holding time for analysis is forty (40) days from date of extraction.

SEMIVOLATILE ORGANICS - SOIL

EPA SW846 Methods 3550B and 8270C are used for the extraction and analysis of Semivolatile Organics. A 30 gram sample is sonicated three times with a 1:1 mixture of Methylene Chloride and Acetone. The extracts are then concentrated and analyzed by GC/MS. The holding time for extraction is fourteen (14) days from date of collection. The holding time for analysis is forty (40) days from date of extraction.

PESTICIDES - WATER

EPA SW846 Methods 3510C and 8081A are used for the extraction and analysis of Pesticides and PCBs. One liter of sample is solvent extracted with three 60-milliliter aliquots of Methylene Chloride. The Methylene Chloride extract is filtered through Sodium Sulfate, concentrated and exchanged to Hexane. Florisil cleanup may also be performed. The extract is analyzed by gas chromatography and target compounds are measured using an electron capture detector. The holding time for extraction is seven (7) days from date of collection. The holding time for analysis is forty (40) days from date of collection.

PESTICIDES - WATER

EPA SW846 Methods 3510C and 8081 are used for the extraction and analysis of Pesticides and PCBs. One liter of sample is solvent extracted with three 60-milliliter aliquots of Methylene Chloride. The Methylene Chloride extract is filtered through Sodium Sulfate, concentrated and exchanged to Hexane. Florisil cleanup may also be performed. The extract is analyzed by gas chromatography and target compounds are measured using an electron capture detector. The holding time for extraction is seven (7) days from date of collection. The holding time for analysis is forty (40) days from date of collection.

PESTICIDES - SOIL

EPA SW846 Methods 3550B and 8081 are used for the extraction and analysis of Pesticides and PCBs. A 30 gram sample aliquot is sonicated three times with a 1:1 mixture of Acetone and Methylene Chloride. The extracts are concentrated and exchanged to Hexane. PCB only samples are treated with sulfuric acid as a cleanup. Pesticide/PCB samples may have florisil cleanup. The extract is then analyzed by gas chromatography and the compounds are measured using an electron capture detector. The holding time for extraction is fourteen (14) days from date of collection. The holding time for analysis is forty (40) days from date of extraction.

PCB - WATER

EPA Methods 3510C/8082 are used for the extraction analysis of PCBs. A measured volume of sample is solvent extracted with Methylene Chloride. The Methylene Chloride extract is filtered through Sodium Sulfate, exchanged to Hexane, concentrated and treated with Sulfuric Acid to remove interferences, if necessary. The extract is separated by gas chromatography and the compounds are measured using an electron capture detector.

PCB - SOIL

The analysis of PCBs is performed by EPA Method 3550B/8082. A 30 gram sample is sonicated three times with a 1:1 mixture of Acetone and Methylene Chloride. The extracts are concentrated, treated with Sulfuric Acid, and exchanged to Hexane. The extract is then analyzed by gas chromatography with electron capture detector on two different GC columns.

METALS

Metals analysis is based on SW846. Arsenic, Selenium, Thallium and Lead maybe analyzed by furnace AA with Zeeman background correction. Mercury is analyzed by cold vapor technique. All other metals are analyzed by Inductively Coupled Argon Plasma emission spectroscopy (if the ICP61E Trace is used, Arsenic, Selenium, Thallium and Lead can be analyzed by ICP). Samples for ICP analysis are digested with Hydrochloric and Nitric Acids. Samples for furnace analysis are digested with Nitric Acid. Samples for Mercury analysis are digested with Potassium permanganate and Nitric Acid. The holding time for Mercury is twenty-six (26) days from collection. The holding time for all other Metals is six (6) months.

CHAIN OF CUSTODY

STL Committed To Your Success
Severn Trent Laboratories
628 Route 10
Whippany NJ 07981
Tel: (973) 428-8181
Fax: (973) 428-5222

No. 73529

CHAIN OF CUSTODY

FIELD BOOK: _____ Pg ____ of ____

(1) Client: OGDEN/NSA USACE-NYD
(2) Project Name/no.: STEWART ATB 77076 0061
(3) Client Contact: STEVE POSTEN
(4) STL Contact: DAN GLENN
(5) TAT: 1wk, 2wk, 3wk OTHER _____
(6) Proj. Type: NJPDES, NPDES, ISRA, CLP, CERCLA, RCRA, UST, ACO, MOA, OTHER USACE
(7) Protocol: CLP, SW846, EPA 600 DW, OTHER _____
(8) Reporting Type: NJ Reg Format, NJ Reduced Format, CLP, Level II, Level I (Data Sum), Other ASP CAT B

(14) Bill To _____
PO# _____

(15) ANALYSIS REQUIRED

For Lab Use Only
Job No. 94106
Quote No. _____
# of Coolers: _____
Cooler Temp.(s) _____
Custody Seal #(s) _____
Date Due: _____

PM NON-CONFORMANCE
Preserved: _____ Temp: _____
Container: _____ Volume: _____
Broken: _____ Initials: _____
Holding Time: _____
Other: _____
Logged By: _____

(9) Client ID (10 CHAR)	(10) Date	(11) Time	(12) Mtx	# OF CONTAINERS (13)	TCL VOC	TCL BN/AE	TCL PEST/PCB	TAL METALS	LAB ID	DESCRIPTION
MW-1-01	10/13/99	12:15	Water	3	X				01	
MW-2-01	10/13	12:55	Water	3	X				02	
MW-2-02	10/13	12:56	Water	3	X				03	
MW-2-03	10/13	1200	Water	3	X				04	
MW-4-01	10/13	1440	Water	3	X				05	
SW-2-1-01	10/13	14:58	Water	8	X	X	X	X	06	
SW-2-1-02	10/13	15:05	Water	8	X	X	X	X	07	
S-2-1-01	10/13	14:35	Soil	3	X	X	X	X	08	
S-2-1-02	10/13	14:35	Soil	3	X	X	X	X	09	
MW-3-01	10/13	16:35	Water	3	X				10	
MW-5-01	10/13	17:15	Water	3	X				11	

(16) COMMENTS: (Please include hazards on site.)

(17)

	Print Name and Company	Signature	Custody Seal # (s)	Date/Time
Sampled By:	Madhu M. Patel	[signature]		10/13/99 / 1900
Received By:	[signature] / STL	[signature]		10-13-99 / 1900
Relinquished By:	Rachel Malantak			/
Received By:				/
Relinquished By:				/
Received By:	Rachel Malantak STL	R Malantak		10/13/99 /

Mtx = Matrix of Sample. (AI=Air, AQ=Aqueous, LE=Leachate, ML=Misc Liquid, MS=Misc Solids, OIL, SE=Sediment, SL=Sludge, SO=Soil)

000610

... STL. The pink copy should be retained by the client.) See reverse for directions.

SEVERN TRENT LABORATORIES, Inc. - NEW JERSEY
SAMPLE RECEIPT VERIFICATION FORM

JOB NUMBER: 94106 CLIENT OGDEN DATE RECEIVED: 10/13/99

OF SAMPLES 11 # OF COOLERS 2

CUSTODY SEALS: PRESENT/ABSENT INTACT/ BROKEN TEMPERATURE BLANK PRESENT: ✓YES _ NO

COOLER TEMP/S ° C 3.83.7 COOLER OUTSIDE 2-6 ° C ___ PRESERVED: ICE/BLUE ICE/ NONE

IF OUTSIDE TEMP RANGE - WERE SAMPLES RECEIVED LESS THAN 4 HOURS FROM COLLECTION ? __ YES __ NO

CHAIN OF CUSTODY: PRESENT/ ABSENT PROPERLY SIGNED, DATED, TIME: ✓YES _ NO

SAMPLE TAGS: PRESENT/ ABSENT RECEIVED BY: DRIVER ✓ IF SHIPPED AIRBILL PRESENT ___ # ___

COOLER RADIOACT. SCREEN BELOW 0.50 uR/hr YES ✓ NO ___ (INFORM SAFETY OFFICER IMMED.)

✓YES __ NO SAMPLE BOTTLES INTACT
✓YES __ NO PROPER CONTAINERS PER ANALYSIS USED
✓YES __ NO SAMPLE LABELS INTACT
✓YES __ NO LABELS COMPLETE AND LEGIBLE (ID, DATE, TIME, SIGNATURE, PRESERVATIVE)
✓YES __ NO SAMPLES RECEIVED WITHIN HOLDING TIME
✓YES ✓ NO SAMPLES PROPERLY PRESERVED
✓YES __ NO NO BUBBLES PRESENT VOA WATER MATRIX __ NA
✓YES __ NO SUFFICIENT SAMPLE VOLUME RECEIVED
__ YES __ NO DRINKING H20/TREATED H20 – CHECKED FOR RESIDUAL CHLORINE ✓ NA
(DOCUMENT ON pH VERIFICATION LOG FORM

RM INTIAL 10/13 DATE - RUSH REPORT ISSUED BY __ NA
___ INTIAL ___ DATE - pH ANALYSIS PERFORMED BY ✓ NA
RM INTIAL 10/13 DATE - % MOISTURE PERFORMED BY __ NA
___ INTIAL ___ DATE - SAMPLE COMPOSITE PERFORMED BY ✓ NA

NOTE AND ITEMIZE BY SAMPLE AFFECTED, DISCREPANCIES AND NONCONFORMANCES FOUND:
voas not preserved

PROJECT MANAGER INFORMED OF DISCREPANCIES: ___ INTIALS ___ DATE ✓ NA

SUBCONTRACTING OF ANALYSIS REQUIRED __ YES __ NO SUB COC COMPLETED __ YES __ NO ✓ NA
SUBCONTRACTED SAMPLES SHIPPED __ YES __ NO CARRIER USED ___

SAMPLE RECEIPT, LABELING AND STORAGE PROCEDURES PERFORMED BY: R. Malanus

FINAL INSPECTION

BOTTLES CORRECTLY LABELED ✓YES __ NO REVIEWED BY [signature] DATE: 10/13/99
INTERNAL CHAIN OF CUSTODY INITIATED ✓YES __ NO
ALL SIGNATURES AND DATES COMPLETE ✓YES __ NO

CLIENT INFORMED OF DISCREPANCIES/NONCONFORMANCES BY PM ___ DATE ___ TIME ___

NAME CLIENT REPRESENTATIVE INFORMED ___ METHOD: PHONE ___ FAX ___

CORRECTIVE ACTION REQUESTED BY CLIENT: ___

CORRECTIVE ACTION TAKEN: ___

PROJECT MANAGER APPROVED VERIFICATION FORM COMPLETE: [signature] DATE 10/14/99
Print name [signature]

SEVERN TRENT LABORATORIES, Inc. - NEW JERSEY PAGE 1 of ___

SAMPLE PRESERVATION VERIFICATION LOG
SAMPLE CONTROL DEPARTMENT

JOB NUMBER: 94106 CLIENT: OGDEN DATE RECEIVED: 10/13/99

OF SAMPLES: 11

If pH is not within acceptable range, document actual pH in OTHER column

VOA			METALS			PHC			OIL & GREASE		
ID #	pH <2	OTHER	ID #	pH <2	OTHER	ID #	pH <2	OTHER	ID #	pH <2	OTHER
1		*	8	7							
2		*	9	5							
3		*	6	✓							
4		*	7	✓							
5		*									
6		*									
7		*									
10		*									
11		*									

CYANIDE			H2SO4 PRES. W.C.			H2SO4 PRES. W.C.			OTHER PRESERVATIVE		
ID #	pH >12	OTHER	ID #	pH <2	OTHER	ID #	pH <2	OTHER	ID #	pH ___	OTHER

COMMENTS: NOTE BY SAMPLE ID NUMBER - NON CONFORMANCES IN pH PRESERVATION:
* not preserved

pH PRESERVATION VERIFICATION PERFORMED BY: [signature] DATE 10/13/99

PROJECT MANAGER INFORMED OF NON CONFORMANCE: ____ YES INITIAL _____

STL
Committed To Your Success

Severn Trent Laboratories

INTERNAL CHAIN OF CUSTODY CHRONICLE
VOLATILES

Job/Case Number: 94106 Sample IDs: 1-07, 10, 11

Relinquished By: [illegible] Date/Time: 10/14/99

Received By: [illegible] Date/Time: 10/14/99

I confirm that I have performed the analysis below following SOP quidelines:

ANALYST RETRIEVAL:

Sample No(s)	Analyst Signature	Date	Returned Date (Soil)
001-011	S. Illnary	10/14/99	

ANALYST RETRIEVAL: REANALYSIS:

Sample No(s)	Analyst Signature	Date	

PERCENT SOLIDS:

Sample No(s)	Analyst Signature	Date	

I confirm that I have reviewed all associated data for this job:

REVIEWED BY: Signature [illegible] Date 11/17/99

Data Release Authorized By:

AUTHORIZATION: [illegible] Group Leader/Lab Manager Date 11/18/99

Severn Trent Laboratories

INTERNAL CHAIN OF CUSTODY CHRONICLE

BNA

JOB/CASE NUMBER: 94106

I confirm that I have performed the analysis below following SOP quidelines:

ANALYSIS:

Sample No(s)	Analyst Signature	Date
006,007	SSeal	10/21/99

REANALYSIS:

Sample No(s)	Analyst Signature	Date

PREPARATION:

Sample No(s)	Extraction Tech Signature	Date	Consumed
006,007	[illegible]	10/15/99	

I confirm that I have reviewed all associated data for this job:

REVIEWED BY: Signature: SSeal Date: 11/05/99

AUTHORIZATION: Data Release Authorized By: [illegible] Group Leader/Lab Manager Date: 11/16/99

SEVERN TRENT LABORATORIES, INC. (STL)
INTERNAL CHAIN OF CUSTODY CHRONICLE
GAS CHROMATOGRAPHY (GC)

JOB/CASE NUMBERS: 94106

I Confirm that I have performed the analysis below following SOP guidelines:

Analysis: Pest/PCB (Circle which apply)

Sample Numbers	Analyst Signature	Date
006 + 007	[illegible]	11.12.99

Preparation: Pest/PCB (Circle which apply)

006-007	John Kopuski	10-15-99

Analysis: Herbicide

Preparation: Herbicide

Analysis: Other

Preparation: Other

I confirm that I have reviewed all associated data and authorize the release of this job:

AUTHORIZATION: [illegible] — Group Leader/Lab Manager — Date: 12/10/99

SEVERN TRENT LABORATORIES, INC. (STL)
INTERNAL CHAIN OF CUSTODY CHRONICLE
GAS CHROMATOGRAPHY (GC)

JOB/CASE NUMBERS: 94106

I Confirm that I have performed the analysis below following SOP guidelines:

Analysis: Pest/PCB (Circle which apply)

Sample Numbers	Analyst Signature	Date
008-009	Lisa Tako	10/20/99

Preparation: Pest/PCB (Circle which apply)

008-009	John Kupinski	10-15-99

Analysis: Herbicide

Preparation: Herbicide

Analysis: Other

Preparation: Other

I confirm that I have reviewed all associated data and authorize the release of this job:

AUTHORIZATION: _____ _____
Group Leader/Lab Manager Date

SEVERN TRENT LABORATORIES, INC. (STL)
INTERNAL CHAIN OF CUSTODY CHRONICLE
GAS CHROMATOGRAPHY (GC)

JOB/CASE NUMBERS: 94106

I Confirm that I have performed the analysis below following SOP guidelines:

Analysis: Pest/PCB (Circle which apply)

Sample Numbers	Analyst Signature	Date
006-007	[illegible]	11/8/99

Preparation: Pest/PCB (Circle which apply)

006-007	[illegible]	10-15-99

Analysis: Herbicide

Preparation: Herbicide

Analysis: Other

Preparation: Other

I confirm that I have reviewed all associated data and authorize the release of this job:

AUTHORIZATION: [illegible] 11/22/99
Group Leader/Lab Manager Date

SEVERN TRENT LABORATORIES, INC. (STL)
INTERNAL CHAIN OF CUSTODY CHRONICLE
GAS CHROMATOGRAPHY (GC)

JOB/CASE NUMBERS: 94106

I Confirm that I have performed the analysis below following SOP guidelines:

Analysis: Pest/PCB (Circle which apply)

Sample Numbers	Analyst Signature	Date
008, 009	[illegible]	10/28/99

Preparation: Pest/PCB (Circle which apply)

008, 009	John Kopurch	10-15-99

Analysis: Herbicide

Preparation: Herbicide

Analysis: Other

Preparation: Other

I confirm that I have reviewed all associated data and authorize the release of this job:

AUTHORIZATION: [illegible] 11/22/99
Group Leader/Lab Manager Date

INTERNAL CHAIN OF CUSTODY CHRONICLE - METALS

Job/Case: 94106

Leachate Relinquished By: _____ Date/Time: _____

Leachate Received By: _____ Date/Time: _____

TCLP Preparation: ICP

Sample Number	Analyst	Date/Time	Returned to Storage

Analysis: ICP

Sample Number	Analyst	Date/Time	Returned to Storage
008-009	[illegible]	10/28/99 1200	10/28/99 1400
008-009	[illegible]	10/29/99 1000	10/29/99 1200
006-007	[illegible]	10/29/99 1000	10/29/99 1200
006-007	[illegible]	11/1/99 1200	11/1/99 1400

Analysis: Furnace

Sample Number	Analyst	Date/Time	Returned to Storage

Analysis: Mercury

Sample Number	Analyst	Date/Time	Returned to Storage
008,009	[illegible]	11/1/99 1300	
006,007	[illegible]	11/2/99 1345	

TCLP Preparation: Mercury

Sample Number	Analyst	Date/Time	Returned to Storage

I confirm that I have reviewed all associated data and authorize the release of this job:

Group Leader/Lab Manager: [illegible] Date: 12/7/99

STL - NEW JERSEY SIGNATURE PAGE

Employee Name	Signature	Initials
LABORATORY DIRECTOR		
Armbruster, Carl		CA
LABORATORY MANAGER		
Hitt, Dewey		DDH
QA/QC MANAGER		
Heath, Timothy		TMH
ADMINISTRATION		
Bartley, Katrina		KAB
Connelly, Joan		JMC
Davila, Nahir		N.D.
Nadzan, Al		A.N.
REPORTS PRODUCTION		
Cignarella, Christine		C.C.
Patel, Darshana	Darshana Patel	D.P.
Roman, Richard	Richard Roman	R.R.
SYSTEMS		
Foti, Lisa		
Molina, Maria		MCM

STL - NEW JERSEY SIGNATURE PAGE

Employee Name	Signature	Initials
PROJECT MANAGEMENT		
Brack, Joe		
Doster, Deanna		
Glenn, Dan		
Pryor, Kelly		
Trulick, Barbra		
SAMPLE CONTROL		
Doeffinger, John		
Droz, Efrain		
Malaniak, Rachel		
BOTTLE PREP		
D'Achille, Al		
Reynolds, Ed		
Sander, James		
GC/MS VOLATILES		
Acierno, Mark		MVA
Klusey, Sylvanus		SK
Manlangit, Ferdie		fm
Waldron, Stacey		
GC/MS SEMIVOLATILES		
Mauriello, Gregg		
O'Brien, Patrick		
Schulze, Stephen		
Seal, Sonia		08/23/99

STL - NEW JERSEY SIGNATURE PAGE

Employee Name	Signature	Initials
GAS CHROMATOGRAPHY		
Hankerson, Anthony		
Herrmann, Claus		
Hornberger, Kasie		KM
Kopinski, John		JK.
Lena, John		
Scott, Gordon		
Tako, Lisa		
~~Weschler~~, David		DW
Weechsler		
METALS		
Chang, Grace		GC
Cousineau, Paul		PC
Herpen, Lori		
Nadzan, Tim		
Schwartz, Robert		RSS
WET CHEMISTRY		
Begraft, Jacqueline		JB
Bielski, Kevin		KB
Florance, Gerard		JF.
Kadakia, Geeta		
Piatt, Ernest		ERP
FIELD SERVICES		
Dippel, Edward		
Knudsen, Troy		
Murad, John		

STL - NEW JERSEY SIGNATURE PAGE

Employee Name	Signature	Initials
RADIOLOGICALS		
Fink, Daniel		
Komanduri, Sreenivas	K Sreenivas	K S
Nielsen, Erik		
Smith, Benjamin	Benjamin Smith	BS
Zareian-Fink, Nahid	Nahid Zareian	N.Z

REVISED 8/20/99

RPDATA\MASTER\QCSIG.PG

VOLATILES

2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: STL-NJ

Job No. : 94106

	CLIENT SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	SMC4 (DBF) #	TOT OUT
01	VB1KI2	99	95	114	105	0
02	VB1KBS	95	102	115	108	0
03	MW-1-01	99	97	105	98	0
04	MW-2-01	98	100	102	101	0
05	MW-2-02	96	101	104	101	0
06	MW-2-03	96	99	106	102	0
07	MW-4-01	97	98	104	101	0
08	SW-2-1-01	96	94	103	102	0
09	SW-2-1-02	97	94	104	102	0
10	MW-3-01	97	95	109	100	0
11	MW-5-01	98	98	105	102	0
12	GW-W18AMSMS	97	97	114	101	0
13	GW-W18AMSDMSD	98	96	112	101	0
14	991015I2	97	94	110	105	0
15						
16						
17						
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27						
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29						
30						

		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(88-110)
SMC2 (BFB)	= Bromofluorobenzene	(86-115)
SMC3 (DCE)	= 1,2-Dichloroethane-d4	(80-120)
SMC4 (DBF)	= Dibromofluoromethane	(86-118)

Column to be used to flag recovery values

* Values outside of QC limits.

D System Monitoring Compound diluted out

FORM II VOA-1

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Level: (low/med) LOW

	SAMPLE NO.	SMC1 (DBF) #	SMC2 (DCE) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	9910145J1	96	92	100	92	0
02	S-2-1-01	90	109	113	84	0
03	S-2-1-01MS	101	100	102	88	0
04	S-2-1-01MSD	97	99	106	85	0
05	S-2-1-02	93	95	109	84	0
06	VBLKBS	98	106	99	97	0
07						
08						
09						
10						
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30						
31						
32						

	QC LIMITS
SMC1=DIBROMOFLUROMETHANE	80-120
SMC2=1,2-DICHLOROETHANE-d4	80-120
SMC3=TOLUENE-d8	81-117
SMC3=BROMOFLUROBENZENE	74-121

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM II VOA-2

3A
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL-NJ

Job No. : 94106

Matrix Spike - Client Sample No.: GW-W18AMS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	48	96	61-145
Trichloroethene	50	0	54	108	71-120
Benzene	50	18	66	96	76-127
Toluene	50	0	53	106	76-125
Chlorobenzene	50	220	250	60*	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	47	94	2	14	61-145
Trichloroethene	50	55	110	2	14	71-120
Benzene	50	67	98	2	11	76-127
Toluene	50	54	108	2	13	76-125
Chlorobenzene	50	250	60*	0	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits.

RPD: 0 out of 5 outside limits
Spike Recovery: 2 out of 10 outside limits

COMMENTS:

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: StL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix Spike - Sample No.: S-2-1-01ms Level: (low/med) Low

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	51	102	59-172
Benzene	50	0	57	114	66-142
Trichloroethene	50	0	55	110	62-137
Toluene	50	0	59	118	59-139
Chlorobenzene	50	0	61	122	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MS % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	48	96	6	22	59-172
Benzene	50	54	108	5	21	66-142
Trichloroethene	50	50	100	10	24	62-137
Toluene	50	55	110	7	21	59-139
Chlorobenzene	50	58	116	5	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Comments: _____

Water VOLATILE BLANK SPIKE RECOVERY

Lab Name: STL-NJ

Job No. : 94106

Lab ID : VBLKBS

Compound	% Recovery
1,1-Dichloroethene	108 %
Trichloroethene	101 %
Benzene	90 %
Toluene	101 %
Chlorobenzene	89 %

Soil VOLATILE BLANK SPIKE RECOVERY

Lab Name: STL-NJ

Job No. : 94106

Lab ID : VBLKBS

Compound	% Recovery
1,1-Dichloroethene	107 %
Trichloroethene	98 %
Benzene	94 %
Toluene	97 %
Chlorobenzene	97 %

VBIKI2

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: STL-NJ

Job No. : 94106

Lab File ID: I2166

Lab Sample ID: 991014I2

Date Analyzed: 10/14/99

Time Analyzed: 19:16

GC Column: DB-624 ID: 0.32 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSI

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBIKBS	VBIKBS	I2169	20:23
02	MW-1-01	94106001	I2182	01:32
03	MW-2-01	94106002	I2183	01:54
04	MW-2-02	94106003	I2184	02:16
05	MW-2-03	94106004	I2185	02:38
06	MW-4-01	94106005	I2186	03:02
07	SW-2-1-01	94106006	I2187	03:29
08	SW-2-1-02	94106007	I2188	03:55
09	MW-3-01	94106010	I2189	04:22
10	MW-5-01	94106011	I2190	04:48
11				
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30				

COMMENTS:

FORM IV VOA

4A
VOLATILE METHOD BLANK SUMMARY

VBIKJ1

Lab Name: STL-NJ

Job No. : 94106

Lab File ID: J1986

Lab Sample ID: 991014J1

Date Analyzed: 10/14/99

Time Analyzed: 1834

GC Column: DB-624 ID: 0.32 (mm)

Heated Purge: (Y/N) Y

Instrument ID: MSJ

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBIKBS	VBIKBS	J1987	19:03
02	S-2-1-01	94106008	J1997	00:05
03	S-2-1-01 ms	94106008ms	J2001	02:01
04	S-2-1-01msD	94106008msD	J2002	02:30
05	S-2-1-02	94106009	J2003	02:59
06				
07				
08				
09				
10				
11				
12				
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28				
29				
30				

COMMENTS:

FORM IV VOA

4A
VOLATILE METHOD BLANK SUMMARY

VBLK12
991015I2

Lab Name: STL-NJ

Job No. : 94106

Lab File ID: I2227

Lab Sample ID: 991015I2

Date Analyzed: 10/15/99

Time Analyzed: 19:41

GC Column: DB-624 ID: 0.32 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSI

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	GW-W18AMSMS	94050011MS	I2249	04:31
02	GW-W18AMSDMSD	94050012MSD	I2250	05:00
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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14				
15				
16				
17				
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23				
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26				
27				
28				
29				
30				

COMMENTS:

FORM IV VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL-NJ

Job No. : 94106

Lab File ID: I2086

BFB Injection Date: 10/13/99

Instrument ID: MSI

BFB Injection Time: 03:11

GC Column: DB-624 ID: 0.32

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	26.1
75	30.0 - 60.0% of mass 95	57.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	71.4
175	5.0 - 9.0 % of mass 174	5.0 (7.0)1
176	Greater than 95.0% but less than 101% of mass 174.	68.5 (96.0)1
177	5.0 - 9.0 of mass 176	4.4 (6.4)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD500	VSTD500	I2087	10/13/99	03:32
02	VSTD200	VSTD200	I2088	10/13/99	03:58
03	VSTD100	VSTD100	I2089	10/13/99	04:24
04	VSTD050	VSTD050	I2090	10/13/99	04:51
05	VSTD020	VSTD020	I2091	10/13/99	05:17
06	VSTD010	VSTD010	I2092	10/13/99	05:44
07	VSTD005	VSTD005	I2093	10/13/99	06:11
08	VSTD002	VSTD002	I2094	10/13/99	06:44
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL-NJ

Job No. : 94106

Lab File ID: J1950

BFB Injection Date: 10/13/99

Instrument ID: MS5

BFB Injection Time: 18:50

GC Column: DB-624 ID: 0.32

Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.1
75	30.0 - 60.0% of mass 95	33.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	99.7
175	5.0 - 9.0 % of mass 174	8.9 (8.9)1
176	Greater than 95.0% but less than 101% of mass 174.	97.0 (97.3)1
177	5.0 - 9.0 of mass 176	6.4 (6.6)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD500	VSTD500	J1951	10/13/99	19:06
02	VSTD200	VSTD200	J1952	10/13/99	19:36
03	VSTD100	VSTD100	J1953	10/13/99	20:06
04	VSTD050	VSTD050	J1954	10/13/99	20:35
05	VSTD005	VSTD005	J1957	10/13/99	22:09
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V VOA

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Lab File ID: J1982 BFB Injection Date: 10/14/99

Instrument ID: MSJ BFB Injection Time: 16:27

GC Column: RTX624 ID: .32 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.4
75	30.0 - 60.0% of mass 95	32.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	95.2
175	5.0 - 9.0% of mass 174	8.2 (8.6)1
176	95.0 - 101.0% of mass 174	94.0 (98.7)1
177	5.0 - 9.0% of mass 176	6.0 (6.4)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	J1983	10/14/99	17:08
02	VBLKJ1	991014J1	J1986	10/14/99	18:34
03	VBLKBS	VBLKBS	J1987	10/14/99	19:03
04	S-2-1-01	94106008	J1997	10/15/99	00:05
05	S-2-1-01ms	94106008MS	J2001	10/15/99	02:01
06	S-2-1-01msd	94106008MSD	J2002	10/15/99	02:30
07	S-2-1-02	94106009	J2003	10/15/99	02:59
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Lab File ID: I2162 BFB Injection Date: 10/14/99

Instrument ID: MSI BFB Injection Time: 17:39

GC Column: RTX624 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.3
75	30.0 - 60.0% of mass 95	56.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	77.3
175	5.0 - 9.0% of mass 174	5.6 (7.2)1
176	95.0 - 101.0% of mass 174	73.6 (95.2)1
177	5.0 - 9.0% of mass 176	4.7 (6.4)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VStD050	VStD050	I2164	10/14/99	18:19
02	VBlkI2	991014I2	I2166	10/14/99	19:16
03	VBlkBS	VBlkBS	I2169	10/14/99	20.23
04	MW-1-01	94106001	I2182	10/15/99	01:32
05	MW-2-01	94106002	I2183	10/15/99	01:54
06	MW-2-02	94106003	I2184	10/15/99	02:16
07	MW-2-03	94106004	I2185	10/15/99	02:38
08	MW-4-01	94106005	I2186	10/15/99	03:02
09	SW-2-1-01	94106006	I2187	10/15/99	03:29
10	SW-2-1-02	94106007	I2188	10/15/99	03:55
11	MW-3-01	94106010	I2189	10/15/99	04:22
12	MW-5-01	94106011	I2190	10/15/99	04:48
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Lab File ID: I2222 BFB Injection Date: 10/15/99

Instrument ID: MSI BFB Injection Time: 17:51

GC Column: DB624 ID: 0.32 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.9
75	30.0 60 .0% of mass 95	54.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50 % of mass 95	79.6
175	5.0 - 9.0% of mass 174	5.7 (7.2)1
176	Greater than 95.0% but less than 101.0% of mass 174	76.6 (96.3)1
177	5.0 - 9.0% of mass 176	4.7 (6.2)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	I2224	10/15/99	18:29
02	VBLKI2	991015I2	I2227	10/15/99	19:41
03	GW-W18Ams ms	94050C11ms	I2249	10/16/99	04:31
04	GW-W18AmSD msD	94050012msD	I2250	10/16/99	05:00
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Lab File ID (Standard): I2164 Date Analyzed: 10/14/99

Instrument ID: MSI Time Analyzed: 18:19

GC Column: RTX 624 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	855222	8.61	613174	14.22	298297	16.78
	UPPER LIMIT	1710444	9.11	1226348	14.72	596594	17.28
	LOWER LIMIT	427611	8.11	306587	13.72	149148	16.28
	SAMPLE NO.						
01	VBIKI2	817115	8.61	551721	14.22	228866	16.78
02	VBIKBS	713375	8.57	546254	14.20	258237	16.77
03	mw-1-01	1155932	8.58	792094	14.20	355728	16.77
04	mw-2-01	1020127	8.56	713623	14.19	339106	16.77
05	mw-2-02	1021988	8.51	731582	14.17	347604	16.77
06	mw-2-03	1000877	8.56	717633	14.19	337628	16.76
07	mw-4-01	1040072	8.58	729644	14.19	335049	16.77
08	SW-2-1-01	1028214	8.59	713364	14.20	327069	16.77
09	SW-2-1-02	1001347	8.59	693040	14.19	319018	16.76
10	mw-3-01	972393	8.59	686329	14.19	317054	16.77
11	mw-5-01	979634	8.58	678551	14.19	296162	16.76
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 = Chlorobenzene-d5
IS3 = 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.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Lab File ID (Standard): J1983 Date Analyzed: 10/14/99

Instrument ID: MSJ Time Analyzed: 17:08

GC Column: RTX 624 ID: .32 (mm) Heated Purge: (Y/N) Y

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	1517694	7.15	1080643	13.04	417139	18.01
	UPPER LIMIT	3035388	7.65	2161286	13.54	834278	18.51
	LOWER LIMIT	758847	6.65	540322	12.54	208570	17.51
	SAMPLE NO.						
01	VBIKJ1	1046193	7.15	771575	13.02	282181	18.00
02	VBIKBS	1003468	7.15	744631	13.02	289071	17.99
03	S-2-1-01	1976416	7.14	1168835	13.01	273887	17.99
04	S-2-1-01ms	2367563	7.12	1627896	13.01	480230	17.97
05	S-2-1-01msD	2503112	7.12	1629059	13.00	429868	17.97
06	S-2-1-02	2406054	7.13	1569417	13.00	417746	17.98
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Flurobenzene
IS2 = Chlorobenzene-d5
IS3 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Lab File ID (Standard): I2224 Date Analyzed: 10/15/99

Instrument ID: MSI Time Analyzed: 18:29

GC Column: RTX 624 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	946976	8.57	681142	14.19	325016	16.76
	UPPER LIMIT	1893952	9.07	1362284	14.69	650032	17.26
	LOWER LIMIT	473488	8.07	340571	13.69	162508	16.26
	SAMPLE NO.						
01	VBLKI2	855030	8.57	594900	14.18	253363	16.76
02	GW-W18AMSMS	912064	8.58	643565	14.19	217405	16.77
03	GW-W18AMSDMSD	985867	8.59	685530	14.19	216009	16.77
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 = Chlorobenzene-d5
IS3 = 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.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE 000042

MW-1-01

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 94106001

Sample wt/vol: 5.0 (g/mL) ml Lab File ID: I 2182

Level: (low/med) LOW Date Received: 10/13/99

% Moisture: not dec. _____ Date Analyzed: 10/15/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	26	
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-05-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethane	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2182.D
Acq On : 15 Oct 99 1:32 am
Sample : ;MSI;;
Misc : 94106001;LOW;AQ;
Quant Time: Oct 15 1:51 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.58	96	1155932	50.00 ug/l	0.00
70) chlorobenzene-d5	14.20	117	792094	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	355728	50.00 ug/l	0.00

System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.18	113	365032	49.12 ug/l	98.24%
44) 1,2-dichloroethane-d4	7.93	65	429842	52.31 ug/l	104.61%
71) toluene-d8	11.28	98	1007749	49.51 ug/l	99.01%
87) bromoflurobenzene	15.77	95	369559	48.50 ug/l	97.00%

Target Compounds					Qvalue
~~14) Tertiary butyl alcohol~~	~~4.25~~	~~59~~	~~8439~~	~~10.29 ug/l~~	~~100~~
~~18) acrolein~~	~~3.52~~	~~56~~	~~5979~~	~~8.05 ug/l~~	~~100~~
~~21) acetone~~	~~4.66~~	~~43~~	~~129831~~	~~41.15 ug/l~~	~~91~~
25) methyl t-butyl ether	4.62	73	154884	12.40 ug/l	100
29) cis-1,2-dichloroethene	6.28	96	189700	26.31 ug/l	83
~~34) Ethyl Cyanide~~	~~6.24~~	~~54~~	~~6487~~	~~8.42 ug/l~~	~~63~~
61) 2-chloroethylvinylether	10.53	63	5538	3.63 ug/l	100

SM
10/15/99

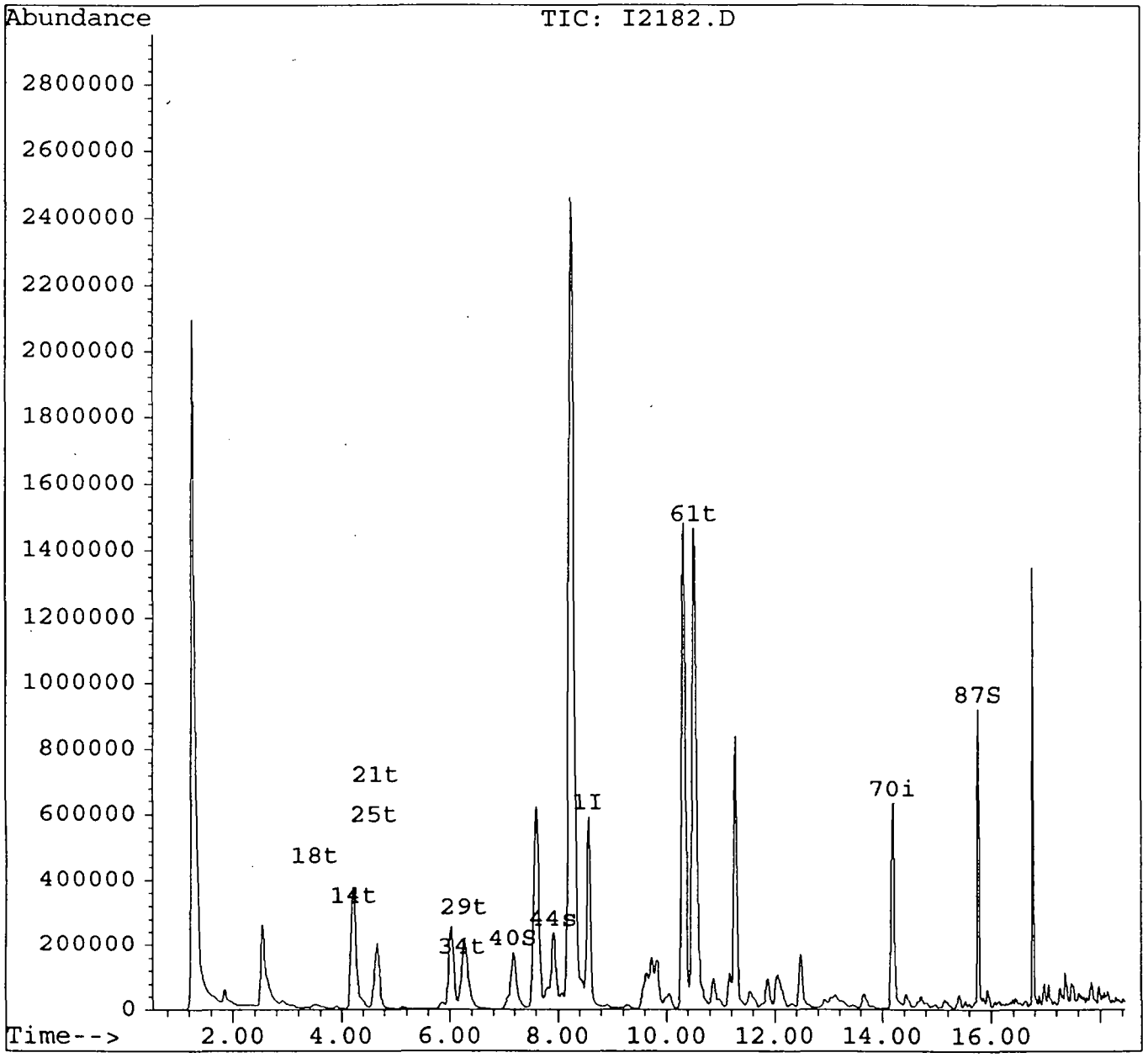
(#) = qualifier out of range (m) = manual integration

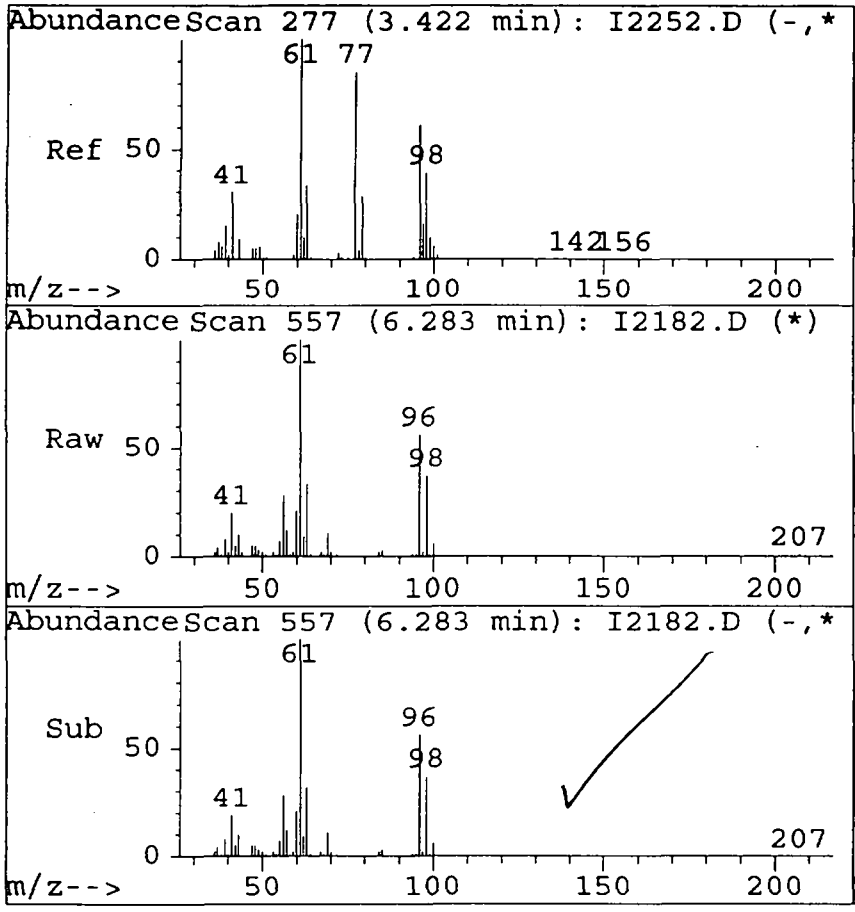
Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2182.D
Acq On : 15 Oct 99 1:32 am
Sample : ;MSI;;
Misc : 94106001;LOW;AQ;
Quant Time: Oct 15 1:51 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

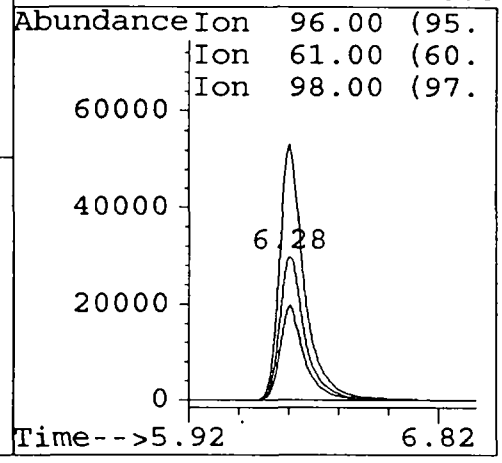


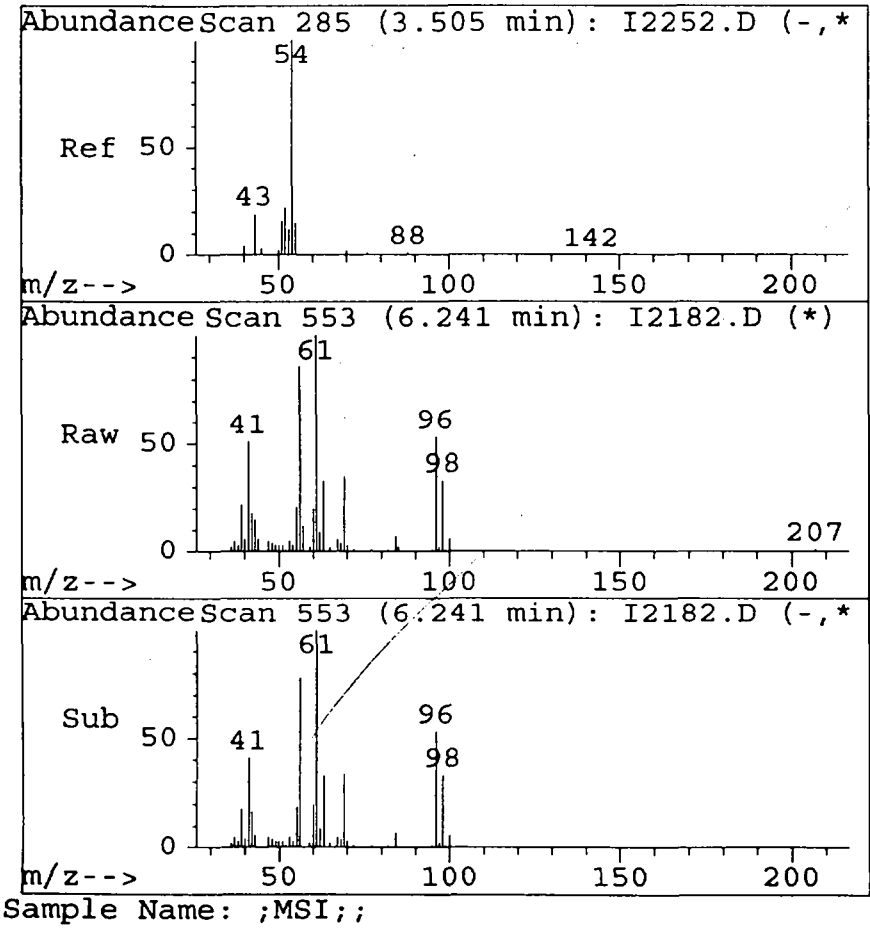


#29
cis-1,2-dichloroethene
Concen: 26.31 ug/l
RT: 6.28 min Scan# 557
Delta R.T. 0.02 min
Lab File: I2182.D
Acq: 15 Oct 99 1:32 am

Tgt Ion:96 Resp: 189700

Ion	Ratio	Lower	Upper
96	100		
61	177.9	119.2	179.2
98	66.4	34.4	94.4
0	0.0	0.0	0.0

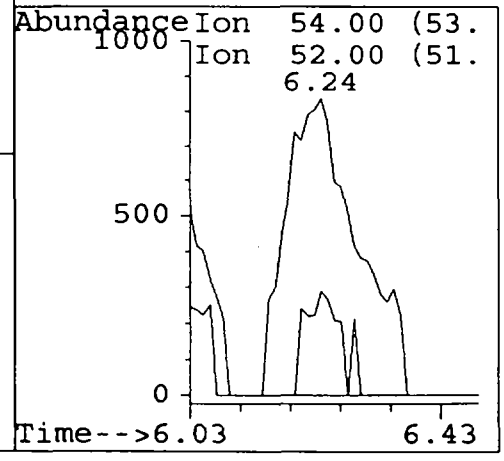




#34
Ethyl Cyanide
Concen: 8.42 ug/l
RT: 6.24 min Scan# 553
Delta R.T. -0.16 min
Lab File: I2182.D
Acq: 15 Oct 99 1:32 am

Tgt Ion:54 Resp: 6487

Ion	Ratio	Lower	Upper
54	100		
52	34.7	0.0	48.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Sample Name: ;MSI;;

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 000046

MW-2-01

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 94106002

Sample wt/vol: 5.0 (g/mL) ml Lab File ID: I2183

Level: (low/med) LOW Date Received: 10/13/99

% Moisture: not dec. _____ Date Analyzed: 10/15/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	13	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-05-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethane	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2183.D
Acq On : 15 Oct 99 1:54 am
Sample : ;MSI;;
Misc : 94106002;LOW;AQ;
Quant Time: Oct 15 2:14 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.56	96	1020127	50.00 ug/l	-0.01
70) chlorobenzene-d5	14.19	117	713623	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	339106	50.00 ug/l	0.00
System Monitoring Compounds					**%Recovery**
40) dibromofluromethane	7.16	113	330809	50.44 ug/l	100.89%
44) 1,2-dichloroethane-d4	7.91	65	370561	51.10 ug/l	102.19%
71) toluene-d8	11.26	98	895169	48.81 ug/l	97.62%
87) bromoflurobenzene	15.77	95	341647	49.77 ug/l	99.53%
Target Compounds					**Qvalue**
~~14) Tertiary butyl alcohol~~	~~4.22~~	~~59~~	~~8794~~	~~12.15 ug/l~~	100
~~21) acetone~~	~~4.19~~	~~43~~	~~209538~~	~~75.26 ug/l~~	56
45) benzene	8.06	78	387285	13.21 ug/l	99
110) naphthalene	18.29	128	54069	3.97 ug/l	100

SK 10/15/99

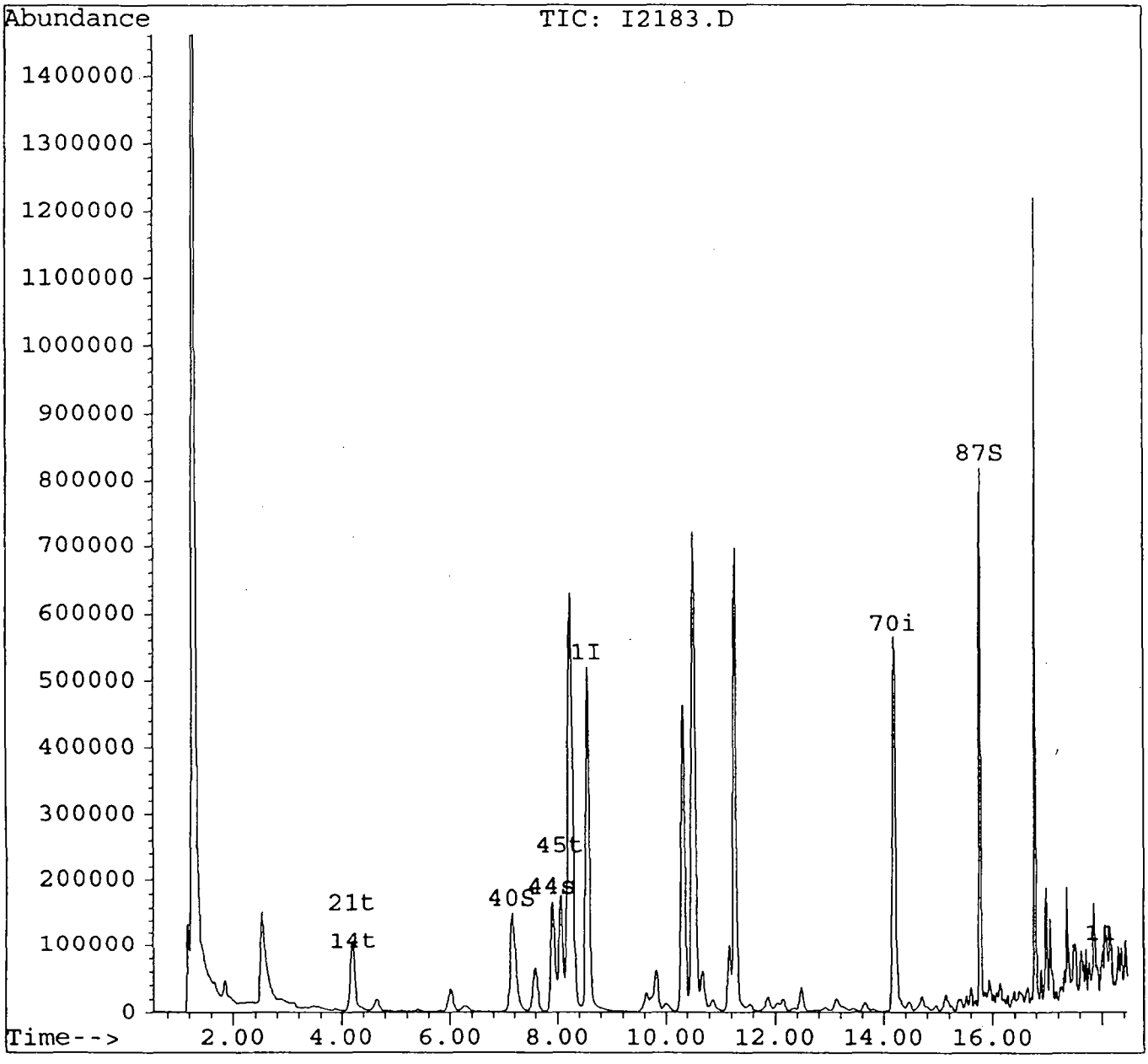
(#) = qualifier out of range (m) = manual integration

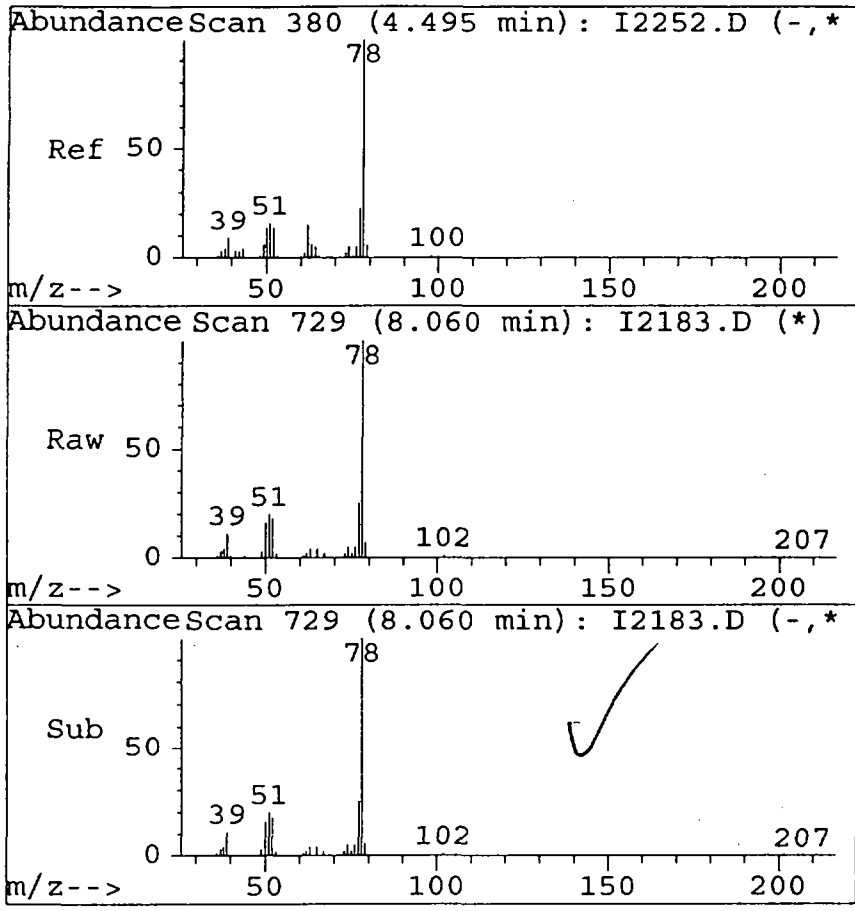
Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2183.D
Acq On : 15 Oct 99 1:54 am
Sample : ;MSI;;
Misc : 94106002;LOW;AQ;
Quant Time: Oct 15 2:14 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

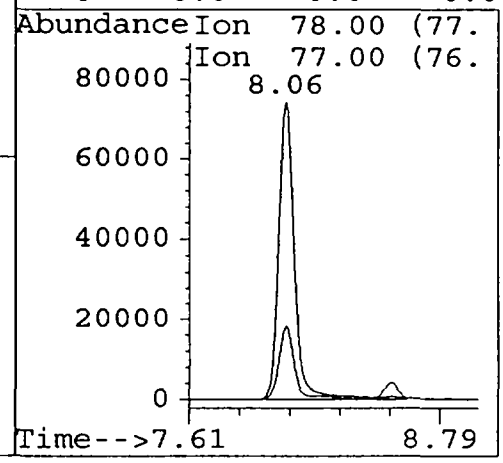


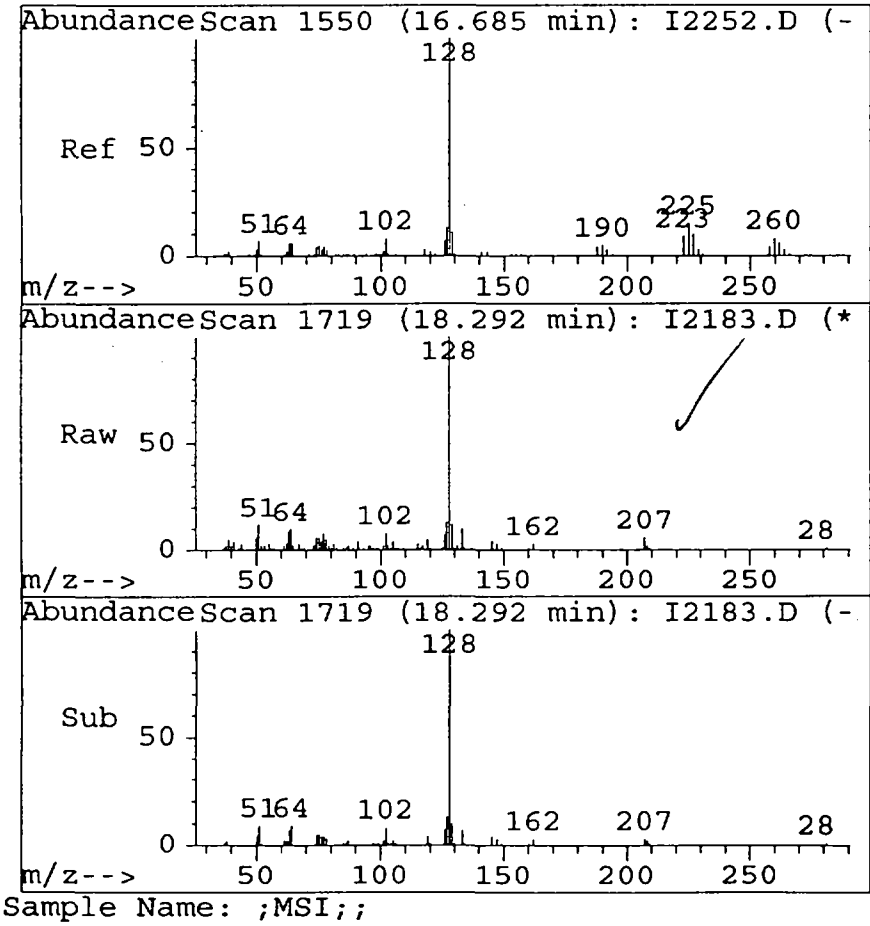


#45
benzene
Concen: 13.21 ug/l
RT: 8.06 min Scan# 729
Delta R.T. -0.01 min
Lab File: I2183.D
Acq: 15 Oct 99 1:54 am

Tgt Ion:78 Resp: 387285

Ion	Ratio	Lower	Upper
78	100		
77	24.6	0.0	54.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

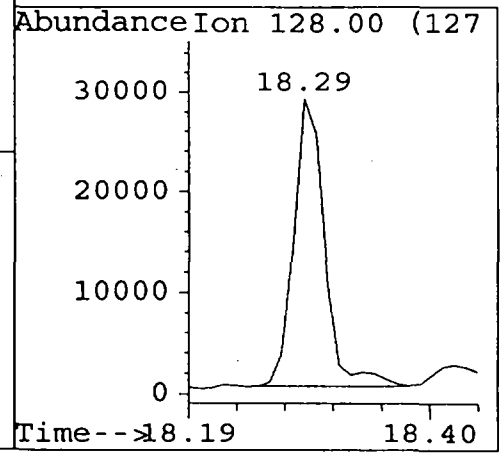




#110
naphthalene
Concen: 3.97 ug/l
RT: 18.29 min Scan# 1719
Delta R.T. -0.01 min
Lab File: I2183.D
Acq: 15 Oct 99 1:54 am

Tgt Ion:128 Resp: 54069

Ion	Ratio	Lower	Upper
128	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Sample Name: ;MSI;;
I2183.D 8260044W.M Fri Oct 15 02:15:18 1999 VOA2 Page 4

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 000050

MW-2-02

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 94106003

Sample wt/vol: 5.0 (g/mL) ml Lab File ID: I 2184

Level: (low/med) LOW Date Received: 10/13/99

% Moisture: not dec. _____ Date Analyzed: 10/15/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	29	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-05-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethane	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2184.D
Acq On : 15 Oct 99 2:16 am
Sample : ;MSI;;
Misc : 94106003;LOW;AQ;
Quant Time: Oct 15 2:36 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.51	96	1021988	50.00 ug/l	-0.06
70) chlorobenzene-d5	14.17	117	731582	50.00 ug/l	-0.02
89) 1,4-dichlorobenzene-d4	16.77	152	347604	50.00 ug/l	0.00
System Monitoring Compounds					**%Recovery**
40) dibromofluromethane	7.10	113	331673	50.48 ug/l	100.97%
44) 1,2-dichloroethane-d4	7.86	65	379275	52.20 ug/l	104.41%
71) toluene-d8	11.25	98	904179	48.09 ug/l	96.18%
87) bromoflurobenzene	15.76	95	354019	50.30 ug/l	100.60%
Target Compounds					**Qvalue**
~~14) Tertiary butyl alcohol~~	~~4.14~~	~~59~~	~~16092~~	~~22.18 ug/l~~	100
~~21) acetone~~	~~4.13~~	~~43~~	~~383957~~	~~137.65 ug/l~~	56
45) benzene	8.01	78	851913	29.00 ug/l	99
86) isopropylbenzene	15.61	105	98680	4.61 ug/l	95
92) n-propylbenzene	16.01	91	129903	4.41 ug/l	94
110) naphthalene	18.30	128	194947	13.96 ug/l	100

SL
10/15/99

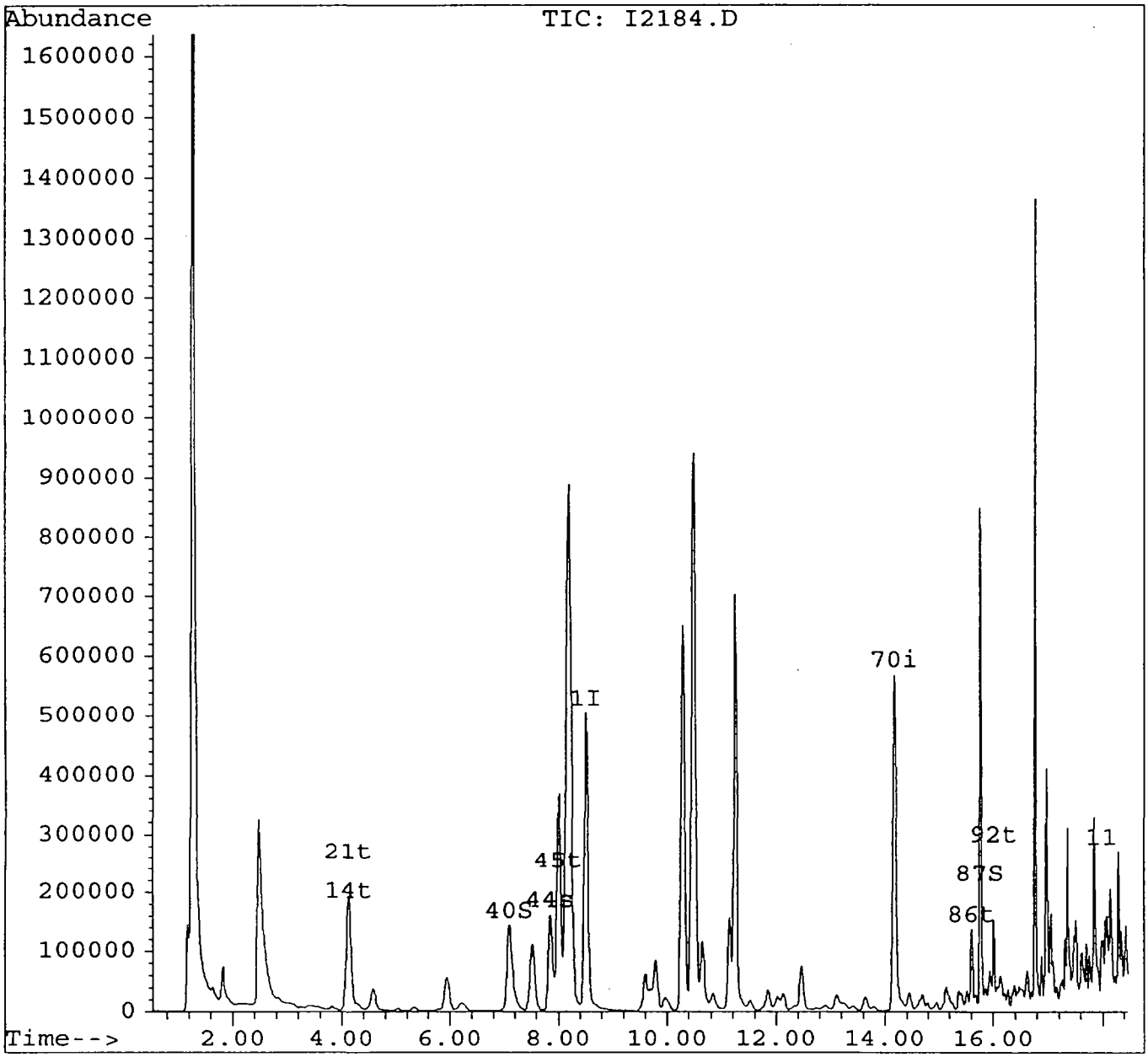
(#) = qualifier out of range (m) = manual integration

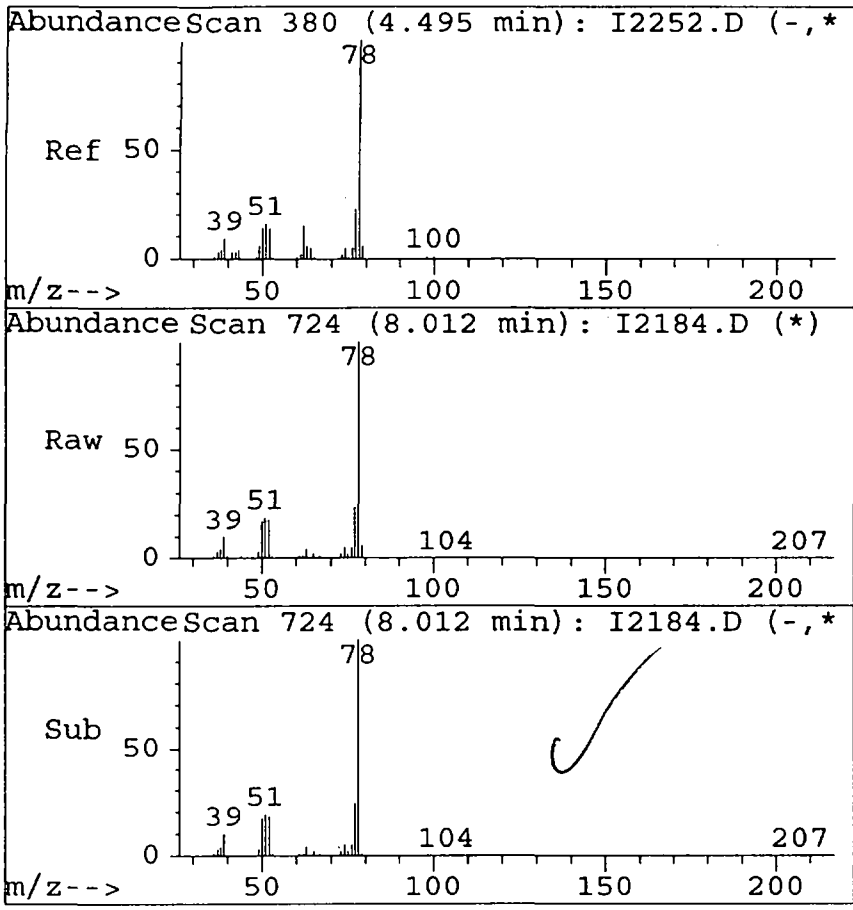
Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2184.D
Acq On : 15 Oct 99 2:16 am
Sample : ;MSI;;
Misc : 94106003;LOW;AQ;
Quant Time: Oct 15 2:36 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

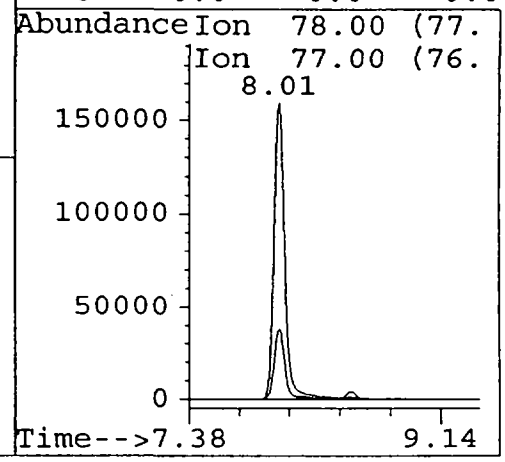


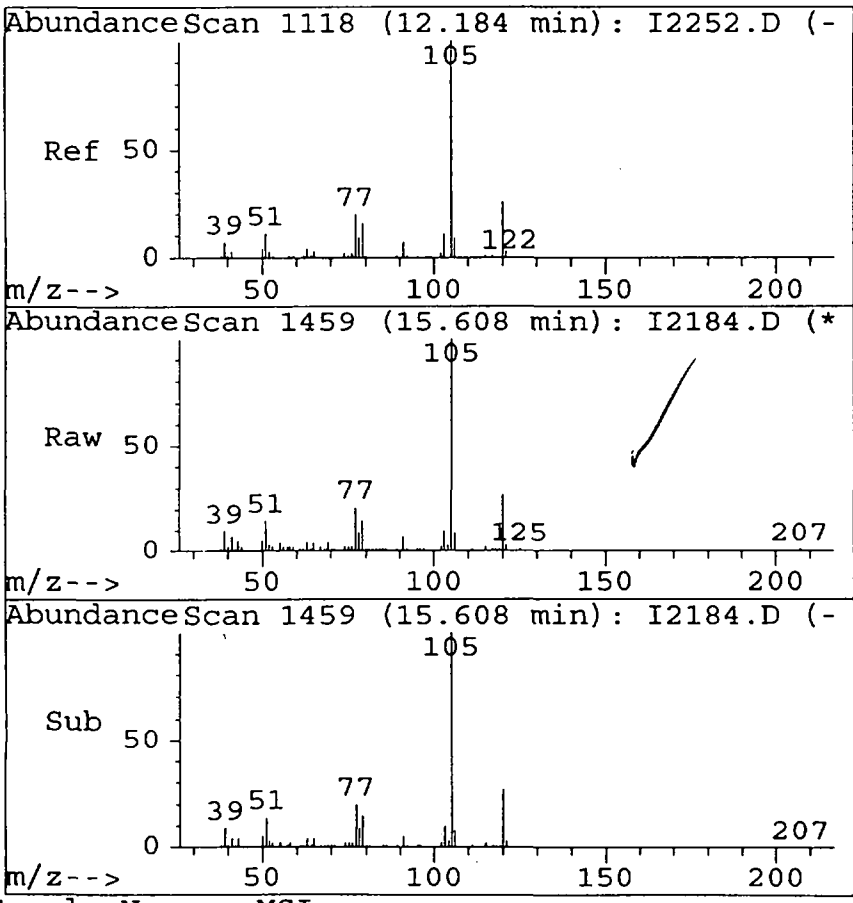


#45
benzene
Concen: 29.00 ug/l
RT: 8.01 min Scan# 724
Delta R.T. -0.06 min
Lab File: I2184.D
Acq: 15 Oct 99 2:16 am

Tgt Ion:78 Resp: 851913

Ion	Ratio	Lower	Upper
78	100		
77	23.6	0.0	54.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

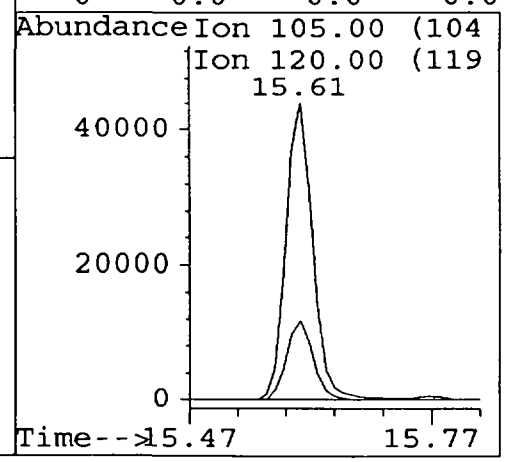




#86
isopropylbenzene
Concen: 4.61 ug/l
RT: 15.61 min Scan# 1459
Delta R.T. -0.00 min
Lab File: I2184.D
Acq: 15 Oct 99 2:16 am

Tgt Ion:105 Resp: 98680

Ion	Ratio	Lower	Upper
105	100		
120	26.7	0.0	54.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
000054
MW-2-03

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 94106004

Sample wt/vol: 5.0 (g/mL) ml Lab File ID: I2185

Level: (low/med) LOW Date Received: 10/13/99

% Moisture: not dec. _____ Date Analyzed: 10/15/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	11	
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-05-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethane	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2185.D
Acq On : 15 Oct 99 2:38 am
Sample : ;MSI;;
Misc : 94106004;LOW;AQ;
Quant Time: Oct 15 2:57 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.56	96	1000877	50.00 ug/l	-0.01
70) chlorobenzene-d5	14.19	117	717633	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.76	152	337628	50.00 ug/l	0.00
System Monitoring Compounds					**%Recovery**
40) dibromofluromethane	7.15	113	327615	50.92 ug/l	101.83%
44) 1,2-dichloroethane-d4	7.91	65	376100	52.86 ug/l	105.72%
71) toluene-d8	11.27	98	885107	47.99 ug/l	95.98%
87) bromoflurobenzene	15.77	95	342288	49.58 ug/l	99.16%
Target Compounds					**Qvalue**
14) Tertiary butyl alcohol	4.20	59	7893	11.11 ug/l	100
~~18) acrolein~~	~~2.53~~	~~56~~	~~52674~~	~~81.93 ug/l~~	~~100~~
~~21) acetone~~	~~4.64~~	~~43~~	~~11579~~	~~4.24 ug/l~~	~~56~~
45) benzene	8.06	78	330638	11.49 ug/l	99
110) naphthalene	18.29	128	67788	5.00 ug/l	100

SK
10/15/99

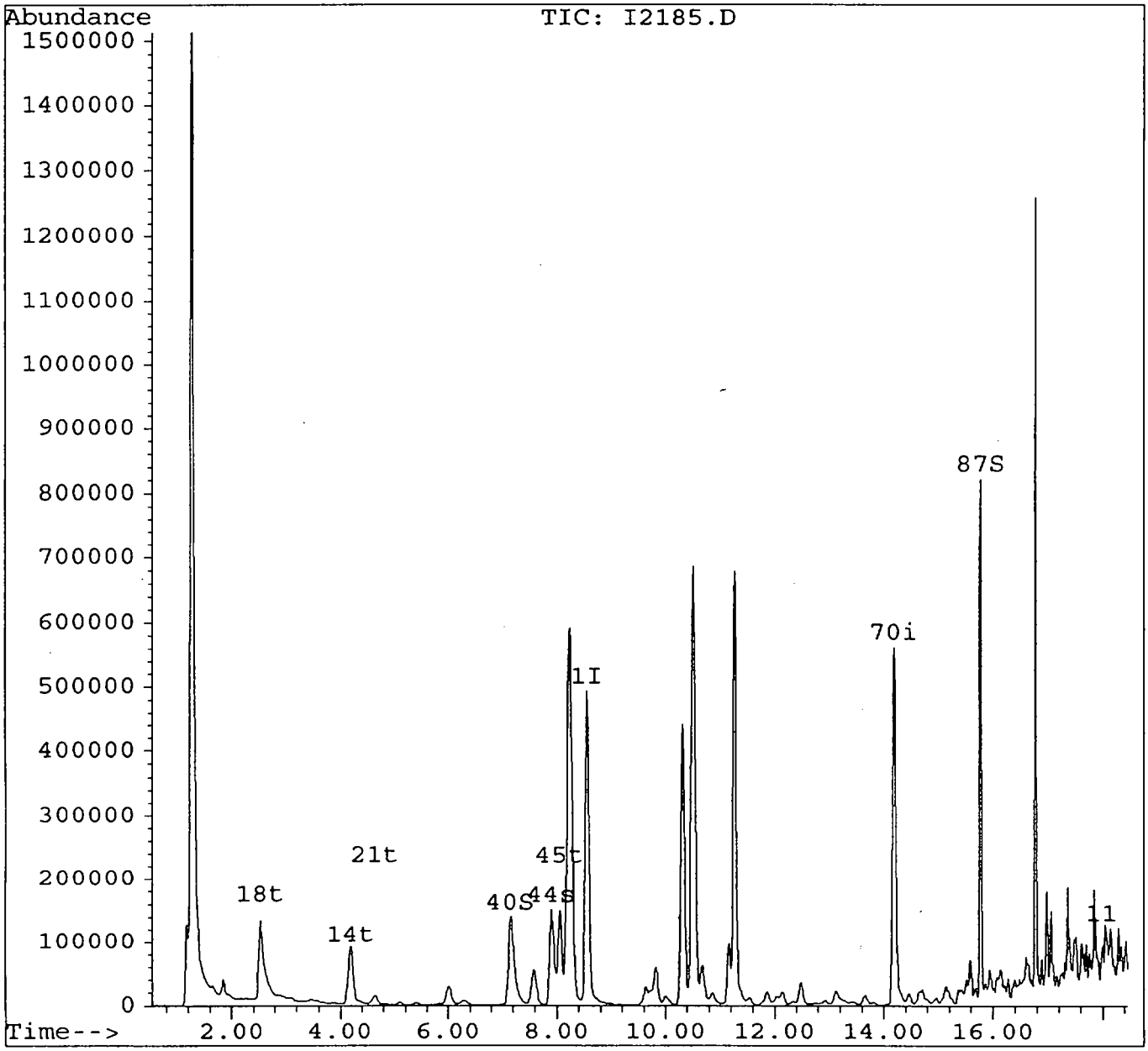
(#) = qualifier out of range (m) = manual integration

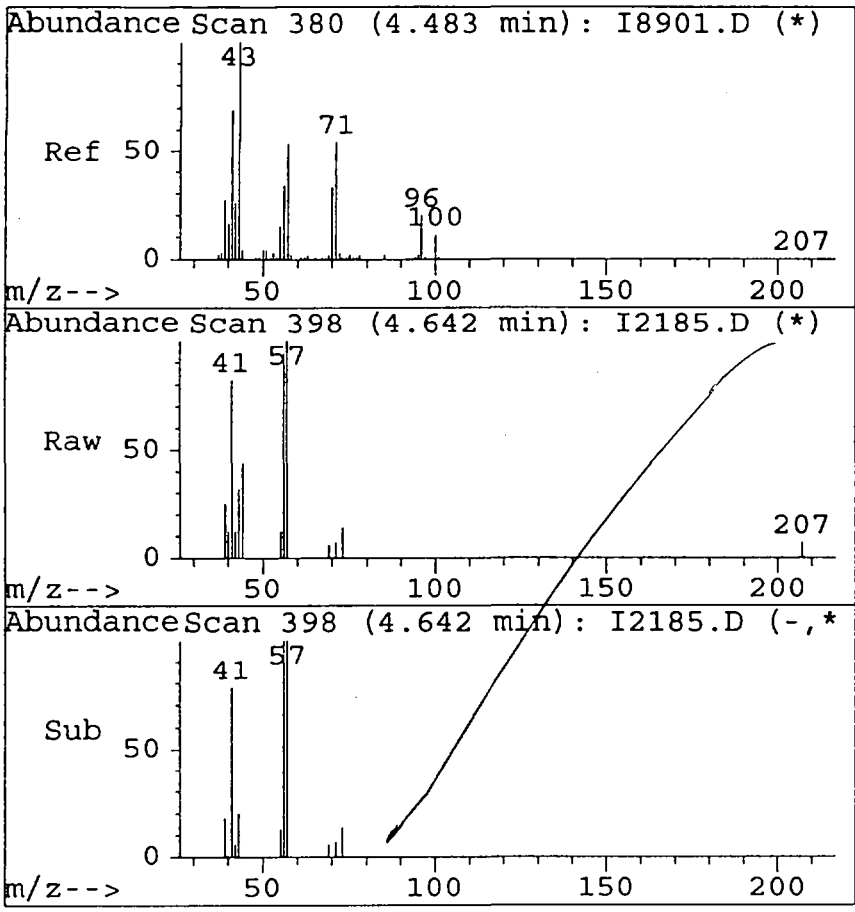
Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2185.D
Acq On : 15 Oct 99 2:38 am
Sample : ;MSI;;
Misc : 94106004;LOW;AQ;
Quant Time: Oct 15 2:57 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

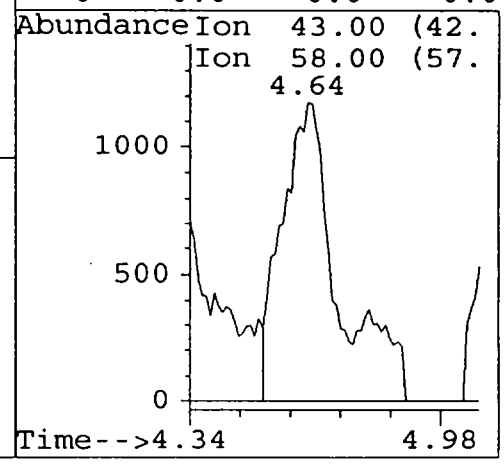


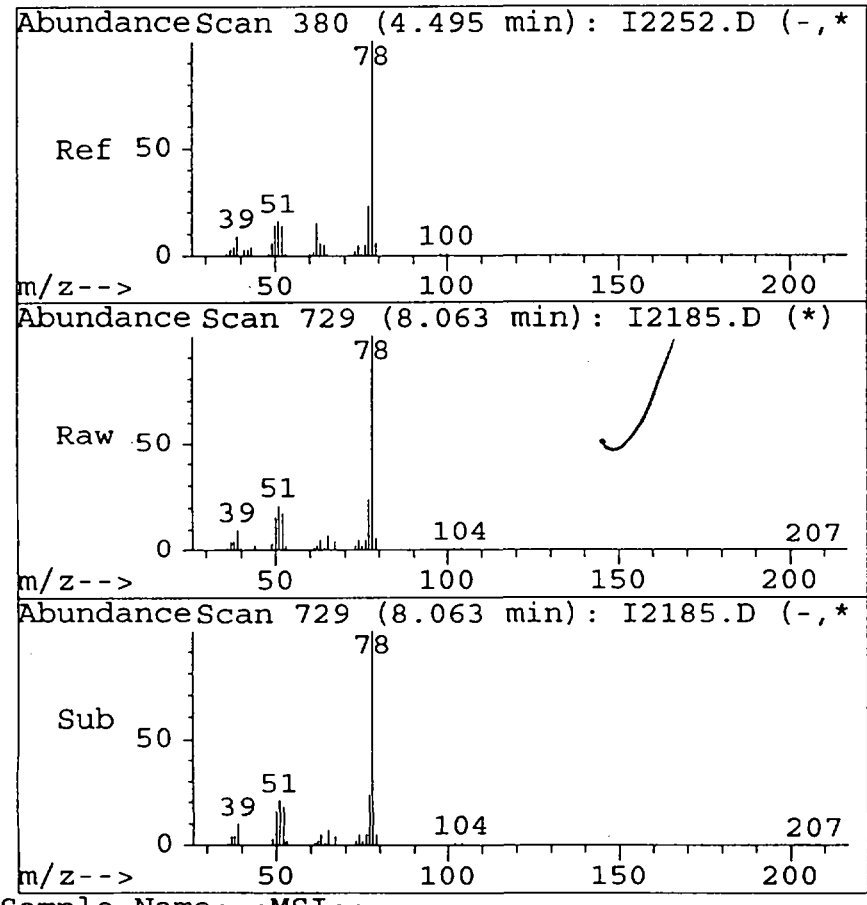


#21
acetone
Concen: 4.24 ug/l
RT: 4.64 min Scan# 398
Delta R.T. 0.03 min
Lab File: I2185.D
Acq: 15 Oct 99 2:38 am

Tgt Ion:43 Resp: 11579

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.0	50.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

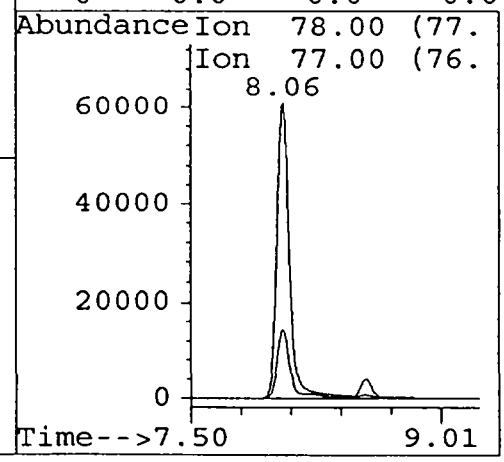




#45
benzene
Concen: 11.49 ug/l
RT: 8.06 min Scan# 729
Delta R.T. -0.01 min
Lab File: I2185.D
Acq: 15 Oct 99 2:38 am

Tgt Ion:78 Resp: 330638

Ion	Ratio	Lower	Upper
78	100		
77	23.7	0.0	54.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 000058
MW-4-01

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 94106005

Sample wt/vol: 5.0 (g/mL) ml Lab File ID: I2186

Level: (low/med) LOW Date Received: 10/13/99

% Moisture: not dec. _____ Date Analyzed: 10/15/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-05-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethane	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2186.D
Acq On : 15 Oct 99 3:02 am
Sample : ;MSI;;
Misc : 94106005;LOW;AQ;
Quant Time: Oct 15 3:22 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.58	96	1040072	50.00 ug/l	0.01
70) chlorobenzene-d5	14.19	117	729644	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	335049	50.00 ug/l	0.00

System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.20	113	337433	50.47 ug/l	100.93%
44) 1,2-dichloroethane-d4	7.94	65	383911	51.92 ug/l	103.84%
71) toluene-d8	11.28	98	906429	48.34 ug/l	96.68%
87) bromoflurobenzene	15.77	95	343153	48.89 ug/l	97.78%

Target Compounds					Qvalue
18) ~~acrolein~~	~~3.58~~	~~56~~	~~15858~~	~~23.74 ug/l~~	100
21) ~~acetone~~	~~4.68~~	~~43~~	~~37687~~	~~13.28 ug/l~~	96

10/15/99

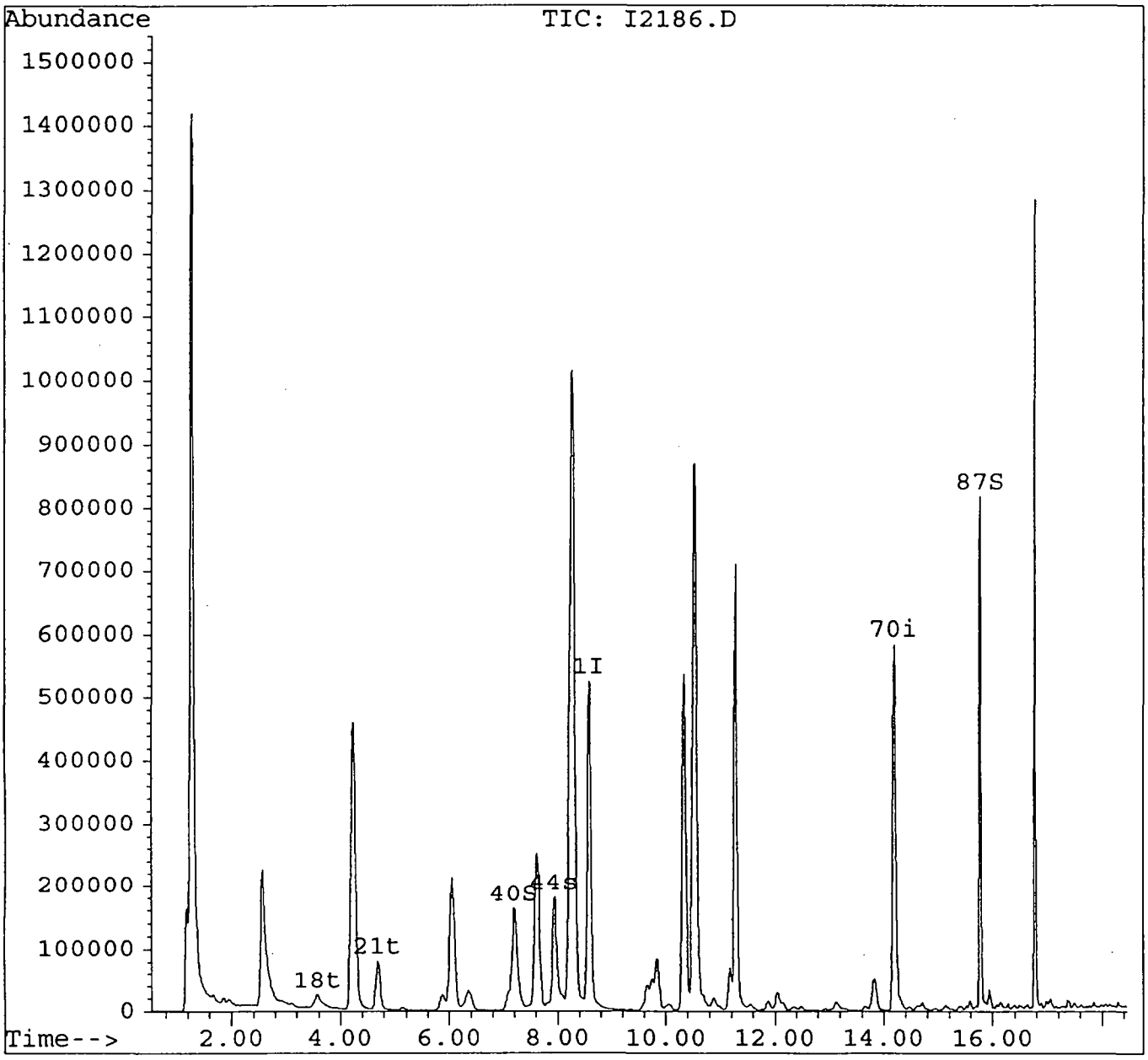
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2186.D
Acq On : 15 Oct 99 3:02 am
Sample : ;MSI;;
Misc : 94106005;LOW;AQ;
Quant Time: Oct 15 3:22 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SW-2-1-01

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 94106006

Sample wt/vol: 5.0 (g/mL) ml Lab File ID: I2187

Level: (low/med) LOW Date Received: 10/13/99

% Moisture: not dec. _____ Date Analyzed: 10/15/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-05-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethane	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2187.D
Acq On : 15 Oct 99 3:29 am
Sample : ;MSI;;
Misc : 94106006;LOW;AQ;
Quant Time: Oct 15 3:48 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.59	96	1028214	50.00 ug/l	0.02
70) chlorobenzene-d5	14.20	117	713364	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	327069	50.00 ug/l	0.00

System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.20	113	336881	50.96 ug/l	101.93%
44) 1,2-dichloroethane-d4	7.95	65	376132	51.46 ug/l	102.91%
71) toluene-d8	11.28	98	879094	47.95 ug/l	95.90%
87) bromoflurobenzene	15.77	95	324527	47.29 ug/l	94.58%

Target Compounds	Qvalue

10/15/99

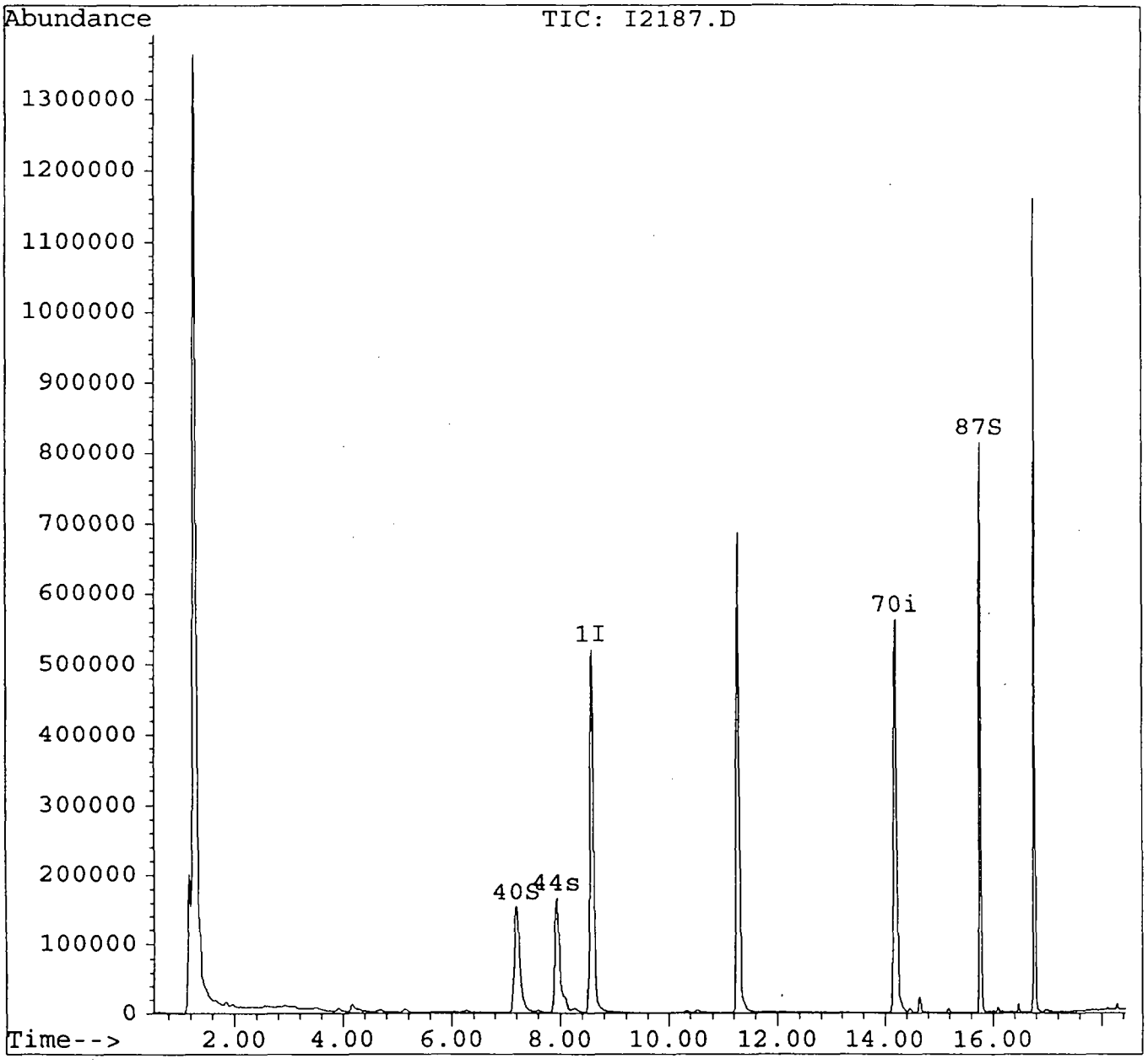
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2187.D
Acq On : 15 Oct 99 3:29 am
Sample : ;MSI;;
Misc : 94106006;LOW;AQ;
Quant Time: Oct 15 3:48 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 000064

SW-2-1-02

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 94106007

Sample wt/vol: 5.0 (g/mL) ml Lab File ID: I 2188

Level: (low/med) LOW Date Received: 10/13/99

% Moisture: not dec. _____ Date Analyzed: 10/15/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-05-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethane	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2188.D
Acq On : 15 Oct 99 3:55 am
Sample : ;MSI;;
Misc : 94106007;LOW;AQ;
Quant Time: Oct 15 4:15 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.59	96	1001347	50.00 ug/l	0.02
70) chlorobenzene-d5	14.19	117	693040	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.76	152	319018	50.00 ug/l	0.00

System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.20	113	327698	50.91 ug/l	101.81%
44) 1,2-dichloroethane-d4	7.94	65	369858	51.96 ug/l	103.91%
71) toluene-d8	11.29	98	864285	48.53 ug/l	97.05%
87) bromoflurobenzene	15.77	95	312572	46.88 ug/l	93.77%

Target Compounds	Qvalue

10/15/99

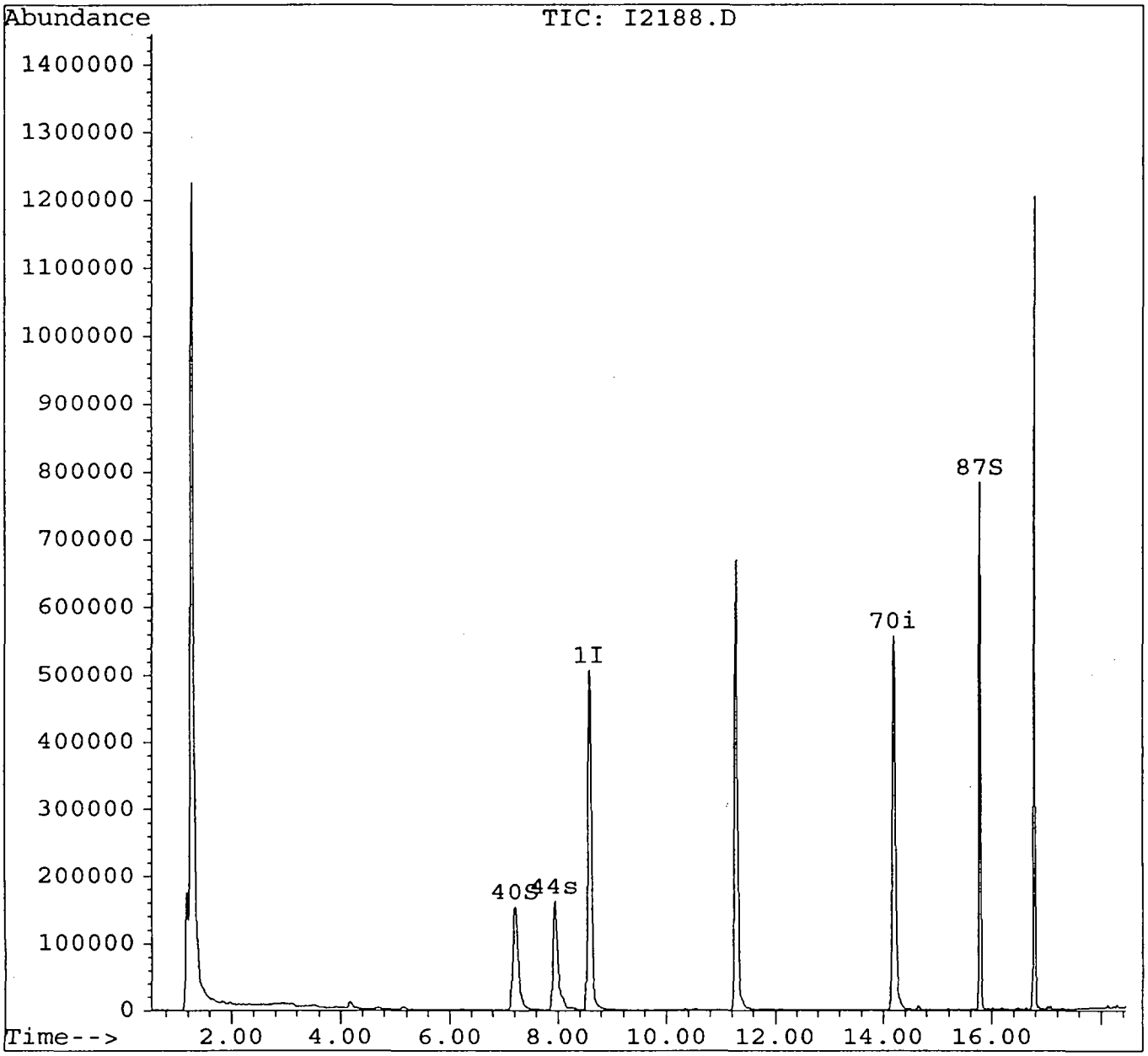
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2188.D
Acq On : 15 Oct 99 3:55 am
Sample : ;MSI;;
Misc : 94106007;LOW;AQ;
Quant Time: Oct 15 4:15 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 000067

S-2-1-01

Lab Name: STL-NJ Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: 94106008

Sample wt/vol: NA (g/mL) g Lab File ID: J1997

Level: (low/med) LOW Date Received: 10/13/99

% Moisture: not dec. 60 Date Analyzed: 10/15/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

Concentration Units: (ug/L or ug/Kg) ug/kg

CAS No.	Compound		Q
67-64-1	Acetone	25	U
71-43-2	Benzene	12	U
75-27-4	Bromodichloromethane	12	U
75-25-2	Bromoform	12	U
74-83-9	Bromomethane	25	U
78-93-3	2-Butanone	25	U
75-15-0	Carbon Disulfide	12	U
56-23-5	Carbon Tetrachloride	12	U
108-90-7	Chlorobenzene	12	U
124-48-1	Chlorodibromomethane	12	U
75-00-3	Chloroethane	25	U
67-66-3	Chloroform	12	U
74-87-3	Chloromethane	25	U
75-34-3	1,1-Dichloroethane	12	U
107-06-2	1,2-Dichloroethane	12	U
75-35-4	1,1-Dichloroethene	12	U
156-59-2	Cis-1,2-Dichloroethene	12	U
156-60-5	Trans-1,2-Dichloroethene	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	Cis-1,3-Dichloropropene	12	U
10061-05-6	Trans-1,3-Dichloropropene	12	U
100-41-4	Ethylbenzene	12	U
591-78-6	2-Hexanone	25	U
108-10-1	4-Methyl-2-Pentanone	25	U
75-09-2	Methylene Chloride	12	U
100-42-5	Styrene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
127-18-4	Tetrachloroethane	12	U
108-88-3	Toluene	12	U
71-55-6	1,1,1-Trichloroethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
79-01-6	Trichloroethylene	12	U
75-01-4	Vinyl Chloride	25	U
1330-20-7	Xylenes (Total)	12	U

Quantitation Report (Not Reviewed)

000068

Data File : C:\HPCHEM\1\DATA\101499\J1997.D
Acq On : 15 Oct 99 00:05
Sample : ;MSJ;;
Misc : 94106008;LOW;SO;
Quant Time: Nov 17 16:52 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.14	96	1976416	50.00 ppb	-0.10
64) Chlorobenzene-d5	13.01	117	1168835	50.00 ppb	-0.11
80) 1,4-Dichlorobenzene-d4	17.99	152	273887	50.00 ppb	-0.11
System Monitoring Compounds					
37) Dibromofluoromethane	6.14	113	606865	44.95 ppb	-0.09
Surrogate Spike 50.000	Range 86 - 118		Recovery = 89.90%		
41) 1,2-Dichloroethane-d4	6.69	65	484154	54.72 ppb	-0.09
Surrogate Spike 50.000	Range 80 - 120		Recovery = 109.44%		
65) Toluene-d8	10.02	98	1572686	56.34 ppb	-0.12
Surrogate Spike 50.000	Range 88 - 110		Recovery = 112.68%#		
78) Bromofluorobenzene	15.51	95	396276	42.06 ppb	-0.10
Surrogate Spike 50.000	Range 86 - 115		Recovery = 84.12%#		
Target Compounds					Qvalue
~~18) Acetone~~	~~3.32~~	~~43~~	~~39521~~	~~15.41 ppb~~	~~90~~

SW
11/11/99

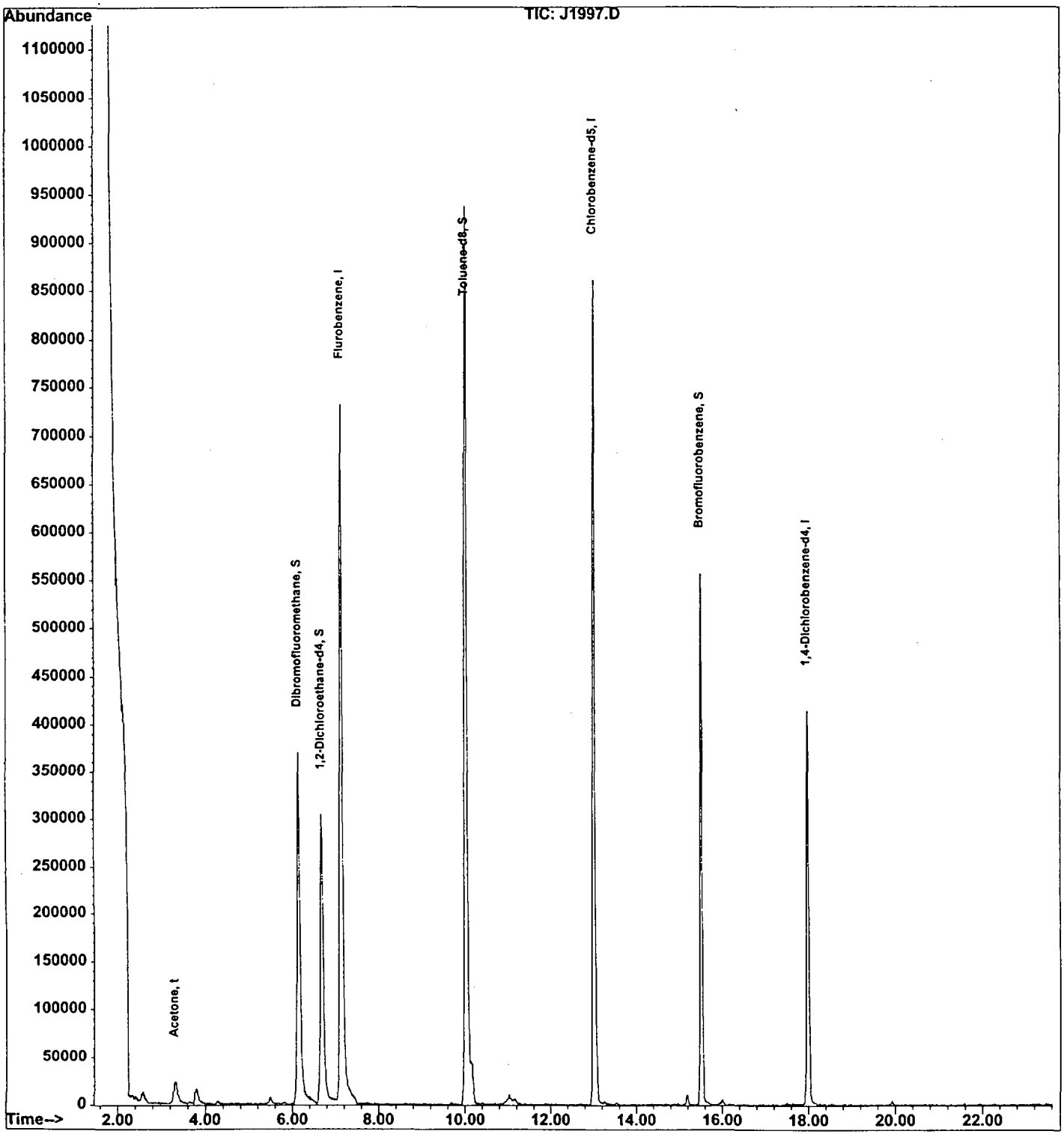
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\J1997.D
Acq On : 15 Oct 99 00:05
Sample : ;MSJ;;
Misc : 94106008;LOW;SO;
Quant Time: Nov 17 16:52 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
S-2-1-02

Lab Name: STL-NJ Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) SOIL Lab Sample ID: 94106009

Sample wt/vol: NA (g/mL) g Lab File ID: J2003

Level: (low/med) LOW Date Received: 10/13/99

% Moisture: not dec. 57 Date Analyzed: 10/15/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	23	U
71-43-2	Benzene	12	U
75-27-4	Bromodichloromethane	12	U
75-25-2	Bromoform	12	U
74-83-9	Bromomethane	23	U
78-93-3	2-Butanone	23	U
75-15-0	Carbon Disulfide	12	U
56-23-5	Carbon Tetrachloride	12	U
108-90-7	Chlorobenzene	12	U
124-48-1	Chlorodibromomethane	12	U
75-00-3	Chloroethane	23	U
67-66-3	Chloroform	12	U
74-87-3	Chloromethane	23	U
75-34-3	1,1-Dichloroethane	12	U
107-06-2	1,2-Dichloroethane	12	U
75-35-4	1,1-Dichloroethene	12	U
156-59-2	Cis-1,2-Dichloroethene	12	U
156-60-5	Trans-1,2-Dichloroethene	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	Cis-1,3-Dichloropropene	12	U
10061-05-6	Trans-1,3-Dichloropropene	12	U
100-41-4	Ethylbenzene	12	U
591-78-6	2-Hexanone	23	U
108-10-1	4-Methyl-2-Pentanone	23	U
75-09-2	Methylene Chloride	12	U
100-42-5	Styrene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
127-18-4	Tetrachloroethane	12	U
108-88-3	Toluene	12	U
71-55-6	1,1,1-Trichloroethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
79-01-6	Trichloroethylene	12	U
75-01-4	Vinyl Chloride	23	U
1330-20-7	Xylenes (Total)	12	U

Quantitation Report (Not Reviewed) **000071**

Data File : C:\HPCHEM\1\DATA\101499\J2003.D Vial: 100
Acq On : 15 Oct 99 2:59 Operator:
Sample : ;MSJ;; Inst : GC/MS Ins
Misc : 94106009;LOW;SO; Multiplr: 1.00
Quant Time: Nov 17 16:54 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.13	96	2406054	50.00 ppb	-0.11
64) Chlorobenzene-d5	13.00	117	1569417	50.00 ppb	-0.12
80) 1,4-Dichlorobenzene-d4	17.98	152	417746	50.00 ppb	-0.12
System Monitoring Compounds					
37) Dibromofluoromethane	6.14	113	766595	46.64 ppb	-0.10
Surrogate Spike 50.000	Range 86 - 118		Recovery = 93.28%		
41) 1,2-Dichloroethane-d4	6.68	65	510669	47.41 ppb	-0.10
Surrogate Spike 50.000	Range 80 - 120		Recovery = 94.82%		
65) Toluene-d8	10.01	98	2038393	54.38 ppb	-0.13
Surrogate Spike 50.000	Range 88 - 110		Recovery = 108.76%		
78) Bromofluorobenzene	15.51	95	533546	42.17 ppb	-0.10
Surrogate Spike 50.000	Range 86 - 115		Recovery = 84.34%#		
Target Compounds					Qvalue
~~18) Acetone~~	~~3.28~~	~~43~~	~~62580~~	~~20.04 ppb~~	~~92~~
~~91) 4-isopropyltoluene~~	~~17.88~~	~~119~~	~~79263~~	~~3.69 ppb~~	~~98~~

SW
11/17/99

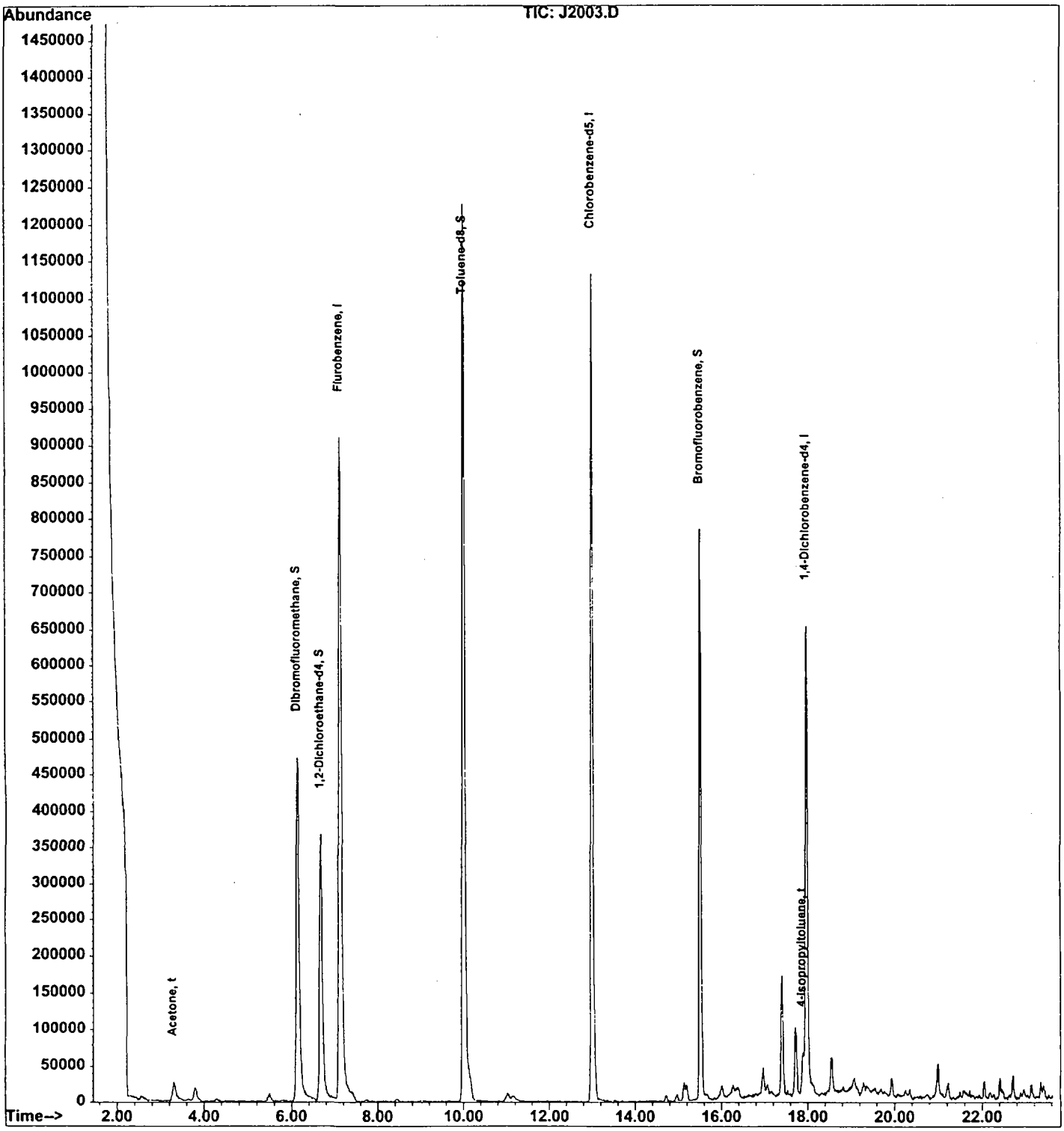
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\J2003.D
Acq On : 15 Oct 99 2:59
Sample : ;MSJ;;
Misc : 94106009;LOW;SO;
Quant Time: Nov 17 16:54 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
MW-3-01 000073

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 94106010

Sample wt/vol: 5.0 (g/mL) ml Lab File ID: I 2189

Level: (low/med) LOW Date Received: 10/13/99

% Moisture: not dec. _____ Date Analyzed: 10/15/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-05-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethane	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2189.D
Acq On : 15 Oct 99 4:22 am
Sample : ;MSI;;
Misc : 94106010;LOW;AQ;
Quant Time: Oct 15 4:41 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.59	96	972393	50.00 ug/l	0.02
70) chlorobenzene-d5	14.19	117	686329	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	317054	50.00 ug/l	0.00
System Monitoring Compounds					**%Recovery**
40) dibromofluromethane	7.20	113	314289	50.28 ug/l	100.55%
44) 1,2-dichloroethane-d4	7.95	65	376784	54.51 ug/l	109.01%
71) toluene-d8	11.28	98	859403	48.72 ug/l	97.45%
87) bromoflurobenzene	15.77	95	312634	47.35 ug/l	94.70%
Target Compounds					**Qvalue**
12) ~~Ethyl Mercaptan~~	~~3.67~~	~~62~~	~~3854~~	~~4.57~~ ug/l	84
14) ~~Tertiary butyl alcohol~~	~~4.25~~	~~59~~	~~3582~~	~~5.19~~ ug/l	100
18) ~~acrolein~~	~~3.57~~	~~56~~	~~27482~~	~~44.00~~ ug/l	100
21) ~~acetone~~	~~4.69~~	~~43~~	~~235426~~	~~88.71~~ ug/l	94
34) ~~Ethyl Cyanide~~	~~6.26~~	~~54~~	~~31145~~	~~48.08~~ ug/l	89
61) ~~2-chloroethylvinylether~~	~~10.53~~	~~63~~	~~5907~~	~~4.61~~ ug/l	100

10/15/99

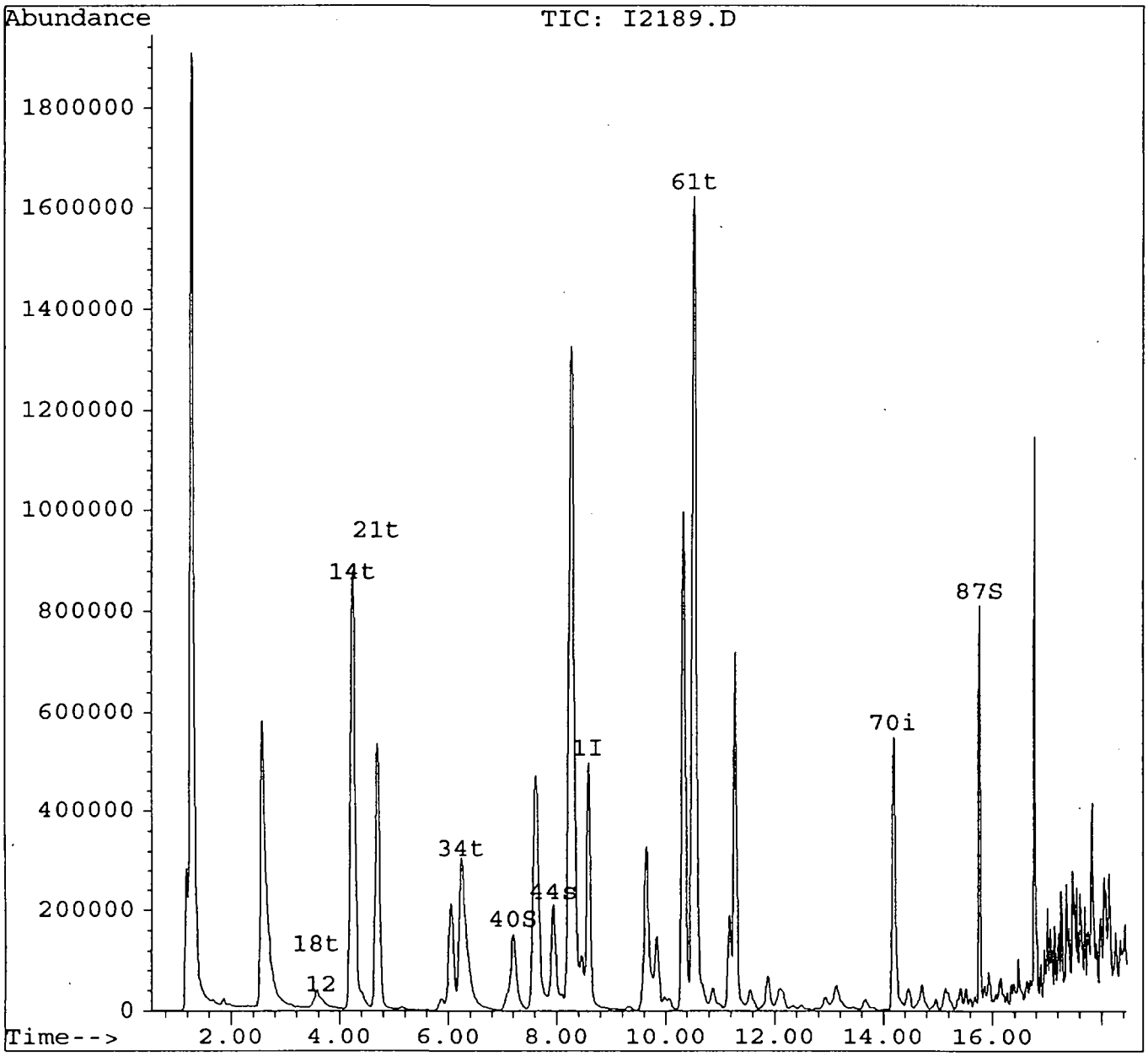
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2189.D
Acq On : 15 Oct 99 4:22 am
Sample : ;MSI;;
Misc : 94106010;LOW;AQ;
Quant Time: Oct 15 4:41 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
MW-5-01

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 94106011

Sample wt/vol: 5.0 (g/mL) ml Lab File ID: I 2190

Level: (low/med) LOW Date Received: 10/13/99

% Moisture: not dec. _____ Date Analyzed: 10/15/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-05-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethane	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2190.D
Acq On : 15 Oct 99 4:48 am
Sample : ;MSI;;
Misc : 94106011;LOW;AQ;
Quant Time: Oct 15 5:08 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.58	96	979634	50.00 ug/l	0.01
70) chlorobenzene-d5	14.19	117	678551	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.76	152	296162	50.00 ug/l	0.00
System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.21	113	320784	50.94 ug/l	101.87%
44) 1,2-dichloroethane-d4	7.94	65	365767	52.52 ug/l	105.04%
71) toluene-d8	11.28	98	858980	49.26 ug/l	98.52%
87) bromoflurobenzene	15.77	95	319002	48.87 ug/l	97.74%
Target Compounds					Qvalue
18) ~~acrolein~~	~~3.56~~	~~56~~	~~4101~~	~~6.52 ug/l~~	100
21) ~~acetone~~	~~4.67~~	~~43~~	~~12591~~	~~4.71 ug/l~~	~~91~~
97) 1,2,4-trimethylbenzene	16.48	105	49942	3.24 ug/l	91

10/18/99

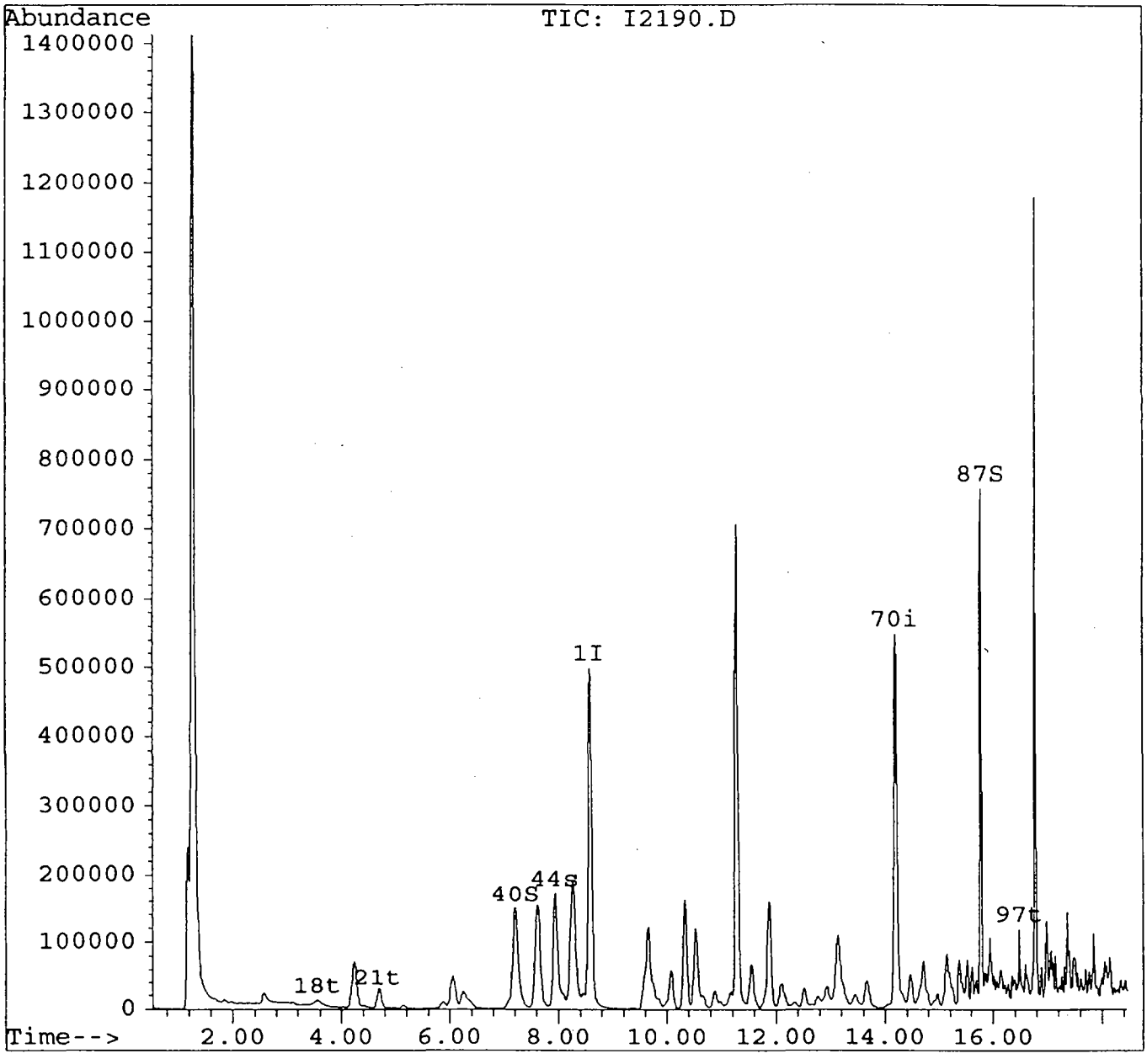
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2190.D
Acq On : 15 Oct 99 4:48 am
Sample : ;MSI;;
Misc : 94106011;LOW;AQ;
Quant Time: Oct 15 5:08 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



Calibration Table Report
Method: 8260044W.M
Title: Method 8260 FOR WATERS
Last Calibration: Wed Oct 13 09:44:24 1999

AVE RF
11.7

Calibration Files

Compound	2	5	10	20	50	100	200	500	Avg	Stdev
	I2094.D	I2093.D	I2092.D	I2091.D	I2090.D	I2089.D	I2088.D	I2087.D		
Fluorobenzene	ISTD									
dichlorodifluoromethane	0.486	0.435	0.413	0.491	0.455	0.459	0.449	0.431	0.452	5.91
1,3-Butadiene	0.213	0.184	0.227	0.237	0.218	0.240	0.255	0.255	0.229	10.32
chlorotrifluoroethene									0.000	0.00
chloromethane	0.570	0.425	0.417	0.451	0.441	0.472	0.504	0.421	0.463	11.30
vinyl chloride	0.443	0.401	0.395	0.455	0.414	0.448	0.462	0.446	0.433	5.97
bromomethane	0.403	0.293	0.290	0.329	0.284	0.226	0.016		0.263	46.17
chloroethane	0.190	0.173	0.170	0.188	0.172	0.168	0.147		0.173	8.27
trichlorofluoromethane	0.396	0.365	0.338	0.405	0.374	0.380	0.378	0.395	0.379	5.60
1,2-dichloro-1,1,2 trifluoroethane									0.000	0.00
Diethyl ether	0.141	0.170	0.184	0.169	0.164	0.158	0.169	0.150	0.163	8.06
Ethyl Mercaptan	0.038	0.045	0.054	0.056	0.039	0.040	0.040	0.036	0.043	17.71
freon	0.418	0.489	0.487	0.486	0.373	0.379	0.375	0.318	0.416	15.68
Tertiary butyl alcohol		0.049	0.035	0.040	0.039	0.033	0.029	0.023	0.035	23.70
1,1-dichloroethene	0.335	0.278	0.289	0.263	0.179	0.184	0.187	0.168	0.235	26.94
Acetonitrile	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	39.56
methylene chloride	0.726	0.548	0.472	0.410	0.365	0.343	0.358	0.313	0.442	31.23
acrolein	0.052	0.040	0.029	0.029	0.028	0.028	0.028	0.024	0.032	28.62
acrylonitrile	0.041	0.035	0.042	0.043	0.038	0.043	0.045	0.046	0.042	8.50
trans-1,2-dichloroethene	0.315	0.278	0.318	0.313	0.291	0.296	0.301	0.259	0.296	6.87
acetone	0.161	0.133	0.130	0.140	0.126	0.130	0.139	0.134	0.136	8.05
carbon disulfide	1.641	1.424	1.490	1.548	1.446	1.463	1.452	1.314	1.472	6.45
hexane	0.752	0.729	0.751	0.760	0.702	0.701	0.675	0.563	0.704	9.13
1,1-dichloroethane	0.730	0.684	0.751	0.746	0.703	0.693	0.728	0.685	0.715	3.79
methyl t-butyl ether	0.529	0.476	0.500	0.535	0.560	0.567	0.605	0.551	0.540	7.48
vinyl acetate	0.351	0.508	0.594	0.571	0.608	0.598	0.642	0.583	0.557	16.42
2-chloro-1,3-butadiene	0.447	0.409	0.458	0.515	0.500	0.527	0.547	0.545	0.493	10.21
2,2-dichloropropane	0.319	0.323	0.362	0.362	0.377	0.400	0.449	0.459	0.382	13.67
cis-1,2-dichloroethene	0.323	0.298	0.330	0.324	0.311	0.306	0.321	0.283	0.312	5.02
2-butanone		0.016	0.026	0.028	0.029	0.032	0.031	0.025	0.027	20.51
Idomethane	0.662	0.558	0.570	0.572	0.487	0.432	0.373	0.451	0.513	18.26
Allyl chloride	1.641	1.424	1.486	1.534	1.427	1.445	1.436	1.299	1.462	6.73
cyclohexane	0.693	0.755	0.774	0.805	0.744	0.752	0.756	0.659	0.742	6.19
Ethyl Cyanide	0.034	0.031	0.034	0.035	0.034	0.036	0.034	0.028	0.033	7.38
Ethyl Acetate	0.715	0.752	0.785	0.798	0.730	0.726	0.694	0.601	0.725	8.43
bromochloromethane	0.152	0.146	0.167	0.155	0.148	0.144	0.152	0.142	0.151	5.33
tetrahydrofuran	0.085	0.076	0.089	0.088	0.092	0.093	0.089	0.078	0.086	7.29
chloroform	0.624	0.586	0.650	0.641	0.614	0.602	0.645	0.617	0.622	3.58
1,1,1-trichloroethane	0.362	0.356	0.393	0.412	0.395	0.408	0.442	0.443	0.401	8.06
dibromofluromethane	0.316	0.324	0.320	0.315	0.322	0.314	0.329	0.331	0.321	1.99
carbon tetrachloride	0.224	0.242	0.268	0.301	0.298	0.323	0.353	0.363	0.296	16.82
1,1-dichloropropene	0.491	0.486	0.544	0.563	0.514	0.520	0.564	0.533	0.527	5.62
2,2,4-trimethylpentane	0.752	0.729	0.751	0.760	0.702	0.704	0.680	0.568	0.706	8.85
1,2-dichloroethane-d4	0.366	0.370	0.371	0.360	0.342	0.331	0.348	0.356	0.355	3.98
benzene	1.806	1.499	1.626	1.493	1.338	1.291	1.306	1.139	1.437	14.78
1,2-dichloroethane	0.512	0.449	0.481	0.451	0.430	0.419	0.439	0.414	0.449	7.29
Isopropyl acetate	0.715	0.752	0.785	0.798	0.730	0.726	0.694	0.601	0.725	8.43
Heptane	0.715	0.752	0.785	0.798	0.730	0.726	0.694	0.601	0.725	8.43
trichloroethene	0.309	0.290	0.327	0.337	0.320	0.321	0.331	0.308	0.318	4.79
1,2-dichloropropane	0.408	0.385	0.443	0.421	0.411	0.392	0.416	0.382	0.407	5.04
methyl methacrylate	0.100	0.109	0.138	0.155	0.170	0.183	0.179	0.147	0.148	20.91
1,4-Dioxane	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	27.27
dibromomethane	0.176	0.170	0.210	0.195	0.184	0.181	0.185	0.175	0.184	7.03
bromodichloromethane	0.367	0.353	0.407	0.396	0.395	0.393	0.432	0.416	0.395	6.44
methylacrylonitrile	0.169	0.153	0.168	0.168	0.165	0.173	0.160	0.137	0.162	7.34
Propyl acetate									0.000	0.00
4-methyl-2-pentanone	0.215	0.216	0.238	0.258	0.264	0.289	0.275	0.225	0.248	11.37
2-hexanone	0.168	0.156	0.155	0.169	0.177	0.189	0.179	0.130	0.165	11.10
cis-1,3-dichloropropene	0.434	0.423	0.512	0.499	0.503	0.487	0.502	0.471	0.479	7.04
toluene	0.697	0.607	0.741	0.711	0.634	0.629	0.640	0.565	0.653	8.98
2-chloroethylvinylether	0.015	0.040	0.050	0.032	0.081	0.089	0.123	0.097	0.066	56.10
Octane									0.000	0.00

isobutyl acetate									0.000	0.00
trans-1,3-dichloropropene	0.356	0.355	0.426	0.408	0.421	0.425	0.453	0.427	0.409	8.56
1,1,2-trichloroethane	0.208	0.199	0.244	0.229	0.229	0.226	0.232	0.199	0.221	7.55
1,2-dibromoethane	0.193	0.190	0.234	0.226	0.221	0.225	0.231	0.213	0.217	7.78
tetrachloroethene	0.291	0.251	0.278	0.288	0.270	0.277	0.280	0.262	0.275	4.80
1,3-dichloropropane	0.413	0.395	0.469	0.447	0.437	0.428	0.450	0.398	0.430	6.10
chlorobenzene-d5	ISTD									
toluene-d8	1.280	1.243	1.296	1.297	1.287	1.292	1.291	1.294	1.285	1.40
dibromochloromethane	0.368	0.351	0.448	0.428	0.419	0.413	0.434	0.398	0.407	8.13
chlorobenzene	1.052	0.940	1.600	1.334	0.986	0.967	0.982	0.881	1.093	22.54
1,1,1,2-tetrachloroethane	0.397	0.355	0.430	0.416	0.394	0.381	0.405	0.374	0.394	6.06
ethylbenzene	1.737	1.536	1.886	1.866	1.695	1.683	1.673	1.459	1.692	8.62
Nonene									0.000	0.00
1-chlorohexane									0.000	0.00
m,p-Xylenes	0.630	0.575	0.702	0.669	0.568	0.542	0.498	0.435	0.577	15.29
ethyl methacrylate									0.000	0.00
Cyclohexanone	0.027	0.044	0.046	0.050	0.046	0.048	0.046	0.031	0.042	19.97
butyl acrylate									0.000	0.00
cyclohexanol									0.000	0.00
o-xylene	0.583	0.533	0.642	0.627	0.567	0.540	0.519	0.449	0.557	11.13
styrene	0.876	0.837	1.038	1.031	0.964	0.923	0.892	0.754	0.914	10.54
bromoform	0.171	0.169	0.217	0.212	0.208	0.217	0.222	0.195	0.201	10.44
isopropylbenzene	1.419	1.348	1.638	1.663	1.490	1.455	1.449	1.251	1.464	9.37
bromoflurobenzene	0.464	0.458	0.469	0.474	0.479	0.483	0.497	0.522	0.481	4.28
bromobenzene	0.418	0.374	0.445	0.436	0.410	0.405	0.413	0.365	0.408	6.74
1,4-dichlorobenzene-d4	ISTD									
1,1,2,2-tetrachloroethane	1.007	0.946	1.113	1.071	1.003	1.018	0.986	0.790	0.992	9.69
1,2,3-trichloropropane	1.257	1.148	1.356	1.267	1.219	1.247	1.152	0.901	1.193	11.37
n-propylbenzene	4.438	4.141	4.753	4.695	4.241	4.159	4.021	3.443	4.236	9.81
2-chlorotoluene	2.749	2.499	2.863	2.784	2.547	2.507	2.503	2.194	2.581	8.26
4-chlorotoluene	3.096	2.961	3.310	3.144	2.819	2.697	2.575	2.196	2.850	12.58
1,3,5-trimethylbenzene	2.644	2.498	2.884	2.830	2.484	2.377	2.298	2.003	2.502	11.50
tert-butylbenzene	3.122	2.918	3.325	3.334	3.009	2.818	2.691	2.274	2.936	11.95
1,2,4-trimethylbenzene	2.872	2.623	3.071	2.881	2.572	2.448	2.347	1.994	2.601	13.24
sec-butylbenzene	3.653	3.509	3.888	3.962	3.506	3.414	3.266	2.868	3.508	9.92
1,3-dichlorobenzene	1.957	1.757	1.970	1.891	1.677	1.600	1.590	1.221	1.708	14.51
4-isopropyltoluene	2.876	2.757	3.125	3.159	2.761	2.639	2.517	2.054	2.736	12.91
1,4-dichlorobenzene	2.022	1.797	2.025	1.929	1.716	1.693	1.696	1.522	1.800	9.91
1,2-dichlorobenzene	1.715	1.581	1.774	1.690	1.533	1.518	1.522	1.330	1.583	8.93
n-butylbenzene	3.106	3.001	3.398	3.450	3.043	2.980	2.890	2.503	3.046	9.75
cis-1,4-dichloro-2-butene	1.257	1.074	1.273	1.239	1.209	1.235	1.148	0.895	1.166	10.93
trans-1,4-dichloro-2-butene	0.148	0.184	0.224	0.224	0.236	0.245	0.240	0.213	0.214	15.40
1,2-dibromo-3-chloropropane	0.168	0.147	0.152	0.154	0.143	0.154	0.153	0.125	0.149	8.19
pentachloroethane	0.450	0.430	0.468	0.478	0.484	0.447	0.464	0.438	0.457	4.19
1,2,4-trichlorobenzene	0.834	0.769	0.865	0.839	0.700	0.729	0.788	0.710	0.779	8.06
hexachlorobutadiene	0.483	0.475	0.490	0.508	0.417	0.428	0.452	0.465	0.465	6.69
naphthalene	2.388	2.108	2.243	2.214	1.802	1.994	1.934	1.389	2.009	15.55
1,2,3-trichlorobenzene									0.000	0.00
2-Methyl Naphthalene									0.000	0.00
1,3-Dimethyl Naphthalene									0.000	0.00

Wed Oct 13 09:52:05 1999

Compound List Report 5972 - In

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration
Total Cpnds : 113

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Fluorobenzene	96	8.57	1.000	A	0	A	L
2	T	dichlorodifluoromethane	85	1.47	0.171	A	1	A	B
3	T	1,3-Butadiene	54	1.89	0.221	A	1	A	B
4	T	chlorotrifluoroethene	116	0.98	0.114	A	2	A	B
5	T	chloromethane	50	1.72	0.201	A	1	A	B
6	T	vinyl chloride	62	1.84	0.215	A	1	A	B
7	T	bromomethane	96	2.20	0.257	A	1	A	B
8	T	chloroethane	64	2.40	0.280	A	1	A	B
9	T	trichlorofluoromethane	101	2.71	0.316	A	1	A	B
10	T	1,2-dichloro-1,1,2 trifluoroet	67	1.47	0.171	A	2	A	B
11	T	Diethyl ether	59	3.14	0.367	A	2	A	B
12		Ethyl Mercaptan	62	3.45	0.403	A	1	A	B
13	T	freon	101	3.46	0.404	A	2	A	B
14	T	Tertiary butyl alcohol	59	4.41	0.515	A	0	A	B
15	T	1,1-dichloroethene	96	3.45	0.403	A	2	A	B
16	T	Acetonitrile	40	1.89	0.221	A	2	A	B
17	T	methylene chloride	84	4.12	0.481	A	2	A	B
18	T	acrolein	56	3.27	0.381	A	0	A	B
19	T	acrylonitrile	53	1.89	0.221	A	1	A	B
20	T	trans-1,2-dichloroethene	96	4.61	0.538	A	2	A	B
21	T	acetone	43	4.61	0.538	A	1	A	B
22	T	carbon disulfide	76	3.85	0.450	A	0	A	B
23	T	hexane	57	5.10	0.595	A	2	A	B
24	T	1,1-dichloroethane	63	5.24	0.612	A	2	A	B
25	T	methyl t-butyl ether	73	4.61	0.538	A	0	A	B
26	T	vinyl acetate	43	5.33	0.622	A	0	A	B
27	T	2-chloro-1,3-butadiene	53	5.44	0.634	A	2	A	B
28	T	2,2-dichloropropane	77	6.26	0.731	A	1	A	B
29	T	cis-1,2-dichloroethene	96	6.26	0.731	A	2	A	B
30	T	2-butanone	72	6.25	0.730	A	2	A	B
31	T	Idomethane	142	3.69	0.431	A	1	A	B
32	T	Allyl chloride	76	3.85	0.450	A	1	A	B
33	T	cyclohexane	56	7.56	0.882	A	2	A	B
34	T	Ethyl Cyanide	54	6.40	0.747	A	1	A	B
35	T	Ethyl Acetate	43	8.63	1.007	A	2	A	B
36	T	bromochloromethane	128	6.77	0.790	A	2	A	B
37	T	tetrahydrofuran	42	6.93	0.808	A	1	A	B
38	T	chloroform	83	6.82	0.796	A	1	A	B
39	T	1,1,1-trichloroethane	97	7.35	0.858	A	2	A	B
40	S	dibromofluromethane	113	7.17	0.837	A	1	A	B
41	T	carbon tetrachloride	117	7.77	0.907	A	1	A	B
42	T	1,1-dichloropropene	75	7.68	0.896	A	2	A	B
43	T	2,2,4-trimethylpentane	57	5.10	0.595	A	2	A	B
44	S	1,2-dichloroethane-d4	65	7.93	0.925	A	1	A	L
45	T	benzene	78	8.07	0.942	A	1	A	B
46	T	1,2-dichloroethane	62	8.07	0.942	A	1	A	B
47	T	Isopropyl acetate	43	8.63	1.007	A	2	A	B
48	T	Heptane	43	8.63	1.007	A	2	A	B
49	T	trichloroethene	95	9.26	1.081	A	2	A	B
50	T	1,2-dichloropropane	63	9.59	1.119	A	1	A	B

52		T	1,4-Dioxane	88	9.93	1.159	A	1	A	B
53		T	dibromomethane	93	9.83	1.147	A	2	A	B
54		T	bromodichloromethane	83	10.03	1.170	A	2	A	B
55		T	methylacrylonitrile	41	6.67	0.778	A	3	A	B
56		T	Propyl acetate	43	6.43	0.750	A	1	A	B
57		T	4-methyl-2-pentanone	43	10.96	1.279	A	2	A	B
58		T	2-hexanone	43	12.43	1.450	A	2	A	B
59		T	cis-1,3-dichloropropene	75	10.83	1.264	A	1	A	B
60		T	toluene	92	11.39	1.329	A	1	A	B
61		T	2-chloroethylvinylether	63	10.58	1.235	A	0	A	B
62		T	Octane	43	7.56	0.882	A	2	A	B
63		T	butyl acetate	43	11.56	1.349	A	1	A	B
64		T	isobutyl acetate	43	12.79	1.492	A	1	A	B
65		T	trans-1,3-dichloropropene	75	11.72	1.368	A	1	A	B
66		T	1,1,2-trichloroethane	83	12.04	1.405	A	2	A	B
67		T	1,2-dibromoethane	107	13.15	1.534	A	2	A	B
68		T	tetrachloroethene	166	12.48	1.456	A	1	A	B
69		T	1,3-dichloropropane	76	12.37	1.444	A	1	A	B
70	I		chlorobenzene-d5	117	14.19	1.000	A	1	A	B
71		S	toluene-d8	98	11.28	0.795	A	1	A	B
72		T	dibromochloromethane	129	12.85	0.905	A	1	A	B
73		T	chlorobenzene	112	14.26	1.004	A	2	A	B
74		T	1,1,1,2-tetrachloroethane	131	14.40	1.015	A	2	A	B
75		T	ethylbenzene	91	14.46	1.019	A	1	A	B
76		T	Nonene	55	7.56	0.532	A	3	A	B
77		T	1-chlorohexane	91	8.06	0.568	A	2	A	B
78		T	m,p-Xylenes	106	14.65	1.032	A	1	A	B
79		T	ethyl methacrylate	69	14.63	1.031	A	2	A	B
80		T	Cyclohexanone	42	15.66	1.103	A	2	A	B
81		T	butyl acrylate	55	9.80	0.690	A	2	A	B
82		T	cyclohexanol	57	9.93	0.700	A	2	A	B
83		T	o-xylene	106	15.19	1.070	A	1	A	B
84		T	styrene	104	15.22	1.072	A	1	A	B
85		T	bromoform	173	15.43	1.087	A	1	A	B
86		T	isopropylbenzene	105	15.61	1.100	A	1	A	B
87		S	bromoflurobenzene	95	15.77	1.111	A	2	A	B
88		T	bromobenzene	156	15.92	1.122	A	2	A	B
89	I		1,4-dichlorobenzene-d4	152	16.77	1.000	A	1	A	B
90		T	1,1,2,2-tetrachloroethane	83	15.87	0.946	A	2	A	B
91		T	1,2,3-trichloropropane	75	15.93	0.950	A	1	A	B
92		T	n-propylbenzene	91	16.01	0.955	A	1	A	B
93		T	2-chlorotoluene	91	16.10	0.960	A	1	A	B
94		T	4-chlorotoluene	91	16.18	0.965	A	1	A	B
95		T	1,3,5-trimethylbenzene	105	16.17	0.964	A	1	A	B
96		T	tert-butylbenzene	119	16.45	0.981	A	1	A	B
97		T	1,2,4-trimethylbenzene	105	16.48	0.983	A	1	A	B
98		T	sec-butylbenzene	105	16.62	0.991	A	1	A	B
99		T	1,3-dichlorobenzene	146	16.72	0.997	A	2	A	B
100		T	4-isopropyltoluene	119	16.73	0.998	A	2	A	B
101		T	1,4-dichlorobenzene	146	16.79	1.001	A	2	A	B
102		T	1,2-dichlorobenzene	146	17.06	1.017	A	2	A	B
103		T	n-butylbenzene	91	17.03	1.015	A	1	A	B
104		T	cis-1,4-dichloro-2-butene	75	15.93	0.950	A	2	A	B
105		T	trans-1,4-dichloro-2-butene	53	15.95	0.951	A	2	A	B
106		T	1,2-dibromo-3-chloropropane	75	17.56	1.047	A	2	A	B
107		T	pentachloroethane	167	16.47	0.982	A	2	A	B
108		T	1,2,4-trichlorobenzene	180	18.12	1.081	A	1	A	B
109		T	hexachlorobutadiene	225	18.24	1.088	A	1	A	B

111	T	1,2,3-trichlorobenzene	180	18.12	1.081	A	1	A	B
112	T	2-Methyl Naphthalene	142	17.01	1.015	A	1	A	B
113	T	1,3-Dimethyl Naphthalene	156	17.56	1.047	A	0	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

8260044W.M Wed Oct 13 09:57:27 1999 VOA2

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2087.d
Acq On : 13 Oct 99 3:32 am
Sample : VSTD500;MSI;;
Misc : VSTD500;LOW;AQ;
Quant Time: Oct 13 9:42 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.57	96	665978	50.00 ug/l	-0.02
70) chlorobenzene-d5	14.19	117	467509	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	207572	50.00 ug/l	0.00
System Monitoring Compounds					%Recovery
40) dibromoflurometh ane	7.17	113	220411	51.37 ug/l	102.73%
44) 1,2-dichloroethane-d4	7.93	65	237123	46.41 ug/l	92.83%
71) toluene-d8	11.28	98	604910	21.75 ug/l	43.51%
87) bromoflurobenzene	15.77	95	244146	23.58 ug/l	47.16%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.47	85	2868131	472.96 ug/l	100
3) 1,3-Butadiene	1.89	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.72	50	2801046	476.47 ug/l	100
6) vinyl chloride	1.84	62	2971172	539.35 ug/l	100
7) bromomethane	2.20	96	101988	26.98 ug/l	99
8) chloroethane	2.40	64	52636	22.94 ug/l	88
9) trichlorofluoromethane	2.71	101	2631975	528.75 ug/l	99
10) 1,2-dichloro-1,1,2 trifluo	1.47	67		No Calib #	
11) Diethyl ether	3.14	59	1001653	458.87 ug/l	92
12) Ethyl Mercaptan	3.45	62	237680	461.54 ug/l #	47
13) freon	3.46	101	2118632	427.45 ug/l	87
14) Tertiary butyl alcohol	4.41	59	151936	296.20 ug/l	100
15) 1,1-dichloroethene	3.45	96	1117659	469.62 ug/l	94
16) Acetonitrile	1.89	40	73805	1858.40 ug/l m	1
17) methylene chloride	4.12	84	2086608	429.75 ug/l	89
18) acrolein	3.27	56	637338	427.18 ug/l	100
19) acrylonitrile	1.89	53	1215703	43180.27 ug/l #	31
20) trans-1,2-dichloroethene	4.61	96	1722120	443.79 ug/l #	71
21) acetone	4.61	43	889119	530.53 ug/l	69
22) carbon disulfide	3.85	76	8749640	454.40 ug/l	100
23) hexane	5.10	57	3750678	400.85 ug/l	95
24) 1,1-dichloroethane	5.24	63	4562072	486.99 ug/l	98
25) methyl t-butyl ether	4.61	73	3666724	491.65 ug/l	100
26) vinyl acetate	5.33	43	3885951	480.08 ug/l	100
27) 2-chloro-1,3-butadiene	5.44	53	3628148	544.89 ug/l	84
28) 2,2-dichloropropane	6.26	77	3057052	608.14 ug/l	86
29) cis-1,2-dichloroethene	6.26	96	1886726	456.17 ug/l #	70
30) 2-butanone	6.25	72	164013	421.21 ug/l	95
31) Idomethane	3.69	142	3002886	464.51 ug/l	84
32) Allyl chloride	3.85	76	8651703	454.63 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2087.d
Acq On : 13 Oct 99 3:32 am
Sample : VSTD500;MSI;;
Misc : VSTD500;LOW;AQ;
Quant Time: Oct 13 9:42 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33) cyclohexane	7.56	56	4386125	443.17 ug/l	#	63
34) Ethyl Cyanide	6.40	54	1877767	415.76 ug/l		94
35) Ethyl Acetate	8.63	43	4001019	411.10 ug/l	#	66
36) bromochloromethane	6.77	128	944236	479.37 ug/l		96
37) tetrahydrofuran	6.93	42	520638	426.44 ug/l		95
38) chloroform	6.82	83	4107821	502.13 ug/l		96
39) 1,1,1-trichloroethane	7.35	97	2950757	561.09 ug/l		89
41) carbon tetrachloride	7.77	117	2416714	609.84 ug/l		98
42) 1,1-dichloropropene	7.68	75	3549582	518.57 ug/l		93
43) 2,2,4-trimethylpentane	5.10	57	3781412	404.13 ug/l	#	20
45) benzene	8.07	78	7586043	425.80 ug/l		100
46) 1,2-dichloroethane	8.07	62	2760205	481.65 ug/l		83
47) Isopropyl acetate	8.63	43	4001019	411.10 ug/l	#	60
48) Heptane	8.63	43	4001019	411.10 ug/l		96
49) trichloroethene	9.26	95	2052798	482.11 ug/l		88
50) 1,2-dichloropropane	9.59	63	2546393	465.70 ug/l		96
51) methyl methacrylate	9.80	69	979087	432.84 ug/l	#	89
52) 1,4-Dioxane	9.93	88	229095	430.93 ug/l		76
53) dibromomethane	9.83	93	1162171	475.15 ug/l		94
54) bromodichloromethane	10.03	83	2768531	525.56 ug/l		97
55) methylacrylonitrile	6.67	41	9106956	414.84 ug/l		90
56) Propyl acetate	6.43	43		No Calib	#	
57) 4-methyl-2-pentanone	10.96	43	1497735	425.89 ug/l	#	95
58) 2-hexanone	12.43	43	862919	365.71 ug/l	#	95
59) cis-1,3-dichloropropene	10.83	75	3137159	467.79 ug/l		91
60) toluene	11.39	92	3761862	445.28 ug/l		98
61) 2-chloroethylvinylether	10.58	63	642922	593.21 ug/l		100
62) Octane	7.56	43		No Calib	#	
63) butyl acetate	11.56	43		No Calib		
64) isobutyl acetate	12.79	43		No Calib		
65) trans-1,3-dichloropropene	11.72	75	2842060	507.31 ug/l		88
66) 1,1,2-trichloroethane	12.04	83	1323698	433.72 ug/l		88
67) 1,2-dibromoethane	13.15	107	1417292	481.81 ug/l		97
68) tetrachloroethene	12.48	166	1747310	485.86 ug/l		95
69) 1,3-dichloropropane	12.37	76	2651189	455.32 ug/l		97
72) dibromochloromethane	12.85	129	1860427	205.44 ug/l		98
73) chlorobenzene	14.26	112	4117314	193.30 ug/l		88
74) 1,1,1,2-tetrachloroethane	14.40	131	1746574	205.30 ug/l		96
75) ethylbenzene	14.46	91	6821408	186.29 ug/l		97
76) Nonene	7.56	55		No Calib	#	
77) 1-chlorohexane	0.00	91		Not Detected		
78) m,p-Xylenes	14.65	106	4070564	165.98 ug/l		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2087.d
Acq On : 13 Oct 99 3:32 am
Sample : VSTD500;MSI;;
Misc : VSTD500;LOW;AQ;
Quant Time: Oct 13 9:42 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.63	69		No Calib	#	
80)	Cyclohexanone	15.66	42	144211	141.51 ug/l	#	62
81)	butyl acrylate	9.80	55		No Calib	#	
82)	cyclohexanol	9.93	57		No Calib	#	
83)	o-xylene	15.19	106	2097907	171.26 ug/l		89
84)	styrene	15.22	104	3526583	169.24 ug/l		74
85)	bromoform	15.43	173	910162	202.83 ug/l		97
86)	isopropylbenzene	15.61	105	5847154	181.66 ug/l		93
88)	bromobenzene	15.92	156	1707887	192.67 ug/l	#	84
90)	1,1,2,2-tetrachloroethane	15.87	83	1640474	394.00 ug/l		97
91)	1,2,3-trichloropropane	15.93	75	1869244	369.42 ug/l		59
92)	n-propylbenzene	16.01	91	7146873	405.97 ug/l		94
93)	2-chlorotoluene	16.10	91	4554250	430.69 ug/l		86
94)	4-chlorotoluene	16.18	91	4558217	389.51 ug/l		90
95)	1,3,5-trimethylbenzene	16.17	105	4157857	403.17 ug/l		94
96)	tert-butylbenzene	16.45	119	4720435	377.89 ug/l		93
97)	1,2,4-trimethylbenzene	16.48	105	4139724	387.67 ug/l		94
98)	sec-butylbenzene	16.62	105	5953310	409.07 ug/l		89
99)	1,3-dichlorobenzene	16.72	146	2533601	363.91 ug/l		95
100)	4-isopropyltoluene	16.73	119	4262956	371.98 ug/l		96
101)	1,4-dichlorobenzene	16.79	146	3159793	443.58 ug/l		94
102)	1,2-dichlorobenzene	17.06	146	2760082	433.72 ug/l		93
103)	n-butylbenzene	17.03	91	5195417	411.31 ug/l		87
104)	cis-1,4-dichloro-2-butene	15.93	75	1858023	370.25 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.95	53	442089	335.45 ug/l		86
106)	1,2-dibromo-3-chloropropan	17.56	75	260125	439.69 ug/l	#	71
107)	pentachloroethane	16.47	167	908263	452.48 ug/l		93
108)	1,2,4-trichlorobenzene	18.12	180	1473233	506.83 ug/l		97
109)	hexachlorobutadiene	18.24	225	964847	557.79 ug/l		93
110)	naphthalene	18.30	128	2883685	385.40 ug/l		100
111)	1,2,3-trichlorobenzene	18.12	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	17.56	156		No Calib		

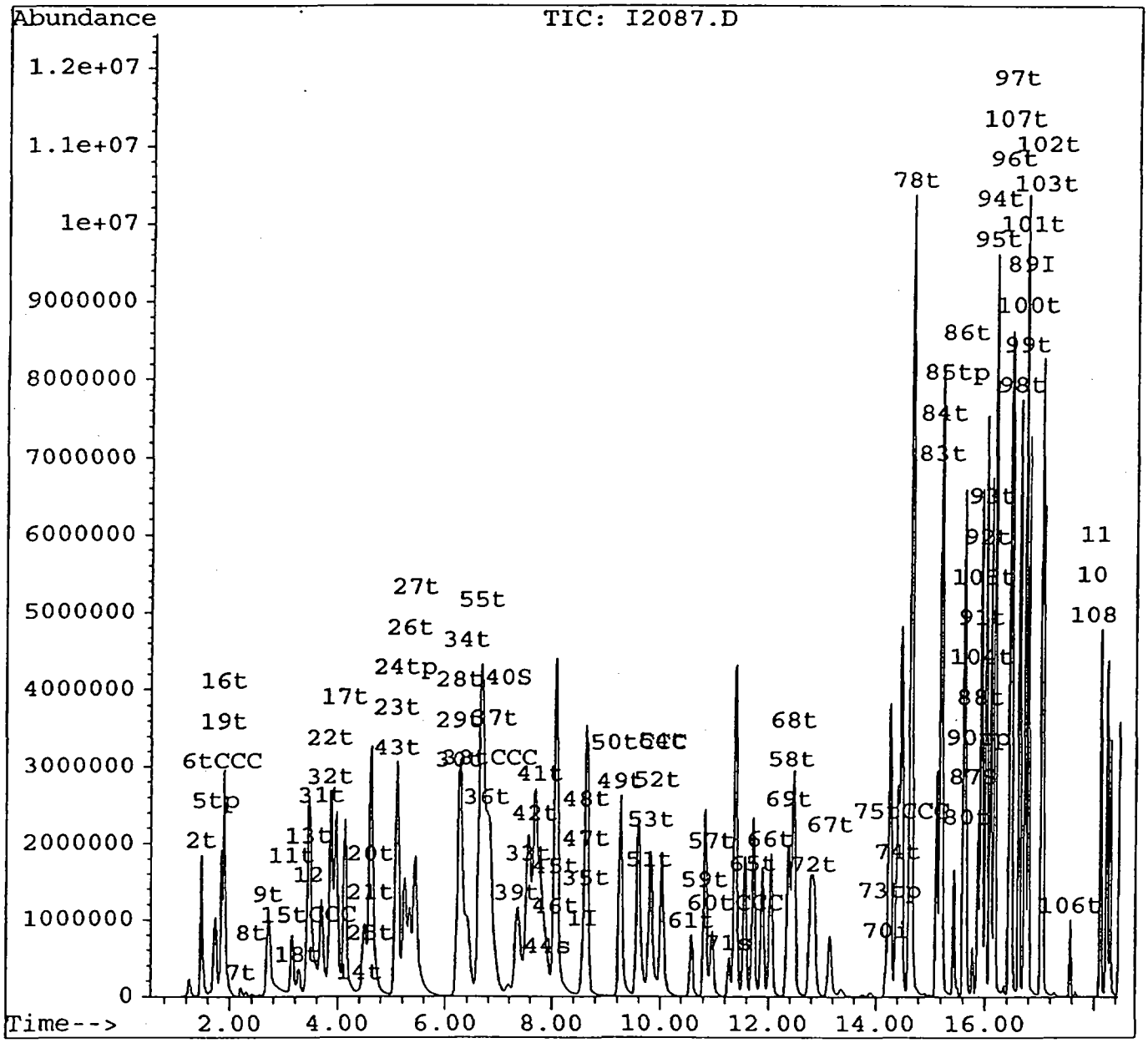
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2087.d
Acq On : 13 Oct 99 3:32 am
Sample : VSTD500;MSI;;
Misc : VSTD500;LOW;AQ;
Quant Time: Oct 13 9:42 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2088.d
Acq On : 13 Oct 99 3:58 am
Sample : VSTD200;MSI;;
Misc : VSTD200;LOW;AQ;
Quant Time: Oct 13 9:41 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.57	96	739007	50.00 ug/l	-0.02
70) chlorobenzene-d5	14.20	117	516736	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	234598	50.00 ug/l	0.00
System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.20	113	243065	51.05 ug/l	102.09%
44) 1,2-dichloroethane-d4	7.94	65	256972	45.33 ug/l	90.66%
71) toluene-d8	11.28	98	667093	21.71 ug/l	43.41%
87) bromoflurobenzene	15.77	95	257059	22.46 ug/l	44.92%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.48	85	1327925	197.34 ug/l	100
3) 1,3-Butadiene	1.90	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.72	50	1490647	228.51 ug/l	99
6) vinyl chloride	1.85	62	1365843	223.44 ug/l	99
7) bromomethane	2.22	96	46532	11.09 ug/l	97
8) chloroethane	2.35	64	435376	171.01 ug/l	99
9) trichlorofluoromethane	2.76	101	1117327	202.29 ug/l	98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.16	59	500705	206.71 ug/l	95
12) Ethyl Mercaptan	3.49	62	117107	204.93 ug/l #	51
13) freon	3.50	101	1109331	201.70 ug/l	87
14) Tertiary butyl alcohol	4.33	59	86233	151.50 ug/l	100
15) 1,1-dichloroethene	3.49	96	551684	208.90 ug/l	91
16) Acetonitrile	1.90	40	34279	777.85 ug/l m	1
17) methylene chloride	4.15	84	1058280	196.42 ug/l	91
18) acrolein	3.29	56	325531	196.63 ug/l	100
19) acrylonitrile	1.90	53	533598	17079.82 ug/l m	99
20) trans-1,2-dichloroethene	4.63	96	889519	206.58 ug/l #	75
21) acetone	4.62	43	409930	220.43 ug/l	70
22) carbon disulfide	3.89	76	4293091	200.92 ug/l	100
23) hexane	5.13	57	1996582	192.30 ug/l	96
24) 1,1-dichloroethane	5.26	63	2152950	207.11 ug/l	100
25) methyl t-butyl ether	4.62	73	1789716	216.26 ug/l	100
26) vinyl acetate	5.35	43	1897154	211.22 ug/l	100
27) 2-chloro-1,3-butadiene	5.46	53	1617091	218.86 ug/l	87
28) 2,2-dichloropropane	6.29	77	1328457	238.16 ug/l	90
29) cis-1,2-dichloroethene	6.29	96	948453	206.65 ug/l #	76
30) 2-butanone	6.25	72	91425	211.59 ug/l	77
31) Idomethane	3.72	142	1104062	153.91 ug/l	92
32) Allyl chloride	3.89	76	4244762	201.01 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2088.d
Acq On : 13 Oct 99 3:58 am
Sample : VSTD200;MSI;;
Misc : VSTD200;LOW;AQ;
Quant Time: Oct 13 9:41 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) cyclohexane	7.58	56	2234884	203.50 ug/l #	65
34) Ethyl Cyanide	6.37	54	1012933	202.11 ug/l	94
35) Ethyl Acetate	8.64	43	2052034	190.01 ug/l #	67
36) bromochloromethane	6.78	128	448542	205.22 ug/l	95
37) tetrahydrofuran	6.94	42	262882	194.04 ug/l	91
38) chloroform	6.85	83	1906940	210.07 ug/l	96
39) 1,1,1-trichloroethane	7.37	97	1305546	223.72 ug/l	88
41) carbon tetrachloride	7.80	117	1042405	237.05 ug/l	98
42) 1,1-dichloropropene	7.69	75	1665974	219.34 ug/l	94
43) 2,2,4-trimethylpentane	5.13	57	2011535	193.73 ug/l #	24
45) benzene	8.09	78	3860387	195.27 ug/l	100
46) 1,2-dichloroethane	8.09	62	1296762	203.92 ug/l	85
47) Isopropyl acetate	8.64	43	2052034	190.01 ug/l #	60
48) Heptane	8.64	43	2052034	190.01 ug/l	98
49) trichloroethene	9.26	95	978849	207.17 ug/l	87
50) 1,2-dichloropropane	9.60	63	1229440	202.63 ug/l	96
51) methyl methacrylate	9.80	69	529923	211.12 ug/l #	91
52) 1,4-Dioxane	9.92	88	131804	223.42 ug/l	78
53) dibromomethane	9.83	93	547857	201.86 ug/l	93
54) bromodichloromethane	10.03	83	1276406	218.36 ug/l	97
55) methylacrylonitrile	6.66	41	4718476	193.70 ug/l	90
56) Propyl acetate	6.42	43		No Calib	
57) 4-methyl-2-pentanone	10.95	43	814199	208.64 ug/l #	95
58) 2-hexanone	12.42	43	530261	202.52 ug/l #	96
59) cis-1,3-dichloropropene	10.84	75	1485116	199.57 ug/l	91
60) toluene	11.39	92	1892197	201.84 ug/l	99
61) 2-chloroethylvinylether	10.59	63	362684	301.57 ug/l	100
62) Octane	7.81	43		No Calib #	
63) butyl acetate	11.56	43		No Calib	
64) isobutyl acetate	12.78	43		No Calib	
65) trans-1,3-dichloropropene	11.71	75	1338115	215.25 ug/l	89
66) 1,1,2-trichloroethane	12.05	83	686094	202.59 ug/l	88
67) 1,2-dibromoethane	13.14	107	683835	209.50 ug/l	98
68) tetrachloroethene	12.48	166	827886	207.45 ug/l	96
69) 1,3-dichloropropane	12.37	76	1329682	205.79 ug/l	97
72) dibromochloromethane	12.84	129	897537	89.67 ug/l	99
73) chlorobenzene	14.25	112	2028900	86.18 ug/l	90
74) 1,1,1,2-tetrachloroethane	14.39	131	837677	89.08 ug/l	97
75) ethylbenzene	14.46	91	3458734	85.46 ug/l	97
76) Nonene	7.58	55		No Calib #	
77) 1-chlorohexane	0.00	91		Not Detected	
78) m,p-Xylenes	14.65	106	2059039	75.96 ug/l	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2088.d
Acq On : 13 Oct 99 3:58 am
Sample : VSTD200;MSI;;
Misc : VSTD200;LOW;AQ;
Quant Time: Oct 13 9:41 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.63	69		No Calib	#	
80)	Cyclohexanone	15.65	42	94763	84.13 ug/l	#	65
81)	butyl acrylate	9.80	55		No Calib	#	
82)	cyclohexanol	9.92	57		No Calib	#	
83)	o-xylene	15.19	106	1072305	79.20 ug/l		89
84)	styrene	15.21	104	1843024	80.02 ug/l		70
85)	bromoform	15.44	173	458741	92.49 ug/l		97
86)	isopropylbenzene	15.61	105	2994515	84.17 ug/l		95
88)	bromobenzene	15.92	156	853531	87.12 ug/l	#	76
90)	1,1,2,2-tetrachloroethane	15.86	83	925514	196.68 ug/l		97
91)	1,2,3-trichloropropane	15.92	75	1081303	189.08 ug/l		60
92)	n-propylbenzene	16.02	91	3772974	189.63 ug/l		96
93)	2-chlorotoluene	16.10	91	2349050	196.56 ug/l		88
94)	4-chlorotoluene	16.18	91	2416491	182.71 ug/l		85
95)	1,3,5-trimethylbenzene	16.16	105	2156656	185.03 ug/l		96
96)	tert-butylbenzene	16.45	119	2524931	178.84 ug/l		98
97)	1,2,4-trimethylbenzene	16.48	105	2202366	182.49 ug/l		93
98)	sec-butylbenzene	16.61	105	3065080	186.35 ug/l		94
99)	1,3-dichlorobenzene	16.72	146	1492413	189.67 ug/l		93
100)	4-isopropyltoluene	16.73	119	2361783	182.34 ug/l		97
101)	1,4-dichlorobenzene	16.79	146	1591412	197.67 ug/l		94
102)	1,2-dichlorobenzene	17.06	146	1428208	198.58 ug/l		93
103)	n-butylbenzene	17.02	91	2711535	189.94 ug/l		96
104)	cis-1,4-dichloro-2-butene	15.92	75	1077339	189.95 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.94	53	225353	151.30 ug/l	#	56
106)	1,2-dibromo-3-chloropropan	17.57	75	143771	215.02 ug/l		80
107)	pentachloroethane	16.46	167	435562	191.99 ug/l		97
108)	1,2,4-trichlorobenzene	18.11	180	739638	225.14 ug/l		97
109)	hexachlorobutadiene	18.24	225	423895	216.83 ug/l		94
110)	naphthalene	18.29	128	1814962	214.62 ug/l		100
111)	1,2,3-trichlorobenzene	18.11	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	17.57	156		No Calib		

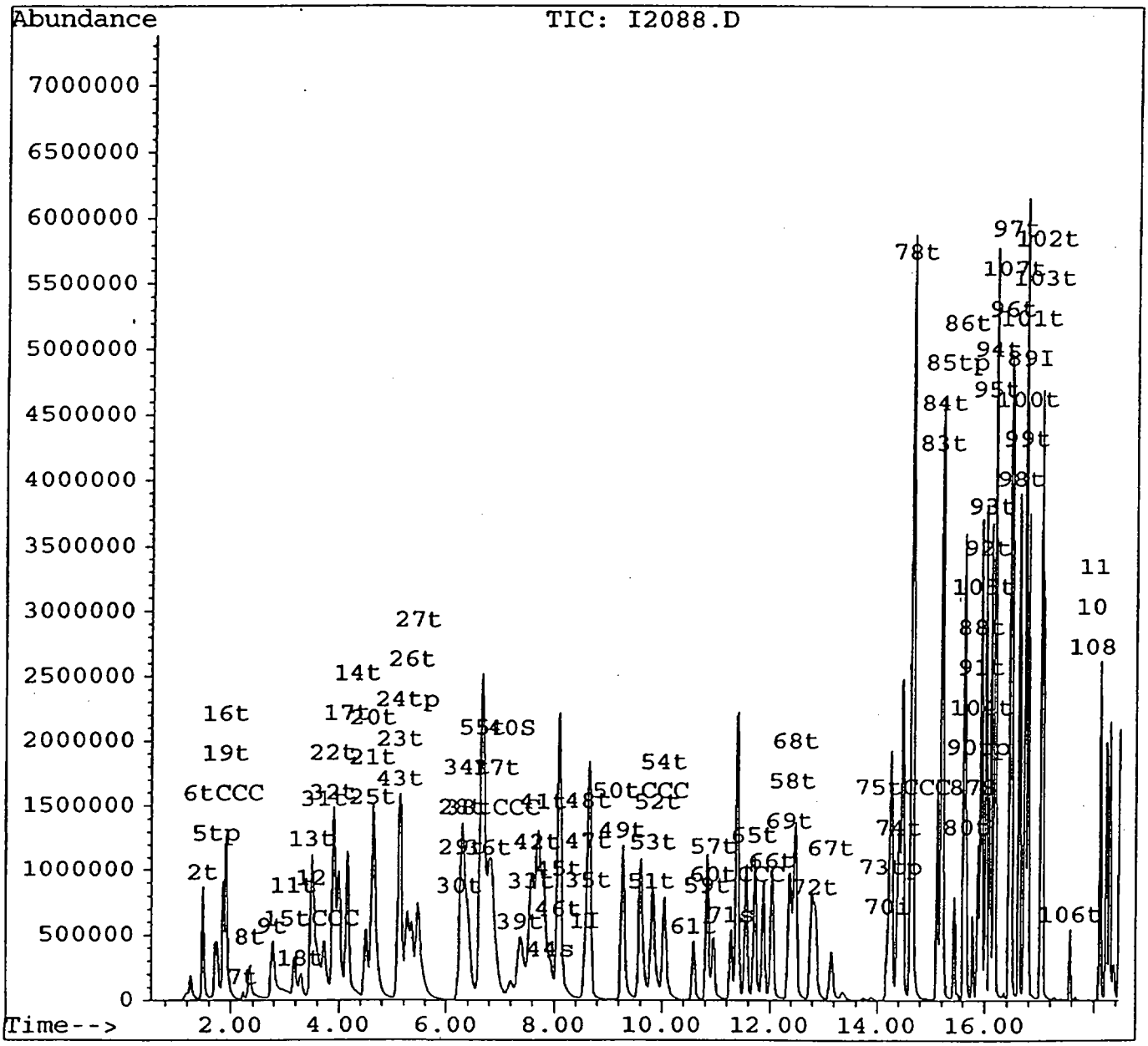
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2088.d
Acq On : 13 Oct 99 3:58 am
Sample : VSTD200;MSI;;
Misc : VSTD200;LOW;AQ;
Quant Time: Oct 13 9:41 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2089.d
Acq On : 13 Oct 99 4:24 am
Sample : VSTD100;MSI;;
Misc : VSTD100;LOW;AQ;
Quant Time: Oct 13 9:38 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.58	96	735263	50.00 ug/l	0.00
70) chlorobenzene-d5	14.19	117	506430	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	228176	50.00 ug/l	0.00
System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.19	113	230595	48.67 ug/l	97.35%
44) 1,2-dichloroethane-d4	7.94	65	243338	43.14 ug/l	86.29%
71) toluene-d8	11.28	98	654369	21.72 ug/l	43.45%
87) bromoflurobenzene	15.77	95	244833	21.83 ug/l	43.65%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.48	85	675242	100.86 ug/l	99
3) 1,3-Butadiene	1.90	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.72	50	694140	106.95 ug/l	100
6) vinyl chloride	1.85	62	658066	108.20 ug/l	100
7) bromomethane	2.24	96	332552	79.69 ug/l	95
8) chloroethane	2.39	64	247701	97.79 ug/l	99
9) trichlorofluoromethane	2.79	101	558327	101.60 ug/l	100
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.17	59	231983	96.26 ug/l	95
12) Ethyl Mercaptan	3.50	62	59128	104.00 ug/l #	53
13) freon	3.51	101	557475	101.88 ug/l	88
14) Tertiary butyl alcohol	4.29	59	48810	86.19 ug/l	100
15) 1,1-dichloroethene	3.50	96	270517	102.96 ug/l	92
16) Acetonitrile	1.90	40	11962	272.82 ug/l m	1
17) methylene chloride	4.16	84	504016	94.02 ug/l	92
18) acrolein	3.30	56	166384	101.01 ug/l	100
19) acrylonitrile	1.90	53	251373	8087.12 ug/l m	90
20) trans-1,2-dichloroethene	4.64	96	434586	101.44 ug/l #	74
21) acetone	4.62	43	190624	103.03 ug/l	70
22) carbon disulfide	3.91	76	2151736	101.22 ug/l	100
23) hexane	5.14	57	1030218	99.73 ug/l	96
24) 1,1-dichloroethane	5.27	63	1018426	98.47 ug/l	99
25) methyl t-butyl ether	4.62	73	834308	101.33 ug/l	100
26) vinyl acetate	5.35	43	879693	98.44 ug/l	100
27) 2-chloro-1,3-butadiene	5.47	53	774479	105.35 ug/l	88
28) 2,2-dichloropropane	6.30	77	588446	106.03 ug/l	90
29) cis-1,2-dichloroethene	6.30	96	450139	98.58 ug/l #	75
30) 2-butanone	6.24	72	47219	109.84 ug/l	78
31) Idomethane	3.73	142	635192	89.00 ug/l	92
32) Allyl chloride	3.91	76	2125514	101.17 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2089.d
Acq On : 13 Oct 99 4:24 am
Sample : VSTD100;MSI;;
Misc : VSTD100;LOW;AQ;
Quant Time: Oct 13 9:38 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	cyclohexane	7.59	56	1106315	101.25 ug/l	#	66
34)	Ethyl Cyanide	6.37	54	532635	106.82 ug/l		95
35)	Ethyl Acetate	8.65	43	1067283	99.33 ug/l	#	67
36)	bromochloromethane	6.79	128	212356	97.65 ug/l		94
37)	tetrahydrofuran	6.94	42	137399	101.94 ug/l		90
38)	chloroform	6.85	83	884554	97.94 ug/l		97
39)	1,1,1-trichloroethane	7.38	97	600411	103.41 ug/l		89
41)	carbon tetrachloride	7.79	117	474996	108.57 ug/l		99
42)	1,1-dichloropropene	7.70	75	764666	101.19 ug/l		94
43)	2,2,4-trimethylpentane	5.14	57	1035663	100.25 ug/l	#	25
45)	benzene	8.09	78	1899012	96.55 ug/l		100
46)	1,2-dichloroethane	8.09	62	616527	97.44 ug/l		85
47)	Isopropyl acetate	8.65	43	1067283	99.33 ug/l	#	60
48)	Heptane	8.65	43	1067283	99.33 ug/l		99
49)	trichloroethene	9.27	95	472441	100.50 ug/l		87
50)	1,2-dichloropropane	9.59	63	576035	95.42 ug/l		95
51)	methyl methacrylate	9.80	69	268485	107.51 ug/l	#	91
52)	1,4-Dioxane	9.91	88	65425	111.47 ug/l		76
53)	dibromomethane	9.84	93	265841	98.45 ug/l		95
54)	bromodichloromethane	10.04	83	577672	99.33 ug/l		98
55)	methylacrylonitrile	6.66	41	2546823	105.08 ug/l		91
56)	Propyl acetate	6.42	43		No Calib		
57)	4-methyl-2-pentanone	10.95	43	425666	109.63 ug/l	#	95
58)	2-hexanone	12.42	43	277402	106.49 ug/l	#	95
59)	cis-1,3-dichloropropene	10.83	75	716039	96.71 ug/l		90
60)	toluene	11.39	92	925053	99.18 ug/l		98
61)	2-chloroethylvinylether	10.59	63	130985	109.47 ug/l		100
62)	Octane	7.59	43		No Calib	#	
63)	butyl acetate	11.56	43		No Calib		
64)	isobutyl acetate	12.78	43		No Calib		
65)	trans-1,3-dichloropropene	11.72	75	624324	100.94 ug/l		89
66)	1,1,2-trichloroethane	12.04	83	332798	98.77 ug/l		88
67)	1,2-dibromoethane	13.15	107	331391	102.04 ug/l		97
68)	tetrachloroethene	12.48	166	406852	102.47 ug/l		96
69)	1,3-dichloropropane	12.37	76	629385	97.91 ug/l		98
72)	dibromochloromethane	12.85	129	418159	42.63 ug/l		98
73)	chlorobenzene	14.26	112	979542	42.45 ug/l		92
74)	1,1,1,2-tetrachloroethane	14.39	131	386138	41.90 ug/l		98
75)	ethylbenzene	14.46	91	1704893	42.98 ug/l		97
76)	Nonene	7.59	55		No Calib	#	
77)	1-chlorohexane	0.00	91		Not Detected		
78)	m,p-Xylenes	14.65	106	1097781	41.32 ug/l		91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2089.d
Acq On : 13 Oct 99 4:24 am
Sample : VSTD100;MSI;;
Misc : VSTD100;LOW;AQ;
Quant Time: Oct 13 9:38 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.64	69		No Calib	#	
80)	Cyclohexanone	15.66	42	49074	44.45 ug/l	#	64
81)	butyl acrylate	9.80	55		No Calib	#	
82)	cyclohexanol	9.91	57		No Calib	#	
83)	o-xylene	15.19	106	547306	41.25 ug/l		91
84)	styrene	15.21	104	934494	41.40 ug/l		72
85)	bromoform	15.43	173	219750	45.21 ug/l		97
86)	isopropylbenzene	15.61	105	1473233	42.25 ug/l		96
88)	bromobenzene	15.92	156	409936	42.69 ug/l	#	69
90)	1,1,2,2-tetrachloroethane	15.86	83	464371	101.46 ug/l		97
91)	1,2,3-trichloropropane	15.92	75	569079	102.31 ug/l		60
92)	n-propylbenzene	16.01	91	1898123	98.08 ug/l		98
93)	2-chlorotoluene	16.10	91	1143934	98.41 ug/l		89
94)	4-chlorotoluene	16.18	91	1230557	95.66 ug/l		87
95)	1,3,5-trimethylbenzene	16.17	105	1084685	95.68 ug/l		93
96)	tert-butylbenzene	16.45	119	1285859	93.64 ug/l		99
97)	1,2,4-trimethylbenzene	16.48	105	1117203	95.18 ug/l		94
98)	sec-butylbenzene	16.62	105	1558087	97.39 ug/l		93
99)	1,3-dichlorobenzene	16.72	146	730369	95.43 ug/l		94
100)	4-isopropyltoluene	16.73	119	1204451	95.61 ug/l		98
101)	1,4-dichlorobenzene	16.79	146	772498	98.65 ug/l		94
102)	1,2-dichlorobenzene	17.06	146	692751	99.03 ug/l		93
103)	n-butylbenzene	17.02	91	1360039	97.95 ug/l		100
104)	cis-1,4-dichloro-2-butene	15.92	75	563531	102.16 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.94	53	111799	77.17 ug/l	#	47
106)	1,2-dibromo-3-chloropropan	17.56	75	70320	108.13 ug/l		73
107)	pentachloroethane	16.46	167	203765	92.35 ug/l		96
108)	1,2,4-trichlorobenzene	18.12	180	332620	104.10 ug/l		98
109)	hexachlorobutadiene	18.24	225	195092	102.60 ug/l		97
110)	naphthalene	18.30	128	909919	110.63 ug/l		100
111)	1,2,3-trichlorobenzene	18.12	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	17.56	156		No Calib		

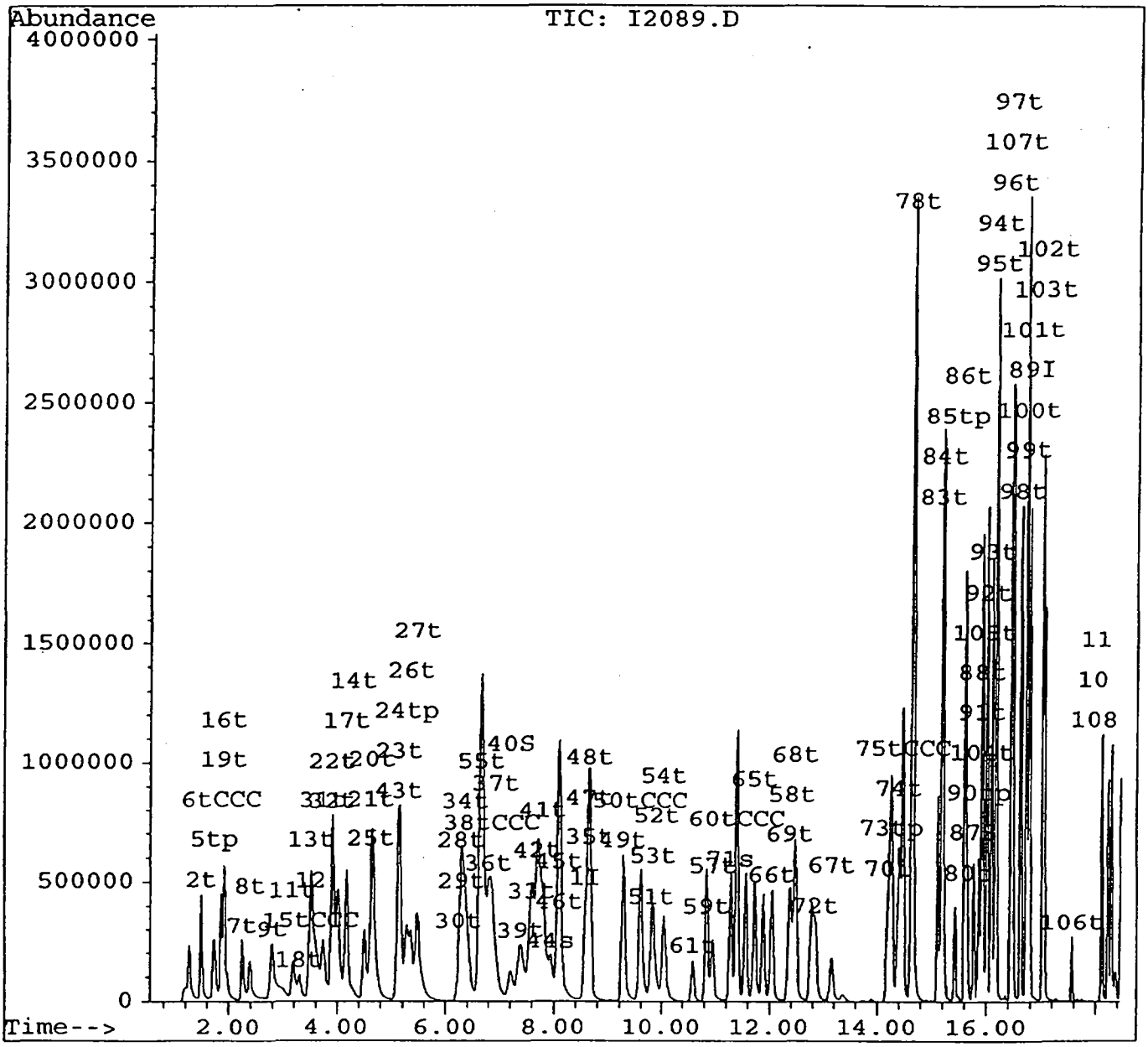
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2089.d
Acq On : 13 Oct 99 4:24 am
Sample : VSTD100;MSI;;
Misc : VSTD100;LOW;AQ;
Quant Time: Oct 13 9:38 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2090.d
Acq On : 13 Oct 99 4:51 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 13 9:39 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.58	96	812303	50.00 ug/l	0.00
70) chlorobenzene-d5	14.20	117	558495	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	249279	50.00 ug/l	0.00
System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.21	113	261694	50.00 ug/l	100.00%
44) 1,2-dichloroethane-d4	7.94	65	278102	44.63 ug/l	89.26%
71) toluene-d8	11.28	98	718717	21.64 ug/l	43.27%
87) bromoflurobenzene	15.77	95	267645	21.64 ug/l	43.27%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.48	85	369827	50.00 ug/l	99
3) 1,3-Butadiene	1.90	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.72	50	358521	50.00 ug/l	100
6) vinyl chloride	1.85	62	335957	50.00 ug/l	100
7) bromomethane	2.27	96	230921	50.09 ug/l	95
8) chloroethane	2.40	64	139924	50.00 ug/l	99
9) trichlorofluoromethane	2.79	101	303568	50.00 ug/l	98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.19	59	133124	50.00 ug/l	92
12) Ethyl Mercaptan	3.51	62	31406	50.00 ug/l #	54
13) freon	3.53	101	303085	50.13 ug/l	87
14) Tertiary butyl alcohol	4.27	59	31283	50.00 ug/l	100
15) 1,1-dichloroethene	3.51	96	145225	50.03 ug/l	88
16) Acetonitrile	1.90	40	7195	148.53 ug/l m	1
17) methylene chloride	4.17	84	296112	50.00 ug/l	92
18) acrolein	3.30	56	90988	50.00 ug/l	100
19) acrylonitrile	1.90	53	122749	3574.52 ug/l m	98
20) trans-1,2-dichloroethene	4.64	96	236652	50.00 ug/l #	73
21) acetone	4.63	43	102206	50.00 ug/l	72
22) carbon disulfide	3.91	76	1174506	50.01 ug/l	100
23) hexane	5.14	57	570641	50.00 ug/l	96
24) 1,1-dichloroethane	5.27	63	571311	50.00 ug/l	99
25) methyl t-butyl ether	4.62	73	454833	50.00 ug/l	100
26) vinyl acetate	5.36	43	493546	49.99 ug/l	100
27) 2-chloro-1,3-butadiene	5.47	53	406533	50.06 ug/l	87
28) 2,2-dichloropropane	6.31	77	306567	50.00 ug/l	91
29) cis-1,2-dichloroethene	6.30	96	252238	50.00 ug/l #	74
30) 2-butanone	6.25	72	23747	50.00 ug/l	89
31) Idomethane	3.73	142	395245	50.13 ug/l	91
32) Allyl chloride	3.91	76	1159562	49.96 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2090.d
Acq On : 13 Oct 99 4:51 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 13 9:39 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	cyclohexane	7.59	56	604156	50.05 ug/l	#	67
34)	Ethyl Cyanide	6.36	54	275768	50.06 ug/l		97
35)	Ethyl Acetate	8.65	43	593387	49.99 ug/l	#	65
36)	bromochloromethane	6.79	128	120125	50.00 ug/l		95
37)	tetrahydrofuran	6.94	42	74457	50.00 ug/l		88
38)	chloroform	6.85	83	498908	50.00 ug/l		94
39)	1,1,1-trichloroethane	7.38	97	320722	50.00 ug/l		90
41)	carbon tetrachloride	7.81	117	241679	50.00 ug/l		96
42)	1,1-dichloropropene	7.70	75	417441	50.00 ug/l		93
43)	2,2,4-trimethylpentane	5.14	57	570641	50.00 ug/l	#	28
45)	benzene	8.10	78	1086528	50.00 ug/l		100
46)	1,2-dichloroethane	8.10	62	349494	50.00 ug/l		86
47)	Isopropyl acetate	8.65	43	593387	49.99 ug/l	#	60
48)	Heptane	8.65	43	593387	49.99 ug/l		97
49)	trichloroethene	9.28	95	259675	50.00 ug/l		89
50)	1,2-dichloropropane	9.60	63	333462	50.00 ug/l		95
51)	methyl methacrylate	9.80	69	137949	50.00 ug/l	#	93
52)	1,4-Dioxane	9.91	88	32422	50.00 ug/l		77
53)	dibromomethane	9.84	93	149165	50.00 ug/l		96
54)	bromodichloromethane	10.04	83	321261	50.00 ug/l		98
55)	methylacrylonitrile	6.65	41	1338822	50.00 ug/l		92
56)	Propyl acetate	6.43	43		No Calib		
57)	4-methyl-2-pentanone	10.95	43	214472	50.00 ug/l	#	95
58)	2-hexanone	12.42	43	143901	50.00 ug/l	#	96
59)	cis-1,3-dichloropropene	10.84	75	408988	50.00 ug/l		91
60)	toluene	11.39	92	515224	50.00 ug/l		98
61)	2-chloroethylvinylether	10.59	63	66096	50.00 ug/l		100
62)	Octane	7.60	43		No Calib	#	
63)	butyl acetate	11.55	43		No Calib		
64)	isobutyl acetate	12.78	43		No Calib		
65)	trans-1,3-dichloropropene	11.72	75	341656	50.00 ug/l		89
66)	1,1,2-trichloroethane	12.05	83	186125	50.00 ug/l		87
67)	1,2-dibromoethane	13.14	107	179397	50.00 ug/l		97
68)	tetrachloroethene	12.48	166	219326	50.00 ug/l		96
69)	1,3-dichloropropane	12.37	76	355103	50.00 ug/l		98
72)	dibromochloromethane	12.84	129	234076	21.64 ug/l		98
73)	chlorobenzene	14.25	112	550560	21.64 ug/l		92
74)	1,1,1,2-tetrachloroethane	14.39	131	219901	21.64 ug/l		98
75)	ethylbenzene	14.47	91	946455	21.64 ug/l		97
76)	Nonene	7.59	55		No Calib	#	
77)	1-chlorohexane	0.00	91		Not Detected		
78)	m,p-Xylenes	14.65	106	633899	21.64 ug/l		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2090.d
Acq On : 13 Oct 99 4:51 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 13 9:39 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.63	69		No Calib	#	
80)	Cyclohexanone	15.65	42	25694	21.11 ug/l	m	74
81)	butyl acrylate	9.80	55		No Calib	#	
82)	cyclohexanol	9.92	57		No Calib	#	
83)	o-xylene	15.19	106	316622	21.64 ug/l		94
84)	styrene	15.21	104	538608	21.64 ug/l		76
85)	bromoform	15.44	173	115987	21.64 ug/l		96
86)	isopropylbenzene	15.61	105	831974	21.64 ug/l		95
88)	bromobenzene	15.92	156	229118	21.64 ug/l	#	70
90)	1,1,2,2-tetrachloroethane	15.86	83	250012	50.00 ug/l		97
91)	1,2,3-trichloropropane	15.92	75	303834	50.00 ug/l		60
92)	n-propylbenzene	16.02	91	1057083	50.00 ug/l		97
93)	2-chlorotoluene	16.10	91	634946	50.00 ug/l		87
94)	4-chlorotoluene	16.18	91	702684	50.00 ug/l		85
95)	1,3,5-trimethylbenzene	16.16	105	619254	50.00 ug/l		95
96)	tert-butylbenzene	16.45	119	750081	50.00 ug/l		95
97)	1,2,4-trimethylbenzene	16.48	105	641197	50.00 ug/l		93
98)	sec-butylbenzene	16.63	105	873871	50.00 ug/l		93
99)	1,3-dichlorobenzene	16.72	146	418049	50.00 ug/l		94
100)	4-isopropyltoluene	16.73	119	688150	50.00 ug/l		97
101)	1,4-dichlorobenzene	16.79	146	427731	50.00 ug/l		93
102)	1,2-dichlorobenzene	17.06	146	382117	50.00 ug/l		92
103)	n-butylbenzene	17.02	91	758463	50.00 ug/l		100
104)	cis-1,4-dichloro-2-butene	15.92	75	301330	50.00 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.94	53	58800	37.15 ug/l	#	59
106)	1,2-dibromo-3-chloropropan	17.57	75	35524	50.00 ug/l		76
107)	pentachloroethane	16.46	167	120530	50.00 ug/l		97
108)	1,2,4-trichlorobenzene	18.11	180	174541	50.00 ug/l		98
109)	hexachlorobutadiene	18.24	225	103866	50.00 ug/l		97
110)	naphthalene	18.30	128	449284	50.00 ug/l		100
111)	1,2,3-trichlorobenzene	18.11	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	17.57	156		No Calib		

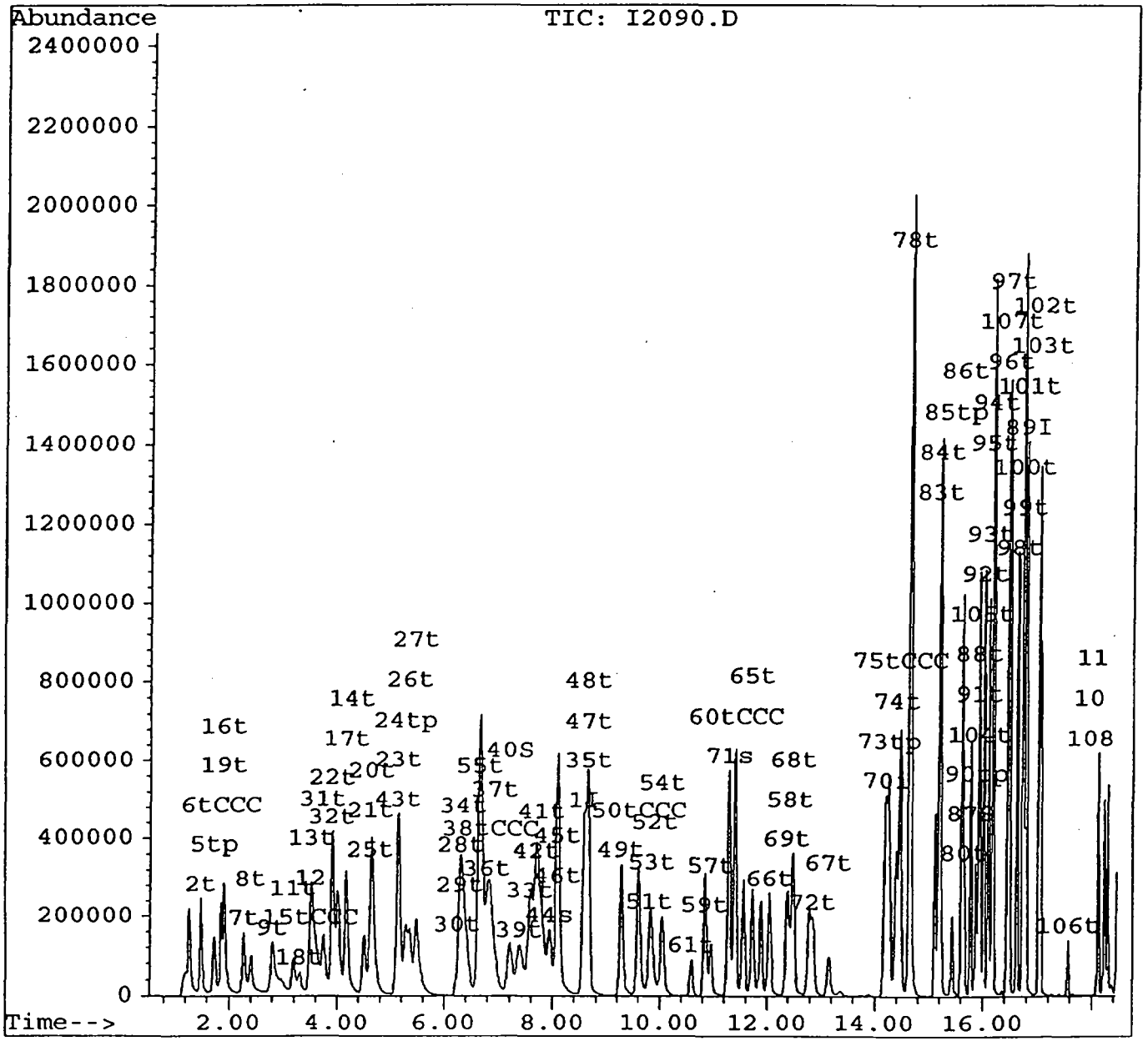
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2090.d
Acq On : 13 Oct 99 4:51 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 13 9:39 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2091.d
Acq On : 13 Oct 99 5:17 am
Sample : VSTD020;MSI;;
Misc : VSTD020;LOW;AQ;
Quant Time: Oct 13 9:34 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.59	96	785750	50.00 ug/l	0.00
70) chlorobenzene-d5	14.19	117	524797	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	235561	50.00 ug/l	0.00
System Monitoring Compounds					**%Recovery**
40) dibromoflurometh ane	7.20	113	247491	48.88 ug/l	97.77%
44) 1,2-dichloroethane-d4	7.95	65	282864	46.93 ug/l	93.86%
71) toluene-d8	11.29	98	680533	21.80 ug/l	43.61%
87) bromoflurobenzene	15.77	95	248714	21.40 ug/l	42.79%
Target Compounds					**Qvalue**
2) dichlorodifluoromethane	1.49	85	154336	21.57 ug/l	99
3) 1,3-Butadiene	1.91	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.72	50	141750	20.44 ug/l	98
6) vinyl chloride	1.86	62	143119	22.02 ug/l	99
7) bromomethane	2.29	96	103289	23.16 ug/l	98
8) chloroethane	2.42	64	59167	21.86 ug/l	97
9) trichlorofluoromethane	2.81	101	127280	21.67 ug/l	99
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.18	59	53203	20.66 ug/l	92
12) Ethyl Mercaptan	3.51	62	17573	28.92 ug/l #	69
13) freon	3.53	101	152680	26.11 ug/l	95
14) Tertiary butyl alcohol	4.26	59	12667	20.93 ug/l	100
15) 1,1-dichloroethene	3.51	96	82783	29.48 ug/l	81
16) Acetonitrile	1.91	40	3170	67.65 ug/l m	1
17) methylene chloride	4.18	84	128870	22.50 ug/l	92
18) acrolein	3.31	56	36096	20.51 ug/l m	100
19) acrylonitrile	1.91	53	53541	1611.83 ug/l #	31
20) trans-1,2-dichloroethene	4.65	96	98261	21.46 ug/l #	75
21) acetone	4.64	43	44120	22.31 ug/l	69
22) carbon disulfide	3.92	76	486651	21.42 ug/l	100
23) hexane	5.15	57	238765	21.63 ug/l	95
24) 1,1-dichloroethane	5.28	63	234457	21.21 ug/l	99
25) methyl t-butyl ether	4.63	73	168097	19.10 ug/l	100
26) vinyl acetate	5.35	43	179512	18.80 ug/l	100
27) 2-chloro-1,3-butadiene	5.48	53	161932	20.61 ug/l	88
28) 2,2-dichloropropane	6.32	77	113918	19.21 ug/l	91
29) cis-1,2-dichloroethene	6.30	96	101870	20.88 ug/l #	78
30) 2-butanone	6.24	72	8920	19.42 ug/l	98
31) Idomethane	3.74	142	179833	23.58 ug/l	94
32) Allyl chloride	3.92	76	482008	21.47 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2091.d
Acq On : 13 Oct 99 5:17 am
Sample : VSTD020;MSI;;
Misc : VSTD020;LOW;AQ;
Quant Time: Oct 13 9:34 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) cyclohexane	7.59	56	252867	21.66 ug/l #	68
34) Ethyl Cyanide	6.37	54	109447	20.54 ug/l	93
35) Ethyl Acetate	8.65	43	250878	21.85 ug/l #	58
36) bromochloromethane	6.80	128	48853	21.02 ug/l	96
37) tetrahydrofuran	6.95	42	27757	19.27 ug/l	97
38) chloroform	6.85	83	201363	20.86 ug/l	95
39) 1,1,1-trichloroethane	7.39	97	129529	20.88 ug/l	87
41) carbon tetrachloride	7.80	117	94740	20.26 ug/l	99
42) 1,1-dichloropropene	7.71	75	176994	21.92 ug/l	94
43) 2,2,4-trimethylpentane	5.15	57	238765	21.63 ug/l #	28
45) benzene	8.09	78	469131	22.32 ug/l	99
46) 1,2-dichloroethane	8.09	62	141652	20.95 ug/l	85
47) Isopropyl acetate	8.65	43	250878	21.85 ug/l #	61
48) Heptane	8.65	43	250878	21.85 ug/l	97
49) trichloroethene	9.27	95	106044	21.11 ug/l	86
50) 1,2-dichloropropane	9.60	63	132262	20.50 ug/l	96
51) methyl methacrylate	9.81	69	48696	18.25 ug/l #	92
52) 1,4-Dioxane	9.90	88	12824	20.45 ug/l	84
53) dibromomethane	9.84	93	61286	21.24 ug/l	93
54) bromodichloromethane	10.04	83	124316	20.00 ug/l	98
55) methylacrylonitrile	6.66	41	529068	20.43 ug/l	90
56) Propyl acetate	6.43	43		No Calib	
57) 4-methyl-2-pentanone	10.95	43	80964	19.51 ug/l #	96
58) 2-hexanone	12.41	43	53273	19.14 ug/l #	95
59) cis-1,3-dichloropropene	10.83	75	156985	19.84 ug/l	91
60) toluene	11.39	92	223492	22.42 ug/l	99
61) 2-chloroethylvinylether	10.60	63	10016	7.83 ug/l	100
62) Octane	7.75	43		No Calib #	
63) butyl acetate	11.56	43		No Calib	
64) isobutyl acetate	12.78	43		No Calib	
65) trans-1,3-dichloropropene	11.72	75	128085	19.38 ug/l	88
66) 1,1,2-trichloroethane	12.04	83	72065	20.01 ug/l	87
67) 1,2-dibromoethane	13.15	107	71171	20.51 ug/l	97
68) tetrachloroethene	12.49	166	90500	21.33 ug/l	96
69) 1,3-dichloropropane	12.37	76	140345	20.43 ug/l	97
72) dibromochloromethane	12.85	129	89913	8.84 ug/l	97
73) chlorobenzene	14.25	112	279965	11.71 ug/l	92
74) 1,1,1,2-tetrachloroethane	14.40	131	87230	9.13 ug/l	98
75) ethylbenzene	14.46	91	391812	9.53 ug/l	97
76) Nonene	7.61	55		No Calib #	
77) 1-chlorohexane	0.00	91		Not Detected	
78) m,p-Xylenes	14.65	106	280904	10.20 ug/l	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2091.d
Acq On : 13 Oct 99 5:17 am
Sample : VSTD020;MSI;;
Misc : VSTD020;LOW;AQ;
Quant Time: Oct 13 9:34 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.64	69		No Calib	#	
80)	Cyclohexanone	15.66	42	10476	9.16 ug/l	#	60
81)	butyl acrylate	9.80	55		No Calib	#	
82)	cyclohexanol	9.90	57		No Calib	#	
83)	o-xylene	15.19	106	131525	9.56 ug/l		92
84)	styrene	15.21	104	216364	9.25 ug/l		75
85)	bromoform	15.43	173	44517	8.84 ug/l		97
86)	isopropylbenzene	15.61	105	349159	9.66 ug/l		96
88)	bromobenzene	15.92	156	91555	9.20 ug/l	#	64
90)	1,1,2,2-tetrachloroethane	15.87	83	100887	21.35 ug/l		97
91)	1,2,3-trichloropropane	15.92	75	119356	20.79 ug/l		61
92)	n-propylbenzene	16.01	91	442396	22.14 ug/l		98
93)	2-chlorotoluene	16.10	91	262320	21.86 ug/l		88
94)	4-chlorotoluene	16.18	91	296264	22.31 ug/l		89
95)	1,3,5-trimethylbenzene	16.17	105	266628	22.78 ug/l		93
96)	tert-butylbenzene	16.45	119	314114	22.16 ug/l		100
97)	1,2,4-trimethylbenzene	16.48	105	271493	22.40 ug/l		93
98)	sec-butylbenzene	16.62	105	373322	22.60 ug/l		96
99)	1,3-dichlorobenzene	16.73	146	178200	22.55 ug/l		93
100)	4-isopropyltoluene	16.73	119	297634	22.89 ug/l		97
101)	1,4-dichlorobenzene	16.79	146	181737	22.48 ug/l		94
102)	1,2-dichlorobenzene	17.06	146	159214	22.05 ug/l		92
103)	n-butylbenzene	17.03	91	325107	22.68 ug/l		96
104)	cis-1,4-dichloro-2-butene	15.92	75	116746	20.50 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.95	53	21075	14.09 ug/l	#	76
106)	1,2-dibromo-3-chloropropan	17.56	75	14480	21.57 ug/l	#	69
107)	pentachloroethane	16.46	167	45026	19.77 ug/l		93
108)	1,2,4-trichlorobenzene	18.12	180	79028	23.96 ug/l		97
109)	hexachlorobutadiene	18.24	225	47820	24.36 ug/l		99
110)	naphthalene	18.30	128	208624	24.57 ug/l		100
111)	1,2,3-trichlorobenzene	18.12	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	17.57	156		No Calib		

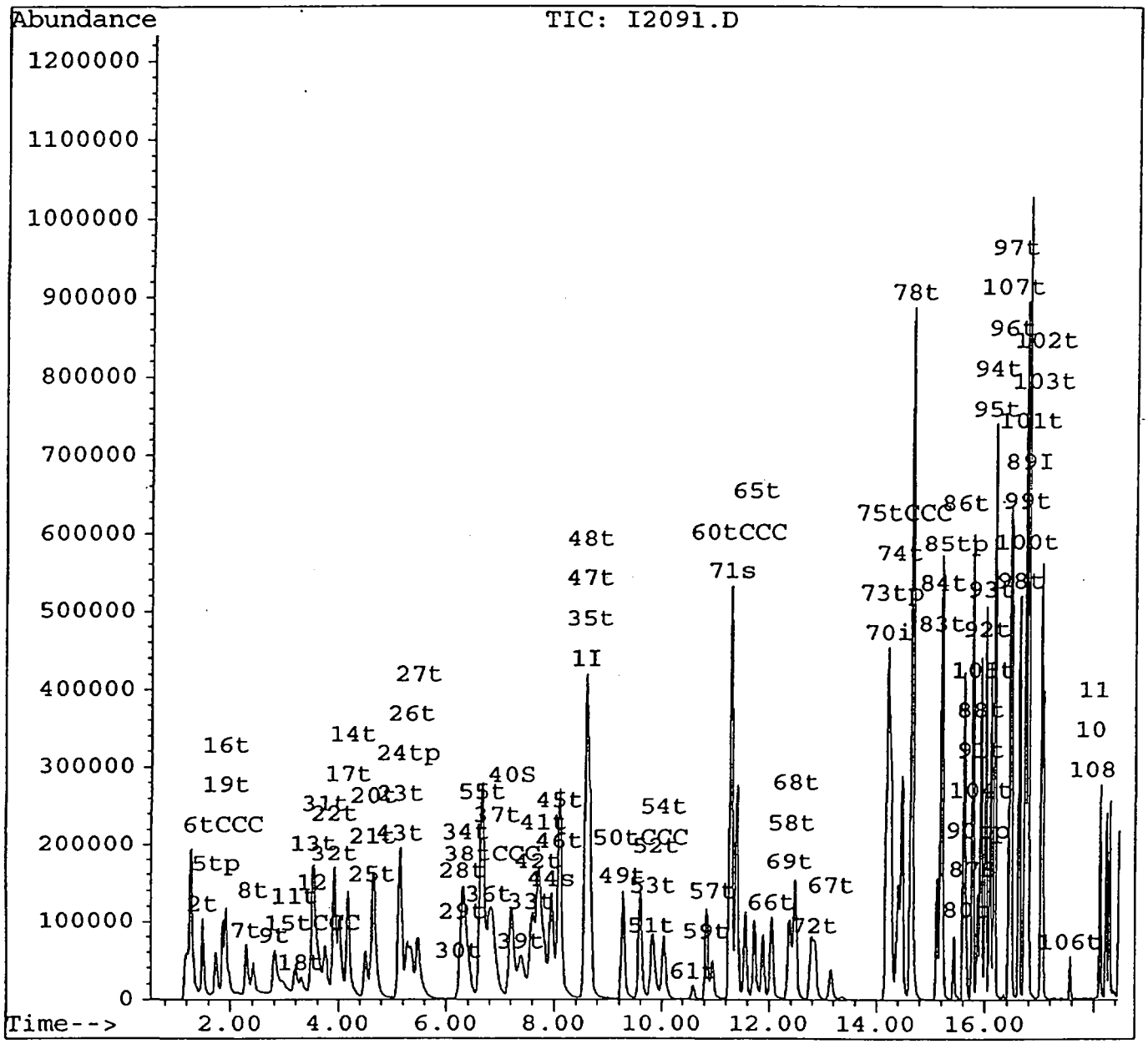
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2091.d
Acq On : 13 Oct 99 5:17 am
Sample : VSTD020;MSI;;
Misc : VSTD020;LOW;AQ;
Quant Time: Oct 13 9:34 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2092.d
Acq On : 13 Oct 99 5:44 am
Sample : VSTD010;MSI;;
Misc : VSTD010;LOW;AQ;
Quant Time: Oct 13 9:32 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.58	96	799438	50.00 ug/l	0.00
70) chlorobenzene-d5	14.20	117	532623	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	236301	50.00 ug/l	0.00
System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.21	113	255970	49.69 ug/l	99.39%
44) 1,2-dichloroethane-d4	7.95	65	296303	48.32 ug/l	96.63%
71) toluene-d8	11.28	98	690430	21.79 ug/l	43.59%
87) bromoflurobenzene	15.77	95	249891	21.18 ug/l	42.37%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.49	85	66015	9.07 ug/l	98
3) 1,3-Butadiene	1.91	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.73	50	66639	9.44 ug/l	99
6) vinyl chloride	1.86	62	63083	9.54 ug/l	99
7) bromomethane	2.30	96	46444	10.24 ug/l #	65
8) chloroethane	2.42	64	27198	9.88 ug/l	96
9) trichlorofluoromethane	2.80	101	54012	9.04 ug/l	98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.19	59	29380	11.21 ug/l	94
12) Ethyl Mercaptan	3.53	62	8655	14.00 ug/l	75
13) freon	3.53	101	77898	13.09 ug/l	98
14) Tertiary butyl alcohol	4.27	59	5642	9.16 ug/l	100
15) 1,1-dichloroethene	3.52	96	46134	16.15 ug/l	89
16) Acetonitrile	1.91	40	1182	24.79 ug/l m	1
17) methylene chloride	4.18	84	75442	12.94 ug/l	93
18) acrolein	3.31	56	18334	10.24 ug/l m	100
19) acrylonitrile	1.91	53	27077	801.19 ug/l #	31
20) trans-1,2-dichloroethene	4.65	96	50891	10.93 ug/l #	76
21) acetone	4.62	43	20748	10.31 ug/l	71
22) carbon disulfide	3.92	76	238155	10.30 ug/l	100
23) hexane	5.14	57	120103	10.69 ug/l	94
24) 1,1-dichloroethane	5.28	63	120018	10.67 ug/l	97
25) methyl t-butyl ether	4.63	73	79977	8.93 ug/l	100
26) vinyl acetate	5.36	43	94936	9.77 ug/l	100
27) 2-chloro-1,3-butadiene	5.48	53	73254	9.16 ug/l	89
28) 2,2-dichloropropane	6.32	77	57803	9.58 ug/l	88
29) cis-1,2-dichloroethene	6.31	96	52732	10.62 ug/l #	72
30) 2-butanone	6.25	72	4237	9.06 ug/l	86
31) Idomethane	3.74	142	91150	11.75 ug/l	94
32) Allyl chloride	3.92	76	237592	10.40 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2092.d
Acq On : 13 Oct 99 5:44 am
Sample : VSTD010;MSI;;
Misc : VSTD010;LOW;AQ;
Quant Time: Oct 13 9:32 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	cyclohexane	7.60	56	123779	10.42 ug/l	#	67
34)	Ethyl Cyanide	6.38	54	53941	9.95 ug/l		93
35)	Ethyl Acetate	8.65	43	125487	10.74 ug/l	#	51
36)	bromochloromethane	6.79	128	26743	11.31 ug/l		98
37)	tetrahydrofuran	6.95	42	14205	9.69 ug/l		95
38)	chloroform	6.86	83	103934	10.58 ug/l		94
39)	1,1,1-trichloroethane	7.38	97	62786	9.95 ug/l		86
41)	carbon tetrachloride	7.81	117	42850	9.01 ug/l		94
42)	1,1-dichloropropene	7.70	75	86962	10.58 ug/l		94
43)	2,2,4-trimethylpentane	5.14	57	120103	10.69 ug/l	#	27
45)	benzene	8.10	78	259963	12.16 ug/l		98
46)	1,2-dichloroethane	8.10	62	76871	11.17 ug/l		87
47)	Isopropyl acetate	8.65	43	125487	10.74 ug/l	#	61
48)	Heptane	8.65	43	125487	10.74 ug/l		97
49)	trichloroethene	9.27	95	52326	10.24 ug/l		90
50)	1,2-dichloropropane	9.60	63	70877	10.80 ug/l		95
51)	methyl methacrylate	9.81	69	22089	8.14 ug/l	#	94
52)	1,4-Dioxane	9.92	88	5323	8.34 ug/l		83
53)	dibromomethane	9.84	93	33648	11.46 ug/l		92
54)	bromodichloromethane	10.04	83	65113	10.30 ug/l		97
55)	methylacrylonitrile	6.66	41	268202	10.18 ug/l		92
56)	Propyl acetate	6.43	43		No Calib		
57)	4-methyl-2-pentanone	10.95	43	37979	9.00 ug/l	#	96
58)	2-hexanone	12.43	43	24854	8.77 ug/l	#	95
59)	cis-1,3-dichloropropene	10.84	75	81831	10.17 ug/l		91
60)	toluene	11.39	92	118538	11.69 ug/l		97
61)	2-chloroethylvinylether	10.59	63	8044	6.18 ug/l		100
62)	Octane	7.60	43		No Calib	#	
63)	butyl acetate	11.56	43		No Calib		
64)	isobutyl acetate	12.78	43		No Calib		
65)	trans-1,3-dichloropropene	11.73	75	68039	10.12 ug/l		92
66)	1,1,2-trichloroethane	12.05	83	39007	10.65 ug/l		88
67)	1,2-dibromoethane	13.15	107	37450	10.61 ug/l		99
68)	tetrachloroethene	12.48	166	44412	10.29 ug/l		96
69)	1,3-dichloropropane	12.38	76	75042	10.74 ug/l		98
72)	dibromochloromethane	12.85	129	47681	4.62 ug/l		97
73)	chlorobenzene	14.26	112	170400	7.02 ug/l		93
74)	1,1,1,2-tetrachloroethane	14.39	131	45776	4.72 ug/l		94
75)	ethylbenzene	14.46	91	200893	4.82 ug/l		98
76)	Nonene	7.61	55		No Calib	#	
77)	1-chlorohexane	0.00	91		Not Detected		
78)	m,p-Xylenes	14.65	106	149521	5.35 ug/l		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2092.d
Acq On : 13 Oct 99 5:44 am
Sample : VSTD010;MSI;;
Misc : VSTD010;LOW;AQ;
Quant Time: Oct 13 9:32 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.64	69		No Calib	#	
80)	Cyclohexanone	15.66	42	4924	4.24 ug/l	#	67
81)	butyl acrylate	9.80	55		No Calib	#	
82)	cyclohexanol	9.91	57		No Calib	#	
83)	o-xylene	15.19	106	68430	4.90 ug/l		94
84)	styrene	15.21	104	110544	4.66 ug/l		78
85)	bromoform	15.44	173	23132	4.52 ug/l		95
86)	isopropylbenzene	15.61	105	174436	4.76 ug/l		98
88)	bromobenzene	15.92	156	47380	4.69 ug/l	#	66
90)	1,1,2,2-tetrachloroethane	15.86	83	52580	11.09 ug/l		95
91)	1,2,3-trichloropropane	15.92	75	64079	11.12 ug/l		60
92)	n-propylbenzene	16.02	91	224607	11.21 ug/l		99
93)	2-chlorotoluene	16.10	91	135329	11.24 ug/l		89
94)	4-chlorotoluene	16.18	91	156438	11.74 ug/l		85
95)	1,3,5-trimethylbenzene	16.17	105	136304	11.61 ug/l		93
96)	tert-butylbenzene	16.45	119	157138	11.05 ug/l		96
97)	1,2,4-trimethylbenzene	16.48	105	145156	11.94 ug/l		94
98)	sec-butylbenzene	16.63	105	183725	11.09 ug/l		93
99)	1,3-dichlorobenzene	16.72	146	93079	11.74 ug/l		95
100)	4-isopropyltoluene	16.73	119	147700	11.32 ug/l		97
101)	1,4-dichlorobenzene	16.79	146	95682	11.80 ug/l		93
102)	1,2-dichlorobenzene	17.06	146	83838	11.57 ug/l		93
103)	n-butylbenzene	17.02	91	160609	11.17 ug/l		100
104)	cis-1,4-dichloro-2-butene	15.92	75	60161	10.53 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.94	53	10563	7.04 ug/l	#	45
106)	1,2-dibromo-3-chloropropan	17.57	75	7164	10.64 ug/l		73
107)	pentachloroethane	16.46	167	22140	9.69 ug/l		96
108)	1,2,4-trichlorobenzene	18.12	180	40863	12.35 ug/l		100
109)	hexachlorobutadiene	18.24	225	23141	11.75 ug/l		98
110)	naphthalene	18.30	128	106003	12.44 ug/l		100
111)	1,2,3-trichlorobenzene	18.12	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	0.00	156		Not Detected		

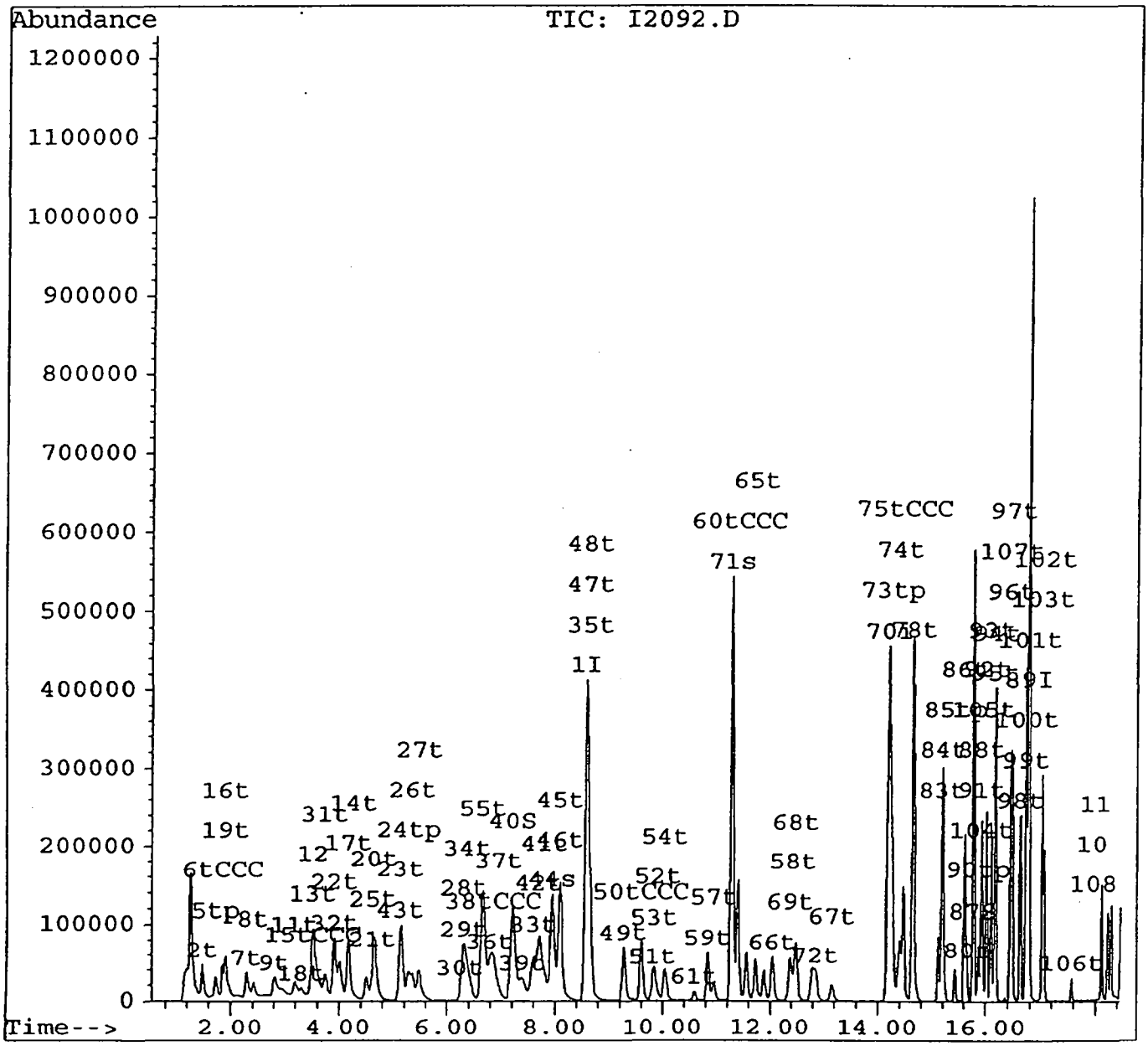
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2092.d
Acq On : 13 Oct 99 5:44 am
Sample : VSTD010;MSI;;
Misc : VSTD010;LOW;AQ;
Quant Time: Oct 13 9:32 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2093.d
Acq On : 13 Oct 99 6:11 am
Sample : VSTD005;MSI;;
Misc : VSTD005;LOW;AQ;
Quant Time: Oct 13 9:30 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.59	96	784527	50.00 ug/l	0.00
70) chlorobenzene-d5	14.20	117	546036	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	235335	50.00 ug/l	0.00
System Monitoring Compounds					**%Recovery**
40) dibromofluromethane	7.21	113	254444	50.34 ug/l	100.67%
44) 1,2-dichloroethane-d4	7.95	65	290011	48.19 ug/l	96.38%
71) toluene-d8	11.29	98	678482	20.89 ug/l	41.78%
87) bromoflurobenzene	15.77	95	250289	20.70 ug/l	41.39%
Target Compounds					**Qvalue**
2) dichlorodifluoromethane	1.49	85	34129	4.78 ug/l	99
3) 1,3-Butadiene	1.91	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.74	50	33360	4.82 ug/l	99
6) vinyl chloride	1.86	62	31489	4.85 ug/l	99
7) bromomethane	2.30	96	22987	5.16 ug/l #	67
8) chloroethane	2.43	64	13566	5.02 ug/l	93
9) trichlorofluoromethane	2.81	101	28639	4.88 ug/l	98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.18	59	13353	5.19 ug/l	94
12) Ethyl Mercaptan	3.51	62	3531	5.82 ug/l	75
13) freon	3.54	101	38372	6.57 ug/l	98
14) Tertiary butyl alcohol	4.26	59	3855	6.38 ug/l	100
15) 1,1-dichloroethene	3.52	96	21817	7.78 ug/l	90
16) Acetonitrile	1.84	40	597	12.76 ug/l #	1
17) methylene chloride	4.18	84	42990	7.52 ug/l	89
18) acrolein	3.31	56	12580	7.16 ug/l m	100
19) acrylonitrile	1.92	53	11037	332.78 ug/l #	37
20) trans-1,2-dichloroethene	4.65	96	21815	4.77 ug/l #	78
21) acetone	4.64	43	10435	5.29 ug/l	56
22) carbon disulfide	3.93	76	111709	4.92 ug/l	100
23) hexane	5.15	57	57224	5.19 ug/l	92
24) 1,1-dichloroethane	5.28	63	53649	4.86 ug/l	100
25) methyl t-butyl ether	4.63	73	37306	4.25 ug/l	100
26) vinyl acetate	5.36	43	39883	4.18 ug/l	100
27) 2-chloro-1,3-butadiene	5.48	53	32048	4.09 ug/l	88
28) 2,2-dichloropropane	6.32	77	25363	4.28 ug/l	91
29) cis-1,2-dichloroethene	6.30	96	23362	4.79 ug/l #	80
30) 2-butanone	6.24	72	1234	2.69 ug/l m	24
31) Idomethane	3.75	142	43769	5.75 ug/l	88
32) Allyl chloride	3.93	76	111709	4.98 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2093.d
Acq On : 13 Oct 99 6:11 am
Sample : VSTD005;MSI;;
Misc : VSTD005;LOW;AQ;
Quant Time: Oct 13 9:30 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) cyclohexane	7.61	56	59266	5.08 ug/l #	72
34) Ethyl Cyanide	6.37	54	24657	4.63 ug/l	96
35) Ethyl Acetate	8.66	43	58987	5.14 ug/l #	38
36) bromochloromethane	6.81	128	11436	4.93 ug/l	93
37) tetrahydrofuran	6.94	42	5938	4.13 ug/l	96
38) chloroform	6.86	83	45968	4.77 ug/l	98
39) 1,1,1-trichloroethane	7.38	97	27906	4.50 ug/l	87
41) carbon tetrachloride	7.80	117	18959	4.06 ug/l	98
42) 1,1-dichloropropene	7.71	75	38138	4.73 ug/l	93
43) 2,2,4-trimethylpentane	5.15	57	57224	5.19 ug/l #	24
45) benzene	8.10	78	117595	5.60 ug/l	99
46) 1,2-dichloroethane	8.09	62	35220	5.22 ug/l	84
47) Isopropyl acetate	8.66	43	58987	5.14 ug/l #	63
48) Heptane	8.66	43	58987	5.14 ug/l	93
49) trichloroethene	9.28	95	22722	4.53 ug/l	91
50) 1,2-dichloropropane	9.60	63	30167	4.68 ug/l	88
51) methyl methacrylate	9.81	69	8527	3.20 ug/l #	87
52) 1,4-Dioxane	9.91	88	4106	6.56 ug/l	76
53) dibromomethane	9.85	93	13363	4.64 ug/l	91
54) bromodichloromethane	10.04	83	27669	4.46 ug/l	98
55) methylacrylonitrile	6.67	41	119939	4.64 ug/l	91
56) Propyl acetate	6.44	43		No Calib	
57) 4-methyl-2-pentanone	10.95	43	16960	4.09 ug/l #	90
58) 2-hexanone	12.43	43	12255	4.41 ug/l #	93
59) cis-1,3-dichloropropene	10.84	75	33169	4.20 ug/l	89
60) toluene	11.40	92	47605	4.78 ug/l	95
61) 2-chloroethylvinylether	10.60	63	3160	2.48 ug/l	100
62) Octane	7.59	43		No Calib #	
63) butyl acetate	11.56	43		No Calib	
64) isobutyl acetate	12.79	43		No Calib	
65) trans-1,3-dichloropropene	11.72	75	27885	4.23 ug/l	90
66) 1,1,2-trichloroethane	12.04	83	15632	4.35 ug/l	84
67) 1,2-dibromoethane	13.15	107	14913	4.30 ug/l	97
68) tetrachloroethene	12.49	166	19669	4.64 ug/l	96
69) 1,3-dichloropropane	12.38	76	30959	4.51 ug/l	97
72) dibromochloromethane	12.85	129	19192	1.81 ug/l	99
73) chlorobenzene	14.25	112	51311	2.06 ug/l	93
74) 1,1,1,2-tetrachloroethane	14.40	131	19380	1.95 ug/l	96
75) ethylbenzene	14.47	91	83887	1.96 ug/l	96
76) Nonene	7.61	55		No Calib #	
77) 1-chlorohexane	0.00	91		Not Detected	
78) m,p-Xylenes	14.65	106	62784	2.19 ug/l	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2093.d
Acq On : 13 Oct 99 6:11 am
Sample : VSTD005;MSI;;
Misc : VSTD005;LOW;AQ;
Quant Time: Oct 13 9:30 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.64	69		No Calib	#	
80)	Cyclohexanone	15.66	42	2392	2.01 ug/l	#	73
81)	butyl acrylate	0.00	55		Not Detected		
82)	cyclohexanol	9.90	57		No Calib	#	
83)	o-xylene	15.20	106	29078	2.03 ug/l		98
84)	styrene	15.22	104	45684	1.88 ug/l		82
85)	bromoform	15.43	173	9243	1.76 ug/l		96
86)	isopropylbenzene	15.62	105	73628	1.96 ug/l		97
88)	bromobenzene	15.93	156	20399	1.97 ug/l	#	73
90)	1,1,2,2-tetrachloroethane	15.87	83	22258	4.72 ug/l		95
91)	1,2,3-trichloropropane	15.92	75	27020	4.71 ug/l		60
92)	n-propylbenzene	16.01	91	97446	4.88 ug/l		99
93)	2-chlorotoluene	16.10	91	58811	4.91 ug/l		89
94)	4-chlorotoluene	16.18	91	69677	5.25 ug/l		90
95)	1,3,5-trimethylbenzene	16.17	105	58782	5.03 ug/l		94
96)	tert-butylbenzene	16.45	119	68660	4.85 ug/l		99
97)	1,2,4-trimethylbenzene	16.48	105	61720	5.10 ug/l		93
98)	sec-butylbenzene	16.62	105	82568	5.00 ug/l		95
99)	1,3-dichlorobenzene	16.73	146	41360	5.24 ug/l		93
100)	4-isopropyltoluene	16.73	119	64884	4.99 ug/l		98
101)	1,4-dichlorobenzene	16.79	146	42284	5.24 ug/l		95
102)	1,2-dichlorobenzene	17.06	146	37206	5.16 ug/l		93
103)	n-butylbenzene	17.03	91	70633	4.93 ug/l		97
104)	cis-1,4-dichloro-2-butene	15.92	75	25286	4.44 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.95	53	4337	2.90 ug/l	#	72
106)	1,2-dibromo-3-chloropropan	17.56	75	3459	5.16 ug/l	#	59
107)	pentachloroethane	16.47	167	10130	4.45 ug/l		97
108)	1,2,4-trichlorobenzene	18.12	180	18101	5.49 ug/l		97
109)	hexachlorobutadiene	18.24	225	11180	5.70 ug/l		99
110)	naphthalene	18.30	128	49613	5.85 ug/l		100
111)	1,2,3-trichlorobenzene	18.12	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	0.00	156		Not Detected		

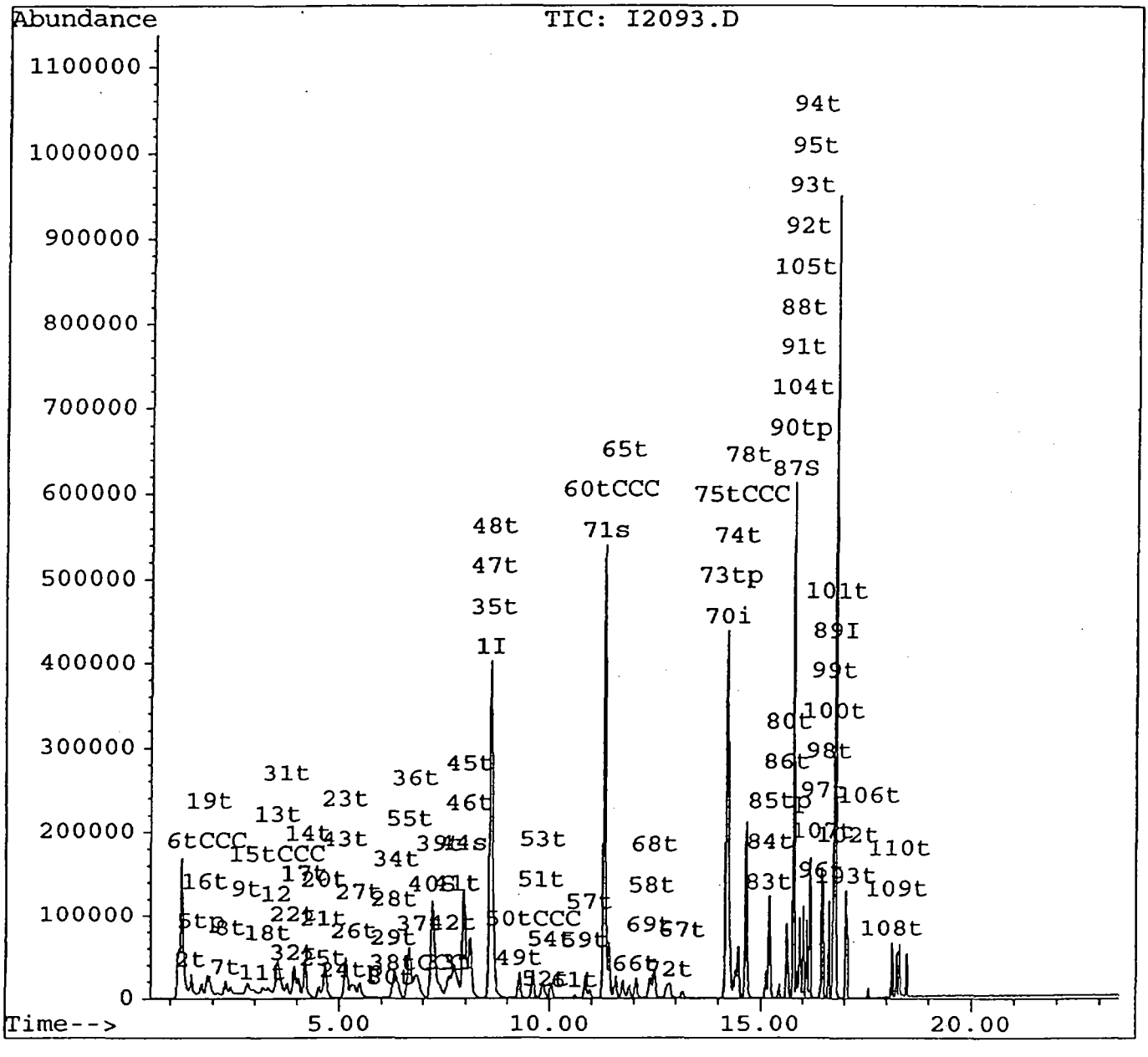
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2093.d
Acq On : 13 Oct 99 6:11 am
Sample : VSTD005;MSI;;
Misc : VSTD005;LOW;AQ;
Quant Time: Oct 13 9:30 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2094.d
Acq On : 13 Oct 99 6:44 am
Sample : VSTD002;MSI;;
Misc : VSTD002;LOW;AQ;
Quant Time: Oct 13 9:28 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.59	96	785883	50.00 ug/l	0.00
70) chlorobenzene-d5	14.20	117	534976	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	235048	50.00 ug/l	0.00
System Monitoring Compounds					**%Recovery**
40) dibromofluromethane	7.21	113	248596	49.09 ug/l	98.19%
44) 1,2-dichloroethane-d4	7.95	65	287825	47.74 ug/l	95.49%
71) toluene-d8	11.29	98	684898	21.52 ug/l	43.05%
87) bromoflurobenzene	15.77	95	248317	20.96 ug/l	41.91%
Target Compounds					**Qvalue**
2) dichlorodifluoromethane	1.49	85	15265	2.13 ug/l	96
3) 1,3-Butadiene	1.91	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.73	50	17906	2.58 ug/l	100
6) vinyl chloride	1.86	62	13928	2.14 ug/l	98
7) bromomethane	2.30	96	12667	2.84 ug/l #	66
8) chloroethane	2.43	64	5985	2.21 ug/l	91
9) trichlorofluoromethane	2.81	101	12451	2.12 ug/l	98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.18	59	4448	1.73 ug/l	82
12) Ethyl Mercaptan	3.53	62	1186	1.95 ug/l	73
13) freon	3.54	101	13140	2.25 ug/l	96
14) Tertiary butyl alcohol	4.27	59	2462	4.07 ug/l	100
15) 1,1-dichloroethene	3.52	96	10527	3.75 ug/l	97
16) Acetonitrile	1.84	40	638	13.61 ug/l m	24
17) methylene chloride	4.18	84	22819	3.98 ug/l	92
18) acrolein	3.31	56	6504	3.69 ug/l m	100
19) acrylonitrile	1.91	53	5203	156.61 ug/l #	43
20) trans-1,2-dichloroethene	4.65	96	9901	2.16 ug/l	89
21) acetone	4.63	43	5059	2.56 ug/l	56
22) carbon disulfide	3.93	76	51580	2.27 ug/l	100
23) hexane	5.15	57	23631	2.14 ug/l	91
24) 1,1-dichloroethane	5.28	63	22958	2.08 ug/l	98
25) methyl t-butyl ether	4.64	73	16633	1.89 ug/l	100
26) vinyl acetate	5.37	43	11029	1.15 ug/l	100
27) 2-chloro-1,3-butadiene	5.48	53	14051	1.79 ug/l	87
28) 2,2-dichloropropane	6.30	77	10026	1.69 ug/l	90
29) cis-1,2-dichloroethene	6.32	96	10139	2.08 ug/l	90
30) 2-butanone	6.25	72	130	0.28 ug/l m	0
31) Idomethane	3.76	142	20797	2.73 ug/l	97
32) Allyl chloride	3.93	76	51580	2.30 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2094.d
Acq On : 13 Oct 99 6:44 am
Sample : VSTD002;MSI;;
Misc : VSTD002;LOW;AQ;
Quant Time: Oct 13 9:28 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	cyclohexane	7.61	56	21796	1.87 ug/l	#	58
34)	Ethyl Cyanide	6.38	54	10647	2.00 ug/l		89
35)	Ethyl Acetate	8.65	43	22475	1.96 ug/l	#	1
36)	bromochloromethane	6.80	128	4791	2.06 ug/l	#	86
37)	tetrahydrofuran	6.96	42	2677	1.86 ug/l	#	38
38)	chloroform	6.86	83	19624	2.03 ug/l		97
39)	1,1,1-trichloroethane	7.39	97	11364	1.83 ug/l		85
41)	carbon tetrachloride	7.81	117	7035	1.50 ug/l		96
42)	1,1-dichloropropene	7.71	75	15446	1.91 ug/l		96
43)	2,2,4-trimethylpentane	5.15	57	23631	2.14 ug/l	#	29
45)	benzene	8.10	78	56776	2.70 ug/l	m	99
46)	1,2-dichloroethane	8.10	62	16092	2.38 ug/l		69
47)	Isopropyl acetate	8.65	43	22475	1.96 ug/l	#	72
48)	Heptane	8.65	43	22475	1.96 ug/l	#	79
49)	trichloroethene	9.27	95	9728	1.94 ug/l		81
50)	1,2-dichloropropane	9.59	63	12840	1.99 ug/l		88
51)	methyl methacrylate	9.81	69	3137	1.18 ug/l	#	77
52)	1,4-Dioxane	9.91	88	2256	3.60 ug/l		85
53)	dibromomethane	9.85	93	5524	1.91 ug/l		93
54)	bromodichloromethane	10.04	83	11527	1.85 ug/l		93
55)	methylacrylonitrile	6.66	41	53238	2.06 ug/l		91
56)	Propyl acetate	6.44	43		No Calib		
57)	4-methyl-2-pentanone	10.95	43	6768	1.63 ug/l	#	89
58)	2-hexanone	12.41	43	5269	1.89 ug/l	#	79
59)	cis-1,3-dichloropropene	10.84	75	13638	1.72 ug/l		93
60)	toluene	11.40	92	21905	2.20 ug/l		99
61)	2-chloroethylvinylether	0.00	63		Not Detected		
62)	Octane	7.62	43		No Calib	#	
63)	butyl acetate	11.56	43		No Calib		
64)	isobutyl acetate	12.78	43		No Calib		
65)	trans-1,3-dichloropropene	11.72	75	11190	1.69 ug/l		89
66)	1,1,2-trichloroethane	12.04	83	6541	1.82 ug/l		91
67)	1,2-dibromoethane	13.16	107	6068	1.75 ug/l		91
68)	tetrachloroethene	12.49	166	9133	2.15 ug/l		99
69)	1,3-dichloropropane	12.38	76	12995	1.89 ug/l		99
72)	dibromochloromethane	12.85	129	7880	0.76 ug/l		94
73)	chlorobenzene	14.26	112	22515	0.92 ug/l		87
74)	1,1,1,2-tetrachloroethane	14.40	131	8495	0.87 ug/l		97
75)	ethylbenzene	14.47	91	37167	0.89 ug/l		99
76)	Nonene	7.60	55		No Calib	#	
77)	1-chlorohexane	0.00	91		Not Detected		
78)	m,p-Xylenes	14.65	106	26982	0.96 ug/l		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2094.d
Acq On : 13 Oct 99 6:44 am
Sample : VSTD002;MSI;;
Misc : VSTD002;LOW;AQ;
Quant Time: Oct 13 9:28 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
79)	ethyl methacrylate	14.64	69		No Calib #	
80)	Cyclohexanone	15.66	42	582	0.50 ug/l #	55
81)	butyl acrylate	0.00	55		Not Detected	
82)	cyclohexanol	0.00	57		Not Detected	
83)	o-xylene	15.20	106	12472	0.89 ug/l	94
84)	styrene	15.21	104	18741	0.79 ug/l	77
85)	bromoform	15.43	173	3651	0.71 ug/l	96
86)	isopropylbenzene	15.62	105	30360	0.82 ug/l	95
88)	bromobenzene	15.92	156	8949	0.88 ug/l #	61
90)	1,1,2,2-tetrachloroethane	15.87	83	9467	2.01 ug/l	95
91)	1,2,3-trichloropropane	15.92	75	11821	2.06 ug/l	57
92)	n-propylbenzene	16.01	91	41730	2.09 ug/l	99
93)	2-chlorotoluene	16.10	91	25845	2.16 ug/l	90
94)	4-chlorotoluene	16.18	91	29108	2.20 ug/l	90
95)	1,3,5-trimethylbenzene	16.17	105	24862	2.13 ug/l	95
96)	tert-butylbenzene	16.45	119	29349	2.07 ug/l	99
97)	1,2,4-trimethylbenzene	16.48	105	27002	2.23 ug/l	92
98)	sec-butylbenzene	16.62	105	34341	2.08 ug/l	94
99)	1,3-dichlorobenzene	16.73	146	18397	2.33 ug/l	95
100)	4-isopropyltoluene	16.73	119	27038	2.08 ug/l	98
101)	1,4-dichlorobenzene	16.79	146	19011	2.36 ug/l	97
102)	1,2-dichlorobenzene	17.06	146	16121	2.24 ug/l	94
103)	n-butylbenzene	17.03	91	29198	2.04 ug/l	99
104)	cis-1,4-dichloro-2-butene	15.92	75	11821	2.08 ug/l #	1
105)	trans-1,4-dichloro-2-buten	15.95	53	1387	0.93 ug/l	84
106)	1,2-dibromo-3-chloropropan	17.56	75	1582	2.36 ug/l #	62
107)	pentachloroethane	16.46	167	4227	1.86 ug/l	91
108)	1,2,4-trichlorobenzene	18.12	180	7838	2.38 ug/l	99
109)	hexachlorobutadiene	18.24	225	4544	2.32 ug/l	98
110)	naphthalene	18.30	128	22454	2.65 ug/l	100
111)	1,2,3-trichlorobenzene	18.12	180		No Calib	
112)	2-Methyl Naphthalene	0.00	142		Not Detected	
113)	1,3-Dimethyl Naphthalene	0.00	156		Not Detected	

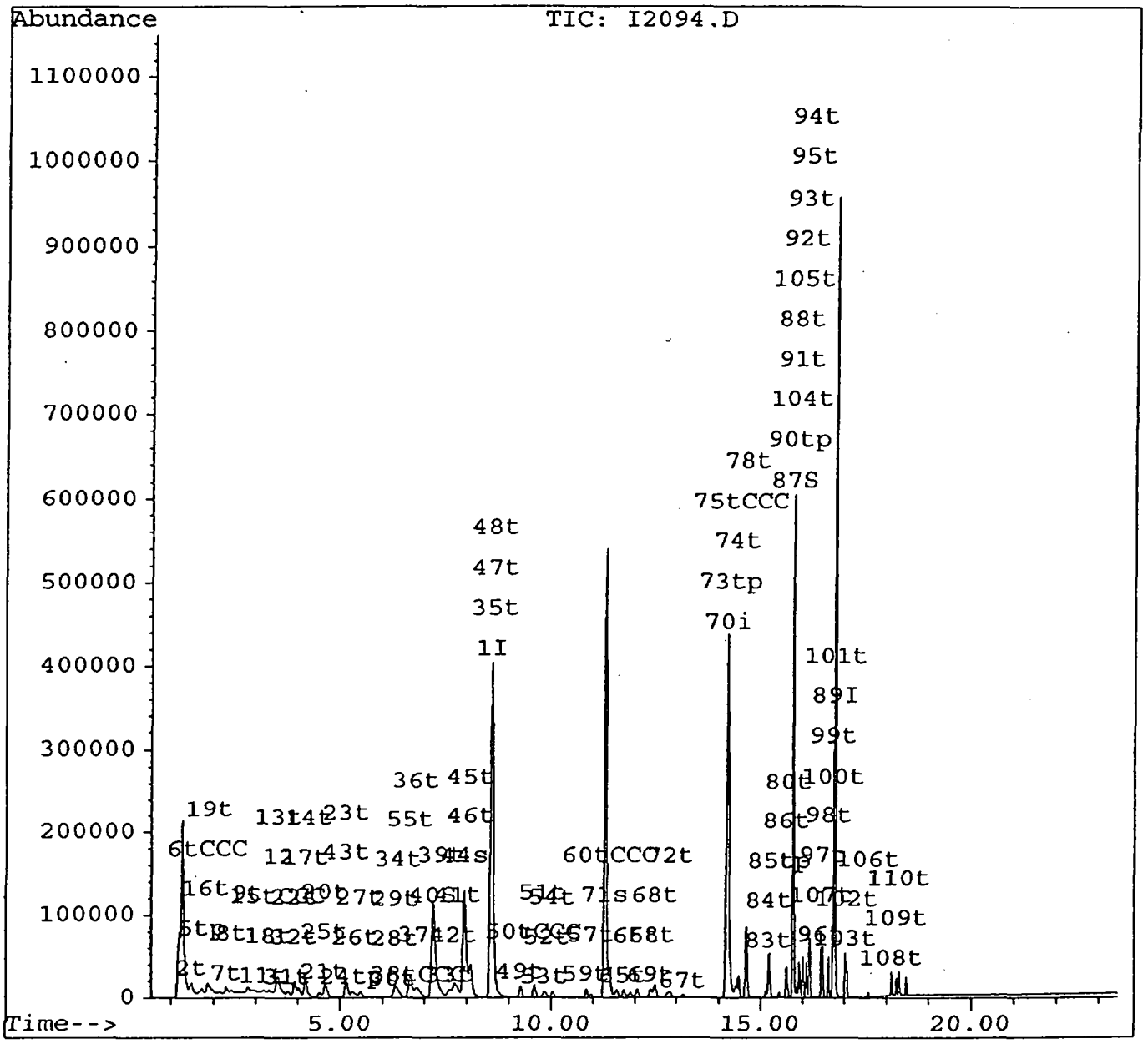
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2094.d
Acq On : 13 Oct 99 6:44 am
Sample : VSTD002;MSI;;
Misc : VSTD002;LOW;AQ;
Quant Time: Oct 13 9:28 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Response Factor Report GC/MS Ins

Average %RSD
11.9

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Calibration

Calibration Files
5 =J1957.D 50 =J1954.D 100 =J1953.D
200 =J1952.D 500 =J1951.D

		Compound	5	50	100	200	500	Avg	%RSD
1)	I	Flurobenzene	----------	----------	ISTD	----------	----------		
2)	t	Dichlorodifluorometha	0.076	0.115	0.134	0.149	0.144	0.124	24.10
3)	T	1,3-Butadiene	0.121	0.145	0.150	0.125	0.144	0.135	10.35
4)	tP	Chloromethane	0.207	0.252	0.261	0.275	0.235	0.246	10.69
5)	tCCC	Vinyl chloride	0.177	0.197	0.190	0.217	0.184	0.193	8.08
6)		Bromomethane	0.142	0.111	0.082	0.065	0.037	0.088	46.37
7)	t	Chloroethane	0.088	0.083	0.065	0.047	0.016	0.060	49.51
8)	t	Trichlorofluoromethan	0.136	0.169	0.165	0.172	0.081	0.145	26.33
9)	t	Diethyl ether	0.211	0.208	0.222	0.198	0.145	0.197	15.24
10)	t	Freon	0.346	0.316	0.362	0.371	0.331	0.345	6.52
11)	t	Tertiary butyl alcoho	0.019	0.041	0.042	0.039	0.032	0.034	27.66
12)	tCCC	1,1-Dichloroethene	0.172	0.198	0.220	0.233	0.189	0.203	12.09
13)	t	Acetonitrile	0.019	0.012	0.014	0.016	0.015	0.015	16.13
14)	t	Methylene chloride	0.335	0.279	0.281	0.272	0.243	0.282	11.82
15)	t	Acrolein	0.114	0.154	0.168	0.136	0.124	0.139	15.50
16)	t	Acrylonitrile	0.285	0.326	0.357	0.292	0.275	0.307	10.97
17)	t	trans,1,2-Dichloroeth	0.222	0.259	0.279	0.292	0.252	0.261	10.31
18)	t	Acetone	0.086	0.068	0.069	0.053	0.049	0.065	22.81
19)	t	Carbon disulfide	0.656	0.563	0.663	0.634	0.578	0.619	7.41
20)	t	Hexane	0.402	0.373	0.399	0.429	0.382	0.397	5.44
21)	tp	1,1-Dichloroethane	0.342	0.401	0.406	0.420	0.371	0.388	8.10
22)	t	Methyl t-butyl ether	0.406	0.496	0.439	0.432	0.373	0.429	10.60
23)	t	Vinyl acetate	0.496	0.543	0.579	0.496	0.474	0.518	8.18
24)	t	2-chloro-1,3-butadien	0.252	0.256	0.279	0.274	0.260	0.264	4.50
25)	t	2,2-Dichloropropane	0.190	0.234	0.255	0.268	0.224	0.234	12.79
26)	t	cis-1,2-Dichloroethen	0.251	0.312	0.322	0.323	0.289	0.299	10.19
27)	t	2-Butanone	0.028	0.031	0.032	0.027	0.025	0.029	10.65
28)	t	Iodomethane	0.473	0.526	0.592	0.566	0.560	0.544	8.40
29)	t	Allyl chloride	0.150	0.149	0.171	0.162	0.167	0.160	6.26
30)	t	Cyclohexane	0.114	0.154	0.168	0.136	0.124	0.139	15.50
31)	t	Ethyl cyanide	0.289	0.335	0.382	0.283	0.286	0.315	13.73
32)	t	Ethyl acetate	0.082	0.091	0.078	0.077	0.068	0.079	10.57
33)	t	Bromochloromethane	0.130	0.180	0.186	0.182	0.161	0.168	13.81
34)	t	Tetrahydrofuran	0.148	0.145	0.145	0.113	0.096	0.129	18.33
35)	tCCC	Chloroform	0.341	0.437	0.471	0.476	0.402	0.425	13.07
36)	t	1,1,1-Trichloroethane	0.254	0.287	0.308	0.321	0.272	0.288	9.28
37)	S	Dibromofluoromethane	0.339	0.337	0.355	0.363	0.313	0.342	5.69
38)	t	Carbon tetrachloride	0.239	0.265	0.290	0.316	0.277	0.278	10.31
39)	t	1,1,-Dichloropropene	0.270	0.294	0.309	0.355	0.301	0.306	10.13
40)	t	2,2,4-Trimethylpentan	0.402	0.373	0.399	0.429	0.382	0.397	5.44
41)	S	1,2-Dichloroethane-d4	0.221	0.215	0.228	0.218	0.238	0.224	4.06
42)	t	Benzene	0.828	0.919	0.936	0.961	0.818	0.892	7.32
43)	t	1,2-Dichloroethane	0.238	0.273	0.269	0.254	0.227	0.252	7.71

(#) = Out of Range

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Calibration

Calibration Files
5 =J1957.D 50 =J1954.D 100 =J1953.D
200 =J1952.D 500 =J1951.D

		Compound	5	50	100	200	500	Avg	%RSD
44)	t	Heptane	0.399	0.410	0.430	0.450	0.397	0.417	5.41
45)	t	Trichloroethene	0.263	0.281	0.288	0.302	0.259	0.279	6.26
46)	tCCC	1,2-Dichloropropane	0.237	0.277	0.279	0.281	0.247	0.264	7.78
47)	t	Methylmethacrylate	0.151	0.162	0.169	0.138	0.126	0.149	11.59
48)	t	1,4-Dioxane	0.002	0.003	0.003	0.002	0.002	0.002	18.20
49)	t	Dibromomethane	0.178	0.227	0.215	0.200	0.182	0.200	10.28
50)	t	Bromodichloromethane	0.273	0.311	0.316	0.315	0.280	0.299	6.97
51)	t	Methylacrylonitrile	1.763	1.751	1.831	1.509	1.254	1.622	14.73
52)	t	4-methly-2-pentanone	0.028	0.028	0.029	0.023	0.021	0.026	13.63
53)	t	2-Hexanone	0.147	0.191	0.200	0.155	0.142	0.167	15.82
54)	t	cis-1,3-Dichloroprope	0.288	0.333	0.332	0.322	0.278	0.311	8.37
55)	tCCC	Toluene	0.598	0.598	0.613	0.617	0.500	0.585	8.24
56)	t	2-Chloroethylvinyleth	0.058	0.061	0.063	0.063	0.053	0.060	7.28
57)	t	Octane	0.186	0.231	0.248	0.186	0.169	0.204	16.42
58)	t	Isobutyl acetate	0.015	0.017	0.019	0.015	0.013	0.016	15.65
59)	t	trans-1,3-Dichloropro	0.364	0.403	0.400	0.397	0.347	0.382	6.54
60)	t	1,1,2-Trichloroethane	0.207	0.218	0.213	0.194	0.154	0.197	13.17
61)	t	1,2-Dibromoethane	0.289	0.315	0.313	0.293	0.251	0.292	8.87
62)	t	Tetrachloroethene	0.404	0.328	0.314	0.330	0.273	0.330	14.34
63)	t	1,3-Dichloropropane	0.347	0.362	0.358	0.331	0.283	0.336	9.60
64)	I	Chlorobenzene-d5	----------ISTD----------						
65)	S	Toluene-d8	1.179	1.185	1.177	1.187	1.243	1.194	2.32
66)	t	Dibromochloromethane	0.352	0.417	0.421	0.421	0.409	0.404	7.30
67)	tp	Chlorobenzene	0.954	1.015	0.998	1.037	0.924	0.986	4.66
68)	t	1,1,1,2-Tetrachloroet	0.265	0.327	0.333	0.337	0.304	0.313	9.54
69)	tCCC	Ethylbenzene	1.332	1.343	1.345	1.358	1.093	1.294	8.72
70)	t	1-Chlorohexane	1.301	1.324	1.312	1.388	1.230	1.311	4.31
71)	t	m&p-Xylenes	0.579	0.589	0.585	0.581	0.445	0.556	11.19
72)	t	Ethyl methacrylate	0.363	0.415	0.421	0.371	0.375	0.389	6.90
73)	t	Cyclohexanone	0.002	0.003	0.003	0.002	0.003	0.003	12.12
74)	t	0-Xylene	0.515	0.559	0.564	0.563	0.482	0.536	6.82
75)	t	Styrene	0.945	1.050	1.037	1.015	0.837	0.977	9.01
76)	tp	Bromoform	0.223	0.296	0.304	0.292	0.276	0.278	11.70
77)	t	Isopropylbenzene	1.234	1.268	1.295	1.336	1.131	1.253	6.20
78)	S	Bromofluorobenzene	0.388	0.404	0.422	0.412	0.388	0.403	3.67
79)	t	Bromobenzene	0.383	0.421	0.426	0.429	0.398	0.411	4.88
80)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
81)	tp	1,1,2,2-Tetrachloroet	0.908	1.020	0.963	0.842	0.676	0.882	15.06
82)	t	1,2,3-Trichloropropan	1.034	1.111	1.040	1.074	1.009	1.054	3.76
83)	t	n-Propylbenzene	3.858	3.504	3.379	3.516	2.755	3.402	11.85
84)	t	2-Chlorotoluene	2.433	2.145	2.066	2.104	1.802	2.110	10.65
85)	t	4-Chlorotoluene	2.577	2.320	2.180	2.179	1.721	2.195	14.17

(#) = Out of Range

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Calibration

Calibration Files
5 =J1957.D 50 =J1954.D 100 =J1953.D
200 =J1952.D 500 =J1951.D

		Compound	5	50	100	200	500	Avg	%RSD
86)	t	1,3,5-Trimethylbenzen	2.606	2.374	2.240	2.266	1.820	2.261	12.64
87)	t	tert-Butylbenzene	2.366	2.006	1.953	2.039	1.817	2.036	9.95
88)	t	1,2,4-Trimethylbenzen	2.709	2.430	2.314	2.376	2.010	2.368	10.59
89)	t	sec-Butylbenzene	3.901	3.264	3.150	3.333	2.844	3.298	11.69
90)	t	1,3-Dichlorobenzene	1.757	1.630	1.588	1.655	1.501	1.626	5.74
91)	t	4-isopropyltoluene	2.952	2.524	2.452	2.629	2.315	2.574	9.32
92)	t	1,4-Dichlorobenzene	1.841	1.669	1.592	1.682	1.551	1.667	6.68
93)	t	1,2-Dichlorobenzene	1.552	1.518	1.427	1.455	1.246	1.440	8.27
94)	t	n-Butylbenzene	2.847	2.375	2.268	2.348	1.860	2.340	15.01
95)	t	cis-1,4-dichloro-2-bu	0.345	0.421	0.414	0.367	0.338	0.377	10.16
96)	t	trans-1,4-dichloro-2-	0.055	0.060	0.057	0.057	0.048	0.055	8.14
97)	t	1,2-dibromo-3-chlorop	0.101	0.083	0.070	0.069	0.061	0.077	20.76
98)	t	Pentachloroethane	0.357	0.454	0.551	0.539	0.570	0.494	17.97
99)	t	1,2,4-Trichlorobenzen	1.263	1.024	0.868	0.903	0.948	1.001	15.75
100)	t	Hexachlorobutadiene	0.525	0.400	0.408	0.443	0.456	0.446	11.15
101)	t	Naphthalene	2.844	2.642	1.990	1.830	1.538	2.169	25.51
102)	t	1,2,3-Trichlorobenzen	1.179	0.948	0.740	0.760	0.636	0.853	25.15
103)	t	2-Methyl Naphthalene		0.948	0.740	0.760	0.636	0.000	-1.00
104)	t	1,3-Dimethyl Naphthal	1.047	1.027	0.994	1.026	0.951	1.009	3.72

(#) = Out of Range

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Calibration
Total Cpnds : 104

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Flurobenzene	96	7.20	1.000	A	0	A	B
2	T	Dichlorodifluoromethane	85	1.76	0.245	A	0	A	B
3	T	1,3-Butadiene	54	2.02	0.281	A	1	A	B
4	T	Chloromethane	50	1.87	0.260	A	1	A	B
5	T	Vinyl chloride	62	2.00	0.278	A	1	A	B
6		Bromomethane	96	2.33	0.323	A	1	A	B
7	T	Chloroethane	64	2.41	0.336	A	1	A	B
8	T	Trichlorofluoromethane	101	2.65	0.368	A	1	A	B
9	T	Diethyl ether	59	2.94	0.408	A	2	A	B
10	T	Freon	101	3.20	0.445	A	2	A	B
11	T	Tertiary butyl alcohol	59	3.99	0.554	A	0	A	B
12	T	1,1-Dichloroethene	96	3.21	0.446	A	2	A	B
13	T	Acetonitrile	40	3.73	0.519	A	1	A	B
14	T	Methylene chloride	84	3.82	0.531	A	1	A	B
15	T	Acrolein	56	3.15	0.438	A	0	A	B
16	T	Acrylonitrile	53	4.19	0.583	A	1	A	B
17	T	trans,1,2-Dichloroethene	96	4.10	0.569	A	2	A	B
18	T	Acetone	43	3.33	0.463	A	1	A	B
19	T	Carbon disulfide	76	3.45	0.479	A	0	A	B
20	T	Hexane	57	4.33	0.602	A	2	A	B
21	T	1,1-Dichloroethane	63	4.68	0.650	A	2	A	B
22	T	Methyl t-butyl ether	73	4.09	0.568	A	0	A	B
23	T	Vinyl acetate	43	4.73	0.657	A	0	A	B
24	T	2-chloro-1,3-butadiene	53	4.75	0.660	A	2	A	B
25	T	2,2-Dichloropropane	77	5.44	0.757	A	1	A	B
26	T	cis-1,2-Dichloroethene	96	5.48	0.762	A	2	A	B
27	T	2-Butanone	72	5.52	0.768	A	1	A	B
28	T	Iodomethane	142	3.41	0.474	A	1	A	B
29	T	Allyl chloride	76	3.64	0.506	A	1	A	B
30	T	Cyclohexane	56	3.15	0.438	A	2	A	B
31	T	Ethyl cyanide	54	5.72	0.795	A	1	A	B
32	T	Ethyl acetate	43	4.08	0.567	A	2	A	B
33	T	Bromochloromethane	128	5.84	0.811	A	2	A	B
34	T	Tetrahydrofuran	42	5.85	0.813	A	1	A	B
35	T	Chloroform	83	5.96	0.828	A	1	A	B
36	T	1,1,1-Trichloroethane	97	6.14	0.854	A	2	A	B
37	S	Dibromofluoromethane	113	6.19	0.861	A	1	A	B
38	T	Carbon tetrachloride	117	6.33	0.880	A	1	A	B
39	T	1,1,-Dichloropropene	75	6.39	0.888	A	2	A	B
40	T	2,2,4-Trimethylpentane	57	4.33	0.602	A	2	A	B
41	S	1,2-Dichloroethane-d4	65	6.74	0.937	A	1	A	B
42	T	Benzene	78	6.70	0.932	A	1	A	B
43	T	1,2-Dichloroethane	62	6.86	0.954	A	1	A	B
44	T	Heptane	43	7.04	0.978	A	2	A	B
45	T	Trichloroethene	95	7.80	1.083	A	2	A	B
46	T	1,2-Dichloropropane	63	8.27	1.149	A	1	A	B
47	T	Methylmethacrylate	69	8.49	1.180	A	2	A	B
48	T	1,4-Dioxane	88	8.51	1.183	A	1	A	B
49	T	Dibromomethane	93	8.49	1.180	A	2	A	B
50	T	Bromodichloromethane	83	8.79	1.221	A	2	A	B
51	T	Methylacrylonitrile	41	5.89	0.818	A	3	A	B
52	T	4-methly-2-pentanone	43	10.04	1.395	A	2	A	B
53	T	2-Hexanone	43	11.77	1.636	A	2	A	B

54		T	cis-1,3-Dichloropropene	75	10.89	1.514	A	1	A	B
55		T	Toluene	92	10.23	1.421	A	1	A	B
56		T	2-Chloroethylvinylether	63	10.23	1.421	A	0	A	B
57		T	Octane	43	6.74	0.937	A	2	A	B
58		T	Isobutyl acetate	43	8.50	1.182	A	1	A	B
59		T	trans-1,3-Dichloropropene	75	9.68	1.346	A	1	A	B
60		T	1,1,2-Trichloroethane	83	11.25	1.563	A	2	A	B
61		T	1,2-Dibromoethane	107	12.15	1.689	A	2	A	B
62		T	Tetrachloroethene	166	11.27	1.566	A	1	A	B
63		T	1,3-Dichloropropane	76	11.57	1.608	A	1	A	B
64	I		Chlorobenzene-d5	117	13.08	1.000	A	1	A	B
65		S	Toluene-d8	98	10.09	0.771	A	1	A	B
66		T	Dibromochloromethane	129	11.95	0.913	A	1	A	B
67		T	Chlorobenzene	112	13.13	1.004	A	2	A	B
68		T	1,1,1,2-Tetrachloroethane	131	13.36	1.022	A	2	A	B
69		T	Ethylbenzene	91	13.33	1.020	A	1	A	B
70		T	1-Chlorohexane	91	10.23	0.782	A	2	A	B
71		T	m&p-Xylenes	106	13.60	1.040	A	1	A	B
72		T	Ethyl methacrylate	69	11.01	0.842	A	2	A	B
73		T	Cyclohexanone	42	11.77	0.900	A	2	A	B
74		T	0-Xylene	106	14.42	1.102	A	1	A	B
75		T	Styrene	104	14.48	1.108	A	1	A	B
76		T	Bromoform	173	14.87	1.137	A	1	A	B
77		T	Isopropylbenzene	105	15.18	1.161	A	1	A	B
78		S	Bromofluorobenzene	95	15.58	1.191	A	2	A	B
79		T	Bromobenzene	156	15.81	1.209	A	2	A	B
80	I		1,4-Dichlorobenzene-d4	152	18.06	1.000	A	1	A	B
81		T	1,1,2,2-Tetrachloroethane	83	16.04	0.888	A	2	A	B
82		T	1,2,3-Trichloropropane	75	10.89	0.603	A	1	A	B
83		T	n-Propylbenzene	91	16.05	0.889	A	1	A	B
84		T	2-Chlorotoluene	91	16.23	0.899	A	1	A	B
85		T	4-Chlorotoluene	91	16.49	0.913	A	1	A	B
86		T	1,3,5-Trimethylbenzene	105	16.46	0.912	A	1	A	B
87		T	tert-Butylbenzene	119	17.09	0.947	A	1	A	B
88		T	1,2,4-Trimethylbenzene	105	17.24	0.955	A	1	A	B
89		T	sec-Butylbenzene	105	17.58	0.974	A	1	A	B
90		T	1,3-Dichlorobenzene	146	17.86	0.989	A	2	A	B
91		T	4-isopropyltoluene	119	17.97	0.995	A	2	A	B
92		T	1,4-Dichlorobenzene	146	18.10	1.003	A	2	A	B
93		T	1,2-Dichlorobenzene	146	18.91	1.047	A	2	A	B
94		T	n-Butylbenzene	91	18.88	1.046	A	1	A	B
95		T	cis-1,4-dichloro-2-butene	75	16.17	0.895	A	2	A	B
96		T	trans-1,4-dichloro-2-butene	53	16.46	0.912	A	2	A	B
97		T	1,2-dibromo-3-chloropropane	75	15.81	0.876	A	2	A	B
98		T	Pentachloroethane	167	17.19	0.952	A	2	A	B
99		T	1,2,4-Trichlorobenzene	180	21.64	1.198	A	1	A	B
100		T	Hexachlorobutadiene	225	21.84	1.210	A	1	A	B
101		T	Naphthalene	128	21.97	1.217	A	0	A	B
102		T	1,2,3-Trichlorobenzene	182	22.33	1.236	A	1	A	B
103		T	2-Methyl Naphthalene	142	17.92	0.992	A	1	A	B
104		T	1,3-Dimethyl Naphthalene	156	15.81	0.876	A	0	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

8260008S.M Thu Oct 14 15:25:44 1999 MARK

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1951.D
Acq On : 13 Oct 99 19:06
Sample : VSTD500;MSJ;;
Misc : VSTD500;LOW;SO;
Quant Time: Oct 13 23:07 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.19	96	1649190	50.00 ppb	0.00
66) Chlorobenzene-d5	13.09	117	1083280	50.00 ppb	0.00
83) 1,4-Dichlorobenzene-d4	18.06	152	453600	50.00 ppb	0.00
System Monitoring Compounds					
39) Dibromofluoromethane	6.19	113	515886	46.37 ppb	0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 92.74%		
43) 1,2-Dichloroethane-d4	6.73	65	274786	37.28 ppb	-0.01
Surrogate Spike 50.000	Range 80 - 120		Recovery = 74.56%#		
67) Toluene-d8	10.10	98	1346577	52.43 ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 104.86%		
81) Bromofluorobenzene	15.59	95	420834	48.03 ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 96.06%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.74	85	2381061	626.52 ppb	100
3) 1,3-Butadiene	2.00	54	2068667	507.81 PPB	91
4) Chlorotrfluoroethene	0.00	116		Not Detected	
5) Chloromethane	1.88	50	3867873	465.32 ppb	94
6) Vinyl chloride	2.01	62	3029565	467.30 ppb	100
7) Bromomethane	2.29	96	616202	167.80 ppb	95
8) Chloroethane	2.35	64	257406	93.74 ppb	97
9) Trichlorofluoromethane	2.60	101	1343159	240.97 ppb	98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		No Calib #	
11) Diethyl ether	2.92	59	2398126	348.94 ppb	94
12) Freon	3.14	101	5452728	523.54 ppb	92
13) Tertiary butyl alcohol	4.06	59	533831	397.66 ppb	100
14) 1,1-Dichloroethene	3.17	96	3112187	476.30 ppb	78
15) Acetonitrile	3.73	40	2488626	626.52 ppb #	79
16) Methylene chloride	3.80	84	4010303	435.09 ppb	98
17) Acrolein	3.14	56	2052079	404.74 ppb	100
18) Acrylonitrile	4.18	53	4540854	422.90 ppb	94
19) trans,1,2-Dichloroethene	4.07	96	4149360	485.24 ppb #	80
20) Acetone	3.32	43	801664	370.64 ppb	99
21) Carbon disulfide	3.40	76	9526193	519.09 ppb m	100
22) Hexane	4.30	57	6300473	512.04 ppb	95
23) 1,1-Dichloroethane	4.66	63	6117778	462.56 ppb	97
24) Methyl t-butyl ether	4.08	73	6157350	377.12 ppb	100
25) Vinyl acetate	4.71	43	7820730	437.05 ppb	100
26) 2-chloro-1,3-butadiene	4.72	53	4292917	508.72 ppb	88
27) 2,2-Dichloropropane	5.42	77	3696742	478.55 ppb	87
28) cis-1,2-Dichloroethene	5.47	96	4758756	462.70 ppb #	75
29) 2-Butanone	5.53	72	411913	398.43 ppb #	18

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1951.D
Acq On : 13 Oct 99 19:06
Sample : VSTD500;MSJ;;
Misc : VSTD500;LOW;SO;
Quant Time: Oct 13 23:07 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Iodomethane	3.36	142	9238163	533.77 ppb		98
31)	Allyl chloride	3.60	76	2753493	535.91 ppb	m	3
32)	Cyclohexane	3.14	56	2052079	404.74 ppb	#	67
33)	Ethyl cyanide	5.73	54	4720322	427.64 ppb		98
34)	Ethyl acetate	4.08	43	1116259	372.25 ppb	#	38
35)	Bromochloromethane	5.82	128	2658145	447.85 ppb		85
36)	Tetrahydrofuran	5.85	42	1578840	325.04 ppb		96
37)	Chloroform	5.94	83	6621740	459.29 ppb		99
38)	1,1,1-Trichloroethane	6.13	97	4485615	473.78 ppb		93
40)	Carbon tetrachloride	6.32	117	4571260	522.68 ppb		98
41)	1,1,-Dichloropropene	6.38	75	4965477	511.72 ppb		89
42)	2,2,4-Trimethylpentane	4.30	57	6300473	512.04 ppb		93
44)	Benzene	6.69	78	13483476	444.89 ppb		98
45)	1,2-Dichloroethane	6.86	62	3750607	417.19 ppb		90
46)	Heptane	7.03	43	6552181	484.49 ppb		93
47)	Trichloroethene	7.79	95	4279227	461.45 ppb		96
48)	1,2-Dichloropropane	8.27	63	4072388	445.53 ppb		94
49)	Methylmethacrylate	8.50	69	2082999	389.78 ppb	#	86
50)	1,4-Dioxane	8.51	88	657339	377.90 ppb		90
51)	Dibromomethane	8.48	93	3006051	402.27 ppb		97
52)	Bromodichloromethane	8.80	83	4611076	449.15 ppb		97
53)	Methylacrylonitrile	5.90	41	20686372	358.41 ppb		96
54)	4-methly-2-pentanone	10.05	43	3463402	372.25 ppb		92
55)	2-Hexanone	11.78	43	2342022	372.17 ppb	#	95
56)	cis-1,3-Dichloropropene	10.90	75	4577146	416.12 ppb	#	83
57)	Toluene	10.23	92	8252716	418.65 ppb		97
58)	2-Chloroethylvinylether	10.22	63	867507	432.56 ppb		100
59)	Octane	0.00	43		No Calib	#	
60)	Isobutyl acetate	8.50	43	206579	358.33 ppb		87
61)	trans-1,3-Dichloropropene	9.69	75	5729310	431.42 ppb		85
62)	1,1,2-Trichloroethane	11.25	83	2532063	351.80 ppb		90
63)	1,2-Dibromoethane	12.16	107	4140162	397.88 ppb		100
64)	Tetrachloroethene	11.28	166	4504885	416.29 ppb		100
65)	1,3-Dichloropropane	11.58	76	4660282	390.25 ppb		98
68)	Dibromochloromethane	11.96	129	4427354	489.88 ppb		99
69)	Chlorobenzene	13.14	112	10009361	455.06 ppb		89
70)	1,1,1,2-Tetrachloroethane	13.37	131	3289066	464.45 ppb		98
71)	Ethylbenzene	13.34	91	11837906	406.78 ppb		94
72)	Nonene	0.00	55		No Calib	#	
73)	1-Chlorohexane	10.23	91	13329064	464.69 ppb		98
74)	m&p-Xylenes	13.62	106	9634054	377.48 ppb		90
75)	Ethyl methacrylate	11.03	69	4063639	452.44 ppb		92
76)	Cyclohexanone	11.77	42	136261	429.06 ppb		95

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\101399\J1951.D Vial: 100
Acq On : 13 Oct 99 19:06 Operator:
Sample : VSTD500;MSJ;; Inst : GC/MS Ins
Misc : VSTD500;LOW;SO; Multiplr: 1.00
Quant Time: Oct 13 23:07 1999 Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	0-Xylene	14.42	106	5224056	431.66 ppb	84
78)	Styrene	14.49	104	9063154	398.49 ppb	88
79)	Bromoform	14.88	173	2994110	467.03 ppb	99
80)	Isopropylbenzene	15.20	105	12251928	445.98 ppb	99
82)	Bromobenzene	15.83	156	4312727	473.28 ppb	85
84)	1,1,2,2-Tetrachloroethane	16.06	83	3064140	331.08 ppb	98
85)	1,2,3-Trichloropropane	10.90	75	4577146	454.05 ppb	85
86)	n-Propylbenzene	16.07	91	12494993	393.12 ppb	91
87)	2-Chlorotoluene	16.24	91	8174470	419.97 ppb	93
88)	4-Chlorotoluene	16.51	91	7806023	370.94 ppb	94
89)	1,3,5-Trimethylbenzene	16.48	105	8255883	383.45 ppb	98
90)	tert-Butylbenzene	17.11	119	8241747	452.93 ppb	94
91)	1,2,4-Trimethylbenzene	17.26	105	9116424	413.59 ppb	98
92)	sec-Butylbenzene	17.60	105	12899011	435.64 ppb	100
93)	1,3-Dichlorobenzene	17.88	146	6810706	460.51 ppb	99
94)	4-isopropyltoluene	17.99	119	10501038	458.60 ppb	99
95)	1,4-Dichlorobenzene	18.12	146	7037145	464.65 ppb	98
96)	1,2-Dichlorobenzene	18.93	146	5651804	410.44 ppb	98
97)	n-Butylbenzene	18.90	91	8439210	391.74 ppb	95
98)	cis-1,4-dichloro-2-butene	16.19	75	1534769	443.90 ppb	99
99)	trans-1,4-dichloro-2-buten	16.48	53	217594	403.15 ppb	97
100)	1,2-dibromo-3-chloropropan	15.83	75	274798	366.78 ppb	79
101)	Pentachloroethane	17.20	167	2586602	628.60 ppb	92
102)	1,2,4-Trichlorobenzene	21.65	180	4298401	459.24 ppb	99
103)	Hexachlorobutadiene	21.85	225	2067029	569.17 ppb	98
104)	Naphthalene	21.98	128	6976950	290.93 ppb	100
105)	1,2,3-Trichlorobenzene	22.33	182	2885469	335.63 ppb	100
106)	2-Methyl Naphthalene	0.00	142		Not Detected	
107)	1,3-Dimethyl Naphthalene	0.00	156		No Calib	

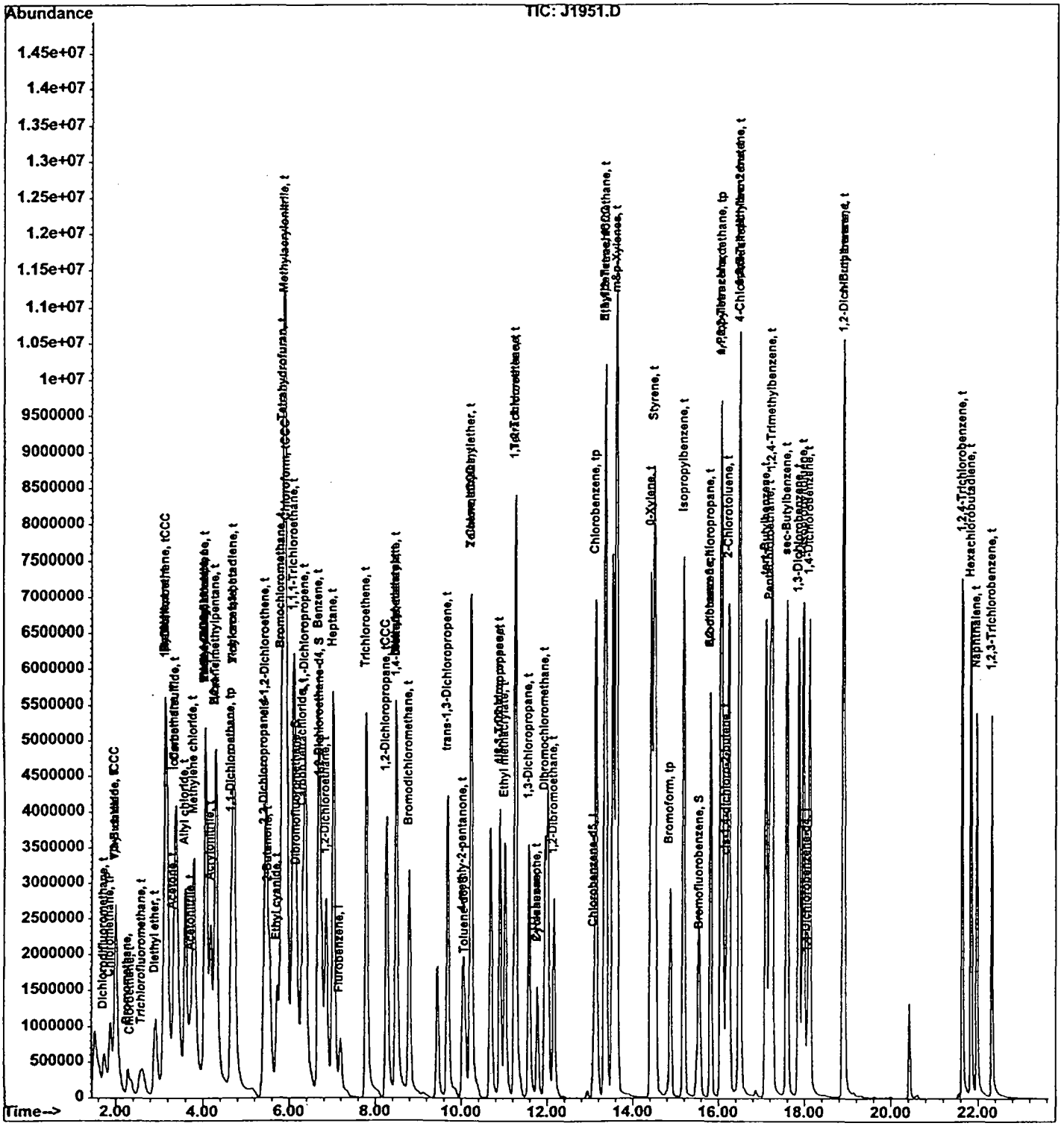
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101399\J1951.D
Acq On : 13 Oct 99 19:06
Sample : VSTD500;MSJ;;
Misc : VSTD500;LOW;SO;
Quant Time: Oct 13 23:07 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 02:59:26 1999
Response via : Single Level Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1952.D
Vial: 100
Acq On : 13 Oct 99 19:36
Operator:
Sample : VSTD200;MSJ;;
Inst : GC/MS Ins
Misc : VSTD200;LOW;SO;
Multiplr: 1.00
Quant Time: Oct 14 2:56 1999
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.20	96	1455387	50.00 ppb	0.00
66) Chlorobenzene-d5	13.09	117	1045506	50.00 ppb	0.01
83) 1,4-Dichlorobenzene-d4	18.07	152	436542	50.00 ppb	0.01
System Monitoring Compounds					
39) Dibromofluoromethane	6.20	113	528817	53.86 ppb	0.01
Surrogate Spike 50.000	Range 86 - 118		Recovery = 107.72%		
43) 1,2-Dichloroethane-d4	6.74	65	245727	37.78 ppb m	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 75.56%#		
67) Toluene-d8	10.10	98	1240648	50.05 ppb	0.01
Surrogate Spike 50.000	Range 88 - 110		Recovery = 100.10%		
81) Bromofluorobenzene	15.59	95	430902	50.96 ppb	0.01
Surrogate Spike 50.000	Range 86 - 115		Recovery = 101.92%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.76	85	867398	258.63 ppb	100
3) 1,3-Butadiene	2.02	54	871322	242.37 PPB	88
4) Chlorotrfluoroethene	0.00	116		Not Detected	
5) Chloromethane	1.89	50	1598810	217.96 ppb	96
6) Vinyl chloride	2.01	62	1265793	221.25 ppb	99
7) Bromomethane	2.30	96	381052	117.59 ppb	94
8) Chloroethane	2.40	64	272533	112.46 ppb	98
9) Trichlorofluoromethane	2.63	101	998478	202.98 ppb	95
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		No Calib #	
11) Diethyl ether	2.93	59	1153023	190.11 ppb	95
12) Freon	3.18	101	2159625	234.97 ppb	90
13) Tertiary butyl alcohol	4.01	59	226353	191.07 ppb	100
14) 1,1-Dichloroethene	3.20	96	1359150	235.71 ppb	76
15) Acetonitrile	3.74	40	941227	268.51 ppb #	81
16) Methylene chloride	3.82	84	1585064	194.87 ppb	98
17) Acrolein	3.15	56	792774	177.18 ppb	100
18) Acrylonitrile	4.20	53	1698024	179.20 ppb	95
19) trans,1,2-Dichloroethene	4.09	96	1699060	225.15 ppb #	79
20) Acetone	3.33	43	310591	162.72 ppb	100
21) Carbon disulfide	3.43	76	3692229	227.98 ppb m	100
22) Hexane	4.32	57	2499066	230.14 ppb	94
23) 1,1-Dichloroethane	4.68	63	2442875	209.30 ppb	96
24) Methyl t-butyl ether	4.09	73	2512998	174.41 ppb	100
25) Vinyl acetate	4.72	43	2886263	182.77 ppb	100
26) 2-chloro-1,3-butadiene	4.74	53	1594735	214.14 ppb	88
27) 2,2-Dichloropropane	5.44	77	1557409	228.45 ppb	88
28) cis-1,2-Dichloroethene	5.48	96	1880406	207.18 ppb #	75
29) 2-Butanone	5.53	72	157130	172.22 ppb	21

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1952.D
Acq On : 13 Oct 99 19:36
Sample : VSTD200;MSJ;;
Misc : VSTD200;LOW;SO;
Quant Time: Oct 14 2:56 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Iodomethane	3.39	142	3296193	215.81 ppb		97
31)	Allyl chloride	3.63	76	941400	207.62 ppb	m	2
32)	Cyclohexane	3.15	56	792774	177.18 ppb	#	90
33)	Ethyl cyanide	5.73	54	1646687	169.05 ppb		99
34)	Ethyl acetate	4.09	43	449850	169.99 ppb	#	38
35)	Bromochloromethane	5.84	128	1059142	202.21 ppb		87
36)	Tetrahydrofuran	5.86	42	657017	153.27 ppb		97
37)	Chloroform	5.96	83	2769794	217.70 ppb		99
38)	1,1,1-Trichloroethane	6.14	97	1866606	223.41 ppb		93
40)	Carbon tetrachloride	6.34	117	1839675	238.36 ppb		98
41)	1,1,-Dichloropropene	6.39	75	2065007	241.15 ppb		90
42)	2,2,4-Trimethylpentane	4.32	57	2499066	230.14 ppb		92
44)	Benzene	6.69	78	5595558	209.21 ppb		98
45)	1,2-Dichloroethane	6.87	62	1481444	186.73 ppb		90
46)	Heptane	7.04	43	2620667	219.58 ppb		93
47)	Trichloroethene	7.81	95	1755347	214.49 ppb		93
48)	1,2-Dichloropropane	8.28	63	1636829	202.92 ppb		95
49)	Methylmethacrylate	8.50	69	802426	170.15 ppb	#	86
50)	1,4-Dioxane	8.51	88	258274	168.25 ppb		90
51)	Dibromomethane	8.49	93	1166830	176.94 ppb		98
52)	Bromodichloromethane	8.80	83	1834323	202.47 ppb		97
53)	Methylacrylonitrile	5.89	41	8782726	172.43 ppb		96
54)	4-methly-2-pentanone	10.04	43	1339620	163.16 ppb	#	89
55)	2-Hexanone	11.78	43	900985	162.24 ppb	#	95
56)	cis-1,3-Dichloropropene	10.91	75	1874597	193.12 ppb	#	85
57)	Toluene	10.24	92	3593779	206.58 ppb		97
58)	2-Chloroethylvinylether	10.24	63	366577	207.12 ppb		100
59)	Octane	0.00	43		No Calib	#	
60)	Isobutyl acetate	8.51	43	85349	167.76 ppb		89
61)	trans-1,3-Dichloropropene	9.70	75	2311829	197.26 ppb		86
62)	1,1,2-Trichloroethane	11.25	83	1131986	178.22 ppb		90
63)	1,2-Dibromoethane	12.16	107	1703962	185.56 ppb		99
64)	Tetrachloroethene	11.28	166	1923393	201.41 ppb		99
65)	1,3-Dichloropropane	11.58	76	1928006	182.95 ppb		98
68)	Dibromochloromethane	11.96	129	1759630	201.74 ppb		98
69)	Chlorobenzene	13.14	112	4335484	204.23 ppb		90
70)	1,1,1,2-Tetrachloroethane	13.37	131	1411058	206.46 ppb		97
71)	Ethylbenzene	13.34	91	5677673	202.15 ppb		94
72)	Nonene	0.00	55		No Calib	#	
73)	1-Chlorohexane	10.24	91	5806171	209.73 ppb		98
74)	m&p-Xylenes	13.61	106	4858115	197.23 ppb		88
75)	Ethyl methacrylate	11.02	69	1551202	178.95 ppb		92
76)	Cyclohexanone	11.77	42	51297	167.36 ppb	m	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1952.D Vial: 100
Acq On : 13 Oct 99 19:36 Operator:
Sample : VSTD200;MSJ;; Inst : GC/MS Ins
Misc : VSTD200;LOW;SO; Multiplr: 1.00
Quant Time: Oct 14 2:56 1999 Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	0-Xylene	14.43	106	2352949	201.45 ppb	85
78)	Styrene	14.50	104	4242840	193.29 ppb	86
79)	Bromoform	14.88	173	1222836	197.63 ppb	100
80)	Isopropylbenzene	15.19	105	5587742	210.74 ppb	99
82)	Bromobenzene	15.82	156	1792088	203.77 ppb	88
84)	1,1,2,2-Tetrachloroethane	16.06	83	1470753	165.13 ppb	99
85)	1,2,3-Trichloropropane	10.91	75	1874597	193.22 ppb	85
86)	n-Propylbenzene	16.06	91	6139897	200.72 ppb	95
87)	2-Chlorotoluene	16.25	91	3673881	196.12 ppb	97
88)	4-Chlorotoluene	16.50	91	3805717	187.92 ppb	97
89)	1,3,5-Trimethylbenzene	16.47	105	3956800	190.96 ppb	100
90)	tert-Butylbenzene	17.11	119	3560814	203.33 ppb	94
91)	1,2,4-Trimethylbenzene	17.25	105	4148426	195.56 ppb	100
92)	sec-Butylbenzene	17.59	105	5820782	204.27 ppb	97
93)	1,3-Dichlorobenzene	17.87	146	2889229	202.99 ppb	98
94)	4-isopropyltoluene	17.98	119	4590394	208.30 ppb	98
95)	1,4-Dichlorobenzene	18.13	146	2936303	201.45 ppb	99
96)	1,2-Dichlorobenzene	18.92	146	2540254	191.68 ppb	98
97)	n-Butylbenzene	18.89	91	4100872	197.80 ppb	99
98)	cis-1,4-dichloro-2-butene	16.19	75	641588	192.82 ppb	98
99)	trans-1,4-dichloro-2-buten	16.47	53	99182	190.94 ppb	84
100)	1,2-dibromo-3-chloropropan	15.82	75	120360	166.92 ppb	84
101)	Pentachloroethane	17.20	167	940335	237.45 ppb	94
102)	1,2,4-Trichlorobenzene	21.65	180	1576205	174.98 ppb	97
103)	Hexachlorobutadiene	21.84	225	773795	221.40 ppb	98
104)	Naphthalene	21.98	128	3195293	138.45 ppb	100
105)	1,2,3-Trichlorobenzene	22.33	182	1327326	160.42 ppb	100
106)	2-Methyl Naphthalene	0.00	142		Not Detected	
107)	1,3-Dimethyl Naphthalene	0.00	156		No Calib	

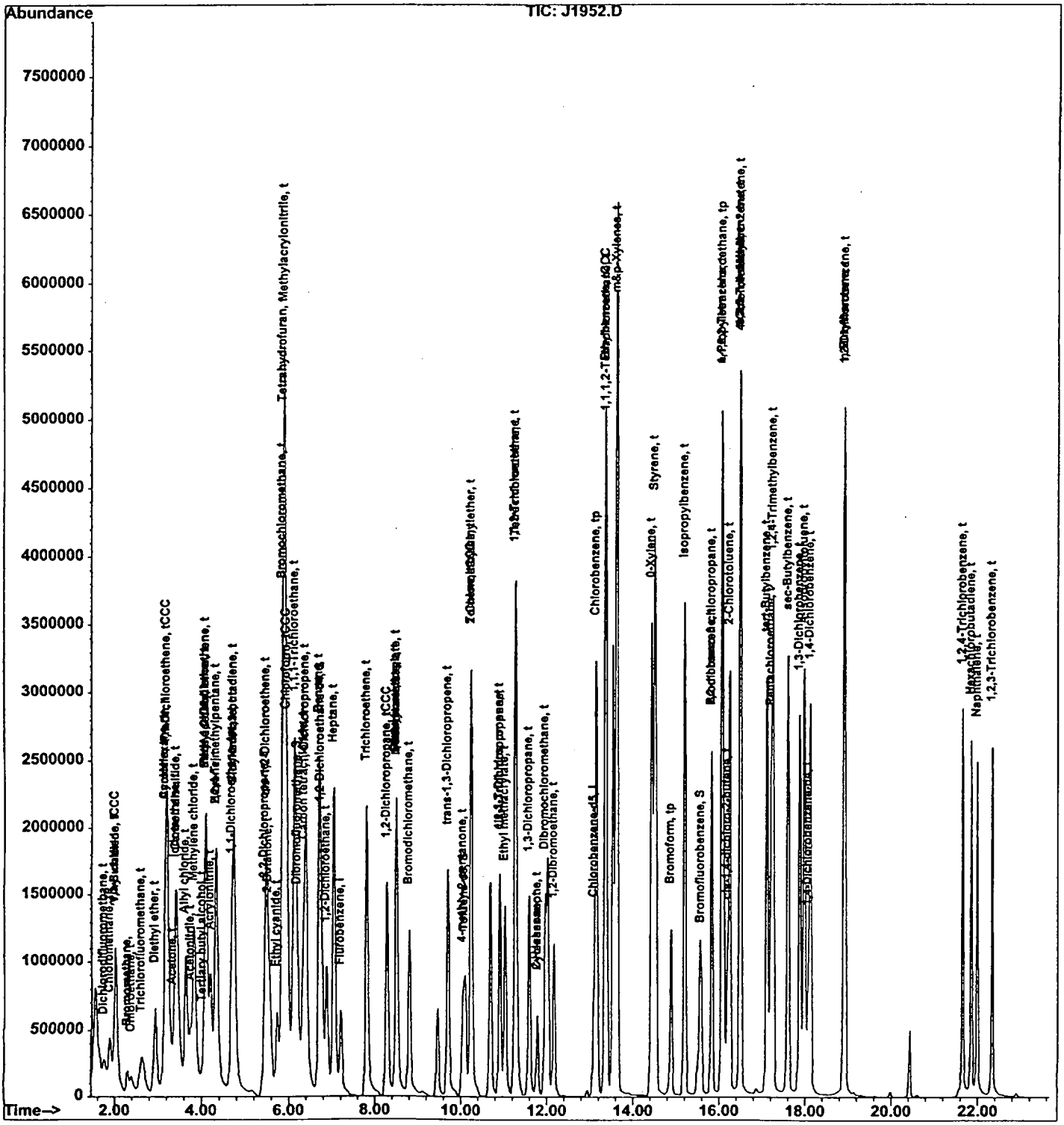
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101399\J1952.D
Acq On : 13 Oct 99 19:36
Sample : VSTD200;MSJ;;
Misc : VSTD200;LOW;SO;
Quant Time: Oct 14 2:56 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 02:59:26 1999
Response via : Single Level Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1953.D
Vial: 100
Acq On : 13 Oct 99 20:06
Operator:
Sample : VSTD100;MSJ;;
Inst : GC/MS Ins
Misc : VSTD100;LOW;SO;
Multiplr: 1.00
Quant Time: Oct 14 0:09 1999
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 23:13:06 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Flurobenzene	7.20	96	1374443	50.00	ppb		0.00
66) Chlorobenzene-d5	13.08	117	1022132	50.00	ppb		0.00
83) 1,4-Dichlorobenzene-d4	18.06	152	438172	50.00	ppb		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	6.20	113	488255	52.66	ppb		0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 105.32%				
43) 1,2-Dichloroethane-d4	6.74	65	247473	40.28	ppb	m	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 80.56%				
67) Toluene-d8	10.09	98	1202764	49.63	ppb		0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 99.26%				
81) Bromofluorobenzene	15.58	95	431450	52.19	ppb		0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 104.38%				

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.76	85	368034	116.20	ppb		100
3) 1,3-Butadiene	2.02	54	398435	117.36	ppb		90
4) Chlorotrfluoroethene	0.00	116		Not Detected			
5) Chloromethane	1.88	50	718310	103.69	ppb		98
6) Vinyl chloride	2.01	62	520929	96.41	ppb		98
7) Bromomethane	2.31	96	224374	73.32	ppb		94
8) Chloroethane	2.41	64	179730	78.53	ppb		92
9) Trichlorofluoromethane	2.63	101	454065	97.74	ppb		96
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		No Calib		#	
11) Diethyl ether	2.94	59	609780	106.46	ppb		91
12) Freon	3.19	101	995057	114.64	ppb		89
13) Tertiary butyl alcohol	3.99	59	114622	102.45	ppb		100
14) 1,1-Dichloroethene	3.21	96	605197	111.14	ppb		76
15) Acetonitrile	3.75	40	392940	118.70	ppb	#	36
16) Methylene chloride	3.83	84	771338	100.41	ppb		98
17) Acrolein	3.17	56	460545	108.99	ppb		100
18) Acrylonitrile	4.20	53	980289	109.55	ppb		95
19) trans,1,2-Dichloroethene	4.09	96	766505	107.56	ppb	#	79
20) Acetone	3.33	43	188689	104.68	ppb		96
21) Carbon disulfide	3.43	76	1821746	119.11	ppb	m	100
22) Hexane	4.33	57	1095489	106.83	ppb		96
23) 1,1-Dichloroethane	4.68	63	1116381	101.28	ppb		98
24) Methyl t-butyl ether	4.08	73	1205912	88.62	ppb		100
25) Vinyl acetate	4.72	43	1591067	106.69	ppb		100
26) 2-chloro-1,3-butadiene	4.74	53	767843	109.18	ppb		87
27) 2,2-Dichloropropane	5.45	77	702128	109.06	ppb		89
28) cis-1,2-Dichloroethene	5.49	96	886298	103.40	ppb	#	75
29) 2-Butanone	5.54	72	88873	103.15	ppb		24

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1953.D
Acq On : 13 Oct 99 20:06
Sample : VSTD100;MSJ;;
Misc : VSTD100;LOW;SO;
Quant Time: Oct 14 0:09 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 23:13:06 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Iodomethane	3.39	142	1626591	112.77 ppb		97
31)	Allyl chloride	3.63	76	470550	109.89 ppb	m	5
32)	Cyclohexane	3.17	56	460545	108.99 ppb	#	94
33)	Ethyl cyanide	5.72	54	1050860	114.23 ppb		97
34)	Ethyl acetate	4.08	43	215485	86.22 ppb	#	51
35)	Bromochloromethane	5.83	128	511754	103.46 ppb		90
36)	Tetrahydrofuran	5.85	42	399788	98.76 ppb		95
37)	Chloroform	5.96	83	1293998	107.69 ppb		95
38)	1,1,1-Trichloroethane	6.15	97	846378	107.27 ppb		93
40)	Carbon tetrachloride	6.33	117	798538	109.56 ppb		99
41)	1,1,-Dichloropropene	6.39	75	850305	105.15 ppb		90
42)	2,2,4-Trimethylpentane	4.33	57	1095489	106.83 ppb		78
44)	Benzene	6.70	78	2573427	101.88 ppb		97
45)	1,2-Dichloroethane	6.87	62	738208	98.53 ppb		93
46)	Heptane	7.03	43	1181526	104.83 ppb		95
47)	Trichloroethene	7.80	95	791610	102.43 ppb		91
48)	1,2-Dichloropropane	8.27	63	765808	100.53 ppb		95
49)	Methylmethacrylate	8.50	69	463347	104.04 ppb	#	85
50)	1,4-Dioxane	8.52	88	158332	109.22 ppb		89
51)	Dibromomethane	8.49	93	590192	94.77 ppb		98
52)	Bromodichloromethane	8.79	83	868527	101.51 ppb		97
53)	Methylacrylonitrile	5.89	41	5033259	104.64 ppb		97
54)	4-methly-2-pentanone	10.03	43	794458	102.46 ppb	#	92
55)	2-Hexanone	11.76	43	548713	104.63 ppb	#	95
56)	cis-1,3-Dichloropropene	10.90	75	911634	99.45 ppb	#	84
57)	Toluene	10.23	92	1683932	102.50 ppb		95
58)	2-Chloroethylvinylether	10.23	63	173144	103.59 ppb		100
59)	Octane	0.00	43		No Calib	#	
60)	Isobutyl acetate	8.51	43	51853	107.92 ppb		96
61)	trans-1,3-Dichloropropene	9.69	75	1100656	99.45 ppb		88
62)	1,1,2-Trichloroethane	11.24	83	585080	97.54 ppb		90
63)	1,2-Dibromoethane	12.16	107	860966	99.28 ppb		100
64)	Tetrachloroethene	11.27	166	864212	95.83 ppb		100
65)	1,3-Dichloropropane	11.58	76	984287	98.90 ppb		99
68)	Dibromochloromethane	11.95	129	860722	100.94 ppb		99
69)	Chlorobenzene	13.13	112	2040652	98.32 ppb		91
70)	1,1,1,2-Tetrachloroethane	13.37	131	681693	102.02 ppb		96
71)	Ethylbenzene	13.34	91	2749158	100.12 ppb		95
72)	Nonene	0.00	55		No Calib	#	
73)	1-Chlorohexane	10.23	91	2682505	99.11 ppb		99
74)	m&p-Xylenes	13.60	106	2391803	99.32 ppb		89
75)	Ethyl methacrylate	11.02	69	860470	101.53 ppb		92
76)	Cyclohexanone	11.77	42	30838	102.91 ppb		96

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\101399\J1953.D Vial: 100
Acq On : 13 Oct 99 20:06 Operator:
Sample : VSTD100;MSJ;; Inst : GC/MS Ins
Misc : VSTD100;LOW;SO; Multiplr: 1.00
Quant Time: Oct 14 0:09 1999 Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 23:13:06 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	0-Xylene	14.42	106	1153451	101.01 ppb	85
78)	Styrene	14.49	104	2119921	98.78 ppb	85
79)	Bromoform	14.87	173	621932	102.81 ppb	99
80)	Isopropylbenzene	15.19	105	2646987	102.12 ppb	98
82)	Bromobenzene	15.82	156	871362	101.34 ppb	92
84)	1,1,2,2-Tetrachloroethane	16.05	83	843700	94.37 ppb	99
85)	1,2,3-Trichloropropane	10.90	75	911634	93.62 ppb	82
86)	n-Propylbenzene	16.05	91	2960863	96.44 ppb	97
87)	2-Chlorotoluene	16.23	91	1810341	96.28 ppb	99
88)	4-Chlorotoluene	16.49	91	1910482	93.98 ppb	97
89)	1,3,5-Trimethylbenzene	16.47	105	1962968	94.38 ppb	98
90)	tert-Butylbenzene	17.10	119	1711884	97.39 ppb	96
91)	1,2,4-Trimethylbenzene	17.24	105	2028069	95.25 ppb	98
92)	sec-Butylbenzene	17.59	105	2760261	96.51 ppb	95
93)	1,3-Dichlorobenzene	17.86	146	1392043	97.44 ppb	96
94)	4-isopropyltoluene	17.96	119	2148927	97.15 ppb	98
95)	1,4-Dichlorobenzene	18.11	146	1395194	95.37 ppb	98
96)	1,2-Dichlorobenzene	18.92	146	1250363	94.00 ppb	99
97)	n-Butylbenzene	18.89	91	1987433	95.50 ppb	97
98)	cis-1,4-dichloro-2-butene	16.17	75	362880	108.65 ppb	95
99)	trans-1,4-dichloro-2-buten	16.47	53	49532	95.00 ppb	90
100)	1,2-dibromo-3-chloropropan	15.82	75	61305	84.71 ppb	80
101)	Pentachloroethane	17.19	167	482480	121.38 ppb	92
102)	1,2,4-Trichlorobenzene	21.64	180	760403	84.10 ppb	97
103)	Hexachlorobutadiene	21.85	225	357144	101.80 ppb	98
104)	Naphthalene	21.98	128	1743652	75.27 ppb	100
105)	1,2,3-Trichlorobenzene	22.32	182	648194	78.05 ppb	100
106)	2-Methyl Naphthalene	0.00	142		Not Detected	
107)	1,3-Dimethyl Naphthalene	0.00	156		No Calib	

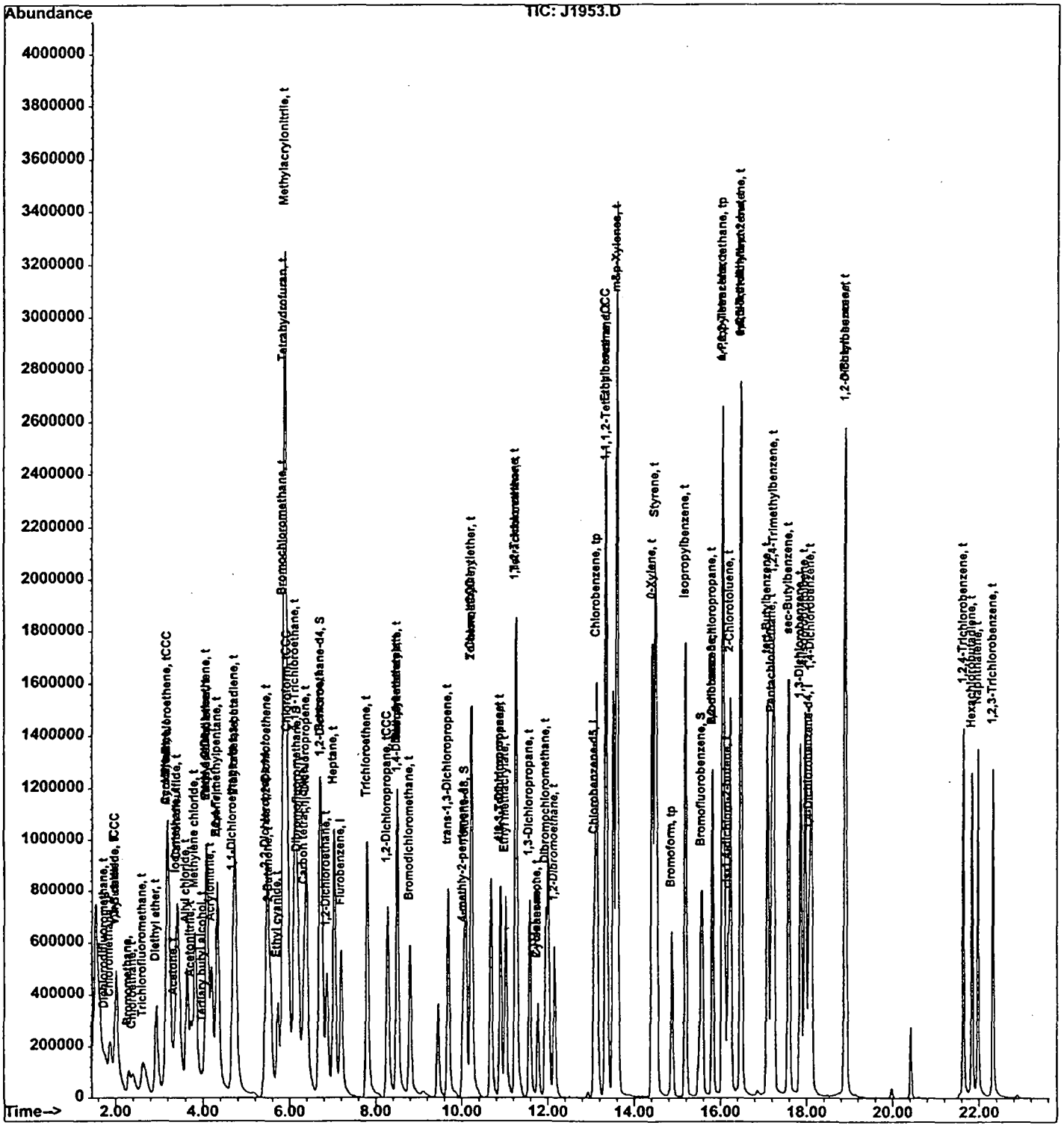
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101399\J1953.D
Acq On : 13 Oct 99 20:06
Sample : VSTD100;MSJ;;
Misc : VSTD100;LOW;SO;
Quant Time: Oct 14 0:09 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 02:59:26 1999
Response via : Single Level Calibration



Quantitation Report (QT Reviewed) 000133

Data File : C:\HPCHEM\1\DATA\101399\J1954.D
Acq On : 13 Oct 99 20:35
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;
Quant Time: Oct 14 0:10 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Flurobenzene	7.20	96	1430565	50.00 ppb		0.00
66) Chlorobenzene-d5	13.08	117	1048019	50.00 ppb		0.00
83) 1,4-Dichlorobenzene-d4	18.06	152	429334	50.00 ppb		0.00
System Monitoring Compounds						
39) Dibromofluoromethane	6.19	113	482534	50.00 ppb		0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 100.00%			
43) 1,2-Dichloroethane-d4	6.74	65	277546	43.41 ppb	m	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 86.82%			
67) Toluene-d8	10.09	98	1242322	50.00 ppb		0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 100.00%			
81) Bromofluorobenzene	15.58	95	423814	50.00 ppb		0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 100.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.76	85	164664	49.95 ppb		100
3) 1,3-Butadiene	2.02	54	173746	49.17 PPB		93
4) Chlorotrfluoroethene	0.00	116		Not Detected		
5) Chloromethane	1.87	50	360517	50.00 ppb		95
6) Vinyl chloride	2.00	62	281182	50.00 ppb		99
7) Bromomethane	2.33	96	159268	50.00 ppb		96
8) Chloroethane	2.41	64	119102	50.00 ppb		59
9) Trichlorofluoromethane	2.65	101	241757	50.00 ppb		96
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected		
11) Diethyl ether	2.94	59	298078	50.00 ppb		89
12) Freon	3.20	101	451722	50.00 ppb		90
13) Tertiary butyl alcohol	3.99	59	58223	50.00 ppb		100
14) 1,1-Dichloroethene	3.21	96	283396	50.00 ppb		74
15) Acetonitrile	3.73	40	172279	50.00 ppb	#	48
16) Methylene chloride	3.82	84	399767	50.00 ppb		99
17) Acrolein	3.15	56	219900	50.00 ppb		100
18) Acrylonitrile	4.19	53	465697	50.00 ppb		98
19) trans,1,2-Dichloroethene	4.10	96	370881	50.00 ppb	#	80
20) Acetone	3.33	43	96646	51.51 ppb		98
21) Carbon disulfide	3.45	76	804853	50.56 ppb	m	100
22) Hexane	4.33	57	533676	50.00 ppb		97
23) 1,1-Dichloroethane	4.68	63	573634	50.00 ppb		98
24) Methyl t-butyl ether	4.09	73	710200	50.14 ppb		100
25) Vinyl acetate	4.73	43	776107	50.00 ppb		100
26) 2-chloro-1,3-butadiene	4.75	53	366001	50.00 ppb		92
27) 2,2-Dichloropropane	5.44	77	335045	50.00 ppb		89
28) cis-1,2-Dichloroethene	5.48	96	446069	50.00 ppb	#	75
29) 2-Butanone	5.52	72	44840	50.00 ppb	#	12

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1954.D
Acq On : 13 Oct 99 20:35
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;
Quant Time: Oct 14 0:10 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Iodomethane	3.41	142	753098	50.16 ppb		98
31)	Allyl chloride	3.64	76	212836	47.75 ppb	m	3
32)	Cyclohexane	3.15	56	219900	50.00 ppb	#	96
33)	Ethyl cyanide	5.72	54	478743	50.00 ppb		100
34)	Ethyl acetate	4.08	43	130058	50.00 ppb	#	90
35)	Bromochloromethane	5.84	128	257424	50.00 ppb		89
36)	Tetrahydrofuran	5.85	42	207961	49.36 ppb		97
37)	Chloroform	5.96	83	625308	50.00 ppb		98
38)	1,1,1-Trichloroethane	6.14	97	410634	50.00 ppb		93
40)	Carbon tetrachloride	6.33	117	379320	50.00 ppb		98
41)	1,1,-Dichloropropene	6.39	75	420855	50.00 ppb		90
42)	2,2,4-Trimethylpentane	4.33	57	533676	50.00 ppb		98
44)	Benzene	6.70	78	1314490	50.00 ppb		96
45)	1,2-Dichloroethane	6.86	62	389917	50.00 ppb		95
46)	Heptane	7.04	43	586560	50.00 ppb		100
47)	Trichloroethene	7.80	95	402209	50.00 ppb		89
48)	1,2-Dichloropropane	8.27	63	396443	50.00 ppb		97
49)	Methylmethacrylate	8.49	69	231778	50.00 ppb	#	86
50)	1,4-Dioxane	8.51	88	75444	50.00 ppb		91
51)	Dibromomethane	8.49	93	324107	50.00 ppb		92
52)	Bromodichloromethane	8.79	83	445262	50.00 ppb		97
53)	Methylacrylonitrile	5.89	41	2504801	50.03 ppb		98
54)	4-methly-2-pentanone	10.04	43	403530	50.00 ppb	#	91
55)	2-Hexanone	11.77	43	272933	50.00 ppb	#	96
56)	cis-1,3-Dichloropropene	10.89	75	477074	50.00 ppb		86
57)	Toluene	10.23	92	854978	50.00 ppb		98
58)	2-Chloroethylvinylether	10.23	63	86983	50.00 ppb		100
59)	Octane	0.00	43		No Calib	#	
60)	Isobutyl acetate	8.50	43	25004	50.00 ppb		99
61)	trans-1,3-Dichloropropene	9.68	75	575986	50.00 ppb		89
62)	1,1,2-Trichloroethane	11.25	83	312168	50.00 ppb		92
63)	1,2-Dibromoethane	12.15	107	451303	50.00 ppb		98
64)	Tetrachloroethene	11.27	166	469343	50.00 ppb		99
65)	1,3-Dichloropropane	11.57	76	517930	50.00 ppb		100
68)	Dibromochloromethane	11.95	129	437171	50.00 ppb		98
69)	Chlorobenzene	13.13	112	1063995	50.00 ppb		92
70)	1,1,1,2-Tetrachloroethane	13.36	131	342554	50.00 ppb		96
71)	Ethylbenzene	13.33	91	1407697	50.00 ppb		95
72)	Nonene	0.00	55		No Calib	#	
73)	1-Chlorohexane	10.23	91	1387518	50.00 ppb		100
74)	m&p-Xylenes	13.60	106	1234562	50.00 ppb		90
75)	Ethyl methacrylate	11.01	69	434466	50.00 ppb		93
76)	Cyclohexanone	11.77	42	15362	50.00 ppb		83

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1954.D
Acq On : 13 Oct 99 20:35
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;
Quant Time: Oct 14 0:10 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	0-Xylene	14.42	106	585415	50.00 ppb	88
78)	Styrene	14.48	104	1100185	50.00 ppb	85
79)	Bromoform	14.87	173	310117	50.00 ppb	99
80)	Isopropylbenzene	15.18	105	1328899	50.00 ppb	98
82)	Bromobenzene	15.81	156	440790	50.00 ppb	91
84)	1,1,2,2-Tetrachloroethane	16.04	83	437990	50.00 ppb	99
85)	1,2,3-Trichloropropane	10.89	75	477074	50.00 ppb	86
86)	n-Propylbenzene	16.05	91	1504177	50.00 ppb	99
87)	2-Chlorotoluene	16.23	91	920985	49.99 ppb	97
88)	4-Chlorotoluene	16.49	91	995893	50.00 ppb	100
89)	1,3,5-Trimethylbenzene	16.46	105	1019129	50.01 ppb	97
90)	tert-Butylbenzene	17.09	119	861146	50.00 ppb	98
91)	1,2,4-Trimethylbenzene	17.24	105	1043143	50.00 ppb	96
92)	sec-Butylbenzene	17.58	105	1401252	50.00 ppb	96
93)	1,3-Dichlorobenzene	17.86	146	699917	50.00 ppb	98
94)	4-isopropyltoluene	17.97	119	1083662	50.00 ppb	98
95)	1,4-Dichlorobenzene	18.10	146	716746	50.00 ppb	95
96)	1,2-Dichlorobenzene	18.91	146	651677	50.00 ppb	99
97)	n-Butylbenzene	18.88	91	1019521	50.00 ppb	96
98)	cis-1,4-dichloro-2-butene	16.17	75	180546	55.17 ppb	96
99)	trans-1,4-dichloro-2-buten	16.46	53	25801	50.51 ppb	95
100)	1,2-dibromo-3-chloropropan	15.81	75	35457	50.00 ppb	83
101)	Pentachloroethane	17.19	167	194738	50.00 ppb	95
102)	1,2,4-Trichlorobenzene	21.64	180	439740	49.64 ppb	99
103)	Hexachlorobutadiene	21.84	225	171868	50.00 ppb	99
104)	Naphthalene	21.97	128	1134145	49.97 ppb	100
105)	1,2,3-Trichlorobenzene	22.33	182	406864	50.00 ppb	100
106)	2-Methyl Naphthalene	0.00	142		Not Detected	
107)	1,3-Dimethyl Naphthalene	0.00	156		No Calib	

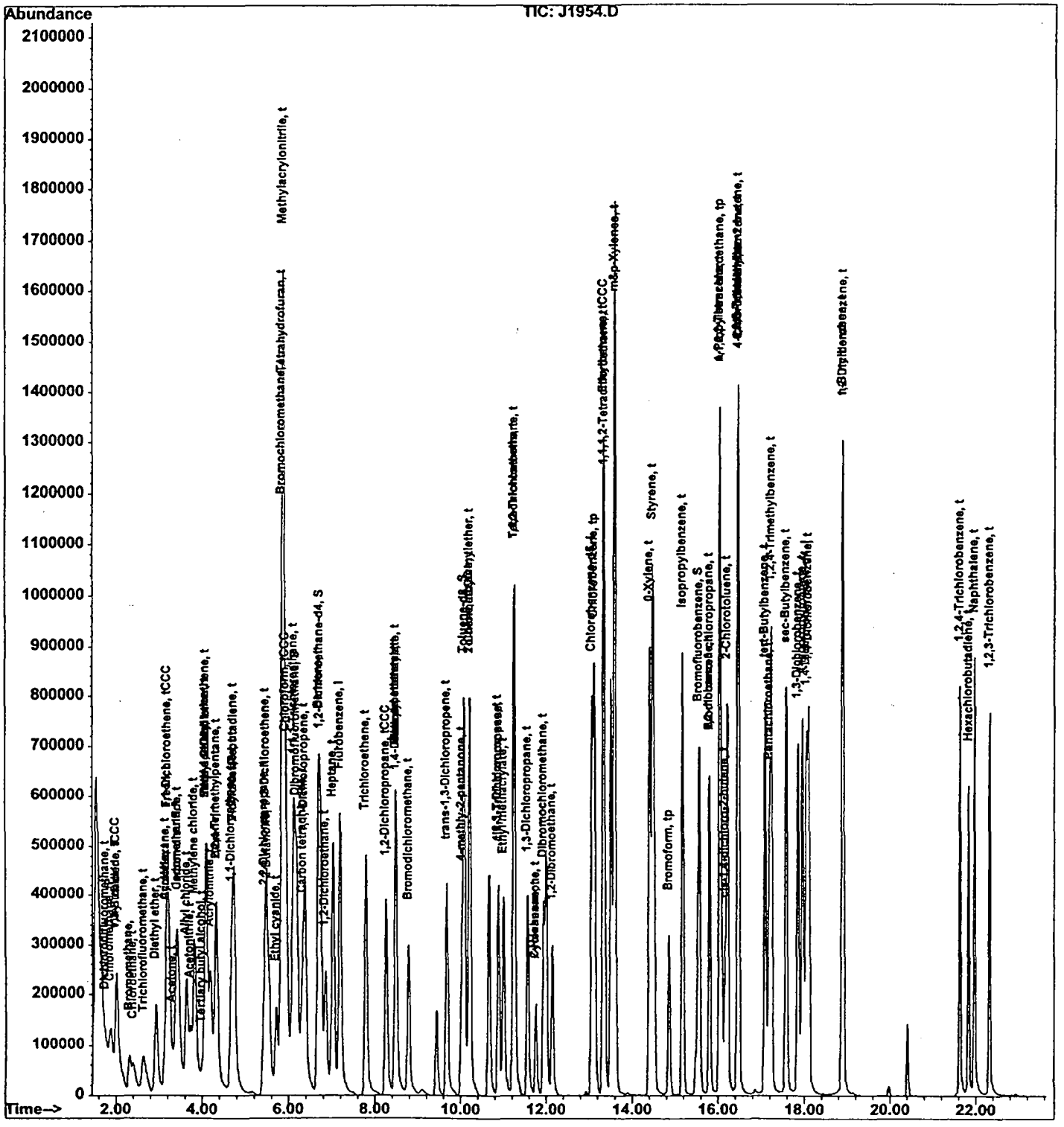
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101399\J1954.D
Acq On : 13 Oct 99 20:35
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;
Quant Time: Oct 14 0:10 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 02:59:26 1999
Response via : Single Level Calibration



Quantitation Report (Not Reviewed)

000137

Data File : C:\HPCHEM\1\DATA\101399\J1957.D
Acq On : 13 Oct 99 22:04
Sample : VSTD005;MSJ;;
Misc : VSTD005;LOW;SO;
Quant Time: Oct 14 2:53 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 00:35:24 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.20	96	1272617	50.00 ppb	0.00
66) Chlorobenzene-d5	13.07	117	969804	50.00 ppb	0.00
83) 1,4-Dichlorobenzene-d4	18.05	152	354431	50.00 ppb	0.00
System Monitoring Compounds					
39) Dibromofluoromethane	6.21	113	431691	50.28 ppb	0.01
Surrogate Spike 50.000	Range 86 - 118		Recovery = 100.56%		
43) 1,2-Dichloroethane-d4	6.75	65	281182	56.94 ppb	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 113.88%		
67) Toluene-d8	10.09	98	1143230	49.72 ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 99.44%		
81) Bromofluorobenzene	15.57	95	376570	48.01 ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 96.02%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.78	85	9633	3.29 ppb	100
3) 1,3-Butadiene	0.00	54		Not Detected	
4) Chlorotrfluoroethene	0.00	116		Not Detected	
5) Chloromethane	1.88	50	26308	4.10 ppb	89
6) Vinyl chloride	2.00	62	22496	4.50 ppb	97
7) Bromomethane	2.33	96	18105	6.39 ppb	93
8) Chloroethane	2.44	64	11238	5.30 ppb #	35
9) Trichlorofluoromethane	2.65	101	17329	4.03 ppb	100
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	2.95	59	26838	5.06 ppb	98
12) Freon	3.22	101	44036	5.48 ppb	90
13) Tertiary butyl alcohol	0.00	59		Not Detected	
14) 1,1-Dichloroethene	3.22	96	21916	4.35 ppb	95
15) Acetonitrile	3.75	40	23852	7.78 ppb #	1
16) Methylene chloride	3.85	84	42666	6.00 ppb	98
17) Acrolein	3.20	56	14543	3.72 ppb	100
18) Acrylonitrile	4.21	53	36264	4.38 ppb	98
19) trans,1,2-Dichloroethene	4.10	96	28243	4.28 ppb	97
20) Acetone	3.35	43	10977	6.38 ppb m	82
21) Carbon disulfide	3.45	76	83500	5.83 ppb m	100
22) Hexane	4.35	57	51154	5.39 ppb	96
23) 1,1-Dichloroethane	4.68	63	43465	4.26 ppb	97
24) Methyl t-butyl ether	4.09	73	51662	4.09 ppb	100
25) Vinyl acetate	4.73	43	63167	4.57 ppb	100
26) 2-chloro-1,3-butadiene	4.75	53	32029	4.92 ppb	95
27) 2,2-Dichloropropane	5.44	77	24211	4.06 ppb	94
28) cis-1,2-Dichloroethene	5.48	96	31921	4.02 ppb	95
29) 2-Butanone	5.56	72	3564	4.47 ppb m	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1957.D
Acq On : 13 Oct 99 22:04
Sample : VSTD005;MSJ;;
Misc : VSTD005;LOW;SO;
Quant Time: Oct 14 2:53 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 00:35:24 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Iodomethane	3.41	142	60235	4.50 ppb		97
31)	Allyl chloride	3.65	76	19099	5.04 ppb	m	7
32)	Cyclohexane	3.20	56	14543	3.72 ppb	#	81
33)	Ethyl cyanide	5.72	54	36722	4.31 ppb		100
34)	Ethyl acetate	4.09	43	10394	4.49 ppb	#	94
35)	Bromochloromethane	5.84	128	16557	3.62 ppb		89
36)	Tetrahydrofuran	5.88	42	18779	5.08 ppb		84
37)	Chloroform	5.96	83	43451	3.91 ppb		88
38)	1,1,1-Trichloroethane	6.15	97	32347	4.43 ppb		94
40)	Carbon tetrachloride	6.34	117	30429	4.51 ppb		98
41)	1,1,-Dichloropropene	6.39	75	34370	4.59 ppb		98
42)	2,2,4-Trimethylpentane	4.35	57	51154	5.39 ppb		86
44)	Benzene	6.70	78	105417	4.51 ppb		100
45)	1,2-Dichloroethane	6.88	62	30252	4.36 ppb		97
46)	Heptane	7.02	43	50726	4.86 ppb		94
47)	Trichloroethene	7.79	95	33516	4.68 ppb		98
48)	1,2-Dichloropropane	8.26	63	30181	4.28 ppb	#	87
49)	Methylmethacrylate	8.50	69	19178	4.65 ppb		93
50)	1,4-Dioxane	8.53	88	4812	3.58 ppb		91
51)	Dibromomethane	8.50	93	22712	3.94 ppb		96
52)	Bromodichloromethane	8.79	83	34766	4.39 ppb		96
53)	Methylacrylonitrile	5.89	41	224353	5.03 ppb		95
54)	4-methly-2-pentanone	10.04	43	35041	4.88 ppb	#	1
55)	2-Hexanone	11.77	43	18754	3.86 ppb	#	95
56)	cis-1,3-Dichloropropene	10.90	75	36646	4.32 ppb		94
57)	Toluene	10.22	92	76124	5.00 ppb		97
58)	2-Chloroethylvinylether	10.23	63	7406	4.79 ppb		100
59)	Octane	0.00	43		No Calib	#	
60)	Isobutyl acetate	8.50	43	1956	4.40 ppb	#	45
61)	trans-1,3-Dichloropropene	9.69	75	46355	4.52 ppb		98
62)	1,1,2-Trichloroethane	11.24	83	26346	4.74 ppb		98
63)	1,2-Dibromoethane	12.15	107	36755	4.58 ppb	#	99
64)	Tetrachloroethene	11.26	166	51422	6.16 ppb		94
65)	1,3-Dichloropropane	11.58	76	44160	4.79 ppb		99
68)	Dibromochloromethane	11.94	129	34126	4.22 ppb		92
69)	Chlorobenzene	13.13	112	92523	4.70 ppb		94
70)	1,1,1,2-Tetrachloroethane	13.36	131	25726	4.06 ppb		96
71)	Ethylbenzene	13.33	91	129150	4.96 ppb		99
72)	Nonene	0.00	55		No Calib		
73)	1-Chlorohexane	10.22	91	126140	4.91 ppb		82
74)	m&p-Xylenes	13.59	106	112244	4.91 ppb		97
75)	Ethyl methacrylate	11.02	69	35175	4.37 ppb		98
76)	Cyclohexanone	11.99	42	1104	3.88 ppb	#	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1957.D
Acq On : 13 Oct 99 22:04
Sample : VSTD005;MSJ;;
Misc : VSTD005;LOW;SO;
Quant Time: Oct 14 2:53 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 00:35:24 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
77)	0-Xylene	14.41	106	49915	4.61 ppb		94
78)	Styrene	14.48	104	91691	4.50 ppb		99
79)	Bromoform	14.86	173	21624	3.77 ppb		100
80)	Isopropylbenzene	15.19	105	119654	4.87 ppb		98
82)	Bromobenzene	15.81	156	37098	4.55 ppb		94
84)	1,1,2,2-Tetrachloroethane	16.05	83	32182	4.45 ppb		99
85)	1,2,3-Trichloropropane	10.90	75	36646	4.65 ppb		92
86)	n-Propylbenzene	16.05	91	136727	5.51 ppb		100
87)	2-Chlorotoluene	16.23	91	86216	5.67 ppb		97
88)	4-Chlorotoluene	16.49	91	91350	5.56 ppb		99
89)	1,3,5-Trimethylbenzene	16.47	105	92367	5.49 ppb		97
90)	tert-Butylbenzene	17.10	119	83843	5.90 ppb		99
91)	1,2,4-Trimethylbenzene	17.23	105	96030	5.58 ppb		96
92)	sec-Butylbenzene	17.59	105	138260	5.98 ppb		99
93)	1,3-Dichlorobenzene	17.85	146	62274	5.39 ppb		94
94)	4-isopropyltoluene	17.96	119	104630	5.85 ppb		96
95)	1,4-Dichlorobenzene	18.10	146	65263	5.51 ppb		91
96)	1,2-Dichlorobenzene	18.92	146	55025	5.11 ppb		97
97)	n-Butylbenzene	18.89	91	100895	5.99 ppb		95
98)	cis-1,4-dichloro-2-butene	16.18	75	12232	4.10 ppb		85
99)	trans-1,4-dichloro-2-buten	16.47	53	1939	4.55 ppb		90
100)	1,2-dibromo-3-chloropropan	15.81	75	3597	6.14 ppb	#	49
101)	Pentachloroethane	17.19	167	12639	3.93 ppb		88
102)	1,2,4-Trichlorobenzene	21.64	180	44762	6.17 ppb		94
103)	Hexachlorobutadiene	21.84	225	18606	6.56 ppb		94
104)	Naphthalene	21.98	128	100805	5.38 ppb		100
105)	1,2,3-Trichlorobenzene	22.32	182	41793	6.22 ppb		100
106)	2-Methyl Naphthalene	0.00	142		Not Detected		
107)	1,3-Dimethyl Naphthalene	0.00	156		No Calib		

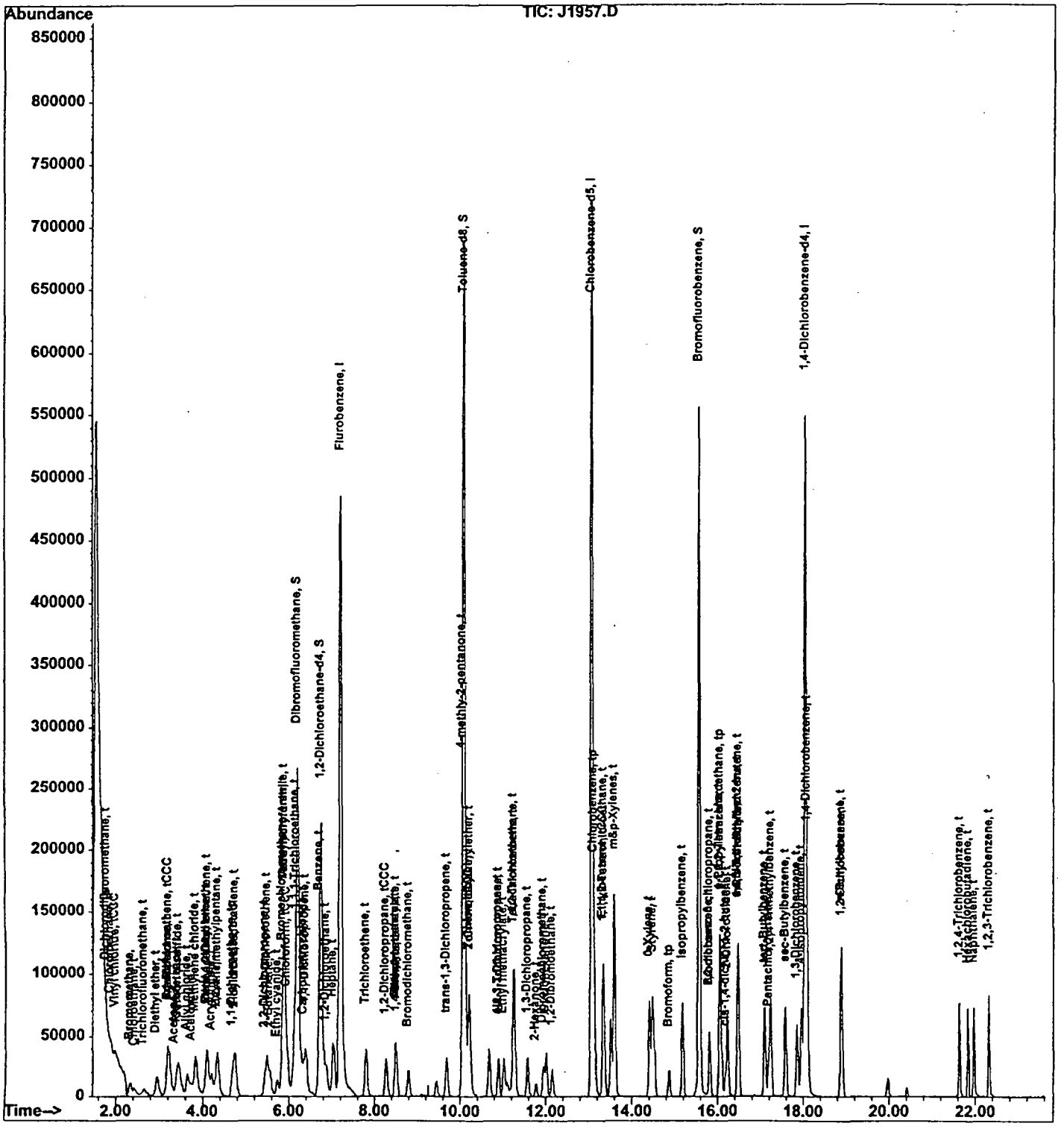
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101399\J1957.D
Acq On : 13 Oct 99 22:04
Sample : VSTD005;MSJ;;
Misc : VSTD005;LOW;SO;
Quant Time: Oct 14 2:53 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 02:59:26 1999
Response via : Single Level Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101499\J1983.D
Acq On : 14 Oct 99 17:08
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Flurobenzene	1.000	1.000	0.0	106	-0.04
2	t	Dichlorodifluoromethane	0.124	0.127	-2.4	117	0.00
3	T	1,3-Butadiene	0.135	0.126	6.7	110	-0.02
4	tP	Chloromethane	0.246	0.264	-7.3	111	0.00
5	tCCC	Vinyl chloride	0.193	0.208	-7.8	112	0.00
6		Bromomethane	0.088	0.120	-36.4#	114	0.00
7	t	Chloroethane	0.060	0.085	-41.7#	108	-0.01
8	t	Trichlorofluoromethane	0.145	0.161	-11.0	101	-0.04
9	t	Diethyl ether	0.197	0.224	-13.7	114	-0.02
10	t	Freon	0.345	0.333	3.5	112	-0.03
11	t	Tertiary butyl alcohol	0.034	0.031	8.8	82	-0.03
12	tCCC	1,1-Dichloroethene	0.203	0.166	18.2	89	-0.02
13	t	Acetonitrile	0.015	0.018	-20.0	154	-0.02
14	t	Methylene chloride	0.282	0.227	19.5	86	-0.01
15	t	Acrolein	0.139	0.160	-15.1	110	0.00
16	t	Acrylonitrile	0.307	0.335	-9.1	109	-0.02
17	t	trans,1,2-Dichloroethene	0.261	0.218	16.5	89	-0.02
18	t	Acetone	0.065	0.066	-1.5	103	-0.01
19	t	Carbon disulfide	0.619	0.666	-7.6	126	-0.02
20	t	Hexane	0.397	0.396	0.3	113	-0.02
21	tp	1,1-Dichloroethane	0.388	0.336	13.4	89	-0.03
22	t	Methyl t-butyl ether	0.429	0.426	0.7	91	-0.03
23	t	Vinyl acetate	0.518	0.659	-27.2#	129	-0.03
24	t	2-chloro-1,3-butadiene	0.264	0.308	-16.7	128	-0.03
25	t	2,2-Dichloropropane	0.234	0.194	17.1	88	-0.03
26	t	cis-1,2-Dichloroethene	0.299	0.261	12.7	89	-0.03
27	t	2-Butanone	0.029	0.030	-3.4	102	-0.02
28	t	Iodomethane	0.544	0.644	-18.4	130	-0.03
29	t	Allyl chloride	0.160	0.164	-2.5	117	-0.02
30	t	Cyclohexane	0.139	0.160	-15.1	110	0.00
31	t	Ethyl cyanide	0.315	0.362	-14.9	115	-0.03
32	t	Ethyl acetate	0.079	0.077	2.5	90	-0.02
33	t	Bromochloromethane	0.168	0.142	15.5	84	-0.04
34	t	Tetrahydrofuran	0.129	0.151	-17.1	110	-0.03
35	tCCC	Chloroform	0.425	0.378	11.1	92	-0.03
36	t	1,1,1-Trichloroethane	0.288	0.233	19.1	86	-0.04
37	S	Dibromofluoromethane	0.342	0.331	3.2	104	-0.03
38	t	Carbon tetrachloride	0.278	0.216	22.3	87	-0.03
39	t	1,1,-Dichloropropene	0.306	0.245	19.9	88	-0.03
40	t	2,2,4-Trimethylpentane	0.397	0.396	0.3	113	-0.02
41	S	1,2-Dichloroethane-d4	0.224	0.208	7.1	103	-0.04
42	t	Benzene	0.892	0.773	13.3	89	-0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101499\J1983.D Vial: 100
Acq On : 14 Oct 99 17:08 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
43	t	1,2-Dichloroethane	0.252	0.207	17.9	80	-0.03
44	t	Heptane	0.417	0.417	0.0	108	-0.04
45	t	Trichloroethene	0.279	0.233	16.5	88	-0.04
46	tCCC	1,2-Dichloropropane	0.264	0.231	12.5	89	-0.03
47	t	Methylmethacrylate	0.149	0.175	-17.4	115	-0.04
48	t	1,4-Dioxane	0.002	0.003	-50.0#	105	-0.05
49	t	Dibromomethane	0.200	0.165	17.5	77	-0.05
50	t	Bromodichloromethane	0.299	0.252	15.7	86	-0.04
51	t	Methylacrylonitrile	1.622	1.865	-15.0	113	-0.04
52	t	4-methly-2-pentanone	0.026	0.028	-7.7	104	-0.04
53	t	2-Hexanone	0.167	0.190	-13.8	106	-0.05
54	t	cis-1,3-Dichloropropene	0.311	0.263	15.4	84	-0.04
55	tCCC	Toluene	0.585	0.501	14.4	89	-0.04
56	t	2-Chloroethylvinylether	0.060	0.050	16.7	88	-0.05
57	t	Octane	0.204	0.220	-7.8	101	-0.03
58	t	Isobutyl acetate	0.016	0.017	-6.3	101	-0.04
59	t	trans-1,3-Dichloropropene	0.382	0.329	13.9	87	-0.04
60	t	1,1,2-Trichloroethane	0.197	0.166	15.7	81	-0.05
61	t	1,2-Dibromoethane	0.292	0.237	18.8	80	-0.04
62	t	Tetrachloroethene	0.330	0.246	25.5#	80	-0.04
63	t	1,3-Dichloropropane	0.336	0.285	15.2	83	-0.04
64	I	Chlorobenzene-d5	1.000	1.000	0.0	103	-0.04
65	S	Toluene-d8	1.194	1.212	-1.5	105	-0.04
66	t	Dibromochloromethane	0.404	0.335	17.1	83	-0.04
67	tp	Chlorobenzene	0.986	0.827	16.1	84	-0.04
68	t	1,1,1,2-Tetrachloroethane	0.313	0.257	17.9	81	-0.04
69	tCCC	Ethylbenzene	1.294	1.134	12.4	87	-0.04
70	t	1-Chlorohexane	1.311	1.131	13.7	88	-0.05
71	t	m&p-Xylenes	0.556	0.494	11.2	87	-0.04
72	t	Ethyl methacrylate	0.389	0.465	-19.5	116	-0.04
73	t	Cyclohexanone	0.003	0.003	0.0	102	-0.04
74	t	0-Xylene	0.536	0.455	15.1	84	-0.04
75	t	Styrene	0.977	0.846	13.4	83	-0.04
76	tp	Bromoform	0.278	0.217	21.9	76	-0.04
77	t	Isopropylbenzene	1.253	1.052	16.0	86	-0.04
78	S	Bromofluorobenzene	0.403	0.395	2.0	101	-0.04
79	t	Bromobenzene	0.411	0.333	19.0	82	-0.04
80	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	-0.05
81	tp	1,1,2,2-Tetrachloroethane	0.882	0.781	11.5	74	-0.03
82	t	1,2,3-Trichloropropane	1.054	0.956	9.3	84	-0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101499\J1983.D Vial: 100
Acq On : 14 Oct 99 17:08 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
83	t	n-Propylbenzene	3.402	3.062	10.0	85	-0.03
84	t	2-Chlorotoluene	2.110	1.840	12.8	83	-0.03
85	t	4-Chlorotoluene	2.195	1.949	11.2	82	-0.04
86	t	1,3,5-Trimethylbenzene	2.261	2.015	10.9	82	-0.03
87	t	tert-Butylbenzene	2.036	1.716	15.7	83	-0.03
88	t	1,2,4-Trimethylbenzene	2.368	2.030	14.3	81	-0.04
89	t	sec-Butylbenzene	3.298	2.769	16.0	82	-0.04
90	t	1,3-Dichlorobenzene	1.626	1.358	16.5	81	-0.04
91	t	4-isopropyltoluene	2.574	2.120	17.6	82	-0.04
92	t	1,4-Dichlorobenzene	1.667	1.388	16.7	81	-0.04
93	t	1,2-Dichlorobenzene	1.440	1.217	15.5	78	-0.04
94	t	n-Butylbenzene	2.340	1.943	17.0	80	-0.03
95	t	cis-1,4-dichloro-2-butene	0.377	0.443	-17.5	102	-0.03
96	t	trans-1,4-dichloro-2-butene	0.055	0.051	7.3	83	-0.04
97	t	1,2-dibromo-3-chloropropane	0.077	0.066	14.3	78	-0.04
98	t	Pentachloroethane	0.494	0.633	-28.1#	136	-0.04
99	t	1,2,4-Trichlorobenzene	1.001	0.776	22.5	74	-0.02
100	t	Hexachlorobutadiene	0.446	0.303	32.1#	73	-0.03
101	t	Naphthalene	2.169	1.590	26.7#	58	-0.02
102	t	1,2,3-Trichlorobenzene	0.853	0.666	21.9	68	-0.03
103	t	2-Methyl Naphthalene	0.000	0.000	0.0	0#	-17.92#
104	t	1,3-Dimethyl Naphthalene	1.009	0.863	14.5	82	-0.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\101499\J1983.D Vial: 100
Acq On : 14 Oct 99 17:08 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00
Quant Time: Oct 14 18:37 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\J1954.D
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\J1954.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Flurobenzene	7.15	96	1517694	50.00	ppb	-0.04
64) Chlorobenzene-d5	13.04	117	1080643	50.00	ppb	-0.04
80) 1,4-Dichlorobenzene-d4	18.01	152	417139	50.00	ppb	-0.05
System Monitoring Compounds						
37) Dibromofluoromethane	6.16	113	501859	49.02	ppb	-0.03
Surrogate Spike 50.000	Range 86 - 118		Recovery = 98.04%			
41) 1,2-Dichloroethane-d4	6.70	65	315635	48.47	ppb	-0.04
Surrogate Spike 50.000	Range 80 - 120		Recovery = 96.94%			
65) Toluene-d8	10.05	98	1310183	51.14	ppb	-0.04
Surrogate Spike 50.000	Range 88 - 110		Recovery = 102.28%			
78) Bromofluorobenzene	15.54	95	427221	48.88	ppb	-0.04
Surrogate Spike 50.000	Range 86 - 115		Recovery = 97.76%			

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.76	85	193210	55.30	ppb		100
3) 1,3-Butadiene	2.00	54	190802	51.76	ppb		94
4) Chloromethane	1.87	50	401017	52.42	ppb		98
5) Vinyl chloride	2.00	62	315918	52.95	ppb		97
6) Bromomethane	2.32	96	181430	53.69	ppb		76
7) Chloroethane	2.40	64	129036	51.06	ppb		96
8) Trichlorofluoromethane	2.61	101	244847	47.73	ppb		97
9) Diethyl ether	2.91	59	339217	53.63	ppb		97
10) Freon	3.17	101	505865	52.78	ppb		98
11) Tertiary butyl alcohol	3.96	59	47749	38.65	ppb		100
12) 1,1-Dichloroethene	3.19	96	252236	41.95	ppb		95
13) Acetonitrile	3.71	40	265680	726.81	ppb	#	77
14) Methylene chloride	3.81	84	343963	40.55	ppb		98
15) Acrolein	3.15	56	242369	51.95	ppb		100
16) Acrylonitrile	4.17	53	509102	51.52	ppb		100
17) trans,1,2-Dichloroethene	4.08	96	331389	42.11	ppb		99
18) Acetone	3.32	43	99837	48.69	ppb		97
19) Carbon disulfide	3.43	76	1010787	59.19	ppb	m	100
20) Hexane	4.31	57	600396	53.02	ppb		98
21) 1,1-Dichloroethane	4.65	63	510704	41.96	ppb		99
22) Methyl t-butyl ether	4.06	73	646287	42.89	ppb		100
23) Vinyl acetate	4.70	43	1000781	60.77	ppb		100
24) 2-chloro-1,3-butadiene	4.71	53	467814	60.24	ppb		96
25) 2,2-Dichloropropane	5.41	77	294741	41.46	ppb		100
26) cis-1,2-Dichloroethene	5.45	96	396206	41.86	ppb		100
27) 2-Butanone	5.50	72	45950	48.30	ppb		91
28) Iodomethane	3.38	142	977724	61.19	ppb		100
29) Allyl chloride	3.62	76	249324	55.21	ppb	m	13

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101499\J1983.D
Acq On : 14 Oct 99 17:08
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;
Quant Time: Oct 14 18:37 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\J1954.D
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\J1954.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Cyclohexane	3.15	56	242369	51.95 ppb	#	92
31)	Ethyl cyanide	5.69	54	549842	54.13 ppb		97
32)	Ethyl acetate	4.06	43	117518	42.59 ppb	#	98
33)	Bromochloromethane	5.80	128	216164	39.58 ppb		97
34)	Tetrahydrofuran	5.82	42	229313	51.97 ppb		97
35)	Chloroform	5.92	83	573572	43.23 ppb		97
36)	1,1,1-Trichloroethane	6.10	97	353823	40.61 ppb		99
38)	Carbon tetrachloride	6.30	117	328158	40.77 ppb		99
39)	1,1,-Dichloropropene	6.36	75	371262	41.58 ppb		99
40)	2,2,4-Trimethylpentane	4.31	57	600396	53.02 ppb		98
42)	Benzene	6.66	78	1173129	42.06 ppb		98
43)	1,2-Dichloroethane	6.83	62	313620	37.91 ppb		97
44)	Heptane	7.00	43	632543	50.82 ppb		98
45)	Trichloroethene	7.75	95	354368	41.52 ppb		99
46)	1,2-Dichloropropane	8.24	63	351138	41.74 ppb		100
47)	Methylmethacrylate	8.45	69	266234	54.14 ppb		99
48)	1,4-Dioxane	8.46	88	78949	986.38 ppb		100
49)	Dibromomethane	8.44	93	250503	36.43 ppb		94
50)	Bromodichloromethane	8.75	83	382739	40.51 ppb		97
51)	Methylacrylonitrile	5.85	41	2830890	53.27 ppb		99
52)	4-methly-2-pentanone	10.00	43	417835	488.00 ppb		91
53)	2-Hexanone	11.72	43	288848	49.88 ppb		99
54)	cis-1,3-Dichloropropene	10.85	75	398652	39.38 ppb		99
55)	Toluene	10.18	92	760957	41.95 ppb		99
56)	2-Chloroethylvinylether	10.17	63	76321	41.35 ppb		100
57)	Octane	6.71	43	333868	47.65 ppb		97
58)	Isobutyl acetate	8.46	43	25219	47.53 ppb		88
59)	trans-1,3-Dichloropropene	9.64	75	500014	40.91 ppb		99
60)	1,1,2-Trichloroethane	11.20	83	252109	38.06 ppb		98
61)	1,2-Dibromoethane	12.11	107	360014	37.60 ppb		98
62)	Tetrachloroethene	11.23	166	373412	37.50 ppb		98
63)	1,3-Dichloropropane	11.53	76	432343	39.34 ppb		100
66)	Dibromochloromethane	11.91	129	361662	40.12 ppb		99
67)	Chlorobenzene	13.09	112	893728	40.73 ppb		100
68)	1,1,1,2-Tetrachloroethane	13.32	131	277542	39.29 ppb		99
69)	Ethylbenzene	13.29	91	1225225	42.20 ppb		99
70)	1-Chlorohexane	10.17	91	1221699	42.70 ppb		99
71)	m&p-Xylenes	13.56	106	1068336	83.92 ppb		100
72)	Ethyl methacrylate	10.97	69	501969	56.02 ppb		100
73)	Cyclohexanone	11.73	42	15698	247.76 ppb	#	83
74)	0-Xylene	14.38	106	491724	40.73 ppb		99
75)	Styrene	14.44	104	914088	40.29 ppb		100
76)	Bromoform	14.83	173	234556	36.68 ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101499\J1983.D
Vial: 100
Acq On : 14 Oct 99 17:08
Operator:
Sample : VSTD050;MSJ;;
Inst : GC/MS Ins
Misc : VSTD050;LOW;SO;
Multiplr: 1.00
Quant Time: Oct 14 18:37 1999
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\J1954.D
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\J1954.D

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	Isopropylbenzene	15.14	105	1136511	41.47 ppb	100
79)	Bromobenzene	15.77	156	360176	39.62 ppb	98
81)	1,1,2,2-Tetrachloroethane	16.01	83	325691	38.27 ppb	98
82)	1,2,3-Trichloropropane	10.85	75	398652	43.00 ppb	98
83)	n-Propylbenzene	16.02	91	1277404	43.70 ppb	98
84)	2-Chlorotoluene	16.20	91	767597	42.89 ppb	98
85)	4-Chlorotoluene	16.45	91	812891	42.01 ppb	99
86)	1,3,5-Trimethylbenzene	16.43	105	840641	42.45 ppb	100
87)	tert-Butylbenzene	17.06	119	715930	42.78 ppb	100
88)	1,2,4-Trimethylbenzene	17.20	105	846917	41.78 ppb	97
89)	sec-Butylbenzene	17.54	105	1155002	42.42 ppb	97
90)	1,3-Dichlorobenzene	17.82	146	566374	41.64 ppb	99
91)	4-isopropyltoluene	17.93	119	884290	41.99 ppb	99
92)	1,4-Dichlorobenzene	18.06	146	578859	41.56 ppb	98
93)	1,2-Dichlorobenzene	18.87	146	507787	40.10 ppb	99
94)	n-Butylbenzene	18.85	91	810544	40.91 ppb	100
95)	cis-1,4-dichloro-2-butene	16.14	75	184719	52.65 ppb	97
96)	trans-1,4-dichloro-2-buten	16.42	53	21293	42.47 ppb	87
97)	1,2-dibromo-3-chloropropan	15.77	75	27576	40.02 ppb	91
98)	Pentachloroethane	17.15	167	263907	69.74 ppb	99
99)	1,2,4-Trichlorobenzene	21.62	180	323580	37.87 ppb	96
100)	Hexachlorobutadiene	21.81	225	126200	37.79 ppb	99
101)	Naphthalene	21.95	128	663136	30.09 ppb	100
102)	1,2,3-Trichlorobenzene	22.29	182	277621	35.11 ppb	100
103)	2-Methyl Naphthalene	0.00	142		Not Detected	
104)	1,3-Dimethyl Naphthalene	15.77	156	360176	42.05 ppb	100

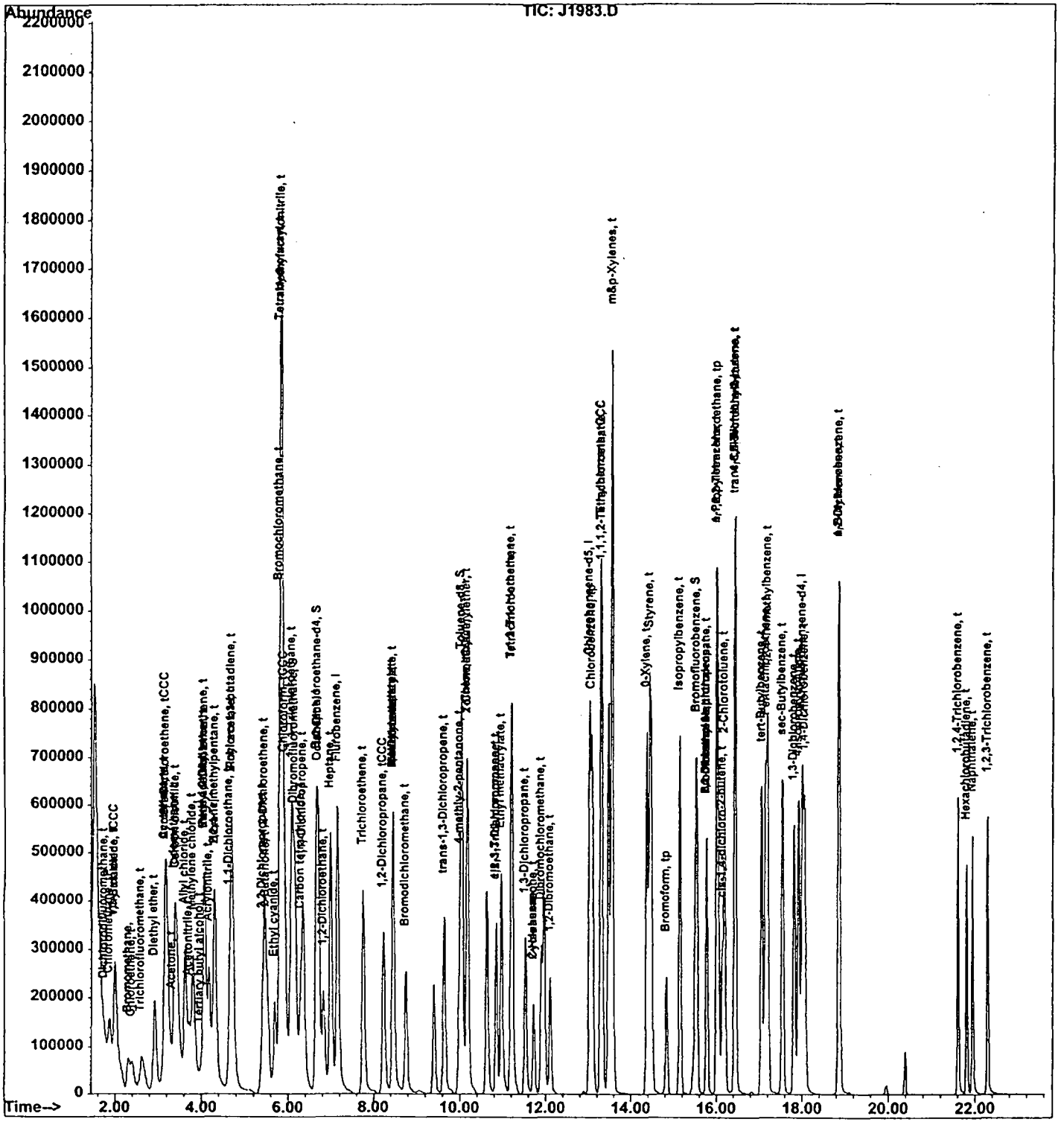
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\J1983.D
Acq On : 14 Oct 99 17:08
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;
Quant Time: Oct 14 18:37 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Single Level Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101499\I2164.D
Acq On : 14 Oct 99 18:19 pm
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	I	Fluorobenzene	1.000	1.000	0.0	105	0.04
2	t	dichlorodifluoromethane	0.452	0.397	12.2	92	0.02
3	T	1,3-Butadiene	0.229	0.289	-26.2	139	0.03
4	t	chlorotrifluoroethene	0.000	0.000	0.0	0#	-0.98#
5	tp	chloromethane	0.463	0.410	11.4	98	0.01
6	tCCC	vinyl chloride	0.433	0.404	6.7	103	0.02
7	t	bromomethane	0.263	0.222	15.8	82	0.08
8	t	chloroethane	0.173	0.181	-4.5	110	0.02
9	t	trichlorofluoromethane	0.379	0.409	-8.0	115	0.11
10	t	1,2-dichloro-1,1,2 trifluor	0.000	0.000	0.0	0#	-1.47#
11	t	Diethyl ether	0.163	0.186	-13.7	119	0.06
12		Ethyl Mercaptan	0.043	0.049	-12.1	132	0.08
13	t	freon	0.416	0.426	-2.6	120	0.09
14	t	Tertiary butyl alcohol	0.035	0.027	22.7	75	-0.11
15	tCCC	1,1-dichloroethene	0.235	0.230	2.3	135	0.08
16	t	Acetonitrile	0.001	0.001	-33.9#	169	0.03
17	t	methylene chloride	0.442	0.335	24.3	97	0.06
18	t	acrolein	0.032	0.027	14.7	103	0.05
19	t	acrylonitrile	0.042	0.051	-23.5	143	0.03
20	t	trans-1,2-dichloroethene	0.296	0.272	8.1	98	0.06
21	t	acetone	0.136	0.126	7.6	105	0.04
22	t	carbon disulfide	1.472	1.396	5.2	102	0.08
23	t	hexane	0.704	0.665	5.5	100	0.07
24	tp	1,1-dichloroethane	0.715	0.687	4.0	103	0.06
25	t	methyl t-butyl ether	0.540	0.465	13.9	87	0.04
26	t	vinyl acetate	0.557	0.594	-6.7	103	0.05
27	t	2-chloro-1,3-butadiene	0.493	0.517	-4.8	109	0.06
28	t	2,2-dichloropropane	0.382	0.358	6.0	100	0.07
29	t	cis-1,2-dichloroethene	0.312	0.290	6.9	98	0.06
30	t	2-butanone	0.027	0.026	1.6	95	0.02
31	t	Idomethane	0.513	0.412	19.7	89	0.07
32	t	Allyl chloride	1.462	1.378	5.7	102	0.08
33	t	cyclohexane	0.742	0.713	4.0	101	0.07
34	t	Ethyl Cyanide	0.033	0.032	2.8	100	0.00
35	t	Ethyl Acetate	0.725	0.711	2.0	102	0.05
36	t	bromochloromethane	0.151	0.151	0.1	107	0.06
37	t	tetrahydrofuran	0.086	0.088	-2.3	101	0.04
38	tCCC	chloroform	0.622	0.594	4.5	102	0.07
39	t	1,1,1-trichloroethane	0.401	0.399	0.7	106	0.07
40	S	dibromofluromethane	0.321	0.338	-5.3	111	0.07

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101499\I2164.D
Acq On : 14 Oct 99 18:19 pm
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
41	t	carbon tetrachloride	0.296	0.368	-24.2	130	0.07
42	t	1,1-dichloropropene	0.527	0.486	7.8	100	0.05
43	t	2,2,4-trimethylpentane	0.706	0.667	5.5	100	0.07
44	s	1,2-dichloroethane-d4	0.355	0.419	-18.0	129	0.05
45	t	benzene	1.437	1.243	13.5	98	0.05
46	t	1,2-dichloroethane	0.449	0.443	1.5	108	0.05
47	t	Isopropyl acetate	0.725	0.711	2.0	102	0.05
48	t	Heptane	0.725	0.711	2.0	102	0.05
49	t	trichloroethene	0.318	0.298	6.2	98	0.04
50	tCCC	1,2-dichloropropane	0.407	0.391	3.9	100	0.03
51	t	methyl methacrylate	0.148	0.151	-2.2	93	0.03
52	t	1,4-Dioxane	0.002	0.002	20.4	95	0.00
53	t	dibromomethane	0.184	0.185	-0.2	106	0.04
54	t	bromodichloromethane	0.395	0.392	0.6	104	0.04
55	t	methylacrylonitrile	0.162	0.171	-5.6	109	0.02
56	t	Propyl acetate	0.000	0.000	0.0	101	0.02
57	t	4-methyl-2-pentanone	0.248	0.255	-2.9	102	0.00
58	t	2-hexanone	0.165	0.168	-1.3	100	0.02
59	t	cis-1,3-dichloropropene	0.479	0.471	1.6	99	0.03
60	tCCC	toluene	0.653	0.604	7.5	100	0.03
61	t	2-chloroethylvinylether	0.066	0.091	-38.2#	118	0.03
62	t	Octane	0.000	0.000	0.0	107	0.06
63	t	butyl acetate	0.000	0.000	0.0	99	0.02
64	t	isobutyl acetate	0.000	0.000	0.0	96	0.02
65	t	trans-1,3-dichloropropene	0.409	0.397	2.9	99	0.02
66	t	1,1,2-trichloroethane	0.221	0.211	4.3	97	0.03
67	t	1,2-dibromoethane	0.217	0.209	3.6	100	0.03
68	t	tetrachloroethene	0.275	0.267	2.9	104	0.03
69	t	1,3-dichloropropane	0.430	0.410	4.5	99	0.03
70	i	chlorobenzene-d5	1.000	1.000	0.0	110	0.03
71	s	toluene-d8	1.285	1.245	3.1	106	0.03
72	t	dibromochloromethane	0.407	0.412	-1.1	108	0.03
73	tp	chlorobenzene	1.093	0.924	15.5	103	0.03
74	t	1,1,1,2-tetrachloroethane	0.394	0.388	1.5	108	0.02
75	tCCC	ethylbenzene	1.692	1.572	7.1	102	0.03
76	t	Nonene	0.000	0.000	0.0	101	0.06
77	t	1-chlorohexane	0.000	0.000	0.0	0#	-8.06#
78	t	m,p-Xylenes	0.577	0.562	2.6	109	0.02
79	t	ethyl methacrylate	0.000	0.000	0.0	108	0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101499\I2164.D
Acq On : 14 Oct 99 18:19 pm
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
80	t	Cyclohexanone	0.042	0.049	-16.8	118	0.00
81	t	butyl acrylate	0.000	0.000	0.0	103	0.03
82	t	cyclohexanol	0.000	0.000	0.0	100	0.00
83	t	o-xylene	0.557	0.555	0.4	108	0.02
84	t	styrene	0.914	0.936	-2.4	107	0.00
85	tp	bromoform	0.201	0.209	-3.7	110	0.02
86	t	isopropylbenzene	1.464	1.469	-0.3	108	0.02
87	S	bromoflurobenzene	0.481	0.494	-2.7	113	0.00
88	t	bromobenzene	0.408	0.402	1.5	108	0.02
89	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	120	0.02
90	tp	1,1,2,2-tetrachloroethane	0.992	0.836	15.7	100	0.00
91	t	1,2,3-trichloropropane	1.193	1.045	12.4	103	0.00
92	t	n-propylbenzene	4.236	3.842	9.3	108	0.00
93	t	2-chlorotoluene	2.581	2.326	9.9	109	0.02
94	t	4-chlorotoluene	2.850	2.591	9.1	110	0.00
95	t	1,3,5-trimethylbenzene	2.502	2.351	6.0	113	0.00
96	t	tert-butylbenzene	2.936	2.881	1.9	115	0.02
97	t	1,2,4-trimethylbenzene	2.601	2.410	7.3	112	0.02
98	t	sec-butylbenzene	3.508	3.275	6.6	112	0.00
99	t	1,3-dichlorobenzene	1.708	1.602	6.2	114	0.02
100	t	4-isopropyltoluene	2.736	2.708	1.0	117	0.02
101	t	1,4-dichlorobenzene	1.800	1.633	9.3	114	0.00
102	t	1,2-dichlorobenzene	1.583	1.450	8.4	113	0.00
103	t	n-butylbenzene	3.046	2.869	5.8	113	0.00
104	t	cis-1,4-dichloro-2-butene	1.166	1.043	10.6	103	0.00
105	t	trans-1,4-dichloro-2-butene	0.214	0.219	-2.5	111	0.00
106	t	1,2-dibromo-3-chloropropane	0.149	0.121	18.9	102	0.00
107	t	pentachloroethane	0.457	0.478	-4.6	118	0.00
108	t	1,2,4-trichlorobenzene	0.779	0.753	3.3	129	0.00
109	t	hexachlorobutadiene	0.465	0.502	-8.1	144	0.00
110	t	naphthalene	2.009	1.613	19.7	107	0.00
111	t	1,2,3-trichlorobenzene	0.000	0.000	0.0	129	0.00
112	t	2-Methyl Naphthalene	0.000	0.000	0.0	0#	-17.01#
113	t	1,3-Dimethyl Naphthalene	0.000	0.000	0.0	125	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2164.D
Acq On : 14 Oct 99 6:19 pm
Sample : VSTD050;MSI;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 14 19:02 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.61	96	855222	50.00 ug/l	0.04
70) chlorobenzene-d5	14.22	117	613174	50.00 ug/l	0.03
89) 1,4-dichlorobenzene-d4	16.78	152	298297	50.00 ug/l	0.02
System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.24	113	289365	52.63 ug/l	105.26%
44) 1,2-dichloroethane-d4	7.98	65	358639	58.99 ug/l	117.98%
71) toluene-d8	11.31	98	763537	48.45 ug/l	96.91%
87) bromoflurobenzene	15.78	95	302955	51.36 ug/l	102.72%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.49	85	339746	43.91 ug/l	98
3) 1,3-Butadiene	1.92	54	246809	63.11 ug/l	99
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.74	50	350502	44.30 ug/l	99
6) vinyl chloride	1.86	62	345579	46.67 ug/l	100
7) bromomethane	2.28	96	189444	42.11 ug/l	94
8) chloroethane	2.42	64	154450	52.25 ug/l	98
9) trichlorofluoromethane	2.82	101	349966	54.01 ug/l	99
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.20	59	158711	56.83 ug/l	93
12) Ethyl Mercaptan	3.53	62	41594	56.07 ug/l #	56
13) freon	3.55	101	364691	51.29 ug/l	96
14) Tertiary butyl alcohol	4.30	59	23470	38.67 ug/l m	100
15) 1,1-dichloroethene	3.53	96	196549	48.84 ug/l	80
16) Acetonitrile	1.92	40	12176	669.56 ug/l m	1
17) methylene chloride	4.18	84	286163	37.87 ug/l	86
18) acrolein	3.32	56	93703	170.57 ug/l	100
19) acrylonitrile	1.92	53	175708	246.97 ug/l #	31
20) trans-1,2-dichloroethene	4.67	96	232892	45.95 ug/l #	69
21) acetone	4.65	43	107789	46.18 ug/l	70
22) carbon disulfide	3.94	76	1194239	47.42 ug/l	100
23) hexane	5.17	57	568870	47.23 ug/l	94
24) 1,1-dichloroethane	5.30	63	587325	48.02 ug/l	98
25) methyl t-butyl ether	4.65	73	397929	43.05 ug/l	100
26) vinyl acetate	5.38	43	508350	53.37 ug/l	100
27) 2-chloro-1,3-butadiene	5.50	53	442186	52.39 ug/l	83
28) 2,2-dichloropropane	6.33	77	306557	46.98 ug/l	90
29) cis-1,2-dichloroethene	6.32	96	248197	46.53 ug/l #	70
30) 2-butanone	6.27	72	22551	49.22 ug/l	73
31) Idomethane	3.76	142	352253	40.14 ug/l	84
32) Allyl chloride	3.94	76	1178587	47.15 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2164.D
Acq On : 14 Oct 99 6:19 pm
Sample : VSTD050;MSI;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 14 19:02 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	cyclohexane	7.63	56	609638	48.02 ug/l	#	64
34)	Ethyl Cyanide	6.40	54	277035	486.22 ug/l		95
35)	Ethyl Acetate	8.68	43	607729	49.00 ug/l	#	66
36)	bromochloromethane	6.83	128	128868	49.95 ug/l		94
37)	tetrahydrofuran	6.96	42	75475	51.15 ug/l		98
38)	chloroform	6.89	83	508225	47.75 ug/l		95
39)	1,1,1-trichloroethane	7.42	97	340840	49.66 ug/l		89
41)	carbon tetrachloride	7.84	117	314882	62.12 ug/l		96
42)	1,1-dichloropropene	7.73	75	415460	46.10 ug/l		93
43)	2,2,4-trimethylpentane	5.17	57	570245	47.23 ug/l	#	22
45)	benzene	8.12	78	1063141	43.25 ug/l		100
46)	1,2-dichloroethane	8.12	62	378530	49.25 ug/l		85
47)	Isopropyl acetate	8.68	43	607729	49.00 ug/l	#	60
48)	Heptane	8.68	43	607729	49.00 ug/l		100
49)	trichloroethene	9.30	95	255210	46.92 ug/l		91
50)	1,2-dichloropropane	9.62	63	334736	48.06 ug/l		96
51)	methyl methacrylate	9.83	69	128891	51.08 ug/l	#	89
52)	1,4-Dioxane	9.93	88	30782	796.33 ug/l	#	75
53)	dibromomethane	9.87	93	158112	50.11 ug/l		96
54)	bromodichloromethane	10.07	83	335557	49.70 ug/l		98
55)	methylacrylonitrile	6.69	41	1458940	527.87 ug/l		94
56)	Propyl acetate	0.00	43		No Calib		
57)	4-methyl-2-pentanone	10.96	43	217946	51.47 ug/l	#	91
58)	2-hexanone	12.44	43	143396	50.67 ug/l	#	93
59)	cis-1,3-dichloropropene	10.86	75	403172	49.21 ug/l		93
60)	toluene	11.42	92	516450	46.24 ug/l		98
61)	2-chloroethylvinylether	10.61	63	77902	69.10 ug/l		100
62)	Octane	0.00	43		No Calib	#	
63)	butyl acetate	0.00	43		No Calib		
64)	isobutyl acetate	0.00	43		No Calib		
65)	trans-1,3-dichloropropene	11.74	75	339400	48.56 ug/l		89
66)	1,1,2-trichloroethane	12.07	83	180766	47.85 ug/l		88
67)	1,2-dibromoethane	13.18	107	178662	48.19 ug/l		99
68)	tetrachloroethene	12.50	166	228068	48.57 ug/l		96
69)	1,3-dichloropropane	12.40	76	350997	47.77 ug/l		98
72)	dibromochloromethane	12.88	129	252588	50.55 ug/l		99
73)	chlorobenzene	14.28	112	566302	42.27 ug/l		94
74)	1,1,1,2-tetrachloroethane	14.42	131	237870	49.25 ug/l		96
75)	ethylbenzene	14.49	91	963685	46.44 ug/l		98
76)	Nonene	0.00	55		No Calib	#	
77)	1-chlorohexane	0.00	91		Not Detected		
78)	m,p-Xylenes	14.66	106	689536	97.38 ug/l		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2164.D
Acq On : 14 Oct 99 6:19 pm
Sample : VSTD050;MSI;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 14 19:02 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	0.00	69		No Calib	#	
80)	Cyclohexanone	15.67	42	30274	58.38 ug/l	#	62
81)	butyl acrylate	0.00	55		No Calib	#	
82)	cyclohexanol	0.00	57		No Calib	#	
83)	o-xylene	15.20	106	340449	49.81 ug/l		95
84)	styrene	15.22	104	573820	51.18 ug/l		78
85)	bromoform	15.45	173	127972	51.84 ug/l		96
86)	isopropylbenzene	15.63	105	900619	50.16 ug/l		95
88)	bromobenzene	15.94	156	246609	49.26 ug/l	#	75
90)	1,1,2,2-tetrachloroethane	15.87	83	249414	42.16 ug/l		97
91)	1,2,3-trichloropropane	15.94	75	311852	43.80 ug/l		61
92)	n-propylbenzene	16.02	91	1145975	45.34 ug/l		99
93)	2-chlorotoluene	16.11	91	693694	45.05 ug/l		85
94)	4-chlorotoluene	16.18	91	772850	45.46 ug/l		90
95)	1,3,5-trimethylbenzene	16.17	105	701344	46.98 ug/l		93
96)	tert-butylbenzene	16.46	119	859497	49.07 ug/l		89
97)	1,2,4-trimethylbenzene	16.49	105	718969	46.33 ug/l		91
98)	sec-butylbenzene	16.63	105	976931	46.68 ug/l		94
99)	1,3-dichlorobenzene	16.73	146	477898	46.90 ug/l		93
100)	4-isopropyltoluene	16.74	119	807680	49.48 ug/l		94
101)	1,4-dichlorobenzene	16.79	146	487135	45.37 ug/l		95
102)	1,2-dichlorobenzene	17.06	146	432403	45.79 ug/l		94
103)	n-butylbenzene	17.03	91	855930	47.10 ug/l		95
104)	cis-1,4-dichloro-2-butene	15.94	75	311101	44.71 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.96	53	65473	51.25 ug/l	#	80
106)	1,2-dibromo-3-chloropropan	17.57	75	36149	40.54 ug/l	#	64
107)	pentachloroethane	16.47	167	142651	52.29 ug/l		95
108)	1,2,4-trichlorobenzene	18.13	180	224692	48.34 ug/l		98
109)	hexachlorobutadiene	18.24	225	149796	54.05 ug/l		98
110)	naphthalene	18.30	128	481253	40.15 ug/l		100
111)	1,2,3-trichlorobenzene	0.00	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	0.00	156		No Calib		

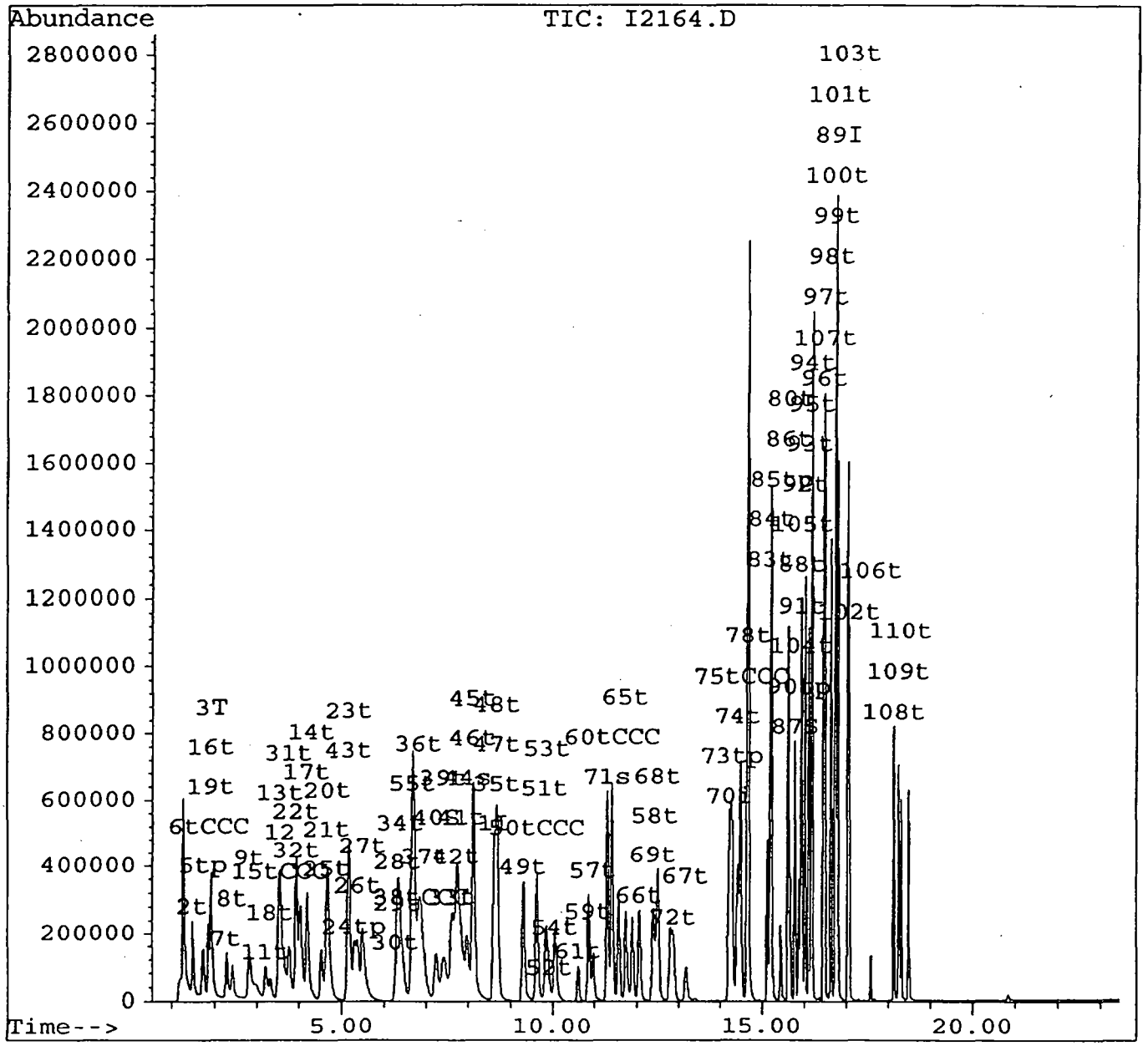
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2164.D
Acq On : 14 Oct 99 18:19 pm
Sample : VSTD050;MSI;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 14 19:02 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101599\I2224.D
Acq On : 15 Oct 99 18:29 pm
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	I	Fluorobenzene	1.000	1.000	0.0	117	0.00
2	t	dichlorodifluoromethane	0.452	0.504	-11.5	129	0.01
3	T	1,3-Butadiene	0.229	0.208	8.8	111	0.00
4	t	chlorotrifluoroethene	0.000	0.000	0.0	0#	-0.98#
5	tp	chloromethane	0.463	0.497	-7.4	131	-0.02
6	tCCC	vinyl chloride	0.433	0.496	-14.6	140	0.00
7	t	bromomethane	0.263	0.273	-3.8	112	0.04
8	t	chloroethane	0.173	0.243	-40.6#	164	-0.02
9	t	trichlorofluoromethane	0.379	0.503	-32.7#	157	0.06
10	t	1,2-dichloro-1,1,2 trifluor	0.000	0.000	0.0	0#	-1.47#
11	t	Diethyl ether	0.163	0.182	-11.5	129	0.01
12		Ethyl Mercaptan	0.043	0.049	-12.6	147	0.03
13	t	freon	0.416	0.368	11.4	115	0.03
14	t	Tertiary butyl alcohol	0.035	0.044	-25.0	134	-0.17
15	tCCC	1,1-dichloroethene	0.235	0.246	-4.6	160	0.03
16	t	Acetonitrile	0.001	0.002	-57.1#	220	0.00
17	t	methylene chloride	0.442	0.408	7.7	130	0.00
18	t	acrolein	0.032	0.025	21.4	105	0.01
19	t	acrylonitrile	0.042	0.038	9.2	117	0.00
20	t	trans-1,2-dichloroethene	0.296	0.336	-13.5	135	0.00
21	t	acetone	0.136	0.148	-8.2	137	-0.01
22	t	carbon disulfide	1.472	1.168	20.6	94	0.03
23	t	hexane	0.704	0.635	9.9	105	0.02
24	tp	1,1-dichloroethane	0.715	0.822	-15.0	136	0.00
25	t	methyl t-butyl ether	0.540	0.609	-12.7	127	-0.01
26	t	vinyl acetate	0.557	0.536	3.7	103	-0.01
27	t	2-chloro-1,3-butadiene	0.493	0.440	10.9	102	0.00
28	t	2,2-dichloropropane	0.382	0.425	-11.4	131	0.00
29	t	cis-1,2-dichloroethene	0.312	0.363	-16.4	136	0.00
30	t	2-butanone	0.027	0.027	-1.4	108	-0.04
31	t	Idomethane	0.513	0.426	17.0	102	0.02
32	t	Allyl chloride	1.462	1.153	21.1	94	0.03
33	t	cyclohexane	0.742	0.684	7.8	107	0.02
34	t	Ethyl Cyanide	0.033	0.031	7.8	105	-0.06
35	t	Ethyl Acetate	0.725	0.664	8.4	106	0.00
36	t	bromochloromethane	0.151	0.194	-28.6	153	-0.01
37	t	tetrahydrofuran	0.086	0.083	3.9	105	-0.02
38	tCCC	chloroform	0.622	0.717	-15.1	136	0.00
39	t	1,1,1-trichloroethane	0.401	0.475	-18.3	140	0.00
40	S	dibromofluromethane	0.321	0.329	-2.2	119	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101599\I2224.D
Acq On : 15 Oct 99 18:29 pm
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
41	t	carbon tetrachloride	0.296	0.408	-37.6#	160	0.00
42	t	1,1-dichloropropene	0.527	0.600	-14.0	136	0.00
43	t	2,2,4-trimethylpentane	0.706	0.636	9.9	106	0.02
44	s	1,2-dichloroethane-d4	0.355	0.406	-14.2	138	0.00
45	t	benzene	1.437	1.518	-5.7	132	0.00
46	t	1,2-dichloroethane	0.449	0.526	-17.2	143	0.00
47	t	Isopropyl acetate	0.725	0.664	8.4	106	0.00
48	t	Heptane	0.725	0.664	8.4	106	0.00
49	t	trichloroethene	0.318	0.373	-17.4	136	0.00
50	tCCC	1,2-dichloropropane	0.407	0.483	-18.6	137	-0.01
51	t	methyl methacrylate	0.148	0.144	2.6	99	-0.01
52	t	1,4-Dioxane	0.002	0.002	21.9	103	-0.03
53	t	dibromomethane	0.184	0.240	-30.3#	153	0.00
54	t	bromodichloromethane	0.395	0.464	-17.5	137	0.00
55	t	methylacrylonitrile	0.162	0.157	3.0	111	-0.04
56	t	Propyl acetate	0.000	0.000	0.0	110	-0.03
57	t	4-methyl-2-pentanone	0.248	0.238	3.9	105	-0.02
58	t	2-hexanone	0.165	0.159	3.7	105	-0.01
59	t	cis-1,3-dichloropropene	0.479	0.579	-20.8	134	-0.01
60	tCCC	toluene	0.653	0.747	-14.4	137	0.00
61	t	2-chloroethylvinylether	0.066	0.074	-11.6	105	-0.01
62	t	Octane	0.000	0.000	0.0	105	0.00
63	t	butyl acetate	0.000	0.000	0.0	107	-0.01
64	t	isobutyl acetate	0.000	0.000	0.0	104	-0.01
65	t	trans-1,3-dichloropropene	0.409	0.485	-18.7	134	-0.01
66	t	1,1,2-trichloroethane	0.221	0.269	-22.0	137	-0.01
67	t	1,2-dibromoethane	0.217	0.269	-24.1	142	-0.01
68	t	tetrachloroethene	0.275	0.337	-22.9	146	0.00
69	t	1,3-dichloropropane	0.430	0.520	-21.0	139	-0.01
70	i	chlorobenzene-d5	1.000	1.000	0.0	122	0.00
71	s	toluene-d8	1.285	1.238	3.6	117	0.00
72	t	dibromochloromethane	0.407	0.498	-22.2	145	-0.01
73	tp	chlorobenzene	1.093	1.142	-4.6	141	0.00
74	t	1,1,1,2-tetrachloroethane	0.394	0.473	-20.0	146	-0.01
75	tCCC	ethylbenzene	1.692	1.921	-13.5	138	0.00
76	t	Nonene	0.000	0.000	0.0	108	0.00
77	t	1-chlorohexane	0.000	0.000	0.0	0#	-8.06#
78	t	m,p-Xylenes	0.577	0.680	-17.7	146	0.00
79	t	ethyl methacrylate	0.000	0.000	0.0	111	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101599\I2224.D
Acq On : 15 Oct 99 18:29 pm
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
80	t	Cyclohexanone	0.042	0.041	2.5	109	0.00
81	t	butyl acrylate	0.000	0.000	0.0	105	-0.01
82	t	cyclohexanol	0.000	0.000	0.0	102	-0.04
83	t	o-xylene	0.557	0.674	-20.9	145	0.00
84	t	styrene	0.914	1.142	-24.9	144	-0.01
85	tp	bromoform	0.201	0.259	-28.5	152	0.00
86	t	isopropylbenzene	1.464	1.775	-21.2	145	0.00
87	S	bromoflurobenzene	0.481	0.483	-0.5	123	0.00
88	t	bromobenzene	0.408	0.496	-21.5	147	0.00
89	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	130	0.00
90	tp	1,1,2,2-tetrachloroethane	0.992	1.080	-8.9	140	0.00
91	t	1,2,3-trichloropropane	1.193	1.223	-2.5	131	-0.01
92	t	n-propylbenzene	4.236	4.659	-10.0	143	0.00
93	t	2-chlorotoluene	2.581	2.768	-7.3	142	0.00
94	t	4-chlorotoluene	2.850	3.124	-9.6	144	0.00
95	t	1,3,5-trimethylbenzene	2.502	2.831	-13.2	149	0.00
96	t	tert-butylbenzene	2.936	3.323	-13.2	144	0.00
97	t	1,2,4-trimethylbenzene	2.601	2.909	-11.8	147	0.00
98	t	sec-butylbenzene	3.508	3.959	-12.8	147	0.00
99	t	1,3-dichlorobenzene	1.708	1.946	-13.9	151	0.00
100	t	4-isopropyltoluene	2.736	3.263	-19.3	154	0.00
101	t	1,4-dichlorobenzene	1.800	1.987	-10.4	151	0.00
102	t	1,2-dichlorobenzene	1.583	1.803	-13.9	153	0.00
103	t	n-butylbenzene	3.046	3.405	-11.8	146	0.00
104	t	cis-1,4-dichloro-2-butene	1.166	1.215	-4.2	131	-0.01
105	t	trans-1,4-dichloro-2-butene	0.214	0.193	9.7	107	0.00
106	t	1,2-dibromo-3-chloropropane	0.149	0.159	-6.5	146	0.00
107	t	pentachloroethane	0.457	0.416	9.0	112	0.00
108	t	1,2,4-trichlorobenzene	0.779	0.933	-19.8	174	0.00
109	t	hexachlorobutadiene	0.465	0.605	-30.3#	189	0.00
110	t	naphthalene	2.009	2.152	-7.1	156	0.00
111	t	1,2,3-trichlorobenzene	0.000	0.000	0.0	174	0.00
112	t	2-Methyl Naphthalene	0.000	0.000	0.0	0#	-17.01#
113	t	1,3-Dimethyl Naphthalene	0.000	0.000	0.0	115	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101599\I2224.D
Acq On : 15 Oct 99 6:29 pm
Sample : VSTD050;MSI;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 15 19:10 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.57	96	946976	50.00 ug/l	0.00
70) chlorobenzene-d5	14.19	117	681142	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.76	152	325016	50.00 ug/l	0.00
System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.17	113	311235	51.12 ug/l	102.25%
44) 1,2-dichloroethane-d4	7.93	65	384486	57.11 ug/l	114.22%
71) toluene-d8	11.27	98	843508	48.19 ug/l	96.37%
87) bromoflurobenzene	15.77	95	329183	50.24 ug/l	100.47%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.48	85	477739	55.76 ug/l	99
3) 1,3-Butadiene	1.89	54	197399	45.59 ug/l	97
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.70	50	470565	53.71 ug/l	99
6) vinyl chloride	1.84	62	469704	57.28 ug/l	99
7) bromomethane	2.24	96	258650	51.92 ug/l	98
8) chloroethane	2.38	64	230119	70.31 ug/l	99
9) trichlorofluoromethane	2.77	101	476047	66.35 ug/l	99
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.15	59	172360	55.74 ug/l	93
12) Ethyl Mercaptan	3.48	62	46255	56.31 ug/l #	67
13) freon	3.49	101	348866	44.31 ug/l	88
14) Tertiary butyl alcohol	4.25	59	41996	62.48 ug/l	100
15) 1,1-dichloroethene	3.48	96	232927	52.28 ug/l	89
16) Acetonitrile	1.89	40	15817	785.50 ug/l #	1
17) methylene chloride	4.13	84	386028	46.14 ug/l	87
18) acrolein	3.28	56	95637	157.22 ug/l	100
19) acrylonitrile	1.89	53	143007	181.53 ug/l m	89
20) trans-1,2-dichloroethene	4.62	96	318455	56.75 ug/l #	73
21) acetone	4.60	43	139873	54.12 ug/l	70
22) carbon disulfide	3.89	76	1106383	39.68 ug/l	100
23) hexane	5.12	57	601078	45.07 ug/l	96
24) 1,1-dichloroethane	5.25	63	778339	57.48 ug/l	99
25) methyl t-butyl ether	4.60	73	576927	56.37 ug/l	100
26) vinyl acetate	5.32	43	507997	48.16 ug/l	100
27) 2-chloro-1,3-butadiene	5.45	53	416348	44.55 ug/l	85
28) 2,2-dichloropropane	6.27	77	402315	55.68 ug/l	91
29) cis-1,2-dichloroethene	6.27	96	343923	58.22 ug/l #	76
30) 2-butanone	6.21	72	25733	50.72 ug/l	69
31) Idomethane	3.71	142	403276	41.50 ug/l	86
32) Allyl chloride	3.89	76	1092149	39.46 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101599\I2224.D
Acq On : 15 Oct 99 6:29 pm
Sample : VSTD050;MSI;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 15 19:10 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	cyclohexane	7.57	56	647979	46.09 ug/l	#	67
34)	Ethyl Cyanide	6.33	54	290814	460.95 ug/l		95
35)	Ethyl Acetate	8.63	43	629015	45.80 ug/l	#	64
36)	bromochloromethane	6.76	128	183703	64.30 ug/l		97
37)	tetrahydrofuran	6.90	42	78477	48.03 ug/l		93
38)	chloroform	6.82	83	678516	57.57 ug/l		96
39)	1,1,1-trichloroethane	7.36	97	449590	59.16 ug/l		88
41)	carbon tetrachloride	7.77	117	386142	68.79 ug/l		98
42)	1,1-dichloropropene	7.68	75	568656	56.99 ug/l		93
43)	2,2,4-trimethylpentane	5.12	57	602245	45.05 ug/l	#	26
45)	benzene	8.07	78	1437982	52.83 ug/l		100
46)	1,2-dichloroethane	8.07	62	498568	58.58 ug/l		86
47)	Isopropyl acetate	8.63	43	629015	45.80 ug/l	#	60
48)	Heptane	8.63	43	629015	45.80 ug/l		97
49)	trichloroethene	9.26	95	353587	58.71 ug/l		92
50)	1,2-dichloropropane	9.58	63	457451	59.32 ug/l		95
51)	methyl methacrylate	9.79	69	136109	48.71 ug/l	#	92
52)	1,4-Dioxane	9.90	88	33445	781.39 ug/l		77
53)	dibromomethane	9.83	93	227704	65.17 ug/l		96
54)	bromodichloromethane	10.02	83	439296	58.76 ug/l		98
55)	methylacrylonitrile	6.62	41	1483988	484.90 ug/l		93
56)	Propyl acetate	0.00	43		No Calib		
57)	4-methyl-2-pentanone	10.93	43	225308	48.05 ug/l	#	94
58)	2-hexanone	12.41	43	150810	48.13 ug/l	#	96
59)	cis-1,3-dichloropropene	10.82	75	547884	60.40 ug/l		92
60)	toluene	11.39	92	707514	57.20 ug/l		97
61)	2-chloroethylvinylether	10.57	63	69667	55.81 ug/l		100
62)	Octane	0.00	43		No Calib	#	
63)	butyl acetate	0.00	43		No Calib		
64)	isobutyl acetate	0.00	43		No Calib		
65)	trans-1,3-dichloropropene	11.71	75	459266	59.34 ug/l		91
66)	1,1,2-trichloroethane	12.03	83	255160	61.00 ug/l		88
67)	1,2-dibromoethane	13.13	107	254711	62.04 ug/l		97
68)	tetrachloroethene	12.47	166	319457	61.45 ug/l		97
69)	1,3-dichloropropane	12.36	76	492113	60.48 ug/l		97
72)	dibromochloromethane	12.84	129	339083	61.09 ug/l		99
73)	chlorobenzene	14.25	112	778079	52.28 ug/l		95
74)	1,1,1,2-tetrachloroethane	14.39	131	321992	60.01 ug/l		98
75)	ethylbenzene	14.46	91	1308374	56.76 ug/l		98
76)	Nonene	0.00	55		No Calib	#	
77)	1-chlorohexane	0.00	91		Not Detected		
78)	m,p-Xylenes	14.64	106	925877	117.71 ug/l		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101599\I2224.D
Acq On : 15 Oct 99 6:29 pm
Sample : VSTD050;MSI;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 15 19:10 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	0.00	69		No Calib	#	
80)	Cyclohexanone	15.66	42	28090	48.76 ug/l	#	60
81)	butyl acrylate	0.00	55		No Calib	#	
82)	cyclohexanol	0.00	57		No Calib	#	
83)	o-xylene	15.18	106	458853	60.43 ug/l		96
84)	styrene	15.20	104	777826	62.45 ug/l		77
85)	bromoform	15.43	173	176238	64.27 ug/l		96
86)	isopropylbenzene	15.61	105	1208696	60.61 ug/l		95
88)	bromobenzene	15.92	156	337812	60.74 ug/l	#	68
90)	1,1,2,2-tetrachloroethane	15.86	83	350990	54.45 ug/l		97
91)	1,2,3-trichloropropane	15.92	75	397568	51.25 ug/l		64
92)	n-propylbenzene	16.01	91	1514133	54.98 ug/l		98
93)	2-chlorotoluene	16.09	91	899782	53.63 ug/l		87
94)	4-chlorotoluene	16.17	91	1015200	54.80 ug/l		86
95)	1,3,5-trimethylbenzene	16.16	105	920265	56.58 ug/l		93
96)	tert-butylbenzene	16.44	119	1080037	56.59 ug/l		100
97)	1,2,4-trimethylbenzene	16.47	105	945459	55.92 ug/l		92
98)	sec-butylbenzene	16.62	105	1286624	56.42 ug/l		93
99)	1,3-dichlorobenzene	16.72	146	632435	56.97 ug/l		93
100)	4-isopropyltoluene	16.72	119	1060686	59.64 ug/l		97
101)	1,4-dichlorobenzene	16.78	146	645964	55.21 ug/l		95
102)	1,2-dichlorobenzene	17.05	146	585868	56.95 ug/l		94
103)	n-butylbenzene	17.02	91	1106767	55.89 ug/l		94
104)	cis-1,4-dichloro-2-butene	15.92	75	394896	52.09 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.95	53	62857	45.16 ug/l	#	75
106)	1,2-dibromo-3-chloropropan	17.56	75	51728	53.25 ug/l	#	67
107)	pentachloroethane	16.46	167	135200	45.49 ug/l		97
108)	1,2,4-trichlorobenzene	18.12	180	303365	59.90 ug/l		99
109)	hexachlorobutadiene	18.23	225	196702	65.14 ug/l		99
110)	naphthalene	18.29	128	699543	53.56 ug/l		100
111)	1,2,3-trichlorobenzene	0.00	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	0.00	156		No Calib		

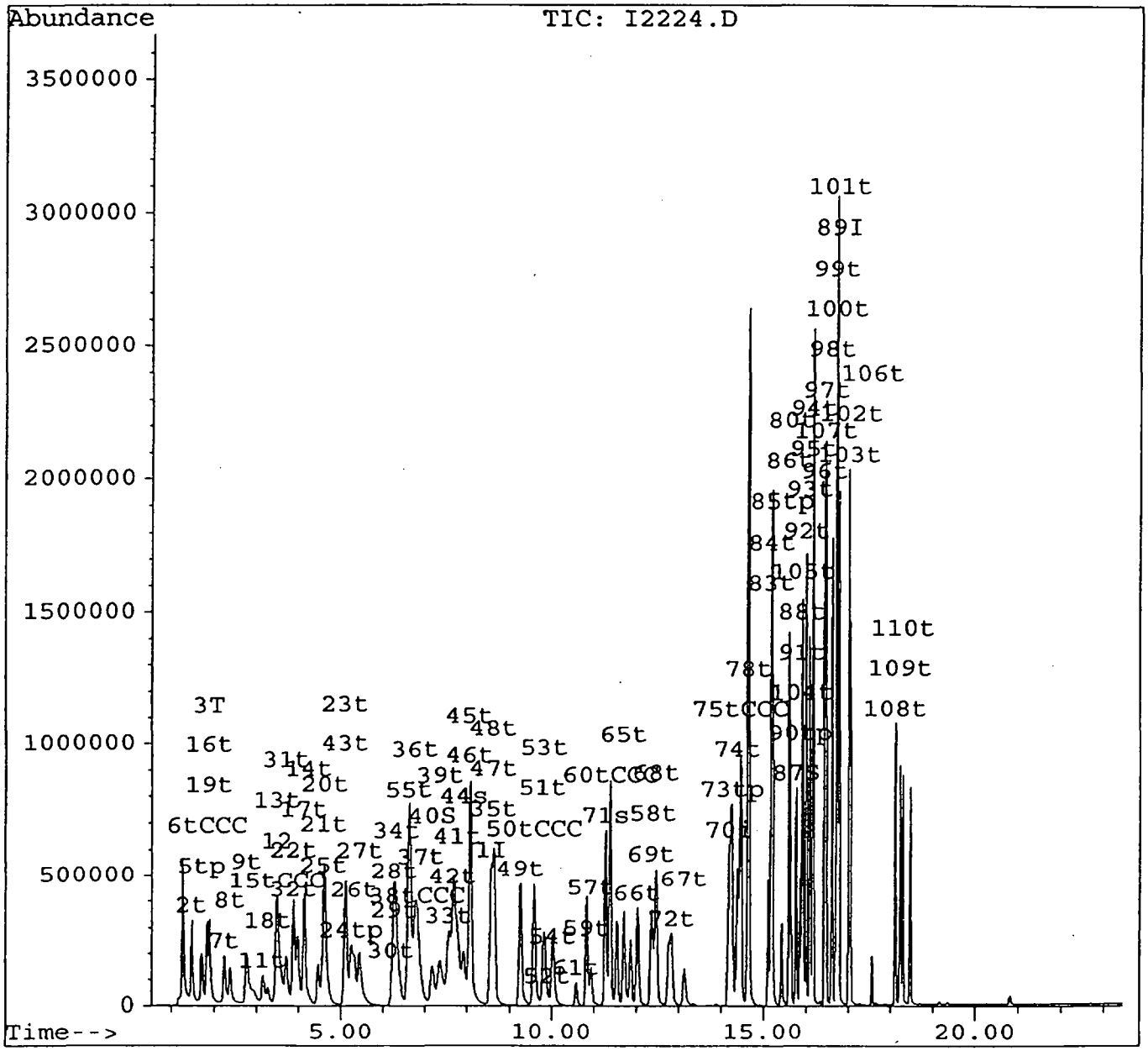
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101599\I2224.D
Acq On : 15 Oct 99 18:29 pm
Sample : VSTD050;MSI;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 15 19:10 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

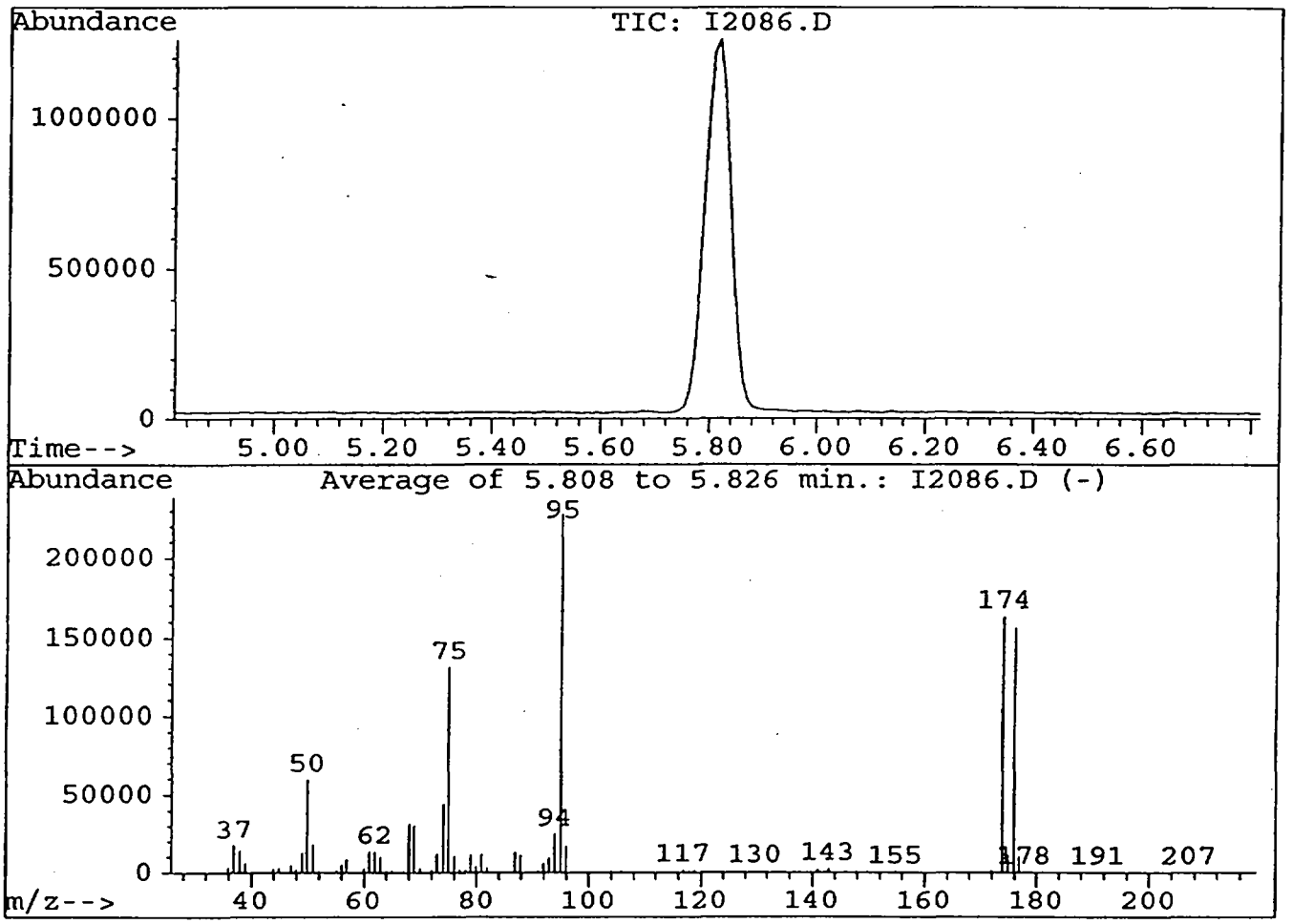


BFB

Data File : C:\HPCHEM\1\DATA\101399\I2086.D
Acq On : 13 Oct 99 3:11 am
Sample : 50NGBFB;MSI;;
Misc : 50NGBFB;LOW;AQ;

Vial: 1
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFB.M
Title :

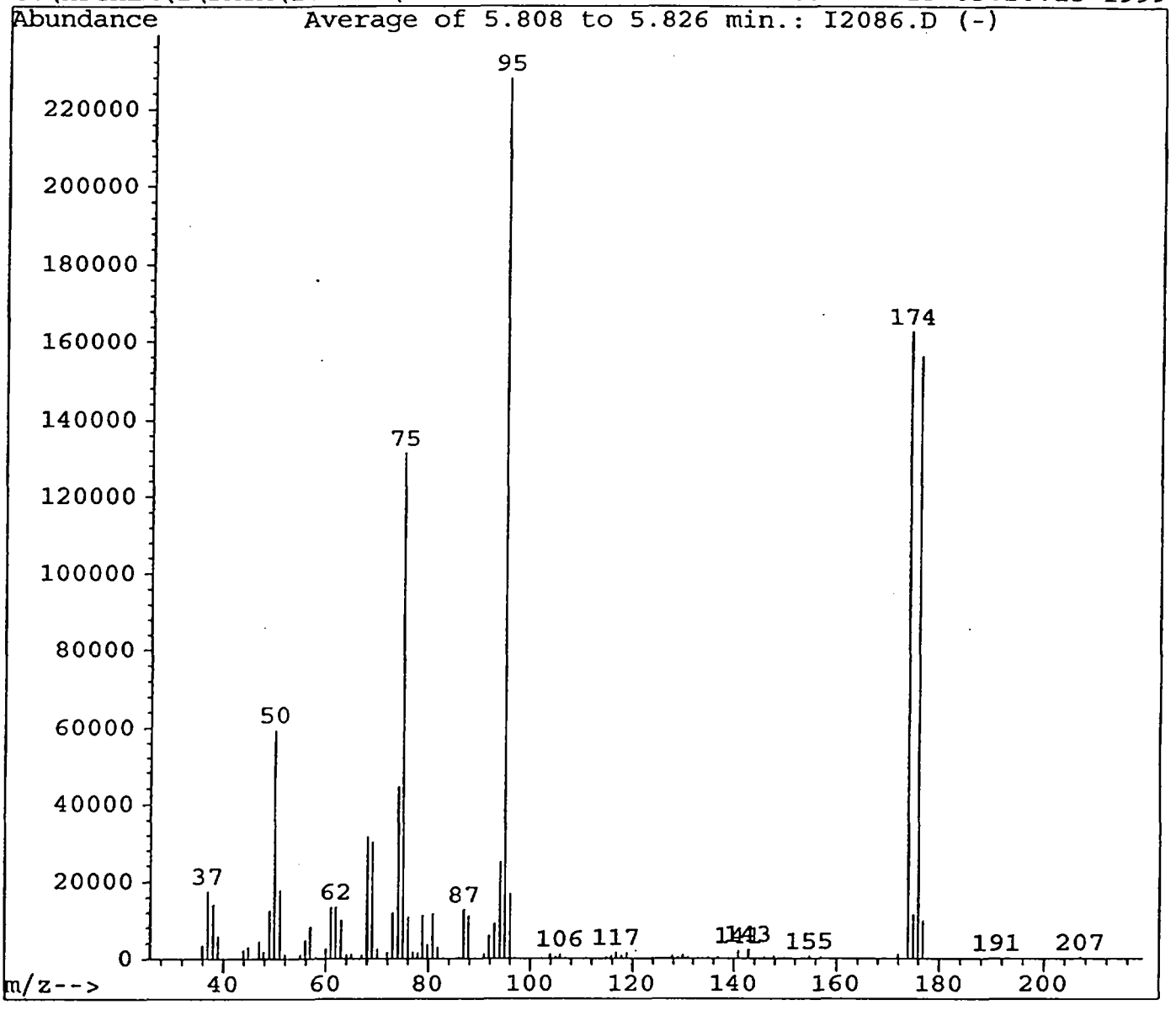


Scans Used: 534 535 536 Bkg: 525

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.1	59532	PASS
75	95	30	60	57.6	131350	PASS
95	95	100	100	100.0	227883	PASS
96	95	5	9	7.5	16993	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	71.4	162624	PASS
175	174	5	9	7.0	11329	PASS
176	174	95	101	96.0	156139	PASS
177	176	5	9	6.4	9966	PASS

BFB 624 Results

C:\HPCHEM\1\DATA\101399\I2086.D Wed Oct 13 03:20:15 1999



Peak Apex is scan: 535
Average of 3 scans: 534,535,536 minus background scan 525

Target Mass	Comparison Mass	Lower Limit,%	Upper Limit,%	Relative Abundance,%	Result Pass/Fail
50	95	15	40	26.1	PASS
75	95	30	60	57.6	PASS
95	95	100	100	100.0	PASS
96	95	5	9	7.5	PASS
173	174	0	2	0.0	PASS
174	95	50	100	71.4	PASS
175	174	5	9	7.0	PASS
176	174	95	101	96.0	PASS
177	176	5	9	6.4	PASS

Average of 5.808 to 5.826 min.: I2086.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	3571	46.10	144	55.95	4924	65.90	178
36.90	17639	47.00	4670	56.90	8435	66.95	993
38.00	14224	47.85	2024	57.90	431	67.95	31627
38.95	6019	48.95	12722	58.70	68	68.90	30334
39.90	369	49.90	59532	59.10	100	69.95	2664
41.00	326	51.00	18098	59.90	2738	71.10	179
41.95	79	51.95	1310	60.90	13434	71.90	1719
43.00	9	52.80	95	61.90	13530	72.95	12027
43.90	2431	52.95	264	62.90	10078	73.95	44341
44.85	3009	54.00	169	63.95	1193	74.90	131350
45.85	233	54.95	1117	64.95	1311	75.95	10836

Average of 5.808 to 5.826 min.: I2086.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
76.95	1800	91.85	5972	106.85	324	127.85	885
77.95	1493	92.90	9124	109.85	146	128.90	487
78.85	11299	93.90	24965	110.80	257	129.85	974
79.85	3729	94.95	227883	111.80	153	130.90	431
80.85	11763	95.95	16993	112.90	91	132.90	128
81.85	3028	96.95	380	114.85	421	134.15	84
82.90	155	102.85	212	115.75	879	134.90	423
85.90	416	103.10	75	116.80	1675	136.85	426
86.90	12790	103.85	1131	117.85	955	139.95	70
87.85	11073	104.90	576	118.85	1592	140.85	2072
90.90	1165	105.80	1210	126.75	92	141.85	101

Average of 5.808 to 5.826 min.: I2086.D

Modified:subtracted

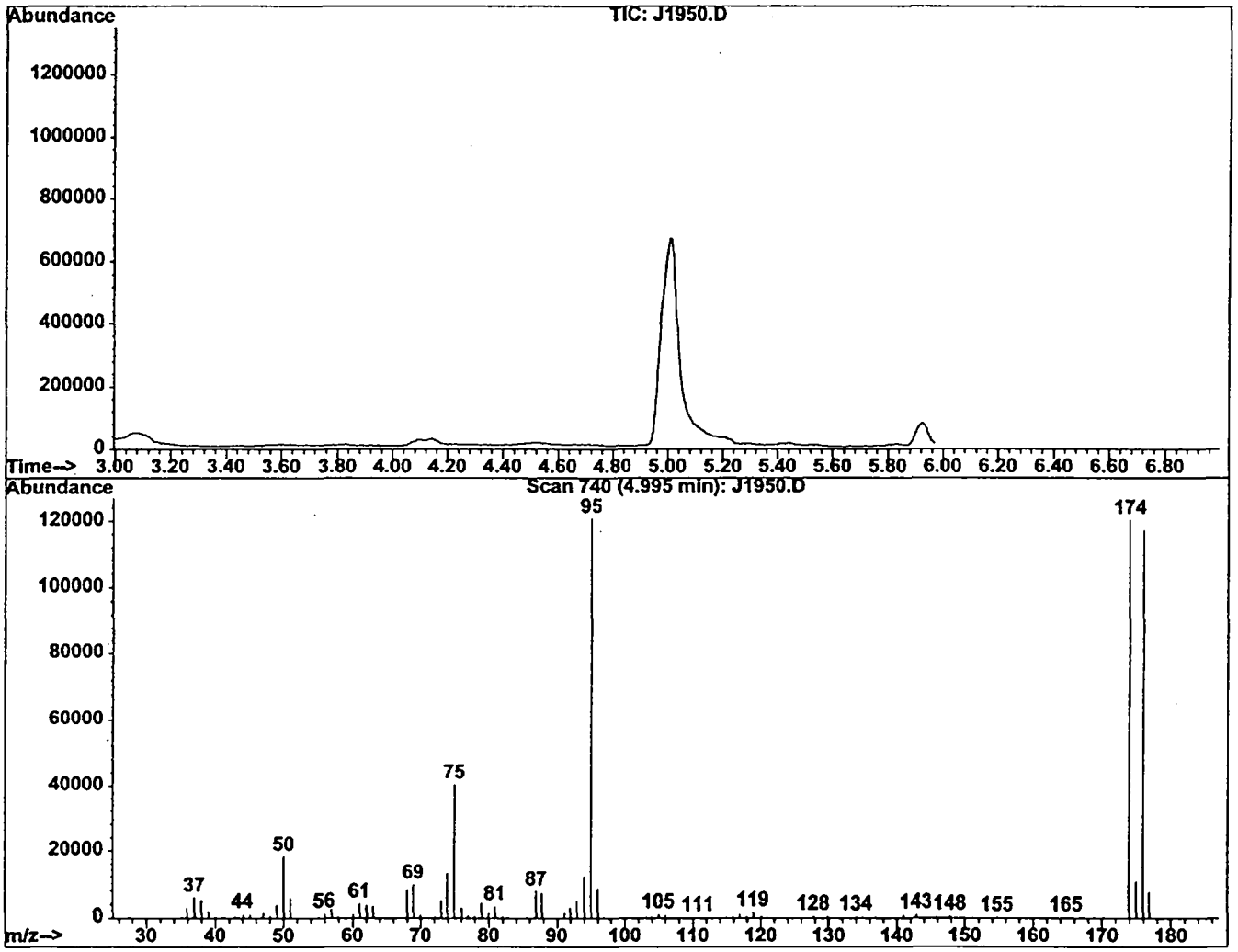
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
142.85	2377	155.95	235	177.85	358		
144.85	226	156.90	453	191.00	314		
145.85	418	157.85	214	192.85	74		
146.80	222	158.70	72	206.95	423		
147.75	675	160.70	81	208.00	65		
148.80	192	160.85	235	208.95	172		
149.75	272	171.85	1328				
152.85	79	173.90	162624				
153.75	157	174.90	11329				
154.80	701	175.90	156139				
155.80	87	176.85	9966				

BFB

Data File : C:\HPCHEM\1\DATA\101399\J1950.D
Acq On : 13 Oct 99 18:50
Sample : 50NGBFB;MSJ;;
Misc : 50NGBFB;LOW;AQ;

Vial: 1
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B



Spectrum Information: Scan 740

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.1	18328	PASS
75	95	30	60	33.5	40544	PASS
95	95	100	100	100.0	120984	PASS
96	95	5	9	7.3	8773	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	99.7	120600	PASS
175	174	5	9	8.9	10743	PASS
176	174	95	101	97.3	117328	PASS
177	176	5	9	6.6	7726	PASS

Scan 740 (4.995 min): J1950.D
50NGBFB;MSJ;;

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	336	47.05	1432	61.05	4133	73.95	13243
35.90	2855	48.05	789	62.05	3564	74.95	40544
37.00	5878	49.05	3868	63.05	3452	76.05	3050
38.00	5144	50.05	18328	64.05	347	76.95	881
39.00	2013	51.05	5803	64.95	159	77.95	709
40.00	331	52.05	203	68.05	8267	78.95	4428
41.00	273	55.05	272	68.95	9794	79.95	1370
42.00	163	55.95	1285	69.95	903	80.95	3437
42.90	517	56.95	2617	71.05	219	81.95	592
44.05	1081	57.85	365	72.05	476	82.75	376
45.05	1016	60.05	1142	73.05	5053	86.95	7739

Scan 740 (4.995 min): J1950.D
50NGBFB;MSJ;;

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.85	7285	105.00	1130	120.10	584	142.90	1048
91.05	1476	105.90	878	120.90	200	144.90	170
91.95	3029	106.70	260	125.90	152	145.75	284
92.95	4988	108.00	196	127.80	613	147.85	598
94.05	12194	110.80	194	129.80	471	148.65	184
95.00	120984	112.20	162	130.70	182	149.85	218
96.00	8773	114.90	280	134.00	448	152.85	154
96.90	363	115.90	424	134.90	319	154.75	182
97.90	155	116.90	1147	136.80	340	164.85	197
103.10	343	117.90	539	140.90	909	170.25	173
103.90	384	118.90	1657	142.00	152	173.95	120600

Scan 740 (4.995 min): J1950.D
50NGBFB;MSJ;;

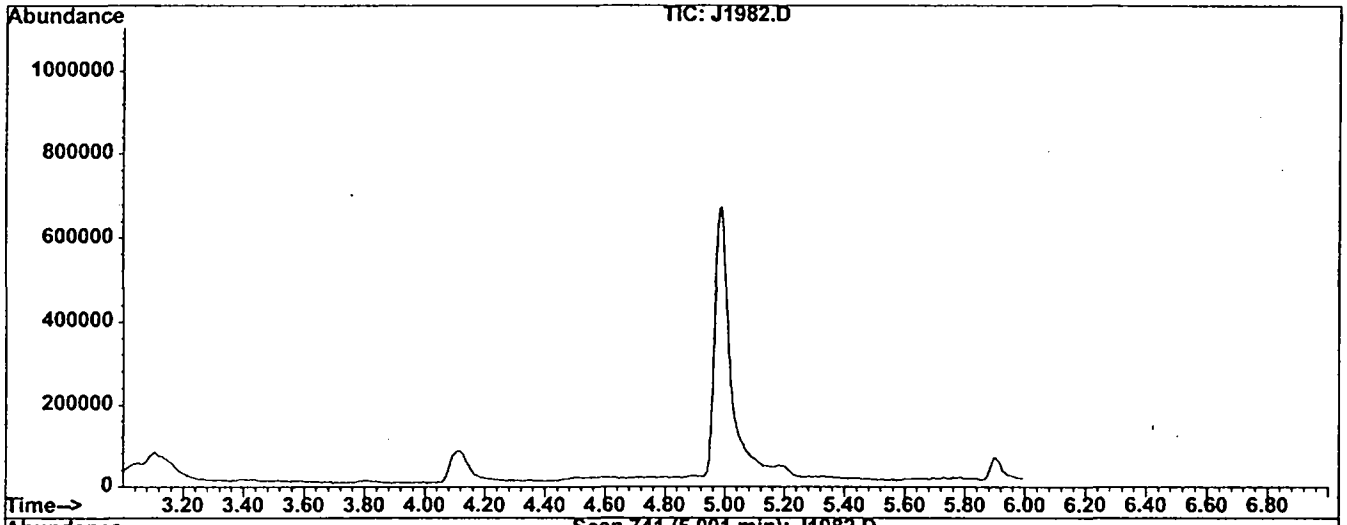
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
174.95	10743						
175.95	117328						
176.85	7726						

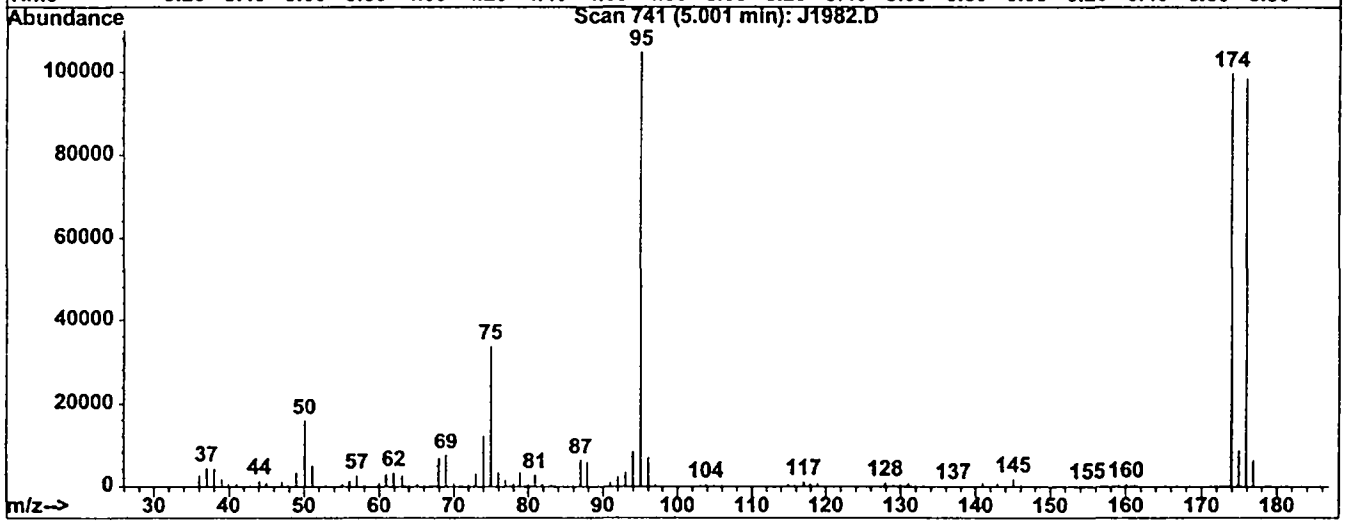
BFB

Data File : C:\HPCHEM\1\DATA\101499\J1982.D
Acq On : 14 Oct 99 16:27
Sample : 50NGBFB;MSJ;;
Misc : 50NGBFB;LOW;AQ;

Vial: 1
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFB.M
Title :





Spectrum Information: Scan 741

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.4	16128	PASS
75	95	30	60	32.3	33872	PASS
95	95	100	100	100.0	104872	PASS
96	95	5	9	6.6	6919	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	95.2	99880	PASS
175	174	5	9	8.6	8574	PASS
176	174	95	101	98.7	98544	PASS
177	176	5	9	6.4	6320	PASS

Scan 741 (5.001 min): J1982.D
50NGBFB;MSJ;;

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	2696	47.05	1252	59.95	887	71.05	265
37.00	4402	47.85	450	60.95	2910	71.95	546
38.00	4213	48.95	3341	61.95	3249	72.95	3165
39.00	1879	50.05	16128	63.05	2661	73.95	12234
39.90	746	51.05	5024	63.95	383	74.95	33872
41.00	775	52.05	158	65.05	679	75.95	3433
42.10	319	52.85	256	66.05	210	76.95	1579
42.80	368	55.05	783	66.85	478	77.95	752
44.05	1462	56.05	1429	67.95	6771	78.85	3342
44.95	893	57.05	2669	68.95	7493	79.95	636
45.95	245	58.05	240	69.95	914	80.85	2737

Scan 741 (5.001 min): J1982.D
50NGBFB;MSJ;;

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.85	748	96.00	6919	117.00	1194	134.00	166
83.05	529	97.00	503	117.90	690	134.80	158
85.95	151	103.10	318	118.90	809	137.00	244
86.95	6296	103.80	515	119.90	169	140.90	873
87.85	5837	104.90	357	121.10	153	142.90	820
89.25	187	106.00	352	127.90	991	145.05	1882
90.95	1081	107.00	151	129.00	438	146.05	476
91.95	2356	108.10	164	129.90	637	146.85	185
92.95	3408	112.90	235	131.00	822	147.95	318
93.95	8359	114.90	602	131.90	259	154.95	339
95.00	104872	115.80	464	133.00	227	156.95	179

Scan 741 (5.001 min): J1982.D
50NGBFB;MSJ;;

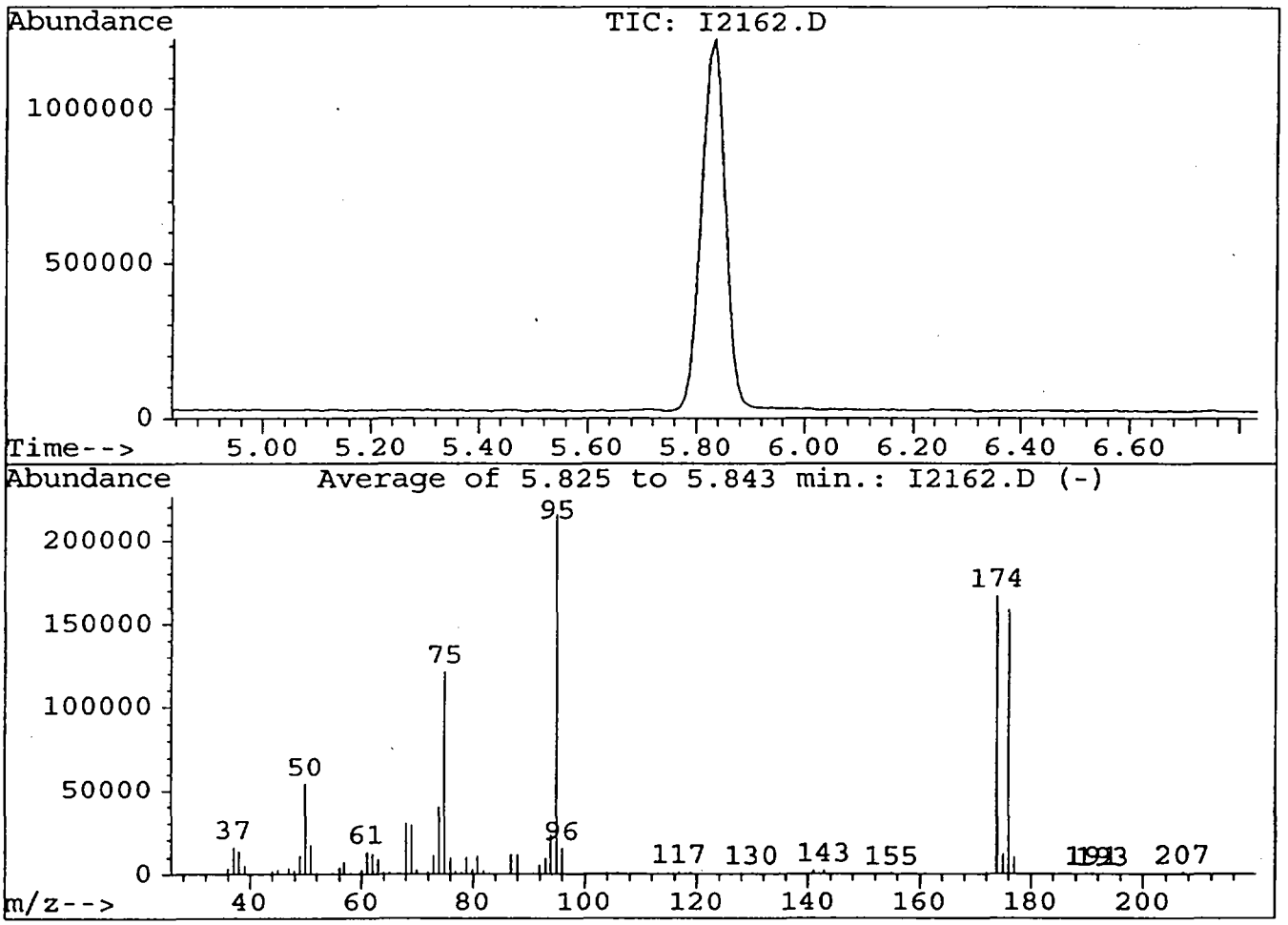
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
159.05	353						
160.05	683						
161.15	406						
171.85	296						
173.95	99880						
174.95	8574						
175.95	98544						
176.85	6320						

BFB

Data File : C:\HPCHEM\1\DATA\101499\I2162.D
Acq On : 14 Oct 99 17:39 pm
Sample : 50NGBFB;MSI;;
Misc : 50NGBFB;LOW;AQ;

Vial: 1
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFB.M
Title :

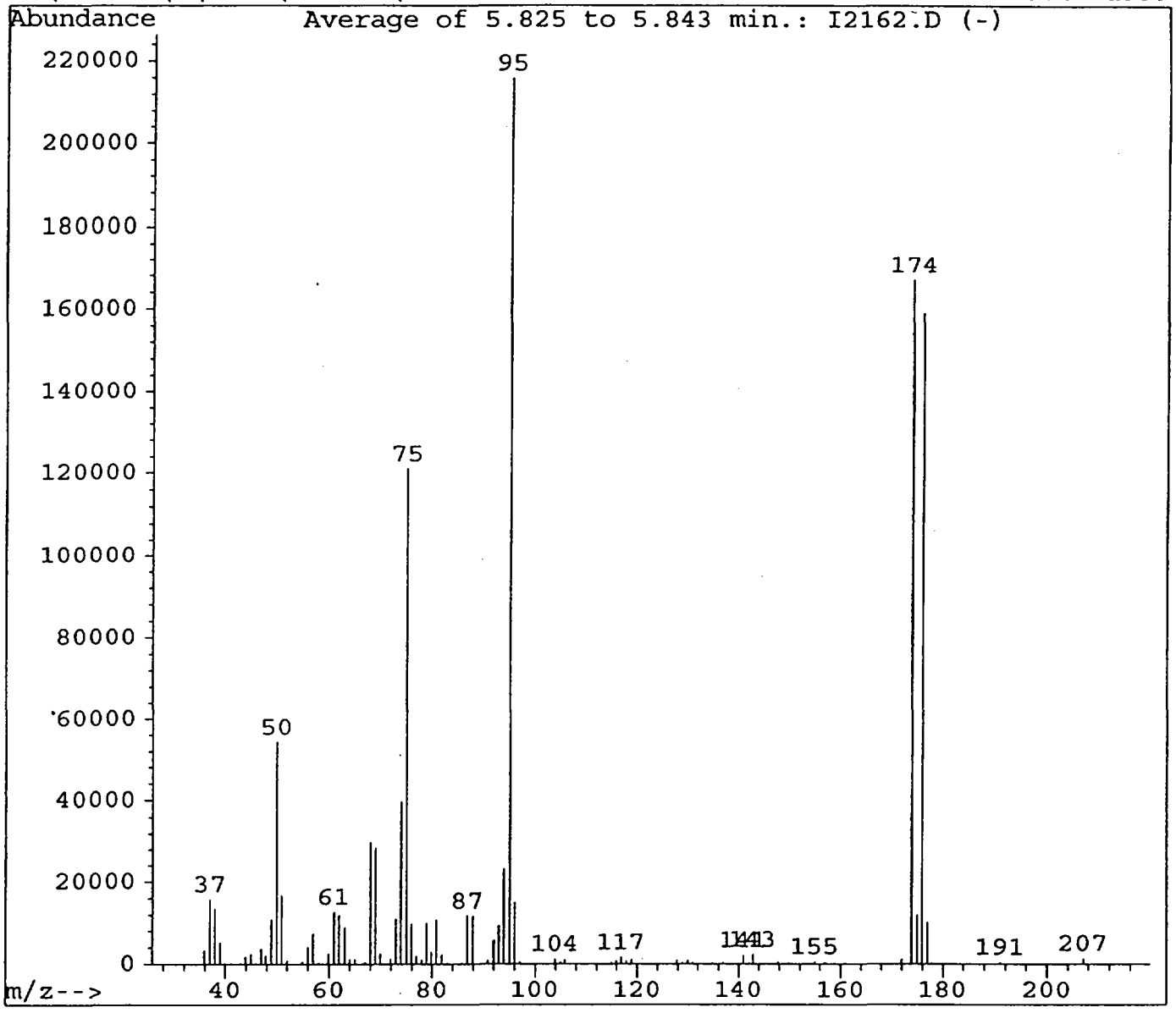


Scans Used: 536 537 538 Bkg: 527

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.3	54504	PASS
75	95	30	60	56.1	121032	PASS
95	95	100	100	100.0	215851	PASS
96	95	5	9	7.0	15192	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	77.3	166955	PASS
175	174	5	9	7.2	11993	PASS
176	174	95	101	95.2	158891	PASS
177	176	5	9	6.4	10123	PASS

BFB 624 Results

C:\HPCHEM\1\DATA\101499\I2162.D Thu Oct 14 17:48:27 1999



Peak Apex is scan: 537
Average of 3 scans: 536,537,538 minus background scan 527

Target Mass	Comparison Mass	Lower Limit,%	Upper Limit,%	Relative Abundance,%	Result Pass/Fail
50	95	15	40	25.3	PASS
75	95	30	60	56.1	PASS
95	95	100	100	100.0	PASS
96	95	5	9	7.0	PASS
173	174	0	2	0.0	PASS
174	95	50	100	77.3	PASS
175	174	5	9	7.2	PASS
176	174	95	101	95.2	PASS
177	176	5	9	6.4	PASS

Average of 5.825 to 5.843 min.: I2162.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	3308	46.95	3707	58.00	415	68.95	28653
37.00	15819	47.85	2056	58.80	163	69.90	2596
37.95	13589	48.90	10890	59.95	2603	71.05	98
39.00	5267	49.90	54504	60.95	12816	71.90	1402
39.90	300	50.90	16986	61.95	11990	72.95	11059
41.10	269	51.95	940	62.95	8982	73.95	39669
41.90	7	52.95	145	63.90	1227	74.95	121032
42.90	381	53.85	87	65.00	1221	75.95	9949
43.90	1804	54.85	655	65.90	51	76.90	1937
44.95	2562	56.00	4047	66.95	555	77.95	1052
45.95	287	56.90	7467	67.95	29893	78.90	10056

Average of 5.825 to 5.843 min.: I2162.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.90	3089	95.00	215851	110.80	233	128.85	485
80.85	10843	95.95	15192	111.90	147	129.95	923
81.90	2376	96.95	595	112.95	68	130.95	389
82.90	281	102.85	252	114.85	471	132.95	102
85.85	319	103.05	93	115.85	862	134.70	188
86.90	11842	103.90	1219	116.85	1643	134.85	365
87.90	11652	104.90	514	117.90	856	136.60	116
90.85	953	105.80	1119	118.90	1228	136.90	431
91.95	5676	106.75	122	119.95	78	139.80	74
92.95	9430	106.95	232	124.80	90	140.90	2126
93.90	23133	109.75	77	127.85	913	141.90	341

Average of 5.825 to 5.843 min.: I2162.D

Modified:subtracted

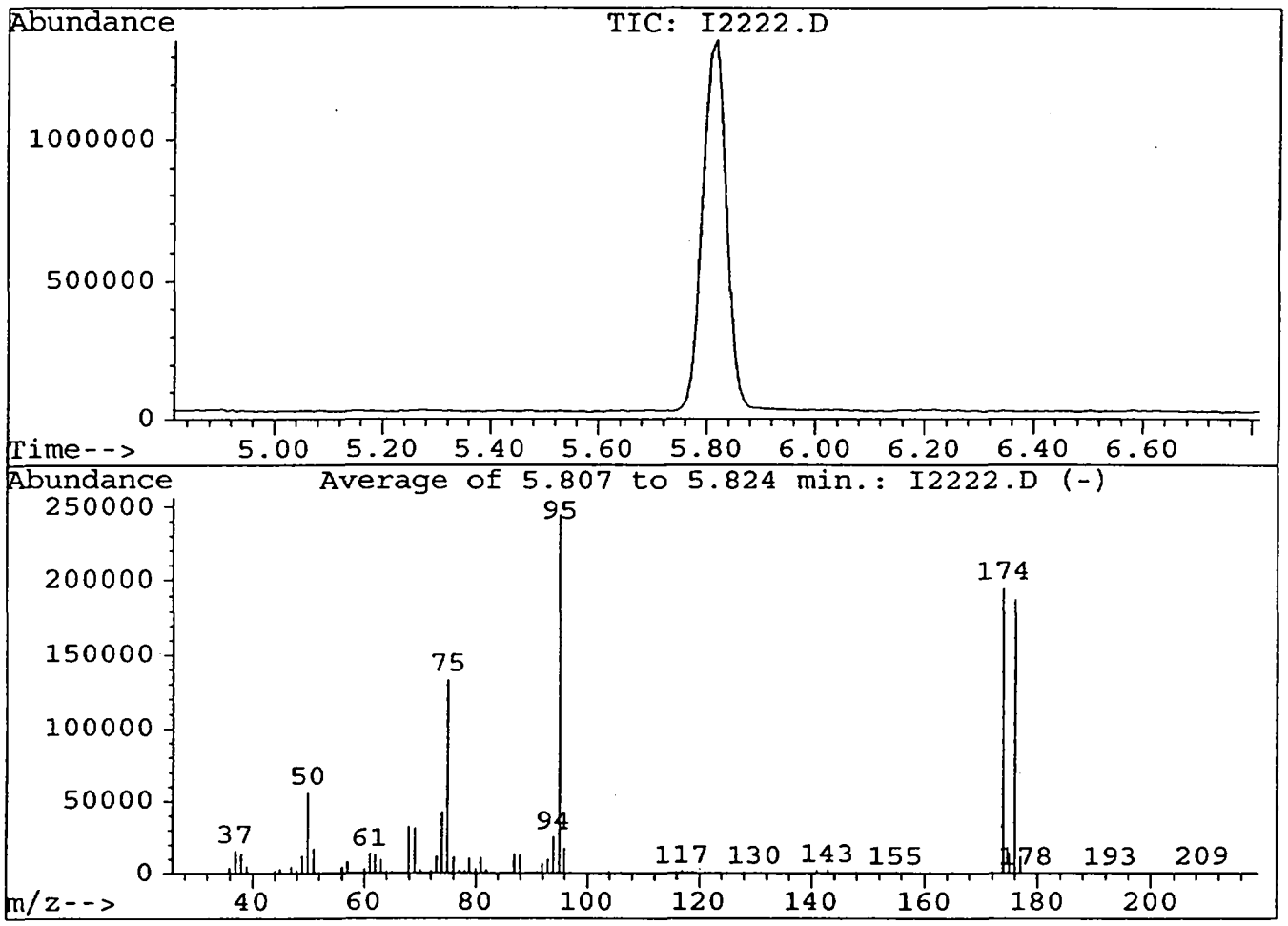
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
142.85	2393	154.90	635	175.90	158891		
144.90	375	155.85	101	176.95	10123		
145.85	372	156.90	431	177.85	274		
146.75	114	158.85	324	178.10	106		
147.00	249	160.75	161	191.00	473		
147.80	523	160.95	222	192.75	92		
148.80	185	162.95	94	192.90	197		
149.05	103	170.90	71	207.00	1350		
149.80	290	171.95	1279	208.00	60		
151.85	76	173.90	166955	208.95	146		
153.85	80	174.95	11993	209.95	74		

BFB

Data File : C:\HPCHEM\1\DATA\101599\I2222.D
Acq On : 15 Oct 99 17:51 pm
Sample : 50NGBFB;MSI;;
Misc : 50NGBFB;LOW;AQ;

Vial: 1
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFB.M
Title :

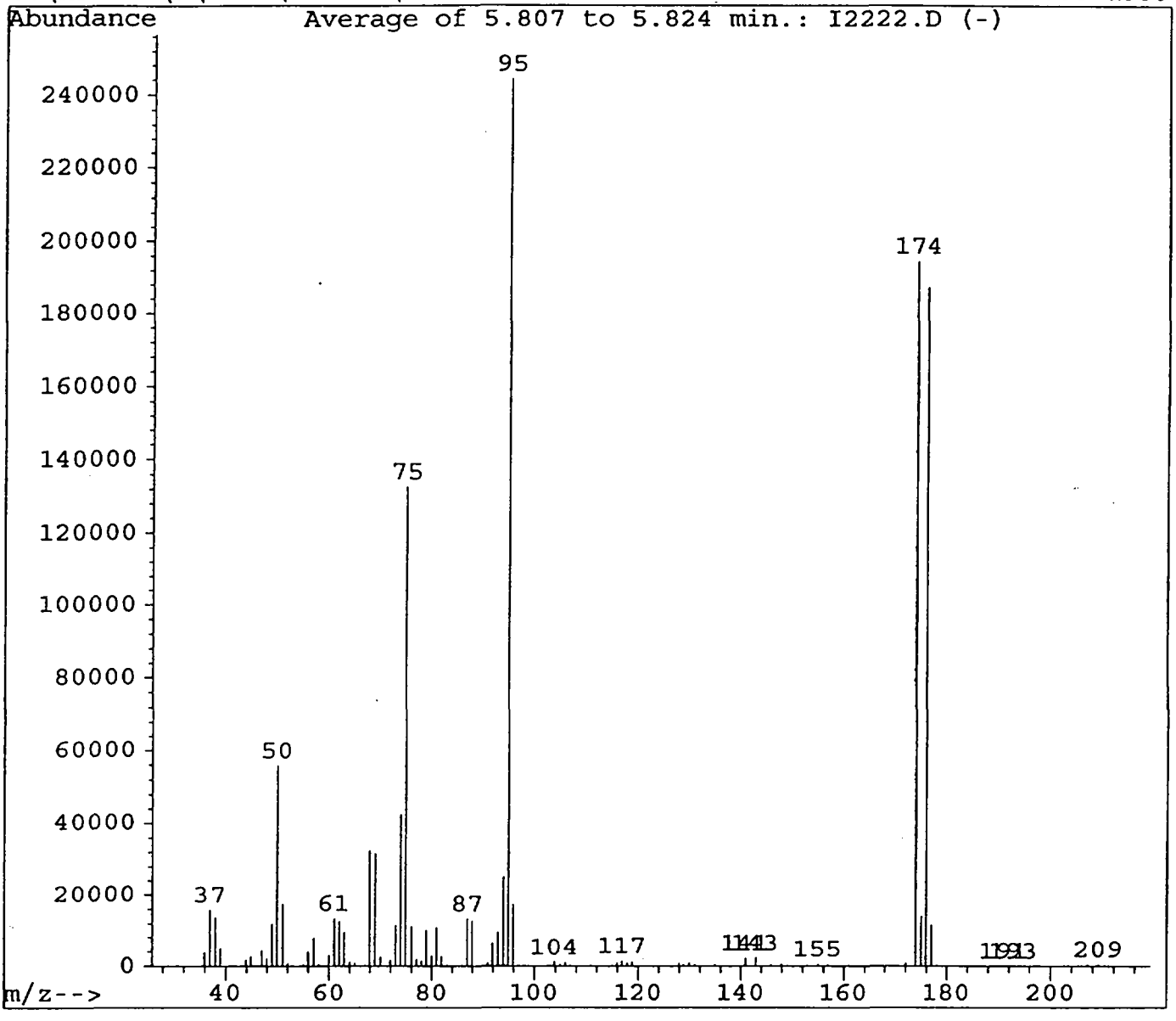


Scans Used: 534 535 536 Bkg: 525

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.9	55892	PASS
75	95	30	60	54.2	132635	PASS
95	95	100	100	100.0	244523	PASS
96	95	5	9	7.1	17378	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	79.6	194560	PASS
175	174	5	9	7.2	14096	PASS
176	174	95	101	96.3	187307	PASS
177	176	5	9	6.2	11677	PASS

BFB 624 Results

C:\HPCHEM\1\DATA\101599\I2222.D Fri Oct 15 18:00:08 1999



Peak Apex is scan: 535
Average of 3 scans: 534,535,536 minus background scan 525

Target Mass	Comparison Mass	Lower Limit,%	Upper Limit,%	Relative Abundance,%	Result Pass/Fail
50	95	15	40	22.9	PASS
75	95	30	60	54.2	PASS
95	95	100	100	100.0	PASS
96	95	5	9	7.1	PASS
173	174	0	2	0.0	PASS
174	95	50	100	79.6	PASS
175	174	5	9	7.2	PASS
176	174	95	101	96.3	PASS
177	176	5	9	6.2	PASS

Average of 5.807 to 5.824 min.: I2222.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	3815	46.95	4481	58.85	73	70.00	2616
36.95	15819	47.90	2090	60.00	2979	71.95	1642
37.95	13697	48.95	11904	61.00	13441	72.95	11491
38.95	5044	49.90	55892	61.95	12747	73.95	42405
39.90	123	51.00	17494	62.95	9572	74.90	132635
40.80	289	51.95	748	64.00	1258	76.00	11172
41.85	244	52.90	279	65.00	865	76.95	1955
42.95	160	55.00	457	65.95	145	77.95	1500
43.95	1745	55.95	4155	67.05	323	78.85	10158
44.90	2804	57.00	7987	67.95	32448	79.90	2843
45.95	265	58.00	451	68.95	31763	80.90	10901

Average of 5.807 to 5.824 min.: I2222.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.90	2656	95.00	244523	114.95	190	134.85	523
82.95	418	95.90	17378	115.90	937	136.70	245
84.85	250	96.85	370	116.85	1556	136.90	104
85.85	323	102.95	211	117.85	938	140.90	2278
86.95	13364	103.85	1189	118.80	1186	141.80	114
87.90	12814	104.85	578	123.90	72	142.05	240
89.90	67	105.90	1040	127.95	983	142.90	2402
90.95	1020	106.80	329	128.80	424	144.75	97
91.90	6502	110.85	263	129.95	985	145.05	67
92.90	9537	111.75	79	130.95	453	145.90	467
93.95	25178	112.85	164	131.90	107	146.85	122

Average of 5.807 to 5.824 min.: I2222.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
147.90	654	170.00	70	209.10	459		
149.00	205	171.95	912				
149.75	84	173.90	194560				
150.00	234	174.95	14096				
152.90	261	175.90	187307				
153.85	85	176.90	11677				
154.95	681	178.00	354				
155.85	73	191.00	148				
156.85	411	192.90	67				
158.85	240	207.00	419				
160.90	340	208.00	41				

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 000175

VBLKI2

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 991014I2

Sample wt/vol: 5.0 (g/mL) ml Lab File ID: I2166

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/14/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-05-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethane	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2166.D
Acq On : 14 Oct 99 19:16 pm
Sample : VBLKI2;MSI;;
Misc : 991014I2;LOW;AQ;
Quant Time: Oct 14 19:35 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.61	96	817115	50.00 ug/l	0.04
70) chlorobenzene-d5	14.22	117	551721	50.00 ug/l	0.03
89) 1,4-dichlorobenzene-d4	16.78	152	228866	50.00 ug/l	0.02

System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.23	113	275745	52.49 ug/l	104.99%
44) 1,2-dichloroethane-d4	7.97	65	331267	57.03 ug/l	114.05%
71) toluene-d8	11.31	98	701101	49.45 ug/l	98.89%
87) bromoflurobenzene	15.78	95	251518	47.39 ug/l	94.78%

Target Compounds Qvalue

SU
10/14/99

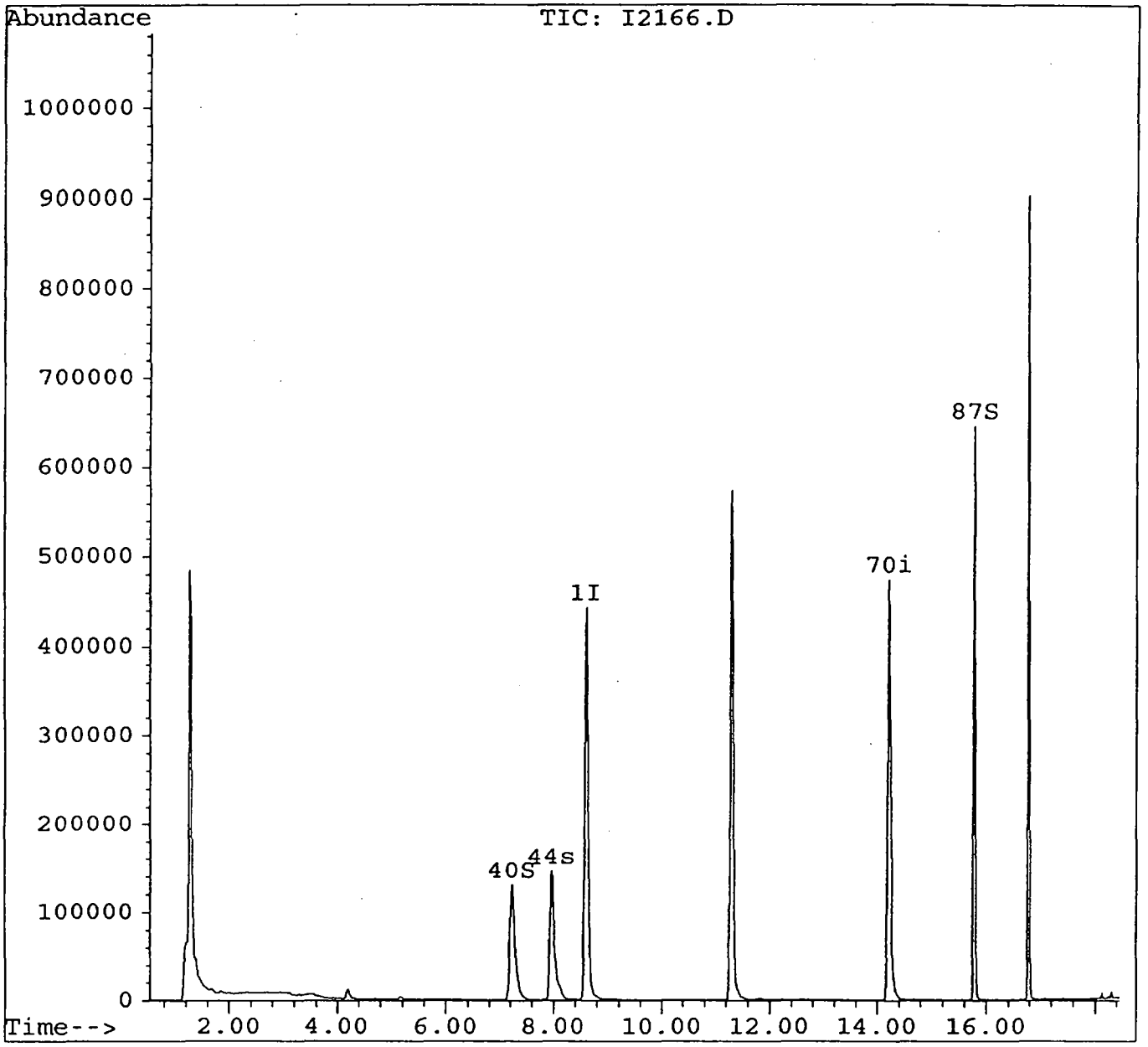
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\I2166.D
Acq On : 14 Oct 99 19:16 pm
Sample : VBLKI2;MSI;;
Misc : 991014I2;LOW;AQ;
Quant Time: Oct 14 19:35 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
000178
VB1KI2

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 991015I2

Sample wt/vol: 5.0 (g/mL) ml Lab File ID: I2227

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/15/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-05-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	3.4	
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethane	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101599\I2227.D
Acq On : 15 Oct 99 19:41 pm
Sample : VBLKI2;MSI;;
Misc : 991015I2;LOW;AQ;
Quant Time: Oct 15 20:00 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.57	96	855030	50.00 ug/l	0.00
70) chlorobenzene-d5	14.18	117	594900	50.00 ug/l	-0.01
89) 1,4-dichlorobenzene-d4	16.76	152	253363	50.00 ug/l	0.00
System Monitoring Compounds					**%Recovery**
40) dibromofluromethane	7.17	113	288996	52.58 ug/l	105.15%
44) 1,2-dichloroethane-d4	7.92	65	335326	55.17 ug/l	110.33%
71) toluene-d8	11.28	98	740676	48.45 ug/l	96.89%
87) bromoflurobenzene	15.76	95	270666	47.29 ug/l	94.59%
Target Compounds					**Qvalue**
17) methylene chloride	4.13	84	25775	3.41 ug/l	86

SM
10/15/99

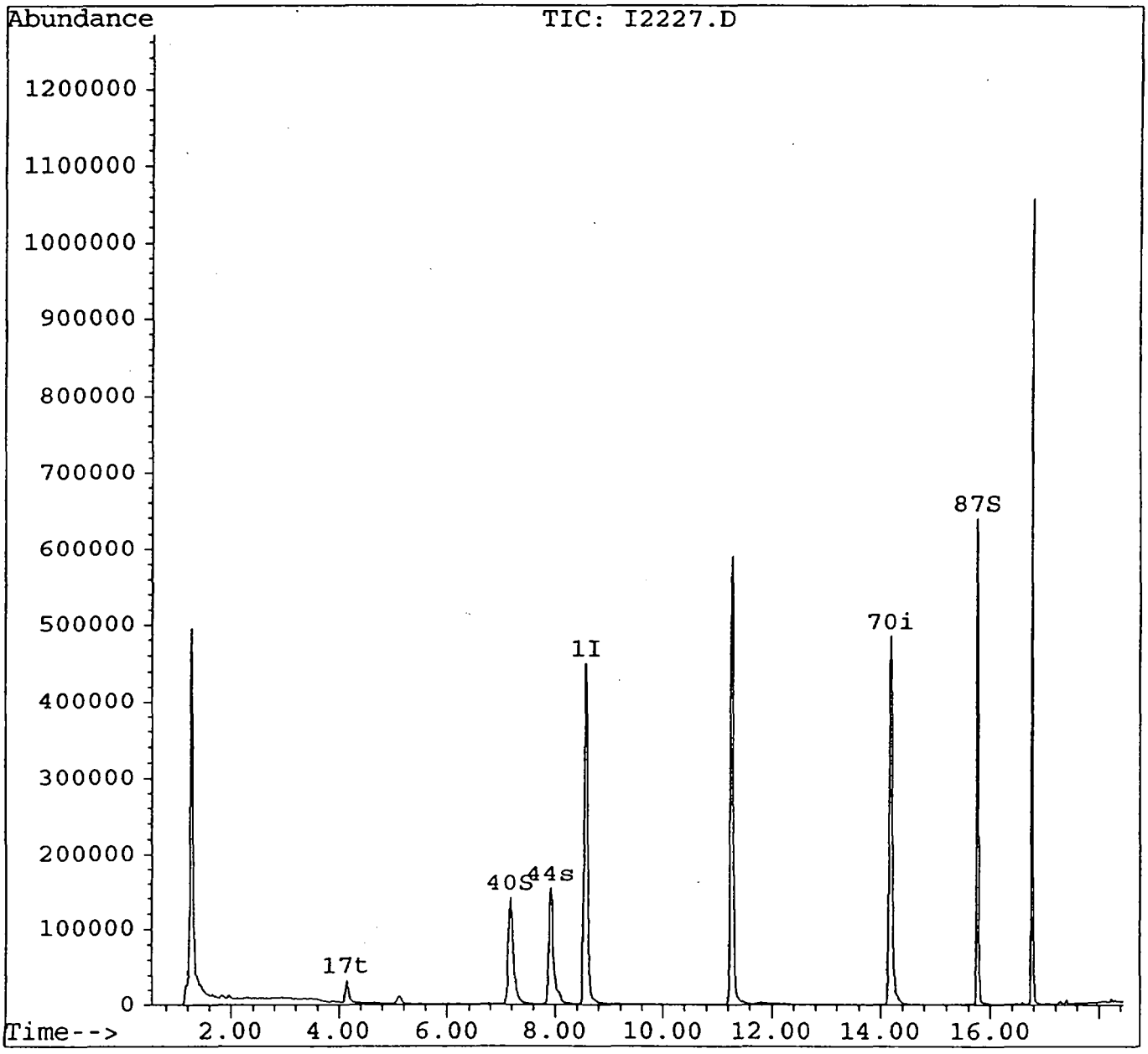
(#) = qualifier out of range (m) = manual integration

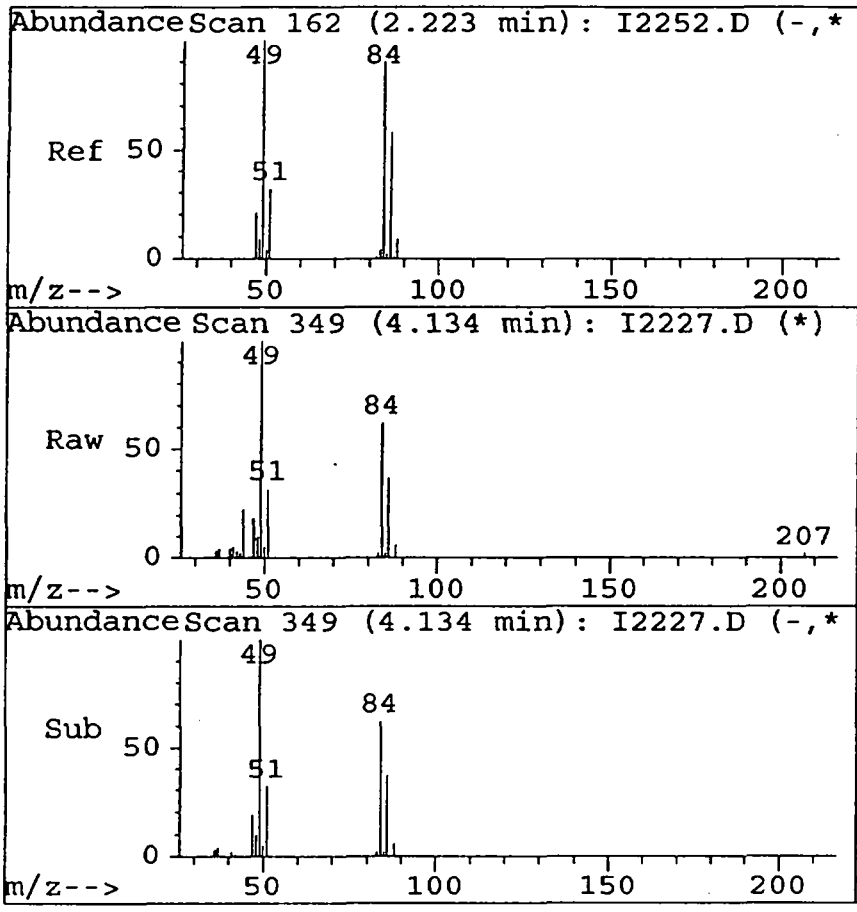
Quantitation Report

Data File : C:\HPCHEM\1\DATA\101599\I2227.D
Acq On : 15 Oct 99 19:41 pm
Sample : VBLKI2;MSI;;
Misc : 991015I2;LOW;AQ;
Quant Time: Oct 15 20:00 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

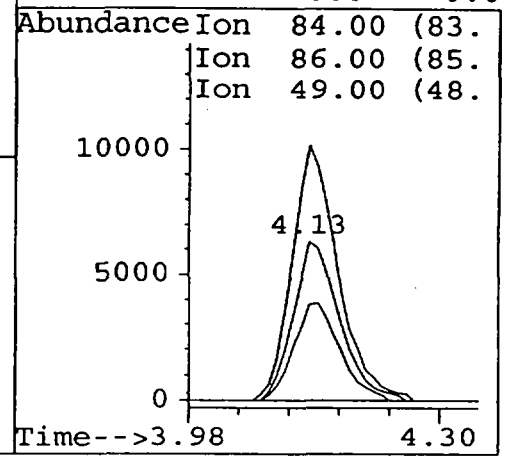




#17
methylene chloride
Concen: 3.41 ug/l
RT: 4.13 min Scan# 349
Delta R.T. 0.01 min
Lab File: I2227.D
Acq: 15 Oct 99 19:41 pm

Tgt Ion:84 Resp: 25775

Ion	Ratio	Lower	Upper
84	100		
86	60.4	37.1	97.1
49	157.7	107.4	167.4
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 000182

VBLKJ1

Lab Name: STL-NJ Contract: _____

Project No.: 94106 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Lab Sample ID: 991014J1

Sample wt/vol: NA (g/mL) g Lab File ID: J1986

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/14/99

GC Column: RTX624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-05-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethane	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\101499\J1986.D
Acq On : 14 Oct 99 18:34
Sample : VBLKJ1;MSJ;;
Misc : 991014J1;LOW;SO;
Quant Time: Nov 17 16:54 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.15	96	1046193	50.00 ppb	-0.09
64) Chlorobenzene-d5	13.02	117	771575	50.00 ppb	-0.10
80) 1,4-Dichlorobenzene-d4	18.00	152	282181	50.00 ppb	-0.10

System Monitoring Compounds

37) Dibromofluoromethane	6.16	113	342590	47.93 ppb	-0.08
Surrogate Spike 50.000	Range 86 - 118		Recovery = 95.86%		
41) 1,2-Dichloroethane-d4	6.70	65	215624	46.03 ppb	-0.08
Surrogate Spike 50.000	Range 80 - 120		Recovery = 92.06%		
65) Toluene-d8	10.03	98	923353	50.11 ppb	-0.11
Surrogate Spike 50.000	Range 88 - 110		Recovery = 100.22%		
78) Bromofluorobenzene	15.52	95	287731	46.26 ppb	-0.09
Surrogate Spike 50.000	Range 86 - 115		Recovery = 92.52%		

Target Compounds Qvalue

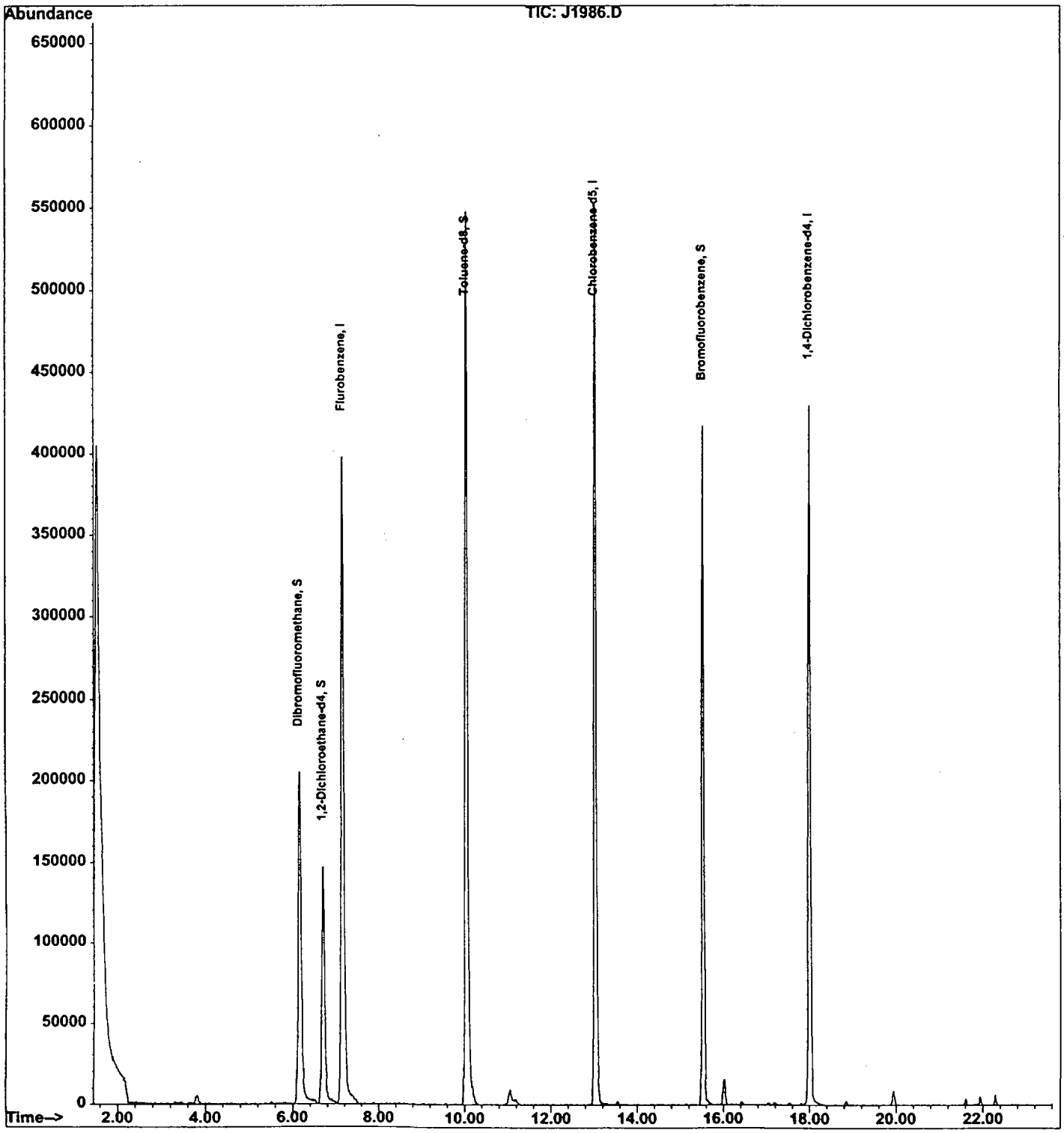
SK 11/17/99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101499\J1986.D Vial: 100
Acq On : 14 Oct 99 18:34 Operator:
Sample : VBLKJ1;MSJ;; Inst : GC/MS Ins
Misc : 991014J1;LOW;SO; Multiplr: 1.00
Quant Time: Nov 17 16:54 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration



STL-NJ Instrument Log

VOA-GC/MS Department

MSI

Analyst/Date/seq. fm 10/13/99

Analytical Fractions ___VOA___

Instrument ID ___MSI___

Tune File ___T_H.U

Calibration Standards

Standard	Lot #	Conc(ug/ml)	vol(ul)
BFB	VOAWS 0004BFB	25	2
CLP/824ISS	VOAWS	50	2
CLP MIX	VOAWS	50	2
WORK STD	VOAWS	50	2
DICH/TRI	VOAWS	50	5
8260 IS/SS	VOAWS	50	5
8260 Full	VOAWS 0032GAS	50	5
8260 Misc	VOAWS 0008 MISC	100	2.5
8240 CR	VOAWS 0027 ADD	100	2.5
524.2ISS	VOAWS 0016 AR	10	12.5/2.5*
524.2Vmix	VOAWS	25	12.5/2.5*

IS/RTLimits	IS/RTLimits
600/500	CLP/8260
IS#1	IS#1
RT	RT
IS#2	IS#2
RT	RT
IS#3	IS#3
RT	RT

Reviewed By : fm

2nd Review : 311

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	(✓) = pH <2	COMMENTS
1	50ngBFB	I2086	DIR	2ul	1.0	I	BFB	—	8260	—	OK
2	VST0500	87	1	5ml		I	8260044W			—	OK
3	200	88	2			I				—	OK
4	100	89	3			I				—	OK
5	050	90	4			I				—	OK
6	020	91	5			I				—	OK
7	010	92	6			I				—	OK
8	005	93	7			I				—	OK
9	002	94	8			I				—	OK
10	991013 I1	95	9			I				—	OK
11	I1	96	10			I				—	OK
12	I2	97	11	100ul	125	I				—	OK
13	VBLKBS	98	12	5ml	1.0	I				—	OK
14	LB-723	99	13	500ul		I				✓	OK
15	94038001	2100	14			I				✓	OK
16	94011004	01	15			I				✓	OK
17	006	02	16			I				✓	OK
18	008	03	1			I				✓	OK
19	013	04	2			I				✓	OK
20	015	05	3			I				✓	OK
21	94038001MS	06	4			I				✓	OK
22	001MSD	07	5			I				✓	OK
23	94011015	08	6			I					pdf time
24		09	7			I					
25		10	8			I					

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STL-NJ Instrument Log
VOA-GC/MS Department

MSJ
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MSJLOG1.XLS
Revised 03/09/99

Analyst/Date/seq. S. Klu Sy 10/13/99

Analytical Fractions ___VOA_____
Instrument ID ___MSJ_____
Tune File ____T_H.U

Calibration Standards

Standard	Lot #	Conc(ug/ml)	vol(ul)
BFB	VOAWS 0004BFB	25	2
CLP/624ISS	VOAWS -	50	2
CLP MIX	VOAWS 0007CLP	50	2
WORK STD	VOAWS —	50	2
DICH/TRI	VOAWS —	50	5
8260 IS/SS	VOAWS 0003ISS	50	5
8260 Full	VOAWS 00324	50	5
8260 Misc	VOAWS 0008m	100	2.5
8240 CR	VOAWS 0027Add	~~100~~ 50	~~2.5~~
524.2ISS	VOAWS 0015AR	~~10~~ 50	12.5/2.5*
524.2Vmix	VOAWS	25	12.5/2.5*

IS/RTLimits 600/500
IS#1 _____
RT _____
IS#2 _____
RT _____
IS#3 _____
RT _____

IS/RTLimits CLP/8260
IS#1 1430565
RT 7.20
IS#2 1048019
RT 13.08
IS#3 429334
RT 18.06

Reviewed By : Sue
2nd Review : _____

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	COMMENTS
1	50 NGBFB	T1950	DI	2ul	—	I —	—	—	8260	OK
2	VSTD500	51	1	5ml	1.0	I	82600075			OK
3	200	52	2			I				OK
4	100	53	3			I				OK
5	050	54	4			I				OK
6	005	56	6			I				OK
7	005	57	7			I				OK
8	991013J1	58	8	5g		I	82600085			OK
9	991013J1	59	9			I				OK
10	VBLKBS	60	10	5ml		I				OK
11	94401001	61	11	5g		I				RR ISL
12	802	62	12			I				
13	003	63	13			I				
14	002MS	64	14			I				
15	002MSD	65	15			I				
16	93948002	66	16			I				
17	001	67	17			I				
18	004	68	18			I				
19	005	69	19			I				
20	~~94035~~ 007	70	20			I				OK
21	008	71	21			I				OK low fins
22	94046001	72	22			I				OK
23	002	73	23			I				OK
24	003	74	24			I				OK
25	002MS	75	25			I				OK
	002MSD	76	26							

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STL-NJ Instrument Log
VOA-GC/MS Department

MSJ
Revised 03/09/99

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MSJLOG1.XLS

Analyst/Date/seq. S. [illegible] 10/14/99

Analytical Fractions ___VOA_____
Instrument ID ___MSJ_____
Tune File ____T_H.U

Calibration Standards

Standard	Lot #	Conc(ug/ml)	vol(ul)
BFB	VOAWS 0004BFB	25	2
CLP/624ISS	VOAWS	50	2
CLP MIX	VOAWS 0007CLP	50	2
WORK STD	VOAWS —	50	2
DICH/TRI	VOAWS —	50	5
8260 IS/SS	VOAWS 0003ISS	50	5
8260 Full	VOAWS 0032C	50	5
8260 Misc	VOAWS 0008m	100	2.5
8240 CR	VOAWS 0027Add	100	2.5
524.2ISS	VOAWS 0016Ar	50	12.5/2.5*
524.2Vmix	VOAWS	25	12.5/2.5*

IS/RTLimits 600/500
IS#1 _____
RT _____
IS#2 _____
RT _____
IS#3 _____
RT _____

IS/RTLimits CLP/8260
IS#1 _____
RT _____
IS#2 _____
RT _____
IS#3 _____
RT _____

Reviewed By : [illegible]
2nd Review : _____

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	COMMENTS
1	50 NG BFB	J1982	DI	2ul	—	I —	—	—	8260	ok
2	VSTD050	83	1	5ml	1.0	I	8260008S	P1/P2		ok
3	991014J1	85	3	5g		I				ok
4	991014J1	86	4	5g		I				ok
5	VBLKBS	87	5	5ml		I				ok
6	94046003	88	6	5g		I				ok
7	93948002	89	7			I				ok
8	004	90	8			I				ok
9	005	91	9			I				ok
10	94035007	92	10			I				ok
11	008	93	11			I				ok
12	94098001	94	12			I				ok
13	002MS	95	13			I				ok
14	001MSD	96	14			I				ok
15	94106008	97	15			I				ok
16	009	98	16			I				~~ok~~ ok
17	94039001	99	17			I				ok
18	94083001	2000	18	1g	5X	I				ok
19	94106008MS	01	19	5g	1.0	I				ok
20	008MSD	02	20			I				ok
21	94106009	03	21			I				ok
22						I				
23						I				
24						I				
25						I				

000187

STL-NJ Instrument Log

VOA-GC/MS Department

MSI

Analyst/Date/seq. S. Illuley 10/14/99

Analytical Fractions ___VOA___

Instrument ID ___MSI___

Tune File ___T_H.U

Calibration Standards

Standard	Lot #		Conc(ug/ml)		vol(ul)
BFB	VOAWS	00048B	25		2
CLP/624ISS	VOAWS		50		2
CLP MIX	VOAWS	007AA	50		2
WORK STD	VOAWS	—	50		2
DICH/TRI	VOAWS	—	50		5
8260 IS/SS	VOAWS	0003ISS	50		5
8260 Full	VOAWS	00326	50		5
8260 Misc	VOAWS	0008mis	100		2.5
8240 CR	VOAWS	0027AA	100		2.5
524.2ISS	VOAWS	0016AA	~~10~~ 50		12.5/2.5*
524.2Vmix	VOAWS		25		12.5/2.5*

IS/RTLimits 600/500	IS/RTLimits CLP/8260
IS#1 ___	IS#1 955222
RT ___	RT ~~14.5~~ 8.61
IS#2 ___	IS#2 613174
RT ___	RT 14.22
IS#3 ___	IS#3 298297
RT ___	RT 16.76

Reviewed By : SL

2nd Review :

11:35

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	(✓) = pH <2	COMMENTS
1	50 NG BFB	J2162	DT	2ul	—	I	—	—	624/8260	—	OK
2	VSTD020	63	1	5ml	1.0	I	624098	VIT	624		OK
3	050	64	2			I	8260044W		8260		OK
4	991014I1	65	3			I	624098		624		OK
5	991014I2	66	4			I	8260044W		8260		OK
6	991014I3	67	5	100ul	125	I					OK
7	991014I1	68	4	5ml	1.0	I	624098		624		OK
8	VBLKBS	69	10			I	8260044W		8260		OK
9	VBLKBS	70	11			I	624098		624		OK
10	94058007	71		5ml ~~100ul~~		I	8260044W	TU	8260		OK wrong method
11	001	72	2	100ul	83	I					OK
12	002	73	3		76	I					OK
13	003	74	4		79	I					OK
14	004	75	5		104	I					OK
15	005	76	6		82	I					OK
16	006	77	7		82	I					OK
17	94101001	78	8		125	I		BTEX	BTEX		OK
18	94088001	79	9		125	I					OK
19	94058106MS	80	10		82	I		TU	TU		OK
20	106MSD	81	11		82	I					OK
21	94106001	82	12	5ml	1.0	I					OK
22	002	83	13			I					OK
23	003	84	14			I					OK
24	004	85	15			I					OK
25	005	86	16			I					OK

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MSI

VOA-GC/MS Department

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Analyst/Date/seq. [illegible] 10/1/91

Analytical Fractions ___VOA___

Instrument ID ___MSI___

Tune File ___T_H.U

17:35

Calibration Standards 2 of 3

Standard	Lot #	Conc(ug/ml)	vol(ul)
BFB	VOAWS	25	2
CLP/624ISS	VOAWS	50	2
CLP MIX	VOAWS	50	2
WORK STD	VOAWS	50	2
DICH/TRI	VOAWS	50	5
8260 IS/SS	VOAWS	50	5
8260 Full	VOAWS	50	5
8260 Misc	VOAWS	100	2.5
8240 CR	VOAWS	100	2.5
524.2ISS	VOAWS	10	12.5/2.5*
524.2Vmix	VOAWS	25	12.5/2.5*

IS/RTLimits 600/500	IS/RTLimits CLP/8260
IS#1	IS#1
RT	RT
IS#2	IS#2
RT	RT
IS#3	IS#3
RT	RT

Reviewed By : [illegible]

2nd Review [illegible]

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	(✓) = pH <2	COMMENTS
1	94106006	I2187	1	5ml	1.0	I —	8260004LW	TU	8260	✓	OK
2	007	88	2			I				✓	OK
3	010	89	3			I				✓	OK
4	011	90	4			I				✓	OK
5	94058007	91	5			I				✓	OK
6	001	92	6	100ul	83	I				✓	PAST TUNE
7	94106002MS	93	7	5ml	1.0	I				✓	
8	002MSD	94	8			I				✓	
9	94063016	95	9	5ml	1.0	I	624098	—	600	✓	RR CARRYOR
10	015	96	10			I				✓	OK
11	014	97	11			I				✓	OK
12	013	98	12			I				✓	OK
13	012	99	13			I				✓	OK
14	011	I2200	14		1.0	I				✓	RR 10X
15	016	01	15	5ml		I				✓	OK
16	94032002	02	16			I				✓	OK
17	001	03	1			I				✓	OK
18	001MS	04	2			I				✓	OK
19	0011	05	3	500ul	10X	I				✓	OK
20	94090001	06	4	5ml	1.0	I				✓	OK
21	002	07	5			I				✓	OK
22	003	08	6			I				✓	OK
23	004	09	7			I				✓	OK
24	005	10	8			I				✓	OK
25	006	11	9			I				✓	OK

000189

STL-NJ Instrument Log

VOA-GC/MS Department

MSI

Analyst/Date/seq. S. Ullsey 10/15/99

Analytical Fractions ___VOA___

Instrument ID ___MSI___

Tune File ___T_H.U

Calibration Standards

Standard	Lot #		Conc(ug/ml)	vol(ul)
BFB	VOAWS	0004BFB	25	2
CLP/624ISS	VOAWS	0015ISS	50	2
CLP MIX	VOAWS	0007MIX	50	2
WORK STD	VOAWS	—	50	2
DICH/TRI	VOAWS	—	50	5
8260 IS/SS	VOAWS	0003ISS	50	5
8260 Full	VOAWS	0032G	50	5
8260 Misc	VOAWS	0005M	100	2.5
8240 CR	VOAWS	002FADD	100	2.5
524.2ISS	VOAWS	0016AR	10	12.5/2.5*
524.2Vmix	VOAWS		25	12.5/2.5*

IS/RTLimits 600/500		IS/RTLimits CLP/8260	
IS#1	94120	IS#1	946976
RT	5.40	RT	8.57
IS#2	493822	IS#2	681142
RT	6.61	RT	14.19
IS#3	417866	IS#3	2250/6
RT	10.44	RT	16.76

Reviewed By : GH

2nd Review : 1751

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	(✓) = pH <2	COMMENTS
1	50 NG BFB	I2222	DI	2ul	—	I —	—	—	600/8260	—	OK
2	VSTD050	24	2	5ml	1.0	I	8260004UW	P/T	8260		OK
3	020	25	1			I	624098		600		OK
4	9910ICA1	26	2			I					OK
5	9910ICA2	27	4			I	8260004UW		8260		OK
6	9910ICA3	28	5			I					OK
7	VB21KB5	29	12			I					OK
8	VB21KB5	30	16			I	624098		624		OK
9	94058001	31	1	100ul	83	I	8260004UW	TU	8260	—	OK
10	94120004	32	2	5ml	1.0	I				✓	OK
11	001	33	3			I				—	OK
12	002	34	4			I				—	OK
13	003	35	5			I				—	OK
14	001MS	36	6			I				—	OK
15	001MSD	37	7			I				—	OK
16	94050016	38	8			I				—	OK
17	001	39	9			I					OK pH 10X
18	002	40	10			I				—	OK
19	003	41	11			I				—	OK
20	004	42	12			I				—	OK
21	005	43	13			I				—	OK
22	006	44	14			I				—	OK
23	007	45	15			I				—	OK
24	008	46	16			I				—	RR 20+
25	009	47	1			I					OK

000190

STL-NJ Instrument Log
VOA-GC/MS Department

MSI

Analyst/Date/seq. CL 10/15/97

Analytical Fractions VOA

Instrument ID MSI

Tune File T_H.U

Calibration Standards

Standard	Lot #	Conc(ug/ml)	vol(ul)
BFB	VOAWS	25	2
CLP/624ISS	VOAWS	50	2
CLP MIX	VOAWS	50	2
WORK STD	VOAWS	50	2
DICH/TRI	VOAWS	50	5
8260 IS/SS	VOAWS	50	5
8260 Full	VOAWS	50	5
8260 Misc	VOAWS	100	2.5
8240 CR	VOAWS	100	2.5
524.2ISS	VOAWS	10	12.5/2.5*
524.2Vmix	VOAWS	25	12.5/2.5*

See prev. page

IS/RTLimits 600/500	IS/RTLimits CLP/8260
IS#1	IS#1
RT	RT
IS#2	IS#2
RT	RT
IS#3	IS#3
RT	RT

Reviewed By :

2nd Review :

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	(✓) = pH <2	COMMENTS
1	94050 010	I22 48	2	5ml	1.0	I —	8260044W	Tut 06	8260		RNJ 09
2	011MS	49	3			I					OK
3	012MSD	50	4			I					OK
4	013	51	5			I					RKN
5	015	52	6			I					DAST TUNE
6	001DL	53	7	500ug	10.0	I					
7	93865001	54	8	5ml	1.0	I	624098	ppt	624		OK
8	94079014MS	55	9			I		Tut MT			RR
9	015MSD	56	10			I					
10	013	57	11			I					
11	008	58	12			I					
12	009	59	13			I					
13	001	60	14			I					
14						I					
15						I					
16						I					
17						I					
18						I					
19						I					
20						I					
21						I					
22						I					
23						I					
24						I					
25						I					

10/18/97

000191

SEMIVOLATILES

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: STL-NJ

Project No.: 94106

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	#	#	TOT OUT
01	SBLK41653	39	49	57	18	31	37			0
02	SW-2-1-02	37	46	34	19	26	46			0
03	SW-2-1-02MS	43	58	46	33	44	61			0
04	SW-2-1-02MSD	47	62	52	39	50	55			0
05	SW-2-1-01	38	46	55	18	29	41			0
06	SBLKBS	39	52	53	20	32	49			0
07										
08										
09										
10										
11										
12										
13										
14										
15										
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				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

3C

WATER SEMIVOLATILE BLANK SPIKE DUPLICATE RECOVERY

Lab Name: STN-NJ

Project No.: 94106

Matrix Spike - Sample No.: SBLKBS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	75	0	20	27	26-90
2-Chlorophenol	75	0	44	59	25-102
1,4-Dichlorobenzene	50	0	22	44	28-104
N-Nitrosodi-n-Propylamine	50	0	21	42	41-126
1,2,4-Trichlorobenzene	50	0	23	46	38-107
4-Chloro-3-Methylphenol	75	0	47	63	26-103
Acenaphthene	50	0	25	50	31-137
4-Nitrophenol	75	0	17	22	11-114
2,4-Dinitrotoluene	50	0	25	50	38-89
Penachlorophenol	75	0	30	40	17-109
Pyrene	50	0	28	56	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Comments:

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL-NJ

Project No.: 94106

Matrix Spike - Sample No.: SW-2-1-02 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	150	0	52	35	26-90
2-Chlorophenol	150	0	82	55	25-102
1,4-Dichlorobenzene	100	0	52	52	28-104
N-Nitrosodi-n-Propylamine	100	0	49	49	41-126
1,2,4-Trichlorobenzene	100	0	56	56	38-107
4-Chloro-3-Methylphenol	150	0	90	60	26-103
Acenaphthene	100	0	60	60	31-137
4-Nitrophenol	150	0	44	29	11-114
2,4-Dinitrotoluene	150	0	49	33	38-89
Penachlorophenol	150	0	82	55	17-109
Pyrene	100	0	52	52	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	150	57	38	9	35	26-90
2-Chlorophenol	150	90	60	9	50	25-102
1,4-Dichlorobenzene	100	62	62	18	27	28-104
N-Nitrosodi-n-Propylamine	100	56	56	13	38	41-126
1,2,4-Trichlorobenzene	100	61	61	9	23	38-107
4-Chloro-3-Methylphenol	150	94	63	4	33	26-103
Acenaphthene	100	65	65	8	19	31-137
4-Nitrophenol	150	36	24	20	50	11-114
2,4-Dinitrotoluene	150	53	35	8	47	38-89
Penachlorophenol	150	77	51	6	47	17-109
Pyrene	100	54	54	4	36	35-142

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Comments: _____

4C

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

SBLK41653

Lab Name: STL-NJ

Project No.: 94106

Lab File ID: G9698

Lab Sample ID: SBLK41653

Instrument ID: MSG

Date Extracted: 10/15/99

Matrix: (soil/water) Water

Date Analyzed: 10/21/99

Level: (low/med) low

Time Analyzed: 11:04

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SW-2-1-02	94106007	G9700	10/21/99
02	SW-2-1-02MS	94106007MS	G9701	10/21/99
03	SW-2-1-02MSD	94106007MSD	G9702	10/21/99
04	SW-2-1-01	94106006	G9703	10/21/99
05	SBLKBS	SBLKBS	G9699	10/21/99
06				
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COMMENTS:

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : STL-NJ Contract:

Project No.: 94106

Lab File ID: GG310 DFTPP Injection Date: 10/7/99

Instrument ID: MSG DFTPP Injection Time: 0515

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	53.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	67.0
70	Less than 2.0% of mass 69	0.4 (0.6)1
127	40.0 - 60.0% of mass 198	45.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.2
275	10.0 - 30.0% of mass 198	15.8
365	1.0 - 100.0% of mass 198	2.1
441	0.01 - 100.0% of mass 443	88.0
442	40.0 - 100.0% of mass 198	71.9
443	17.0 - 23.0% of mass 442	15.1 (21.0)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD080	G9521	10/7/99	0630
02	SSTD010	SSTD010	G9522	10/7/99	0724
03	SSTD050	SSTD050	G9523	10/7/99	0814
04	STDD100	STDD100	G9524	10/7/99	0905
05	STDD120	STDD120	G9525	10/7/99	0955
06	STDD160	STDD160	G9526	10/7/99	1045
07					
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21					
22					

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : STL-NJ

Project No.:

Lab File ID: GG325

DFTPP Injection Date: 10/21/99

Instrument ID: MSG

DFTPP Injection Time: 9:08

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	51.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	63.6
70	Less than 2.0% of mass 69	0.4 (0.6)1
127	40.0 - 60.0% of mass 198	46.9
197	Less than 1.0% of mass 198	0.7
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	8.4
275	10.0 - 30.0% of mass 198	23.7
365	Greater than 1.0% of mass 198	2.2
441	Present, but less than mass 443	86.1
442	Greater than 40.0% of mass 198	80.6
443	17.0 - 23.0% of mass 442	15.4 (19.1)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD080	G9696	10/21/99	9:28
02	SBLK41653	SBLK41653	G9698	10/21/99	11:04
03	SW-2-1-02	94106007	G9700	10/21/99	12:43
04	SW-2-1-02MS	94106007MS	G9701	10/21/99	13:33
05	SW-2-1-02MSD	94106007MSD	G9702	10/21/99	14:23
06	SW-2-1-01	94106006	G9703	10/21/99	15:23
07	SBLKBS	SBLKBS	G9699	10/21/99	11:52
08					
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19					
20					
21					
22					

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ

Project No.: 94106

Lab File ID (Standard): G9696 Date Analyzed: 10/21/99

Instrument ID: MSG Time Analyzed: 9.28 AM

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	293612	10.03	1111446	13.23	828201	17.83
	UPPER LIMIT	587224	10.53	2222892	13.73	1656402	18.33
	LOWER LIMIT	146806	9.53	555723	12.73	414101	17.33
	SAMPLE NO.						
01	SBLK41653	306278	10.03	1152963	13.23	768878	17.83
02	SW-2-1-02	314370	10.03	1184710	13.24	817636	17.83
03	SW-2-1-02MS	293525	10.04	1098965	13.23	782816	17.84
04	SW-2-1-02MSD	298439	10.04	1151453	13.24	794737	17.84
05	SW-2-1-01	301177	10.03	1155523	13.24	823288	17.84
06	SBLKBS	292810	10.03	1142871	13.23	808261	17.83
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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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ

Project No.: 94106

Lab File ID (Standard): G9696 Date Analyzed: 10/21/99

Instrument ID: MSG Time Analyzed: 9.28 AM

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	1567404	21.74	1724891	28.71	1467297	33.10
	UPPER LIMIT	3134808	22.24	3449782	29.21	2934594	33.60
	LOWER LIMIT	783702	21.24	862446	28.21	733649	32.60
	SAMPLE NO.						
01	SBLK41653	1412654	21.74	1239640	28.71	1282167	33.11
02	SW-2-1-02	1544680	21.75	1637095	28.71	1312611	33.13
03	SW-2-1-02MS	1488156	21.75	1449936	28.72	1293938	33.13
04	SW-2-1-02MSD	1491734	21.75	1542065	28.72	1311129	33.12
05	SW-2-1-01	1581795	21.75	1635827	28.72	1475544	33.13
06	SBLKBS	1526427	10.03	1655626	13.23	1341725	17.83
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19							
20							
21							
22							

IS4 (DCB) = Phenanthrene-d10
IS5 (NPT) = Chrysene-d12
IS6 (ANT) = 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.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SW-2-1-01

Lab Name: STL-NJ

Project No.: 94106

Matrix: (soil/water) WATER

Lab Sample ID: 94106006

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: G9703

Level: (low/med) LOW

Date Received: 10/11/99

% Moisture: _____ decanted: (Y/N): _____

Date Extracted: 10/15/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/21/99

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg)	ug/Kg		Q
108-95-2	Phenol		10		U
111-44-4	Bis (2-Chloroethyl) Ether		10		U
95-57-8	2-Chlorophenol		10		U
541-73-1	1,3-Dichlorobenzene		10		U
106-46-7	1,4-Dichlorobenzene		10		U
95-50-1	1,2-Dichlorobenzene		10		U
95-48-7	2-Methylphenol		10		U
108-60-1	2,2' -Oxybis (1-Chloropropane)		10		U
106-44-5	4-Methylphenol		10		U
621-64-7	N-Nitrosodi-n-Propylamine		10		U
67-72-1	Hexachloroethane		10		U
98-95-3	Nitrobenzene		10		U
78-59-1	Isophorone		10		U
88-75-5	2-Nitrophenol		10		U
105-67-9	2,4-Dimethylphenol		10		U
111-91-1	Bis (2-Chloroethoxy) Methane		10		U
120-83-2	2,4-Dichlorophenol		10		U
120-82-1	1,2,4-Trichlorobenzene		10		U
91-20-3	Naphthlene		10		U
106-47-8	4-Chloroaniline		10		U
87-68-3	Hexachlorobutadiene		10		U
59-50-7	4-Chloro-3-Methylphenol		10		U
91-57-6	2-Methylnaphthalene		10		U
77-47-4	Hexachlorocyclopentadiene		10		U
88-06-2	2,4,6-Trichlorophenol		10		U
95-95-4	2,4,5-Trichlorophenol		50		U
91-58-7	2-Chloronaphthalene		10		U
88-74-4	2-Nitroaniline		50		U
131-11-3	Dimethylphthalate		10		U
208-96-8	Acenaphthylene		10		U
606-20-2	2,6-Dinitrotoluene		10		U
99-09-2	3-Nitroaniline		50		U
83-32-9	Acenaphthene		10		U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SW-2-1-01

Lab Name: STL-NJ

Project No.: 94106

Matrix: (soil/water) WARWE

Lab Sample ID: 94106006

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: G9703

Level: (low/med) LOW

Date Received: 10/11/99

% Moisture: _____ decanted: (Y/N): _____

Date Extracted: 10/15/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/21/99

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg)	ug/Kg		Q
51-28-5	2,4-Dinitrophenol		50		U
100-02-7	4-Nitrophenol		50		U
132-64-9	Dibenzofuran		10		U
121-14-2	2,4-Dinitrotoluene		10		U
84-66-2	Diethylphthalate		10		U
7005-72-3	4-Chlorophenyl-Phenyl Ether		10		U
86-73-7	Fluorene		10		U
100-01-6	4-Nitroaniline		50		U
534-52-1	4,6-Dinitro-2-Methylphenol		50		U
86-30-6	N-Nitrosodiphenylamine (1)		10		U
101-55-3	4-Bromophenyl-Phenylether		10		U
118-74-1	Hexachlorobenzene		10		U
87-86-5	Penachlorophenol		50		U
85-01-8	Phenanthrene		10		U
120-12-7	Anthracene		10		U
86-74-8	Carbazole		10		U
84-74-2	Di-n-Butylphthalate		10		U
206-44-0	Fluoranthene		10		U
129-00-0	Pyrene		10		U
85-68-7	Butylbenzylphthalate		10		U
91-94-1	3,3'-Dichlorobenzidine		10		U
56-55-3	Benzo (a) Anthracene		10		U
218-01-9	Chrysene		10		U
117-81-7	Bis (2-Ethylhexyl) Phthalate		10		U
117-84-0	Di-n-Octylphtalate		10		U
205-99-2	Benzo (b) Fluoranthene		10		U
207-08-9	Benzo (k) Fluoranthene		10		U
50-32-8	Benzo (a) Pyrene		10		U
193-39-5	Indeno (1,2,3-cd) Pyrene		10		U
53-70-3	Dibenz (a,h) Anthracene		10		U
191-24-2	Benzo (g,h,i) Perylene		10		U

Quantitation Report (QT Reviewed) 000203

Data File : C:\HPCHEM\1\DATA\102199.S\G9703.D Vial: 8
Acq On : 21 Oct 99 15:13 Operator:
Sample : MSG;; Inst : MSG
Misc : 94106006;B;WG41653;AQ;;;;LOW; Multiplr: 1.00
Quant Time: Oct 22 7:24 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.03	152	301177	40.00	ppb	0.01
20) Naphthalene-d8	13.24	136	1155523	40.00	ppb	0.02
35) Acenaphthene-d10	17.84	164	823288	40.00	ppb	0.00
56) Phenanthrene-d10	21.75	188	1581795	40.00	ppb	0.00
68) Chrysene-d12	28.72	240	1635827	40.00	ppb	0.00
77) Perylene-d12	33.13	264	1475544	40.00	ppb	0.02
86) 1,4-Dichlorobenzene-d4B	10.03	152	301177	40.00	ppb	0.01
88) Perylene-d12B	33.13	264	1475544	40.00	ppb	0.02
89) Acenaphthene-d10B	17.84	164	823288	40.00	ppb	0.00
91) 1,4-Dichlorobenzene-d4C	10.03	152	301177	40.00	ppb	0.01
94) Acenaphthene-d10C	17.84	164	823288	40.00	ppb	0.00
97) Naphthalene-d8C	13.24	136	1155523	40.00	ppb	0.02
99) Phenanthrene-d10C	21.75	188	1581795	40.00	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	6.97	112	167164	21.73	ppb 29	0.01
5) Phenol-d5	9.11	99	158067	13.75	ppb 18	0.00
9) 2-Chlorophenol-d4	9.47	132	318300	35.39	ppb	0.01
13) 1,2-Dichlorobenzene-d4	10.41	152	132127	19.69	ppb	0.01
21) Nitrobenzene-d5	11.39	82	213411	19.08	ppb 38 m	0.02
39) 2-Fluorobiphenyl	16.05	172	535761	22.86	ppb 46	0.00
59) 2,4,6-Tribromophenol	19.91	332	153714	31.06	ppb 41	0.01
71) Terphenyl-d14	25.94	244	965867	27.63	ppb 55	0.00

Target Compounds Qvalue

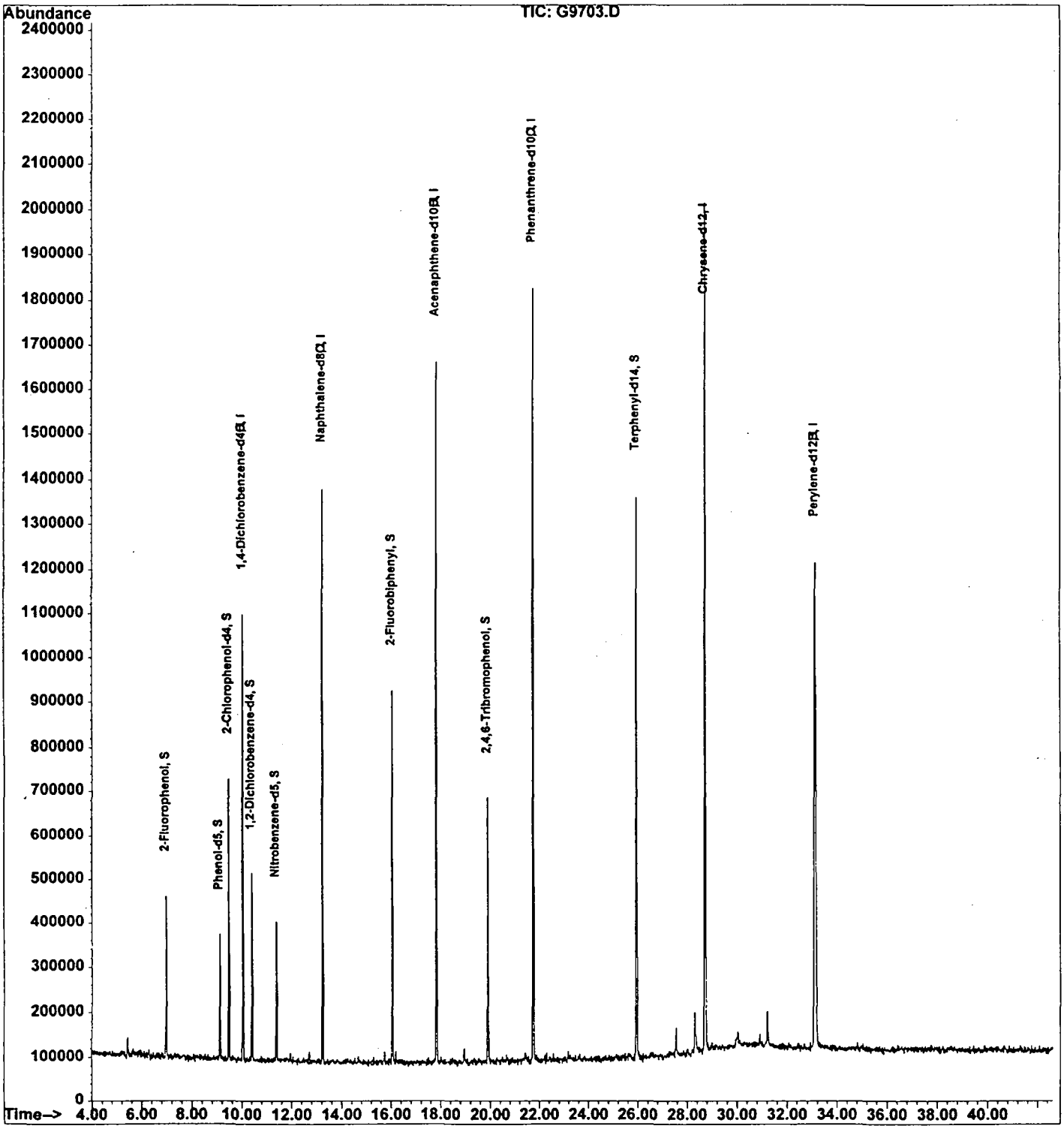
S Seal 10/22/99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102199.S\G9703.D Vial: 8
Acq On : 21 Oct 99 15:13 Operator:
Sample : MSG;; Inst : MSG
Misc : 94106006;B;WG41653;AQ;;;;LOW; Multiplr: 1.00
Quant Time: Oct 22 7:24 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Multiple Level Calibration



1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 000205

SW-2-1-02

Lab Name: STL-NJ

Project No.: 94106

Matrix: (soil/water) WATER

Lab Sample ID: 94106007

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: G9700

Level: (low/med) LOW

Date Received: 10/11/99

% Moisture: _____ decanted: (Y/N): _____

Date Extracted: 10/15/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/21/99

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg)		ug/Kg		Q
108-95-2	Phenol			10		U
111-44-4	Bis (2-Chloroethyl) Ether			10		U
95-57-8	2-Chlorophenol			10		U
541-73-1	1,3-Dichlorobenzene			10		U
106-46-7	1,4-Dichlorobenzene			10		U
95-50-1	1,2-Dichlorobenzene			10		U
95-48-7	2-Methylphenol			10		U
108-60-1	2,2' -Oxybis (1-Chloropropane)			10		U
106-44-5	4-Methylphenol			10		U
621-64-7	N-Nitrosodi-n-Propylamine			10		U
67-72-1	Hexachloroethane			10		U
98-95-3	Nitrobenzene			10		U
78-59-1	Isophorone			10		U
88-75-5	2-Nitrophenol			10		U
105-67-9	2,4-Dimethylphenol			10		U
111-91-1	Bis (2-Chloroethoxy) Methane			10		U
120-83-2	2,4-Dichlorophenol			10		U
120-82-1	1,2,4-Trichlorobenzene			10		U
91-20-3	Naphthlene			10		U
106-47-8	4-Chloroaniline			10		U
87-68-3	Hexachlorobutadiene			10		U
59-50-7	4-Chloro-3-Methylphenol			10		U
91-57-6	2-Methylnaphthalene			10		U
77-47-4	Hexachlorocyclopentadiene			10		U
88-06-2	2,4,6-Trichlorophenol			10		U
95-95-4	2,4,5-Trichlorophenol			50		U
91-58-7	2-Chloronaphthalene			10		U
88-74-4	2-Nitroaniline			50		U
131-11-3	Dimethylphthalate			10		U
208-96-8	Acenaphthylene			10		U
606-20-2	2,6-Dinitrotoluene			10		U
99-09-2	3-Nitroaniline			50		U
83-32-9	Acenaphthene			10		U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SW-2-1-02

Lab Name: STL-NJ

Project No.: 94106

Matrix: (soil/water) WARWE

Lab Sample ID: 94106007

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: G9700

Level: (low/med) LOW

Date Received: 10/11/99

% Moisture: _____ decanted: (Y/N): _____

Date Extracted: 10/15/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/21/99

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg)		ug/Kg		Q
51-28-5	2,4-Dinitrophenol			50		U
100-02-7	4-Nitrophenol			50		U
132-64-9	Dibenzofuran			10		U
121-14-2	2,4-Dinitrotoluene			10		U
84-66-2	Diethylphthalate			10		U
7005-72-3	4-Chlorophenyl-Phenyl Ether			10		U
86-73-7	Fluorene			10		U
100-01-6	4-Nitroaniline			50		U
534-52-1	4,6-Dinitro-2-Methylphenol			50		U
86-30-6	N-Nitrosodiphenylamine (1)			10		U
101-55-3	4-Bromophenyl-Phenylether			10		U
118-74-1	Hexachlorobenzene			10		U
87-86-5	Penachlorophenol			50		U
85-01-8	Phenanthrene			10		U
120-12-7	Anthracene			10		U
86-74-8	Carbazole			10		U
84-74-2	Di-n-Butylphthalate			10		U
206-44-0	Fluoranthene			10		U
129-00-0	Pyrene			10		U
85-68-7	Butylbenzylphthalate			10		U
91-94-1	3,3'-Dichlorobenzidine			10		U
56-55-3	Benzo (a) Anthracene			10		U
218-01-9	Chrysene			10		U
117-81-7	Bis (2-Ethylhexyl) Phthalate			10		U
117-84-0	Di-n-Octylphtalate			10		U
205-99-2	Benzo (b) Fluoranthene			10		U
207-08-9	Benzo (k) Fluoranthene			10		U
50-32-8	Benzo (a) Pyrene			10		U
193-39-5	Indeno (1,2,3-cd) Pyrene			10		U
53-70-3	Dibenz (a,h) Anthracene			10		U
191-24-2	Benzo (g,h,i) Perylene			10		U

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\102199.S\G9700.D Vial: 5
Acq On : 21 Oct 99 12:43 Operator:
Sample : MSG;; Inst : MSG
Misc : 94106007;B;WG41653;AQ;;;;LOW; Multiplr: 1.00
Quant Time: Oct 22 7:16 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.03	152	314370	40.00	ppb	0.01
20) Naphthalene-d8	13.24	136	1184710	40.00	ppb	0.01
35) Acenaphthene-d10	17.83	164	817636	40.00	ppb	0.00
56) Phenanthrene-d10	21.75	188	1544680	40.00	ppb	0.00
68) Chrysene-d12	28.71	240	1637095	40.00	ppb	0.00
77) Perylene-d12	33.13	264	1312611	40.00	ppb	0.02
86) 1,4-Dichlorobenzene-d4B	10.03	152	314370	40.00	ppb	0.01
88) Perylene-d12B	33.13	264	1312611	40.00	ppb	0.02
89) Acenaphthene-d10B	17.83	164	817636	40.00	ppb	0.00
91) 1,4-Dichlorobenzene-d4C	10.03	152	314370	40.00	ppb	0.01
94) Acenaphthene-d10C	17.83	164	817636	40.00	ppb	0.00
97) Naphthalene-d8C	13.24	136	1184710	40.00	ppb	0.01
99) Phenanthrene-d10C	21.75	188	1544680	40.00	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	6.96	112	156467	19.49	ppb 26	0.00
5) Phenol-d5	9.11	99	167630	13.97	ppb 19	0.00
9) 2-Chlorophenol-d4	9.47	132	279998	29.82	ppb 40	0.01
13) 1,2-Dichlorobenzene-d4	10.40	152	123226	17.59	ppb 35	0.01
21) Nitrobenzene-d5	11.39	82	210437	18.36	ppb 37 m	0.02
39) 2-Fluorobiphenyl	16.05	172	534862	22.98	ppb 46 m	0.00
59) 2,4,6-Tribromophenol	19.91	332	123645	25.58	ppb 39	0.00
71) Terphenyl-d14	25.94	244	807345	23.08	ppb 46	0.00

Target Compounds Qvalue

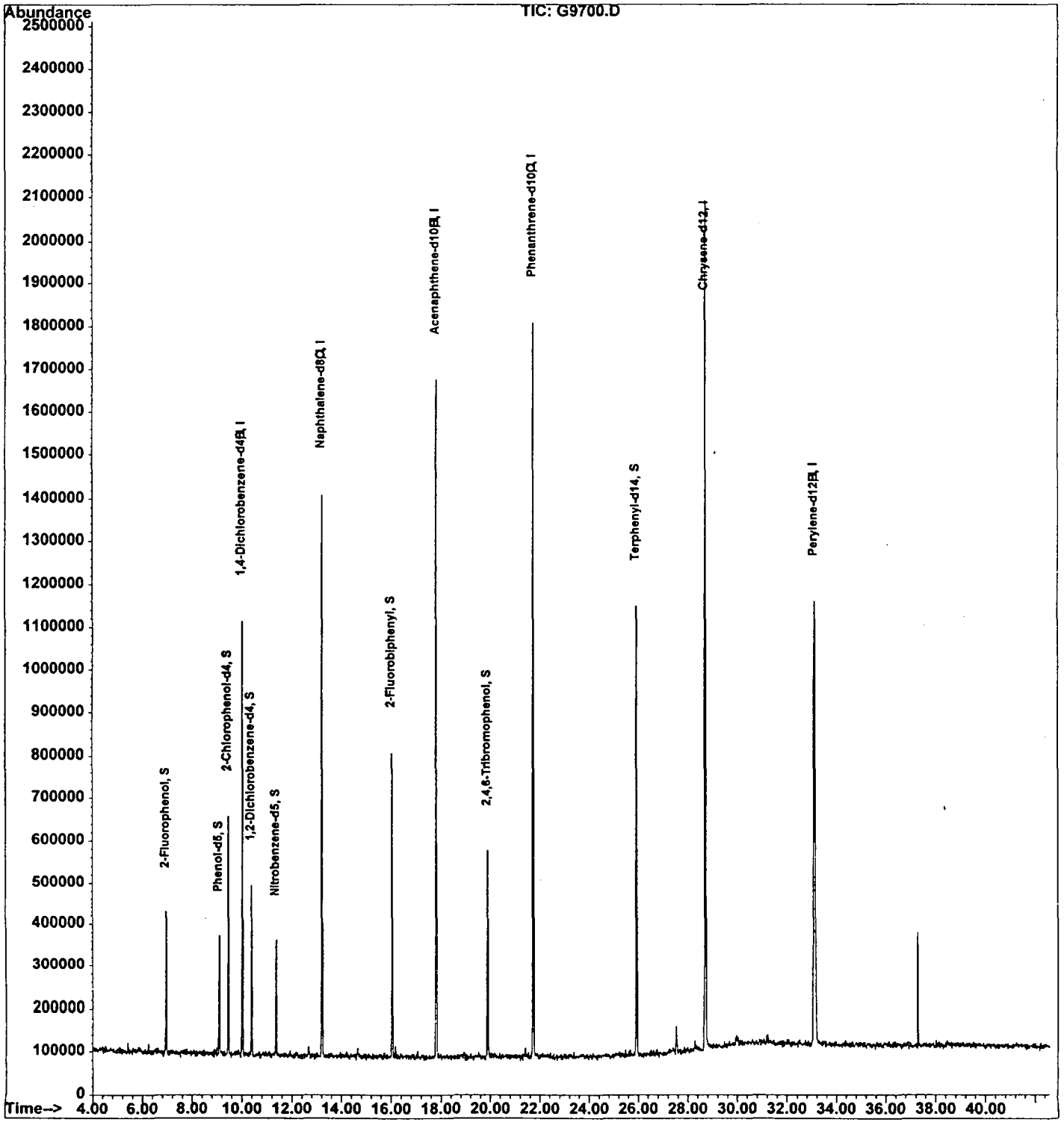
S Seal 10/22/99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102199.S\G9700.D Vial: 5
Acq On : 21 Oct 99 12:43 Operator:
Sample : MSG;; Inst : MSG
Misc : 94106007;B;WG41653;AQ;;;;LOW; Multiplr: 1.00
Quant Time: Oct 22 7:16 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Multiple Level Calibration



Response Factor Report MSG

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Initial Calibration

AVGRF 7.06

Calibration Files

10	=G9522.D	50	=G9523.D	80	=G9521.D
100	=G9524.D	120	=G9525.D	160	=G9526.D

		Compound	10	50	80	100	120	160	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------	----------	----------	ISTD	----------	----------	----------	
2)		Pyridine	1.429	1.441	1.134	1.382	1.462	1.298	1.358	9.14
3)		N-Nitrosodimethylam	0.977	0.957	0.851	0.983	1.036	0.949	0.959	6.36
4)	S	2-Fluorophenol	1.104	1.019	0.956	1.033	1.064	0.953	1.022	5.83
5)	S	Phenol-d5	1.649	1.540	1.472	1.445	1.604	1.448	1.526	5.63
6)	C	Phenol	1.705	1.663	1.567	1.623	1.679	1.571	1.635	3.51#
7)		bis(2-Chloroethyl)e	1.618	1.468	1.360	1.391	1.457	1.323	1.436	7.33
8)	P	2-Chlorophenol	1.358	1.278	1.223	1.235	1.308	1.177	1.263	5.16
9)	S	2-Chlorophenol-d4	1.302	1.205	1.144	1.177	1.214	1.125	1.195	5.27
10)		1,3-Dichlorobenzene	1.470	1.348	1.306	1.340	1.343	1.244	1.342	5.50
11)	C	1,4-Dichlorobenzene	1.510	1.386	1.345	1.383	1.382	1.270	1.379	5.62#
12)		Benzyl alcohol	0.836	0.824	0.760	0.797	0.846	0.794	0.809	3.94
13)	S	1,2-Dichlorobenzene	1.003	0.921	0.792	0.887	0.907	0.840	0.891	8.12
14)		1,2-Dichlorobenzene	1.525	1.335	1.294	1.316	1.328	1.205	1.334	7.88
15)		2-Methylphenol	1.201	1.128	1.038	1.095	1.117	1.043	1.104	5.48
16)		bis(2-chloroisoprop	2.138	2.065	1.967	2.061	2.160	2.028	2.070	3.43
17)		4-Methylphenol	1.194	1.118	1.049	1.091	1.117	1.049	1.103	4.91
18)	P	n-Nitroso-di-n-prop	1.050	1.008	0.953	1.025	1.056	0.978	1.012	3.99
19)		Hexachloroethane	0.689	0.645	0.634	0.661	0.651	0.609	0.648	4.11
20)	I	Naphthalene-d8	----------	----------	----------	ISTD	----------	----------	----------	
21)	S	Nitrobenzene-d5	0.415	0.402	0.341	0.397	0.392	0.377	0.387	6.68
22)		Nitrobenzene	0.415	0.385	0.363	0.376	0.389	0.387	0.386	4.40
23)		Isophorone	0.705	0.694	0.664	0.686	0.686	0.679	0.686	2.03
24)	C	2-Nitrophenol	0.221	0.217	0.213	0.207	0.211	0.194	0.210	4.49#
25)		2,4-Dimethylphenol	0.372	0.349	0.342	0.349	0.349	0.333	0.349	3.70
26)		bis(2-Chloroethoxy)	0.533	0.507	0.464	0.481	0.482	0.470	0.489	5.29
27)	C	2,4-Dichlorophenol	0.317	0.301	0.295	0.294	0.294	0.283	0.297	3.83#
28)		Benzoic Acid	0.159	0.226	0.233	0.229	0.254	0.235	0.223	14.67
29)	P	1,2,4-Trichlorobenz	0.366	0.337	0.325	0.328	0.314	0.305	0.329	6.45
30)		Naphthalene	1.088	0.988	0.944	0.944	0.917	0.900	0.963	7.03
31)		4-Chloroaniline	0.468	0.446	0.433	0.419	0.416	0.400	0.430	5.56
32)	C	Hexachlorobutadiene	0.201	0.180	0.178	0.174	0.174	0.166	0.179	6.59#
33)	C	4-Chloro-3-methylph	0.354	0.358	0.341	0.340	0.340	0.323	0.343	3.65#
34)		2-Methylnaphthalene	0.717	0.684	0.645	0.649	0.621	0.594	0.652	6.73
35)	I	Acenaphthene-d10	----------	----------	----------	ISTD	----------	----------	----------	
36)	P	Hexachlorocyclopent	0.240	0.299	0.311	0.317	0.314	0.295	0.296	9.68
37)	C	2,4,6-trichlorophen	0.379	0.359	0.342	0.355	0.341	0.342	0.353	4.18#
38)		2,4,5-Trichlorophen	0.421	0.387	0.371	0.393	0.390	0.391	0.392	4.08
39)	S	2-Fluorobiphenyl	1.305	1.181	1.029	1.147	1.086	1.085	1.139	8.52
40)		2-Chloronaphthalene	1.151	1.028	0.982	1.019	0.977	0.959	1.019	6.83
41)		2-Nitroaniline	0.369	0.407	0.362	0.400	0.415	0.415	0.395	5.91

(#) = Out of Range

Response Factor Report MSG

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Initial Calibration

Calibration Files
10 =G9522.D 50 =G9523.D 80 =G9521.D
100 =G9524.D 120 =G9525.D 160 =G9526.D

		Compound	10	50	80	100	120	160	Avg	%RSD
42)		Dimethylphthalate	1.384	1.282	1.262	1.275	1.260	1.221	1.281	4.29
43)		Acenaphthylene	1.897	1.736	1.605	1.632	1.526	1.498	1.649	8.96
44)		2,6-Dinitrotoluene	0.304	0.336	0.327	0.330	0.330	0.327	0.326	3.38
45)		3-Nitroaniline	0.358	0.389	0.384	0.377	0.392	0.377	0.379	3.19
46)	C	Acenaphthene	1.256	1.142	1.041	1.089	1.042	1.017	1.098	8.13#
47)	P	2,4-Dinitrophenol		0.177	0.199	0.189	0.232	0.209	0.201	10.26
48)	P	4-Nitrophenol	0.143	0.168	0.156	0.175	0.183	0.175	0.167	8.75
49)		Dibenzofuran	1.712	1.606	1.499	1.571	1.490	1.464	1.557	5.96
50)	P	2,4-Dinitrotoluene	0.438	0.486	0.476	0.477	0.477	0.474	0.471	3.57
51)		Diethylphthalate	1.452	1.462	1.367	1.400	1.380	1.327	1.398	3.69
52)		Fluorene	1.379	1.260	1.157	1.189	1.114	1.107	1.201	8.64
53)		1,2- Diphenyl hydra	1.590	1.574	1.453	1.549	1.520	1.489	1.529	3.42
54)		4-Chlorophenyl-phen	0.675	0.624	0.595	0.589	0.558	0.546	0.598	7.85
55)		4-Nitroaniline	0.426	0.457	0.448	0.449	0.477	0.454	0.452	3.70
56)	I	Phenanthrene-d10	----------ISTD----------							
57)		4,6-Dinitro-2-methy	0.117	0.175	0.167	0.175	0.186	0.176	0.166	14.82
58)	C	n-Nitrosodiphenylam	0.556	0.513	0.471	0.497	0.483	0.490	0.502	5.98#
59)	S	2,4,6-Tribromopheno	0.129	0.130	0.118	0.124	0.126	0.124	0.125	3.30
60)		4-Bromophenyl-pheny	0.198	0.216	0.204	0.205	0.200	0.163	0.198	9.17
61)		Hexachlorobenzene	0.251	0.262	0.238	0.248	0.222	0.202	0.237	9.26
62)		Carbazole	1.198	1.122	1.027	1.093	1.020	1.030	1.082	6.50
63)	C	Pentachlorophenol	0.150	0.149	0.150	0.130	0.158	0.169	0.151	8.35#
64)		Phenanthrene	1.196	1.113	0.976	1.025	1.017	0.999	1.054	7.91
65)		Anthracene	1.233	1.138	1.041	1.054	1.031	1.020	1.086	7.65
66)		Di-n-butylphthalate	1.626	1.554	1.380	1.474	1.424	1.427	1.481	6.26
67)	C	Fluoranthene	1.379	1.262	1.184	1.182	1.169	1.172	1.225	6.80#
68)	I	Chrysene-d12	----------ISTD----------							
69)		Benzidine	0.474	0.164	0.242	0.190	0.134	0.141	0.224	57.39
70)	P	Pyrene	1.324	1.122	1.062	1.221	1.101	1.054	1.148	9.18
71)	S	Terphenyl-d14	0.907	0.920	0.804	0.832	0.880	0.786	0.855	6.51
72)		Butylbenzylphthalat	0.720	0.664	0.609	0.724	0.657	0.652	0.671	6.56
73)		Benzo[a]anthracene	1.262	1.138	0.984	1.144	1.031	1.022	1.097	9.47
74)		3,3'-Dichlorobenzid	0.448	0.429	0.380	0.377	0.431	0.402	0.411	7.13
75)		Chrysene	1.066	0.927	1.071	1.000	0.925	0.912	0.983	7.39
76)		bis(2-Ethylhexyl)ph	1.077	0.915	0.822	1.009	0.843	0.860	0.921	11.06
77)	I	Perylene-d12	----------ISTD----------							
78)	C	Di-n-octylphthalate	0.877	0.722	0.656	0.855	0.692	0.746	0.758	11.77#
79)		Benzo[b]fluoranthen	1.562	1.355	1.242	1.402	1.274	1.314	1.358	8.46
80)		Benzo[k]fluoranthen	1.507	1.261	1.184	1.372	1.228	1.255	1.301	9.12
81)	C	Benzo[a]pyrene	1.623	1.200	1.178	1.380	1.154	1.221	1.293	13.95#
82)		Indeno[1,2,3-cd]pyr	1.338	1.265	1.212	1.475	1.239	1.183	1.285	8.31

(#) = Out of Range

Response Factor Report MSG

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Initial Calibration

Calibration Files

10	=G9522.D	50	=G9523.D	80	=G9521.D
100	=G9524.D	120	=G9525.D	160	=G9526.D

		Compound	10	50	80	100	120	160	Avg	%RSD
83)		Dibenz[a,h]anthrace	0.936	0.868	1.023	1.017	0.834	0.800	0.913	10.33
84)		Benzo[g,h,i]perylen	1.197	1.220	1.137	1.279	1.164	1.030	1.171	7.22
85)		Dibenzo[a,h]acridin							0.000	-1.00
86)	I	1,4-Dichlorobenzene-d	ISTD							
87)		Aniline	1.988	1.741	1.704	1.632	1.703	1.524	1.716	8.98
88)	I	Perylene-d12B	ISTD							
89)	I	Acenaphthene-d10B	ISTD							
90)		Biphenyl							0.000	-1.00
91)	I	1,4-Dichlorobenzene-d	ISTD							
92)		Isobutyric acid							0.000	-1.00
93)		Methacrylic acid							0.000	-1.00
94)	I	Acenaphthene-d10C	ISTD							
95)		Diphenyl ether							0.000	-1.00
96)		1,2-Dimethylnaphtha	1.126	0.972	1.037	0.891	0.827	0.841	0.949	12.40
97)	I	Naphthalene-d8C	ISTD							
98)		Diethyl Maleate							0.000	-1.00
99)	I	Phenanthrene-d10C	ISTD							
100)		Malathion							0.000	-1.00

(#) = Out of Range

Compound List Report MSG

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 11:17:41 1999
Response via : Initial Calibration
Total Cpnds : 100

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4	152	10.16	1.000	A	1	A	A
2		Pyridine	79	4.43	0.436	A	1	A	B
3		N-Nitrosodimethylamine	42	4.32	0.425	A	3	A	A
4	S	2-Fluorophenol	112	7.12	0.700	A	1	A	A
5	S	Phenol-d5	99	9.28	0.913	A	2	A	A
6	C	Phenol	94	9.32	0.917	A	2	A	A
7		bis(2-Chloroethyl)ether	93	9.54	0.939	A	2	A	A
8	P	2-Chlorophenol	128	9.67	0.951	A	2	A	A
9	S	2-Chlorophenol-d4	132	9.63	0.947	A	3	A	A
10		1,3-Dichlorobenzene	146	10.03	0.987	A	2	A	A
11	C	1,4-Dichlorobenzene	146	10.21	1.005	A	2	A	A
12		Benzyl alcohol	108	10.52	1.035	A	2	A	A
13	S	1,2-Dichlorobenzene-d4	152	10.54	1.037	A	2	A	A
14		1,2-Dichlorobenzene	146	10.58	1.041	A	2	A	A
15		2-Methylphenol	108	10.77	1.059	A	1	A	A
16		bis(2-chloroisopropyl)ether	45	10.85	1.068	A	2	A	A
17		4-Methylphenol	108	11.18	1.100	A	1	A	A
18	P	n-Nitroso-di-n-propylamine	70	11.22	1.103	A	2	A	A
19		Hexachloroethane	117	11.42	1.124	A	2	A	A
20	I	Naphthalene-d8	136	13.38	1.000	A	1	A	A
21	S	Nitrobenzene-d5	82	11.56	0.864	A	2	A	A
22		Nitrobenzene	77	11.60	0.868	A	2	A	A
23		Isophorone	82	12.25	0.916	A	1	A	A
24	C	2-Nitrophenol	139	12.40	0.927	A	2	A	A
25		2,4-Dimethylphenol	107	12.51	0.935	A	2	A	A
26		bis(2-Chloroethoxy)methane	93	12.77	0.955	A	2	A	A
27	C	2,4-Dichlorophenol	162	13.02	0.973	A	2	A	A
28		Benzoic Acid	122	12.85	0.961	A	2	A	A
29	P	1,2,4-Trichlorobenzene	180	13.23	0.989	A	2	A	A
30		Naphthalene	128	13.44	1.005	A	2	A	A
31		4-Chloroaniline	127	13.58	1.015	A	1	A	A
32	C	Hexachlorobutadiene	225	13.76	1.028	A	2	A	A
33	C	4-Chloro-3-methylphenol	107	14.83	1.108	A	2	A	A
34		2-Methylnaphthalene	142	15.25	1.140	A	1	A	A
35	I	Acenaphthene-d10	164	18.00	1.000	A	2	A	A
36	P	Hexachlorocyclopentadiene	237	15.66	0.870	A	2	A	A
37	C	2,4,6-trichlorophenol	196	15.99	0.888	A	2	A	A
38		2,4,5-Trichlorophenol	196	16.07	0.893	A	2	A	A
39	S	2-Fluorobiphenyl	172	16.22	0.901	A	1	A	A
40		2-Chloronaphthalene	162	16.53	0.918	A	2	A	A
41		2-Nitroaniline	65	16.81	0.934	A	2	A	A
42		Dimethylphthalate	163	17.31	0.962	A	2	A	A
43		Acenaphthylene	152	17.62	0.979	A	2	A	A
44		2,6-Dinitrotoluene	165	17.47	0.970	A	2	A	A
45		3-Nitroaniline	138	17.90	0.995	A	2	A	A
46	C	Acenaphthene	153	18.10	1.005	A	2	A	A
47	P	2,4-Dinitrophenol	184	18.17	1.009	A	2	A	A
48	P	4-Nitrophenol	109	18.32	1.018	A	2	A	A
49		Dibenzofuran	168	18.56	1.031	A	1	A	A
50	P	2,4-Dinitrotoluene	165	18.52	1.029	A	2	A	A
51		Diethylphthalate	149	19.17	1.065	A	2	A	A

52		Fluorene	166	19.47	1.082	A	2	A	A
53		1,2- Diphenyl hydrazine	77	19.88	1.104	A	3	A	A
54		4-Chlorophenyl-phenylether	204	19.45	1.081	A	2	A	A
55		4-Nitroaniline	138	19.54	1.085	A	2	A	A
56	I	Phenanthrene-d10	188	21.95	1.000	A	1	A	A
57		4,6-Dinitro-2-methylphenol	198	19.61	0.894	A	0	A	A
58	C	n-Nitrosodiphenylamine	169	19.77	0.901	A	2	A	A
59	S	2,4,6-Tribromophenol	332	20.10	0.916	A	1	A	A
60		4-Bromophenyl-phenylether	248	20.75	0.945	A	2	A	A
61		Hexachlorobenzene	284	20.91	0.953	A	2	A	A
62		Carbazole	167	22.56	1.028	A	2	A	A
63	C	Pentachlorophenol	266	21.42	0.976	A	2	A	A
64		Phenanthrene	178	22.01	1.003	A	2	A	A
65		Anthracene	178	22.15	1.009	A	2	A	A
66		Di-n-butylphthalate	149	23.46	1.069	A	2	A	A
67	C	Fluoranthene	202	25.17	1.147	A	1	A	A
68	I	Chrysene-d12	240	28.96	1.000	A	3	A	A
69		Benzidine	184	25.48	0.880	A	3	A	A
70	P	Pyrene	202	25.77	0.890	A	2	A	A
71	S	Terphenyl-d14	244	26.15	0.903	A	2	A	A
72		Butylbenzylphthalate	149	27.42	0.947	A	2	A	A
73		Benzo[a]anthracene	228	28.92	0.999	A	2	A	A
74		3,3'-Dichlorobenzidine	252	28.83	0.996	A	3	A	A
75		Chrysene	228	29.02	1.002	A	2	A	A
76		bis(2-Ethylhexyl)phthalate	149	28.89	0.998	A	2	A	A
77	I	Perylene-d12	264	33.50	1.000	A	2	A	A
78	C	Di-n-octylphthalate	149	27.42	0.818	A	1	A	A
79		Benzo[b]fluoranthene	252	32.11	0.958	A	2	A	A
80		Benzo[k]fluoranthene	252	32.22	0.962	A	2	A	A
81	C	Benzo[a]pyrene	252	33.32	0.994	A	2	A	A
82		Indeno[1,2,3-cd]pyrene	276	38.55	1.151	A	1	A	A
83		Dibenz[a,h]anthracene	278	38.66	1.154	A	2	A	A
84		Benzo[g,h,i]perylene	276	40.13	1.198	A	2	A	A
85		Dibenzo[a,h]acridine	279	40.15	1.198	A	2	A	A
86	I	1,4-Dichlorobenzene-d4B	152	10.16	1.000	A	1	A	A
87		Aniline	93	9.38	0.923	A	2	A	A
88	I	Perylene-d12B	264	33.50	1.000	A	2	A	A
89	I	Acenaphthene-d10B	164	18.00	1.000	A	2	A	A
90		Biphenyl	154	20.75	1.153	A	2	A	A
91	I	1,4-Dichlorobenzene-d4C	152	10.16	1.000	A	1	A	A
92		Isobutyric acid	43	2.79	0.274	A	3	A	A
93		Methacrylic acid	41	4.03	0.396	A	2	A	A
94	I	Acenaphthene-d10C	164	18.00	1.000	A	2	A	A
95		Diphenyl ether	170	18.56	1.031	A	2	A	A
96		1,2-Dimethylnaphthalene	141	17.64	0.980	A	1	A	A
97	I	Naphthalene-d8C	136	13.38	1.000	A	1	A	A
98		Diethyl Maleate	99	13.58	1.015	A	2	A	A
99	I	Phenanthrene-d10C	188	21.95	1.000	A	1	A	A
100		Malathion	173	22.15	1.009	A	2	A	A

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin

A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

SW1008G.M Mon Oct 11 11:17:53 1999 MSG

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9521.D Vial: 2
Acq On : 7 Oct 99 6:30 Operator:
Sample : MSG;SSTD080; Inst : MSG
Misc : SSTD080; Multiplr: 1.00
Quant Time: Oct 11 10:30 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.03	152	246758	40.00	ppb	-0.14
20) Naphthalene-d8	13.23	136	957504	40.00	ppb	-0.15
35) Acenaphthene-d10	17.83	164	669767	40.00	ppb	-0.17
56) Phenanthrene-d10	21.76	188	1311386	40.00	ppb	-0.19
68) Chrysene-d12	28.73	240	1543635	40.00	ppb	-0.23
77) Perylene-d12	33.14	264	1433345	40.00	ppb	-0.37
86) 1,4-Dichlorobenzene-d4B	10.03	152	246758	40.00	ppb	-0.14
88) Perylene-d12B	33.14	264	1433345	40.00	ppb	-0.37
89) Acenaphthene-d10B	17.83	164	669767	40.00	ppb	-0.17
91) 1,4-Dichlorobenzene-d4C	10.03	152	246758	40.00	ppb	-0.14
94) Acenaphthene-d10C	17.83	164	669767	40.00	ppb	-0.17
97) Naphthalene-d8C	13.23	136	957504	40.00	ppb	-0.15
99) Phenanthrene-d10C	21.76	188	1311386	40.00	ppb	-0.19
System Monitoring Compounds						
4) 2-Fluorophenol	6.96	112	471684	80.00	ppb	-0.16
5) Phenol-d5	9.12	99	726487	80.00	ppb	-0.16
9) 2-Chlorophenol-d4	9.47	132	564741	80.00	ppb	-0.16
13) 1,2-Dichlorobenzene-d4	10.40	152	390685	80.00	ppb	-0.15
21) Nitrobenzene-d5	11.39	82	652373	80.00	ppb	-0.17
39) 2-Fluorobiphenyl	16.05	172	1378232	80.00	ppb	-0.17
59) 2,4,6-Tribromophenol	19.92	332	309923	80.00	ppb	-0.18
71) Terphenyl-d14	25.94	244	2480927	80.00	ppb	-0.21

Target Compounds							Qvalue
2) Pyridine	4.16	79	559799	80.00	ppb		99
3) N-Nitrosodimethylamine	4.07	42	422654	81.74	ppb	m	89
6) Phenol	9.16	94	773262	891.30	ppb	m	1
7) bis(2-Chloroethyl)ether	9.38	93	671203	80.00	ppb		94
8) 2-Chlorophenol	9.51	128	603407	80.00	ppb		98
10) 1,3-Dichlorobenzene	9.89	146	644645	80.00	ppb		98
11) 1,4-Dichlorobenzene	10.07	146	663784	80.00	ppb		98
12) Benzyl alcohol	10.36	108	375088	80.00	ppb		98
14) 1,2-Dichlorobenzene	10.44	146	638591	80.00	ppb		97
15) 2-Methylphenol	10.62	108	512324	80.00	ppb		98
16) bis(2-chloroisopropyl)ethe	10.70	45	970765	80.00	ppb		100
17) 4-Methylphenol	11.01	108	517826	80.00	ppb		99
18) n-Nitroso-di-n-propylamine	11.02	70	470380	80.00	ppb		95
19) Hexachloroethane	11.27	117	312998	80.00	ppb		86
22) Nitrobenzene	11.44	77	695899	80.00	ppb		89
23) Isophorone	12.05	82	1271558	80.00	ppb		96
24) 2-Nitrophenol	12.25	139	407435	80.00	ppb		98
25) 2,4-Dimethylphenol	12.36	107	654638	80.00	ppb		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9521.D Vial: 2
Acq On : 7 Oct 99 6:30 Operator:
Sample : MSG;SSTD080; Inst : MSG
Misc : SSTD080; Multiplr: 1.00
Quant Time: Oct 11 10:30 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
26)	bis(2-Chloroethoxy)methane	12.61	93	889156	80.00	ppb		100
27)	2,4-Dichlorophenol	12.86	162	565348	80.00	ppb		99
28)	Benzoic Acid	12.63	122	446049	80.00	ppb		97
29)	1,2,4-Trichlorobenzene	13.08	180	622727	80.00	ppb		88
30)	Naphthalene	13.29	128	1808670	80.00	ppb		98
31)	4-Chloroaniline	13.42	127	829835	80.00	ppb		98
32)	Hexachlorobutadiene	13.61	225	340118	80.00	ppb		97
33)	4-Chloro-3-methylphenol	14.68	107	653447	80.00	ppb		99
34)	2-Methylnaphthalene	15.09	142	1235752	80.00	ppb		100
36)	Hexachlorocyclopentadiene	15.50	237	416747	80.00	ppb		98
37)	2,4,6-trichlorophenol	15.83	196	458728	80.00	ppb		99
38)	2,4,5-Trichlorophenol	15.92	196	497350	80.00	ppb		98
40)	2-Chloronaphthalene	16.36	162	1315969	80.00	ppb		97
41)	2-Nitroaniline	16.63	65	485168	80.00	ppb		92
42)	Dimethylphthalate	17.12	163	1690310	80.00	ppb		98
43)	Acenaphthylene	17.45	152	2149584	80.00	ppb		97
44)	2,6-Dinitrotoluene	17.28	165	438522	80.00	ppb		93
45)	3-Nitroaniline	17.71	138	513878	80.00	ppb		90
46)	Acenaphthene	17.92	153	1394988	80.00	ppb		98
47)	2,4-Dinitrophenol	17.99	184	266289	80.00	ppb		94
48)	4-Nitrophenol	18.15	109	208756	80.86	ppb	m	73
49)	Dibenzofuran	18.38	168	2008399	80.00	ppb		99
50)	2,4-Dinitrotoluene	18.33	165	637047	80.00	ppb		85
51)	Diethylphthalate	18.98	149	1831564	80.00	ppb		99
52)	Fluorene	19.28	166	1549468	80.00	ppb		98
53)	1,2- Diphenyl hydrazine	19.69	77	1945956	80.00	ppb		98
54)	4-Chlorophenyl-phenylether	19.28	204	796941	80.00	ppb		99
55)	4-Nitroaniline	19.32	138	599547	80.00	ppb		89
57)	4,6-Dinitro-2-methylphenol	19.41	198	437273	80.00	ppb		100
58)	n-Nitrosodiphenylamine	19.59	169	1235098	80.00	ppb		94
60)	4-Bromophenyl-phenylether	20.57	248	535426	80.00	ppb		94
61)	Hexachlorobenzene	20.74	284	623382	80.00	ppb		97
62)	Carbazole	22.37	167	2694532	80.00	ppb		96
63)	Pentachlorophenol	21.24	266	392677	80.00	ppb		88
64)	Phenanthrene	21.82	178	2560260	80.00	ppb		99
65)	Anthracene	21.95	178	2731053	80.00	ppb		99
66)	Di-n-butylphthalate	23.27	149	3619747	80.00	ppb		98
67)	Fluoranthene	24.96	202	3105961	80.00	ppb		95
69)	Benzidine	25.28	184	748227	80.00	ppb		100
70)	Pyrene	25.56	202	3277496	80.00	ppb		99
72)	Butylbenzylphthalate	27.21	149	1879998	80.00	ppb		96
73)	Benzo[a]anthracene	28.70	228	3037071	80.00	ppb		100
74)	3,3'-Dichlorobenzidine	28.60	252	1172642	80.00	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9521.D Vial: 2
Acq On : 7 Oct 99 6:30 Operator:
Sample : MSG;SSTD080; Inst : MSG
Misc : SSTD080; Multiplr: 1.00
Quant Time: Oct 11 10:30 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

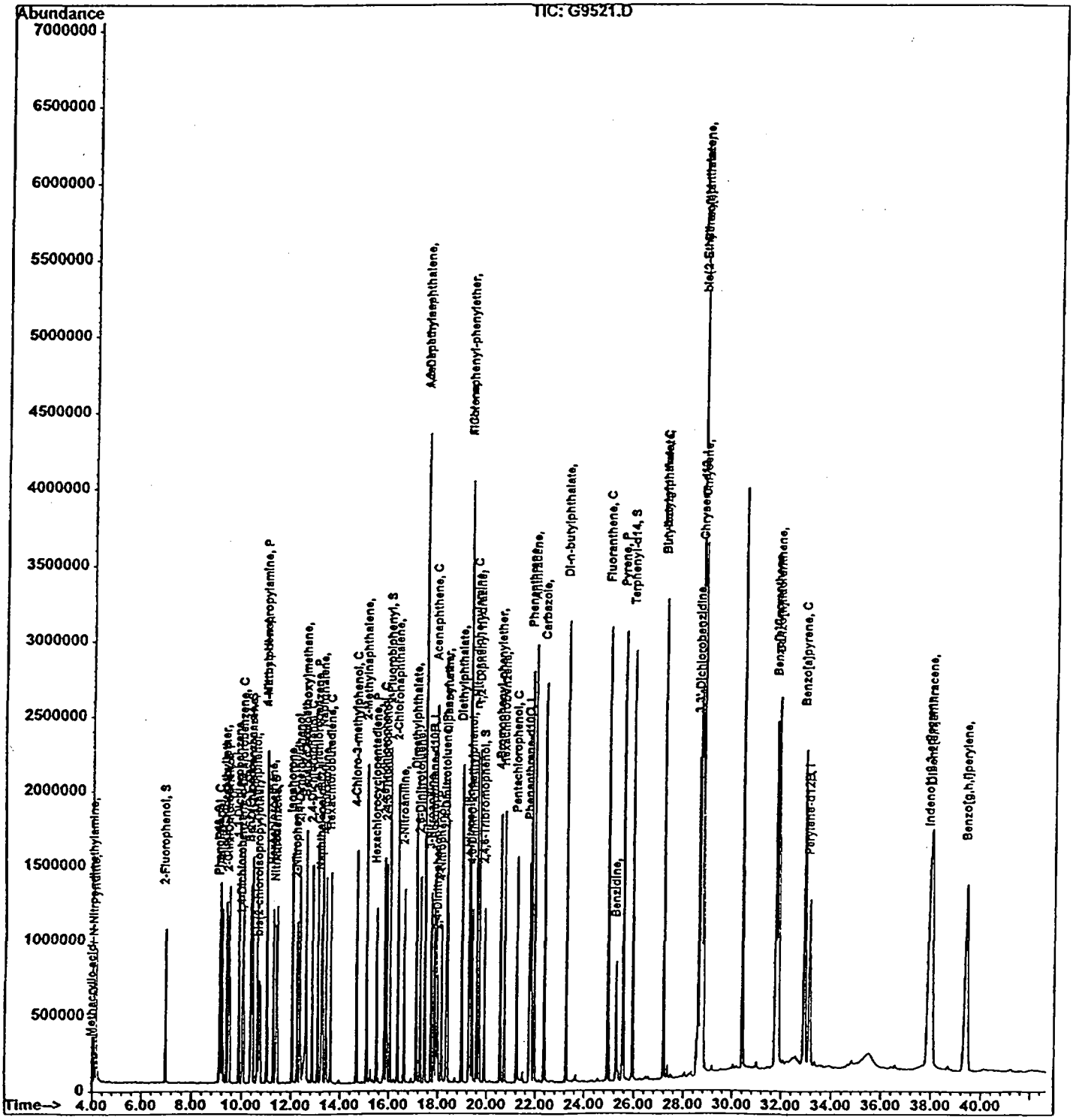
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
75)	Chrysene	28.80	228	3305767	80.00	ppb		99
76)	bis(2-Ethylhexyl)phthalate	28.68	149	2536710	80.00	ppb		99
78)	Di-n-octylphthalate	27.21	149	1879998	80.00	ppb		98
79)	Benzo[b]fluoranthene	31.77	252	3378099	75.88	ppb	m	98
80)	Benzo[k]fluoranthene	31.88	252	3409259	84.01	ppb	m	96
81)	Benzo[a]pyrene	32.94	252	3377795	80.00	ppb		98
82)	Indeno[1,2,3-cd]pyrene	37.94	276	3473508	80.00	ppb		91
83)	Dibenz[a,h]anthracene	38.03	278	2932411	80.00	ppb		99
84)	Benzo[g,h,i]perylene	39.44	276	3259743	80.00	ppb		92
87)	Aniline	9.22	93	841183	80.00	ppb		87
93)	Methacrylic acid	4.02	41	781	80.00	ppb		100
95)	Diphenyl ether	18.38	170	23175	80.00	ppb		88
96)	1,2-Dimethylnaphthalene	17.46	141	1389157	80.00	ppb		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100799.S\G9521.D Vial: 2
Acq On : 7 Oct 99 6:30 Operator:
Sample : MSG;SSTD080; Inst : MSG
Misc : SSTD080; Multiplr: 1.00
Quant Time: Oct 11 10:30 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Single Level Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9522.D Vial: 3
Acq On : 7 Oct 99 7:24 Operator:
Sample : MSG;SSTD010; Inst : MSG
Misc : SSTD010; Multiplr: 1.00
Quant Time: Oct 11 10:40 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.02	152	244849	40.00 ppb	-0.14
20) Naphthalene-d8	13.22	136	920380	40.00 ppb	-0.15
35) Acenaphthene-d10	17.83	164	610766	40.00 ppb	-0.17
56) Phenanthrene-d10	21.75	188	1081797	40.00 ppb	-0.19
68) Chrysene-d12	28.71	240	1250962	40.00 ppb	-0.24
77) Perylene-d12	33.11	264	1026761	40.00 ppb	-0.39
86) 1,4-Dichlorobenzene-d4B	10.02	152	244849	40.00 ppb	-0.14
88) Perylene-d12B	33.11	264	1026761	40.00 ppb	-0.39
89) Acenaphthene-d10B	17.83	164	610766	40.00 ppb	-0.17
91) 1,4-Dichlorobenzene-d4C	10.02	152	244849	40.00 ppb	-0.14
94) Acenaphthene-d10C	17.83	164	610766	40.00 ppb	-0.17
97) Naphthalene-d8C	13.22	136	920380	40.00 ppb	-0.15
99) Phenanthrene-d10C	21.75	188	1081797	40.00 ppb	-0.19
System Monitoring Compounds					
4) 2-Fluorophenol	6.95	112	67588	11.55 ppb	-0.16
5) Phenol-d5	9.11	99	100935	11.20 ppb	-0.17
9) 2-Chlorophenol-d4	9.46	132	79703	11.38 ppb	-0.17
13) 1,2-Dichlorobenzene-d4	10.39	152	61392	12.67 ppb	-0.15
21) Nitrobenzene-d5	11.37	82	95401	12.17 ppb	-0.18
39) 2-Fluorobiphenyl	16.05	172	199202	12.68 ppb	-0.17
59) 2,4,6-Tribromophenol	19.90	332	34844	10.90 ppb	-0.19
71) Terphenyl-d14	25.94	244	283722	11.29 ppb	-0.21

Target Compounds						Qvalue
2) Pyridine	4.17	79	90146	12.98 ppb		92
3) N-Nitrosodimethylamine	4.08	42	60044	11.45 ppb	m	53
6) Phenol	9.13	94	106439	11.10 ppb	m	1
7) bis(2-Chloroethyl)ether	9.37	93	99071	11.90 ppb		92
8) 2-Chlorophenol	9.49	128	83135	11.11 ppb		92
10) 1,3-Dichlorobenzene	9.88	146	89957	11.25 ppb		99
11) 1,4-Dichlorobenzene	10.06	146	92403	11.22 ppb		95
12) Benzyl alcohol	10.34	108	51186	11.00 ppb		91
14) 1,2-Dichlorobenzene	10.43	146	93375	11.79 ppb		96
15) 2-Methylphenol	10.61	108	73508	11.57 ppb		99
16) bis(2-chloroisopropyl)ethe	10.69	45	132099	10.97 ppb		100
17) 4-Methylphenol	10.99	108	73085	11.38 ppb		93
18) n-Nitroso-di-n-propylamine	11.00	70	64377	11.03 ppb		94
19) Hexachloroethane	11.27	117	42798	11.02 ppb	m	74
22) Nitrobenzene	11.42	77	95377	11.41 ppb		88
23) Isophorone	12.04	82	162270	10.62 ppb		94
24) 2-Nitrophenol	12.24	139	50757	10.37 ppb		94
25) 2,4-Dimethylphenol	12.35	107	85628	10.89 ppb		91

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9522.D Vial: 3
Acq On : 7 Oct 99 7:24 Operator:
Sample : MSG;SSTD010; Inst : MSG
Misc : SSTD010; Multiplr: 1.00
Quant Time: Oct 11 10:40 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
26) bis(2-Chloroethoxy)methane	12.60	93	122594	11.48 ppb		96
27) 2,4-Dichlorophenol	12.85	162	72991	10.75 ppb		98
28) Benzoic Acid	12.47	122	41645	7.77 ppb	m	5
29) 1,2,4-Trichlorobenzene	13.08	180	84238	11.26 ppb		92
30) Naphthalene	13.28	128	250294	11.52 ppb		98
31) 4-Chloroaniline	13.41	127	107601	10.79 ppb		95
32) Hexachlorobutadiene	13.60	225	46165	11.30 ppb		97
33) 4-Chloro-3-methylphenol	14.66	107	81527	10.38 ppb		95
34) 2-Methylnaphthalene	15.08	142	164958	11.11 ppb		99
36) Hexachlorocyclopentadiene	15.50	237	36710	7.73 ppb		97
37) 2,4,6-trichlorophenol	15.81	196	57887	11.07 ppb		94
38) 2,4,5-Trichlorophenol	15.90	196	64237	11.33 ppb		94
40) 2-Chloronaphthalene	16.36	162	175745	11.72 ppb		95
41) 2-Nitroaniline	16.61	65	56393	10.20 ppb		91
42) Dimethylphthalate	17.11	163	211350	10.97 ppb		98
43) Acenaphthylene	17.45	152	289644	11.82 ppb		95
44) 2,6-Dinitrotoluene	17.26	165	46422	9.29 ppb		97
45) 3-Nitroaniline	17.69	138	54677	9.33 ppb		99
46) Acenaphthene	17.91	153	191778	12.06 ppb		99
47) 2,4-Dinitrophenol	17.97	184	7972	2.63 ppb		76
48) 4-Nitrophenol	18.13	109	22559	9.48 ppb	m	83
49) Dibenzofuran	18.36	168	261477	11.42 ppb		99
50) 2,4-Dinitrotoluene	18.31	165	66893	9.21 ppb		84
51) Diethylphthalate	18.96	149	221648	10.62 ppb		97
52) Fluorene	19.27	166	210607	11.92 ppb		97
53) 1,2- Diphenyl hydrazine	19.69	77	242849	10.95 ppb		97
54) 4-Chlorophenyl-phenylether	19.27	204	103110	11.35 ppb		97
55) 4-Nitroaniline	19.29	138	64985	9.51 ppb		87
57) 4,6-Dinitro-2-methylphenol	19.39	198	31730	7.04 ppb		100
58) n-Nitrosodiphenylamine	19.57	169	150284	11.80 ppb		95
60) 4-Bromophenyl-phenylether	20.55	248	53602	9.71 ppb		87
61) Hexachlorobenzene	20.72	284	67882	10.56 ppb		85
62) Carbazole	22.35	167	323880	11.66 ppb		94
63) Pentachlorophenol	21.23	266	40511	10.00 ppb		95
64) Phenanthrene	21.81	178	323330	12.25 ppb		96
65) Anthracene	21.95	178	333351	11.84 ppb		98
66) Di-n-butylphthalate	23.26	149	439862	11.78 ppb		97
67) Fluoranthene	24.94	202	373034	11.65 ppb		86
69) Benzidine	25.27	184	134161	17.70 ppb	m	99
70) Pyrene	25.55	202	414171	12.47 ppb		95
72) Butylbenzylphthalate	27.19	149	225094	11.82 ppb		93
73) Benzo[a]anthracene	28.68	228	394741	12.83 ppb		98
74) 3,3'-Dichlorobenzidine	28.58	252	140169	11.80 ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9522.D Vial: 3
Acq On : 7 Oct 99 7:24 Operator:
Sample : MSG;SSTD010; Inst : MSG
Misc : SSTD010; Multiplr: 1.00
Quant Time: Oct 11 10:40 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

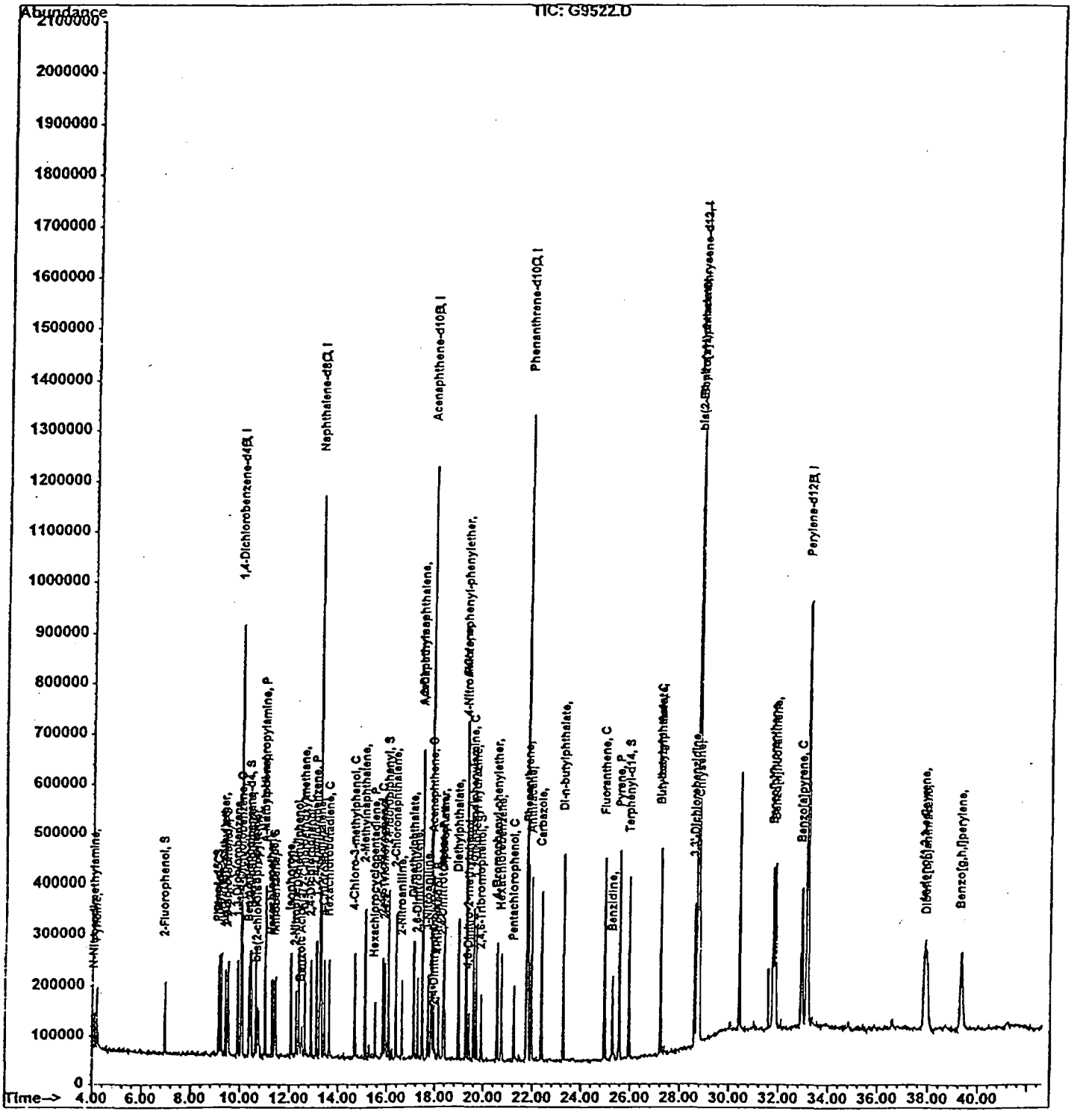
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
75)	Chrysene	28.78	228	333306	9.95	ppb		98
76)	bis(2-Ethylhexyl)phthalate	28.67	149	336918	13.11	ppb		98
78)	Di-n-octylphthalate	27.19	149	225094	13.37	ppb		100
79)	Benzo[b]fluoranthene	31.75	252	401899	13.29	ppb	m	94
80)	Benzo[k]fluoranthene	31.85	252	383989	12.58	ppb	m	92
81)	Benzo[a]pyrene	32.91	252	393843	13.02	ppb		96
82)	Indeno[1,2,3-cd]pyrene	37.86	276	343565	11.05	ppb		96
83)	Dibenz[a,h]anthracene	37.96	278	240169	9.15	ppb		96
84)	Benzo[g,h,i]perylene	39.32	276	306518	10.50	ppb		88
87)	Aniline	9.21	93	121681	11.66	ppb		97
95)	Diphenyl ether	18.36	170	3317	12.56	ppb		81
96)	1,2-Dimethylnaphthalene	17.46	141	171877	10.85	ppb		89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100799.S\G9522.D Vial: 3
Acq On : 7 Oct 99 7:24 Operator:
Sample : MSG;SSTD010; Inst : MSG
Misc : SSTD010; Multiplr: 1.00
Quant Time: Oct 11 10:40 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Single Level Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9523.D Vial: 4
Acq On : 7 Oct 99 8:14 Operator:
Sample : MSG;SSTD050; Inst : MSG
Misc : SSTD050; Multiplr: 1.00
Quant Time: Oct 11 10:47 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.02	152	257019	40.00 ppb	-0.14
20) Naphthalene-d8	13.22	136	980477	40.00 ppb	-0.15
35) Acenaphthene-d10	17.83	164	669646	40.00 ppb	-0.17
56) Phenanthrene-d10	21.75	188	1240755	40.00 ppb	-0.19
68) Chrysene-d12	28.72	240	1451344	40.00 ppb	-0.23
77) Perylene-d12	33.12	264	1335238	40.00 ppb	-0.38
86) 1,4-Dichlorobenzene-d4B	10.02	152	257019	40.00 ppb	-0.14
88) Perylene-d12B	33.12	264	1333787	40.00 ppb	-0.38
89) Acenaphthene-d10B	17.83	164	669646	40.00 ppb	-0.17
91) 1,4-Dichlorobenzene-d4C	10.02	152	257019	40.00 ppb	-0.14
94) Acenaphthene-d10C	17.83	164	669646	40.00 ppb	-0.17
97) Naphthalene-d8C	13.22	136	980477	40.00 ppb	-0.15
99) Phenanthrene-d10C	21.75	188	1240755	40.00 ppb	-0.19
System Monitoring Compounds					
4) 2-Fluorophenol	6.95	112	327347	53.30 ppb	-0.16
5) Phenol-d5	9.12	99	494688	52.30 ppb	-0.16
9) 2-Chlorophenol-d4	9.47	132	387195	52.66 ppb	-0.16
13) 1,2-Dichlorobenzene-d4	10.39	152	295809	58.15 ppb	-0.15
21) Nitrobenzene-d5	11.38	82	492543	58.98 ppb	-0.17
39) 2-Fluorobiphenyl	16.05	172	988402	57.38 ppb	-0.17
59) 2,4,6-Tribromophenol	19.90	332	200896	54.81 ppb	-0.19
71) Terphenyl-d14	25.94	244	1669815	57.27 ppb	-0.21

Target Compounds						Qvalue
2) Pyridine	4.15	79	462915	63.51 ppb		99
3) N-Nitrosodimethylamine	4.06	42	307383	55.86 ppb	m	90
6) Phenol	9.14	94	534391	53.08 ppb	m	1
7) bis(2-Chloroethyl)ether	9.38	93	471673	53.97 ppb		94
8) 2-Chlorophenol	9.50	128	410532	52.26 ppb		96
10) 1,3-Dichlorobenzene	9.87	146	433200	51.61 ppb		100
11) 1,4-Dichlorobenzene	10.06	146	445313	51.53 ppb		99
12) Benzyl alcohol	10.34	108	264722	54.21 ppb		99
14) 1,2-Dichlorobenzene	10.43	146	428863	51.58 ppb		99
15) 2-Methylphenol	10.61	108	362315	54.32 ppb		98
16) bis(2-chloroisopropyl)ethe	10.68	45	663536	52.50 ppb		100
17) 4-Methylphenol	11.00	108	359223	53.28 ppb		95
18) n-Nitroso-di-n-propylamine	11.01	70	323899	52.89 ppb		99
19) Hexachloroethane	11.27	117	207301	50.87 ppb		84
22) Nitrobenzene	11.43	77	471968	52.99 ppb		91
23) Isophorone	12.05	82	850459	52.25 ppb		96
24) 2-Nitrophenol	12.24	139	265909	50.99 ppb		98
25) 2,4-Dimethylphenol	12.35	107	427907	51.07 ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9523.D Vial: 4
Acq On : 7 Oct 99 8:14 Operator:
Sample : MSG;SSTD050; Inst : MSG
Misc : SSTD050; Multiplr: 1.00
Quant Time: Oct 11 10:47 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
26) bis(2-Chloroethoxy)methane	12.60	93	621663	54.62 ppb		98
27) 2,4-Dichlorophenol	12.85	162	368786	50.96 ppb		98
28) Benzoic Acid	12.59	122	276585	48.44 ppb		98
29) 1,2,4-Trichlorobenzene	13.08	180	413264	51.85 ppb		93
30) Naphthalene	13.28	128	1210413	52.28 ppb		98
31) 4-Chloroaniline	13.41	127	546110	51.41 ppb		99
32) Hexachlorobutadiene	13.60	225	220610	50.67 ppb		94
33) 4-Chloro-3-methylphenol	14.66	107	439164	52.51 ppb		93
34) 2-Methylnaphthalene	15.08	142	838444	53.01 ppb		97
36) Hexachlorocyclopentadiene	15.49	237	250670	48.13 ppb		94
37) 2,4,6-trichlorophenol	15.82	196	300597	52.43 ppb		94
38) 2,4,5-Trichlorophenol	15.91	196	324208	52.16 ppb		99
40) 2-Chloronaphthalene	16.36	162	860222	52.30 ppb		98
41) 2-Nitroaniline	16.62	65	341062	56.25 ppb		92
42) Dimethylphthalate	17.12	163	1072950	50.79 ppb		99
43) Acenaphthylene	17.45	152	1453137	54.09 ppb		96
44) 2,6-Dinitrotoluene	17.27	165	281012	51.27 ppb		94
45) 3-Nitroaniline	17.70	138	325609	50.70 ppb		94
46) Acenaphthene	17.92	153	955545	54.81 ppb		98
47) 2,4-Dinitrophenol	17.98	184	148439	44.60 ppb		78
48) 4-Nitrophenol	18.13	109	140624	53.90 ppb	m	75
49) Dibenzofuran	18.36	168	1344260	53.56 ppb		99
50) 2,4-Dinitrotoluene	18.32	165	406927	51.11 ppb		91
51) Diethylphthalate	18.98	149	1223477	53.45 ppb		99
52) Fluorene	19.28	166	1054325	54.45 ppb		100
53) 1,2- Diphenyl hydrazine	19.69	77	1317542	54.18 ppb		97
54) 4-Chlorophenyl-phenylether	19.27	204	521983	52.41 ppb		98
55) 4-Nitroaniline	19.31	138	382904	51.10 ppb		94
57) 4,6-Dinitro-2-methylphenol	19.41	198	270839	52.37 ppb		100
58) n-Nitrosodiphenylamine	19.58	169	795464	54.46 ppb		99
60) 4-Bromophenyl-phenylether	20.56	248	334756	52.86 ppb		97
61) Hexachlorobenzene	20.73	284	406631	55.15 ppb		96
62) Carbazole	22.36	167	1740526	54.62 ppb		96
63) Pentachlorophenol	21.24	266	231283	49.80 ppb		95
64) Phenanthrene	21.81	178	1726279	57.01 ppb		99
65) Anthracene	21.95	178	1765083	54.65 ppb		99
66) Di-n-butylphthalate	23.26	149	2410715	56.31 ppb		99
67) Fluoranthene	24.95	202	1957015	53.28 ppb		92
69) Benzidine	25.28	184	297116	33.79 ppb		100
70) Pyrene	25.56	202	2036303	52.86 ppb		99
72) Butylbenzylphthalate	27.20	149	1204760	54.53 ppb		97
73) Benzo[a]anthracene	28.69	228	2064393	57.84 ppb		99
74) 3,3'-Dichlorobenzidine	28.59	252	778341	56.48 ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9523.D Vial: 4
Acq On : 7 Oct 99 8:14 Operator:
Sample : MSG;SSTD050; Inst : MSG
Misc : SSTD050; Multiplr: 1.00
Quant Time: Oct 11 10:47 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

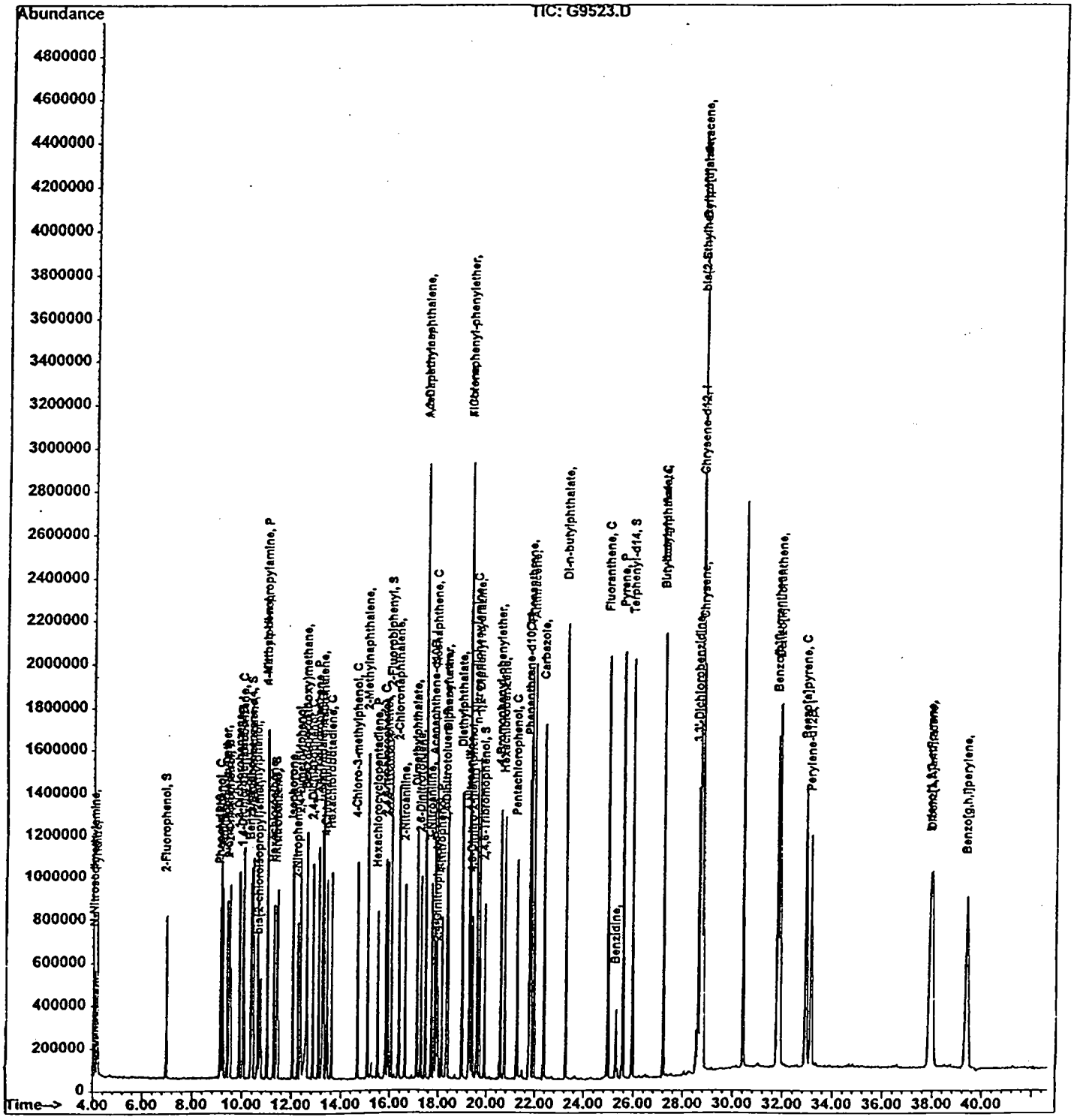
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
75)	Chrysene	28.79	228	1682083	43.30 ppb		99
76)	bis(2-Ethylhexyl)phthalate	28.67	149	1660846	55.71 ppb		97
78)	Di-n-octylphthalate	27.20	149	1204760	55.03 ppb		98
79)	Benzo[b]fluoranthene	31.77	252	2261044	57.48 ppb	m	98
80)	Benzo[k]fluoranthene	31.87	252	2103911	53.00 ppb	m	95
81)	Benzo[a]pyrene	32.92	252	2003136	50.93 ppb		96
82)	Indeno[1,2,3-cd]pyrene	37.91	276	2110660	52.18 ppb		95
83)	Dibenz[a,h]anthracene	37.99	278	1449383	42.45 ppb		97
84)	Benzo[g,h,i]perylene	39.40	276	2035554	53.63 ppb		91
87)	Aniline	9.21	93	559469	51.08 ppb		96
95)	Diphenyl ether	18.36	170	16753	57.84 ppb		94
96)	1,2-Dimethylnaphthalene	17.46	141	813536	46.86 ppb		89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100799.S\G9523.D Vial: 4
Acq On : 7 Oct 99 8:14 Operator:
Sample : MSG;SSTD050; Inst : MSG
Misc : SSTD050; Multiplr: 1.00
Quant Time: Oct 11 10:47 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Single Level Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9524.D Vial: 5
Acq On : 7 Oct 99 9:05 Operator:
Sample : MSG;SSTD0100; Inst : MSG
Misc : SSTD100; Multiplr: 1.00
Quant Time: Oct 11 10:55 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.02	152	163837	40.00 ppb	-0.15
20) Naphthalene-d8	13.23	136	633286	40.00 ppb	-0.15
35) Acenaphthene-d10	17.83	164	420765	40.00 ppb	-0.17
56) Phenanthrene-d10	21.76	188	774571	40.00 ppb	-0.19
68) Chrysene-d12	28.73	240	789318	40.00 ppb	-0.23
77) Perylene-d12	33.14	264	668703	40.00 ppb	-0.37
86) 1,4-Dichlorobenzene-d4B	10.02	152	163837	40.00 ppb	-0.15
88) Perylene-d12B	33.14	264	668703	40.00 ppb	-0.37
89) Acenaphthene-d10B	17.83	164	420765	40.00 ppb	-0.17
91) 1,4-Dichlorobenzene-d4C	10.02	152	163837	40.00 ppb	-0.15
94) Acenaphthene-d10C	17.83	164	420765	40.00 ppb	-0.17
97) Naphthalene-d8C	13.23	136	633286	40.00 ppb	-0.15
99) Phenanthrene-d10C	21.76	188	774571	40.00 ppb	-0.19
System Monitoring Compounds					
4) 2-Fluorophenol	6.96	112	423268	108.12 ppb	-0.16
5) Phenol-d5	9.12	99	591888	98.17 ppb	-0.16
9) 2-Chlorophenol-d4	9.46	132	481953	102.83 ppb	-0.17
13) 1,2-Dichlorobenzene-d4	10.40	152	363114	111.99 ppb	-0.15
21) Nitrobenzene-d5	11.39	82	627997	116.44 ppb	-0.17
39) 2-Fluorobiphenyl	16.05	172	1206151	111.44 ppb	-0.17
59) 2,4,6-Tribromophenol	19.92	332	240610	105.15 ppb	-0.18
71) Terphenyl-d14	25.95	244	1641484	103.52 ppb	-0.20
Target Compounds					Qvalue
2) Pyridine	4.15	79	566228	121.87 ppb	99
3) N-Nitrosodimethylamine	4.06	42	402810	114.83 ppb	94
6) Phenol	9.15	94	664889	103.60 ppb	99
7) bis(2-Chloroethyl)ether	9.38	93	569671	102.26 ppb	94
8) 2-Chlorophenol	9.51	128	505743	100.99 ppb	99
10) 1,3-Dichlorobenzene	9.88	146	548694	102.56 ppb	99
11) 1,4-Dichlorobenzene	10.07	146	566607	102.85 ppb	99
12) Benzyl alcohol	10.35	108	326250	104.80 ppb	99
14) 1,2-Dichlorobenzene	10.44	146	539160	101.73 ppb	97
15) 2-Methylphenol	10.62	108	448564	105.49 ppb	98
16) bis(2-chloroisopropyl)ethe	10.70	45	844213	104.78 ppb	100
17) 4-Methylphenol	11.01	108	447002	104.01 ppb	97
18) n-Nitroso-di-n-propylamine	11.02	70	419931	107.57 ppb	98
19) Hexachloroethane	11.27	117	270624	104.18 ppb	87
22) Nitrobenzene	11.44	77	594784	103.38 ppb	90
23) Isophorone	12.05	82	1085849	103.29 ppb	94
24) 2-Nitrophenol	12.25	139	327759	97.30 ppb	98
25) 2,4-Dimethylphenol	12.35	107	551921	101.98 ppb	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9524.D Vial: 5
Acq On : 7 Oct 99 9:05 Operator:
Sample : MSG;SSTD0100; Inst : MSG
Misc : SSTD100; Multiplr: 1.00
Quant Time: Oct 11 10:55 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
26)	bis(2-Chloroethoxy)methane	12.61	93	761214	103.55 ppb		98
27)	2,4-Dichlorophenol	12.86	162	464755	99.43 ppb		99
28)	Benzoic Acid	12.62	122	362156	98.21 ppb		93
29)	1,2,4-Trichlorobenzene	13.08	180	519591	100.92 ppb		91
30)	Naphthalene	13.29	128	1493842	99.90 ppb		97
31)	4-Chloroaniline	13.42	127	664141	96.81 ppb		97
32)	Hexachlorobutadiene	13.61	225	276116	98.20 ppb		99
33)	4-Chloro-3-methylphenol	14.68	107	538554	99.69 ppb		100
34)	2-Methylnaphthalene	15.09	142	1027784	100.60 ppb		100
36)	Hexachlorocyclopentadiene	15.50	237	333809	102.00 ppb		96
37)	2,4,6-trichlorophenol	15.83	196	373172	103.59 ppb		97
38)	2,4,5-Trichlorophenol	15.92	196	413131	105.78 ppb		99
40)	2-Chloronaphthalene	16.36	162	1071781	103.71 ppb		96
41)	2-Nitroaniline	16.63	65	420801	110.45 ppb		96
42)	Dimethylphthalate	17.12	163	1341333	101.05 ppb		99
43)	Acenaphthylene	17.45	152	1717223	101.73 ppb		97
44)	2,6-Dinitrotoluene	17.28	165	346880	100.73 ppb		99
45)	3-Nitroaniline	17.72	138	396287	98.20 ppb		96
46)	Acenaphthene	17.92	153	1145760	104.59 ppb		98
47)	2,4-Dinitrophenol	17.99	184	199051	95.19 ppb		100
48)	4-Nitrophenol	18.14	109	183655	112.03 ppb	m	84
49)	Dibenzofuran	18.38	168	1652693	104.79 ppb		100
50)	2,4-Dinitrotoluene	18.34	165	502288	100.41 ppb		79
51)	Diethylphthalate	18.98	149	1472622	102.39 ppb		100
52)	Fluorene	19.28	166	1250210	102.75 ppb		98
53)	1,2- Diphenyl hydrazine	19.69	77	1629143	106.61 ppb		97
54)	4-Chlorophenyl-phenylether	19.28	204	619984	99.07 ppb		97
55)	4-Nitroaniline	19.32	138	472123	100.28 ppb		95
57)	4,6-Dinitro-2-methylphenol	19.41	198	339067	105.02 ppb		100
58)	n-Nitrosodiphenylamine	19.59	169	963341	105.64 ppb		98
60)	4-Bromophenyl-phenylether	20.57	248	396117	100.20 ppb		99
61)	Hexachlorobenzene	20.74	284	480186	104.33 ppb		97
62)	Carbazole	22.37	167	2116433	106.39 ppb		97
63)	Pentachlorophenol	21.24	266	252684	87.16 ppb		93
64)	Phenanthrene	21.83	178	1985117	105.02 ppb		98
65)	Anthracene	21.96	178	2040944	101.22 ppb		99
66)	Di-n-butylphthalate	23.28	149	2853391	106.77 ppb		99
67)	Fluoranthene	24.96	202	2288120	99.78 ppb		90
69)	Benzidine	25.28	184	374049	78.21 ppb		100
70)	Pyrene	25.56	202	2410021	115.04 ppb		94
72)	Butylbenzylphthalate	27.21	149	1429276	118.94 ppb		97
73)	Benzo[a]anthracene	28.71	228	2258189	116.33 ppb		98
74)	3,3'-Dichlorobenzidine	28.61	252	744118	99.28 ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9524.D Vial: 5
Acq On : 7 Oct 99 9:05 Operator:
Sample : MSG;SSTD0100; Inst : MSG
Misc : SSTD100; Multiplr: 1.00
Quant Time: Oct 11 10:55 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

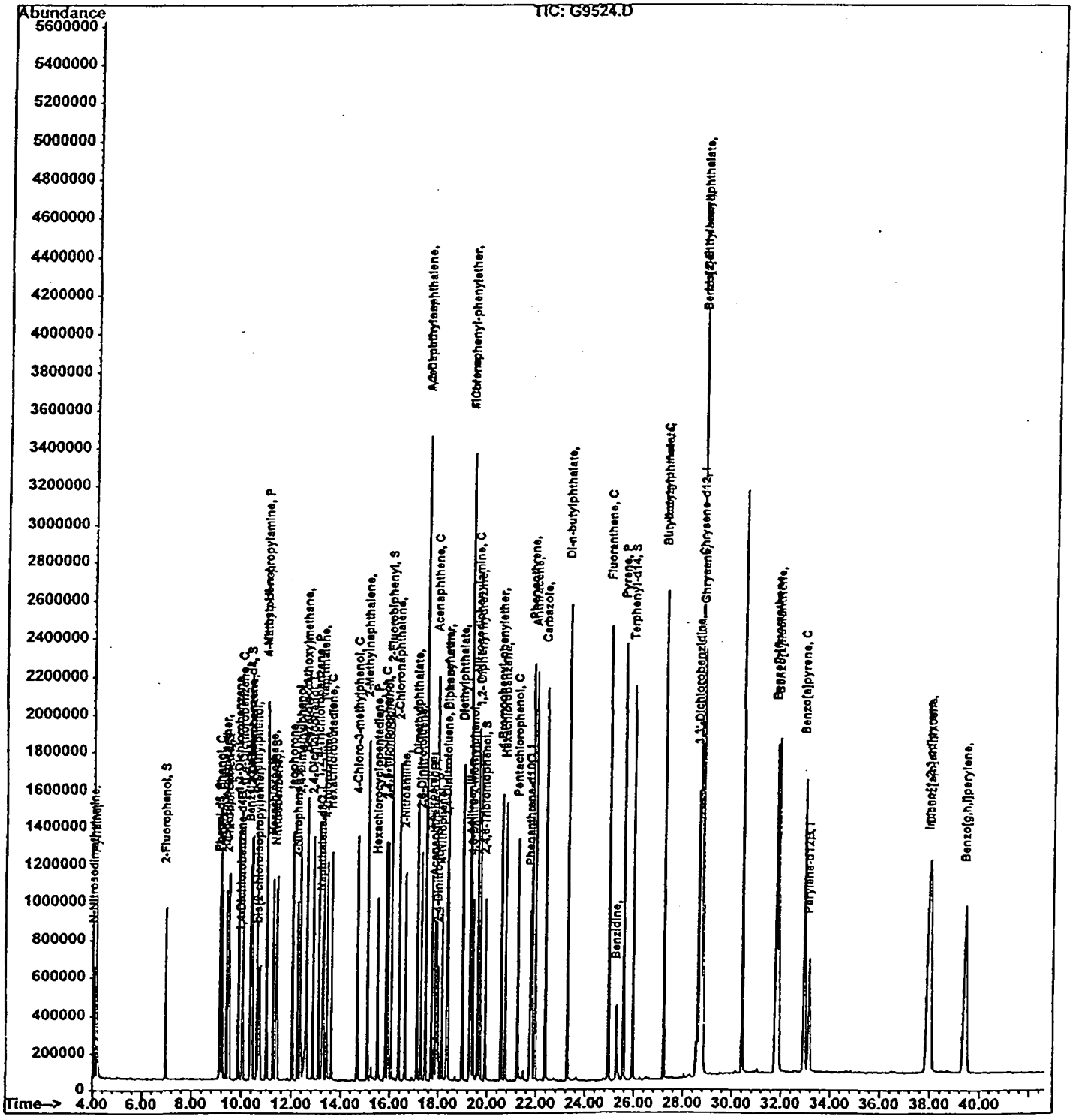
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
75)	Chrysene	28.80	228	1972499	93.35 ppb		98
76)	bis(2-Ethylhexyl)phthalate	28.68	149	1990748	122.78 ppb		97
78)	Di-n-octylphthalate	27.21	149	1429276	130.37 ppb		100
79)	Benzo[b]fluoranthene	31.79	252	2343317	118.95 ppb	m	95
80)	Benzo[k]fluoranthene	31.88	252	2294227	115.39 ppb	m	94
81)	Benzo[a]pyrene	32.94	252	2306967	117.12 ppb		95
82)	Indeno[1,2,3-cd]pyrene	37.96	276	2465391	121.71 ppb		93
83)	Dibenz[a,h]anthracene	38.03	278	1699610	99.39 ppb		97
84)	Benzo[g,h,i]perylene	39.45	276	2138651	112.50 ppb		97
87)	Aniline	9.22	93	668452	95.75 ppb		95
95)	Diphenyl ether	18.38	170	19439	106.81 ppb		92
96)	1,2-Dimethylnaphthalene	17.46	141	937076	85.90 ppb		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100799.S\G9524.D Vial: 5
Acq On : 7 Oct 99 9:05 Operator:
Sample : MSG;SSTD0100; Inst : MSG
Misc : SSTD100; Multiplr: 1.00
Quant Time: Oct 11 10:55 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Single Level Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9525.D Vial: 6
Acq On : 7 Oct 99 9:55 Operator:
Sample : MSG;SSTD0120; Inst : MSG
Misc : SSTD120; Multiplr: 1.00
Quant Time: Oct 11 11:03 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.03	152	231965	40.00 ppb	-0.14
20) Naphthalene-d8	13.23	136	930083	40.00 ppb	-0.15
35) Acenaphthene-d10	17.83	164	637863	40.00 ppb	-0.17
56) Phenanthrene-d10	21.76	188	1193591	40.00 ppb	-0.19
68) Chrysene-d12	28.75	240	1329912	40.00 ppb	-0.21
77) Perylene-d12	33.15	264	1262972	40.00 ppb	-0.36
86) 1,4-Dichlorobenzene-d4B	10.03	152	231965	40.00 ppb	-0.14
88) Perylene-d12B	33.15	264	1262972	40.00 ppb	-0.36
89) Acenaphthene-d10B	17.83	164	637863	40.00 ppb	-0.17
91) 1,4-Dichlorobenzene-d4C	10.03	152	231965	40.00 ppb	-0.14
94) Acenaphthene-d10C	17.83	164	637863	40.00 ppb	-0.17
97) Naphthalene-d8C	13.23	136	930083	40.00 ppb	-0.15
99) Phenanthrene-d10C	21.76	188	1193591	40.00 ppb	-0.19
System Monitoring Compounds					
4) 2-Fluorophenol	6.96	112	740557	133.61 ppb	-0.16
5) Phenol-d5	9.13	99	1116236	130.76 ppb	-0.15
9) 2-Chlorophenol-d4	9.47	132	845092	127.35 ppb	-0.16
13) 1,2-Dichlorobenzene-d4	10.41	152	631278	137.51 ppb	-0.14
21) Nitrobenzene-d5	11.40	82	1093024	137.99 ppb	-0.16
39) 2-Fluorobiphenyl	16.06	172	2078366	126.67 ppb	-0.16
59) 2,4,6-Tribromophenol	19.93	332	452408	128.30 ppb	-0.17
71) Terphenyl-d14	25.95	244	3509232	131.34 ppb	-0.20

Target Compounds						Qvalue
2) Pyridine	4.15	79	1017697	154.71 ppb		99
3) N-Nitrosodimethylamine	4.08	42	721262	145.23 ppb	m	92
6) Phenol	9.17	94	1168631	128.61 ppb		95
7) bis(2-Chloroethyl)ether	9.39	93	1013661	128.52 ppb		98
8) 2-Chlorophenol	9.52	128	910366	128.39 ppb		99
10) 1,3-Dichlorobenzene	9.89	146	934744	123.40 ppb		99
11) 1,4-Dichlorobenzene	10.07	146	961752	123.30 ppb		97
12) Benzyl alcohol	10.37	108	588491	133.52 ppb		96
14) 1,2-Dichlorobenzene	10.44	146	924343	123.18 ppb		96
15) 2-Methylphenol	10.63	108	777266	129.11 ppb		100
16) bis(2-chloroisopropyl)ethe	10.71	45	1502988	131.76 ppb		100
17) 4-Methylphenol	11.02	108	777081	127.71 ppb		98
18) n-Nitroso-di-n-propylamine	11.04	70	734728	132.93 ppb		98
19) Hexachloroethane	11.27	117	452903	123.14 ppb	m	82
22) Nitrobenzene	11.45	77	1086666	128.61 ppb		87
23) Isophorone	12.06	82	1913906	123.96 ppb		91
24) 2-Nitrophenol	12.26	139	588173	118.89 ppb		96
25) 2,4-Dimethylphenol	12.36	107	973240	122.44 ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9525.D Vial: 6
Acq On : 7 Oct 99 9:55 Operator:
Sample : MSG;SSTD0120; Inst : MSG
Misc : SSTD120; Multiplr: 1.00
Quant Time: Oct 11 11:03 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26) bis(2-Chloroethoxy)methane	12.62	93	1344380	124.52 ppb	99
27) 2,4-Dichlorophenol	12.87	162	819127	119.33 ppb	99
28) Benzoic Acid	12.69	122	707557	130.64 ppb	97
29) 1,2,4-Trichlorobenzene	13.09	180	875552	115.80 ppb	97
30) Naphthalene	13.30	128	2559829	116.56 ppb	97
31) 4-Chloroaniline	13.42	127	1161542	115.28 ppb	99
32) Hexachlorobutadiene	13.61	225	485214	117.49 ppb	99
33) 4-Chloro-3-methylphenol	14.68	107	949162	119.63 ppb	94
34) 2-Methylnaphthalene	15.10	142	1732360	115.46 ppb	99
36) Hexachlorocyclopentadiene	15.51	237	600983	121.14 ppb	99
37) 2,4,6-trichlorophenol	15.83	196	652425	119.47 ppb	99
38) 2,4,5-Trichlorophenol	15.92	196	746753	126.12 ppb	99
40) 2-Chloronaphthalene	16.37	162	1869000	119.30 ppb	96
41) 2-Nitroaniline	16.65	65	794315	137.53 ppb	96
42) Dimethylphthalate	17.13	163	2411961	119.86 ppb	99
43) Acenaphthylene	17.46	152	2919942	114.11 ppb	97
44) 2,6-Dinitrotoluene	17.30	165	630769	120.83 ppb	96
45) 3-Nitroaniline	17.74	138	749986	122.60 ppb	91
46) Acenaphthene	17.93	153	1994507	120.10 ppb	99
47) 2,4-Dinitrophenol	18.00	184	443108	139.78 ppb	86
48) 4-Nitrophenol	18.16	109	350373	140.99 ppb	86
49) Dibenzofuran	18.39	168	2851670	119.27 ppb	99
50) 2,4-Dinitrotoluene	18.35	165	912678	120.35 ppb	83
51) Diethylphthalate	18.99	149	2640134	121.08 ppb	99
52) Fluorene	19.29	166	2131755	115.57 ppb	100
53) 1,2- Diphenyl hydrazine	19.71	77	2909357	125.59 ppb	98
54) 4-Chlorophenyl-phenylether	19.28	204	1066935	112.46 ppb	98
55) 4-Nitroaniline	19.35	138	913187	127.94 ppb	96
57) 4,6-Dinitro-2-methylphenol	19.43	198	666119	133.89 ppb	100
58) n-Nitrosodiphenylamine	19.61	169	1729463	123.08 ppb	98
60) 4-Bromophenyl-phenylether	20.58	248	716941	117.69 ppb	97
61) Hexachlorobenzene	20.75	284	795295	112.13 ppb	88
62) Carbazole	22.38	167	3650807	119.09 ppb	95
63) Pentachlorophenol	21.25	266	566164	126.73 ppb	94
64) Phenanthrene	21.84	178	3641386	125.01 ppb	100
65) Anthracene	21.97	178	3692524	118.84 ppb	98
66) Di-n-butylphthalate	23.29	149	5098802	123.81 ppb	100
67) Fluoranthene	24.97	202	4187271	118.50 ppb	93
69) Benzidine	25.28	184	533698	66.23 ppb	100
70) Pyrene	25.57	202	4393326	124.47 ppb	99
72) Butylbenzylphthalate	27.22	149	2621511	129.48 ppb	98
73) Benzo[a]anthracene	28.72	228	4114625	125.80 ppb	97
74) 3,3'-Dichlorobenzidine	28.62	252	1719196	136.14 ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9525.D Vial: 6
Acq On : 7 Oct 99 9:55 Operator:
Sample : MSG;SSTD0120; Inst : MSG
Misc : SSTD120; Multiplr: 1.00
Quant Time: Oct 11 11:03 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

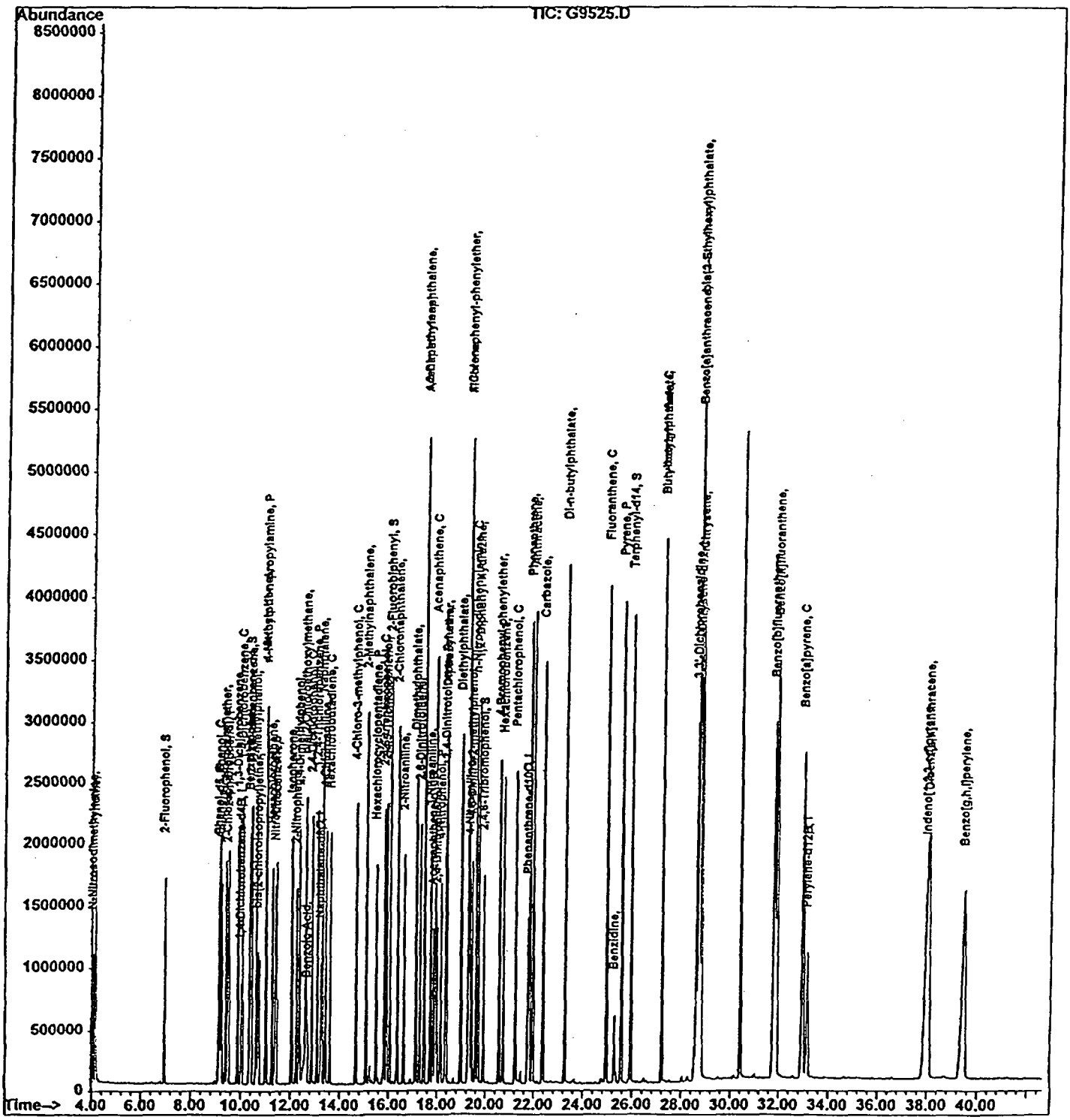
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
75)	Chrysene	28.82	228	3689419	103.63	ppb		99
76)	bis(2-Ethylhexyl)phthalate	28.69	149	3362912	123.10	ppb		100
78)	Di-n-octylphthalate	27.22	149	2621511	126.60	ppb		97
79)	Benzo[b]fluoranthene	31.81	252	4826448	129.72	ppb	m	98
80)	Benzo[k]fluoranthene	31.91	252	4651299	123.87	ppb	m	97
81)	Benzo[a]pyrene	32.97	252	4371546	117.50	ppb		97
82)	Indeno[1,2,3-cd]pyrene	38.00	276	4694927	122.72	ppb		89
83)	Dibenz[a,h]anthracene	38.08	278	3159674	97.83	ppb		97
84)	Benzo[g,h,i]perylene	39.50	276	4408740	122.79	ppb		96
87)	Aniline	9.23	93	1185439	119.93	ppb		81
95)	Diphenyl ether	18.39	170	32532	117.92	ppb		87
96)	1,2-Dimethylnaphthalene	17.47	141	1583483	95.75	ppb		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100799.S\G9525.D Vial: 6
Acq On : 7 Oct 99 9:55 Operator:
Sample : MSG;SSTD0120; Inst : MSG
Misc : SSTD120; Multiplr: 1.00
Quant Time: Oct 11 11:03 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Single Level Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9526.D Vial: 7
Acq On : 7 Oct 99 10:45 Operator:
Sample : MSG;SSTD0160; Inst : MSG
Misc : SSTD160; Multiplr: 1.00
Quant Time: Oct 11 11:06 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.02	152	161553	40.00	ppb	-0.14
20) Naphthalene-d8	13.23	136	618567	40.00	ppb	-0.14
35) Acenaphthene-d10	17.83	164	406256	40.00	ppb	-0.17
56) Phenanthrene-d10	21.75	188	734589	40.00	ppb	-0.19
68) Chrysene-d12	28.74	240	838020	40.00	ppb	-0.21
77) Perylene-d12	33.13	264	731922	40.00	ppb	-0.37
86) 1,4-Dichlorobenzene-d4B	10.02	152	161553	40.00	ppb	-0.14
88) Perylene-d12B	33.13	264	731922	40.00	ppb	-0.37
89) Acenaphthene-d10B	17.83	164	406256	40.00	ppb	-0.17
91) 1,4-Dichlorobenzene-d4C	10.02	152	161553	40.00	ppb	-0.14
94) Acenaphthene-d10C	17.83	164	406256	40.00	ppb	-0.17
97) Naphthalene-d8C	13.23	136	618567	40.00	ppb	-0.14
99) Phenanthrene-d10C	21.75	188	734589	40.00	ppb	-0.19
System Monitoring Compounds						
4) 2-Fluorophenol	6.96	112	616079	159.60	ppb	-0.16
5) Phenol-d5	9.13	99	935543	157.36	ppb	-0.15
9) 2-Chlorophenol-d4	9.47	132	726772	157.25	ppb	-0.16
13) 1,2-Dichlorobenzene-d4	10.40	152	542578	169.70	ppb	-0.14
21) Nitrobenzene-d5	11.39	82	932778	177.06	ppb	-0.16
39) 2-Fluorobiphenyl	16.06	172	1762660	168.68	ppb	-0.16
59) 2,4,6-Tribromophenol	19.92	332	363866	167.67	ppb	-0.17
71) Terphenyl-d14	25.95	244	2636227	156.58	ppb	-0.20
Target Compounds						Qvalue
2) Pyridine	4.14	79	838824	183.10	ppb	100
3) N-Nitrosodimethylamine	4.06	42	613021	177.23	ppb	94
6) Phenol	9.17	94	1015373	160.45	ppb	94
7) bis(2-Chloroethyl)ether	9.39	93	854763	155.61	ppb	97
8) 2-Chlorophenol	9.52	128	760312	153.97	ppb	98
10) 1,3-Dichlorobenzene	9.89	146	803855	152.37	ppb	99
11) 1,4-Dichlorobenzene	10.06	146	820875	151.11	ppb	99
12) Benzyl alcohol	10.36	108	513307	167.22	ppb	96
14) 1,2-Dichlorobenzene	10.44	146	778769	149.02	ppb	99
15) 2-Methylphenol	10.63	108	673961	160.74	ppb	98
16) bis(2-chloroisopropyl)ethe	10.70	45	1310447	164.95	ppb	100
17) 4-Methylphenol	11.02	108	677603	159.90	ppb	98
18) n-Nitroso-di-n-propylamine	11.03	70	632168	164.22	ppb	98
19) Hexachloroethane	11.28	117	393551	153.64	ppb	87
22) Nitrobenzene	11.44	77	957562	170.40	ppb	86
23) Isophorone	12.06	82	1678912	163.51	ppb	93
24) 2-Nitrophenol	12.25	139	479000	145.59	ppb	93
25) 2,4-Dimethylphenol	12.36	107	824780	156.02	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9526.D Vial: 7
Acq On : 7 Oct 99 10:45 Operator:
Sample : MSG;SSTD0160; Inst : MSG
Misc : SSTD160; Multiplr: 1.00
Quant Time: Oct 11 11:06 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
26) bis(2-Chloroethoxy)methane	12.61	93	1162359	161.88 ppb		97
27) 2,4-Dichlorophenol	12.86	162	700120	153.36 ppb		99
28) Benzoic Acid	12.66	122	581900	161.55 ppb		96
29) 1,2,4-Trichlorobenzene	13.09	180	755273	150.19 ppb		96
30) Naphthalene	13.29	128	2227188	152.49 ppb		98
31) 4-Chloroaniline	13.43	127	989931	147.73 ppb		99
32) Hexachlorobutadiene	13.61	225	410094	149.31 ppb		96
33) 4-Chloro-3-methylphenol	14.68	107	799139	151.45 ppb		96
34) 2-Methylnaphthalene	15.09	142	1469891	147.30 ppb		97
36) Hexachlorocyclopentadiene	15.50	237	478791	151.53 ppb		97
37) 2,4,6-trichlorophenol	15.83	196	556340	159.96 ppb		99
38) 2,4,5-Trichlorophenol	15.92	196	635301	168.47 ppb		97
40) 2-Chloronaphthalene	16.37	162	1558073	156.16 ppb		97
41) 2-Nitroaniline	16.63	65	674598	183.39 ppb		95
42) Dimethylphthalate	17.13	163	1983861	154.80 ppb		99
43) Acenaphthylene	17.46	152	2434182	149.35 ppb		96
44) 2,6-Dinitrotoluene	17.29	165	531008	159.71 ppb		99
45) 3-Nitroaniline	17.72	138	613409	157.44 ppb		96
46) Acenaphthene	17.93	153	1651999	156.19 ppb		99
47) 2,4-Dinitrophenol	18.00	184	339838	168.32 ppb		89
48) 4-Nitrophenol	18.15	109	284423	179.70 ppb	m	85
49) Dibenzofuran	18.38	168	2379753	156.28 ppb		97
50) 2,4-Dinitrotoluene	18.35	165	769753	159.37 ppb		94
51) Diethylphthalate	18.99	149	2155726	155.23 ppb		99
52) Fluorene	19.29	166	1798717	153.11 ppb		97
53) 1,2- Diphenyl hydrazine	19.71	77	2420251	164.04 ppb		97
54) 4-Chlorophenyl-phenylether	19.28	204	887967	146.96 ppb		98
55) 4-Nitroaniline	19.34	138	737147	162.16 ppb		96
57) 4,6-Dinitro-2-methylphenol	19.43	198	516088	168.56 ppb		100
58) n-Nitrosodiphenylamine	19.60	169	1438342	166.32 ppb		97
60) 4-Bromophenyl-phenylether	20.57	248	478419	127.61 ppb		90
61) Hexachlorobenzene	20.74	284	593103	135.88 ppb		88
62) Carbazole	22.38	167	3025601	160.36 ppb		95
63) Pentachlorophenol	21.25	266	496033	180.41 ppb		89
64) Phenanthrene	21.83	178	2936515	163.80 ppb		98
65) Anthracene	21.97	178	2997962	156.77 ppb		99
66) Di-n-butylphthalate	23.28	149	4193208	165.44 ppb		99
67) Fluoranthene	24.97	202	3442426	158.29 ppb		92
69) Benzidine	25.29	184	466058	91.79 ppb		100
70) Pyrene	25.57	202	3534506	158.92 ppb		97
72) Butylbenzylphthalate	27.21	149	2185080	171.27 ppb		97
73) Benzo[a]anthracene	28.71	228	3425813	166.22 ppb		100
74) 3,3'-Dichlorobenzidine	28.62	252	1348118	169.41 ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100799.S\G9526.D Vial: 7
Acq On : 7 Oct 99 10:45 Operator:
Sample : MSG;SSTD0160; Inst : MSG
Misc : SSTD160; Multiplr: 1.00
Quant Time: Oct 11 11:06 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Initial Calibration
Response via : Initial Calibration

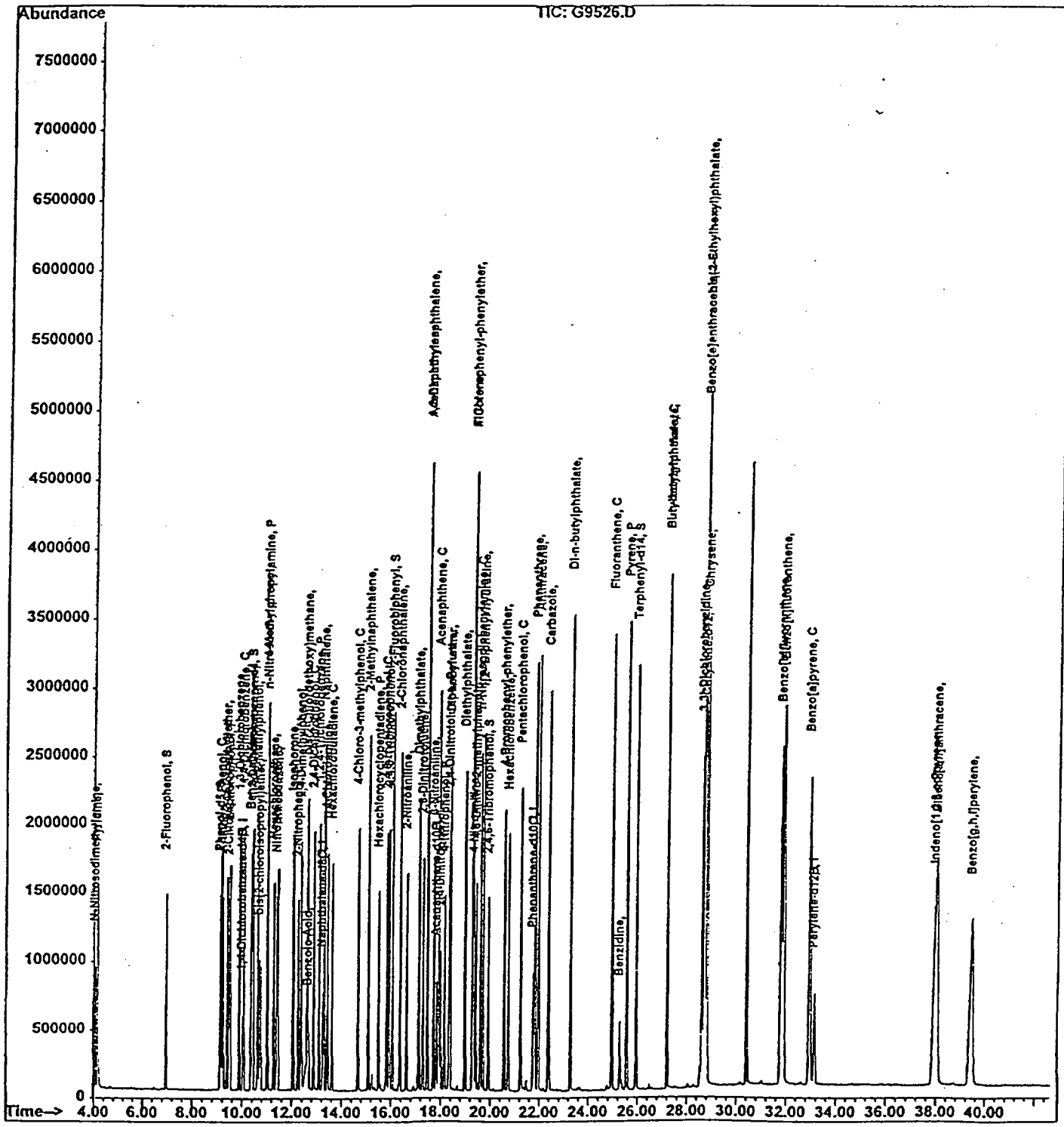
Compound	R.T.	QIon	Response	Conc Unit		Qvalue
75) Chrysene	28.81	228	3056911	136.27 ppb		99
76) bis(2-Ethylhexyl)phthalate	28.68	149	2882100	167.42 ppb		94
78) Di-n-octylphthalate	27.21	149	2185080	182.09 ppb		98
79) Benzo[b]fluoranthene	31.80	252	3845616	178.35 ppb	m	96
80) Benzo[k]fluoranthene	31.91	252	3673417	168.81 ppb	m	97
81) Benzo[a]pyrene	32.96	252	3574846	165.81 ppb		95
82) Indeno[1,2,3-cd]pyrene	37.98	276	3464863	156.28 ppb		98
83) Dibenz[a,h]anthracene	38.07	278	2341157	125.08 ppb		94
84) Benzo[g,h,i]perylene	39.47	276	3016067	144.96 ppb		92
87) Aniline	9.22	93	985043	143.09 ppb		86
95) Diphenyl ether	18.38	170	28311	161.12 ppb		93
96) 1,2-Dimethylnaphthalene	17.47	141	1367113	129.80 ppb		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100799.S\G9526.D Vial: 7
Acq On : 7 Oct 99 10:45 Operator:
Sample : MSG;SSTD0160; Inst : MSG
Misc : SSTD160; Multiplr: 1.00
Quant Time: Oct 11 11:06 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Tue Aug 31 13:19:50 1999
Response via : Single Level Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102199.S\G9696.D Vial: 2
Acq On : 21 Oct 99 9:28 Operator:
Sample : MSG;SSTD080; Inst : MSG
Misc : SSTD080; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	119	0.01
2		Pyridine	1.358	1.245	8.3	131	0.00
3		N-Nitrosodimethylamine	0.959	0.785	18.1	110	0.00
4	S	2-Fluorophenol	1.022	0.863	15.6	107	0.01
5	S	Phenol-d5	1.526	1.304	14.5	105	0.00
6	C	Phenol	1.635	1.434	12.3	109	0.01
7		bis(2-Chloroethyl)ether	1.436	1.227	14.6	107	0.01
8	P	2-Chlorophenol	1.263	1.132	10.4	110	0.01
9	S	2-Chlorophenol-d4	1.195	1.071	10.4	111	0.01
10		1,3-Dichlorobenzene	1.342	1.262	6.0	115	0.00
11	C	1,4-Dichlorobenzene	1.379	1.296	6.0	115	0.01
12		Benzyl alcohol	0.809	0.693	14.3	109	0.01
13	S	1,2-Dichlorobenzene-d4	0.891	0.797	10.5	120	0.01
14		1,2-Dichlorobenzene	1.334	1.249	6.4	115	0.01
15		2-Methylphenol	1.104	0.989	10.4	113	0.00
16		bis(2-chloroisopropyl)ether	2.070	1.809	12.6	109	0.01
17		4-Methylphenol	1.103	0.998	9.5	113	0.00
18	P	n-Nitroso-di-n-propylamine	1.012	0.881	12.9	110	0.02
19		Hexachloroethane	0.648	0.563	13.1	106	0.02
20	I	Naphthalene-d8	1.000	1.000	0.0	116	0.00
21	S	Nitrobenzene-d5	0.387	0.306	20.9	104	0.02
22		Nitrobenzene	0.386	0.332	14.0	106	0.03
23		Isophorone	0.686	0.607	11.5	106	0.02
24	C	2-Nitrophenol	0.210	0.197	6.2	107	0.00
25		2,4-Dimethylphenol	0.349	0.314	10.0	107	0.00
26		bis(2-Chloroethoxy)methane	0.489	0.441	9.8	110	0.00
27	C	2,4-Dichlorophenol	0.297	0.295	0.7	116	0.00
28		Benzoic Acid	0.223	0.171	23.3	85	0.09
29	P	1,2,4-Trichlorobenzene	0.329	0.326	0.9	116	0.00
30		Naphthalene	0.963	0.935	2.9	115	0.00
31		4-Chloroaniline	0.430	0.419	2.6	112	0.00
32	C	Hexachlorobutadiene	0.179	0.166	7.3	109	0.00
33	C	4-Chloro-3-methylphenol	0.343	0.316	7.9	108	0.00
34		2-Methylnaphthalene	0.652	0.663	-1.7	119	0.00
35	I	Acenaphthene-d10	1.000	1.000	0.0	124	0.00
36	P	Hexachlorocyclopentadiene	0.296	0.240	18.9	95	0.00
37	C	2,4,6-trichlorophenol	0.353	0.307	13.0	111	0.00
38		2,4,5-Trichlorophenol	0.392	0.341	13.0	114	0.00
39	S	2-Fluorobiphenyl	1.139	0.983	13.7	118	0.00
40		2-Chloronaphthalene	1.019	0.943	7.5	119	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102199.S\G9696.D Vial: 2
Acq On : 21 Oct 99 9:28 Operator:
Sample : MSG;SSTD080; Inst : MSG
Misc : SSTD080; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		2-Nitroaniline	0.395	0.304	23.0	104	0.00
42		Dimethylphthalate	1.281	1.186	7.4	116	0.00
43		Acenaphthylene	1.649	1.567	5.0	121	0.00
44		2,6-Dinitrotoluene	0.326	0.293	10.1	111	0.00
45		3-Nitroaniline	0.379	0.345	9.0	111	0.00
46	C	Acenaphthene	1.098	1.015	7.6	120	0.00
47	P	2,4-Dinitrophenol	0.201	0.153	23.9	95	0.00
48	P	4-Nitrophenol	0.167	0.133	20.4	106	0.00
49		Dibenzofuran	1.557	1.465	5.9	121	0.00
50	P	2,4-Dinitrotoluene	0.471	0.435	7.6	113	0.00
51		Diethylphthalate	1.398	1.252	10.4	113	0.02
52		Fluorene	1.201	1.120	6.7	120	0.01
53		1,2- Diphenyl hydrazine	1.529	1.283	16.1	109	0.00
54		4-Chlorophenyl-phenylether	0.598	0.597	0.2	124	0.00
55		4-Nitroaniline	0.452	0.390	13.7	108	0.02
56	I	Phenanthrene-d10	1.000	1.000	0.0	120	0.00
57		4,6-Dinitro-2-methylphenol	0.166	0.144	13.3	104	0.01
58	C	n-Nitrosodiphenylamine	0.502	0.463	7.8	117	0.00
59	S	2,4,6-Tribromophenol	0.125	0.108	13.6	109	0.00
60		4-Bromophenyl-phenylether	0.198	0.185	6.6	108	0.00
61		Hexachlorobenzene	0.237	0.235	0.8	118	0.01
62		Carbazole	1.082	1.032	4.6	120	0.00
63	C	Pentachlorophenol	0.151	0.124	17.9	99	0.00
64		Phenanthrene	1.054	0.982	6.8	120	0.00
65		Anthracene	1.086	1.023	5.8	117	0.00
66		Di-n-butylphthalate	1.481	1.323	10.7	115	0.00
67	C	Fluoranthene	1.225	1.163	5.1	117	0.00
68	I	Chrysene-d12	1.000	1.000	0.0	112	0.00
69		Benzidine	0.224	0.260	-16.1	120	0.00
70	P	Pyrene	1.148	1.103	3.9	116	0.00
71	S	Terphenyl-d14	0.855	0.796	6.9	111	0.00
72		Butylbenzylphthalate	0.671	0.587	12.5	108	0.00
73		Benzo[a]anthracene	1.097	1.014	7.6	115	0.00
74		3,3'-Dichlorobenzidine	0.411	0.405	1.5	119	0.00
75		Chrysene	0.983	1.042	-6.0	109	0.00
76		bis(2-Ethylhexyl)phthalate	0.921	0.823	10.6	112	-0.01
77	I	Perylene-d12	1.000	1.000	0.0	102	-0.01
78	C	Di-n-octylphthalate	0.758	0.690	9.0	108	0.00
79		Benzo[b]fluoranthene	1.358	1.297	4.5	107	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102199.S\G9696.D Vial: 2
Acq On : 21 Oct 99 9:28 Operator:
Sample : MSG;SSTD080; Inst : MSG
Misc : SSTD080; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80		Benzo[k]fluoranthene	1.301	1.165	10.5	101	0.00
81	C	Benzo[a]pyrene	1.258	1.134	9.9	99	-0.01
82		Indeno[1,2,3-cd]pyrene	1.285	1.266	1.5	107	0.00
83		Dibenz[a,h]anthracene	0.913	1.076	-17.9	108	0.00
84		Benzo[g,h,i]perylene	1.171	1.065	9.1	96	0.02
85		Dibenzo[a,h]acridine	0.000	0.000	0.0	52	-0.02
86	I	1,4-Dichlorobenzene-d4B	1.000	1.000	0.0	119	0.01
87		Aniline	1.716	1.606	6.4	112	0.01
88	I	Perylene-d12B	1.000	1.000	0.0	102	-0.01
89	I	Acenaphthene-d10B	1.000	1.000	0.0	124	0.00
90		Biphenyl	0.000	0.000	0.0	215#	0.01
91	I	1,4-Dichlorobenzene-d4C	1.000	1.000	0.0	119	0.01
92		Isobutyric acid	0.000	0.000	0.0	0#	-2.79#
93		Methacrylic acid	0.000	0.000	0.0	5113#	0.03
94	I	Acenaphthene-d10C	1.000	1.000	0.0	124	0.00
95		Diphenyl ether	0.000	0.000	0.0	129	0.00
96		1,2-Dimethylnaphthalene	0.949	0.996	-5.0	119	0.00
97	I	Naphthalene-d8C	1.000	1.000	0.0	116	0.00
98		Diethyl Maleate	0.000	0.000	0.0	108	0.00
99	I	Phenanthrene-d10C	1.000	1.000	0.0	120	0.00
100		Malathion	0.000	0.000	0.0	77	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\102199.S\G9696.D Vial: 2
Acq On : 21 Oct 99 9:28 Operator:
Sample : MSG;SSTD080; Inst : MSG
Misc : SSTD080; Multiplr: 1.00
Quant Time: Oct 21 10:13 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.03	152	293612	40.00 ppb	0.01
20) Naphthalene-d8	13.23	136	1111446	40.00 ppb	0.00
35) Acenaphthene-d10	17.83	164	828201	40.00 ppb	0.00
56) Phenanthrene-d10	21.74	188	1567404	40.00 ppb	0.00
68) Chrysene-d12	28.71	240	1724891	40.00 ppb	0.00
77) Perylene-d12	33.10	264	1467297	40.00 ppb	-0.01
86) 1,4-Dichlorobenzene-d4B	10.03	152	293612	40.00 ppb	0.01
88) Perylene-d12B	33.10	264	1467297	40.00 ppb	-0.01
89) Acenaphthene-d10B	17.83	164	828201	40.00 ppb	0.00
91) 1,4-Dichlorobenzene-d4C	10.03	152	293612	40.00 ppb	0.01
94) Acenaphthene-d10C	17.83	164	828201	40.00 ppb	0.00
97) Naphthalene-d8C	13.23	136	1111446	40.00 ppb	0.00
99) Phenanthrene-d10C	21.74	188	1567404	40.00 ppb	0.00
System Monitoring Compounds					
4) 2-Fluorophenol	6.97	112	506761	67.58 ppb	0.01
5) Phenol-d5	9.11	99	765710	68.35 ppb	0.00
9) 2-Chlorophenol-d4	9.47	132	629001	71.74 ppb	0.01
13) 1,2-Dichlorobenzene-d4	10.40	152	468045	71.53 ppb	0.01
21) Nitrobenzene-d5	11.39	82	680237	63.24 ppb	0.02
39) 2-Fluorobiphenyl	16.05	172	1628482	69.08 ppb	0.00
59) 2,4,6-Tribromophenol	19.90	332	338796	69.08 ppb	0.00
71) Terphenyl-d14	25.93	244	2745547	74.48 ppb	0.00
Target Compounds					Qvalue
2) Pyridine	4.16	79	731109	73.36 ppb	m 95
3) N-Nitrosodimethylamine	4.07	42	460867	65.48 ppb	98
6) Phenol	9.15	94	841830	70.15 ppb	91
7) bis(2-Chloroethyl)ether	9.38	93	720243	68.32 ppb	95
8) 2-Chlorophenol	9.51	128	664810	71.71 ppb	91
10) 1,3-Dichlorobenzene	9.89	146	741003	75.23 ppb	99
11) 1,4-Dichlorobenzene	10.07	146	761335	75.19 ppb	97
12) Benzyl alcohol	10.36	108	406982	68.50 ppb	94
14) 1,2-Dichlorobenzene	10.44	146	733327	74.89 ppb	97
15) 2-Methylphenol	10.62	108	580598	71.67 ppb	96
16) bis(2-chloroisopropyl)ethe	10.71	45	1062024	69.90 ppb	94
17) 4-Methylphenol	11.00	108	586229	72.41 ppb	97
18) n-Nitroso-di-n-propylamine	11.02	70	517082	69.63 ppb	98
19) Hexachloroethane	11.28	117	330436	69.46 ppb	80
22) Nitrobenzene	11.45	77	738204	68.85 ppb	92
23) Isophorone	12.05	82	1349293	70.83 ppb	94
24) 2-Nitrophenol	12.25	139	437534	74.88 ppb	91
25) 2,4-Dimethylphenol	12.35	107	697461	71.93 ppb	90

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\102199.S\G9696.D Vial: 2
Acq On : 21 Oct 99 9:28 Operator:
Sample : MSG;SSTD080; Inst : MSG
Misc : SSTD080; Multiplr: 1.00
Quant Time: Oct 21 10:13 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
26) bis(2-Chloroethoxy)methane	12.61	93	980788	72.12 ppb		99
27) 2,4-Dichlorophenol	12.86	162	655182	79.33 ppb		95
28) Benzoic Acid	12.57	122	380954	61.62 ppb		97
29) 1,2,4-Trichlorobenzene	13.08	180	725054	79.24 ppb		98
30) Naphthalene	13.29	128	2077723	77.61 ppb		100
31) 4-Chloroaniline	13.41	127	931184	77.86 ppb		94
32) Hexachlorobutadiene	13.61	225	369823	74.47 ppb		94
33) 4-Chloro-3-methylphenol	14.67	107	703428	73.84 ppb		92
34) 2-Methylnaphthalene	15.09	142	1473475	81.37 ppb		96
36) Hexachlorocyclopentadiene	15.50	237	397503	64.82 ppb		98
37) 2,4,6-trichlorophenol	15.82	196	508696	69.58 ppb		95
38) 2,4,5-Trichlorophenol	15.91	196	565316	69.61 ppb		94
40) 2-Chloronaphthalene	16.37	162	1562676	74.05 ppb		99
41) 2-Nitroaniline	16.62	65	503698	61.61 ppb		93
42) Dimethylphthalate	17.12	163	1963736	74.06 ppb		99
43) Acenaphthylene	17.46	152	2595254	76.01 ppb		99
44) 2,6-Dinitrotoluene	17.27	165	485751	72.07 ppb		92
45) 3-Nitroaniline	17.70	138	571174	72.70 ppb		86
46) Acenaphthene	17.92	153	1680801	73.94 ppb		99
48) 4-Nitrophenol	18.12	109	220610	63.94 ppb	m	92
49) Dibenzofuran	18.37	168	2426385	75.25 ppb		96
50) 2,4-Dinitrotoluene	18.32	165	720172	73.80 ppb		97
51) Diethylphthalate	18.98	149	2074531	71.68 ppb		96
52) Fluorene	19.28	166	1855365	74.62 ppb		97
53) 1,2- Diphenyl hydrazine	19.69	77	2124495	67.10 ppb		98
54) 4-Chlorophenyl-phenylether	19.27	204	989556	79.94 ppb		99
55) 4-Nitroaniline	19.31	138	645533	69.02 ppb		94
57) 4,6-Dinitro-2-methylphenol	19.40	198	452887	69.66 ppb		100
58) n-Nitrosodiphenylamine	19.57	169	1450197	73.79 ppb		93
60) 4-Bromophenyl-phenylether	20.55	248	579371	74.81 ppb		88
61) Hexachlorobenzene	20.73	284	735804	79.19 ppb		84
62) Carbazole	22.36	167	3235722	76.35 ppb		95
63) Pentachlorophenol	21.24	266	388233	65.61 ppb		90
64) Phenanthrene	21.81	178	3079708	74.54 ppb		96
65) Anthracene	21.95	178	3206725	75.34 ppb		98
66) Di-n-butylphthalate	23.26	149	4147783	71.48 ppb		98
67) Fluoranthene	24.95	202	3645026	75.96 ppb		93
69) Benzidine	25.27	184	895256	92.66 ppb		99
70) Pyrene	25.55	202	3805029	76.89 ppb		95
72) Butylbenzylphthalate	27.19	149	2025820	70.01 ppb		92
73) Benzo[a]anthracene	28.68	228	3499552	73.98 ppb		98
74) 3,3'-Dichlorobenzidine	28.58	252	1396881	78.78 ppb		99
75) Chrysene	28.78	228	3596298	84.81 ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\102199.S\G9696.D Vial: 2
Acq On : 21 Oct 99 9:28 Operator:
Sample : MSG;SSTD080; Inst : MSG
Misc : SSTD080; Multiplr: 1.00
Quant Time: Oct 21 10:13 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
76) bis(2-Ethylhexyl)phthalate	28.66	149	2838867	71.48 ppb	98
78) Di-n-octylphthalate	27.19	149	2025820	72.86 ppb	97
79) Benzo[b]fluoranthene	31.76	252	3807166	76.43 ppb	97
80) Benzo[k]fluoranthene	31.84	252	3419243	71.65 ppb	96
81) Benzo[a]pyrene	32.90	252	3329210	72.17 ppb	100
82) Indeno[1,2,3-cd]pyrene	37.86	276	3716433	78.82 ppb	93
83) Dibenz[a,h]anthracene	37.96	278	3158663	94.33 ppb	99
84) Benzo[g,h,i]perylene	39.35	276	3124617	72.74 ppb	88
87) Aniline	9.23	93	942868	74.87 ppb	96
96) 1,2-Dimethylnaphthalene	17.47	141	1649096	83.92 ppb	99

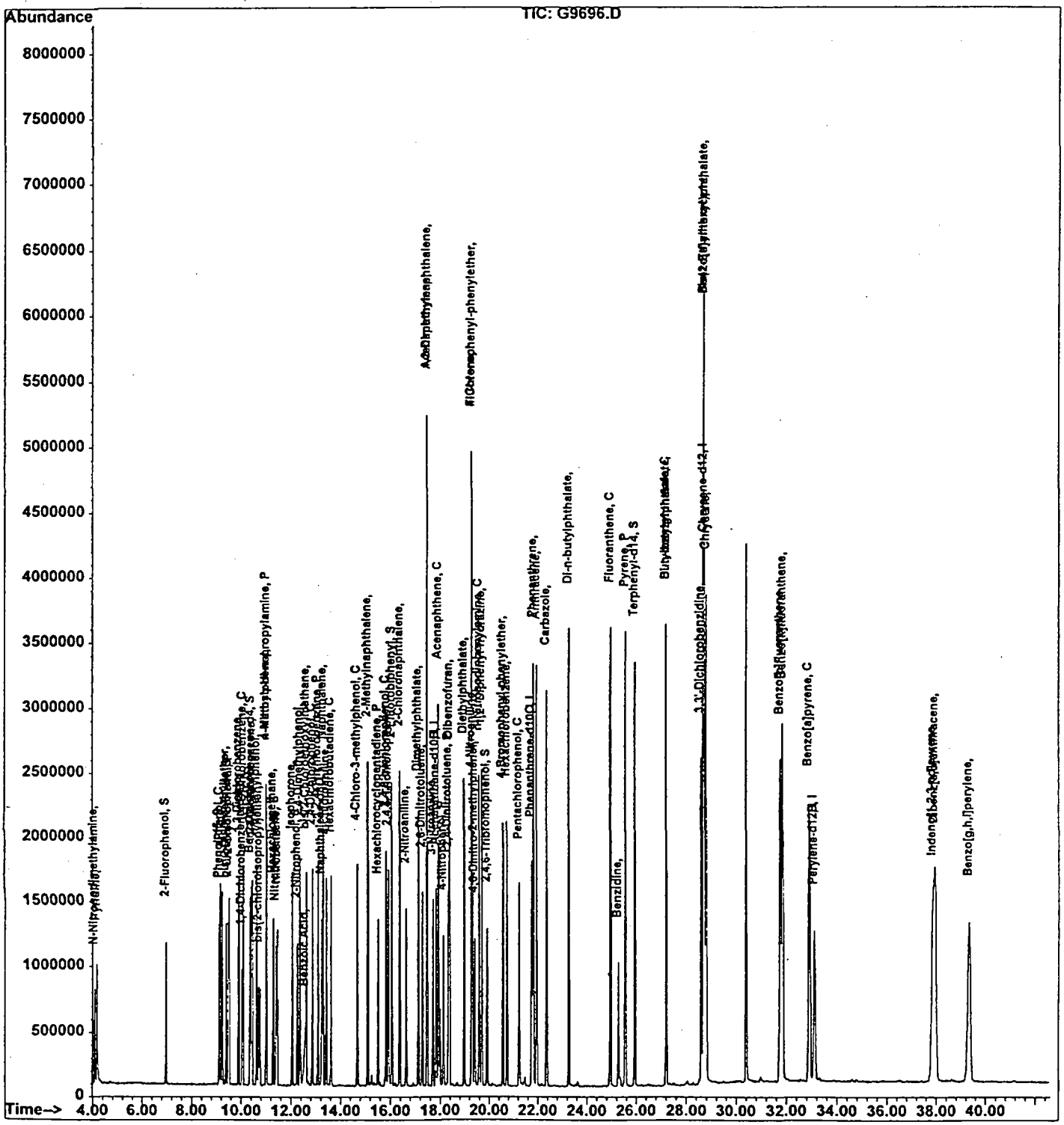
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102199.S\G9696.D
Acq On : 21 Oct 99 9:28
Sample : MSG;SSTD080;
Misc : SSTD080;
Quant Time: Oct 21 10:13 1999

Vial: 2
Operator:
Inst : MSG
Multiplr: 1.00
Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Multiple Level Calibration



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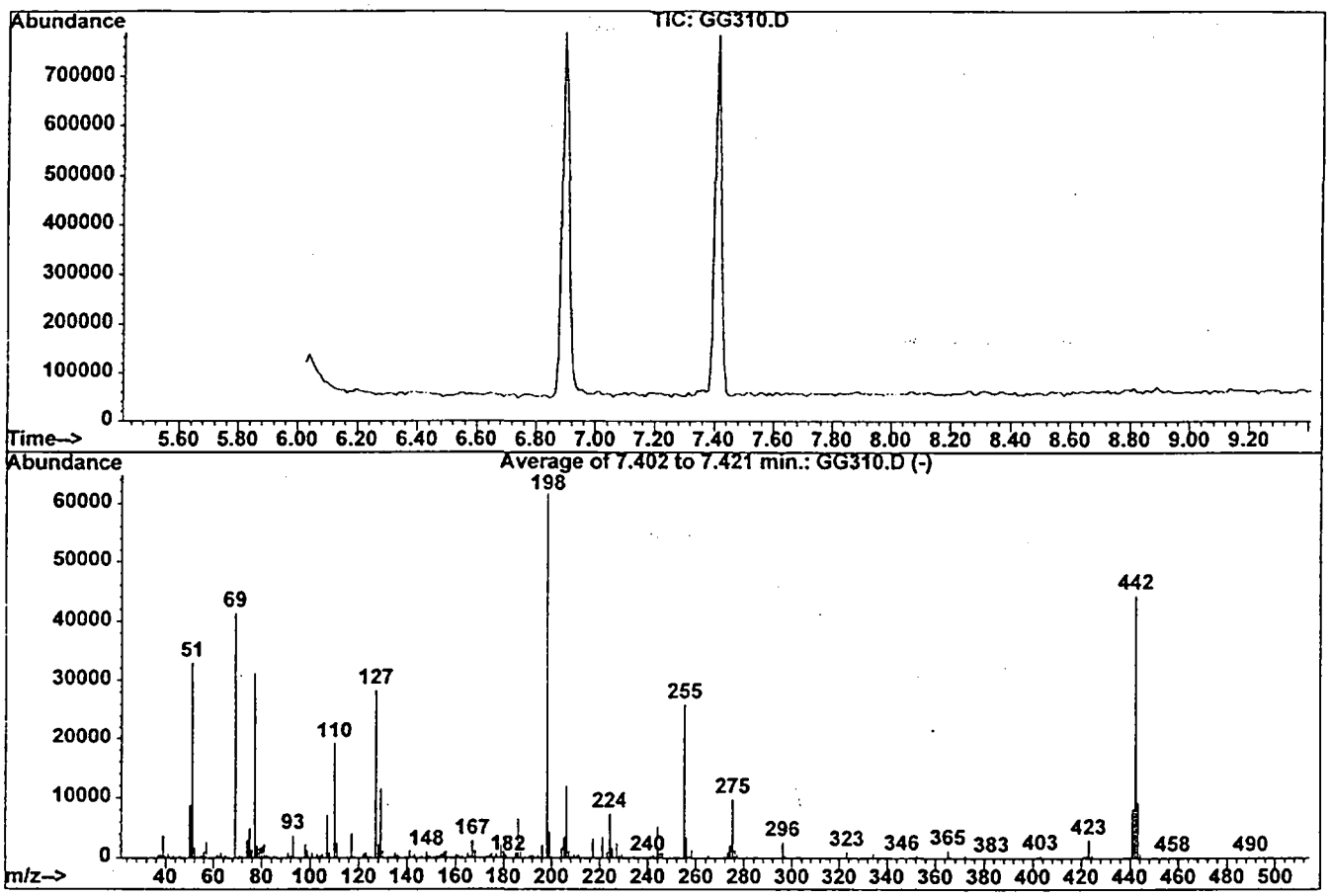
000246

Data File : C:\HPCHEM\1\data\100799.S\GG310.D
Acq On : 7 Oct 99 5:15
Sample : MSG;-50ng dftpp;
Misc : dftpp;

Vial: 1
Operator:
Inst : MSG
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\DFTPG.M
Title :



AutoFind: Scans 142, 143, 144; Background Corrected with Scan 138

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	53.5	33018	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	67.0	41378	PASS
70	69	0.00	2	0.6	250	PASS
127	198	40	60	45.9	28339	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	61747	PASS
199	198	5	9	7.2	4417	PASS
275	198	10	30	15.8	9775	PASS
365	198	1	100	2.1	1272	PASS
441	443	0.01	100	88.0	8201	PASS
442	198	40	100	71.9	44408	PASS
443	442	17	23	21.0	9315	PASS

GG310.D DFTPG.M Thu Oct 07 05:28:11 1999 MSG

Average of 7.402 to 7.421 min.: GG310.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	518	46.60	132	58.35	269	64.85	498
37.90	619	47.40	244	59.05	260	65.20	13
38.95	3766	50.00	8891	60.20	124	66.10	113
39.70	447	51.00	33018	60.40	125	66.40	161
41.05	828	51.90	1755	60.95	97	68.90	41378
41.90	92	53.05	280	61.25	532	70.00	250
42.20	105	53.40	97	61.85	454	70.80	382
43.10	464	53.95	292	62.85	931	71.70	294
44.70	253	54.85	441	63.60	86	72.20	163
45.40	132	55.90	1044	63.90	159	73.95	2989
45.85	464	56.90	2708	64.10	250	74.95	5061

Average of 7.402 to 7.421 min.: GG310.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
75.95	1494	86.00	340	94.05	56	103.80	123
77.05	31200	86.75	173	94.45	90	104.05	523
78.05	2069	87.95	91	95.05	24	104.95	644
79.00	1759	88.95	79	95.85	148	106.95	7233
80.00	1871	89.20	205	96.95	84	107.85	529
80.95	2375	90.05	62	98.00	2358	108.05	940
81.90	562	90.90	868	98.95	1294	108.55	151
82.15	230	91.85	45	99.15	336	109.95	19256
83.05	344	92.00	483	100.90	918	111.05	2577
83.85	13	93.00	3803	102.45	96	112.05	420
84.95	461	93.80	302	102.90	699	113.00	210

Average of 7.402 to 7.421 min.: GG310.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.10	242	123.05	918	133.95	221	142.95	681
115.90	182	123.90	117	134.95	864	143.90	55
117.00	4161	124.05	379	136.05	615	145.10	150
118.20	428	125.00	236	136.50	106	145.60	78
118.85	125	127.00	28339	137.00	325	145.90	303
119.25	198	128.10	2265	137.90	69	146.20	61
119.80	112	129.05	11699	139.10	150	148.00	1026
120.10	167	130.00	1328	139.35	271	149.10	367
121.00	166	131.00	127	140.00	228	149.65	235
121.90	154	132.10	170	141.05	1227	151.05	251
122.15	668	133.05	244	142.05	286	152.05	368

Average of 7.402 to 7.421 min.: GG310.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
152.95	315	162.00	248	172.65	115	180.05	1070
153.20	263	162.25	111	173.05	289	181.00	688
154.10	649	162.80	344	174.10	440	181.95	173
155.10	1013	165.00	763	174.35	83	182.35	52
156.05	1134	166.10	388	175.05	839	183.25	72
156.95	258	167.05	2864	175.85	86	183.65	18
158.00	255	168.05	1266	176.10	57	184.30	207
159.10	241	169.00	228	177.00	726	185.15	956
160.15	641	170.55	117	178.05	129	186.05	6676
160.85	236	171.65	92	178.25	116	187.05	1991
161.20	519	172.10	235	179.00	2209	188.05	100

Average of 7.402 to 7.421 min.: GG310.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
188.35	113	196.10	2203	208.05	287	218.15	376
188.85	115	198.10	61747	209.10	564	219.00	71
189.05	266	199.00	4417	210.55	503	219.60	158
190.15	252	200.10	484	211.20	607	220.05	260
190.90	457	201.50	176	211.90	66	221.05	3543
191.75	270	202.10	86	212.30	62	223.15	1049
192.00	599	203.20	102	214.50	94	224.10	7413
193.00	336	204.10	1716	214.90	96	225.10	1791
194.15	518	205.15	3463	215.15	138	226.20	245
194.70	134	206.15	12119	216.00	264	227.00	2454
195.30	233	207.20	1249	217.10	3241	228.10	540

Average of 7.402 to 7.421 min.: GG310.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
229.10	718	235.65	56	246.15	859	258.10	1310
230.05	135	236.00	143	248.95	153	259.15	209
230.80	51	236.25	106	249.15	72	260.45	72
231.00	119	237.20	233	251.15	154	260.85	66
231.30	70	239.10	121	251.95	53	261.15	69
231.70	52	240.00	178	252.15	53	261.75	63
232.20	81	241.10	385	252.45	140	262.05	61
232.90	84	242.20	492	253.05	139	263.25	69
234.05	358	243.15	122	255.15	25992	265.10	564
234.45	88	244.15	5299	256.05	3549	266.85	157
235.15	253	245.20	812	257.10	490	270.65	76

Average of 7.402 to 7.421 min.: GG310.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
270.85	53	279.80	52	290.80	76	310.00	64
271.35	51	281.00	118	291.50	74	311.30	77
271.65	84	281.70	50	292.20	84	313.75	55
272.05	131	282.60	52	293.05	158	313.95	68
273.15	904	284.25	138	296.15	2661	314.55	70
274.20	2129	284.90	76	297.10	385	315.15	121
275.20	9775	285.20	247	301.95	208	316.00	113
276.15	1366	285.70	53	303.15	288	316.25	92
277.10	626	287.05	114	303.70	59	317.10	135
278.10	187	288.50	73	305.10	57	320.85	69
279.40	54	289.00	55	308.20	157	321.15	117

Average of 7.402 to 7.421 min.: GG310.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
321.45	78	332.85	64	346.10	356	354.40	156
321.85	51	333.05	183	346.85	73	355.00	150
322.25	88	334.15	787	348.15	73	356.10	58
323.20	1025	335.25	113	349.45	72	356.70	51
324.05	153	335.55	92	350.60	130	358.70	138
326.45	56	336.75	77	350.95	55	363.10	89
327.10	258	337.75	63	352.10	453	363.80	58
329.65	75	339.05	75	352.95	192	365.10	1272
331.45	104	341.15	159	353.25	173	366.10	321
331.95	65	341.85	51	353.45	66	367.10	52
332.25	52	342.85	80	354.15	324	369.20	64

Average of 7.402 to 7.421 min.: GG310.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
369.70	66	381.90	52	394.15	55	421.00	399
371.00	168	382.90	88	398.45	54	422.10	415
372.15	503	383.10	66	402.20	247	423.05	3033
372.40	76	383.50	52	403.10	449	424.20	563
373.10	94	383.70	55	404.10	158	425.15	158
373.70	54	384.00	65	404.65	51	426.90	133
374.20	80	386.00	68	405.15	76	428.25	84
375.20	52	386.70	65	408.15	94	430.05	74
376.40	65	391.00	60	414.45	51	435.80	85
378.20	51	391.50	74	418.95	64	436.80	52
379.30	88	392.00	107	419.85	75	437.40	104

Average of 7.402 to 7.421 min.: GG310.D
MSG;-50ng dftpp;
Modified:subtracted

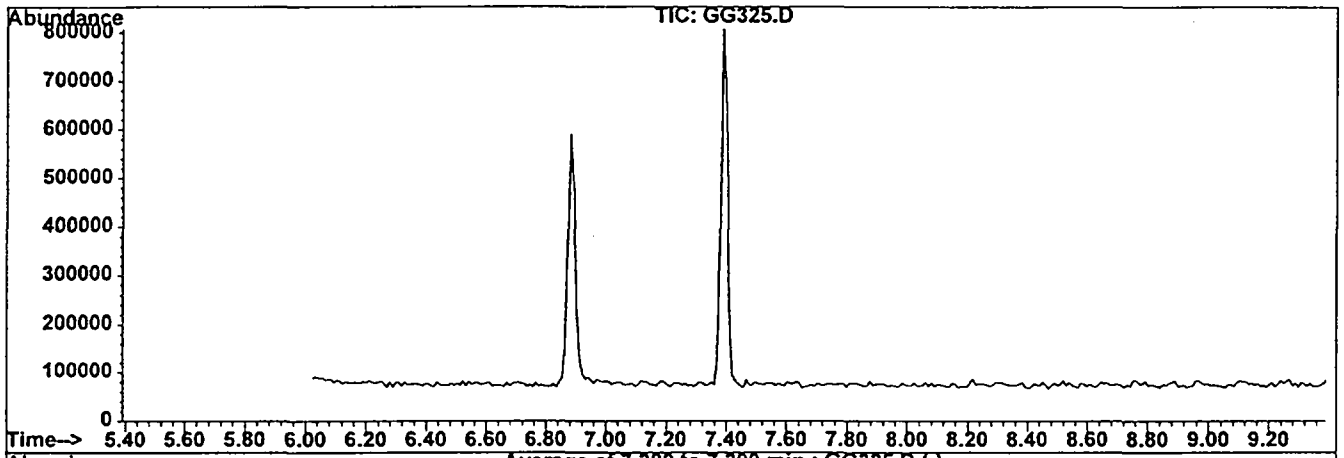
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
437.75	160	450.90	66	493.65	59		
438.50	163	456.10	56	495.35	53		
439.10	164	457.65	124	499.05	66		
439.80	246	460.30	114				
441.10	8201	462.00	103				
442.10	44408	468.70	51				
443.10	9315	475.45	52				
444.00	216	478.55	53				
444.15	701	479.55	62				
449.50	85	489.85	112				
450.70	51	492.95	66				

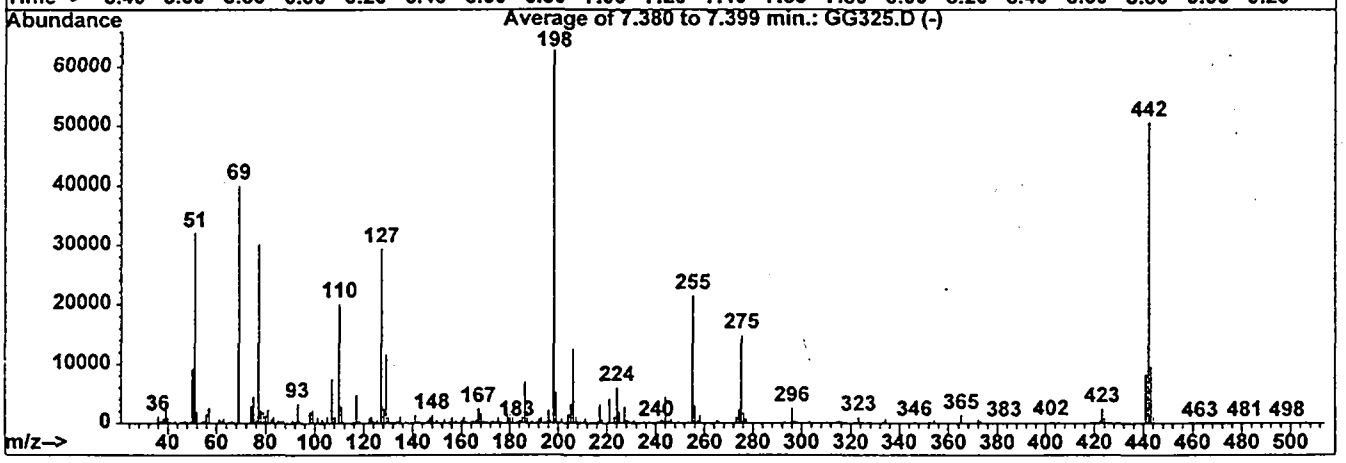
DFTPP

Data File : C:\HPCHEM\1\data\102199.S\GG325.D
Acq On : 21 Oct 99 9:08
Sample : MSG;-50ng dftpp;
Misc : dftpp;

Vial: 1
Operator:
Inst : MSG
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\DFTPG.M
Title :





AutoFind: Scans 140, 141, 142; Background Corrected with Scan 137

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.2	32192	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	63.6	39995	PASS
70	69	0.00	2	0.6	242	PASS
127	198	40	60	46.9	29488	PASS
197	198	0.00	1	0.7	460	PASS
198	198	100	100	100.0	62861	PASS
199	198	5	9	8.4	5267	PASS
275	198	10	30	23.7	14893	PASS
365	198	1	100	2.2	1399	PASS
441	443	0.01	100	86.1	8320	PASS
442	198	40	100	80.6	50693	PASS
443	442	17	23	19.1	9658	PASS

Average of 7.380 to 7.399 min.: GG325.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.85	1210	46.75	540	54.80	426	60.95	696
36.85	469	47.40	323	55.90	1535	62.20	446
37.90	829	47.75	214	56.95	2686	63.00	797
38.95	3360	48.05	337	57.75	106	64.15	115
39.80	916	49.15	312	58.05	180	64.65	302
40.70	319	50.05	9245	58.55	146	65.15	234
41.00	267	51.05	32192	58.65	108	66.10	454
41.90	290	51.95	2077	58.80	105	66.90	337
43.00	470	52.90	46	59.10	206	68.95	39995
45.25	312	53.25	120	59.35	105	70.25	242
46.05	167	54.05	429	59.85	233	70.55	57

Average of 7.380 to 7.399 min.: GG325.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
71.35	141	83.05	1111	91.65	229	99.95	161
72.00	125	84.05	151	91.95	429	100.80	221
74.10	2945	84.65	160	92.35	337	101.05	1025
74.95	4597	85.00	547	93.00	3416	101.80	162
76.15	530	85.40	1	93.90	499	103.00	706
77.05	30243	85.95	454	94.75	208	103.80	339
78.00	2240	87.00	487	95.00	155	104.10	157
79.00	2008	88.30	236	95.25	70	105.00	1160
79.90	1344	88.90	142	96.65	113	107.05	7588
80.95	2254	89.15	156	98.00	1891	107.90	217
82.05	715	90.85	631	99.10	2331	108.10	1145

Average of 7.380 to 7.399 min.: GG325.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
110.00	20135	119.00	72	127.05	29488	133.95	411
111.00	2990	119.20	160	128.10	2555	135.05	1131
111.85	367	120.35	235	129.05	11728	136.00	140
112.10	191	120.95	9	129.80	251	137.00	372
112.60	68	121.40	105	130.00	1100	137.30	238
113.00	153	122.15	927	130.85	274	137.70	156
115.20	177	123.05	1195	131.20	165	138.00	126
115.50	184	123.90	358	131.65	238	138.40	99
116.00	286	124.10	439	132.05	299	139.25	182
117.05	4920	124.85	43	133.00	257	139.70	80
118.05	480	125.25	570	133.80	101	139.95	193

Average of 7.380 to 7.399 min.: GG325.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
140.95	1356	147.15	983	154.55	116	162.20	337
142.10	477	148.00	1421	155.05	313	162.85	67
142.90	364	149.10	248	155.25	178	163.55	86
143.10	341	149.50	97	156.10	1057	164.10	362
144.05	157	149.80	612	156.90	52	164.95	374
144.40	111	150.80	163	157.25	382	166.10	625
145.00	205	151.10	215	158.00	382	167.10	2523
145.30	107	151.80	111	159.05	196	168.10	1690
145.90	113	152.45	131	160.05	523	169.10	489
146.10	456	153.00	734	161.10	1061	169.95	102
146.50	147	154.05	136	161.70	358	170.45	387

Average of 7.380 to 7.399 min.: GG325.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
172.20	281	181.10	1007	188.25	119	195.25	109
173.00	420	182.05	103	188.75	108	196.10	2263
174.15	109	182.55	83	189.05	491	196.75	460
174.45	166	182.90	162	189.45	127	198.05	62861
175.10	984	183.35	67	189.85	86	199.10	5267
176.25	370	183.65	205	191.10	287	200.10	318
176.75	178	184.05	541	191.65	69	200.45	87
177.05	188	185.05	1044	192.10	745	201.50	766
177.85	85	186.15	7059	193.05	958	202.25	66
179.10	1941	187.10	2075	194.15	225	202.90	126
180.10	1636	187.85	23	194.85	86	203.45	158

Average of 7.380 to 7.399 min.: GG325.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
204.05	1551	215.05	235	228.90	432	238.35	164
205.10	3251	216.05	262	230.35	190	238.60	72
206.20	12614	217.15	3256	231.05	525	239.10	81
207.25	1184	218.10	646	232.20	55	239.30	191
208.10	478	221.15	4197	233.00	53	240.30	198
209.05	358	222.25	44	233.30	96	240.80	80
209.70	53	223.10	968	234.20	122	241.05	313
210.10	311	224.20	6086	235.05	274	242.20	601
211.10	841	225.10	2004	236.00	212	242.95	390
211.95	154	227.15	2823	236.70	117	243.20	263
213.10	112	228.10	583	237.15	343	244.10	4478

Average of 7.380 to 7.399 min.: GG325.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
245.05	480	256.10	2972	265.10	543	277.10	869
245.30	398	257.05	525	265.65	73	278.05	183
246.10	714	258.15	1388	266.05	282	278.55	53
246.90	129	259.00	112	267.45	79	279.20	148
247.20	130	259.20	54	268.05	213	279.85	131
247.60	101	259.50	76	271.35	67	280.95	141
249.15	308	260.20	201	272.05	93	282.00	157
251.80	105	260.45	58	273.10	1045	282.55	101
253.15	301	261.45	54	274.20	2346	283.10	196
253.50	129	262.05	59	275.15	14893	283.95	52
255.10	21413	263.45	64	276.15	1803	284.45	51

Average of 7.380 to 7.399 min.: GG325.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
285.15	178	296.10	2580	309.15	55	317.40	87
286.05	75	297.15	576	310.15	139	317.80	120
286.85	71	298.30	283	310.85	88	318.50	181
289.45	70	298.75	77	314.10	146	320.70	71
290.05	64	300.85	110	314.40	87	321.10	54
290.25	78	302.15	88	314.90	182	321.35	141
291.35	60	302.95	65	315.15	350	322.10	51
292.25	54	303.15	417	315.90	62	322.45	165
292.65	100	306.25	143	316.30	309	323.20	1106
293.10	338	307.35	101	316.90	173	324.20	285
294.15	80	307.75	97	317.20	83	325.10	213

Average of 7.380 to 7.399 min.: GG325.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
326.15	106	335.25	3	347.00	121	358.20	73
326.70	53	336.00	60	347.70	62	358.90	62
327.10	330	337.10	90	348.50	51	360.20	82
328.10	342	337.45	157	348.80	55	364.10	80
329.70	72	341.00	190	351.50	74	365.10	1399
330.50	123	341.40	66	352.15	348	366.30	54
330.80	56	342.40	72	352.90	121	366.70	53
331.50	68	342.90	88	353.15	146	367.40	123
332.10	52	343.50	110	354.10	571	368.05	67
333.00	200	344.10	58	355.10	210	369.25	53
334.20	816	346.10	257	357.50	83	369.95	127

Average of 7.380 to 7.399 min.: GG325.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
370.25	62	382.85	173	394.55	66	404.25	88
372.10	667	384.10	164	394.75	68	405.35	55
372.75	113	385.65	52	396.75	61	405.55	172
373.15	433	386.15	60	397.55	147	407.25	71
375.15	54	386.65	145	398.95	50	413.45	51
376.85	68	387.15	116	399.25	96	415.20	115
378.05	80	389.05	55	400.95	69	415.65	63
379.15	58	389.35	77	402.20	333	416.45	113
380.75	76	390.15	212	402.45	68	418.35	59
381.95	100	390.85	180	403.05	191	419.05	76
382.35	59	392.75	54	403.25	286	419.95	145

Average of 7.380 to 7.399 min.: GG325.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
420.80	251	430.20	73	437.30	56	445.55	135
421.15	81	430.75	119	438.20	62	447.60	54
422.15	469	431.70	60	438.50	239	449.50	62
423.15	2479	432.60	85	438.70	59	455.70	74
424.10	860	432.90	57	439.05	147	459.80	52
424.40	77	433.20	71	439.50	110	461.80	50
425.00	72	433.60	57	441.10	8320	462.20	53
425.50	72	434.20	144	442.10	50693	462.80	68
425.80	63	434.80	62	443.10	9658	463.00	88
426.70	63	436.20	142	444.05	1117	463.60	73
429.20	89	436.60	152	444.80	99	468.00	105

Average of 7.380 to 7.399 min.: GG325.D
MSG;-50ng dftpp;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
468.80	51	479.95	75	494.15	63		
470.00	58	481.15	150	494.75	136		
470.30	52	482.05	98	498.15	70		
472.30	73	482.75	67	498.55	86		
472.80	116	483.35	54				
473.30	94	484.75	113				
474.20	124	485.30	17				
474.60	67	486.85	84				
475.35	68	487.75	50				
477.15	50	491.85	65				
478.05	110	492.65	129				

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SBLK 41653

Lab Name: STL-NJ

Project No.: 94106

Matrix: (soil/water) WATER

Lab Sample ID: SBLK41653

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: G9698

Level: (low/med) LOW

Date Received:

% Moisture: decanted: (Y/N):

Date Extracted: 10/15/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/21/99

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg)	ug/Kg	Q
108-95-2	Phenol		10	U
111-44-4	Bis (2-Chloroethyl) Ether		10	U
95-57-8	2-Chlorophenol		10	U
541-73-1	1,3-Dichlorobenzene		10	U
106-46-7	1,4-Dichlorobenzene		10	U
95-50-1	1,2-Dichlorobenzene		10	U
95-48-7	2-Methylphenol		10	U
108-60-1	2,2' -Oxybis (1-Chloropropane)		10	U
106-44-5	4-Methylphenol		10	U
621-64-7	N-Nitrosodi-n-Propylamine		10	U
67-72-1	Hexachloroethane		10	U
98-95-3	Nitrobenzene		10	U
78-59-1	Isophorone		10	U
88-75-5	2-Nitrophenol		10	U
105-67-9	2,4-Dimethylphenol		10	U
111-91-1	Bis (2-Chloroethoxy) Methane		10	U
120-83-2	2,4-Dichlorophenol		10	U
120-82-1	1,2,4-Trichlorobenzene		10	U
91-20-3	Naphthlene		10	U
106-47-8	4-Chloroaniline		10	U
87-68-3	Hexachlorobutadiene		10	U
59-50-7	4-Chloro-3-Methylphenol		10	U
91-57-6	2-Methylnaphthalene		10	U
77-47-4	Hexachlorocyclopentadiene		10	U
88-06-2	2,4,6-Trichlorophenol		10	U
95-95-4	2,4,5-Trichlorophenol		50	U
91-58-7	2-Chloronaphthalene		10	U
88-74-4	2-Nitroaniline		50	U
131-11-3	Dimethylphthalate		10	U
208-96-8	Acenaphthylene		10	U
606-20-2	2,6-Dinitrotoluene		10	U
99-09-2	3-Nitroaniline		50	U
83-32-9	Acenaphthene		10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SBLK 41653

Lab Name: STL-NJ

Project No.: 94106

Matrix: (soil/water) WARWE

Lab Sample ID: SBLK41653

Sample wt/vol: _____ (g/mL) ML

Lab File ID: G9698

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N): _____

Date Extracted: 10/15/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/21/99

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg)		ug/Kg		Q
51-28-5	2,4-Dinitrophenol			50		U
100-02-7	4-Nitrophenol			50		U
132-64-9	Dibenzofuran			10		U
121-14-2	2,4-Dinitrotoluene			10		U
84-66-2	Diethylphthalate			10		U
7005-72-3	4-Chlorophenyl-Phenyl Ether			10		U
86-73-7	Fluorene			10		U
100-01-6	4-Nitroaniline			50		U
534-52-1	4,6-Dinitro-2-Methylphenol			50		U
86-30-6	N-Nitrosodiphenylamine (1)			10		U
101-55-3	4-Bromophenyl-Phenylether			10		U
118-74-1	Hexachlorobenzene			10		U
87-86-5	Penachlorophenol			50		U
85-01-8	Phenanthrene			10		U
120-12-7	Anthracene			10		U
86-74-8	Carbazole			10		U
84-74-2	Di-n-Butylphthalate			10		U
206-44-0	Fluoranthene			10		U
129-00-0	Pyrene			10		U
85-68-7	Butylbenzylphthalate			10		U
91-94-1	3,3'-Dichlorobenzidine			10		U
56-55-3	Benzo (a) Anthracene			10		U
218-01-9	Chrysene			10		U
117-81-7	Bis (2-Ethylhexyl) Phthalate			10		U
117-84-0	Di-n-Octylphtalate			10		U
205-99-2	Benzo (b) Fluoranthene			10		U
207-08-9	Benzo (k) Fluoranthene			10		U
50-32-8	Benzo (a) Pyrene			10		U
193-39-5	Indeno (1,2,3-cd) Pyrene			10		U
53-70-3	Dibenz (a,h) Anthracene			10		U
191-24-2	Benzo (g,h,i) Perylene			10		U

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\102199.S\G9698.D Vial: 3
Acq On : 21 Oct 99 11:04 Operator:
Sample : MSG;SBLK41653; Inst : MSG
Misc : SBLK41653;B;WG41653;AQ;;;;LOW; Multiplr: 1.00
Quant Time: Oct 22 7:02 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.03	152	306278	40.00	ppb	0.01
20) Naphthalene-d8	13.23	136	1152963	40.00	ppb	0.00
35) Acenaphthene-d10	17.83	164	768878	40.00	ppb	0.00
56) Phenanthrene-d10	21.74	188	1412654	40.00	ppb	0.00
68) Chrysene-d12	28.71	240	1239640	40.00	ppb	0.00
77) Perylene-d12	33.11	264	1282167	40.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4B	10.03	152	306278	40.00	ppb	0.01
88) Perylene-d12B	33.11	264	1282167	40.00	ppb	0.00
89) Acenaphthene-d10B	17.83	164	768878	40.00	ppb	0.00
91) 1,4-Dichlorobenzene-d4C	10.03	152	306278	40.00	ppb	0.01
94) Acenaphthene-d10C	17.83	164	768878	40.00	ppb	0.00
97) Naphthalene-d8C	13.23	136	1152963	40.00	ppb	0.00
99) Phenanthrene-d10C	21.74	188	1412654	40.00	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	6.97	112	183766	23.49	ppb 31	0.01
5) Phenol-d5	9.11	99	153777	13.16	ppb 18	0.00
9) 2-Chlorophenol-d4	9.47	132	316719	34.63	ppb	0.01
13) 1,2-Dichlorobenzene-d4	10.40	152	148963	21.82	ppb	0.01
21) Nitrobenzene-d5	11.39	82	216819	19.43	~~ppb~~ 39 m	0.01
39) 2-Fluorobiphenyl	16.04	172	540675	24.70	ppb 99	0.00
59) 2,4,6-Tribromophenol	19.90	332	121655	27.52	ppb 37	0.00
71) Terphenyl-d14	25.93	244	749308	28.28	ppb 57	0.00

Target Compounds Qvalue

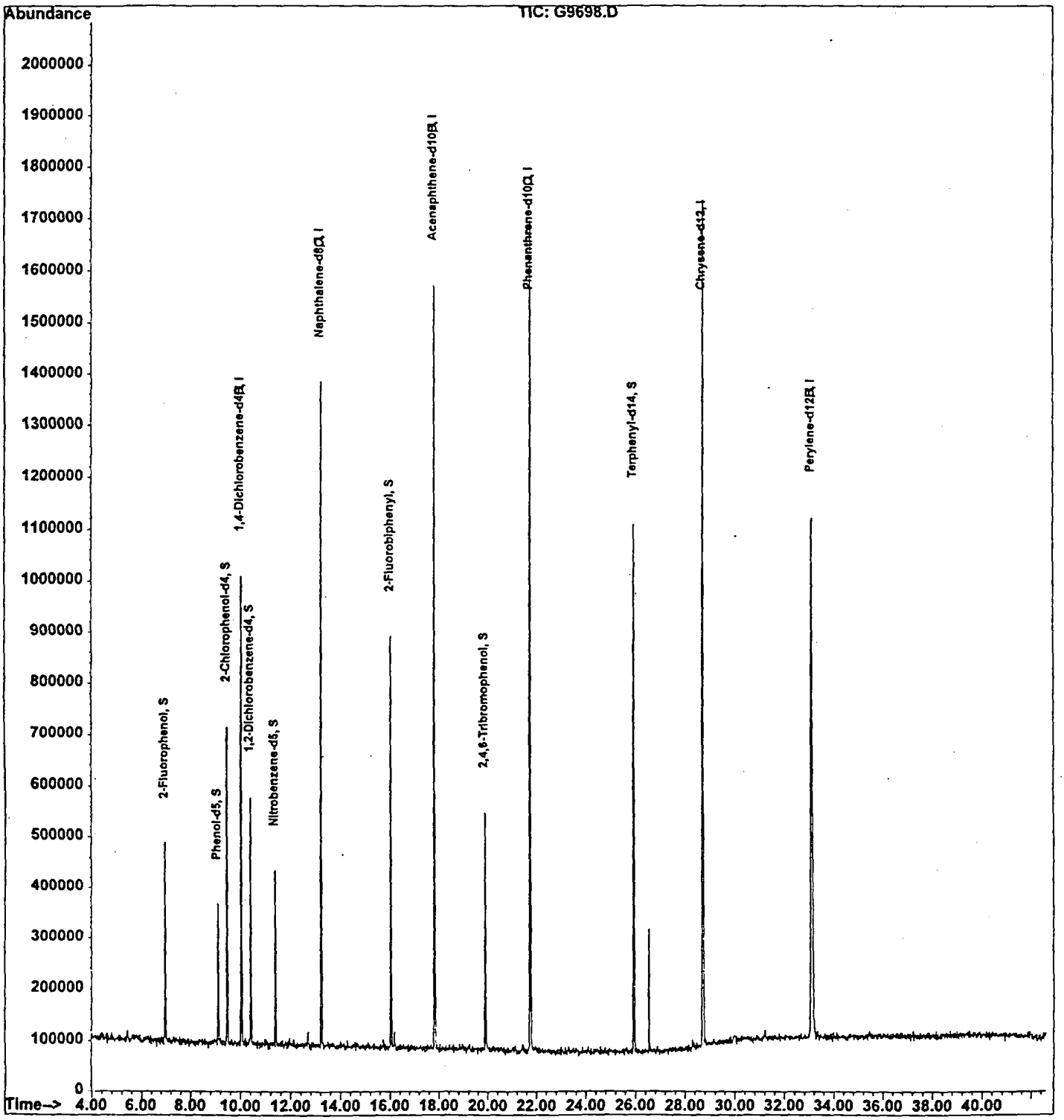
SSeal 11-12-99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102199.S\G9698.D Vial: 3
Acq On : 21 Oct 99 11:04 Operator:
Sample : MSG;SBLK41653; Inst : MSG
Misc : SBLK41653;B;WG41653;AQ;;;;LOW; Multiplr: 1.00
Quant Time: Oct 22 7:02 1999 Quant Results File: SW1008G.RES

Method : C:\HPCHEM\1\METHODS\SW1008G.M
Title : BNA CALIBRATION
Last Update : Mon Oct 11 12:40:22 1999
Response via : Multiple Level Calibration



BNA Semi Department

Analyst/Date/ File 10/07/99

Analytical Fractions ___ BNA _____

Instrument ID ____ MSG _____

Tune File _____ T_G

DFTPP Inj Time 5:15AM

Sequence File _____

Calibration Standards

Standard	Lot #	Conc(ug/ml)	
DFTPP	WS 1238	25	IS#'
HCIS	WS R-0166	4000	IS#:
CC	WS 1248	50/80	IS#:
STD 160	WS	160	IS#4
STD 120	WS	120	IS#!
STD 100	WS	100	IS#(
STD 080	WS	80	
STD 050	WS	50	
STD 020	WS	20	
STD 010	WS	10	

#	LAB ID	CLIENT ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	OK
1	DFTPP		G	1	1 µl		WG	ok	
2	SSTD080		G 9521	2		1.0	WG Su1008um	Ok	
3	SSTD080		G 22 21	3			WG	Ok	
4	SSTD010		G 23 22	4			WG	Ok	
5	SSTD050		G 24 23	5			WG	Ok	
6	SSTD070		G 25 24	6			WG	Ok	
7	SSTD120		G 26 25	7			WG	Ok	
8	SSTD160		G 27 26	8			WG	Ok	
9			G				WG		
10			G				WG		
11			G				WG		
12			G				WG		
13			G				WG		
14			G				WG		
15			G				WG		
16			G				WG		
17			G				WG		
18			G				WG		

MSG

BNA-GC/MS Department

Analyst/Date/ File 10/21/99 Thursday

SW846

Analytical Fractions BNA

Instrument ID MSG

Tune File T_G

DFTPP Inj Time 9:08 AM

Sequence File

Calibration Standards

Standard	Lot #	Conc (ug/ml)
DFTPP	WS	25
HCIS	WS	4000
CC	WS	50/80
STD 160	WS	160
STD 120	WS	120
STD 100	WS	100
STD 080	WS	80
STD 050	WS	50
STD 020	WS	20
STD 010	WS	10

IS area	IS rt
IS#1	RT
IS#2	RT
IS#3	RT
IS#4	RT
IS#5	RT
IS#6	RT

Reviewed By

2nd Review

#	LAB ID	CLIENT ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	OK Comments/Corr Actions
1	DFTPP		G G325	1	1 ul		WG		Ok sent
2	SSTD080		G 9696	2		1.0	WG	SW1008G.M	ok
3	93954001		G 97	13			WG		ok
4	SBLK41653		G 98	4			WG		ok
5	SBLK41653BS		G 99	5			WG		ok
6	94106007		G 9700	65			WG SSeal		ok
7	007MS		G 01	76		2.0	WG		ok
8	007MSD		G 02	87		2.0	WG		ok
9	006		G 03	98		1.0	WG		ok
10	94047001		G 04	109			WG		ok
11	004		G 05	10			WG		ok
12	94105001		G 06	11			WG		ok
13	002		G 07	12			WG		ok
14			G				WG		
15			G				WG		
16			G				WG		
17			G				WG		
18			G				WG		
19			G				WG		
20			G				WG		
21			G				WG		
22			G				WG		
23			G				WG		
24			G				WG		
25			G				WG		

MSGLOG1 1/28/98 rev.

000229

AEN/NJ
Organic Extractions -AQUEOUS / Matrix

Batch: 17629 Extract File#: 41 Extraction Method: SEP FUNNEL Date: 15-OCT-99 Analyst: Anthony T. Hankerson

Luis Batch: WG41653 Relinquished To Storage(Init/Date): SS 10/19/99 Concentration (Finish) Date: 19-OCT-99 Analyst: Steve Schulze

Analysis: BNA-8270B- Removed From Storage(Init/Date): _____

Returned To Storage(Init/Date): _____

BS LOT #: ~~S91195E~~ S51292E
BS LOT VOLUME: .5ml

MS LOT #: ~~S91195E~~ S51292E
MS LOT VOLUME: .5ml

MSD LOT #: ~~S91195E~~ S51292E
MSD LOT VOLUME: .5ml

Spike witnessed by: [signature]

Lab ID	Client ID	Sample Vol	Int. pH	BN pH	AE pH	Initial Vol.	Split Aliquot	Final Vol.	Surr. Lot	Vol	Comments
									S61337E		
94047001	D-3	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94047004	MW-10	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94105001	EQUIPBLK05	1000 ml	7	12	2			1 ml	~~SS1201E~~	.5 ml	
94105002	DECONWATER	1000 ml	7	12	2			1 ml	~~SS1201E~~	.5 ml	
94106006	SW-2-1-01	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94106007	SW-2-1-02	1000 ml	7	12	2			1 ml	~~SS1201E~~	.5 ml	
94106007MSD	SW-2-1-02	500 ml	7	12	2			1 ml	~~SS1201E~~	.5 ml	
94106007MS	SW-2-1-02	500 ml	7	12	2			1 ml	~~SS1201E~~	.5 ml	
QE-17629E	BLANK	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
QE-17629ES	BL.SP.	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	

PESTICIDES

AQUEOUS PEST/PCB SURROGATE RECOVERY

Lab Name: STL-NJ Batch: WG41661

Job Number: 94106

No.	Client ID	TCX % REC	DCB % REC
1	METHOD BLANK	58	53
2	BLANK SPIKE	65	82
3	S-2-1-01	80	68
4	S-2-1-01MS	94	81
5	S-2-1-01MSD	34	74
6	S-2-1-02	82	108
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

ADVISORY QC LIMITS:

Surrogate (1) = TCX - Tetrachloro-m-xylene (30-150)
Surrogate (2) = DBC - Dibutyl chlorendate (20-150)

= Column to be used to flag recovery values
* = Values outside QC Limits
D = Surrogate Diluted out

AQUEOUS PEST/PCB SURROGATE RECOVERY

Lab Name: STL-NJ Batch: WG41661

Job Number: 94106 RR

No.	Client ID	TCX % REC	DCB % REC
1	METHOD BLANK	55	58
2	BLANK SPIKE	66	80
3	S-2-1-01	86	71
4	S-2-1-01MS	94	76
5	S-2-1-01MSD	33	67
6	S-2-1-02	54	81
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

ADVISORY QC LIMITS:

Surrogate (1) = TCX - Tetrachloro-m-xylene (30-150)
Surrogate (2) = DBC - Dibutyl chlorendate (20-150)

= Column to be used to flag recovery values
* = Values outside QC Limits
D = Surrogate Diluted out

GDS
12-9-99

SOIL PEST/PCB SURROGATE RECOVERY

Lab Name: STL-NJ Batch: WG41651

Job Number: 94106

No.	Client ID	TCX %REC #	DCB %REC #
1	S-2-1-01	72	97
2	S-2-1-02	118	100
3	METHOD BLANK	137	100
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

ADVISORY
QC LIMITS:

Surrogate (1) = TCX - Tetrachloro-m-xylene (30-150)
Surrogate (2) = DCB - Decachlorobiphenyl (20-150)

= Column to be used to flag recovery values
* = Values outside QC Limits
D = Surrogate Diluted out

SOIL PEST/PCB SURROGATE RECOVERY

Lab Name: STL-NJ Batch: WG41651

Job Number: 94106

No.	Client ID	TCX % REC	DCB%REC
1	METHOD BLANK	101	82
2	BLANK SPIKE	100	79
3	MW3DS044MS	104	85
4	MW3DSO44MSD	103	81
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

ADVISORY QC LIMITS:

Surrogate (1) = TCX - Tetrachloro-m-xylene (30-150)
Surrogate (2) = DBC - Dibutyl chlorendate (20-150)

= Column to be used to flag recovery values
* = Values outside QC Limits
D = Surrogate Diluted out

WATER PEST MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Lab Name: STL-NJ Contract: _____

Lab Code: STL-NJ Job No.: 94106

Matrix Spike/Matrix Spike Dup - Sample ID: SW-2-1-01

Compound	Spike Added (ug/l)	SAMPLE concentration (ug/l)	MS concentration (ug/l)	MS % REC	QC Limits % Recovery
Gamma-BHC	0.10	0	0.095	95	56-123
Heptachlor	0.10	0	0.099	99	40-131
Aldrin	0.10	0	0.098	98	40-120
Dieldrin	0.20	0	0.22	110	52-126
Endrin	0.20	0	0.23	115	56-121
4,4'-DDT	0.60	0	0.47	78	38-127

Compound	Spike Added (ug/l)	MSD concentration (ug/l)	MSD % REC	RPD	QC Limits % Recovery	QC Limits RPD
Gamma-BHC	0.10	0.084	84	12	56-123	30
Heptachlor	0.10	0.080	80	21	40-131	30
Aldrin	0.10	0.084	84	17	40-120	30
Dieldrin	0.20	0.21	105	5	52-126	30
Endrin	0.20	0.23	115	0	56-121	30
4,4'-DDT	0.60	0.37	62	23	38-127	30

WATER PEST MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Lab Name: STL-NJ Contract: _____

Lab Code: STL-NJ Job No.: 94106

Matrix Spike/Matrix Spike Dup - Sample ID: SW-2-1-01

Compound	Spike Added (ug/l)	SAMPLE concentration (ug/l)	MS concentration (ug/l)	MS % REC	QC Limits % Recovery
Gamma-BHC	0.10	0	0.095	95	56-123
Heptachlor	0.10	0	0.099	99	40-131
Aldrin	0.10	0	0.098	98	40-120
Dieldrin	0.20	0	0.21	105	52-126
Endrin	0.20	0	0.23	115	56-121
4,4'-DDT	0.60	0	.47	78	38-127

Compound	Spike Added (ug/l)	MSD concentration (ug/l)	MSD % REC	RPD	QC Limits % Recovery	QC Limits RPD
Gamma-BHC	0.10	0.084	84	12	56-123	30
Heptachlor	0.10	0.074	74	29	40-131	30
Aldrin	0.10	0.078	78	23	40-120	30
Dieldrin	0.20	0.20	100	5	52-126	30
Endrin	0.20	0.22	110	5	56-121	30
4,4'-DDT	0.60	0.37	62	23	38-127	30

* Values outside of QC limits.

RPD: 0 out of 6 outside limits.
Spike Recovery : 0 out of 12 outside limits.

Comments: _____

WATER PEST MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Lab Name: STL-NJ Contract: _____

Lab Code: STL-NJ Job No.: 94106 RR

Matrix Spike/Matrix Spike Dup - Sample ID: SW-2-1-01

Compound	Spike Added (ug/l)	SAMPLE concentration (ug/l)	MS concentration (ug/l)	MS % REC	QC Limits % Recovery
Gamma-BHC	0.10	0	0.094	94	56-123
Heptachlor	0.10	0	0.11	110	40-131
Aldrin	0.10	0	0.091	91	40-120
Dieldrin	0.20	0.031	0.23	115	52-126
Endrin	0.20	0	0.25	125*	56-121
4,4'-DDT	0.60	0	0.68	113	38-127

Compound	Spike Added (ug/l)	MSD concentration (ug/l)	MSD % REC	RPD	QC Limits % Recovery	QC Limits RPD
Gamma-BHC	0.10	0.086	86	9	56-123	30
Heptachlor	0.10	0.083	83	28	40-131	30
Aldrin	0.10	0.07	70	26	40-120	30
Dieldrin	0.20	0.21	90	10	52-126	30
Endrin	0.20	0.23	115	8	56-121	30
4,4'-DDT	0.60	0.62	103	9	38-127	30

* Values outside of QC limits.

RPD: 0 out of 6 outside limits.
Spike Recovery : 1 out of 12 outside limits.

Comments: _____

GPS
12-7-97

WATER PEST MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Lab Name: STL-NJ Contract: _____

Lab Code: STL-NJ Job No.: 94106 Re

Matrix Spike/Matrix Spike Dup - Sample ID: WG41661 BS

Compound	Spike Added (ug/l)	SAMPLE concentration (ug/l)	MS concentration (ug/l)	MS % REC	QC Limits % Recovery
Gamma-BHC	0.050	0	0.041	82	56-123
Heptachlor	0.050	0	0.044	88	40-131
Aldrin	0.050	0	0.038	76	40-120
Dieldrin	0.10	0	0.097	97	52-126
Endrin	0.10	0	0.118	118	56-121
4,4'-DDT	0.30	0	0.334	111	38-127

* Values outside of QC limits.

RPD: 0 out of 6 outside limits.
Spike Recovery : 0 out of 12 outside limits.

Comments: _____

GDS
12.9.99

SOIL PEST MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Lab Name: STL-NJ Contract: _____

Lab Code: STL-NJ Job No.: 94106

Matrix Spike/Matrix Spike Dup - Sample ID: MW3D-SO-44

Compound	Spike Added (ug/Kgl)	SAMPLE concentration (ug/Kg)	MS concentration (ug/Kg)	MS % REC	QC Limits % Recovery
Gamma-BHC	20	0	29	145*	56-123
Heptachlor	20	0	26	130	40-131
Aldrin	20	0	25	125*	40-120
Dieldrin	39	0	52	133*	52-126
Endrin	39	0	54	138*	56-121
4,4'-DDT	39	0	49	126	38-127

Compound	Spike Added (ug/Kg)	MS concentration (ug/Kg)	MS % REC	RPD	QC Limits % Recovery	QC LIMITS RPD
Gamma-BHC	20	29	145*	0	56-123	30
Heptachlor	20	23	115	12	40-131	30
Aldrin	20	24	120	4	40-120	30
Dieldrin	39	51	131*	2	52-126	30
Endrin	39	53	136*	2	56-121	30
4,4'-DDT	39	47	121	2	38-127	30

* Values outside of QC limits.

RPD: 0 out of 6 outside limits.
Spike Recovery : 7 out of 6 outside limits.

Comments: _____

SOIL PESTICIDE BLANK SPIKE

Lab Name: STL-NJ Contract: _____

Lab Code: STL-NJ Job No.: 94106

Matrix Spike/Matrix Spike Dup - Sample ID: WG41651 BS

Compound	Spike Added (ug/Kg)	SAMPLE concentration (ug/Kg)	MS concentration (ug/Kg)	MS % REC	QC Limits % Recovery
Gamma-BHC	8.3	0	8.4	101	56-123
Heptachlor	8.3	0	8.5	102	40-131
Aldrin	8.3	0	8.6	104	40-120
Dieldrin	17	0	17	100	52-126
Endrin	17	0	19	112	56-121
4,4'-DDT	50	0	55	110	38-127

* Values outside of QC limits.

Spike Recovery : 0 out of 6 outside limits.

Comments: _____

PESTICIDE/PCB METHOD BLANK SUMMARY

Lab Name: STL/NJ
Job No.: 94106
Lab File ID: b02db025
Extraction:(sepf/cont/sonc) sepf
Date Extracted: 10/15/99
Date Analyzed (2): 11/14/99
Time Analyzed (2): 1643
Instrument ID (2): HP58902A
GC Column (1): RTX-CLP

Batch: WG41661
Lab Sample ID: WG41661 MB
Matrix: (soil/water) water
Level: (Low/Med) _____
Date Analyzed (1): 11/14/99
Time Analyzed (1): 1643
Instrument ID (1): HP58902B
GC Column (2): RTX-CLPII

This Method Blank applies to the following samples, MS, and MSD.

No.	CLIENT ID	Lab Sample ID	Date Analyzed 1	Date Analyzed 2
1	BLANK SPIKE	WG41651 BS	11/14/99	11/14/99
2	S-2-1-01	94106006	11/14/99	11/14/99
3	S-2-1-01MS	94106006MS	11/14/99	11/14/99
4	S-2-1-01MSD	94106006MSD	11/14/99	11/14/99
5	S-2-1-02	94106007	11/14/99	11/14/99
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

PESTICIDE/PCB METHOD BLANK SUMMARY

Lab Name: STL/NJ
Job No.: 94106
Lab File ID: b02db025
Extraction:(sepf/cont/sonc) sepf
Date Extracted: 10/15/99
Date Analyzed (2): 12/03/99
Time Analyzed (2): 0345
Instrument ID (2): HP58902A
GC Column (1): RTX-CLP

Batch: WG41661
Lab Sample ID: WG41661 MB RR
Matrix: (soil/water) water
Level: (Low/Med)
Date Analyzed (1): 12/03/99
Time Analyzed (1): 0345
Instrument ID (1): HP58902B
GC Column (2): RTX-CLPII

This Method Blank applies to the following samples, MS, and MSD.

No.	CLIENT ID	Lab Sample ID	Date Analyzed 1	Date Analyzed 2
1	BLANK SPIKE	WG41651 BS	12/03/99	12/03/99
2	S-2-1-01	94106006	12/03/99	12/03/99
3	S-2-1-01MS	94106006MS	12/03/99	12/03/99
4	S-2-1-01MSD	94106006MSD	12/03/99	12/03/99
5	S-2-1-02	94106007	12/03/99	12/03/99
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

PESTICIDE/PCB METHOD BLANK SUMMARY

Lab Name: STL/NJ Batch: WG41651

Job No.: 94106

Lab Sample ID: WG41651 MB Lab File ID: D4AS01J_032

Matrix: (soil/water) SOIL Extraction: (sepf/cont/sonc) SONC

Level: (Low/Med) _____ Date Extracted: 10/12/99

Date Analyzed (1): 11/24/99 Date Analyzed (2): 11/24/99

Time Analyzed (1): 1932 Time Analyzed (2): 1844

Instrument ID (1): HP58904A Instrument ID (2): HP58904B

GC Column (1): DB1701 GC Column (2): DB608

This Method Blank Applies to the Following Samples, MS and MSD:

No.	CLIENT ID	Lab Sample ID	Date Analyzed 1	Date Analyzed 2
1	S-2-1-01	94106008	11/24/99	11/24/99
2	S-2-1-02	94106009	11/24/99	11/24/99
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

PESTICIDE/PCB METHOD BLANK SUMMARY

Lab Name: STL/NJ
Job No.: 94058
Lab File ID: D2B001A 010
Extraction: (sepf/cont/sonc) SONC
Extracted: 10/20/99
Date Analyzed (2): 11/12/99
Time Analyzed (2): 2308
Instrument ID (2): HP58902A
GC Column (1): RTX-CLP

Batch: WG41651
Lab Sample ID: WG41651 MB
Matrix: (soil/water) SOIL
Level: (Low/Med) _____ Date
Date Analyzed (1): 11/12/99
Time Analyzed (1): 2308
Instrument ID (1): HP58902B

GC Column (2): RTX-CLPII

This Method Blank applies to the following samples, MS, and MSD.

No.	CLIENT ID	Lab Sample ID	Date Analyzed 1	Date Analyzed 2
1	BLANK SPIKE	WG41651 BS	11/12/99	11/12/99
2	MW3DSO44MS	94023002MS	11/13/99	11/13/99
3	MW3DSO44MSD	94023003MSD	11/13/99	11/13/99
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				

Client ID: **SW-2-1-01**
Site:

Lab Sample No: **94106006**
Lab Job No: 94106

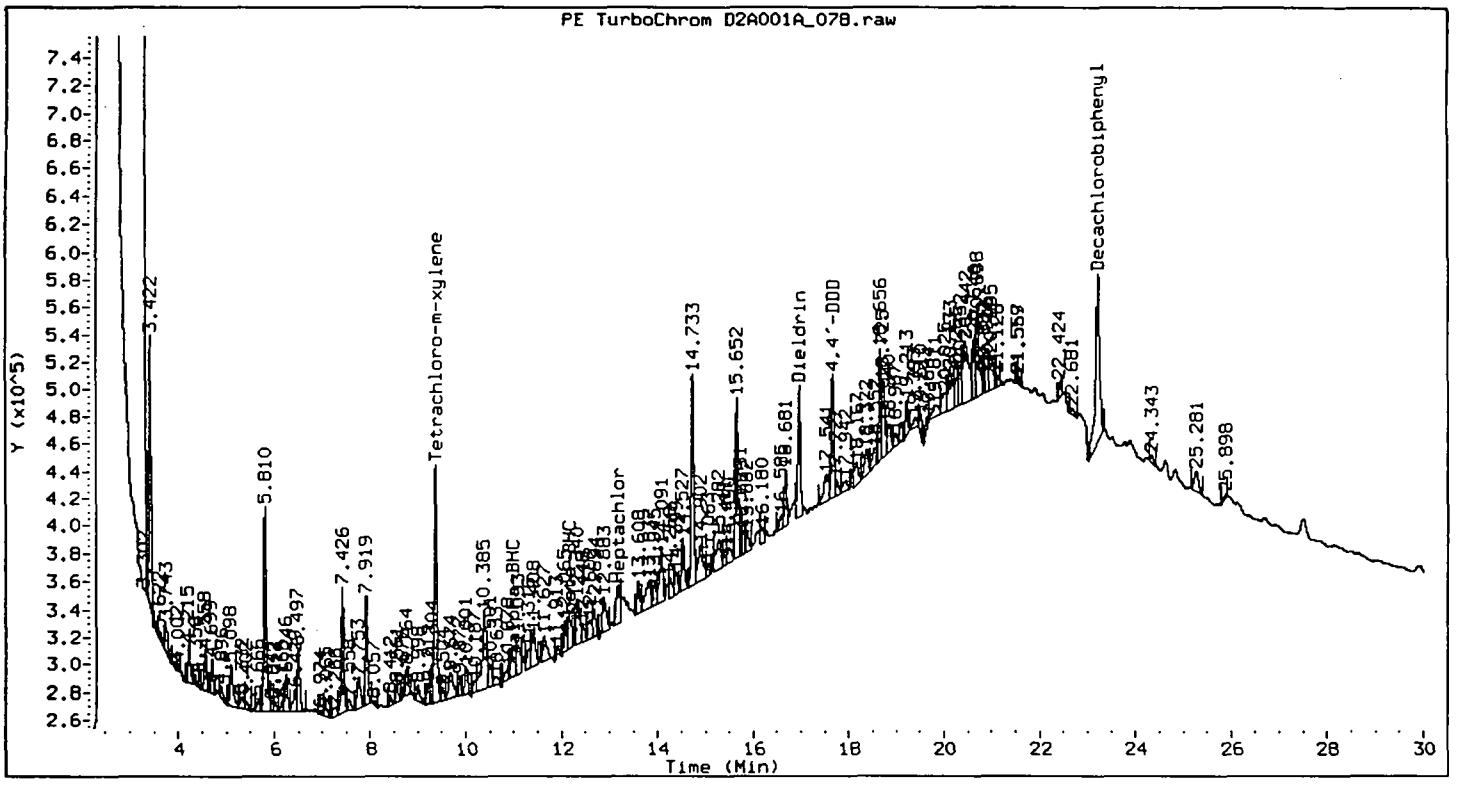
Date Sampled: 10/13/99
Date Received: 10/14/99
Date Analyzed: 11/14/99
GC Column: Rtx-CLPest
Instrument ID: HP58902.i
Lab File ID: D2A001A_078.d

Matrix: WATER
Level: LOW
Purge Volume: 1000.0 mL
Final Volume: 2.0 mL
Dilution Factor: 1.0

ORGANOCHLORINE PESTICIDES - GC/ECD

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aldrin	ND	0.01
alpha-BHC	0.00980J	0.01
beta-BHC	0.01	0.01
delta-BHC	ND	0.01
gamma-BHC (Lindane)	ND	0.01
4,4'-DDD	0.03	0.02
4,4'-DDE	ND	0.02
4,4'-DDT	ND	0.02
Dieldrin	0.02	0.02
Endosulfan I	ND	0.01
Endosulfan II	ND	0.02
Endosulfan sulfate	ND	0.02
Endrin	ND	0.02
Endrin aldehyde	ND	0.02
Endrin ketone	ND	0.02
Heptachlor	0.00685J	0.01
Heptachlor epoxide	ND	0.01
Methoxychlor	ND	0.100
Toxaphene	ND	0.500
gamma-Chlordane	ND	0.01
alpha-Chlordane	ND	0.01

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/D2A001A_078.d Page 1
Report Date 12/10/1999 11:21

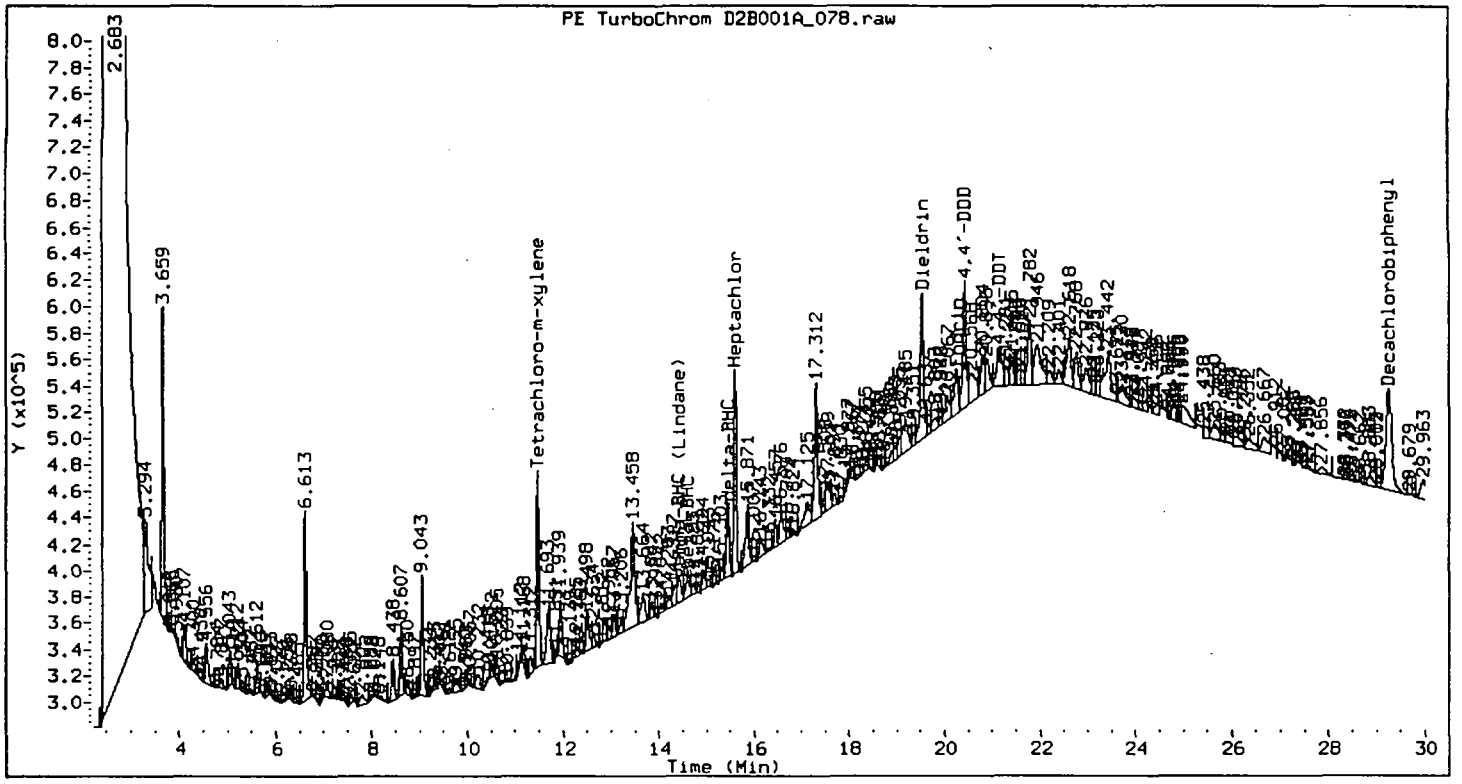


Method : /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/Bf8081.m
Sample Info : 94106006
Lab ID : 94106006 Inst ID : HP58902.i
Inj Date : 14-NOV-1999 19:19 Dil Factor : 1
Operator : gds Sample Matrix : WATER
Cpnd Sublist: TCLpest+ Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
alpha-BHC		10.995	11.014	0.019	151790	4.900	0.010
beta-BHC		12.161	12.169	0.008	127694	6.474	0.013
,4'-DDD	(M)	17.659	17.672	0.013	343722	15.960	0.032
Dieldrin	(M)	16.963	16.976	0.012	368499	11.722	0.023
Heptachlor		13.181	13.179	0.002	144983	3.426	0.007
Tetrachloro-m-xylene		9.373	9.364	0.008	617271	18.875	0.038
Decachlorobiphenyl		23.224	23.242	0.018	732736	16.370	0.033

COMMENTS:

M - Compound response manually integrated.



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/Br8081.m
Sample Info : 94106006
Lab ID : 94106006 Inst ID : HP58902.i
Inj Date : 14-NOV-1999 19:19 Dil Factor : 1
Operator : gds Sample Matrix : WATER
Cpnd Sublist: TCLpest+ Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/l)
beta-BHC	14.605	14.611	0.006	113494	5.667	0.011
delta-BHC	15.457	15.418	0.040	228101	8.260	0.017
gamma-BHC (Lindane)	14.424	14.393	0.032	103728	3.167	0.006
4,4'-DDD	20.426	20.443	0.017	463745	21.971	0.044
4,4'-DDT	21.149	21.218	0.068	221008	9.234	0.018
Dieldrin	19.532	19.545	0.013	536506	17.431	0.035
Endrin	20.255	20.287	0.032	212022	9.813	0.020
Heptachlor	15.605	15.602	0.003	529661	13.302	0.027
Tetrachloro-m-xylene	11.472	11.463	0.009	513297	16.027	0.032

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/D2B001A_078.d Page 2
Report Date 12/10/1999 11:21

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/l)
Decachlorobiphenyl	29.250	29.269	0.019	660797	13.710	0.027

Severn Trent Laboratories - Whippany

Client ID: **SW-2-1-01**
Site:

Lab Sample ID: **94106006** RR
Lab Job No: 94106

Date Sampled: 10/13/09
Date Received: 10/13/99
Date Extracted: 10/15/99
Date Analyzed: 12/03/99
GC Front Column: Rtx-CLPest
GC Rear Column: Rtx-CLPestII
Instrument ID: HP58902.i

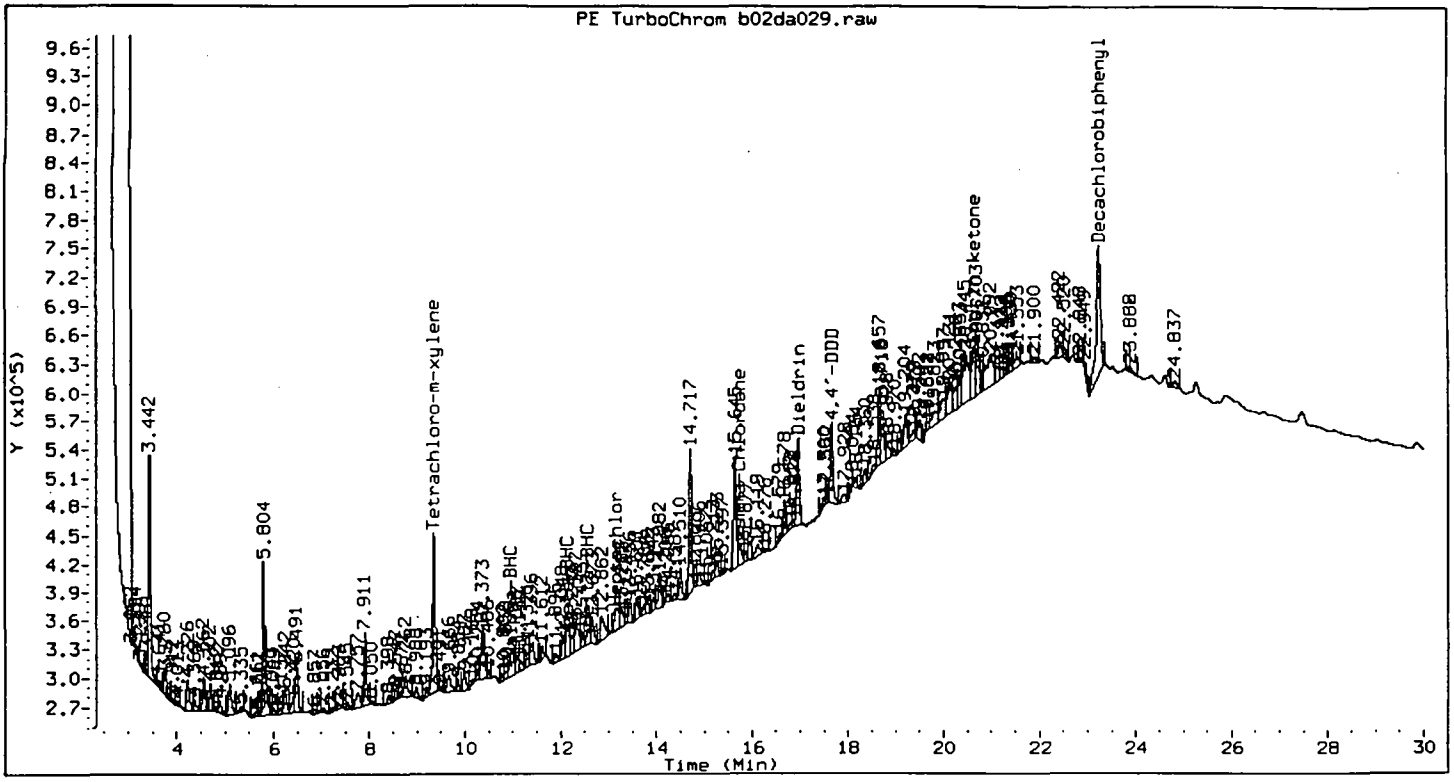
Matrix: WATER
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: b02da029.d
Rear File ID: b02db029.d

ORGANOCHLORINE PESTICIDES - GC/ECD
METHOD 8081A

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aldrin	ND	0.0100	R
alpha-BHC	ND	0.0100	R
beta-BHC	0.0130	0.0100	F
delta-BHC	ND	0.0100	R
gamma-BHC (Lindane)	ND	0.0100	R
4,4'-DDD	0.0327	0.0200	R
4,4'-DDE	ND	0.0200	R
4,4'-DDT	ND	0.0200	R
Dieldrin	0.0307P	0.0200	R
Endosulfan I	ND	0.0100	R
Endosulfan II	ND	0.0200	R
Endosulfan sulfate	ND	0.0200	R
Endrin	ND	0.0200	R
Endrin aldehyde	ND	0.0200	R
Endrin ketone	ND	0.0200	R
Heptachlor	0.0289P	0.0100	R
Heptachlor epoxide	ND	0.0100	R
Methoxychlor	ND	0.100	R
Toxaphene	ND	0.500	R
gamma-Chlordane	ND	0.0100	R
alpha-Chlordane	ND	0.0100	R

GDS
12.7.99

Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/b02da029.d Page 1
Report Date 12/09/1999 11:37



Method : /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/Bf8081.m
Sample Info : 94106006 RR
Lab ID : 94106006 Inst ID : HP58902.i
Inj Date : 03-DEC-1999 06:21 Dil Factor : 1
Operator : gds Sample Matrix : WATER
Cpnd Sublist: TCLpest+ Sample Type: SAMPLE

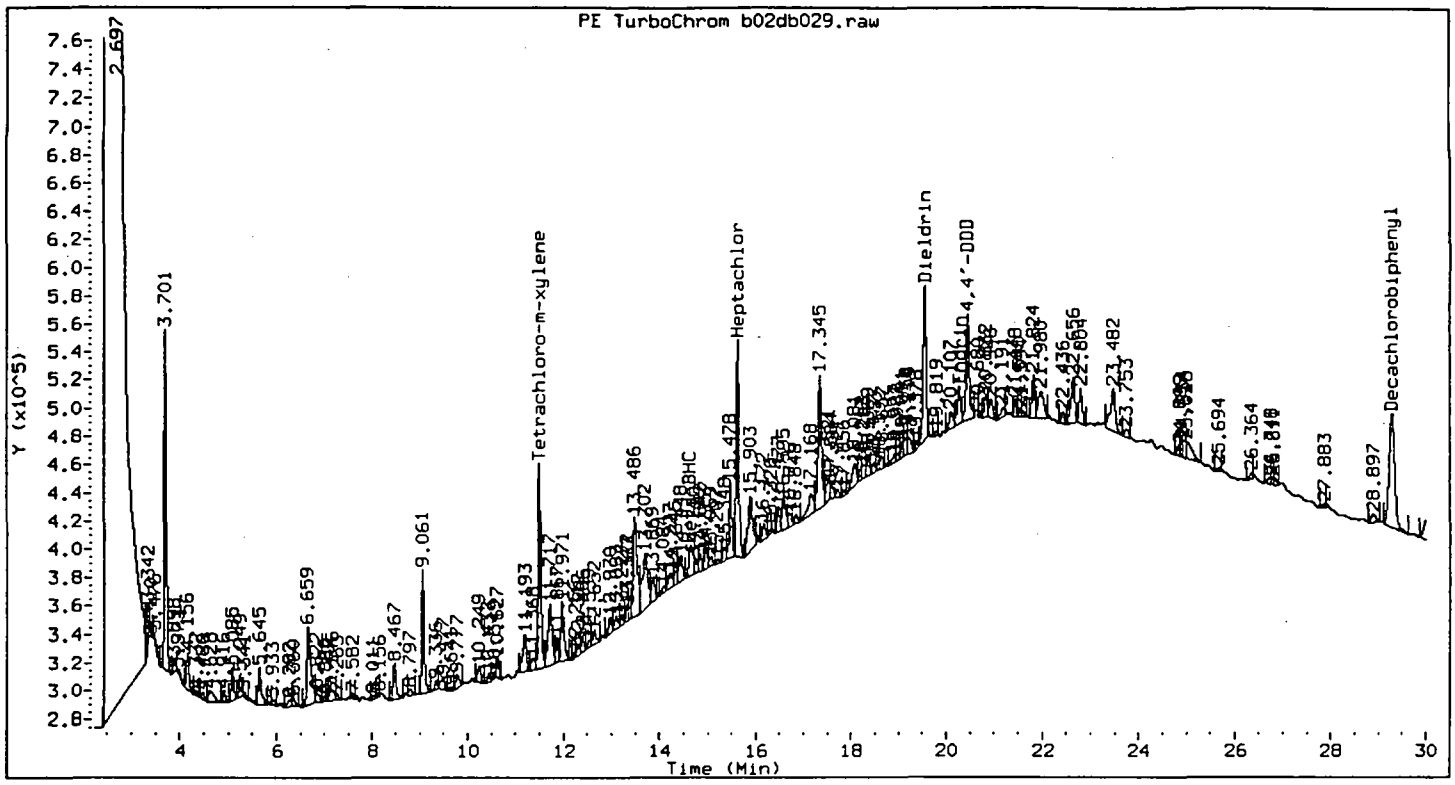
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
alpha-BHC	10.975	10.970	0.005	173289	5.279	0.011
beta-BHC	12.143	12.141	0.002	144885	6.512	0.013
delta-BHC	12.580	12.612	0.032	85909	2.832	0.006
4,4'-DDD	17.658	17.637	0.021	316319	13.713	0.027
Dieldrin	16.959	16.937	0.023	323081	10.223	0.020
Endrin ketone	20.638	20.600	0.038	231439	6.380	0.013
Heptachlor	13.163	13.143	0.020	149587	3.466	0.007
gamma-Chlordane	15.740	15.735	0.005	114960	2.936	0.006
Tetrachloro-m-xylene	9.365	9.325	0.040	624291	17.916	0.036

GDS
12-9-99

Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/b02da029.d Page 2
Report Date 12/09/1999 11:37

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/l)
Decachlorobiphenyl	23.238	23.206	0.032	824159	18.846	0.038

Data File: /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/b02db029.d Page 1
Report Date 12/09/1999 11:35



Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/Br8081.m
Sample Info : 94106006 RR
Lab ID : 94106006 Inst ID : HP58902.i
Inj Date : 03-DEC-1999 06:21 Dil Factor : 1
Operator : gds Sample Matrix : WATER
Cpnd Sublist: TCLpest+ Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
beta-BHC	(M)	14.643	14.619	0.024	118208	5.456	0.011
4,4'-DDD		20.456	20.433	0.023	347725	16.330	0.033
Dieldrin		19.558	19.528	0.030	473844	15.330	0.031
Endrin		20.282	20.271	0.011	136338	6.153	0.012
Heptachlor		15.626	15.590	0.036	572019	14.446	0.029
Tetrachloro-m-xylene		11.496	11.458	0.037	574410	17.235	0.034
Decachlorobiphenyl		29.284	29.239	0.045	670757	14.207	0.028

COMMENTS:

1 - Compound response manually integrated.

GDS
12.9.99

Client ID: **SW-2-1-02**
Site:

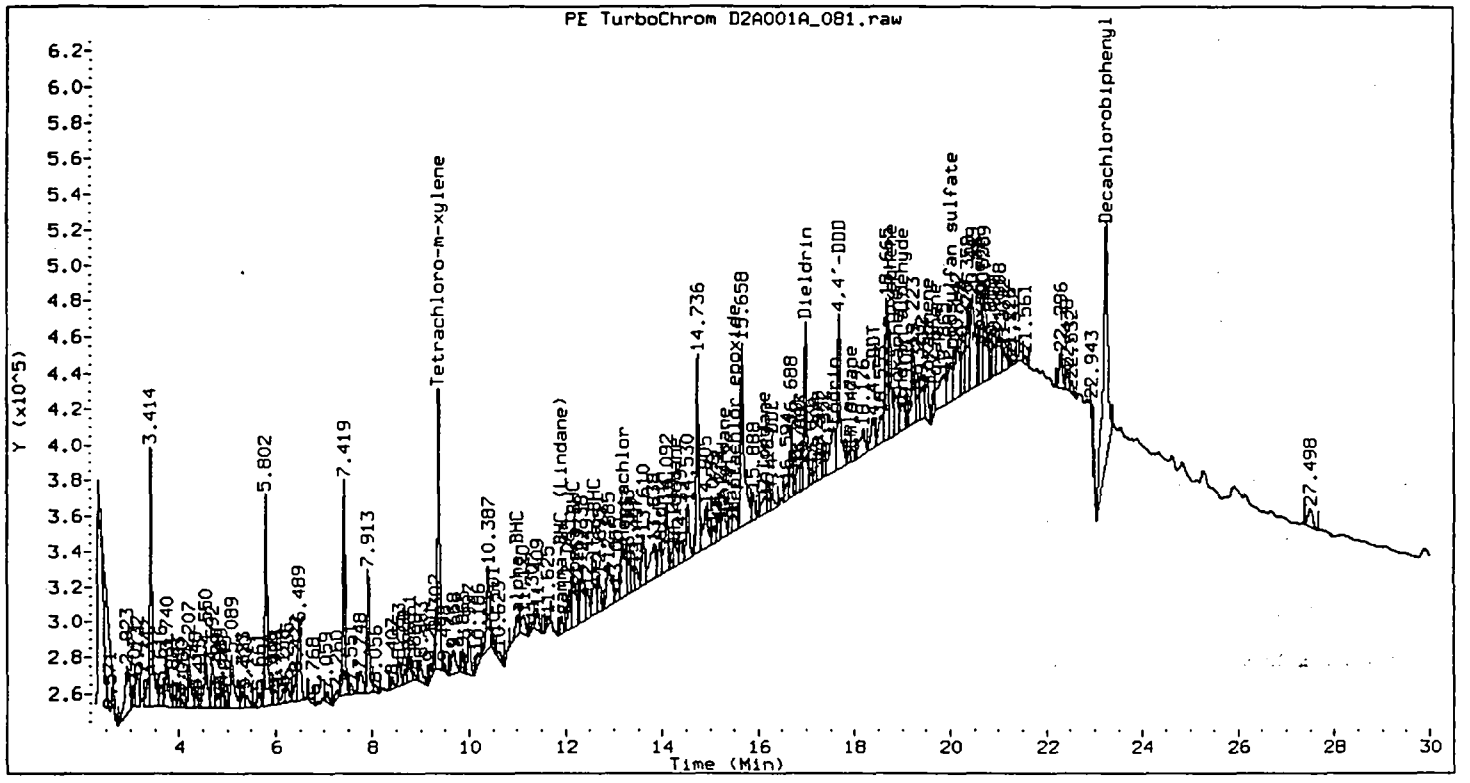
Lab Sample No: **94106007**
Lab Job No: 94106

Date Sampled: 10/13/99
Date Received: 10/14/99
Date Analyzed: 11/14/99
GC Column: Rtx-CLPest
Instrument ID: HP58902.i
Lab File ID: D2A001A_081.d

Matrix: WATER
Level: LOW
Purge Volume: 1000.0 mL
Final Volume: 2.0 mL
Dilution Factor: 1.0

ORGANOCHLORINE PESTICIDES - GC/ECD

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aldrin	ND	0.01
alpha-BHC	ND	0.01
beta-BHC	0.02	0.01
delta-BHC	0.00794J	0.01
gamma-BHC (Lindane)	ND	0.01
4,4'-DDD	0.04	0.02
4,4'-DDE	ND	0.02
4,4'-DDT	ND	0.02
Dieldrin	0.02	0.02
Endosulfan I	ND	0.01
Endosulfan II	ND	0.02
Endosulfan sulfate	ND	0.02
Endrin	0.02J	0.02
Endrin aldehyde	ND	0.02
Endrin ketone	ND	0.02
Heptachlor	0.01	0.01
Heptachlor epoxide	ND	0.01
Methoxychlor	ND	0.100
Toxaphene	ND	0.500
gamma-Chlordane	ND	0.01
alpha-Chlordane	ND	0.01



Method : /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/Bf8081.m
Sample Info : 94106007
Lab ID : 94106007
Inj Date : 14-NOV-1999 21:16
Operator : gds
Cpnd Sublist: TCLpest+

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

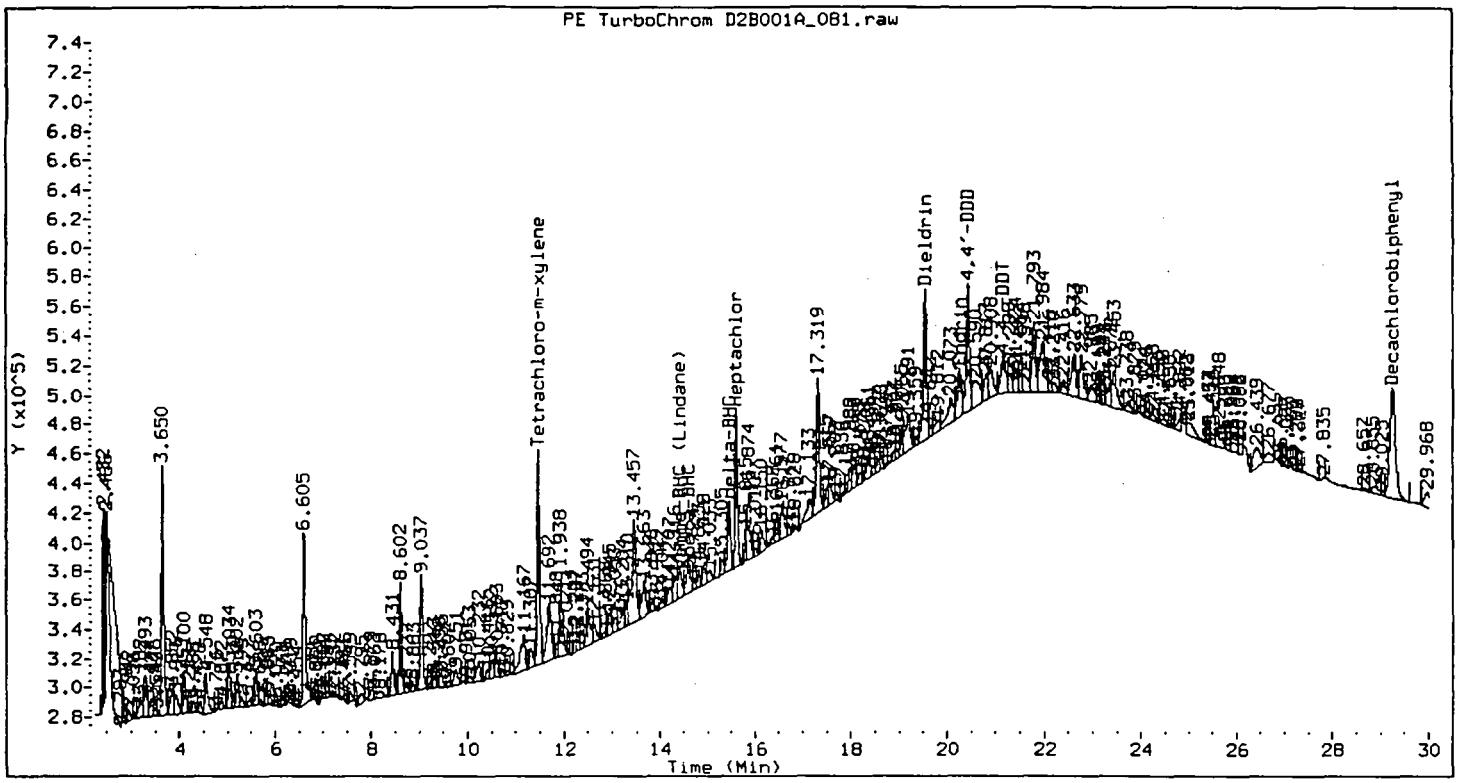
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Aldrin	13.946	13.945	0.001	74705	2.397	0.005
alpha-BHC	10.992	11.014	0.022	69076	2.230	0.004
beta-BHC	12.158	12.169	0.012	173416	8.792	0.018
delta-BHC	12.595	12.639	0.044	104319	3.971	0.008
gamma-BHC (Lindane)	11.908	11.905	0.003	39614	1.256	0.003
4,4'-DDD	17.667	17.672	0.006	382727	17.771	0.036
4,4'-DDE	16.282	16.282	0.001	40734	1.303	0.003
4,4'-DDT	18.382	18.317	0.065	100170	3.615	0.007
Dieldrin	16.970	16.976	0.006	372487	11.849	0.024

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Endosulfan sulfate	19.988	19.981	0.008	143774	4.916	0.010
Endrin	17.561	17.512	0.049	197469	7.480	0.015
Endrin aldehyde	18.990	18.988	0.002	100867	3.663	0.007
Heptachlor	13.182	13.179	0.003	215040	5.081	0.010
Heptachlor epoxide	15.491	15.457	0.033	57956	1.633	0.003
Toxaphene	------	18.279	------	------	------	------ (*)
(2)	18.733	18.781	0.048	263673	1521.752	3.044
(3)	18.873	18.927	0.053	136544	647.834	1.296
(4)	19.515	19.543	0.027	93304	519.863	1.040
(5)	19.680	19.748	0.068	61667	246.666	0.493
(6)	20.576	20.570	0.006	46970	267.626	0.535
Average of peak concentrations:						1.28
Tetrachloro-m-xylene	9.367	9.364	0.003	537293	16.429	0.033
Decachlorobiphenyl	23.238	23.242	0.004	967892	21.624	0.043

COMMENTS:

* - Mutlicomponent peak not used in quantitation of compound.

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/D2B001A_081.d Page 1
Report Date 12/10/1999 11:21



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/Br8081.m
Sample Info : 94106007
Lab ID : 94106007 Inst ID : HP58902.i
Inj Date : 14-NOV-1999 21:16 Dil Factor : 1
Operator : gds Sample Matrix : WATER
Cpnd Sublist: TCLpest+ Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
beta-BHC	14.607	14.611	0.004	139402	6.961	0.014
delta-BHC	15.460	15.418	0.043	206445	7.475	0.015
gamma-BHC (Lindane)	14.427	14.393	0.034	104294	3.184	0.006
4,4'-DDD	20.436	20.443	0.007	419709	19.884	0.040
4,4'-DDT	21.162	21.218	0.056	176284	7.365	0.015
Dieldrin	19.542	19.545	0.003	487747	15.847	0.032
Endrin	20.264	20.287	0.022	197606	9.146	0.018
Heptachlor	15.608	15.602	0.007	375502	9.431	0.019
Tetrachloro-m-xylene	11.468	11.463	0.006	543077	16.957	0.034

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Decachlorobiphenyl	29.251	29.269	0.018	629236	13.055	0.026

Severn Trent Laboratories - Whippany

Client ID: **SW-2-1-02**
Site:

Lab Sample ID: **94106007** RK
Lab Job No: 94106

Date Sampled: 10/13/99
Date Received: 10/13/99
Date Extracted: 10/15/99
Date Analyzed: 12/03/99
GC Front Column: Rtx-CLPest
GC Rear Column: Rtx-CLPestII
Instrument ID: HP58902.i

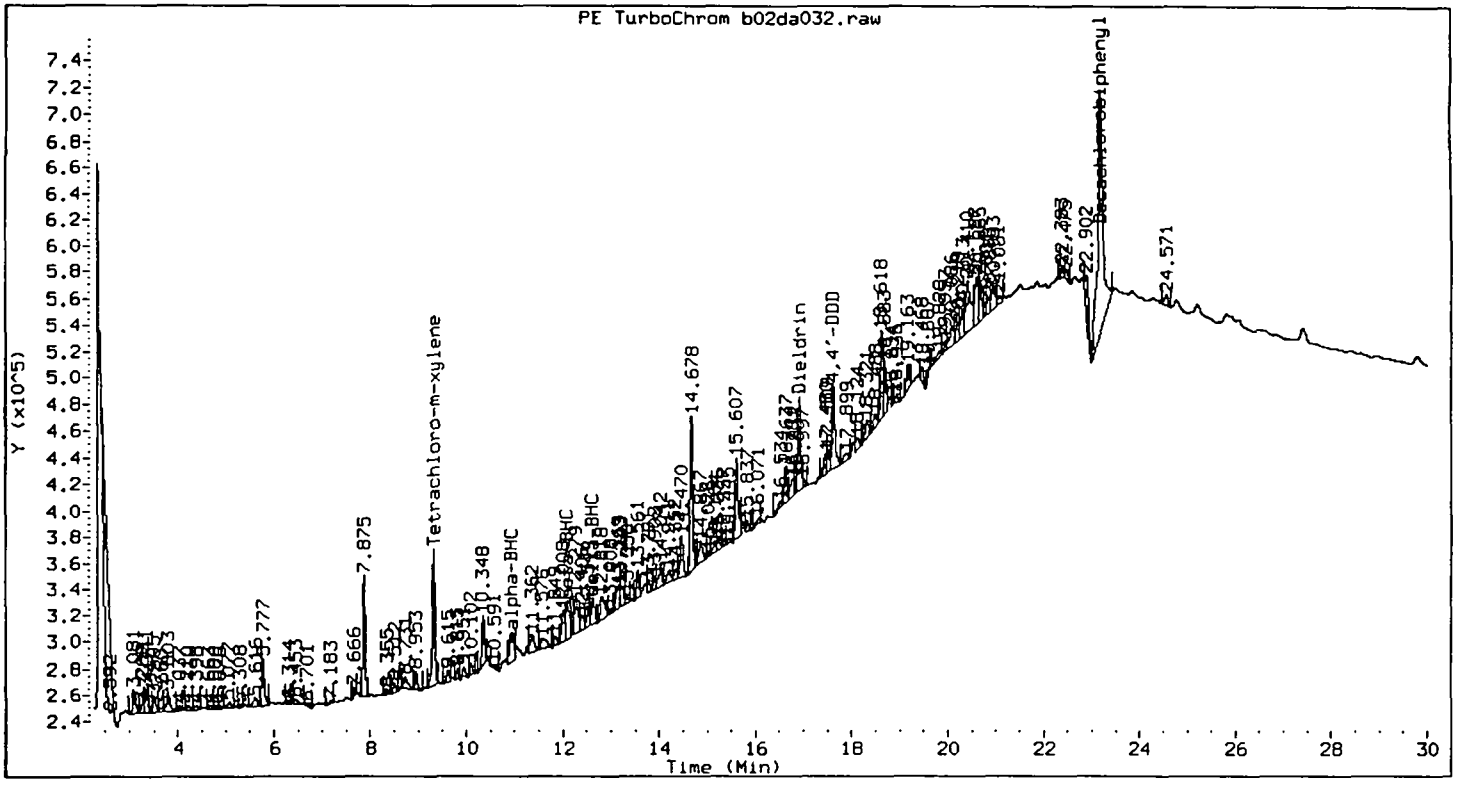
Matrix: WATER
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: b02da032.d
Rear File ID: b02db032.d

ORGANOCHLORINE PESTICIDES - GC/ECD
METHOD 8081A

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aldrin	ND	0.0100	R
alpha-BHC	ND	0.0100	R
beta-BHC	0.0131JP	0.0100	F
delta-BHC	0.0140P	0.0100	R
gamma-BHC (Lindane)	ND	0.0100	R
4,4'-DDD	0.0229	0.0200	F
4,4'-DDE	ND	0.0200	R
4,4'-DDT	ND	0.0200	R
Dieldrin	0.0238	0.0200	R
Endosulfan I	ND	0.0100	R
Endosulfan II	ND	0.0200	R
Endosulfan sulfate	ND	0.0200	R
Endrin	ND	0.0200	R
Endrin aldehyde	ND	0.0200	R
Endrin ketone	ND	0.0200	R
Heptachlor	ND	0.0100	R
Heptachlor epoxide	ND	0.0100	R
Methoxychlor	ND	0.100	R
Toxaphene	ND	0.500	R
gamma-Chlordane	ND	0.0100	R
alpha-Chlordane	ND	0.0100	R

GMS
12.9.99

000290



Method : /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/Bf8081.m
Sample Info : 94106007 RR
Lab ID : 94106007
Inj Date : 03-DEC-1999 08:18
Operator : gds
Cpnd Sublist: TCLpest+

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

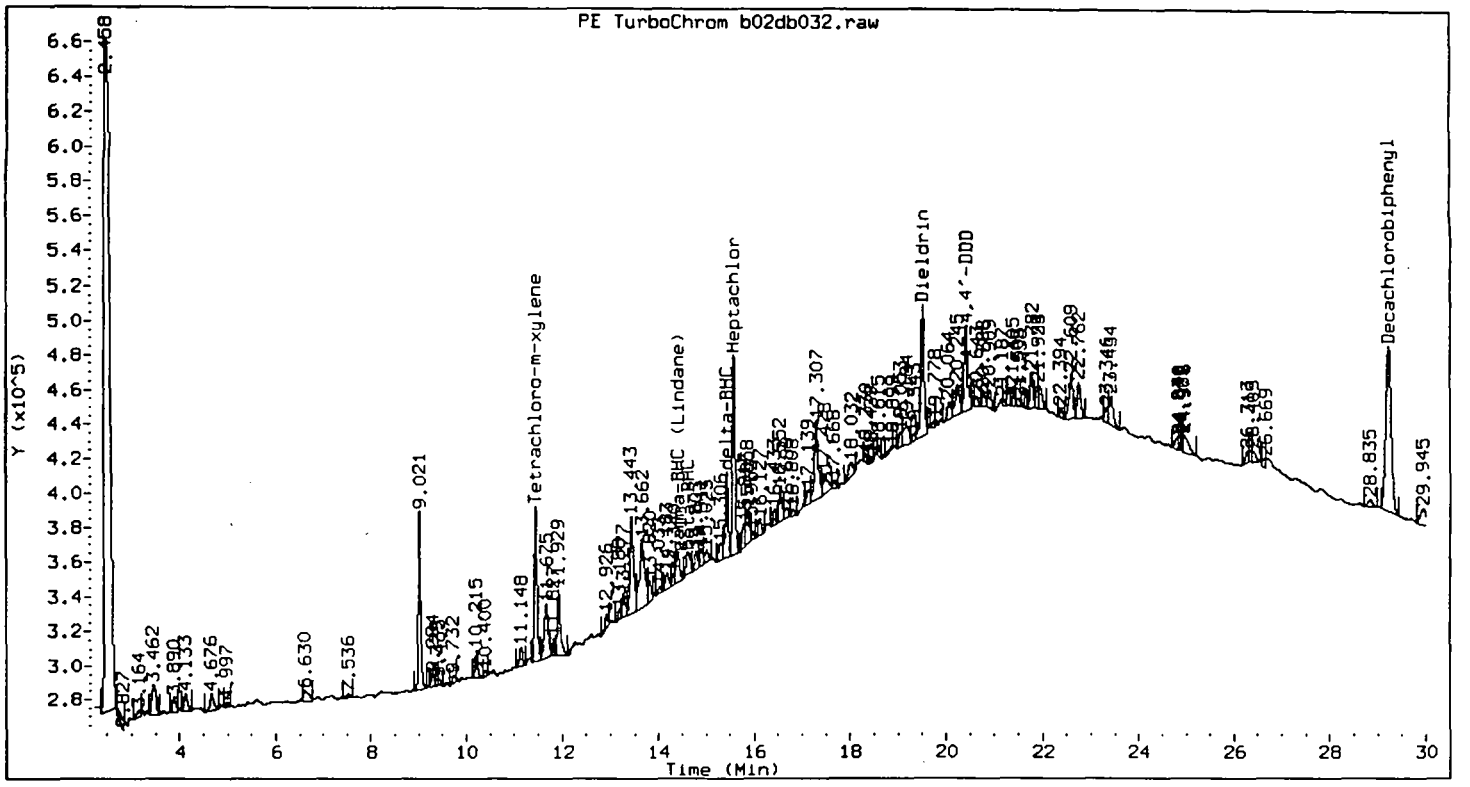
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
~~alpha-BHC~~		~~10.939~~	~~10.970~~	~~0.031~~	~~134016~~	~~4.083~~	~~0.008~~
beta-BHC		12.099	12.141	0.042	145493	6.539	0.013
delta-BHC		12.638	12.612	0.027	87427	2.882	0.006
4,4'-DDD		17.620	17.637	0.017	264017	11.446	0.023
Dieldrin	(M)	16.918	16.937	0.019	290401	9.189	0.018
Tetrachloro-m-xylene		9.325	9.325	0.000	373337	10.714	0.021
Decachlorobiphenyl		23.193	23.206	0.013	1324089	30.279	0.061

COMMENTS:

M - Compound response manually integrated.

GDS
12-9-99

Data File: /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/b02db032.d Page 1
Report Date 12/09/1999 11:37



Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/Br8081.m
Sample Info : 94106007 RR
Lab ID : 94106007
Inj Date : 03-DEC-1999 08:18
Operator : gds
Cpnd Sublist: TCLpest+

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
beta-BHC	(M)	14.634	14.619	0.015	81783	3.775	0.008
delta-BHC		15.438	15.425	0.012	212203	6.986	0.014
~~gamma-BHC (Lindane)~~	~~(M)~~	~~14.412~~	~~14.384~~	~~0.027~~	~~94925~~	~~2.827~~	~~0.006~~
4,4'-DDD		20.418	20.433	0.015	238787	11.214	0.022
Dieldrin		19.517	19.528	0.012	368270	11.915	0.024
~~Heptachlor~~		~~15.585~~	~~15.590~~	~~0.005~~	~~438770~~	~~11.081~~	~~0.022~~
Tetrachloro-m-xylene		11.454	11.458	0.004	361297	10.841	0.022
Decachlorobiphenyl		29.226	29.239	0.013	769535	16.299	0.033

COMMENTS:

GDS
12.9.99

M - Compound response manually integrated.

FORM 1
PEST ORGANICS ANALYSIS DATA SHEET

CLIENT ID

S-2-1-01

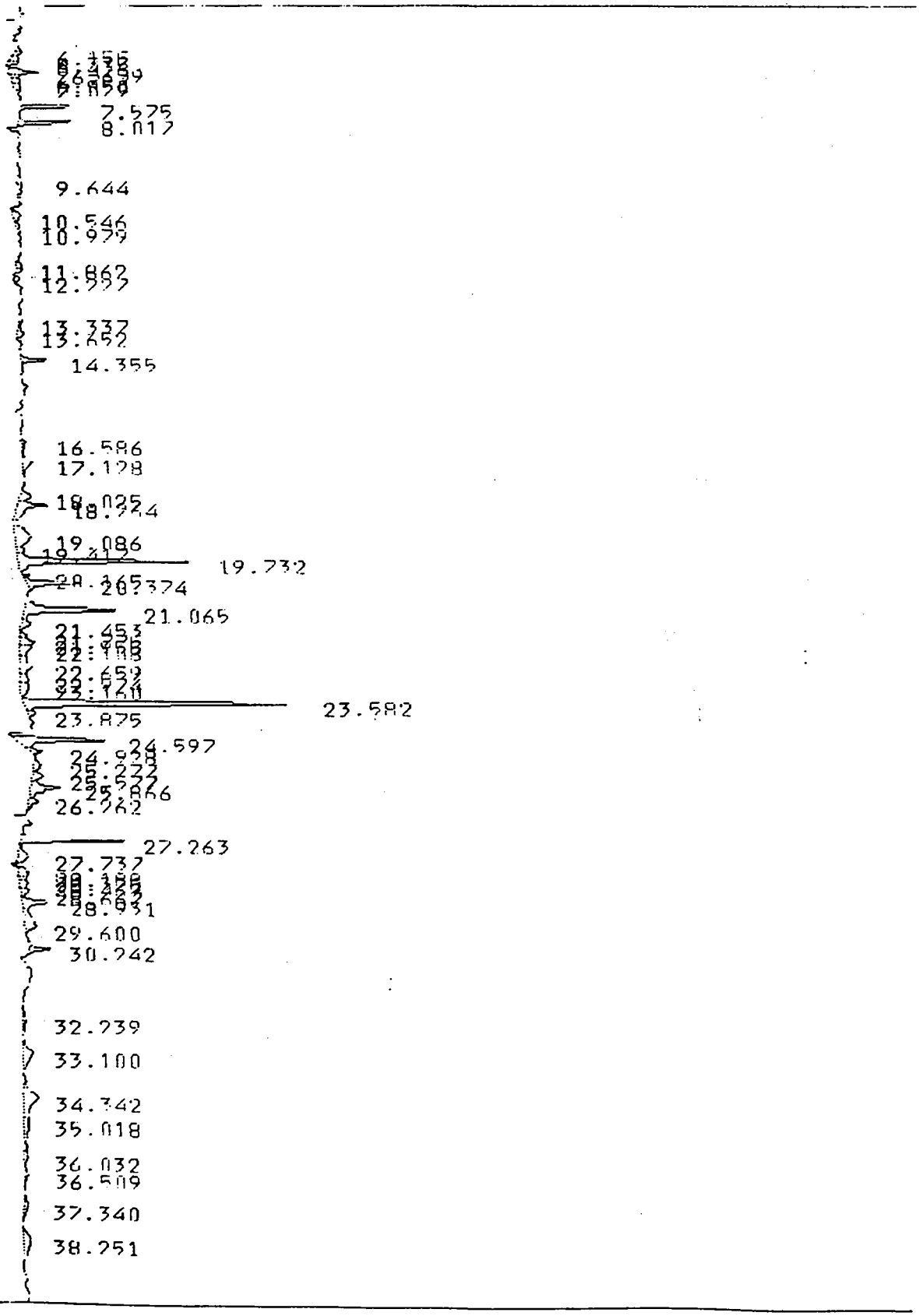
Lab Name: STL - Whippany
Matrix: (soil/water): Soil
Sample wt/vol: 30.4 (g/ml) g
%Moisture: 64.9
Extraction: (SepF/Cont/Sonc) Sonc
Concentrated Extract Volume: 10000(µl)
Injection Volume: 1 (µl)
GPC Cleanup: (Y/N) N pH:_____

Client: OGDEN
Lab Sample ID: 94106008
Lab File ID: D4AS01J_029
Date Received: 10/13/99
Date Extracted: 10/15/99
Date Analyzed: 11/24/99
Dilution Factor: 5
Sulfur Cleanup: Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/Kg	Q
319-84-6	alpha-BHC	23	U
319-85-7	beta-BHC	23	U
319-86-8	delta-BHC	23	U
58-89-9	gamma-BHC (Lindane)	23	U
76-44-8	Heptachlor	23	U
3098-00-2	Aldrin	23	U
1024-57-3	Heptachlor Epoxide	23	U
959-98-8	Endosulfan I	23	U
60-57-1	Dieldrin	29	J
72-55-9	4,4'-DDE	86	
72-20-8	Endrin	47	U
33213-65-9	Endosulfan II	47	U
72-54-8	4,4'-DDD	170	
1031-07-8	Endosulfan Sulfate	47	U
50-29-3	4,4'-DDT	72	
72-43-5	Methoxychlor	230	U
53494-70-5	Endrin Ketone	47	U
7421-93-4	Endrin Aldehyde	47	U
5103-71-9	alpha-Chlordane	23	U
5103-74-2	gamma-Chlordane	23	U
8001-35-2	Toxaphene	1200	U

ILA Pesticide Standard Report

Sample Name : 94106008 5XDL Inj:1708 24Nov1999
Result : /DATA/LOOP/RESULT/D4A501J 029.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : 94106008 5XDL Report No :367 01
Result File : /DATA/LOOP/RESULT/D4A501J 029.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP5890A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1708 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
Subseq/Sample : 1/ 29 Bottle no. : 29

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline
SpecialInteg

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.15		0.000000	12086	VV	0.0000	
2	6.34		0.000000	13487	VV	0.0000	
3	6.44		0.000000	13723	VV	0.0000	
4	6.68		0.000000	53432	PV	0.0000	
5	6.80		0.000000	12171	VV	0.0000	
6	6.95		0.000000	15266	VV	0.0000	
7	7.03		0.000000	13797	VV	0.0000	
8	7.58		0.000000	68859	VB	0.0000	
9	8.02	7.99	0.000000	65985	FF	3.6917	TOX
10	9.64		0.000000	13833	VV	0.0000	
11	10.55	10.54	0.000000	27549	BV	1.3314	~~α-BHC~~
12	10.98		0.000000	11843	VV	0.0000	
13	11.86		0.000000	16880	VV	0.0000	
14	12.23		0.000000	11390	PV	0.0000	
15	13.34		0.000000	12062	VV	0.0000	
16	13.65		0.000000	14486	VV	0.0000	
17	14.35	14.32	0.000000	43467	VV	2.2510	~~ALDRIN~~
18	16.59		0.000000	13903	PV	0.0000	
19	17.13		0.000000	31026	VV	0.0000	
20	18.02		0.000000	31649	BV	0.0000	
21	18.26		0.000000	95514	VV	0.0000	
22	19.09	19.08	0.000000	91230	PV	4.2421	~~α-CHLORDANE~~
23	19.42		0.000000	18977	VV	0.0000	
24	19.73	19.71	0.000000	327738	VV	18.3422	4,4' DDE
25	20.16		0.000000	13674	PV	0.0000	
26	20.37	20.35	0.000000	107212	VB	6.2116	DIELDRIN
27	21.07		0.000000	176818	BV	0.0000	
28	21.45	21.39	0.000000	21547	VV	1.4267	~~ENDRIN~~
29	21.77		0.000000	14628	PV	0.0000	
30	21.95		0.000000	34694	VV	0.0000	
31	22.11		0.000000	38046	VV	0.0000	
32	22.66		0.000000	55154	VV	0.0000	
33	22.97		0.000000	19299	VV	0.0000	
34	23.16		0.000000	32729	VV	0.0000	
35	23.58	23.57	0.000000	470095	PV	36.9484	4,4' DDD
36	23.88		0.000000	17533	VV	0.0000	

IEA Pesticide Standard Report

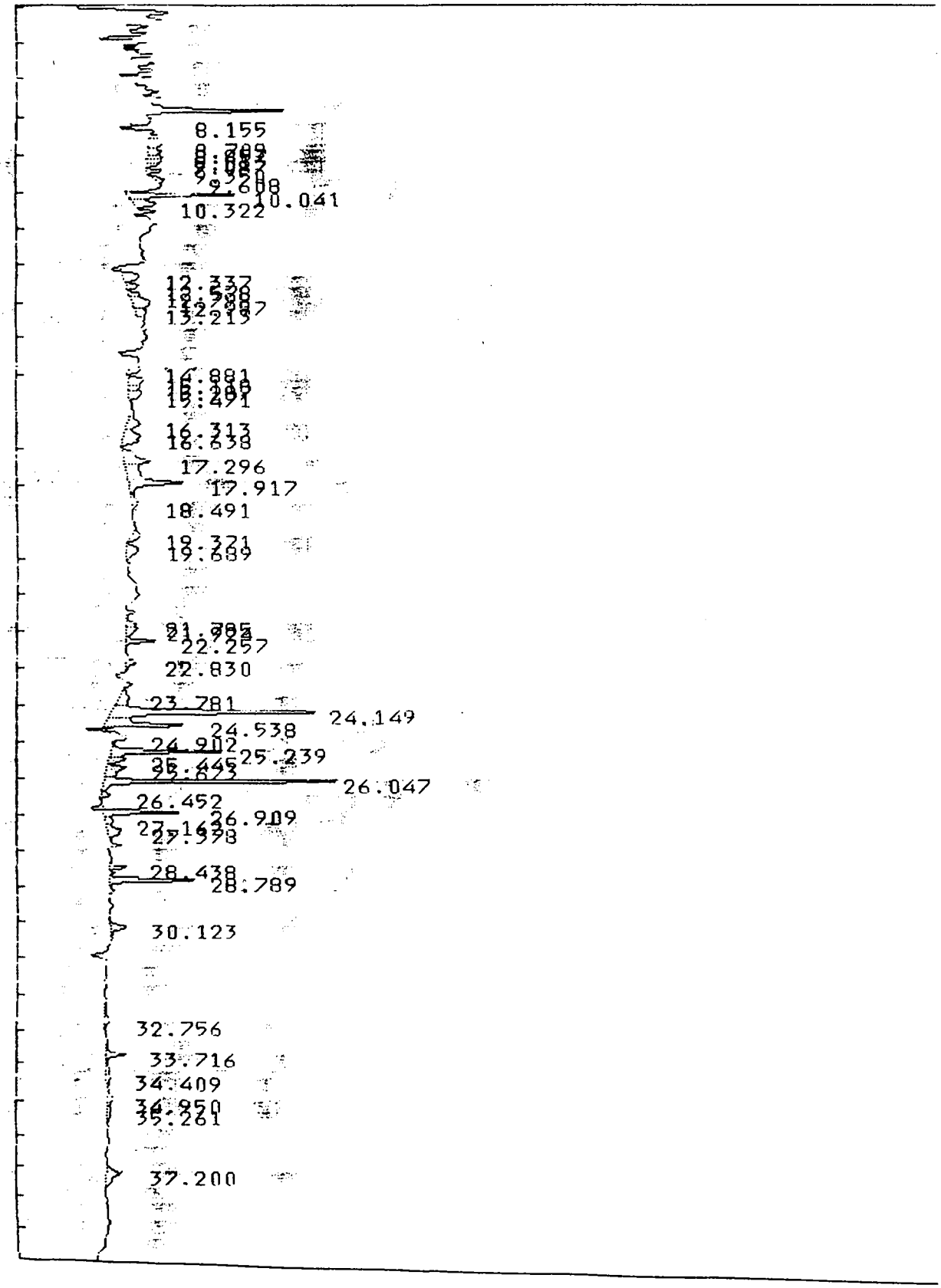
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
37	24.60	24.58	0.000000	172571	PV	15.4356	4,4' DDT
38	24.93		0.000000	22583	VV	0.0000	
39	25.28	25.30	0.000000	19217	BV	2.[illegible]001	~~ENDRIN ALDEHYDE~~
40	25.58		0.000000	28073	VV	0.0000	
41	25.87		0.000000	81556	VV	0.0000	
42	26.26	26.22	0.000000	25025	VB	6.4200	~~METHOXYCHLOR~~
43	27.26		0.000000	120086	VV	0.0000	
44	27.74		0.000000	41697	VB	0.0000	
45	28.19		0.000000	27895	BV	0.0000	
46	28.32		0.000000	11664	VV	0.0000	
47	28.47		0.000000	21715	VV	0.0000	
48	28.67		0.000000	16406	VV	0.0000	
49	28.93		0.000000	58468	VV	0.0000	
50	29.60		0.000000	63433	VB	0.0000	
51	30.24	#30.23	0.000000	4139[illegible]	BB	3.[illegible]62	DCB
52	32.24		0.000000	18658	PV	0.0000	
53	33.10		0.000000	58750	PV	0.0000	
54	34.34		0.000000	104340	VV	0.0000	
55	35.02		0.000000	31663	VV	0.0000	
56	36.03		0.000000	13976	VV	0.0000	
57	36.51		0.000000	18930	VV	0.0000	
58	37.34		0.000000	28594	VV	0.0000	
59	38.25		0.000000	62332	PV	0.0000	et 12/8/99

Total Area : 3120738 Total ng inj : 102.217

Report Time : 1511 08Dec1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/04A5010 029.RES

IEA Pesticide Standard Report

Sample Name : 94106008 5XDL Inj 1620 24Nov1999
Result : /DATA/LOOP/RESULT/D4DS01J 028.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : 94106008 5XDL
Report No :364.10
Result File : /DATA/LOOP/RESULT/D4US01J 028.RES
Column Type : DB-608 30 Meter,0.53mm ID
Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1620 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4BS01J.SEQ
Subseq/Sample : 1/ 28 Bottle no. : 29

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.16		.084778	11423	BV	0.0000	
2	8.71		.149912	17288	VV	0.0000	
3	8.86		.127952	17058	VV	0.0000	
4	9.01		.089954	12786	VV	0.0000	
5	9.09		.084081	12015	VV	0.0000	
6	9.35		.101163	16135	VV	0.0000	
7	9.61		.150571	17764	PV	0.0000	
[illegible]	[illegible]	[illegible]	[illegible]	95236	PV	4.3576	TCX
9	10.32		.191780	39481	VV	0.0000	
10	12.34		.176608	26095	BV	0.0000	
11	12.58		.141055	15670	VV	0.0000	
12	12.80	12.78	.110063	11694	PV	.4209	~~A-BHC~~
13	12.99		.259588	42815	VV	0.0000	
14	13.21		.185138	19995	VV	0.0000	
15	14.88	14.90	.150277	14621	VV	1.2946	~~B-BHC~~
16	15.12		.186267	26605	PV	0.0000	
17	15.29		.124882	13596	VV	0.0000	
18	15.47		.207493	23702	VV	0.0000	
19	16.31		.247510	28549	VV	0.0000	
20	16.64		.300298	45488	VV	0.0000	
21	17.30		.236465	60237	PV	0.0000	
22	17.92	17.87	.252569	132680	VV	7.1153	~~ALDRIN~~
23	18.49		.253202	11541	VB	0.0000	
24	19.37		.181929	12627	BV	0.0000	
25	19.69		.290880	29588	PV	0.0000	
26	21.78	21.73	.128049	12516	PV	.8028	~~G-CHLORDANE~~
27	21.92		.203056	20913	VV	0.0000	
28	22.26		.105243	30446	VV	0.0000	
29	22.83	22.77	.143330	13285	VB	1.0661	~~ENDOSULFAN I~~
30	23.78		.317212	28217	BV	0.0000	
31	24.15	24.10	.141432	286134	VV	23.6945	4,4' DDE
32	24.54	24.51	.126689	99203	VB	9.0349	DIELDRIN
33	24.90		.090895	12947	BB	0.0000	
34	25.24		.080164	90204	BV	0.0000	
35	25.45		.125431	20455	VV	0.0000	
36	25.67	25.72	.227182	40647	PV	7.9795	~~ENDRIN~~
37	26.05	26.03	.070267	206919	VV	48.1880	4,4' DDD

ut 12/8/99

IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
38	26.45		.108532	10370	VV	0.0000	
39	26.91	26.90	.067564	54490	BV	12.7730	4,4' DDT
40	27.16	27.21	.143858	10817	VV	2.9433	~~ENDRIN ALDEHYDE~~
41	27.38		.209699	30151	VV	0.0000	
42	28.44		.082757	14038	VV	0.0000	
43	28.79		.090387	81039	VV	0.0000	
44	30.12		.190009	27050	BV	0.0000	
45	32.76		.341898	12609	VV	0.0000	
46	33.72		.158401	31053	VV	0.0000	
47	34.41		.515287	16320	VV	0.0000	
48	34.95		.277175	12011	VV	0.0000	
49	35.26		.320129	11592	VV	0.0000	
50	37.20	37.24	.310184	46064	BV	7.8447	DCB

ut 12/8/99

Total Area : 1974180 Total ng inj : 127.515

Report Time : 1345 08Dec1999
Method : /DATA/LOOP/METHOD/HP58904BPJ.MTH
Result File : /DATA/LOOP/RESULT/D4HS01J 028.RES

FORM 1
PEST ORGANICS ANALYSIS DATA SHEET

CLIENT ID

S-2-1-02

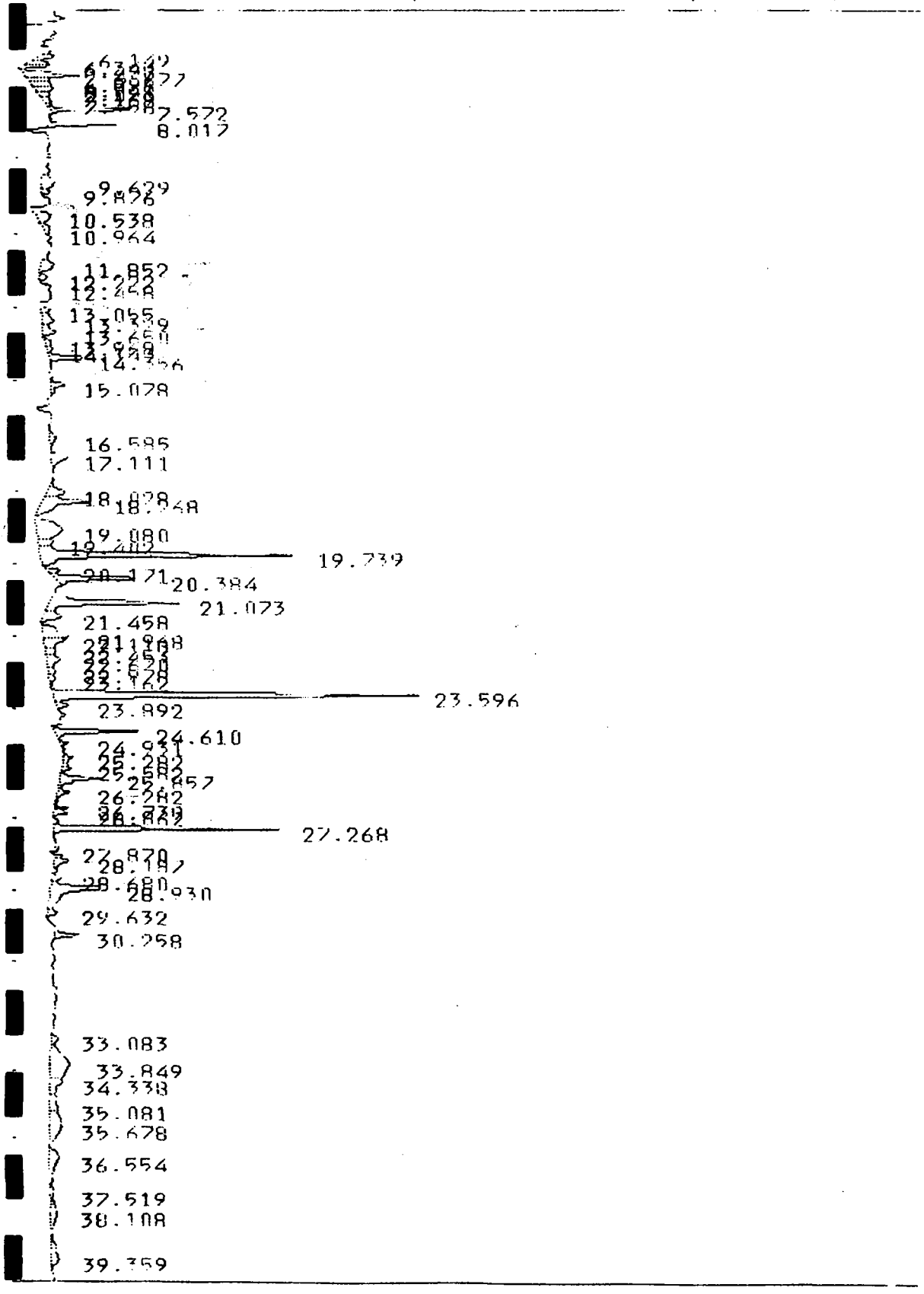
Lab Name: STL - Whippany
Matrix: (soil/water): Soil
Sample wt/vol: 30 (g/ml) g
%Moisture: 58.9
Extraction: (SepF/Cont/Sonc) Sonc
Concentrated Extract Volume: 10000(µl)
Injection Volume: 1 (µl)
GPC Cleanup: (Y/N) N pH:_____

Client: OGDEN
Lab Sample ID: 94106009
Lab File ID: D4AS01J_030
Date Received: 10/13/99
Date Extracted: 10/15/99
Date Analyzed: 11/24/99
Dilution Factor: 5
Sulfur Cleanup: Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/Kg	Q
319-84-6	alpha-BHC	20	U
319-85-7	beta-BHC	20	U
319-86-8	delta-BHC	20	U
58-89-9	gamma-BHC (Lindane)	20	U
76-44-8	Heptachlor	20	U
3098-00-2	Aldrin	12	J
1024-57-3	Heptachlor Epoxide	20	U
959-98-8	Endosulfan I	20	U
60-57-1	Dieldrin	38	J
72-55-9	4,4'-DDE	110	
72-20-8	Endrin	41	U
33213-65-9	Endosulfan II	41	U
72-54-8	4,4'-DDD	210	
1031-07-8	Endosulfan Sulfate	41	U
50-29-3	4,4'-DDT	46	
72-43-5	Methoxychlor	200	U
53494-70-5	Endrin Ketone	41	U
7421-93-4	Endrin Aldehyde	41	U
5103-71-9	alpha-Chlordane	20	U
5103-74-2	gamma-Chlordane	20	U
8001-35-2	Toxaphene	1000	U

IEA Pesticide Standard Report

Sample Name : 94-06009 5XDL Inj:1756 24Nov1999
Result : /DATA/LOOP/RESULT/D4A501J 030.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ICA Pesticide Standard Report

Sample Name : 94106009 5XDL Report No :368 02
Result File : /DATA/LOOP/RESULT/D4AS01J 030.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1756 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
Subseq/Sample : 1/ 30 Bottle no. : 30

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline
SpecialInteg

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.15		0.000000	24059	VV	0.0000	
2	6.34		0.000000	31042	VV	0.0000	
3	6.43		0.000000	34096	VV	0.0000	
4	6.68		0.000000	111066	PV	0.0000	
5	6.80		0.000000	26949	VV	0.0000	
6	6.94		0.000000	40078	VV	0.0000	
7	7.03		0.000000	31949	VV	0.0000	
8	7.17		0.000000	21681	VV	0.0000	
9	7.36		0.000000	19044	VV	0.0000	
10	7.57		0.000000	109901	VB	0.0000	
11	8.02	7.99	0.000000	85674	FF	4.7024	TCX
12	9.63		0.000000	52561	VV	0.0000	
13	9.88		0.000000	14456	VV	0.0000	
14	10.54	10.54	0.000000	59944	BV	2.8969	~~A-BHC~~
15	10.96		0.000000	27554	VV	0.0000	
16	11.85		0.000000	47357	VV	0.0000	
17	12.22		0.000000	19431	PV	0.0000	
18	12.46		0.000000	11919	PV	0.0000	
19	13.05	13.09	0.000000	19194	BV	[illegible]56	~~HEPTACHLOR~~
20	13.33		0.000000	39162	VV	0.0000	
21	13.65		0.000000	40363	VV	0.0000	
22	13.97		0.000000	19232	PV	0.0000	
23	14.14		0.000000	12904	VV	0.0000	
24	14.36	14.32	0.000000	55721	VV	2.8856	ALDRIN
25	15.08		0.000000	28992	PB	0.0000	
26	16.59		0.000000	21699	PV	0.0000	
27	17.11		0.000000	52489	VV	0.0000	
28	18.03		0.000000	51995	BV	0.0000	
29	18.27		0.000000	148722	VV	0.0000	
30	19.08	19.08	0.000000	164791	PV	7.6626	~~A-CHLORDANE~~
31	19.40		0.000000	38342	VV	0.0000	
32	19.74	19.71	0.000000	503536	VV	28.1809	4,4' DDE
33	20.17		0.000000	27212	PV	0.0000	
34	20.38	20.35	0.000000	162631	VB	9.4224	DIELDRIN
35	21.07		0.000000	268614	BV	0.0000	
36	21.46	21.39	0.000000	43516	VV	2.8813	~~ENDRIN~~

ut 12/8/99

IE4 Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
37	21.97		0.000000	98407	PV	0.0000	
38	22.12		0.000000	68404	VV	0.0000	
39	22.45		0.000000	29670	VV	0.0000	
40	22.67		0.000000	47533	VV	0.0000	
41	22.98		0.000000	17627	VV	0.0000	
42	23.16		0.000000	20099	VV	0.0000	
43	23.60	23.57	0.000000	654949	PV	51.4776	4,4' DDD
44	23.89		0.000000	23669	VV	0.0000	
45	24.61	24.58	0.000000	127452	PV	11.4000	4,4' DDT
46	24.93		0.000000	10859	VV	0.0000	
47	25.28	25.30	0.000000	19860	BV	2.1204	~~ENDRIN ALDEHYDE~~
48	25.58		0.000000	17281	VV	0.0000	
49	25.86		0.000000	91865	VV	0.0000	
50	26.28	26.22	0.000000	26235	VB	6.7304	~~METHOXYCHLOR~~
51	26.74		0.000000	13130	BV	0.0000	
52	26.86		0.000000	19615	VV	0.0000	
53	27.27		0.000000	269668	VV	0.0000	
54	27.87		0.000000	10116	VB	0.0000	
55	28.19		0.000000	37070	VV	0.0000	
56	28.68		0.000000	19462	VV	0.0000	
57	28.93		0.000000	180456	VV	0.0000	
58	29.63		0.000000	18164	VV	0.0000	
59	30.26	#30.23	0.000000	42622	FF	4.[illegible]09	PCB
60	33.08		0.000000	21675	PV	0.0000	
61	33.85		0.000000	194357	VV	0.0000	
62	34.34		0.000000	57240	VV	0.0000	
63	35.08		0.000000	43234	VV	0.0000	
64	35.68		0.000000	141469	VV	0.0000	
65	36.55		0.000000	66809	PV	0.0000	
66	37.52		0.000000	14343	VV	0.0000	
67	38.11		0.000000	20745	VV	0.0000	
68	39.36		0.000000	53978	VV	0.0000	

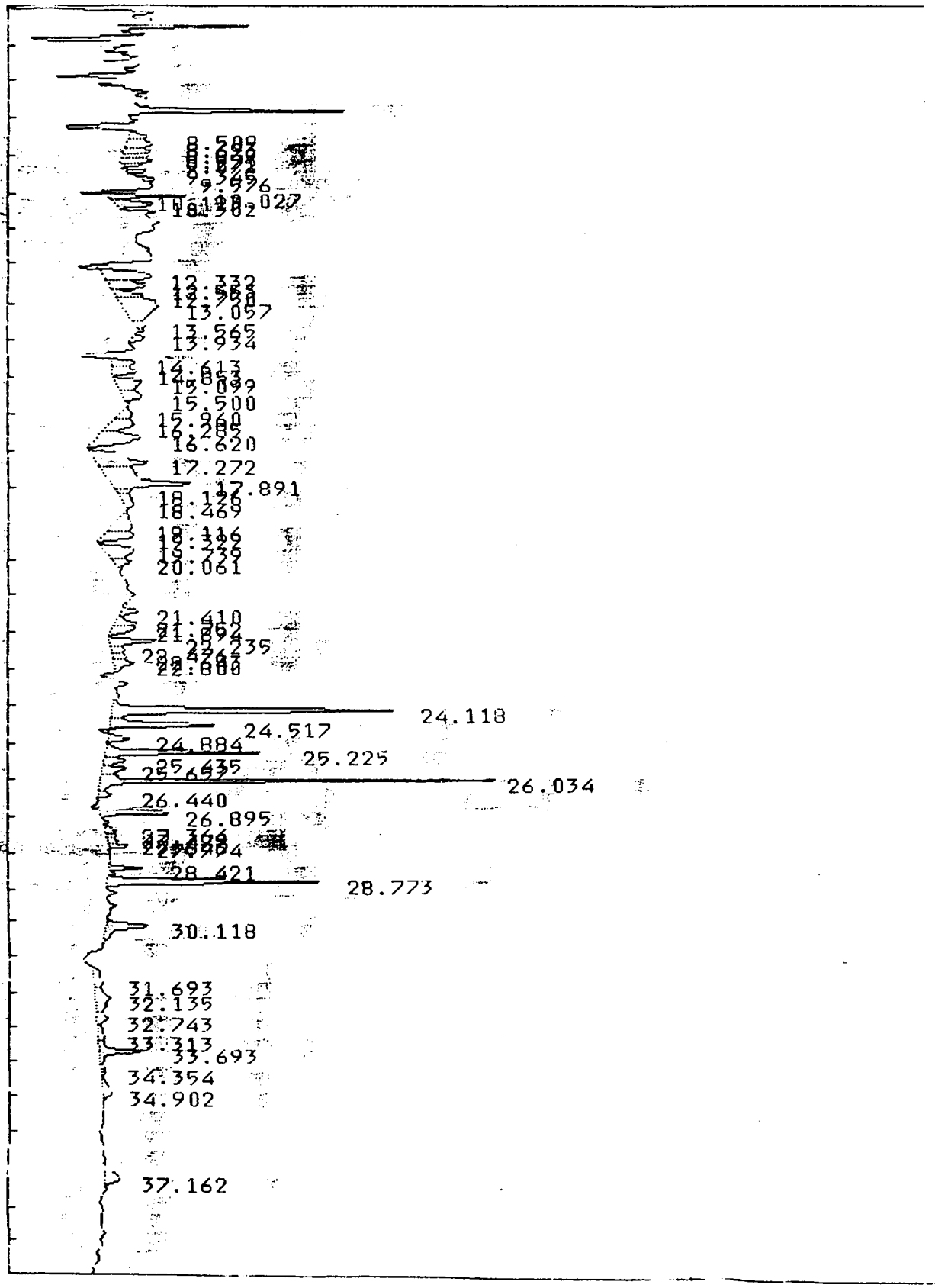
[illegible] 12/8/99

Total Area : 4995939 Total ng inj : 135.217

Report Time : 1557 08Dec1999
Method : /DATA/LOOP/METHOD/HP5890AP#.MTH
Result File : /DATA/LOOP/RESULT/D4A5001J 030.RES

IEA Pesticide Standard Report

Sample Name : 94106009 5XDL Inj 1708 24Nov1999
Result : /DATA/LOOP/RESULT/D4BS01J 029.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : 94106009 5XDL Report No :365.10
Result File : /DATA/LOOP/RESULT/D4RS01J 029.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1708 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01J.SEQ
Subseq/Sample : 1/ 29 Bottle no. : 30

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.51		.113121	19609	VV	0.0000	
2	8.69		.171935	39246	VV	0.0000	
3	8.85		.142946	36588	VV	0.0000	
4	8.97		.070196	16360	VV	0.0000	
5	9.07		.100071	31730	VV	0.0000	
6	9.34		.096471	22742	PV	0.0000	
7	9.58		.123418	18926	PV	0.0000	
8	10.03	#10.00	.060768	50201	BV	2.2970	TCX
9	10.12		.058645	12643	VV	0.0000	
10	10.30		.179918	61872	VV	0.0000	
11	12.33		.200869	90215	BV	0.0000	
12	12.55		.167900	56901	VV	0.0000	
13	12.75	12.78	.121566	33755	VV	1.2149	~~A-BHC~~
14	13.06		.467428	162048	VV	0.0000	
15	13.56		.188693	18312	VV	0.0000	
16	13.93		.145745	14493	BV	0.0000	
17	14.61	14.60	.083280	18366	BV	.7652	~~G-BHC~~
18	14.85	14.90	.154506	35921	VV	3.1805	~~B-BHC~~
19	15.10		.251733	65344	PV	0.0000	
20	15.50		.227793	41338	VV	0.0000	
21	15.96		.238806	24940	BV	0.0000	
22	16.29		.265442	61031	VV	0.0000	
23	16.62		.290235	114036	VV	0.0000	
24	17.27		.274985	137039	PV	0.0000	
25	17.89	17.87	.317163	246815	VV	13.2362	ALDRIN
26	18.13		.112770	14302	VV	0.0000	
27	18.47		.358976	32690	VB	0.0000	
28	19.12		.317013	60604	BV	0.0000	
29	19.32		.223945	62615	VV	0.0000	
30	19.74		.312931	87113	PV	0.0000	
31	20.06		.182295	32945	VB	0.0000	
32	21.41		.094215	14581	BV	0.0000	
33	21.75	21.73	.157158	30492	VV	1.9559	~~G-CHLORDANE~~
34	21.89		.190054	40280	VV	0.0000	
35	22.23		.134189	65137	PV	0.0000	
36	22.48		.142652	17965	VV	0.0000	
37	22.64	22.61	.129847	16972	VV	1.3975	~~A-CHLORDANE~~

vet 12/8/99

IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
38	22.80	22.77	.188148	36581	VB	2.9354	~~ENDOSULFAN I~~
39	24.12	24.10	.128961	347667	VV	28.7900	4,4' DDE
40	24.52	24.51	.123373	125443	VB	11.4247	DIELDRIN
41	24.88		.078693	16408	BB	0.0000	
42	25.22		.082848	133681	BV	0.0000	
43	25.44		.141755	29356	VV	0.0000	
44	25.66	25.72	.173003	40603	VV	7.9707	~~ENDRIN~~
45	26.03	26.03	.074725	320180	VV	74.5645	4,4' DDD
46	26.44		.118697	16817	VV	0.0000	
47	26.90	26.90	.065967	59108	BV	13.8555	4,4' DDT
48	27.36		.126752	14155	VV	0.0000	
49	27.48		.114025	11110	VV	0.0000	
50	27.65	27.60	.125433	12906	VV	3.1031	~~ENDOSULFAN SULFATE~~
51	27.77		.085320	17965	VB	0.0000	
52	28.42		.082920	27850	PV	0.0000	
53	28.77		.088358	181103	VV	0.0000	
54	30.12		.211427	80442	BB	0.0000	
55	31.69		.410179	33548	BV	0.0000	
56	32.14		.427109	64549	VV	0.0000	
57	32.74		.280657	28421	VV	0.0000	
58	33.31		.392235	22246	VV	0.0000	
59	33.69		.200849	82062	VV	0.0000	
60	34.35		.377636	10625	VV	0.0000	
61	34.90		.306748	25911	VV	0.0000	
62	37.16	37.24	.235842	32428	BV	5.5224	DCB

ut 12/8/99

Total Area : 3677332 Total ng inj : 172.214

Report Time : 1356 08Dec1999
Method : /DATA/LOOP/METHOD/HP58904BPJ.MTH
Result File : /DATA/LOOP/RESULT/D4BS01J 029.RES

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-12-99/12nov99f.b, as of 12/09/1999 17:05)

Processing Method : /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/Bf8081.m

DataFile : D2A001A_071.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	30977.264	34466.374	11.263	15
gamma-BHC (Lindane)	Averaged	31535.923	34718.476	10.092	15
4,4'-DDD	Averaged	21537.026	27453.536	27.471<-	15
4,4'-DDT	Averaged	27710.829	17516.237	36.789<-	15
Dieldrin	Averaged	31437.042	32377.972	2.993	15
Endosulfan I	Averaged	32632.230	33607.109	2.987	15
Endrin	Averaged	26398.442	26445.008	0.176	15
Heptachlor	Averaged	42324.510	41911.264	0.976	15
Methoxychlor	Averaged	15003.449	11213.715	25.259<-	15
Tetrachloro-m-xylene	Averaged	32703.675	37189.991	13.718	15
Decachlorobiphenyl	Averaged	44760.595	46841.357	4.649	15

Total %D Sum : 136.37

Number of Compounds: 11

Avg of %Diffs : 12.40

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-12-99/12nov99f.b, as of 12/09/1999 16:58)

Processing Method : /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/Bf8081.m

DataFile : D2A001A_072.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	31161.222	32736.449	5.055	15
beta-BHC	Averaged	19724.702	22006.625	11.569	15
delta-BHC	Averaged	26269.070	28357.727	7.951	15
4,4'-DDE	Averaged	31265.353	33762.138	7.986	15
Endosulfan II	Averaged	31942.574	32308.946	1.147	15
Endosulfan sulfate	Averaged	29248.799	29582.203	1.140	15
Endrin aldehyde	Averaged	27537.381	26646.136	3.236	15
Endrin ketone	Averaged	36090.514	41300.852	14.437	15
Heptachlor epoxide	Averaged	35490.425	36655.541	3.283	15
gamma-Chlordane	Averaged	36373.295	36722.550	0.960	15
alpha-Chlordane	Averaged	36436.980	37233.695	2.187	15
Tetrachloro-m-xylene	Averaged	32703.675	36727.736	12.305	15
Decachlorobiphenyl	Averaged	44760.595	45506.498	1.666	15

Total %D Sum : 72.92

Number of Compounds: 13

Avg of %Diffs : 5.61

Method : /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/Bf8081.m
Sample Info : EVALB
Lab ID : EVALB
Inj Date : 14-NOV-1999 16:04
Operator : gds
Cpnd Sublist: END_DDT
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	19.26%
Endrin	9.61%

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-12-99/12nov99g.b, as of 12/09/1999 16:59)

Processing Method : /chem/HP58902.i/8081/front/11-12-99/12nov99g.b/Bf8081.m

DataFile : D2A001A_085.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	30977.264	32530.835	5.015	15
gamma-BHC (Lindane)	Averaged	31535.923	33592.103	6.520	15
4,4'-DDD	Averaged	21537.026	28462.292	32.155<-	15
4,4'-DDT	Averaged	27710.829	17393.964	37.230<-	15
Dieldrin	Averaged	31437.042	33227.718	5.696	15
Endosulfan I	Averaged	32632.230	34790.905	6.615	15
Endrin	Averaged	26398.442	26978.407	2.197	15
Heptachlor	Averaged	42324.510	41601.633	1.708	15
Methoxychlor	Averaged	15003.449	11141.273	25.742<-	15
Tetrachloro-m-xylene	Averaged	32703.675	35923.783	9.846	15
Decachlorobiphenyl	Averaged	44760.595	51509.553	15.078<-	15

Total %D Sum : 147.80

Number of Compounds: 11

Avg of %Diffs : 13.44

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-12-99/12nov99g.b, as of 12/09/1999 16:59)

Processing Method : /chem/HP58902.i/8081/front/11-12-99/12nov99g.b/Bf8081.m

DataFile : D2A001A_086.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	31161.222	32970.470	5.806	15
beta-BHC	Averaged	19724.702	21875.093	10.902	15
delta-BHC	Averaged	26269.070	27753.482	5.651	15
4,4'-DDE	Averaged	31265.353	34478.464	10.277	15
Endosulfan II	Averaged	31942.574	33858.869	5.999	15
Endosulfan sulfate	Averaged	29248.799	30992.168	5.960	15
Endrin aldehyde	Averaged	27537.381	28596.174	3.845	15
Endrin ketone	Averaged	36090.514	35878.001	0.589	15
Heptachlor epoxide	Averaged	35490.425	38059.041	7.237	15
gamma-Chlordane	Averaged	36373.295	38412.346	5.606	15
alpha-Chlordane	Averaged	36436.980	38678.941	6.153	15
Tetrachloro-m-xylene	Averaged	32703.675	36060.513	10.264	15
Decachlorobiphenyl	Averaged	44760.595	46214.548	3.248	15

Total %D Sum : 81.54

Number of Compounds: 13

Avg of %Diffs : 6.27

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99g.b/D2A001A_087.d Page 1
Report Date 12/09/1999 17:00

Method : /chem/HP58902.i/8081/front/11-12-99/12nov99g.b/Bf8081.m
Sample Info : EVALB
Lab ID : EVALB
Inj Date : 15-NOV-1999 01:10
Operator : gds
Cpnd Sublist: END_DDT
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	20.51%<-
Endrin	9.67%

Report Date : 09-Dec-1999 16:57

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 20:38
End Cal Date : 12-NOV-1999 04:25
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Cal Date : 03-Dec-1999 17:26 lisa
Curve Type : Average

Calibration File Names:
Level 1: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_011.d
Level 2: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_012.d
Level 3: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_018.d
Level 4: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_014.d
Level 5: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_015.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	___ RRF	% RSD	
2 alpha-BHC	25380	26423	29242	34783	39059	30977	18.745	
3 gamma-BHC (Lindane)	26507	27606	30480	35230	37857	31536	15.491	
4 beta-BHC	18943	18846	19610	20327	20898	19725	4.488	
5 delta-BHC	22031	22051	24520	28450	34280	26267	19.759	
6 Heptachlor	41390	41762	42360	43658	42453	42325	2.041	
7 Aldrin	28291	28240	30356	32591	36328	31161	10.902	
8 Heptachlor epoxide	33853	33874	35321	36527	37877	35490	4.899	
9 gamma-Chlordane	36351	35536	35786	36742	37450	36373	2.104	
10 alpha-Chlordane	35278	35063	36427	37365	38052	36437	3.552	
11 4,4'-DDE	27902	28400	31035	33729	35260	31265	10.315	
12 Endosulfan I	31057	32164	32712	34061	33168	32632	3.438	
13 Dieldrin	28470	29576	31347	33925	33867	31437	7.852	
14 Endrin	24735	25401	26399	27941	27517	26398	5.151	
15 4,4'-DDD	19278	20223	21283	23288	23614	21537	8.772	
16 Endosulfan II	30348	30416	32154	33097	33698	31943	4.782	
17 4,4'-DDT	25516	26404	27740	29724	29170	27711	6.431	
18 Endrin aldehyde	26234	27761	28450	27963	27279	27537	3.055	
19 Methoxychlor	15412	15514	15417	15056	13618	15003	5.292	
20 Endosulfan sulfate	27718	28585	29603	30116	30222	29249	3.671	
21 Endrin ketone	33526	34999	36674	37592	37661	36091	4.962	
22 Toxaphene(1)	+++++	+++++	112	+++++	+++++	112	0.000	<-
(2)	+++++	+++++	173	+++++	+++++	173	0.000	<-
(3)	+++++	+++++	211	+++++	+++++	211	0.000	<-
(4)	+++++	+++++	179	+++++	+++++	179	0.000	<-
(5)	+++++	+++++	250	+++++	+++++	250	0.000	<-
(6)	+++++	+++++	176	+++++	+++++	176	0.000	<-

Report Date : 09-Dec-1999 16:57

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 20:38
End Cal Date : 12-NOV-1999 04:25
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Cal Date : 03-Dec-1999 17:26 lisa
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	___ RRF	% RSD	
23 Chlordane (1)	+++++	+++++	1172	+++++	+++++	1172	0.000	<-
(2)	+++++	+++++	2119	+++++	+++++	2119	0.000	<-
(3)	+++++	+++++	4298	+++++	+++++	4298	0.000	<-
(4)	+++++	+++++	7015	+++++	+++++	7015	0.000	<-
(5)	+++++	+++++	1553	+++++	+++++	1553	0.000	<-
(6)	+++++	+++++	732	+++++	+++++	732	0.000	<-
24 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 1 Tetrachloro-m-xylene	32585	32808	33064	33388	31673	32704	1.985	
$ 25 Decachlorobiphenyl	47928	47331	46138	43911	38495	44761	8.545	

Report Date : 09-Dec-1999 16:57

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 19:59
End Cal Date : 12-NOV-1999 04:25
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Cal Date : 12-Nov-1999 15:17 gordon
Curve Type : Average

Calibration File Names:
Level 1: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_011.d
Level 2: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_012.d
Level 3: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_018.d
Level 4: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_014.d
Level 5: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_015.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	___ RRF	% RSD	
2 alpha-BHC	27527	28230	30430	35151	39126	32093	15.372	
3 gamma-BHC (Lindane)	29565	29598	31386	35652	37574	32755	11.179	
4 beta-BHC	19963	19482	19813	20189	20685	20027	2.240	
5 delta-BHC	25417	24720	25778	28612	33558	27617	13.168	
6 Heptachlor	38943	39302	39783	41026	40032	39817	2.000	
7 Aldrin	31435	30571	31281	33284	36680	32650	7.552	
8 Heptachlor epoxide	33152	32928	34202	35057	37016	34471	4.814	
9 gamma-Chlordane	34818	33520	34397	34944	35996	34735	2.587	
10 alpha-Chlordane	35070	34214	35346	35602	36892	35425	2.746	
11 4,4'-DDE	28029	28254	30770	32422	34097	30715	8.557	
12 Endosulfan I	30092	31235	32419	33545	32506	31959	4.150	
13 Dieldrin	27809	29258	30439	33071	33318	30779	7.782	
14 Endrin	20096	20880	21373	22906	22772	21606	5.626	
15 4,4'-DDD	18866	19884	20640	23080	23068	21108	9.013	
16 Endosulfan II	29842	29861	31477	32676	33933	31558	5.651	
17 4,4'-DDT	21473	22594	23490	26049	26063	23934	8.627	
18 Endrin aldehyde	27717	27256	28215	27450	27383	27604	1.380	
19 Methoxychlor	13109	13422	13697	13953	13040	13444	2.878	
20 Endosulfan sulfate	28870	28849	29492	30223	31399	29766	3.601	
21 Endrin ketone	33813	33932	34976	36722	38369	35563	5.497	
22 Chlordane(1)	+++++	+++++	1946	+++++	+++++	1946	0.000	<-
(2)	+++++	+++++	100	+++++	+++++	100	0.000	<-
(3)	+++++	+++++	3100	+++++	+++++	3100	0.000	<-
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.000	<-
(5)	+++++	+++++	682	+++++	+++++	682	0.000	<-
(6)	+++++	+++++	+++++	+++++	+++++	+++++	0.000	<-

Report Date : 09-Dec-1999 16:57

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 19:59
End Cal Date : 12-NOV-1999 04:25
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Cal Date : 12-Nov-1999 15:17 gordon
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	___ RRF	% RSD	
23 Toxaphene(1)	+++++	+++++	111	+++++	+++++	111	0.000	<-
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.000	<-
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.000	<-
(4)	+++++	+++++	194	+++++	+++++	194	0.000	<-
(5)	+++++	+++++	131	+++++	+++++	131	0.000	<-
(6)	+++++	+++++	+++++	+++++	+++++	+++++	0.000	<-
24 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 1 Tetrachloro-m-xylene	33494	32813	32229	31805	29794	32027	4.373	
$ 25 Decachlorobiphenyl	51064	50171	49052	47814	42889	48198	6.656	

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b, as of 12/09/1999 17:09)

Processing Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/Br8081.m

DataFile : D2B001A_071.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32092.682	33972.050	5.856	15
gamma-BHC (Lindane)	Averaged	32754.994	34375.950	4.949	15
4,4'-DDD	Averaged	21107.546	25847.350	22.455<-	15
4,4'-DDT	Averaged	23933.804	21596.300	9.767	15
Dieldrin	Averaged	30778.939	31610.000	2.700	15
Endosulfan I	Averaged	31959.149	31726.800	0.727	15
Endrin	Averaged	21605.585	21088.100	2.395	15
Heptachlor	Averaged	39817.173	39729.600	0.220	15
Methoxychlor	Averaged	13444.213	11581.425	13.856	15
Tetrachloro-m-xylene	Averaged	32026.921	34814.650	8.704	15
Decachlorobiphenyl	Averaged	48198.018	47054.950	2.372	15

Total %D Sum : 74.00

Number of Compounds: 11

Avg of %Diffs : 6.73

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b, as of 12/09/1999 17:09)

Processing Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/Br8081.m

DataFile : D2B001A_072.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	32650.092	35300.000	8.116	15
beta-BHC	Averaged	20026.513	21122.150	5.471	15
delta-BHC	Averaged	27616.770	28881.750	4.580	15
4,4'-DDE	Averaged	30714.560	32564.300	6.022	15
Endosulfan II	Averaged	31557.799	33313.425	5.563	15
Endosulfan sulfate	Averaged	29766.410	29007.650	2.549	15
Endrin aldehyde	Averaged	27604.236	28281.675	2.454	15
Endrin ketone	Averaged	35562.545	31414.825	11.663	15
Heptachlor epoxide	Averaged	34470.745	34311.400	0.462	15
gamma-Chlordane	Averaged	34735.043	38429.600	10.636	15
alpha-Chlordane	Averaged	35424.678	35165.750	0.731	15
Tetrachloro-m-xylene	Averaged	32026.921	34721.350	8.413	15
Decachlorobiphenyl	Averaged	48198.018	46643.600	3.225	15

Total %D Sum : 69.89

Number of Compounds: 13

Avg of %Diffs : 5.38

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/D2B001A_073.d Page 1
Report Date 12/09/1999 17:12

Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/Br8081.m
Sample Info : EVALB
Lab ID : EVALB
Inj Date : 14-NOV-1999 16:04
Operator : gds
Cpnd Sublist: END_DDT
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	20.74%<-
Endrin	7.50%

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-12-99/12nov99g.b, as of 12/09/1999 17:09)

Processing Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99g.b/Br8081.m

DataFile : D2B001A_085.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32092.683	33363.967	3.961	15
gamma-BHC (Lindane)	Averaged	32754.994	33979.451	3.738	15
4,4'-DDD	Averaged	21107.546	22554.021	6.853	15
4,4'-DDT	Averaged	23933.804	17335.779	27.568<-	15
Dieldrin	Averaged	30778.939	31983.258	3.913	15
Endosulfan I	Averaged	31959.149	33478.315	4.753	15
Heptachlor	Averaged	39817.173	39112.622	1.769	15
Methoxychlor	Averaged	13444.213	10107.398	24.820<-	15
Tetrachloro-m-xylene	Averaged	32026.921	34305.356	7.114	15
Decachlorobiphenyl	Averaged	48198.018	50527.399	4.833	15

Total %D Sum : 89.32

Number of Compounds: 10

Avg of %Diffs : 8.93

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-12-99/12nov99g.b, as of 12/09/1999 17:10)

Processing Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99g.b/Br8081.m

DataFile : D2B001A_086.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	32650.092	33121.018	1.442	15
beta-BHC	Averaged	20026.513	21663.406	8.174	15
delta-BHC	Averaged	27616.770	28558.980	3.412	15
4,4'-DDE	Averaged	30714.560	33450.078	8.906	15
Endosulfan II	Averaged	31557.799	34753.775	10.127	15
Endosulfan sulfate	Averaged	29766.410	33322.476	11.947	15
Endrin aldehyde	Averaged	27604.236	31516.486	14.173	15
Endrin ketone	Averaged	35562.545	34398.829	3.272	15
Heptachlor epoxide	Averaged	34470.745	35760.566	3.742	15
gamma-Chlordane	Averaged	34735.043	35664.730	2.677	15
alpha-Chlordane	Averaged	35424.678	36438.580	2.862	15
Tetrachloro-m-xylene	Averaged	32026.921	34446.629	7.555	15
Decachlorobiphenyl	Averaged	48198.018	49596.422	2.901	15

Total %D Sum : 81.19

Number of Compounds: 13

Avg of %Diffs : 6.25

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99g.b/D2B001A_087.d Page 1
Report Date 12/09/1999 17:03

Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99g.b/Br8081.m
Sample Info : EVALB
Lab ID : EVALB
Inj Date : 15-NOV-1999 01:10
Operator : gds
Cpnd Sublist: END_DDT

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	20.75%<-
Endrin	13.46%

Report Date : 09-Dec-1999 13:57

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 20:38
End Cal Date : 27-NOV-1999 09:23
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Cal Date : 29-Nov-1999 15:24 gordon
Curve Type : Average

Calibration File Names:
Level 1: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa017.d
Level 2: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa018.d
Level 3: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa023.d
Level 4: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa020.d
Level 5: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa021.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	___ RRF	% RSD	
2 alpha-BHC	30079	30705	37388	30919	35031	32824	9.796	
3 gamma-BHC (Lindane)	31283	31829	38320	31164	33912	33301	9.055	
4 beta-BHC	21357	21466	23766	22210	22453	22250	4.354	
5 delta-BHC	25362	25942	30744	32047	37604	30340	16.478	
6 Heptachlor	45366	44889	49910	38149	37480	43159	12.194	
7 Aldrin	31397	31603	35953	35312	38229	34499	8.537	
8 Heptachlor epoxide	36765	37749	41341	38638	39342	38767	4.471	
9 gamma-Chlordane	39991	37912	41023	38190	38640	39151	3.362	
10 alpha-Chlordane	37120	37459	41313	38673	38949	38703	4.271	
11 4,4'-DDE	30770	32359	37536	36250	37153	34814	8.774	
12 Endosulfan I	35923	34152	37932	28863	28438	33062	12.842	
13 Dieldrin	31933	31653	36614	28790	29029	31604	9.976	
14 Endrin	26563	25944	30034	22928	23588	25811	10.901	
15 4,4'-DDD	21566	21640	25610	22928	23588	23067	7.204	
16 Endosulfan II	31490	43307	36563	34347	34210	35983	12.427	
17 4,4'-DDT	28615	28930	33211	25876	25725	28472	10.678	
18 Endrin aldehyde	26622	29367	31400	28575	27645	28722	6.320	
19 Methoxychlor	18566	18144	19234	14111	12842	16579	17.457	
20 Endosulfan sulfate	29154	33352	35673	32096	31219	32299	7.519	
21 Endrin ketone	29154	36382	40648	37802	37396	36276	11.812	
22 Toxaphene (1)	+++++	+++++	81.93133	+++++	+++++	81.93133	0.000	<-
(2)	+++++	+++++	140	+++++	+++++	140	0.000	<-
(3)	+++++	+++++	176	+++++	+++++	176	0.000	<-
(4)	+++++	+++++	201	+++++	+++++	201	0.000	<-
(5)	+++++	+++++	122	+++++	+++++	122	0.000	<-
(6)	+++++	+++++	164	+++++	+++++	164	0.000	<-

Report Date : 09-Dec-1999 13:57

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 20:38
End Cal Date : 27-NOV-1999 09:23
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Cal Date : 29-Nov-1999 15:24 gordon
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	___ RRF	% RSD	
23 Chlordane(1)	+++++	+++++	1255	+++++	+++++	1255	0.000	<-
(2)	+++++	+++++	2265	+++++	+++++	2265	0.000	<-
(3)	+++++	+++++	758	+++++	+++++	758	0.000	<-
(4)	+++++	+++++	4453	+++++	+++++	4453	0.000	<-
(5)	+++++	+++++	7233	+++++	+++++	7233	0.000	<-
(6)	+++++	+++++	1603	+++++	+++++	1603	0.000	<-
24 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 1 Tetrachloro-m-xylene	36409	37374	40682	30598	29163	34845	13.855	
$ 25 Decachlorobiphenyl	48012	48998	51231	37237	33174	43730	18.292	

Report Date : 09-Dec-1999 13:57

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 19:59
End Cal Date : 27-NOV-1999 09:23
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Cal Date : 29-Nov-1999 11:40 gordon
Curve Type : Average

Calibration File Names:
Level 1: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab017.d
Level 2: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab018.d
Level 3: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab023.d
Level 4: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab020.d
Level 5: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab021.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	___ RRF	% RSD	
2 alpha-BHC	31403	31301	37266	30260	33706	32787	8.548	
3 gamma-BHC (Lindane)	33379	33131	38320	30462	32595	33577	8.606	
4 beta-BHC	21166	21267	23169	21397	21332	21666	3.897	
5 delta-BHC	28615	27310	30811	30717	34414	30374	8.883	
6 Heptachlor	41979	41512	45693	34601	34198	39597	12.666	
7 Aldrin	32883	32032	36071	34960	37483	34686	6.464	
8 Heptachlor epoxide	35281	35606	39778	37892	37560	37223	4.931	
9 gamma-Chlordane	34747	35402	38910	36121	36734	36383	4.393	
10 alpha-Chlordane	34793	35389	39980	36830	37285	36855	5.486	
11 4,4'-DDE	30985	31502	36249	34312	35166	33643	6.844	
12 Endosulfan I	33705	34303	37849	28683	28078	32524	12.624	
13 Dieldrin	31704	31509	35823	27440	28067	30909	10.881	
14 Endrin	23363	23044	25508	19340	19545	22160	11.989	
15 4,4'-DDD	20979	22294	24695	19000	19499	21293	10.799	
16 Endosulfan II	30559	31477	35075	32832	33806	32750	5.493	
17 4,4'-DDT	21081	21508	24976	19374	19704	21329	10.447	
18 Endrin aldehyde	25675	27420	29333	27329	26620	27276	4.936	
19 Methoxychlor	12595	12906	14197	10501	9903	12020	14.788	
20 Endosulfan sulfate	28162	29040	32644	30700	31102	30330	5.817	
21 Endrin ketone	32840	33926	37583	36667	37398	35683	6.058	
22 Chlordane(1)	+++++	+++++	2010	+++++	+++++	2010	0.000	<-
(2)	+++++	+++++	768	+++++	+++++	768	0.000	<-
(3)	+++++	+++++	3929	+++++	+++++	3929	0.000	<-
(4)	+++++	+++++	3469	+++++	+++++	3469	0.000	<-
(5)	+++++	+++++	3137	+++++	+++++	3137	0.000	<-
(6)	+++++	+++++	1320	+++++	+++++	1320	0.000	<-

Report Date : 09-Dec-1999 13:57

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 19:59
End Cal Date : 27-NOV-1999 09:23
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Cal Date : 29-Nov-1999 11:40 gordon
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	RRF	% RSD	
23 Toxaphene(1)	+++++	+++++	66.18467	+++++	+++++	66.18467	0.000	<-
(2)	+++++	+++++	186	+++++	+++++	186	0.000	<-
(3)	+++++	+++++	135	+++++	+++++	135	0.000	<-
(4)	+++++	+++++	123	+++++	+++++	123	0.000	<-
(5)	+++++	+++++	171	+++++	+++++	171	0.000	<-
(6)	+++++	+++++	114	+++++	+++++	114	0.000	<-
24 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 1 Tetrachloro-m-xylene	37096	35908	38261	28533	26840	33328	15.754	
$ 25 Decachlorobiphenyl	52229	51668	54847	40440	36890	47215	16.934	

Method : /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/Bf8081.m
Sample Info : evalb
Lab ID : evalb
Inj Date : 03-DEC-1999 01:48
Operator : gds
Cpnd Sublist: END_DDT
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	0.66%
Endrin	3.39%

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-26-99/02dec99b.b, as of 12/09/1999 13:11)

Processing Method : /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/Bf8081.m

DataFile : b02da023.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32824.370	34486.550	5.064	15
gamma-BHC (Lindane)	Averaged	33301.243	35341.300	6.126	15
4,4'-DDD	Averaged	23066.677	23552.300	2.105	15
4,4'-DDT	Averaged	28471.628	31871.075	11.940	15
Dieldrin	Averaged	31603.791	35152.100	11.227	15
Endosulfan I	Averaged	33061.803	37335.300	12.926	15
Endrin	Averaged	25811.392	29562.275	14.532	15
Heptachlor	Averaged	43158.940	48298.500	11.908	15
Methoxychlor	Averaged	16579.296	18862.150	13.769	15
Tetrachloro-m-xylene	Averaged	34845.440	38107.500	9.362	15
Decachlorobiphenyl	Averaged	43730.136	50267.686	14.950	15

Total %D Sum : 113.91

Number of Compounds: 11

Avg of %Diffs : 10.36

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-26-99/02dec99b.b, as of 12/09/1999 13:11)

Processing Method : /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/Bf8081.m

DataFile : b02da024.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	34498.798	34688.067	0.549	15
beta-BHC	Averaged	22250.235	22308.727	0.263	15
delta-BHC	Averaged	30339.725	27676.322	8.779	15
4,4'-DDE	Averaged	34813.810	36188.346	3.948	15
Endosulfan II	Averaged	35983.366	35820.475	0.453	15
Endosulfan sulfate	Averaged	32298.522	34934.289	8.161	15
Endrin aldehyde	Averaged	28721.735	31440.154	9.465	15
Endrin ketone	Averaged	36276.311	39953.226	10.136	15
Heptachlor epoxide	Averaged	38767.202	39741.304	2.513	15
gamma-Chlordane	Averaged	39151.330	39981.227	2.120	15
alpha-Chlordane	Averaged	38702.817	40340.026	4.230	15
Tetrachloro-m-xylene	Averaged	34845.440	37769.070	8.390	15
Decachlorobiphenyl	Averaged	43730.136	50286.464	14.993	15

Total %D Sum : 74.00

Number of Compounds: 13

Avg of %Diffs : 5.69

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b, as of 12/10/1999 15:14)

Processing Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b/Br8081.m

DataFile : b02db035.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32787.217	36087.100	10.065	15
gamma-BHC (Lindane)	Averaged	33577.437	36833.350	9.697	15
4,4'-DDD	Averaged	21293.423	16279.188	23.548<-	15
4,4'-DDT	Averaged	21328.720	18746.650	12.106	15
Dieldrin	Averaged	30908.666	35025.200	13.318	15
Endosulfan I	Averaged	32523.645	37367.600	14.894	15
Endrin	Averaged	22159.879	25991.046	17.289<-	15
Heptachlor	Averaged	39596.812	44887.900	13.362	15
Methoxychlor	Averaged	12020.470	4508.146	62.496<-	15
Tetrachloro-m-xylene	Averaged	33327.788	37459.715	12.398	15
Decachlorobiphenyl	Averaged	47214.758	56012.697	18.634<-	15

Total %D Sum : 207.81
Number of Compounds: 11
Avg of %Diffs : 18.89

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b, as of 12/10/1999 15:14)

Processing Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b/Br8081.m

DataFile : b02db036.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	34685.832	37222.250	7.313	15
beta-BHC	Averaged	21666.162	22852.850	5.477	15
delta-BHC	Averaged	30373.513	30078.850	0.970	15
4,4'-DDE	Averaged	33642.975	35106.800	4.351	15
Endosulfan II	Averaged	32749.732	36593.425	11.737	15
Endosulfan sulfate	Averaged	30329.588	34389.975	13.388	15
Endrin aldehyde	Averaged	27275.621	31193.750	14.365	15

Endrin ketone	Averaged	35682.774	40316.775	12.987	15
Heptachlor epoxide	Averaged	37223.480	40379.246	8.478	15
gamma-Chlordane	Averaged	36382.800	39816.600	9.438	15
alpha-Chlordane	Averaged	36855.385	40314.850	9.387	15
Tetrachloro-m-xylene	Averaged	33327.788	38022.750	14.087	15
Decachlorobiphenyl	Averaged	47214.758	55251.561	17.022<-	15

Total %D Sum : 336.80

Number of Compounds: 24

Avg of %Diffs : 14.03

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-26-99/02dec99c.b, as of 12/09/1999 13:11)

Processing Method : /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/Bf8081.m

DataFile : b02da035.d

Compound	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32824.370	35094.900	6.917	15
gamma-BHC (Lindane)	Averaged	33301.243	35815.950	7.551	15
4,4'-DDD	Averaged	23066.677	23909.325	3.653	15
4,4'-DDT	Averaged	28471.628	32325.025	13.534	15
Dieldrin	Averaged	31603.791	35559.075	12.515	15
Endosulfan I	Averaged	33061.803	37740.000	14.150	15
Endrin	Averaged	25811.392	29218.464	13.200	15
Heptachlor	Averaged	43158.940	49097.600	13.760	15
Methoxychlor	Averaged	16579.296	18935.960	14.214	15
Tetrachloro-m-xylene	Averaged	34845.440	38697.700	11.055	15
Decachlorobiphenyl	Averaged	43730.136	50963.919	16.542<-	15

Total %D Sum : 127.09

Number of Compounds: 11

Avg of %Diffs : 11.55

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-26-99/02dec99c.b, as of 12/09/1999 13:11)

Processing Method : /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/Bf8081.m

DataFile : b02da036.d

Compound	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	34498.798	35147.300	1.880	15
beta-BHC	Averaged	22250.235	22837.500	2.639	15
delta-BHC	Averaged	30339.725	28345.050	6.574	15
4,4'-DDE	Averaged	34813.810	37169.725	6.767	15
Endosulfan II	Averaged	35983.366	36878.150	2.487	15
Endosulfan sulfate	Averaged	32298.522	36219.800	12.141	15
Endrin aldehyde	Averaged	28721.735	32346.225	12.619	15
Endrin ketone	Averaged	36276.311	40811.450	12.502	15
Heptachlor epoxide	Averaged	38767.202	40541.500	4.577	15
gamma-Chlordane	Averaged	39151.330	40860.700	4.366	15
alpha-Chlordane	Averaged	38702.817	41228.000	6.525	15
Tetrachloro-m-xylene	Averaged	34845.440	38946.850	11.770	15
Decachlorobiphenyl	Averaged	43730.136	51092.206	16.835<-	15

Total %D Sum : 101.68

Number of Compounds: 13

Avg of %Diffs : 7.82

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-26-99/02dec99c.b, as of 12/10/1999 15:14)

Processing Method : /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/Bf8081.m

DataFile : b02da035.d

Compound	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32824.370	35094.900	6.917	15
gamma-BHC (Lindane)	Averaged	33301.243	35815.950	7.551	15
4,4'-DDD	Averaged	23066.677	23909.325	3.653	15
4,4'-DDT	Averaged	28471.628	32325.025	13.534	15
Dieldrin	Averaged	31603.791	35559.075	12.515	15
Endosulfan I	Averaged	33061.803	37740.000	14.150	15
Endrin	Averaged	25811.392	29218.464	13.200	15
Heptachlor	Averaged	43158.940	49097.600	13.760	15
Methoxychlor	Averaged	16579.296	18935.960	14.214	15
Tetrachloro-m-xylene	Averaged	34845.440	38697.700	11.055	15
Decachlorobiphenyl	Averaged	43730.136	50963.919	16.542<-	15

Total %D Sum : 127.09
Number of Compounds: 11
Avg of %Diffs : 11.55

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-26-99/02dec99c.b, as of 12/10/1999 15:14)

Processing Method : /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/Bf8081.m

DataFile : b02da036.d

Compound	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	34498.798	35147.300	1.880	15
beta-BHC	Averaged	22250.235	22837.500	2.639	15
delta-BHC	Averaged	30339.725	28345.050	6.574	15
4,4'-DDE	Averaged	34813.810	37169.725	6.767	15
Endosulfan II	Averaged	35983.366	36878.150	2.487	15
Endosulfan sulfate	Averaged	32298.522	36219.800	12.141	15
Endrin aldehyde	Averaged	28721.735	32346.225	12.619	15

Endrin ketone	Averaged	36276.311	40811.450	12.502	15
Heptachlor epoxide	Averaged	38767.202	40541.500	4.577	15
gamma-Chlordane	Averaged	39151.330	40860.700	4.366	15
alpha-Chlordane	Averaged	38702.817	41228.000	6.525	15
Tetrachloro-m-xylene	Averaged	34845.440	38946.850	11.770	15
Decachlorobiphenyl	Averaged	43730.136	51092.206	16.835<-	15

Total %D Sum : 228.77
Number of Compounds: 24
Avg of %Diffs : 9.53

Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/Br8081.m
Sample Info : evalb
Lab ID : evalb
Inj Date : 03-DEC-1999 01:48
Operator : gds
Cpnd Sublist: END_DDT

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	3.02%
Endrin	5.03%

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b, as of 12/09/1999 13:14)

Processing Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/Br8081.m

DataFile : b02db023.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32787.217	35414.150	8.012	15
gamma-BHC (Lindane)	Averaged	33577.437	36171.650	7.726	15
4,4'-DDD	Averaged	21293.423	17909.000	15.894<-	15
4,4'-DDT	Averaged	21328.720	18936.325	11.217	15
Dieldrin	Averaged	30908.666	35303.200	14.218	15
Endosulfan I	Averaged	32523.645	37199.550	14.377	15
Endrin	Averaged	22159.879	26059.947	17.600<-	15
Heptachlor	Averaged	39596.812	44894.200	13.378	15
Methoxychlor	Averaged	12020.470	4696.040	60.933<-	15
Tetrachloro-m-xylene	Averaged	33327.788	37600.500	12.820	15
Decachlorobiphenyl	Averaged	47214.758	54999.264	16.487<-	15

Total %D Sum : 192.66
Number of Compounds: 11
Avg of %Diffs : 17.51

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b, as of 12/09/1999 13:14)

Processing Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/Br8081.m

DataFile : b02db024.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	34685.832	36302.400	4.661	15
beta-BHC	Averaged	21666.162	22013.700	1.604	15
delta-BHC	Averaged	30373.513	29509.250	2.845	15
4,4'-DDE	Averaged	33642.975	33379.750	0.782	15
Endosulfan II	Averaged	32749.732	35694.325	8.991	15
Endosulfan sulfate	Averaged	30329.588	33496.725	10.442	15
Endrin aldehyde	Averaged	27275.621	30484.400	11.764	15
Endrin ketone	Averaged	35682.774	38412.800	7.651	15
Heptachlor epoxide	Averaged	37223.480	39673.700	6.582	15
gamma-Chlordane	Averaged	36382.800	39162.300	7.640	15
alpha-Chlordane	Averaged	36855.385	39257.550	6.518	15
Tetrachloro-m-xylene	Averaged	33327.788	37229.900	11.708	15
Decachlorobiphenyl	Averaged	47214.758	53961.816	14.290	15

Total %D Sum : 95.48

Number of Compounds: 13

Avg of %Diffs : 7.34

Method : /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/Bf8081.m
Sample Info : evalb
Lab ID : evalb
Inj Date : 03-DEC-1999 09:36
Operator : gds
Cpnd Sublist: END_DDT
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	0.78%
Endrin	3.16%

Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b/Br8081.m
Sample Info : evalb
Lab ID : evalb
Inj Date : 03-DEC-1999 09:36
Operator : gds
Cpnd Sublist: END_DDT
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	1.81%
Endrin	4.27%

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b, as of 12/09/1999 13:14)

Processing Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b/Br8081.m

DataFile : b02db035.d

Compound	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32787.217	36087.100	10.065	15
gamma-BHC (Lindane)	Averaged	33577.437	36833.350	9.697	15
4,4'-DDD	Averaged	21293.423	16279.188	23.548<-	15
4,4'-DDT	Averaged	21328.720	18746.650	12.106	15
Dieldrin	Averaged	30908.666	35025.200	13.318	15
Endosulfan I	Averaged	32523.645	37367.600	14.894	15
Endrin	Averaged	22159.879	25991.046	17.289<-	15
Heptachlor	Averaged	39596.812	44887.900	13.362	15
Methoxychlor	Averaged	12020.470	4508.146	62.496<-	15
Tetrachloro-m-xylene	Averaged	33327.788	37459.715	12.398	15
Decachlorobiphenyl	Averaged	47214.758	56012.697	18.634<-	15

Total %D Sum : 207.81

Number of Compounds: 11

Avg of %Diffs : 18.89

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b, as of 12/09/1999 13:14)

Processing Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b/Br8081.m

DataFile : b02db036.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	34685.832	37222.250	7.313	15
beta-BHC	Averaged	21666.162	22852.850	5.477	15
delta-BHC	Averaged	30373.513	30078.850	0.970	15
4,4'-DDE	Averaged	33642.975	35106.800	4.351	15
Endosulfan II	Averaged	32749.732	36593.425	11.737	15
Endosulfan sulfate	Averaged	30329.588	34389.975	13.388	15
Endrin aldehyde	Averaged	27275.621	31193.750	14.365	15
Endrin ketone	Averaged	35682.774	40316.775	12.987	15
Heptachlor epoxide	Averaged	37223.480	40379.246	8.478	15
gamma-Chlordane	Averaged	36382.800	39816.600	9.438	15
alpha-Chlordane	Averaged	36855.385	40314.850	9.387	15
Tetrachloro-m-xylene	Averaged	33327.788	38022.750	14.087	15
Decachlorobiphenyl	Averaged	47214.758	55251.561	17.022<-	15

Total %D Sum : 129.00
Number of Compounds: 13
Avg of %Diffs : 9.92

SEVERN TRENT LABORATORIES, INC.
GAS CHROMATOGRAPHY
MULTICOMPONENT PESTICIDE
INITIAL CALIBRATION FORMS

Sequence Name: S4AS01I Column: DB1701 ID: 0.53 Date Analyzed: 10/16/99

COMPOUND	CONCENTRATION	PEAK 1		PEAK 2		PEAK 3		TOTAL AREA	RF
CHLORDANE	500	17.88	437985	18.76	1029726	19.06	1452571	2920282	5841
TOXAPHENE	1000	24.87	1004186	25.13	594648	26.01	374787	1973621	1974

000342

SEVERN TRENT LABORATORIES, INC.
GAS CHROMATOGRAPHY
MULTICOMPONENT PESTICIDE
INITIAL CALIBRATION FORMS

Sequence Name: S4BS01I Column: DB608 ID: 0.53 Date Analyzed: 10/16/99

COMPOUND	CONCENTRATION	PEAK 1		PEAK 2		PEAK 3		TOTAL AREA	RF
CHLORDANE	500	21.69	668001	21.83	468656	22.57	599957	1736614	3473
TOXAPHENE	1000	26.28	182179	28.91	281354	29.15	257889	721422	721

SEVERN TRENT LABORATORIES, INC.
GAS CHROMATOGRAPHY
PESTICIDE
INITIAL CALIBRATION FORMS

Sequence Name: S4AS01C Column: DB1701 ID: 0.53 Date Analyzed: 11/09/99

	L1			L2			L3			L4			L5			AVE		
COMPOUND	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	RF	STD	%RSD
TCX*	5	105519	21104	10	195283	19528	20	357603	17880	40	683601	17090	80	1239556	15494	**18219**	2171	**11.9**
A-BHC	5	100380	20076	10	203151	20315	20	417286	20864	40	856017	21400	80	1664575	20807	**20692**	516	**2.5**
G-BHC	5	103287	20657	10	204901	20490	20	417138	20857	40	840634	21016	80	1620097	20251	**20654**	301	**1.5**
HEPTACHLOR	5	125916	25183	10	254545	25455	20	492272	24614	40	907364	22684	80	1694921	21187	**23825**	1829	**7.7**
ENDOSULFAN I	5	90235	18047	10	171856	17186	20	342307	17115	40	677067	16927	80	1284722	16059	**17067**	709	**4.2**
DIELDRIN	10	177618	17762	20	351122	17556	40	697634	17441	80	1386191	17327	160	2593856	16212	**17260**	607	**3.5**
ENDRIN	10	157987	15799	20	313218	15661	40	612866	15322	80	1194883	14936	160	2207137	13795	**15103**	804	**5.3**
4,4'-DDD	10	126020	12602	20	256833	12842	40	515227	12881	80	1032034	12900	160	1982539	12391	**12723**	221	**1.7**
4,4'-DDT	10	108342	10834	20	225820	11291	40	447054	11176	80	917560	11470	160	1780350	11127	**11180**	234	**2.1**
METHOXYCHLOR	50	222943	4459	100	420313	4203	200	785438	3927	400	1460295	3651	800	2599506	3249	**3898**	472	**12.1**
DCB*	10	122798	12280	20	231232	11562	40	435302	10883	80	784262	9803	160	1397550	8735	**10653**	1408	**13.2**

SEVERN TRENT LABORATORIES, INC.
GAS CHROMATOGRAPHY
PESTICIDE
INITIAL CALIBRATION FORMS

Sequence Name: S4AS01C Column: DB1701 ID: 0.53 Date Analyzed: 11/09/99-11/10/99

	L1			L2			L3			L4			L5			AVE		
COMPOUND	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	RF	STD	%RSD
TCX*	5	92694	18539	10	180078	18008	20	346224	17311	40	714808	17870	80	1232007	15400	17426	1214	7
ALDRIN	5	95550	19110	10	190790	19079	20	387007	19350	40	800668	20017	80	1519687	18996	19310	416	2.2
B-BHC	5	63123	12625	10	119483	11948	20	227927	11396	40	432871	10822	80	818168	10227	11404	937	8.2
D-BHC	5	74348	14870	10	153945	15395	20	312204	15610	40	650345	16259	80	1297786	16222	15671	585	3.7
HETACHLOR EPOXIDE	5	106910	21382	10	207541	20754	20	403063	20153	40	778488	19462	80	1476934	18462	20043	1134	5.7
G-CHLORDANE	5	100180	20036	10	209675	20968	20	394829	19741	40	818194	20455	80	1468231	18353	19911	986	5
A-CHLORDANE	5	113746	22749	10	228789	22879	20	418653	20933	40	882578	22064	80	1512502	18906	21506	1645	7.6
4,4'-DDE	10	177544	17754	20	372313	18616	40	722808	18070	80	1456143	18202	160	2671501	16697	17868	724	4.1
ENDOSULFAN II	10	160204	16020	20	318064	15903	40	616632	15416	80	1188188	14852	160	2192521	13703	15179	945	6.2
ENDRIN ALDEHYDE	10	108519	10852	20	210929	10546	40	393816	9845	80	762340	9529	160	1402797	8767	9908	829	8.4
ENDOSULFAN SULFATE	10	96821	9682	20	178591	8930	40	337281	8432	80	665189	8315	160	1207759	7548	8581	790	9.2
ENDRIN KETONE	10	78166	7817	20	162512	8126	40	327148	8179	80	640522	8007	160	1225657	7660	7958	217	2.7
DCB*	10	121181	12118	20	228743	11437	40	418676	10467	80	785652	9821	160	1405226	8783	10525	1314	12.5

000345

Sequence Name: S4AS01C Column: DB1701 ID: 0.53 Date Analyzed: 11/09/99

COMPOUND	L1-RT.	L2-RT.	L3-RT.	L4-RT.	L5-RT.	AVG. .RT.	+/-	RT	WINDOW
TCX*	7.98	7.99	8.00	7.98	7.98	7.99	0.05	7.94	8.04
A-BHC	10.53	10.54	10.56	10.53	10.53	10.54	0.05	10.49	10.59
G-BHC	12.01	12.01	12.03	12.00	12.00	12.01	0.05	11.96	12.06
HEPTACHLOR	13.09	13.09	13.12	13.08	13.08	13.09	0.05	13.04	13.14
ENDOSULFAN I	18.60	18.61	18.63	18.59	18.60	18.61	0.07	18.54	18.68
DIELDRIN	20.35	20.35	20.38	20.34	20.35	20.35	0.07	20.28	20.42
ENDRIN	21.39	21.39	21.42	21.37	21.38	21.39	0.07	21.32	21.46
4,4'-DDD	23.57	23.57	23.59	23.55	23.56	23.57	0.07	23.5	23.64
4,4'-DDT	24.58	24.58	24.60	24.57	24.57	24.58	0.07	24.51	24.65
METHOXYCHLOR	26.22	26.22	26.23	26.21	26.21	26.22	0.07	26.15	26.29
DCB*	30.23	30.23	30.27	30.22	30.22	30.23	0.10	30.13	30.33

Sequence Name: S4AS01C Column: DB1701 ID: 0.53 Date Analyzed: 11/09/99-11/10/99

COMPOUND	L1-RT.	L2-RT.	L3-RT.	L4-RT.	L5-RT.	AVG. .RT.	+/-	RT	WINDOW
TCX*	7.99	7.99	7.99	8.00	7.98	7.99	0.05	7.94	8.04
B-BHC	14.31	14.31	14.32	14.35	14.32	14.32	0.05	14.27	14.37
D-BHC	14.89	14.89	14.90	14.92	14.89	14.9	0.05	14.85	14.95
ALDRIN	16.06	16.06	16.07	16.10	16.07	16.07	0.05	16.02	16.12
HETACHLOR EPOXIDE	17.20	17.20	17.21	17.23	17.20	17.21	0.07	17.14	17.28
G-CHLORDANE	18.79	18.79	18.80	18.83	18.80	18.8	0.07	18.73	18.87
A-CHLORDANE	19.07	19.07	19.08	19.11	19.08	19.08	0.07	19.01	19.15
4,4'-DDE	19.70	19.69	19.71	19.73	19.70	19.71	0.07	19.64	19.78
ENDOSULFAN II	23.72	23.72	23.74	23.76	23.73	23.73	0.07	23.66	23.8
ENDRIN ALDEHYDE	25.29	25.28	25.30	25.31	25.30	25.3	0.07	25.23	25.37
ENDOSULFAN SULFATE	26.01	26.01	26.02	26.03	26.02	26.02	0.07	25.95	26.09
ENDRIN KETONE	27.12	27.11	27.13	27.13	27.12	27.12	0.07	27.05	27.19
DCB*	30.22	30.22	30.24	30.24	30.24	30.23	0.10	30.13	30.33

SEVERN TRENT LABORATORIES, INC.
GAS CHROMATOGRAPHY
PESTICIDE
INITIAL CALIBRATION FORMS

Sequence Name: S4BS01C Column: DB608 ID: 0.53 Date Analyzed: 11/09/99

	L1			L2			L3			L4			L5			AVE		
COMPOUND	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	RF	STD	%RSD
TCX*	5	123898	24780	10	241246	24125	20	446930	22347	40	809244	20231	80	1423485	17794	**21855**	2876	**13.2**
A-BHC	5	149690	29938	10	290749	29075	20	584793	29240	40	1065581	26640	80	1940536	24257	**27830**	2354	**8.5**
G-BHC	5	131036	26207	10	256325	25633	20	479454	23973	40	922661	23067	80	1690329	21129	**24002**	2040	**8.5**
HEPTACHLOR	5	115805	23161	10	222364	22236	20	421787	21089	40	805548	20139	80	1447803	18098	**20945**	1959	**9.4**
ENDOSULFAN I	5	74749	14950	10	130168	13017	20	243988	12199	40	459492	11487	80	852597	10657	**12462**	1641	**13.2**
DIELDRIN	10	116660	11666	20	240009	12000	40	441284	11032	80	843001	10538	160	1546541	9666	**10980**	927	**8.4**
ENDRIN	10	55581	5558	20	108438	5422	40	204013	5100	80	383391	4792	160	735326	4596	**5094**	407	**8**
4,4'-DDD	10	41814	4181	20	83118	4156	40	180241	4506	80	353516	4419	160	672918	4206	**4294**	158	**3.7**
4,4'-DDT	10	40456	4046	20	86016	4301	40	173966	4349	80	351937	4399	160	677586	4235	**4266**	137	**3.2**
METHOXYCHLOR	50	107815	2156	100	212672	2127	200	419879	2099	400	819924	2050	800	1571945	1965	**2079**	75	**3.6**
DCB*	10	62311	6231	20	123853	6193	40	239521	5988	80	458190	5727	160	835244	5220	**5872**	416	**7.1**

SEVERN TRENT LABORATORIES, INC.
GAS CHROMATOGRAPHY
PESTICIDE
INITIAL CALIBRATION FORMS

Sequence Name: S4BS01C Column: DB608 ID: 0.53 Date Analyzed: 11/09/99-11/10/99

	L1			L2			L3			L4			L5			AVE		
COMPOUND	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	RF	STD	%RSD
TCX*	5	93807	18761	10	234934	23493	20	453676	22684	40	808447	20211	80	1459840	18248	**20679**	2332	**11.3**
B-BHC	5	60156	12031	10	120145	12015	20	231127	11556	40	439894	10997	80	789498	9869	**11294**	901	**8**
D-BHC	5	98709	19742	10	193500	19350	20	396587	19829	40	728459	18211	80	1371774	17147	**18856**	1152	**6.1**
ALDRIN	5	98478	19696	10	210553	21055	20	375561	18778	40	701393	17535	80	1293646	16171	**18647**	1890	**10.1**
HETACHLOR EPOXIDE	5	90203	18041	10	175123	17512	20	365817	18291	40	631119	15778	80	1113850	13923	**16709**	1841	**11**
G-CHLORDANE	5	81723	16345	10	186306	18631	20	321136	16057	40	566859	14171	80	1019720	12747	**15590**	2243	**14.4**
A-CHLORDANE	5	62776	12555	10	125047	12505	20	251735	12587	40	478799	11970	80	888823	11110	**12145**	631	**5.2**
4,4'-DDE	10	127869	12787	20	270765	13538	40	489967	12249	80	913402	11418	160	1661849	10387	**12076**	1221	**10.1**
ENDOSULFAN II	10	45319	4532	20	93512	4676	40	186367	4659	80	377371	4717	160	728827	4555	**4628**	80	**1.7**
ENDRIN ALDEHYDE	10	32124	3212	20	86077	4304	40	153882	3847	80	292563	3657	160	536764	3355	**3675**	431	**11.7**
ENDOSULFAN SULFATE	10	41630	4163	20	84766	4238	40	166941	4174	80	336571	4207	160	641848	4012	**4159**	87	**2.1**
ENDRIN KETONE	10	44842	4484	20	93192	4660	40	188208	4705	80	393904	4924	160	762575	4766	**4708**	160	**3.4**
DCB*	10	62355	6236	20	123874	6194	40	239767	5994	80	455600	5695	160	833428	5209	**5866**	425	**7.2**

Sequence Name: S4BS01C Column: DB608 ID: 0.53 Date Analyzed: 11/09/99

COMPOUND	L1-RT.	L2-RT.	L3-RT.	L4-RT.	L5-RT.	AVG. .RT.	+/-	RT	WINDOW
TCX*	10.01	9.99	9.99	10.02	9.98	10	0.05	9.95	10.05
A-BHC	12.79	12.77	12.78	12.81	12.77	12.78	0.05	12.73	12.83
G-BHC	14.60	14.58	14.60	14.62	14.58	14.6	0.05	14.55	14.65
HEPTACHLOR	16.20	16.18	16.19	16.22	16.17	16.19	0.05	16.14	16.24
ENDOSULFAN I	22.78	22.76	22.77	22.79	22.75	22.77	0.07	22.7	22.84
DIELDRIN	24.52	24.50	24.51	24.53	24.49	24.51	0.07	24.44	24.58
ENDRIN	25.72	25.71	25.71	25.73	25.71	25.72	0.07	25.65	25.79
4,4'-DDD	26.04	26.03	26.03	26.04	26.03	26.03	0.07	25.96	26.1
4,4'-DDT	26.91	26.89	26.89	26.91	26.89	26.9	0.07	26.83	26.97
METHOXYCHLOR	29.99	29.99	29.98	30.01	29.98	29.99	0.07	29.92	30.06
DCB*	37.23	37.24	37.23	37.28	37.23	37.24	0.10	37.14	37.34

Sequence Name: S4BS01C Column: DB608 ID: 0.53 Date Analyzed: 11/09/99-11/10/99

COMPOUND	L1-RT.	L2-RT.	L3-RT.	L4-RT.	L5-RT.	AVG. .RT.	+/-	RT	WINDOW
TCX*	9.99	9.98	9.99	9.99	10.01	9.99	0.05	9.94	10.04
B-BHC	14.90	14.89	14.89	14.90	14.92	14.9	0.05	14.85	14.95
D-BHC	16.74	16.73	16.73	16.74	16.76	16.74	0.05	16.69	16.79
ALDRIN	17.88	17.86	17.86	17.87	17.89	17.87	0.05	17.82	17.92
HETACHLOR EPOXIDE	20.84	20.83	20.82	20.84	20.86	20.84	0.07	20.77	20.91
G-CHLORDANE	21.72	21.72	21.71	21.73	21.75	21.73	0.07	21.66	21.8
A-CHLORDANE	22.61	22.60	22.59	22.61	22.63	22.61	0.07	22.54	22.68
4,4'-DDE	24.10	24.09	24.09	24.10	24.12	24.1	0.07	24.03	24.17
ENDOSULFAN II	26.22	26.22	26.21	26.22	26.23	26.22	0.07	26.15	26.29
ENDRIN ALDEHYDE	27.21	27.20	27.20	27.21	27.21	27.21	0.07	27.14	27.28
ENDOSULFAN SULFATE	27.60	27.60	27.59	27.61	27.61	27.6	0.07	27.53	27.67
ENDRIN KETONE	30.59	30.59	30.59	30.60	30.60	30.59	0.07	30.52	30.66
DCB*	37.22	37.22	37.22	37.25	37.22	37.23	0.10	37.13	37.33

Report Date : 12-Nov-1999 15:14

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 20:38
End Cal Date : 12-NOV-1999 04:25
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Cal Date : 12-Nov-1999 14:57 gordon
Curve Type : Average

Calibration File Names:
Level 1: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_011.d
Level 2: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_012.d
Level 3: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_018.d
Level 4: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_014.d
Level 5: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_015.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	RRF	% RSD	
2 alpha-BHC	25380	26423	29242	34783	39059	30977	18.745	
3 gamma-BHC (Lindane)	26507	27606	30480	35230	37857	31536	15.491	
4 beta-BHC	18943	18846	19610	20327	20898	19725	4.488	
5 delta-BHC	22031	22051	24520	28450	34280	26267	19.759	
6 Heptachlor	41390	41762	42360	43658	42453	42325	2.041	
7 Aldrin	28291	28240	30356	32591	36328	31161	10.902	
8 Heptachlor epoxide	33853	33874	35321	36527	37877	35490	4.899	
9 gamma-Chlordane	36351	35536	35786	36742	37450	36373	2.104	
10 alpha-Chlordane	35278	35063	36427	37365	38052	36437	3.552	
11 4,4'-DDE	27902	28400	31035	33729	35260	31265	10.315	
12 Endosulfan I	31057	32164	32712	34061	33168	32632	3.438	
13 Dieldrin	28470	29576	31347	33925	33867	31437	7.852	
14 Endrin	24735	25401	26399	27941	27517	26398	5.151	
15 4,4'-DDD	19278	20223	21283	23288	23614	21537	8.772	
16 Endosulfan II	30348	30416	32154	33097	33698	31943	4.782	
17 4,4'-DDT	25516	26404	27740	29724	29170	27711	6.431	
18 Endrin aldehyde	26234	27761	28450	27963	27279	27537	3.055	
19 Methoxychlor	15412	15514	15417	15056	13618	15003	5.292	
20 Endosulfan sulfate	27718	28585	29603	30116	30222	29249	3.671	
21 Endrin ketone	33526	34999	36674	37592	37661	36091	4.962	
22 Toxaphene (1)	+++++	+++++	112	+++++	+++++	112	0.000	<-
(2)	+++++	+++++	173	+++++	+++++	173	0.000	<-
(3)	+++++	+++++	211	+++++	+++++	211	0.000	<-
(4)	+++++	+++++	179	+++++	+++++	179	0.000	<-
(5)	+++++	+++++	250	+++++	+++++	250	0.000	<-
(6)	+++++	+++++	176	+++++	+++++	176	0.000	<-

Report Date : 12-Nov-1999 15:14

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 20:38
End Cal Date : 12-NOV-1999 04:25
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Cal Date : 12-Nov-1999 14:57 gordon
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	RRF	% RSD	
23 Chlordane (1)	+++++	+++++	1172	+++++	+++++	1172	0.000	<-
(2)	+++++	+++++	2119	+++++	+++++	2119	0.000	<-
(3)	+++++	+++++	4298	+++++	+++++	4298	0.000	<-
(4)	+++++	+++++	7015	+++++	+++++	7015	0.000	<-
(5)	+++++	+++++	1553	+++++	+++++	1553	0.000	<-
(6)	+++++	+++++	732	+++++	+++++	732	0.000	<-
24 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 1 Tetrachloro-m-xylene	32585	32808	33064	33388	33613	33092	1.262	
$ 25 Decachlorobiphenyl	47928	47331	46138	43911	39689	44999	7.429	

Report Date : 12-Nov-1999 15:04

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 19:59
End Cal Date : 12-NOV-1999 04:25
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Cal Date : 12-Nov-1999 15:04 gordon
Curve Type : Average

Calibration File Names:
Level 1: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_011.d
Level 2: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_012.d
Level 3: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_018.d
Level 4: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_014.d
Level 5: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_015.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	___ RRF	% RSD
2 alpha-BHC	27527	28230	30430	35151	39126	32093	15.372
3 gamma-BHC (Lindane)	29565	29598	31386	35652	37574	32755	11.179
4 beta-BHC	19963	19482	19813	20189	20685	20027	2.240
5 delta-BHC	25417	24720	25778	28612	33558	27617	13.168
6 Heptachlor	38943	39302	39783	41026	40032	39817	2.000
7 Aldrin	31435	30571	31281	33284	36680	32650	7.552
8 Heptachlor epoxide	33152	32928	34202	35057	37016	34471	4.814
9 gamma-Chlordane	34818	33520	34397	34944	35996	34735	2.587
10 alpha-Chlordane	35070	34214	35346	35602	36892	35425	2.746
11 4,4'-DDE	28029	28254	30770	32422	34097	30715	8.557
12 Endosulfan I	30092	31235	32419	33545	32506	31959	4.150
13 Dieldrin	27809	29258	30439	33071	33318	30779	7.782
14 Endrin	20096	20880	21373	22906	22772	21606	5.626
15 4,4'-DDD	18866	19884	20640	23080	23068	21108	9.013
16 Endosulfan II	29842	29861	31477	32676	33933	31558	5.651
17 4,4'-DDT	21473	22594	23490	26049	26063	23934	8.627
18 Endrin aldehyde	27717	27256	28215	27450	27383	27604	1.380
19 Methoxychlor	13109	13422	13697	13953	13040	13444	2.878
20 Endosulfan sulfate	28870	28849	29492	30223	31399	29766	3.601
21 Endrin ketone	33813	33932	34976	36722	38369	35563	5.497
22 Chlordane(1)	+++++	+++++	1946	+++++	+++++	1946	0.000 <-
(2)	+++++	+++++	3861	+++++	+++++	3861	0.000 <-
(3)	+++++	+++++	3425	+++++	+++++	3425	0.000 <-
(4)	+++++	+++++	3100	+++++	+++++	3100	0.000 <-
(5)	+++++	+++++	682	+++++	+++++	682	0.000 <-
(6)	+++++	+++++	1374	+++++	+++++	1374	0.000 <-

Report Date : 12-Nov-1999 15:04

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 19:59
End Cal Date : 12-NOV-1999 04:25
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Cal Date : 12-Nov-1999 15:04 gordon
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	RRF	% RSD	
23 Toxaphene(1)	+++++	+++++	111	+++++	+++++	111	0.000	<-
(2)	+++++	+++++	287	+++++	+++++	287	0.000	<-
(3)	+++++	+++++	236	+++++	+++++	236	0.000	<-
(4)	+++++	+++++	221	+++++	+++++	221	0.000	<-
(5)	+++++	+++++	261	+++++	+++++	261	0.000	<-
(6)	+++++	+++++	194	+++++	+++++	194	0.000	<-
24 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 1 Tetrachloro-m-xylene	33494	32813	32229	31805	29794	32027	4.373	
$ 25 Decachlorobiphenyl	51064	50171	49052	47814	42889	48198	6.656	

PESTICIDE CONTINUING CALIBRATIONS
INDA

Sequence: S4AS01J Instrument: HP58904A Column: DB1701 Analysis Date: 11/24/99 Analysis Time: 0917

Data File ID: D4AS01J_020 Initial Calibration Sequence: S4AS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	8.04	7.99	8.09	357603	364530	1.9
alpha-BHC	10.60	10.55	10.65	417286	417839	0.1
gamma-BHC (Lindane)	12.07	12.02	12.12	417138	414405	0.7
Heptachlor	13.17	13.12	13.22	492272	430667	12.5
Endosulfan I	18.69	18.62	18.76	342307	337387	1.4
Dieldrin	20.43	20.36	20.5	697634	667890	4.3
Endrin	21.47	21.4	21.54	612866	591932	3.4
4,4'-DDD	23.64	23.57	23.71	515227	483313	6.2
4,4'-DDT	24.64	24.57	24.71	447054	436873	2.3
Methoxychlor	26.25	26.18	26.32	785438	778091	0.9
Decachlorobiphenyl*	30.29	30.22	30.36	435302	427031	1.9

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDB

Sequence: S4AS01J Instrument: HP58904A Column: DB1701 Analysis Date: 11/2499 Analysis Time: 1005

Data File ID: D4AS01J_021 Initial Calibration Sequence: S4AS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	8.04	7.99	8.09	346224	360495	4.1
Aldrin	14.41	14.36	14.46	387007	365815	5.5
beta-BHC	14.96	14.91	15.01	227927	220187	3.4
delta-BHC	16.14	16.09	16.19	312204	328653	5.3
Heptachlor Epoxide	17.29	17.22	17.36	403063	382572	5.1
gamma-Chlordane	18.88	18.81	18.95	394829	361891	8.3
alpha-Chlordane	19.17	19.1	19.24	418653	389260	7
4,4'-DDE	19.79	19.72	19.86	722808	680772	5.8
Endosulfan II	23.82	23.75	23.89	616632	585762	5
Endrin Aldehyde	25.33	25.26	25.4	393816	373957	5
Endosulfan Sulfate	26.05	25.98	26.12	337281	321555	4.7
Endrin Ketone	27.16	27.09	27.23	327148	312957	4.3
Decachlorobiphenyl*	30.30	30.23	30.37	418676	419082	0.1

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDA

Sequence: S4BS01J Instrument: HP58904B Column: DB608 Analysis Date: 11/24/99 Analysis Time: 0825

Data File ID: D4BS01J_019 Initial Calibration Sequence: S4BS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	10.03	9.98	10.08	446930	478620	7.1
alpha-BHC	12.82	12.77	12.87	584793	635476	8.7
gamma-BHC (Lindane)	14.63	14.58	14.68	479454	541432	12.9
Heptachlor	16.24	16.19	16.29	421787	486993	15.5
Endosulfan I	22.81	22.74	22.88	243988	275619	13
Dieldrin	24.54	24.47	24.61	441284	489666	11
Endrin	25.73	25.66	25.8	204013	213875	4.8
4,4'-DDD	26.05	25.98	26.12	180241	189522	5.1
4,4'-DDT	26.91	26.84	26.98	173966	222470	27.9
Methoxychlor	29.99	29.92	30.06	419879	478309	13.9
Decachlorobiphenyl*	37.22	37.15	37.29	239521	262765	9.7

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDB

Sequence: S4BS01J Instrument: HP58904B Column: DB608 Analysis Date: 11/24/99 Analysis Time: 0917

Data File ID: D4BS01J_020 Initial Calibration Sequence: S4BS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	10.04	9.99	10.09	453676	477214	5.2
beta-BHC	14.96	14.91	15.01	231127	261895	13.3
delta-BHC	16.79	16.74	16.84	396587	452217	14
Aldrin	17.93	17.88	17.98	375561	435724	16
Heptachlor Epoxide	20.90	20.83	20.97	365817	430514	17.7
gamma-Chlordane	21.78	21.71	21.85	321136	377225	17.5
alpha-Chlordane	22.67	22.6	22.74	251735	284890	13.2
4,4'-DDE	24.16	24.09	24.23	489967	583971	19.2
Endosulfan II	26.25	26.18	26.32	186367	209015	12.2
Endrin Aldehyde	27.23	27.16	27.3	153882	175970	14.4
Endosulfan Sulfate	27.63	27.56	27.7	166941	177099	6.1
Endrin Ketone	30.62	30.55	30.69	188208	213557	13.5
Decachlorobiphenyl*	37.23	37.16	37.3	239767	257871	7.6

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDA

Sequence: S4AS01J Instrument: HP58904A Column: DB1701 Analysis Date: 11/24/99 Analysis Time: 2108

Data File ID: D4AS01J_034 Initial Calibration Sequence: S4AS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	8.01	7.96	8.06	357603	377003	5.4
alpha-BHC	10.56	10.51	10.61	417286	453939	8.8
gamma-BHC (Lindane)	12.03	11.98	12.08	417138	431985	3.6
Heptachlor	13.12	13.07	13.17	492272	473865	3.7
Endosulfan I	18.63	18.56	18.7	342307	336977	1.6
Dieldrin	20.38	20.31	20.45	697634	698789	0.2
Endrin	21.41	21.34	21.48	612866	621891	1.5
4,4'-DDD	23.59	23.52	23.66	515227	508697	1.3
4,4'-DDT	24.60	24.53	24.67	447054	434091	2.9
Methoxychlor	26.22	26.15	26.29	785438	791036	0.7
Decachlorobiphenyl*	30.24	30.17	30.31	435302	422544	2.9

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDB

Sequence: S4AS01J Instrument: HP58904A Column: DB1701 Analysis Date: 11/2499 Analysis Time: 2156

Data File ID: D4AS01J_035 Initial Calibration Sequence: S4AS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	8.01	7.96	8.06	346224	369060	6.6
Aldrin	14.36	14.31	14.41	387007	389634	0.7
beta-BHC	14.91	14.86	14.96	227927	229100	0.5
delta-BHC	16.09	16.04	16.14	312204	342352	9.7
Heptachlor Epoxide	17.24	17.17	17.31	403063	402741	0.1
gamma-Chlordane	18.83	18.76	18.9	394829	380940	3.5
alpha-Chlordane	19.11	19.04	19.18	418653	419717	0.3
4,4'-DDE	19.74	19.67	19.81	722808	731334	1.2
Endosulfan II	23.76	23.69	23.83	616632	612277	0.7
Endrin Aldehyde	25.30	25.23	25.37	393816	382392	2.9
Endosulfan Sulfate	26.02	25.95	26.09	337281	325621	3.5
Endrin Ketone	27.13	27.06	27.2	327148	321562	1.7
Decachlorobiphenyl*	30.25	30.18	30.32	418676	402108	4

*Surrogate

NEA
NORTHERN ECOLOGICAL ASSOCIATES, INC

New York Office:
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Canton, New York 13617

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451 Presumpscot Street
Portland, Maine 04103

APPENDIX D, VOLUME II OF VI

FINAL
FORMER STEWART AIR FORCE BASE (AFB)
HTRW INVESTIGATION

NEWBURGH, NEW YORK

Contract Number: DACW51-97-D-0010
Delivery Order No. 61

Prepared for:

U.S. Army Corps of Engineers
New York District
26 Federal Plaza
New York, New York 10278-0090

Prepared by:

Ogden Environmental and Energy Services Co., Inc.
Northern Ecological Associates, Inc.

MARCH 2000

Committed To *Your* Success

Severn Trent Laboratories
628 Route 10
Whippany, NJ 07981

Tel: (973) 428-8181
Fax: (973) 428-5222

NYSDEC CATEGORY B

SAMPLING DATE OCTOBER 13, 1999

OGDEN ENVIRONMENTAL

PROJECT: STEWART AFB 770760061

PREPARED BY:

SEVERN TRENT LABORATORIES, INC.

(CERTIFICATION NUMBER 10997)

STL JOB NO: 20990-94106

VOLUME II OF III

PESTICIDE CONTINUING CALIBRATIONS
INDA

Sequence: S4BS01J Instrument: HP58904B Column: DB608 Analysis Date: 11/24/99 Analysis Time: 2020

Data File ID: D4BS01J_033 Initial Calibration Sequence: S4BS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	10.04	9.99	10.09	446930	476919	6.7
alpha-BHC	12.83	12.78	12.88	584793	699804	19.7
gamma-BHC (Lindane)	14.64	14.59	14.69	479454	618429	29
Heptachlor	16.24	16.19	16.29	421787	552626	31
Endosulfan I	22.81	22.74	22.88	243988	293516	20.3
Dieldrin	24.54	24.47	24.61	441284	518982	17.6
Endrin	25.73	25.66	25.8	204013	240854	18.1
4,4'-DDD	26.05	25.98	26.12	180241	212032	17.6
4,4'-DDT	26.91	26.84	26.98	173966	197475	13.5
Methoxychlor	29.99	29.92	30.06	419879	482270	14.9
Decachlorobiphenyl*	37.23	37.16	37.3	239521	271614	13.4

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDB

Sequence: S4BS01J Instrument: HP58904B Column: DB608 Analysis Date: 11/24/99 Analysis Time: 2108

Data File ID: D4BS01J_034 Initial Calibration Sequence: S4BS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	10.02	9.97	10.07	453676	475528	4.8
beta-BHC	14.93	14.88	14.98	231127	302973	31.1
delta-BHC	16.76	16.71	16.81	396587	467678	17.9
Aldrin	17.89	17.84	17.94	375561	440175	17.2
Heptachlor Epoxide	20.86	20.79	20.93	365817	439786	20.2
gamma-Chlordane	21.74	21.67	21.81	321136	363925	13.3
alpha-Chlordane	22.63	22.56	22.7	251735	290622	15.4
4,4'-DDE	24.12	24.05	24.19	489967	611535	24.8
Endosulfan II	26.23	26.16	26.3	186367	230864	23.9
Endrin Aldehyde	27.21	27.14	27.28	153882	176106	14.4
Endosulfan Sulfate	27.60	27.53	27.67	166941	185899	11.4
Endrin Ketone	30.58	30.51	30.65	188208	219510	16.6
Decachlorobiphenyl*	37.19	37.12	37.26	239767	259214	8.1

*Surrogate

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4AS01C_005

GC Column: DB1701 ID: 0.53mm Instrument ID: HP58904A

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	31710	1155938	2.7
p,p'-DDD	31710			
p,p'-DDT	1124228	1124228		
Endrin Ketone	0	0	786981	0
Endrin Aldehyde	0			
Endrin	786981	786981		

The % breakdown of either DDT or Endrin must not exceed 15%

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4BS01C_004

GC Column: DB608 ID: 0.53mm Instrument ID: HP58904B

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	24917	447404	5.6
p,p'-DDD	24917			
p,p'-DDT	422487	422487		
Endrin Ketone	11304	27854	289578	9.6
Endrin Aldehyde	16550			
Endrin	261724	261724		

The % breakdown of either DDT or Endrin must not exceed 15%

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4AS01J_019

GC Column: DB1701 ID: 0.53mm Instrument ID: HP58904A

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	20412	1120922	1.8
p,p'-DDD	20412			
p,p'-DDT	1100510	1100510		
Endrin Ketone	0	15684	812074	1.9
Endrin Aldehyde	15684			
Endrin	796390	796390		

The % breakdown of either DDT or Endrin must not exceed 15%

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4BS01J_018

GC Column: DB608 ID: 0.53mm Instrument ID: HP58904B

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	45651	530936	8.6
p,p'-DDD	45651			
p,p'-DDT	485285	485285		
Endrin Ketone	11445	11445	344284	3.3
Endrin Aldehyde	0			
Endrin	332839	332839		

The % breakdown of either DDT or Endrin must not exceed 15%

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4AS01J_033

GC Column: DB1701 ID: 0.53mm Instrument ID: HP58904A

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	15165	1076972	1.4
p,p'-DDD	15165			
p,p'-DDT	1061807	1061807		
Endrin Ketone	0	19794	817398	2.4
Endrin Aldehyde	19794			
Endrin	797604	797604		

The % breakdown of either DDT or Endrin must not exceed 15%

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4BS01J_032

GC Column: DB608 ID: 0.53mm Instrument ID: HP58904B

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	18866	505601	3.7
p,p'-DDD	18866			
p,p'-DDT	486735	486735		
Endrin Ketone	14514	14514	324279	4.5
Endrin Aldehyde	0			
Endrin	309765	309765		

The % breakdown of either DDT or Endrin must not exceed 15%

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-12-99/12nov99b.b, as of 11/30/1999 09:54)

Processing Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99a.b/Br8081.m

DataFile : D2B001A_005.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32092.683	30732.983	4.237	15
gamma-BHC (Lindane)	Averaged	32754.994	31754.819	3.054	15
4,4'-DDD	Averaged	21107.546	23046.592	9.187	15
4,4'-DDT	Averaged	23933.804	24609.086	2.821	15
Dieldrin	Averaged	30778.939	30866.276	0.284	15
Endosulfan I	Averaged	31959.149	32669.338	2.222	15
Endrin	Averaged	21605.585	22304.216	3.234	15
Heptachlor	Averaged	39817.173	39957.284	0.352	15
Methoxychlor	Averaged	13444.213	13854.789	3.054	15
Tetrachloro-m-xylene	Averaged	32026.921	32590.432	1.759	15
Decachlorobiphenyl	Averaged	48198.018	49575.958	2.859	15

Total %D Sum : 33.06

Number of Compounds: 11

Avg of %Diffs : 3.01

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP58902.i

Midpoint Calibration File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_008.d
Injection Date: 11-NOV-1999 21:56

Continuing Calibration File: /chem/HP58902.i/8081/rear/11-12-99/12nov99b.b/D2B001A_005.d
Injection Date: 12-NOV-1999 19:54

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
alpha-BHC	13.379	(13.329 - 13.429)	13.374	
gamma-BHC (Lindane)	14.402	(14.352 - 14.453)	14.399	
4,4'-DDD	20.442	(20.372 - 20.512)	20.453	
4,4'-DDT	21.218	(21.148 - 21.288)	21.230	
Dieldrin	19.543	(19.473 - 19.613)	19.552	
Endosulfan I	18.883	(18.813 - 18.953)	18.891	
Endrin	20.286	(20.216 - 20.356)	20.295	
Heptachlor	15.610	(15.560 - 15.660)	15.608	
Methoxychlor	23.057	(22.987 - 23.127)	23.071	
Tetrachloro-m-xylene	11.476	(11.426 - 11.526)	11.473	
Decachlorobiphenyl	29.293	(29.192 - 29.392)	29.301	

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-12-99/12nov99b.b, as of 11/30/1999 09:54)

Processing Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99a.b/Br8081.m

DataFile : D2B001A_006.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	32650.092	31784.499	2.651	15
beta-BHC	Averaged	20026.513	19972.935	0.268	15
delta-BHC	Averaged	27616.770	26301.886	4.761	15
4,4'-DDE	Averaged	30714.560	31052.701	1.101	15
Endosulfan II	Averaged	31557.799	31771.668	0.678	15
Endosulfan sulfate	Averaged	29766.410	29919.999	0.516	15
Endrin aldehyde	Averaged	27604.236	27037.700	2.052	15
Endrin ketone	Averaged	35562.545	35508.791	0.151	15
Heptachlor epoxide	Averaged	34470.745	34455.455	0.044	15
gamma-Chlordane	Averaged	34735.043	34005.786	2.099	15
alpha-Chlordane	Averaged	35424.678	34597.957	2.334	15
Tetrachloro-m-xylene	Averaged	32026.921	32317.917	0.909	15
Decachlorobiphenyl	Averaged	48198.018	48088.373	0.227	15

Total %D Sum : 17.79

Number of Compounds: 13

Avg of %Diffs : 1.37

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP58902.i

Midpoint Calibration File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_013.d
Injection Date: 12-NOV-1999 01:11

Continuing Calibration File: /chem/HP58902.i/8081/rear/11-12-99/12nov99b.b/D2B001A_006.d
Injection Date: 12-NOV-1999 20:32

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aldrin	16.442	(16.392 - 16.492)	16.471	
beta-BHC	14.597	(14.547 - 14.647)	14.624	
delta-BHC	15.403	(15.353 - 15.453)	15.432	
4,4'-DDE	19.056	(18.986 - 19.126)	19.078	
Endosulfan II	20.757	(20.687 - 20.827)	20.779	
Endosulfan sulfate	22.348	(22.277 - 22.418)	22.374	
Endrin aldehyde	21.602	(21.532 - 21.672)	21.626	
Endrin ketone	24.047	(23.977 - 24.117)	24.080	
Heptachlor epoxide	17.887	(17.817 - 17.957)	17.913	
gamma-Chlordane	18.345	(18.275 - 18.415)	18.370	
alpha-Chlordane	18.703	(18.633 - 18.773)	18.727	
Tetrachloro-m-xylene	11.453	(11.426 - 11.526)	11.478	
Decachlorobiphenyl	29.229	(29.192 - 29.392)	29.293	

CONTINUING CALIBRATION REPORT

000374

(for databatch - /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b, as of 11/30/1999 09:31)

Processing Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/Bf8081.m

ataFile : D2A001A_005.d

Compound	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	30977.264	29775.450	3.880	15
gamma-BHC (Lindane)	Averaged	31535.923	31074.900	1.462	15
,4'-DDD	Averaged	21537.026	21822.650	1.326	15
,4'-DDT	Averaged	27710.829	27204.575	1.827	15
Dieldrin	Averaged	31437.042	31534.525	0.310	15
ndosulfan I	Averaged	32632.230	32993.750	1.108	15
ndrin	Averaged	26398.442	26271.850	0.480	15
Heptachlor	Averaged	42324.510	42325.900	0.003	15
ethoxychlor	Averaged	15003.449	15296.715	1.955	15
etrachloro-m-xylene	Averaged	32703.675	33492.350	2.412	15
Decachlorobiphenyl	Averaged	44760.595	46290.325	3.418	15

Total %D Sum : 18.18

Number of Compounds: 11

Avg of %Diffs : 1.65

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP58902.i

Midpoint Calibration File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_008.d
Injection Date: 11-NOV-1999 21:56

Continuing Calibration File: /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/D2A001A_005.d
Injection Date: 12-NOV-1999 19:54

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
alpha-BHC	11.029	(10.979 - 11.079)	11.023	
gamma-BHC (Lindane)	11.921	(11.871 - 11.971)	11.915	
4,4'-DDD	17.677	(17.608 - 17.747)	17.681	
4,4'-DDT	18.320	(18.250 - 18.390)	18.324	
Dieldrin	16.983	(16.913 - 17.053)	16.984	
Endosulfan I	16.408	(16.338 - 16.478)	16.407	
Endrin	17.517	(17.448 - 17.587)	17.520	
Heptachlor	13.196	(13.146 - 13.246)	13.189	
Methoxychlor	19.451	(19.381 - 19.521)	19.458	
Tetrachloro-m-xylene	9.380	(9.330 - 9.430)	9.375	
Decachlorobiphenyl	23.253	(23.152 - 23.352)	23.264	

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b, as of 11/30/1999 09:31)

Processing Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/Bf8081.m

DataFile : D2A001A_006.d

Compound	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	31161.222	30410.600	2.409	15
beta-BHC	Averaged	19724.702	20103.650	1.921	15
delta-BHC	Averaged	26269.070	25356.450	3.474	15
4,4'-DDE	Averaged	31265.353	31191.075	0.238	15
Endosulfan II	Averaged	31942.574	32271.800	1.031	15
Endosulfan sulfate	Averaged	29248.799	29731.100	1.649	15
Endrin aldehyde	Averaged	27537.381	26916.025	2.256	15
Endrin ketone	Averaged	36090.514	36582.450	1.363	15
Heptachlor epoxide	Averaged	35490.425	35493.000	0.007	15
gamma-Chlordane	Averaged	36373.295	35990.250	1.053	15
alpha-Chlordane	Averaged	36436.980	36403.100	0.093	15
Tetrachloro-m-xylene	Averaged	32703.675	33217.050	1.570	15
Decachlorobiphenyl	Averaged	44760.595	44942.650	0.407	15

Total %D Sum : 17.47

Number of Compounds: 13

Avg of %Diffs : 1.34

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP58902.i

Midpoint Calibration File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_013.d
Injection Date: 12-NOV-1999 01:11

Continuing Calibration File: /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/D2A001A_006.d
Injection Date: 12-NOV-1999 20:32

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aldrin	13.937	(13.887 - 13.987)	13.963	
beta-BHC	12.162	(12.112 - 12.212)	12.188	
delta-BHC	12.632	(12.582 - 12.682)	12.658	
4,4'-DDE	16.273	(16.203 - 16.343)	16.298	
Endosulfan II	18.023	(17.953 - 18.093)	18.048	
Endosulfan sulfate	19.969	(19.899 - 20.039)	19.990	
Endrin aldehyde	18.977	(18.907 - 19.047)	19.000	
Endrin ketone	20.619	(20.549 - 20.689)	20.640	
Heptachlor epoxide	15.449	(15.379 - 15.519)	15.477	
gamma-Chlordane	15.750	(15.680 - 15.820)	15.777	
alpha-Chlordane	16.068	(15.998 - 16.138)	16.095	
Tetrachloro-m-xylene	9.357	(9.330 - 9.430)	9.380	
Decachlorobiphenyl	23.220	(23.152 - 23.352)	23.248	

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b, as of 11/30/1999 10:07)

Processing Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/Br8081.m

DataFile : D2B001A_024.d

Compound	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32092.683	31263.050	2.585	15
gamma-BHC (Lindane)	Averaged	32754.994	32165.150	1.801	15
4,4'-DDD	Averaged	21107.546	21859.881	3.564	15
4,4'-DDT	Averaged	23933.804	22201.845	7.236	15
Dieldrin	Averaged	30778.939	30256.225	1.698	15
Endosulfan I	Averaged	31959.149	32429.342	1.471	15
Endrin	Averaged	21605.585	21703.619	0.454	15
Heptachlor	Averaged	39817.173	40553.700	1.850	15
Methoxychlor	Averaged	13444.213	13495.702	0.383	15
Tetrachloro-m-xylene	Averaged	32026.921	32689.200	2.068	15
Decachlorobiphenyl	Averaged	48198.018	49520.250	2.743	15

Total %D Sum : 25.85

Number of Compounds: 11

Avg of %Diffs : 2.35

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP58902.i

Midpoint Calibration File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_008.d
Injection Date: 11-NOV-1999 21:56

Continuing Calibration File: /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/D2B001A_024.d
Injection Date: 13-NOV-1999 08:14

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
alpha-BHC	13.379	(13.329 - 13.429)	13.378	
gamma-BHC (Lindane)	14.402	(14.352 - 14.453)	14.402	
4,4'-DDD	20.442	(20.372 - 20.512)	20.442	
4,4'-DDT	21.218	(21.148 - 21.288)	21.218	
Dieldrin	19.543	(19.473 - 19.613)	19.543	
Endosulfan I	18.883	(18.813 - 18.953)	18.883	
Endrin	20.286	(20.216 - 20.356)	20.285	
Heptachlor	15.610	(15.560 - 15.660)	15.608	
Methoxychlor	23.057	(22.987 - 23.127)	23.053	
Tetrachloro-m-xylene	11.476	(11.426 - 11.526)	11.476	
Decachlorobiphenyl	29.293	(29.192 - 29.392)	29.276	

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b, as of 11/30/1999 10:07)

Processing Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/Br8081.m

DataFile : D2B001A_025.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	32650.092	31110.398	4.716	15
beta-BHC	Averaged	20026.513	20179.743	0.765	15
delta-BHC	Averaged	27616.770	26130.680	5.381	15
4,4'-DDE	Averaged	30714.560	30439.772	0.895	15
Endosulfan II	Averaged	31557.799	32084.595	1.669	15
Endosulfan sulfate	Averaged	29766.410	30890.487	3.776	15
Endrin aldehyde	Averaged	27604.236	28006.922	1.459	15
Endrin ketone	Averaged	35562.545	35498.587	0.180	15
Heptachlor epoxide	Averaged	34470.745	34107.283	1.054	15
gamma-Chlordane	Averaged	34735.043	33670.420	3.065	15
alpha-Chlordane	Averaged	35424.678	34218.353	3.405	15
Tetrachloro-m-xylene	Averaged	32026.921	32559.079	1.662	15
Decachlorobiphenyl	Averaged	48198.018	47719.929	0.992	15

Total %D Sum : 29.02
Number of Compounds: 13
Avg of %Diffs : 2.23

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP58902.i

Midpoint Calibration File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_013.d
Injection Date: 12-NOV-1999 01:11

Continuing Calibration File: /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/D2B001A_025.d
Injection Date: 13-NOV-1999 08:53

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aldrin	16.442	(16.392 - 16.492)	16.462	
beta-BHC	14.597	(14.547 - 14.647)	14.615	
delta-BHC	15.403	(15.353 - 15.453)	15.422	
4,4'-DDE	19.056	(18.986 - 19.126)	19.076	
Endosulfan II	20.757	(20.687 - 20.827)	20.779	
Endosulfan sulfate	22.348	(22.277 - 22.418)	22.373	
Endrin aldehyde	21.602	(21.532 - 21.672)	21.626	
Endrin ketone	24.047	(23.977 - 24.117)	24.079	
Heptachlor epoxide	17.887	(17.817 - 17.957)	17.907	
gamma-Chlordane	18.345	(18.275 - 18.415)	18.365	
alpha-Chlordane	18.703	(18.633 - 18.773)	18.723	
Tetrachloro-m-xylene	11.453	(11.426 - 11.526)	11.472	
Decachlorobiphenyl	29.229	(29.192 - 29.392)	29.280	

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-12-99/12NOV99c.b, as of 11/30/1999 09:32)

Processing Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99c.b/Bf8081.m

DataFile : D2A001A_024.d

Compound	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	30977.264	30984.800	0.024	15
gamma-BHC (Lindane)	Averaged	31535.923	31718.050	0.578	15
4,4'-DDD	Averaged	21537.026	22835.350	6.028	15
4,4'-DDT	Averaged	27710.829	26604.900	3.991	15
Dieldrin	Averaged	31437.042	31810.275	1.187	15
Endosulfan I	Averaged	32632.230	33020.300	1.189	15
Endrin	Averaged	26398.442	26977.050	2.192	15
Heptachlor	Averaged	42324.510	42519.800	0.461	15
Methoxychlor	Averaged	15003.449	15280.570	1.847	15
Tetrachloro-m-xylene	Averaged	32703.675	33985.350	3.919	15
Decachlorobiphenyl	Averaged	44760.595	46093.400	2.978	15

Total %D Sum : 24.39

Number of Compounds: 11

Avg of %Diffs : 2.22

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP58902.i

Midpoint Calibration File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_008.d
Injection Date: 11-NOV-1999 21:56

Continuing Calibration File: /chem/HP58902.i/8081/front/11-12-99/12NOV99c.b/D2A001A_024.d
Injection Date: 13-NOV-1999 08:14

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
alpha-BHC	11.029	(10.979 - 11.079)	11.027	
gamma-BHC (Lindane)	11.921	(11.871 - 11.971)	11.918	
4,4'-DDD	17.677	(17.608 - 17.747)	17.672	
4,4'-DDT	18.320	(18.250 - 18.390)	18.317	
Dieldrin	16.983	(16.913 - 17.053)	16.978	
Endosulfan I	16.408	(16.338 - 16.478)	16.402	
Endrin	17.517	(17.448 - 17.587)	17.513	
Heptachlor	13.196	(13.146 - 13.246)	13.193	
Methoxychlor	19.451	(19.381 - 19.521)	19.448	
Tetrachloro-m-xylene	9.380	(9.330 - 9.430)	9.377	
Decachlorobiphenyl	23.253	(23.152 - 23.352)	23.247	

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-12-99/12NOV99c.b, as of 11/30/1999 09:32)

Processing Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99c.b/Bf8081.m

DataFile : D2A001A_025.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	31161.222	30545.400	1.976	15
beta-BHC	Averaged	19724.702	20211.900	2.470	15
delta-BHC	Averaged	26269.070	25249.900	3.880	15
4,4'-DDE	Averaged	31265.353	31760.525	1.584	15
Endosulfan II	Averaged	31942.574	32096.350	0.481	15
Endosulfan sulfate	Averaged	29248.799	29476.650	0.779	15
Endrin aldehyde	Averaged	27537.381	26864.200	2.445	15
Endrin ketone	Averaged	36090.514	36834.100	2.060	15
Heptachlor epoxide	Averaged	35490.425	35397.600	0.262	15
gamma-Chlordane	Averaged	36373.295	35871.450	1.380	15
alpha-Chlordane	Averaged	36436.980	36397.600	0.108	15
Tetrachloro-m-xylene	Averaged	32703.675	33366.750	2.028	15
Decachlorobiphenyl	Averaged	44760.595	44435.225	0.727	15

Total %D Sum : 20.18

Number of Compounds: 13

Avg of %Diffs : 1.55

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP58902.i

Midpoint Calibration File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_013.d
Injection Date: 12-NOV-1999 01:11

Continuing Calibration File: /chem/HP58902.i/8081/front/11-12-99/12NOV99c.b/D2A001A_025.d
Injection Date: 13-NOV-1999 08:53

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aldrin	13.937	(13.887 - 13.987)	13.952	
beta-BHC	12.162	(12.112 - 12.212)	12.178	
delta-BHC	12.632	(12.582 - 12.682)	12.646	
4,4'-DDE	16.273	(16.203 - 16.343)	16.288	
Endosulfan II	18.023	(17.953 - 18.093)	18.042	
Endosulfan sulfate	19.969	(19.899 - 20.039)	19.988	
Endrin aldehyde	18.977	(18.907 - 19.047)	18.997	
Endrin ketone	20.619	(20.549 - 20.689)	20.640	
Heptachlor epoxide	15.449	(15.379 - 15.519)	15.465	
gamma-Chlordane	15.750	(15.680 - 15.820)	15.767	
alpha-Chlordane	16.068	(15.998 - 16.138)	16.085	
Tetrachloro-m-xylene	9.357	(9.330 - 9.430)	9.375	
Decachlorobiphenyl	23.220	(23.152 - 23.352)	23.247	

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-12-99/12nov99d.b, as of 12/08/1999 19:02)

Processing Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99d.b/Br8081.m

DataFile : D2B001A_040.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32092.683	33549.248	4.539	15
gamma-BHC (Lindane)	Averaged	32754.994	34034.094	3.905	15
4,4'-DDD	Averaged	21107.546	26760.792	26.783<-	15
4,4'-DDT	Averaged	23933.804	14147.446	40.889<-	15
Dieldrin	Averaged	30778.939	31116.014	1.095	15
Endosulfan I	Averaged	31959.149	33007.319	3.280	15
Endrin	Averaged	21605.585	22013.763	1.889	15
Heptachlor	Averaged	39817.173	39850.184	0.083	15
Methoxychlor	Averaged	13444.213	10036.015	25.351<-	15
Tetrachloro-m-xylene	Averaged	32026.921	34647.758	8.183	15
Decachlorobiphenyl	Averaged	48198.018	50658.718	5.105	15

Total %D Sum : 121.10
Number of Compounds: 11
Avg of %Diffs : 11.01

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP58902.i

Midpoint Calibration File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_008.d
Injection Date: 11-NOV-1999 21:56

Continuing Calibration File: /chem/HP58902.i/8081/rear/11-12-99/12nov99d.b/D2B001A_040.d
Injection Date: 13-NOV-1999 18:37

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
alpha-BHC	13.379	(13.329 - 13.429)	13.367	
gamma-BHC (Lindane)	14.402	(14.352 - 14.453)	14.392	
4,4'-DDD	20.442	(20.372 - 20.512)	20.435	
4,4'-DDT	21.218	(21.148 - 21.288)	21.207	
Dieldrin	19.543	(19.473 - 19.613)	19.537	
Endosulfan I	18.883	(18.813 - 18.953)	18.877	
Endrin	20.286	(20.216 - 20.356)	20.277	
Heptachlor	15.610	(15.560 - 15.660)	15.600	
Methoxychlor	23.057	(22.987 - 23.127)	23.042	
Tetrachloro-m-xylene	11.476	(11.426 - 11.526)	11.464	
Decachlorobiphenyl	29.293	(29.192 - 29.392)	29.242	

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-12-99/12nov99d.b, as of 12/08/1999 19:03)

Processing Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99d.b/Br8081.m

DataFile : D2B001A_041.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	32650.092	32362.153	0.882	15
beta-BHC	Averaged	20026.513	20627.544	3.001	15
delta-BHC	Averaged	27616.770	27274.697	1.239	15
4,4'-DDE	Averaged	30714.560	32467.348	5.707	15
Endosulfan II	Averaged	31557.799	34441.403	9.138	15
Endosulfan sulfate	Averaged	29766.410	31554.879	6.008	15
Endrin aldehyde	Averaged	27604.236	30230.269	9.513	15
Endrin ketone	Averaged	35562.545	32996.596	7.215	15
Heptachlor epoxide	Averaged	34470.745	33380.802	3.162	15
gamma-Chlordane	Averaged	34735.043	33723.073	2.913	15
alpha-Chlordane	Averaged	35424.678	35707.673	0.799	15
Tetrachloro-m-xylene	Averaged	32026.921	33703.678	5.235	15
Decachlorobiphenyl	Averaged	48198.018	46984.973	2.517	15

Total %D Sum : 57.33

Number of Compounds: 13

Avg of %Diffs : 4.41

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP58902.i

Midpoint Calibration File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_013.d
Injection Date: 12-NOV-1999 01:11

Continuing Calibration File: /chem/HP58902.i/8081/rear/11-12-99/12nov99d.b/D2B001A_041.d
Injection Date: 13-NOV-1999 19:16

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aldrin	16.442	(16.392 - 16.492)	16.458	
beta-BHC	14.597	(14.547 - 14.647)	14.613	
delta-BHC	15.403	(15.353 - 15.453)	15.420	
4,4'-DDE	19.056	(18.986 - 19.126)	19.068	
Endosulfan II	20.757	(20.687 - 20.827)	20.772	
Endosulfan sulfate	22.348	(22.277 - 22.418)	22.365	
Endrin aldehyde	21.602	(21.532 - 21.672)	21.618	
Endrin ketone	24.047	(23.977 - 24.117)	24.069	
Heptachlor epoxide	17.887	(17.817 - 17.957)	17.901	
gamma-Chlordane	18.345	(18.275 - 18.415)	18.359	
alpha-Chlordane	18.703	(18.633 - 18.773)	18.717	
Tetrachloro-m-xylene	11.453	(11.426 - 11.526)	11.465	
Decachlorobiphenyl	29.229	(29.192 - 29.392)	29.261	

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-12-99/12nov99d.b, as of 12/08/1999 19:03)

Processing Method : /chem/HP58902.i/8081/front/11-12-99/12nov99d.b/Bf8081.m

DataFile : D2A001A_040.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	30977.264	33098.900	6.849	15
gamma-BHC (Lindane)	Averaged	31535.923	34004.000	7.826	15
4,4'-DDD	Averaged	21537.026	27594.896	28.128<-	15
4,4'-DDT	Averaged	27710.829	17086.575	38.340<-	15
Dieldrin	Averaged	31437.042	32437.225	3.182	15
Endosulfan I	Averaged	32632.230	32939.250	0.941	15
Endrin	Averaged	26398.442	26722.371	1.227	15
Heptachlor	Averaged	42324.510	42277.900	0.110	15
Methoxychlor	Averaged	15003.449	11144.170	25.723<-	15
Tetrachloro-m-xylene	Averaged	32703.675	36361.650	11.185	15
Decachlorobiphenyl	Averaged	44760.595	45955.575	2.670	15

Total %D Sum : 126.18
Number of Compounds: 11
Avg of %Diffs : 11.47

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP58902.i

Midpoint Calibration File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_008.d
Injection Date: 11-NOV-1999 21:56

Continuing Calibration File: /chem/HP58902.i/8081/front/11-12-99/12nov99d.b/D2A001A_040.d
Injection Date: 13-NOV-1999 18:37

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
alpha-BHC	11.029	(10.979 - 11.079)	11.013	
gamma-BHC (Lindane)	11.921	(11.871 - 11.971)	11.906	
4,4'-DDD	17.677	(17.608 - 17.747)	17.668	
4,4'-DDT	18.320	(18.250 - 18.390)	18.311	
Dieldrin	16.983	(16.913 - 17.053)	16.971	
Endosulfan I	16.408	(16.338 - 16.478)	16.396	
Endrin	17.517	(17.448 - 17.587)	17.507	
Heptachlor	13.196	(13.146 - 13.246)	13.181	
Methoxychlor	19.451	(19.381 - 19.521)	19.442	
Tetrachloro-m-xylene	9.380	(9.330 - 9.430)	9.363	
Decachlorobiphenyl	23.253	(23.152 - 23.352)	23.232	

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-12-99/12nov99d.b, as of 12/08/1999 19:04)

Processing Method : /chem/HP58902.i/8081/front/11-12-99/12nov99d.b/Bf8081.m

DataFile : D2A001A_041.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	31161.222	31774.881	1.969	15
beta-BHC	Averaged	19724.702	21042.609	6.682	15
delta-BHC	Averaged	26269.070	27038.138	2.928	15
4,4'-DDE	Averaged	31265.353	32794.432	4.891	15
Endosulfan II	Averaged	31942.574	32391.199	1.404	15
Endosulfan sulfate	Averaged	29248.799	30151.800	3.087	15
Endrin aldehyde	Averaged	27537.381	26617.004	3.342	15
Endrin ketone	Averaged	36090.514	35093.301	2.763	15
Heptachlor epoxide	Averaged	35490.425	36281.505	2.229	15
gamma-Chlordane	Averaged	36373.295	36640.357	0.734	15
alpha-Chlordane	Averaged	36436.980	37132.647	1.909	15
Tetrachloro-m-xylene	Averaged	32703.675	35046.215	7.163	15
Decachlorobiphenyl	Averaged	44760.595	44757.068	0.008	15

Total %D Sum : 39.11

Number of Compounds: 13

Avg of %Diffs : 3.01

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP58902.i

Midpoint Calibration File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_013.d
Injection Date: 12-NOV-1999 01:11

Continuing Calibration File: /chem/HP58902.i/8081/front/11-12-99/12nov99d.b/D2A001A_041.d
Injection Date: 13-NOV-1999 19:16

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aldrin	13.937	(13.887 - 13.987)	13.949	
beta-BHC	12.162	(12.112 - 12.212)	12.172	
delta-BHC	12.632	(12.582 - 12.682)	12.643	
4,4'-DDE	16.273	(16.203 - 16.343)	16.285	
Endosulfan II	18.023	(17.953 - 18.093)	18.035	
Endosulfan sulfate	19.969	(19.899 - 20.039)	19.980	
Endrin aldehyde	18.977	(18.907 - 19.047)	18.988	
Endrin ketone	20.619	(20.549 - 20.689)	20.631	
Heptachlor epoxide	15.449	(15.379 - 15.519)	15.463	
gamma-Chlordane	15.750	(15.680 - 15.820)	15.763	
alpha-Chlordane	16.068	(15.998 - 16.138)	16.082	
Tetrachloro-m-xylene	9.357	(9.330 - 9.430)	9.363	
Decachlorobiphenyl	23.220	(23.152 - 23.352)	23.238	

Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99a.b/Br8081.m
Sample Info : EVALB
Lab ID : EVALB
Inj Date : 12-NOV-1999 21:11
Operator : gds
Cpnd Sublist: END_DDT
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	2.70%
Endrin	11.09%

Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/Bf8081.m
Sample Info : EVALB
Lab ID : EVALB
Inj Date : 12-NOV-1999 21:11
Operator : gds
Cpnd Sublist: END_DDT

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	1.67%
Endrin	6.88%

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/D2B001A_023.d Page 1
Report Date 11/30/1999 10:08

Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/Br8081.m
Sample Info : EVAL B
Lab ID : EVAL B
Inj Date : 13-NOV-1999 07:35
Operator : gds
Cpnd Sublist: END_DDT
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	4.77%
Endrin	7.70%

Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99c.b/Bf8081.m
Sample Info : EVAL B
Lab ID : EVAL B
Inj Date : 13-NOV-1999 07:35
Operator : gds
Cpnd Sublist: END_DDT
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	2.32%
Endrin	5.24%

GAS CHROMATOGRAPHY

ANALYTICAL SEQUENCE

Lab Name: STL/NJ GC Column: RTX-CLP ID: 0.53mm

Init. Calib. Dates: 11/27/99

Instrument ID: HP58902A RR

No.	Sample No.	Lab No.	Date	Time Analyzed	RT (1)	RT (2)
1	INDA L1	INDA L1	11/27/99	0214	9.32	23.18
2	INDA L2	INDA L2	11/27/99	0253	9.33	23.17
3	INDA L3	INDA L3	11/27/99	0332	9.33	23.17
4	INDA L4	INDA L4	11/27/99	0411	9.33	23.18
5	INDA L5	INDA L5	11/27/99	0450	9.33	23.18
6	INDB L1	INDB L1	11/27/99	0529	9.35	23.19
7	INDB L2	INDB L2	11/27/99	0608	9.34	23.19
8	INDB L3	INDB L3	11/27/99	0647	9.34	23.19
9	INDB L4	INDB L4	11/27/99	0726	9.33	23.19
10	INDB L5	INDB L5	11/27/99	0805	9.34	23.19
11	TOX L3	TOX L3	11/27/99	0844	9.33	23.19
12	CHLOR L3	CHLOR L3	11/27/99	0923	9.34	23.18
13	INDA L3	INDA L3	12/03/99	0227	9.32	23.21
14	INDB L3	INDB L3	12/03/99	0306	9.34	23.21
15	WG41661 MB	WG41661 MB	12/03/99	0345	9.33	23.22
16	WG41661 BS	WG41661 BS	12/03/99	0424	9.35	23.23
17	SW-2-1-01	94106006	12/03/99	0621	9.36	23.24
18	SW-2-1-01MS	94106006MS	12/03/99	0700	9.35	23.22
19	SW-2-1-01MSD	94106006MSD	12/03/99	0739	9.35	23.22
20	SW-2-1-02	94106007	12/03/99	0818	9.32	23.19
21	INDA L3	INDA L3	12/03/99	1015	9.32	23.19
22	INDB L3	INDB L3	12/03/99	1054	9.32	23.17
23						
24						
25						

Surrogate (1) = Tetrachloro-m-xylene
Surrogate (2) = Dibutylchlorendate
* = Values outside of QC Limits

GAS CHROMATOGRAPHY

ANALYTICAL SEQUENCE

Lab Name: STL/NJ GC Column: RTX-CLPII ID: 0.53mm

Init. Calib. Dates: 11/27/99

Instrument ID: HP58902B RP

No.	Sample No.	Lab No.	Date	Time Analyzed	RT (1)	RT (2)
1	INDA L1	INDA L1	11/27/99	0214	11.45	29.26
2	INDA L2	INDA L2	11/27/99	0253	11.46	29.24
3	INDA L3	INDA L3	11/27/99	0332	11.46	29.26
4	INDA L4	INDA L4	11/27/99	0411	11.46	29.25
5	INDA L5	INDA L5	11/27/99	0450	11.46	29.26
6	INDB L1	INDB L1	11/27/99	0529	11.48	29.26
7	INDB L2	INDB L2	11/27/99	0608	11.47	29.26
8	INDB L3	INDB L3	11/27/99	0647	11.47	29.26
9	INDB L4	INDB L4	11/27/99	0726	11.47	29.27
10	INDB L5	INDB L5	11/27/99	0805	11.47	29.26
11	TOX L3	TOX L3	11/27/99	0844	11.47	29.25
12	CHLOR L3	CHLOR L3	11/27/99	0923	11.44	29.21
13	INDA L3	INDA L3	12/03/99	0227	11.46	29.24
14	INDB L3	INDB L3	12/03/99	0306	11.47	29.25
15	WG41661 MB	WG41661 MB	12/03/99	0345	11.47	29.25
16	WG41661 BS	WG41661 BS	12/03/99	0424	11.47	29.25
17	SW-2-1-01	94106006	12/03/99	0621	11.49	29.28
18	SW-2-1-01MS	94106006MS	12/03/99	0700	11.46	29.26
19	SW-2-1-01MSD	94106006MSD	12/03/99	0739	11.47	29.26
20	SW-2-1-02	94106007	12/03/99	0818	11.45	29.23
21	INDA L3	INDA L3	12/03/99	1015	11.45	29.22
22	INDB L3	INDB L3	12/03/99	1054	11.44	29.18
23						
24						
25						

Surrogate (1) = Tetrachloro-m-xylene
Surrogate (2) = Dibutylchlorendate
* = Values outside of QC Limits

PEST/PCB EVALUATION STANDARD SUMMARY

RETENTION TIME SHIFT FOR DECACHLOROBIPHENYL/TETRACHLORO-M-XYLENE

Lab Name: STL-NJ

Job No.: 94106

Sequence: S4AS01I/S4AS01C

Instrument ID: HP58904A

GC Column ID: DB1701

Dates of Anlaysis: 10/16/99 11/10/99

CLIENT ID	LAB SAMPLE ID	DATE	TIME	TCX	DCB
CHLORDANE L3	CHLORDANE L3	10/16/99	1522	7.98	30.19
TOXAPHENE L5	TOXAPHENE L5	10/16/99	2101	7.97	30.17
INDA L1	INDA L1	11/09/99	1737	7.98	30.23
INDA L2	INDA L2	11/09/99	1825	7.99	30.23
INDA L3	INDA L3	11/09/99	1914	8.00	30.27
INDA L4	INDA L4	11/09/99	2002	7.98	30.22
INDA L5	INDA L5	11/09/99	2053	7.98	30.22
INDB L1	INDB L1	11/09/99	2143	7.99	30.22
INDB L2	INDB L2	11/09/99	2234	7.99	30.22
INDB L3	INDB L3	11/09/99	2325	7.99	30.24
INDB L4	INDB L4	11/10/99	0015	8.00	30.24
INDB L5	INDB L5	11/10/99	0106	7.98	30.24

TCX = TETRACHLORO-M-XYLENE
DCB = DECACHLOROBIPHENYL
* = Values outside of QC Limits

PEST/PCB EVALUATION STANDARD SUMMARY

RETENTION TIME SHIFT FOR DECACHLOROBIPHENYL/TETRACHLORO-M-XYLENE

Lab Name: STL-NJ

Job No.: 94106 Sequence: S4AS01J

Instrument ID: HP58904A GC Column ID: DB1701

Dates of Anlaysis: 11/24/99

CLIENT ID	LAB SAMPLE ID	DATE	TIME	TCX	DCB
INDA L3	INDA L3	11/24/99	0917	8.04	30.30
INDB L3	INDB L3	11/24/99	1005	8.04	30.30
S-2-1-01	94106008	11/24/99	1708	8.01	30.24
S-2-1-02	94106009	11/24/99	1756	8.01	30.25
METHOD BLANK	WG41651 MB	11/24/99	1932	8.02	30.28
INDA L3	INDA L3	11/24/99	2108	8.01	30.24
INDB L3	INDB L3	11/24/99	2156	8.01	30.25

TCX = TETRACHLORO-M-XYLENE
DCB = DECACHLOROBIPHENYL
* = Values outside of QC Limits

PEST/PCB EVALUATION STANDARD SUMMARY

RETENTION TIME SHIFT FOR DECACHLOROBIPHENYL/TETRACHLORO-M-XYLENE

Lab Name: STL-NJ

Job No.: 94106

Sequence: S4BS01I/S4BS01C

Instrument ID: HP58904B

GC Column ID: DB608

Dates of Anlaysis: 10/16/99 11/10/99

CLIENT ID	LAB SAMPLE ID	DATE	TIME	TCX	DCB
CHLORDANE L3	CHLORDANE L3	10/16/99	1433	10.01	37.13
TOXAPHENE L5	TOXAPHENE L5	10/16/99	2013	10.00	37.11
INDA L1	INDA L1	11/09/99	1648	10.01	37.23
INDA L2	INDA L2	11/09/99	1737	9.99	37.24
INDA L3	INDA L3	11/09/99	1825	9.99	37.23
INDA L4	INDA L4	11/09/99	1914	10.02	37.28
INDA L5	INDA L5	11/09/99	2002	9.98	37.23
INDB L1	INDB L1	11/09/99	2053	9.99	37.22
INDB L2	INDB L2	11/09/99	2143	9.98	37.22
INDB L3	INDB L3	11/09/99	2234	9.99	37.22
INDB L4	INDB L4	11/09/99	2325	9.99	37.25
INDB L5	INDB L5	11/10/99	0015	10.01	37.22

TCX = TETRACHLORO-M-XYLENE
DCB = DECACHLOROBIPHENYL
* = Values outside of QC Limits

PEST/PCB EVALUATION STANDARD SUMMARY

RETENTION TIME SHIFT FOR DECACHLOROBIPHENYL/TETRACHLORO-M-XYLENE

Lab Name: STL-NJ

Job No.: 94106 Sequence: S4BS01J

Instrument ID: HP58904B GC Column ID: DB608

Dates of Anlaysis: 11/24/99

CLIENT ID	LAB SAMPLE ID	DATE	TIME	TCX	DCB
INDA L3	INDA L3	11/24/99	0825	10.03	37.22
INDB L3	INDB L3	11/24/99	0917	10.04	37.23
S-2-1-01	94106008	11/24/99	1620	10.04	37.20
S-2-1-02	94106009	11/24/99	1708	10.03	37.16
METHOD BLANK	WG41651 MB	11/24/99	1844	10.03	37.22
INDA L3	INDA L3	11/24/99	2020	10.04	37.23
INDB L3	INDB L3	11/24/99	2108	10.02	37.19

TCX = TETRACHLORO-M-XYLENE
DCB = DECACHLOROBIPHENYL
* = Values outside of QC Limits

PEST/PCB EVALUATION STANDARD SUMMARY

RETENTION TIME SHIFT FOR TETRACHLORO-M-XYLENE/DECACHLOROBIPHENYL

Lab Name: STL-NJ

Job No.: _____ Sequence: S2B001I/S2B001A

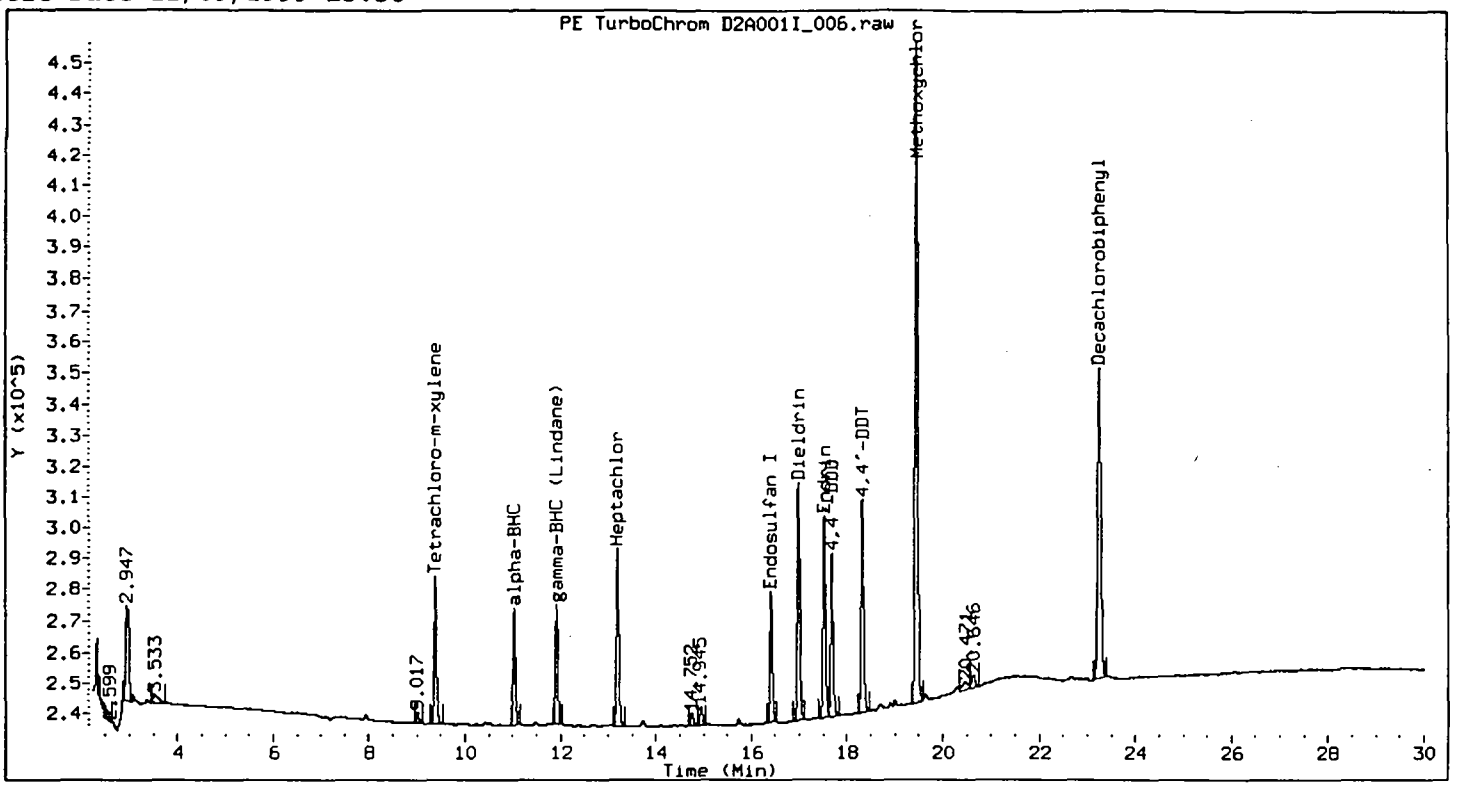
Instrument ID: HP58902B GC Column ID: RTX-CLP II

Dates of Anlaysis: 11/11/99 11/12/99

No	CLIENT ID	LAB SAMPLE ID	DATE	TIME	TCX RT	DCB RT
1	EVAL B	EVAL B	11/11/99	1959	11.49	29.30
2	INDA L1	INDA L1	11/11/99	2038	11.48	29.30
3	INDA L2	INDA L2	11/11/99	2117	11.49	29.29
4	INDA L3	INDA L3	11/11/99	2156	11.48	29.29
5	INDA L4	INDA L4	11/11/99	2235	11.48	29.28
6	INDA L5	INDA L5	11/11/99	2314	11.46	29.26
7	INDB L1	INDB L1	11/11/99	2353	11.45	29.24
8	INDB L2	INDB L2	11/12/99	0032	11.45	29.27
9	INDB L3	INDB L3	11/12/99	0111	11.45	29.23
10	INDB L4	INDB L4	11/12/99	0150	11.45	29.23
11	INDB L5	INDB L5	11/12/99	0229	11.45	29.26
12	TOXAPHENE L3	TOXAPHENE L3	11/12/99	0346	11.45	29.25
13	CHLORDANE L3	CHLORDANE L3	11/12/99	0425	11.44	29.23
14	INDA L3	INDA L3	11/12/99	1954	11.47	29.30
15	INDB L3	INDB L3	11/12/99	2032	11.48	29.29
16	METHOD BLANK	WG41651 MB	11/12/99	2308	11.48	29.28
17	BLANK SPIKE	WG41651 BS	11/12/99	2347	11.48	29.30
18	INDA L3	INDA L3	11/13/99	0814	11.48	29.28
19	INDB L3	INDB L3	11/13/99	0853	11.47	29.28
20	MW3DSO44MS	94023002MS	11/13/99	1011	11.47	29.28
21	MW3DSO44MSD	94023003MSD	11/13/99	1051	11.47	29.26
22	INDA L3	INDA L3	11/13/99	1837	11.46	29.24
23	INDB L3	INDB L3	11/13/99	1916	11.46	29.26
24						
25						
26						

Surrogate (1) = TETRACHLORO-M-XYLENE
Surrogate (2) = DECACHLOROBIPHENYL
* = Values outside of QC Limits

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_006.d Page 1 **000405**
Report Date 12/09/1999 15:58



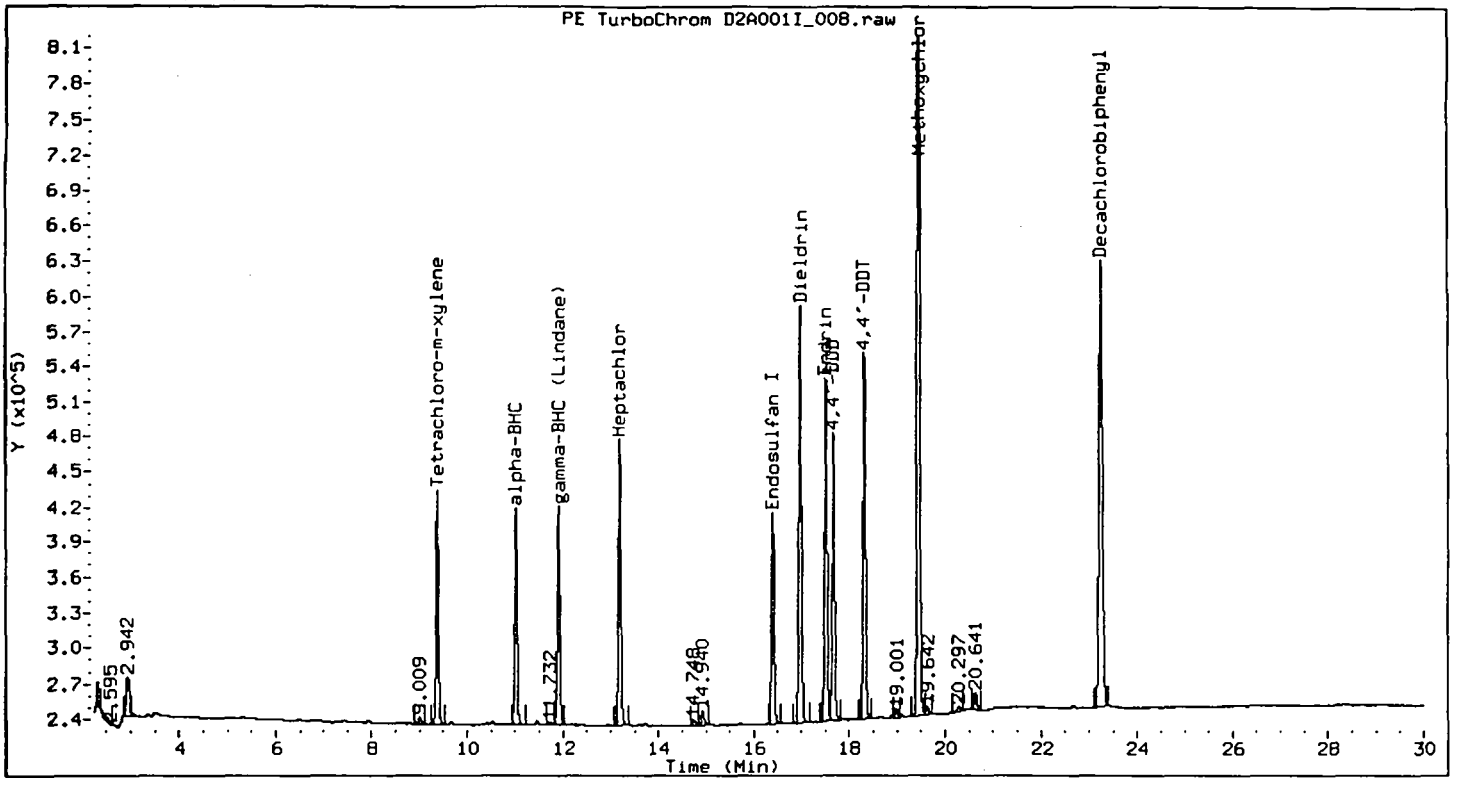
Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDA L1
Lab ID : INDA L1 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 20:38 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_1

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	11.036	11.029	0.007	126901	4.097	4.097
gamma-BHC (Lindane)	11.928	11.921	0.007	132533	4.203	4.203
4,4'-DDD	17.683	17.677	0.005	192775	8.951	8.951
4,4'-DDT	18.326	18.320	0.006	255162	9.208	9.208
Dieldrin	16.988	16.983	0.005	284702	9.056	9.056
Endosulfan I	16.413	16.408	0.005	155284	4.759	4.759
Endrin	17.523	17.517	0.006	247346	9.370	9.370
Heptachlor	13.203	13.196	0.007	206949	4.890	4.890
Methoxychlor	19.456	19.451	0.005	770617	51.363	51.363

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.387	9.380	0.007	162925	4.963	4.963
Decachlorobiphenyl	23.257	23.253	0.004	479276	10.864	10.864

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	9.393	9.380	0.013	328075	9.929	9.929
Decachlorobiphenyl	23.258	23.253	0.005	946620	21.249	21.249

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_008.d Page 1
Report Date 12/09/1999 15:59



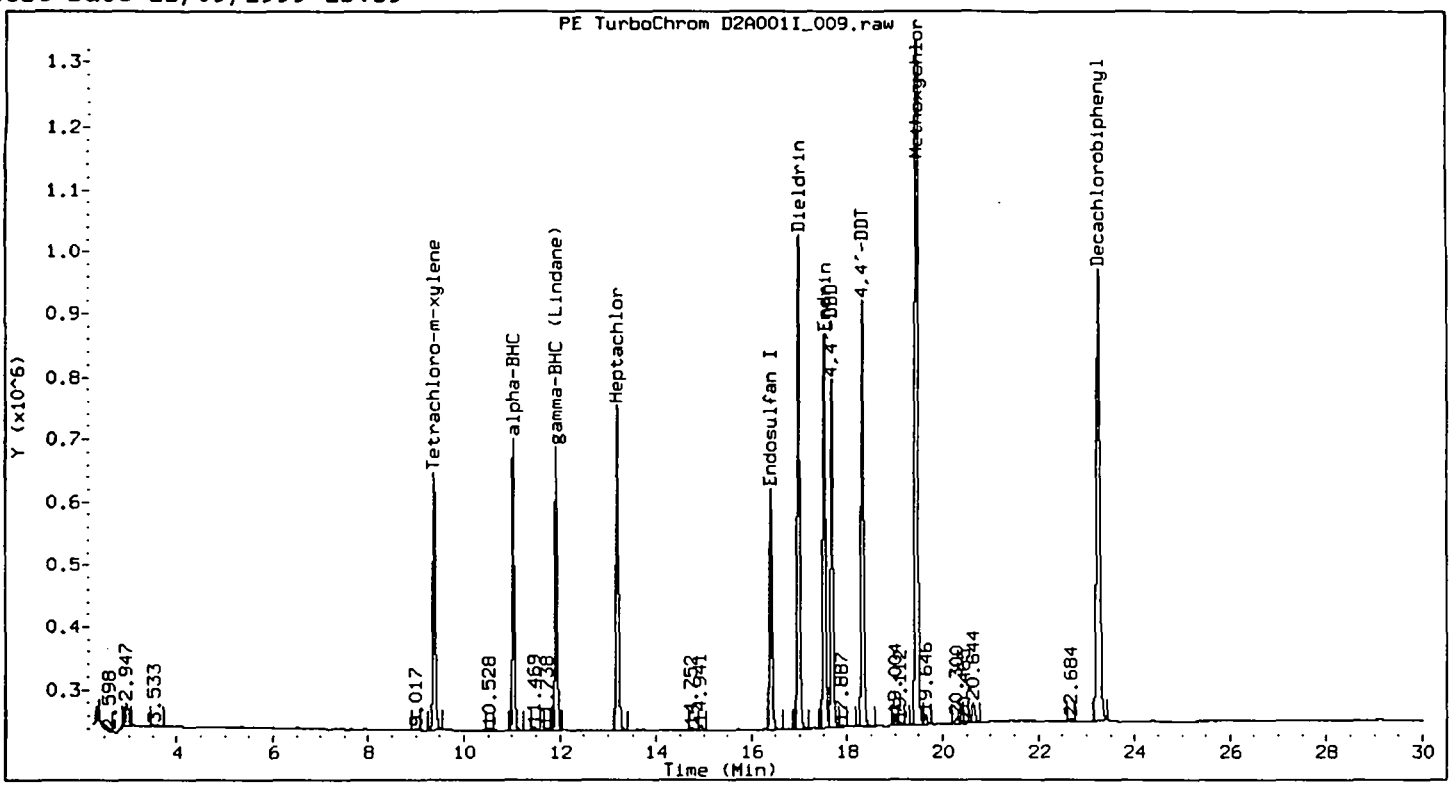
Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDA L3
Lab ID : INDA L3
Inj Date : 11-NOV-1999 21:56
Operator : gds
Cpnd Sublist: INDA

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	11.029	11.029	0.000	584836	18.880	18.880
gamma-BHC (Lindane)	11.921	11.921	0.000	609603	19.330	19.330
4,4'-DDD	17.677	17.677	0.000	851314	39.528	39.528
4,4'-DDT	18.320	18.320	0.000	1109601	40.042	40.042
Dieldrin	16.983	16.983	0.000	1253872	39.885	39.885
Endosulfan I	16.408	16.408	0.000	654237	20.049	20.049
Endrin	17.517	17.517	0.000	1055942	40.000	40.000
Heptachlor	13.196	13.196	0.000	847201	20.017	20.017
Methoxychlor	19.451	19.451	0.000	3083428	205.515	205.515

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.380	9.380	0.000	661286	19.979	19.979
Decachlorobiphenyl	23.253	23.253	0.000	1845530	41.225	41.225

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_009.d Page 1
Report Date 12/09/1999 15:59



Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDA L4
Lab ID : INDA L4
Inj Date : 11-NOV-1999 22:35
Operator : gds
Cpnd Sublist: INDA

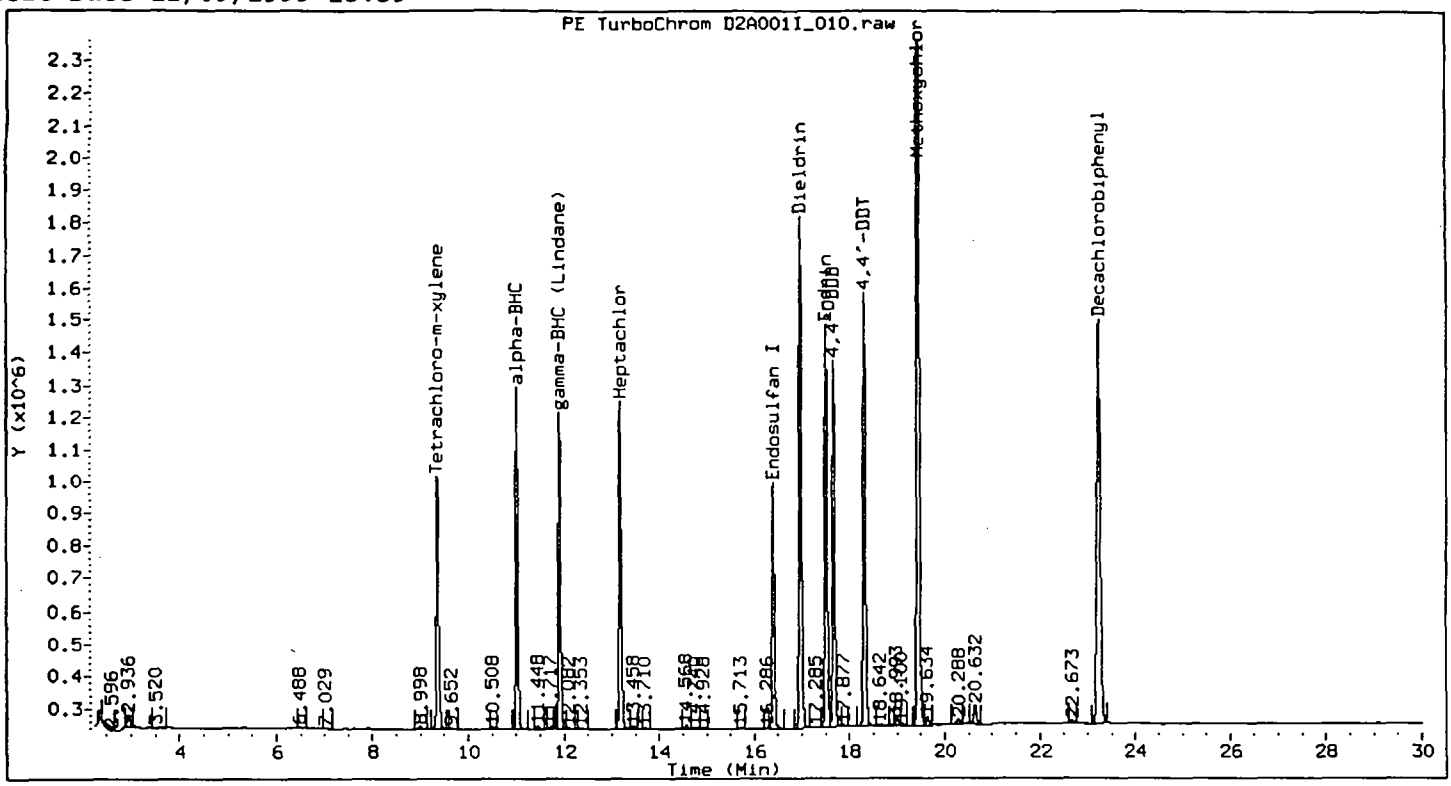
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	11.037	11.029	0.008	1391302	44.914	44.914
gamma-BHC (Lindane)	11.928	11.921	0.008	1409207	44.686	44.686
4,4'-DDD	17.680	17.677	0.003	1863051	86.505	86.505
4,4'-DDT	18.323	18.320	0.003	2377896	85.811	85.811
Dieldrin	16.985	16.983	0.002	2714022	86.332	86.332
Endosulfan I	16.410	16.408	0.002	1362428	41.751	41.751
Endrin	17.520	17.517	0.003	2235285	84.675	84.675
Heptachlor	13.200	13.196	0.004	1746320	41.260	41.260
Methoxychlor	19.453	19.451	0.003	6022465	401.405	401.405

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_009.d Page 2
Report Date 12/09/1999 15:59

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.387	9.380	0.007	1335529	40.359	40.359
Decachlorobiphenyl	23.252	23.253	0.001	3512861	78.065	78.065

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_010.d Page 1
Report Date 12/09/1999 15:59

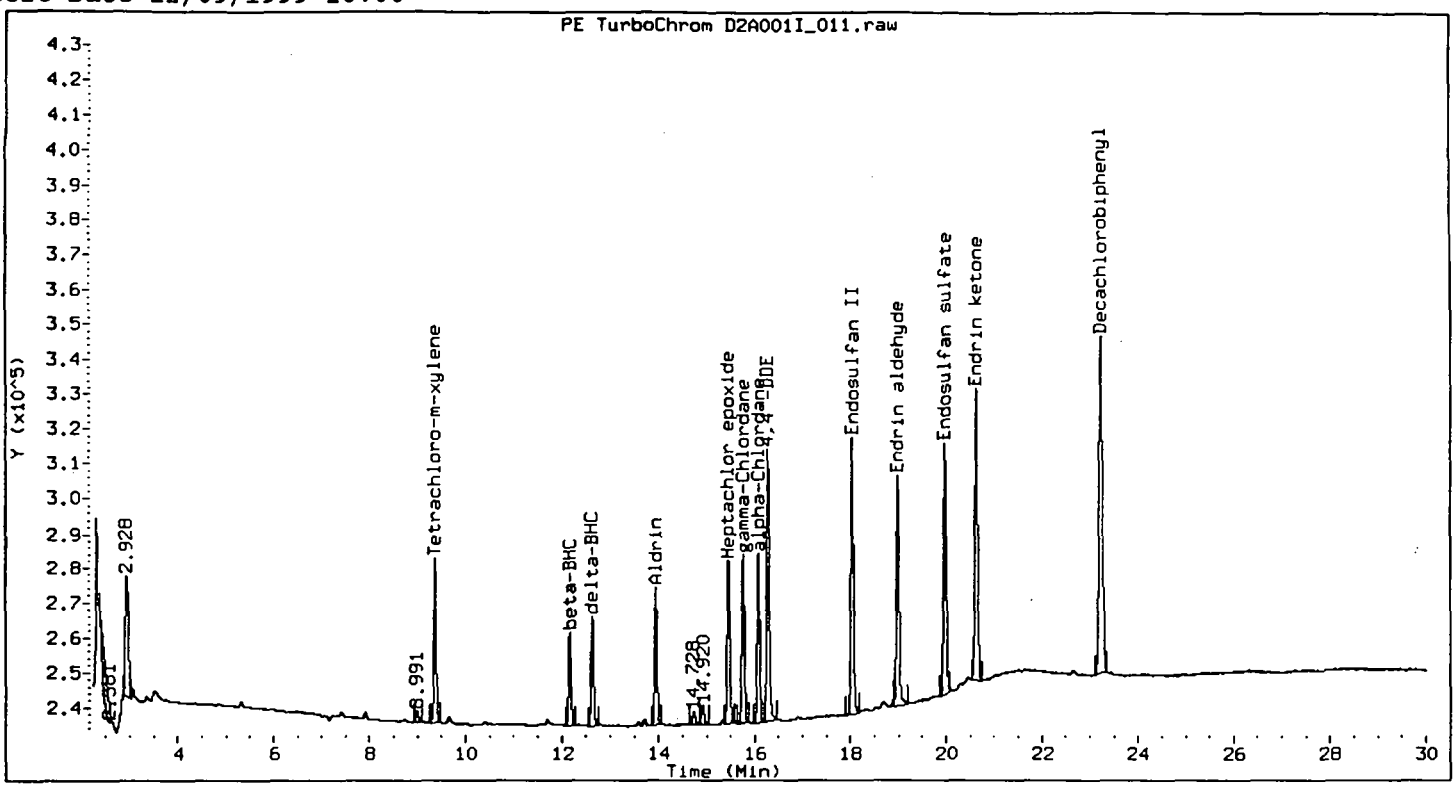


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDA L5
Lab ID : INDA L5 | Inst ID : HP58902.i
Inj Date : 11-NOV-1999 23:14 | Dil Factor : 1
Operator : gds | Sample Matrix : SOIL
Cpnd Sublist: INDA | Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	11.016	11.029	0.013	3124717	100.871	100.871
gamma-BHC (Lindane)	11.907	11.921	0.014	3028551	96.035	96.035
4,4'-DDD	17.669	17.677	0.008	3778190	175.428	175.428
4,4'-DDT	18.312	18.320	0.008	4667179	168.424	168.424
Dieldrin	16.973	16.983	0.011	5418789	172.370	172.370
Endosulfan I	16.398	16.408	0.011	2653463	81.314	81.314
Endrin	17.508	17.517	0.009	4402751	166.781	166.781
Heptachlor	13.181	13.196	0.015	3396208	80.242	80.242
Methoxychlor	19.442	19.451	0.008	10894257	726.117	726.117

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.367	9.380	0.013	2533868	77.480	77.480
Decachlorobiphenyl	23.235	23.253	0.018	6159257	137.604	137.604

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_011.d Page 1
Report Date 12/09/1999 16:00

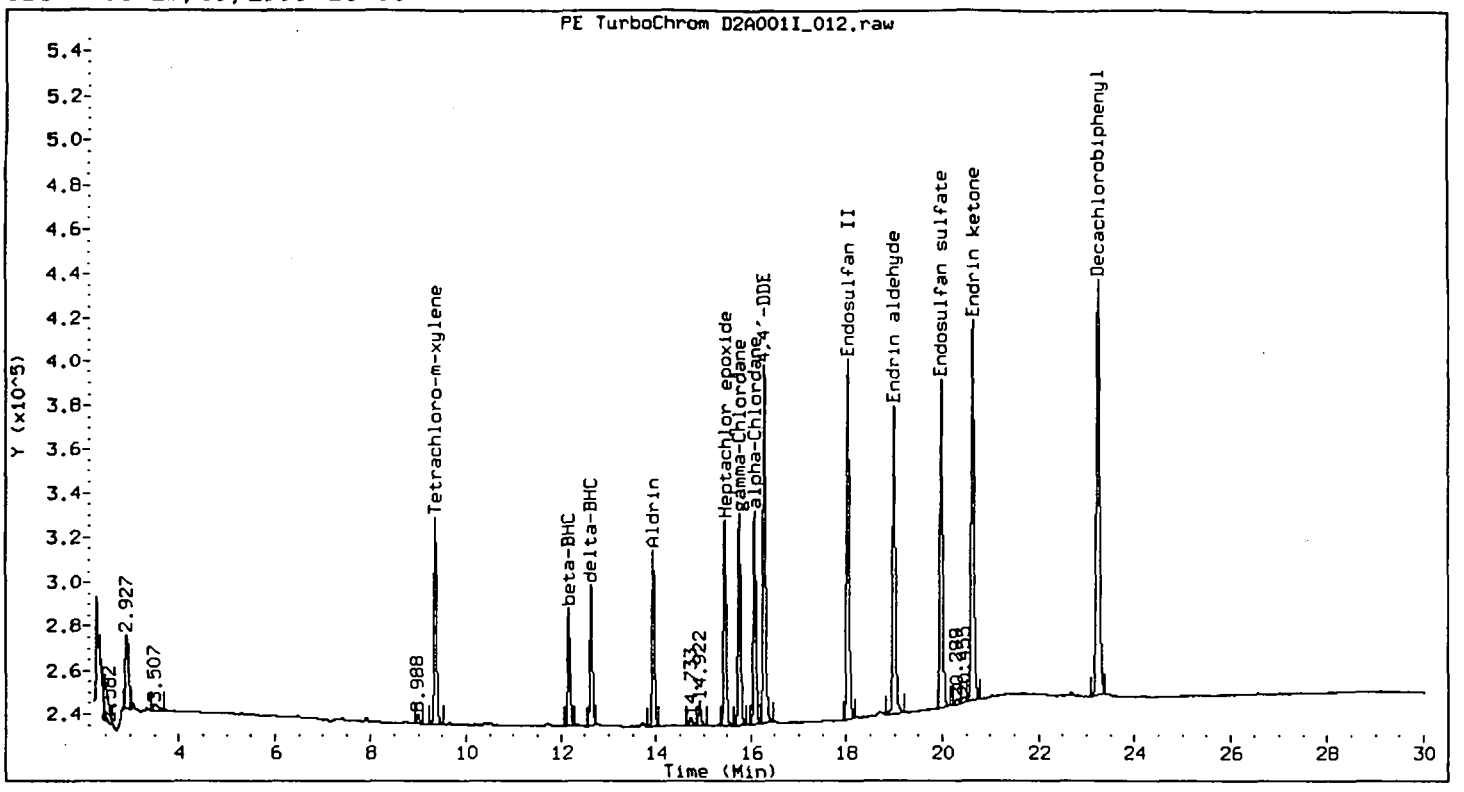


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDB L1
Lab ID : INDB L1 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 23:53 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_1

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.939	13.937	0.002	141453	4.539	4.539
beta-BHC	12.165	12.162	0.003	94714	4.802	4.802
delta-BHC	12.633	12.632	0.002	110156	4.193	4.193
4,4'-DDE	16.277	16.273	0.005	279023	8.924	8.924
Endosulfan II	18.031	18.023	0.008	303482	9.501	9.501
Endosulfan sulfate	19.977	19.969	0.008	277176	9.476	9.476
Endrin aldehyde	18.985	18.977	0.008	262336	9.527	9.527
Endrin ketone	20.627	20.619	0.007	335262	9.289	9.289
Heptachlor epoxide	15.453	15.449	0.004	169267	4.769	4.769

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.756	15.750	0.006	181757	4.997	4.997
alpha-Chlordane	16.074	16.068	0.006	176389	4.841	4.841
Tetrachloro-m-xylene	9.360	9.380	0.020	160544	4.923	4.923
Decachlorobiphenyl	23.230	23.253	0.023	460277	10.371	10.371

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_012.d Page 1
Report Date 12/09/1999 16:00

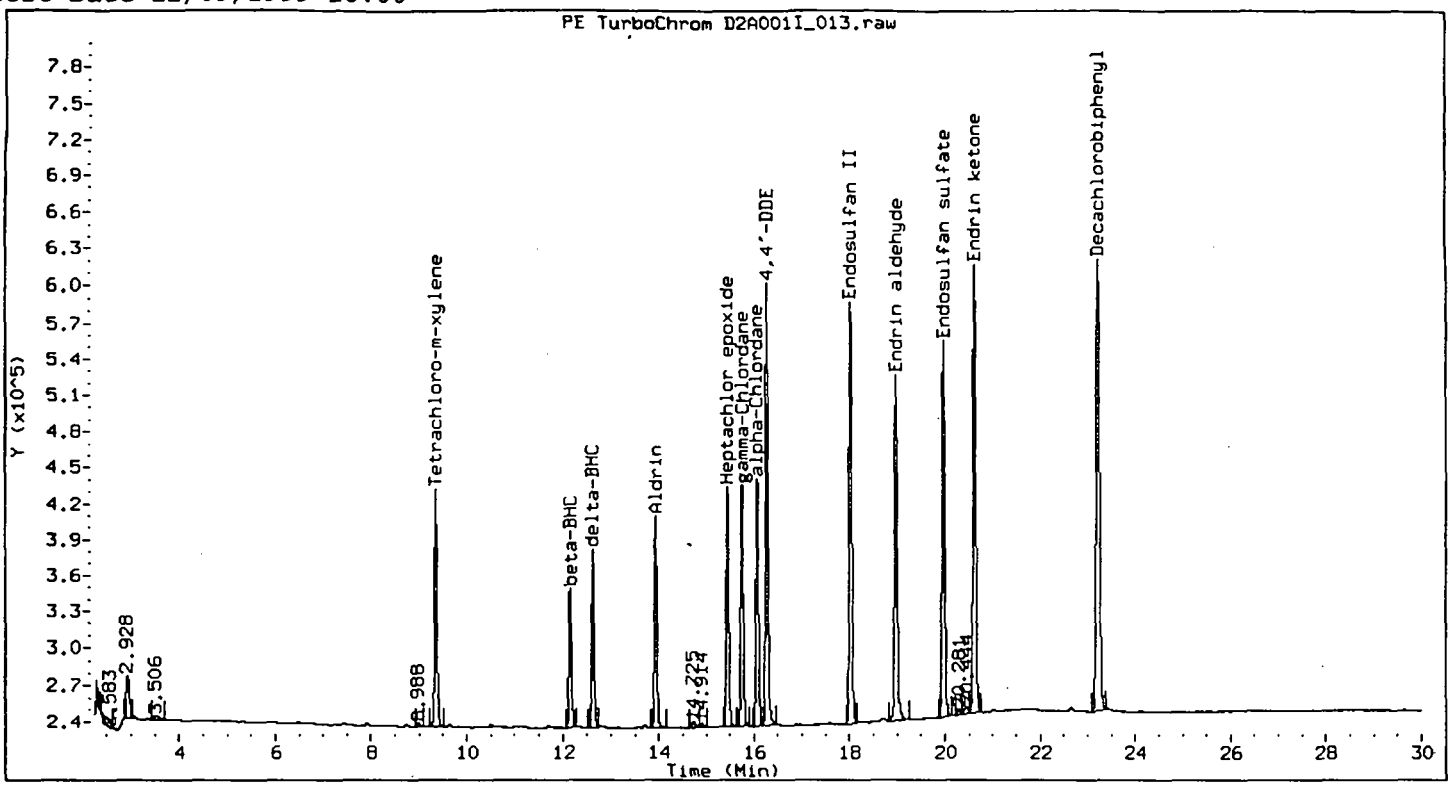


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDB L2
Lab ID : INDB L2 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 00:32 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.943	13.937	0.006	282402	9.063	9.063
beta-BHC	12.167	12.162	0.005	188465	9.555	9.555
delta-BHC	12.636	12.632	0.004	220511	8.394	8.394
4,4'-DDE	16.281	16.273	0.008	567996	18.167	18.167
Endosulfan II	18.036	18.023	0.012	608315	19.044	19.044
Endosulfan sulfate	19.984	19.969	0.015	571695	19.546	19.546
Endrin aldehyde	18.992	18.977	0.014	555224	20.163	20.163
Endrin ketone	20.636	20.619	0.017	699978	19.395	19.395
Heptachlor epoxide	15.457	15.449	0.008	338741	9.545	9.545

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.759	15.750	0.009	355360	9.770	9.770
alpha-Chlordane	16.077	16.068	0.008	350634	9.623	9.623
Tetrachloro-m-xylene	9.358	9.380	0.022	317253	9.794	9.794
Decachlorobiphenyl	23.243	23.253	0.009	903308	20.554	20.554

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_013.d Page 1
Report Date 12/09/1999 16:00



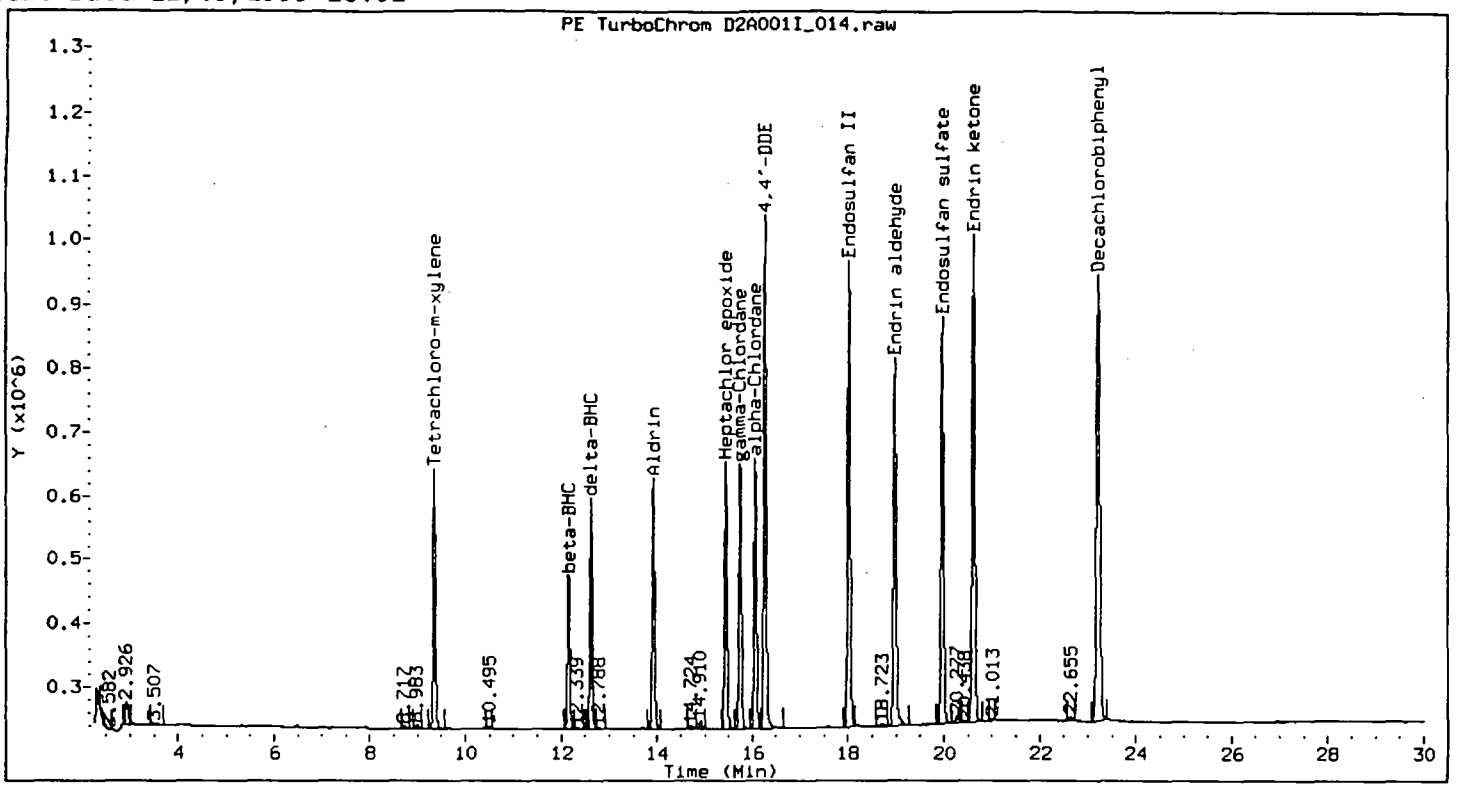
Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDB L3
Lab ID : INDB L3
Inj Date : 12-NOV-1999 01:11
Operator : gds
Cpnd Sublist: INDB

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.937	13.937	0.000	607120	19.483	19.483
beta-BHC	12.162	12.162	0.000	392192	19.883	19.883
delta-BHC	12.632	12.632	0.000	490409	18.669	18.669
4,4'-DDE	16.273	16.273	0.000	1241419	39.706	39.706
Endosulfan II	18.023	18.023	0.000	1286155	40.265	40.265
Endosulfan sulfate	19.969	19.969	0.000	1184125	40.485	40.485
Endrin aldehyde	18.977	18.977	0.000	1137998	41.326	41.326
Endrin ketone	20.619	20.619	0.000	1466965	40.647	40.647
Heptachlor epoxide	15.449	15.449	0.000	706414	19.904	19.904

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.750	15.750	0.000	715730	19.677	19.677
alpha-Chlordane	16.068	16.068	0.000	728535	19.994	19.994
Tetrachloro-m-xylene	9.357	9.380	0.023	655597	20.275	20.275
Decachlorobiphenyl	23.220	23.253	0.033	1801895	41.206	41.206

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_014.d Page 1
Report Date 12/09/1999 16:01

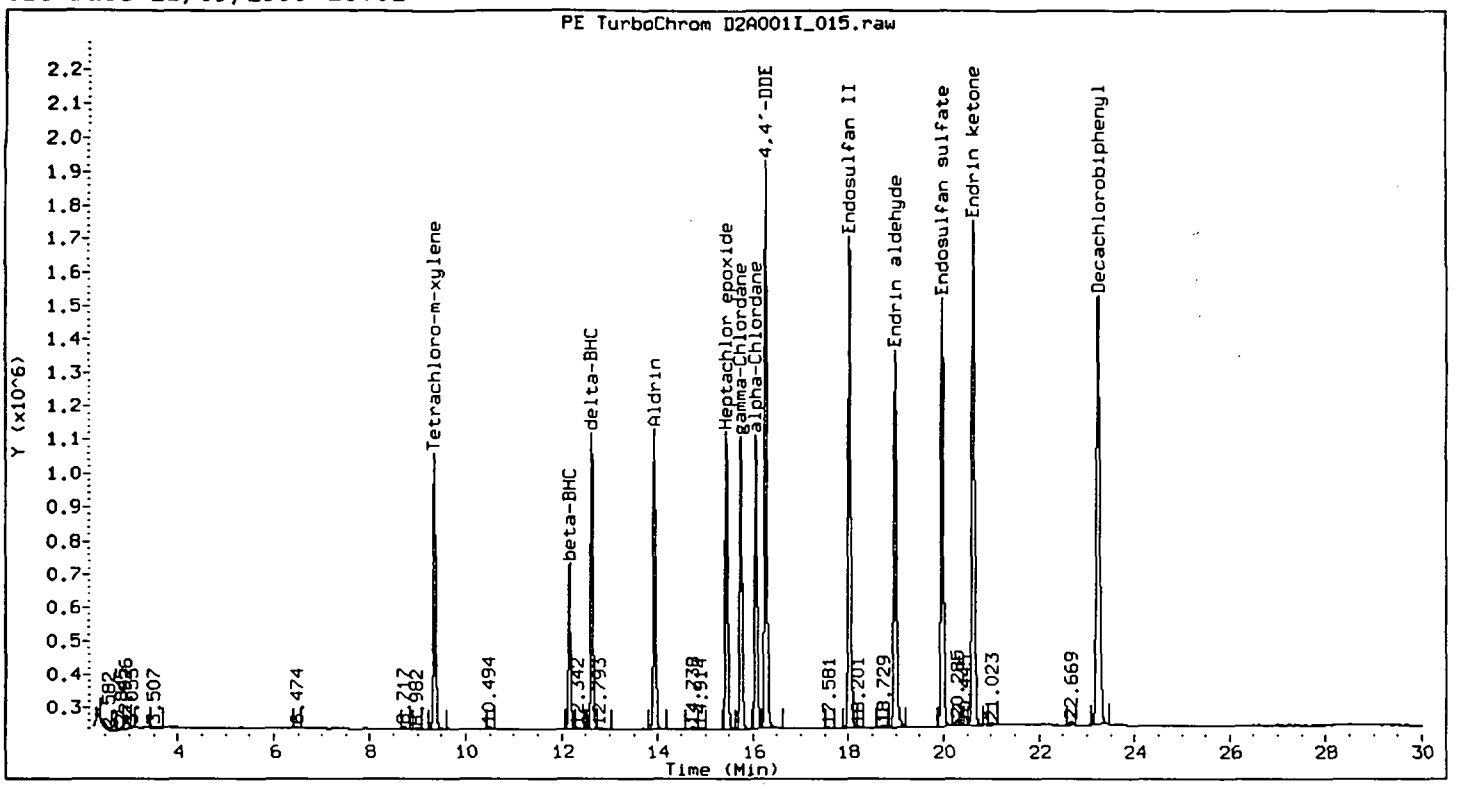


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDB L4
Lab ID : INDB L4 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 01:50 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.932	13.937	0.004	1303638	41.835	41.835
beta-BHC	12.158	12.162	0.003	813082	41.222	41.222
delta-BHC	12.628	12.632	0.003	1137993	43.321	43.321
4,4'-DDE	16.268	16.273	0.004	2698325	86.304	86.304
Endosulfan II	18.021	18.023	0.003	2647731	82.890	82.890
Endosulfan sulfate	19.966	19.969	0.003	2409308	82.373	82.373
Endrin aldehyde	18.974	18.977	0.003	2237058	81.237	81.237
Endrin ketone	20.616	20.619	0.003	3007378	83.329	83.329
Heptachlor epoxide	15.445	15.449	0.004	1461090	41.169	41.169

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.746	15.750	0.004	1469687	40.406	40.406
alpha-Chlordane	16.064	16.068	0.004	1494583	41.018	41.018
Tetrachloro-m-xylene	9.352	9.380	0.028	1336866	41.336	41.336
Decachlorobiphenyl	23.218	23.253	0.035	3419864	78.623	78.623

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_015.d Page 1
Report Date 12/09/1999 16:01



Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDB L5
Lab ID : INDB L5
Inj Date : 12-NOV-1999 02:29
Operator : gds
Cpnd Sublist: INDB

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_5

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin		13.937	13.937	0.000	2906269	93.266	93.266
beta-BHC		12.161	12.162	0.001	1671805	84.757	84.757
delta-BHC	(M)	12.632	12.632	0.000	2742428	104.407	104.407
4,4'-DDE		16.271	16.273	0.002	5641620	180.443	180.443
Endosulfan II		18.023	18.023	0.000	5391745	168.795	168.795
Endosulfan sulfate		19.973	19.969	0.003	4835547	165.325	165.325
Endrin aldehyde		18.979	18.977	0.002	4364629	158.498	158.498
Endrin ketone		20.623	20.619	0.004	6025779	166.963	166.963
Heptachlor epoxide		15.448	15.449	0.001	3030134	85.379	85.379

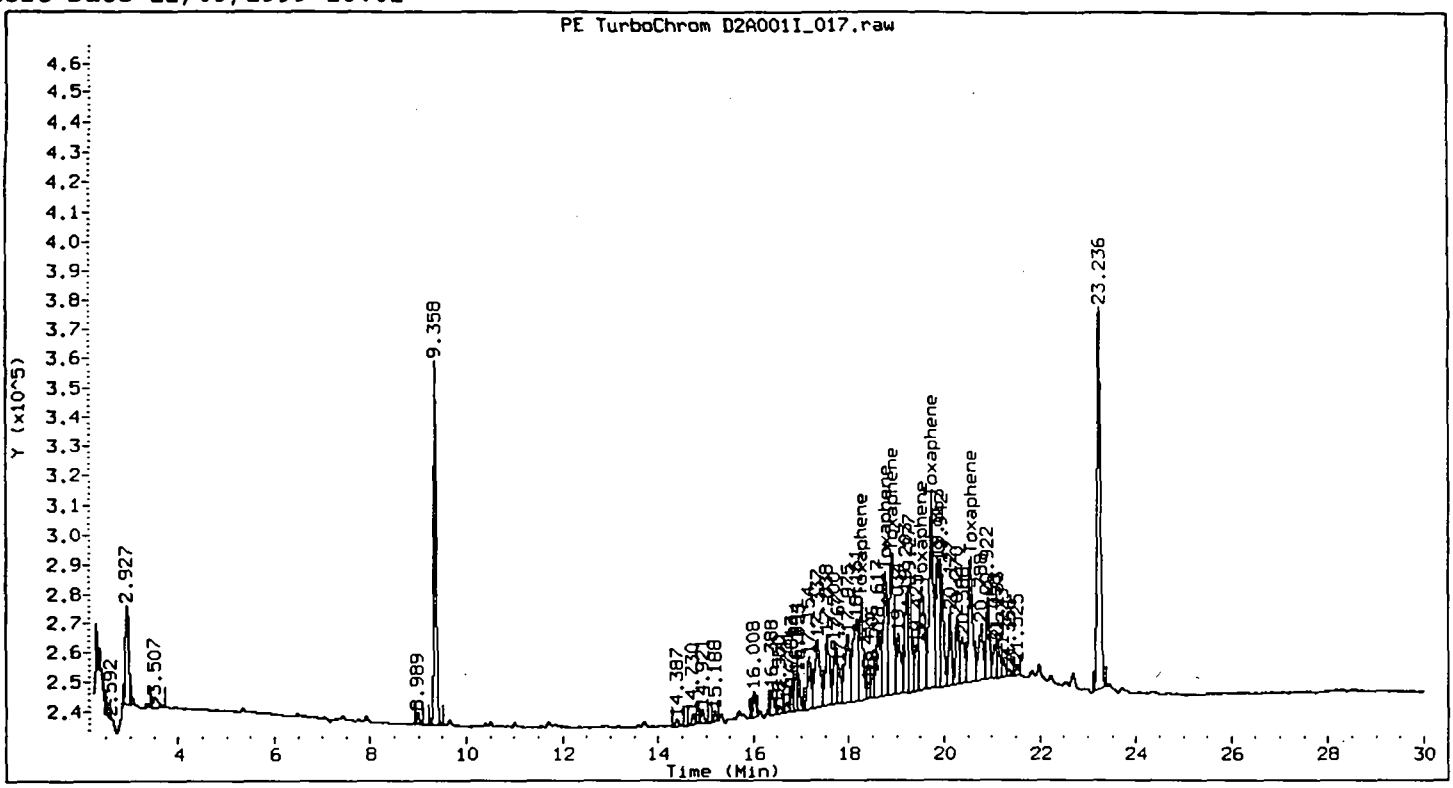
Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_015.d Page 2
Report Date 12/09/1999 16:01

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.749	15.750	0.001	2996032	82.369	82.369
alpha-Chlordane	16.067	16.068	0.001	3044190	83.547	83.547
Tetrachloro-m-xylene	9.351	9.380	0.029	2689028	82.159	82.159
Decachlorobiphenyl	23.233	23.253	0.020	6350169	145.195	145.195

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_017.d Page 1
Report Date 12/09/1999 16:02

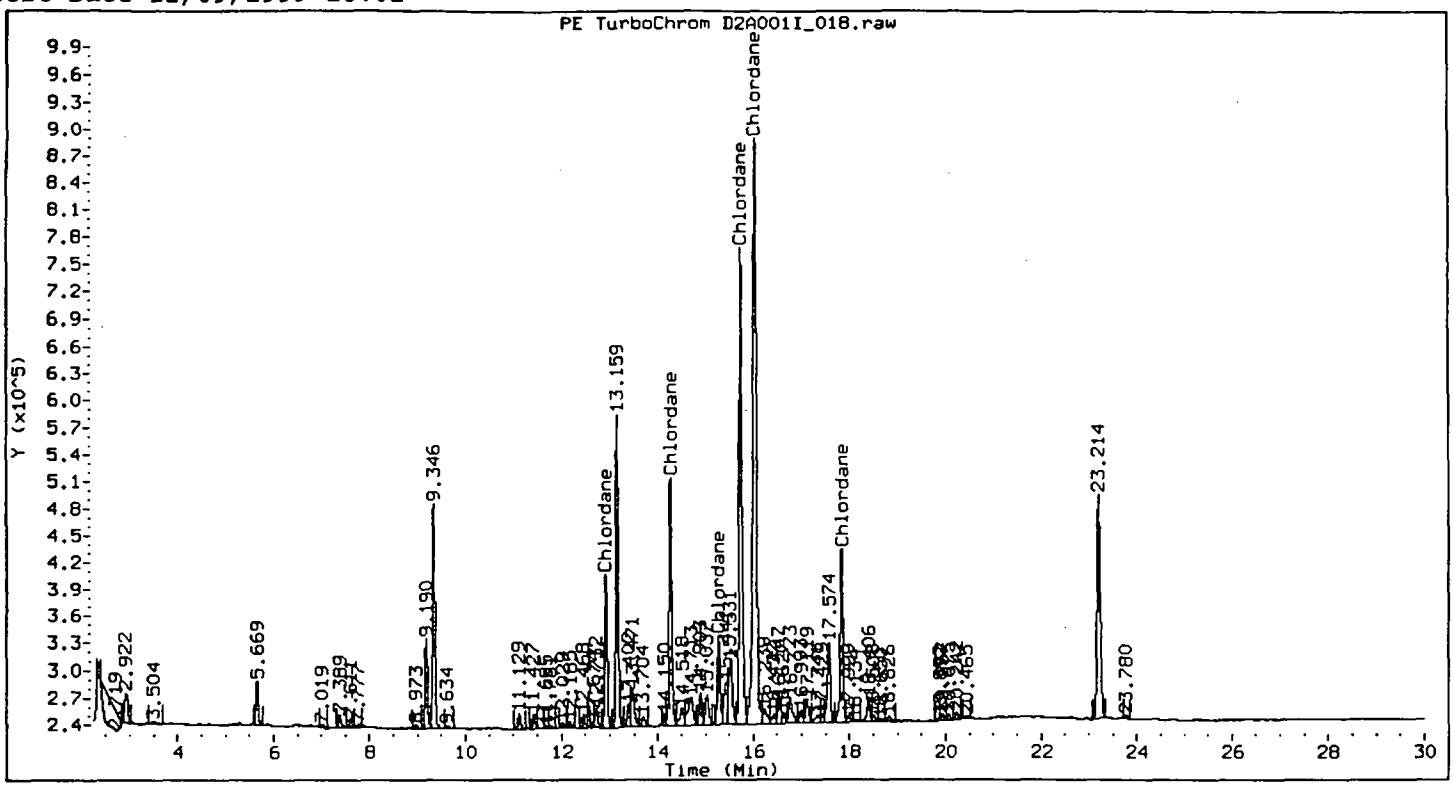


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : TOX L3
Lab ID : TOX L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 03:46 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: TOXAPH0 Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Toxaphene	18.262	18.262	0.000	168549	1500.000	1500.000
(2)	18.765	18.765	0.000	259904	1500.000	1500.000
(3)	18.910	18.910	0.000	316155	1500.000	1500.000
(4)	19.527	19.527	0.000	269217	1500.000	1500.000
(5)	19.733	19.733	0.000	375003	1500.000	1500.000
(6)	20.556	20.556	0.000	263259	1500.000	1500.000

Average of peak concentrations: 1500.00

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_018.d Page 1
Report Date 12/09/1999 16:02

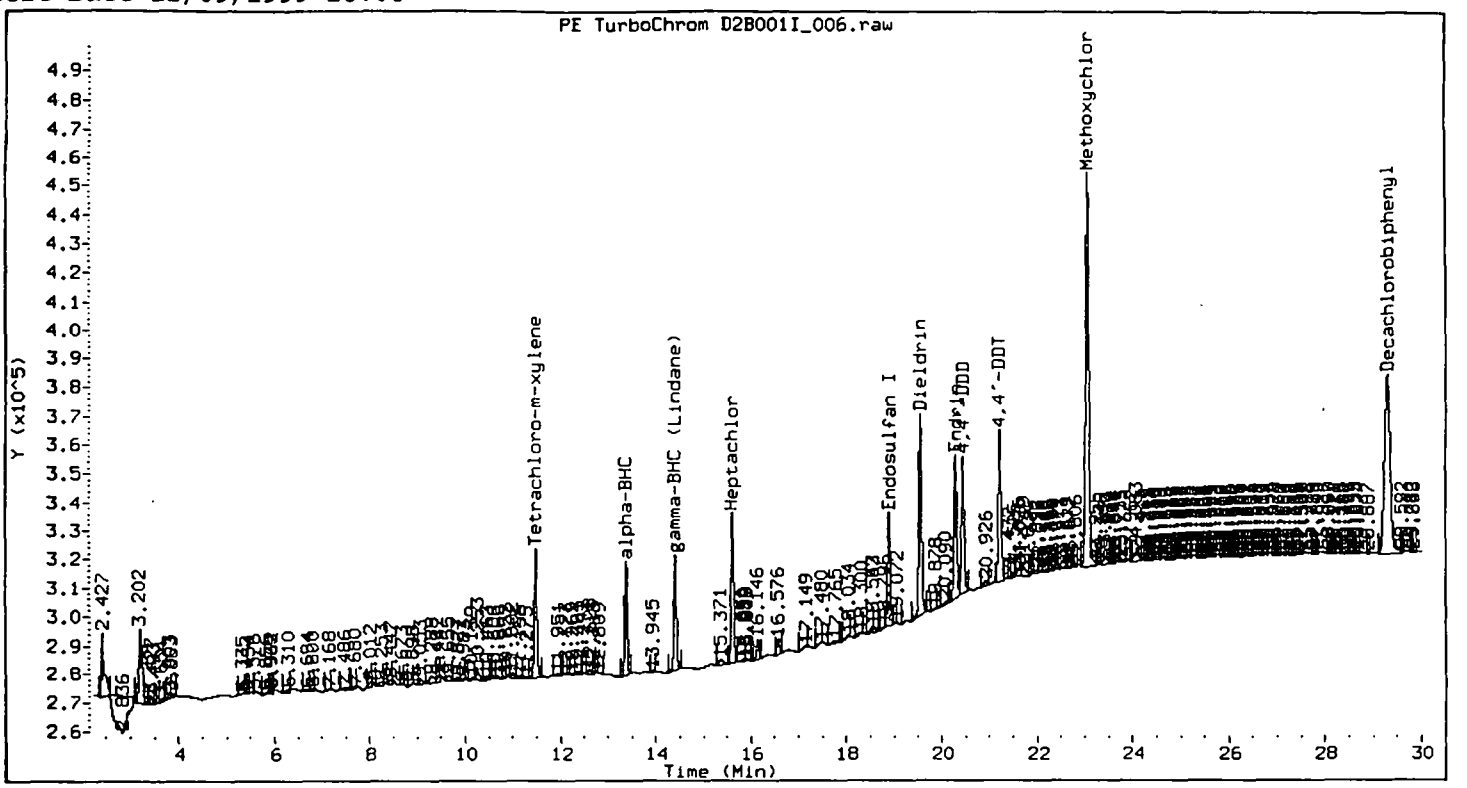


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : CHLOR L3
Lab ID : CHLOR L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 04:25 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: CHLORDANE Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Chlordane	12.932	12.932	0.000	586131	500.000	500.000
(2)	14.277	14.277	0.000	1059432	500.000	500.000
(3)	15.743	15.743	0.000	2149188	500.000	500.000
(4)	16.040	16.040	0.000	3507346	500.000	500.000
(5)	17.843	17.843	0.000	776455	500.000	500.000
(6)	15.285	15.285	0.000	366051	500.000	500.000

Average of peak concentrations: 500.00

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_006.d Page 1
Report Date 12/09/1999 16:08



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDA L1
Lab ID : INDA L1
Inj Date : 11-NOV-1999 20:38
Operator : gds
Cpnd Sublist: INDA

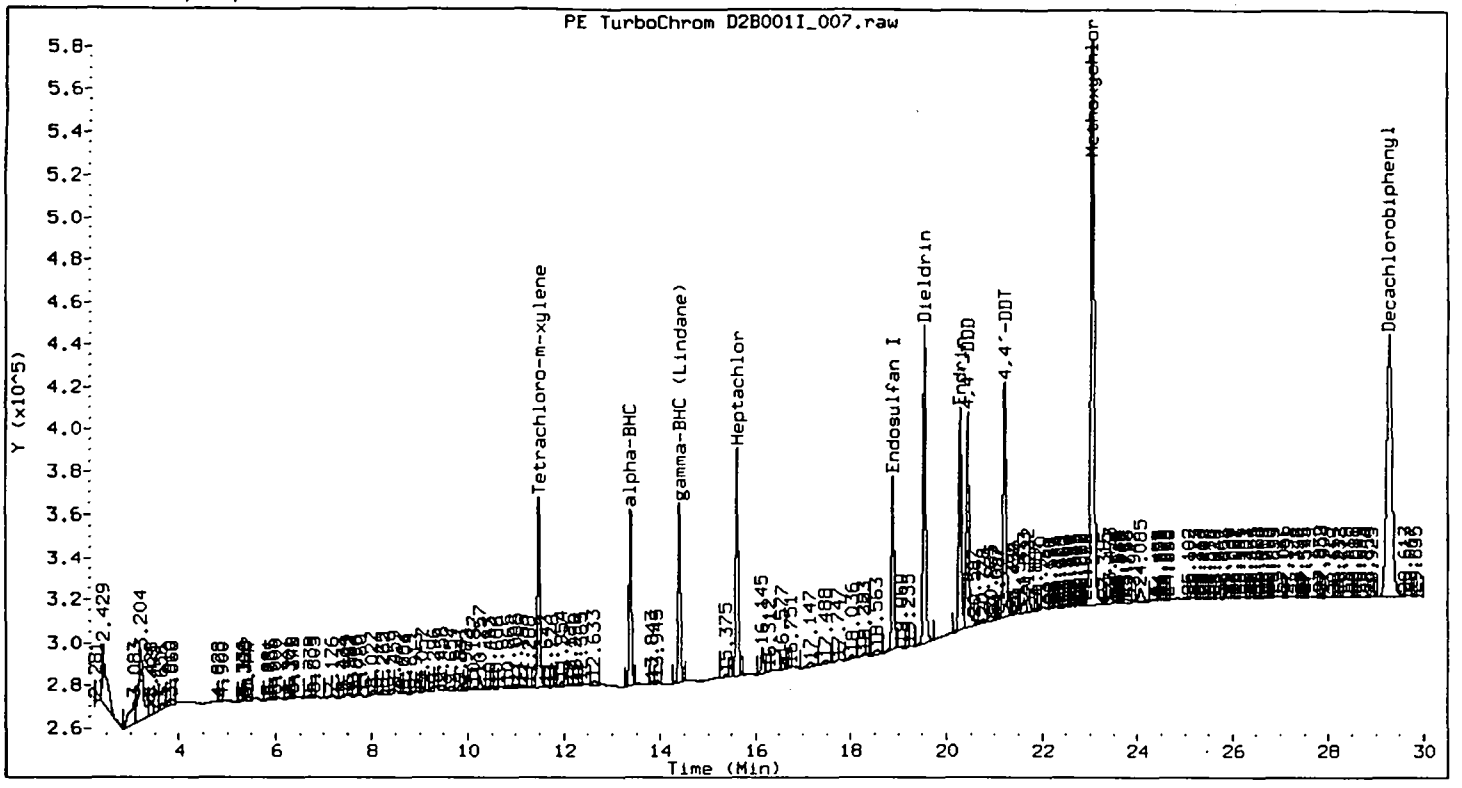
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_1

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	13.383	13.379	0.004	137635	4.289	4.289
gamma-BHC (Lindane)	14.407	14.402	0.004	147824	4.513	4.513
4,4'-DDD	20.445	20.442	0.003	188656	8.938	8.938
4,4'-DDT	21.219	21.218	0.001	214727	8.972	8.972
Dieldrin	19.547	19.543	0.004	278089	9.035	9.035
Endosulfan I	18.887	18.883	0.003	150458	4.708	4.708
Endrin	20.288	20.286	0.003	200963	9.301	9.301
Heptachlor	15.615	15.610	0.005	194716	4.890	4.890
Methoxychlor	23.060	23.057	0.003	655434	48.752	48.752

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_006.d Page 2
Report Date 12/09/1999 16:08

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	11.483	11.476	0.007	167468	5.229	5.229
Decachlorobiphenyl	29.297	29.293	0.004	510635	10.595	10.595

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_007.d Page 1
Report Date 12/09/1999 16:08



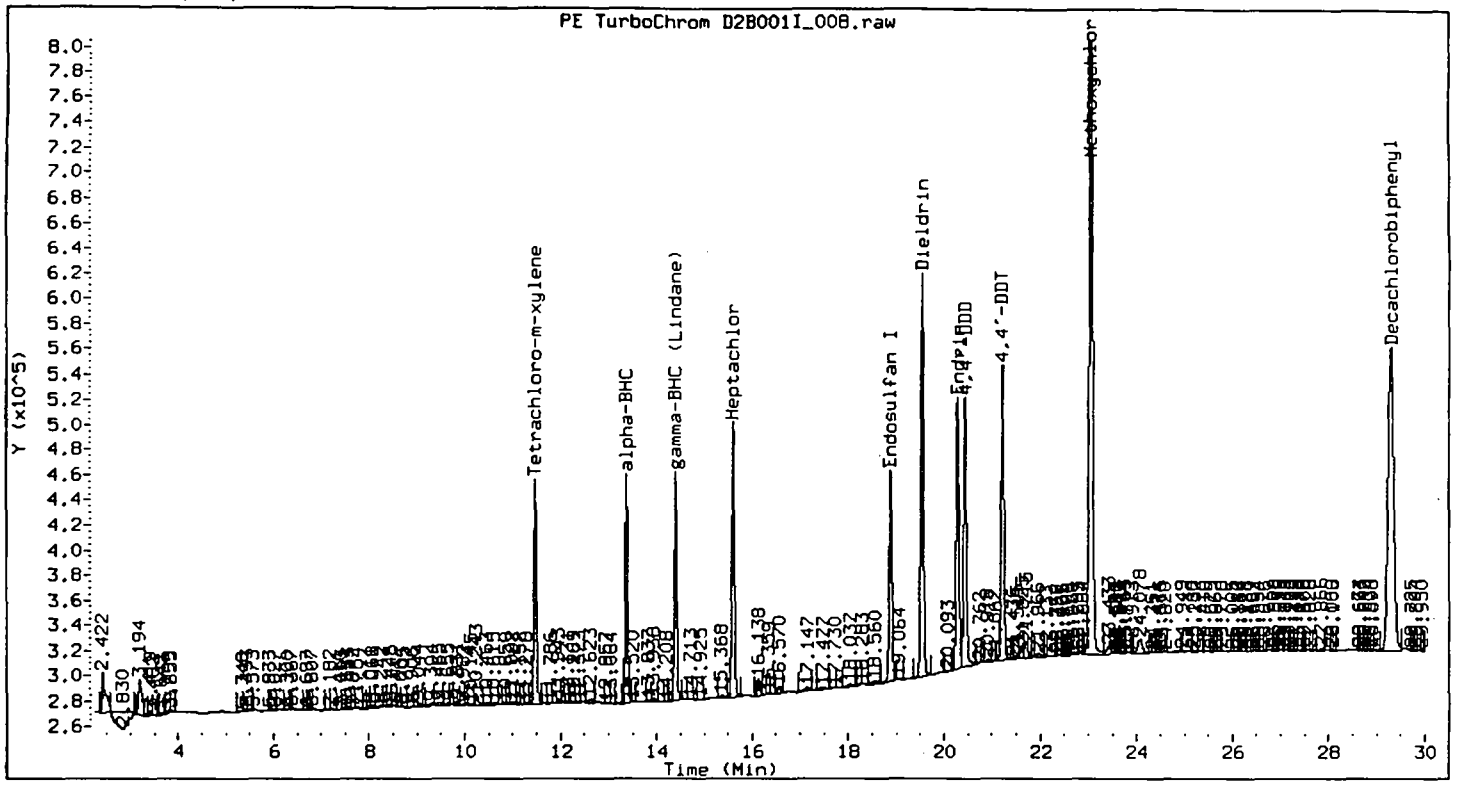
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDA L2
Lab ID : INDA L2 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 21:17 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
alpha-BHC	13.388	13.379	0.009	282298	8.796	8.796
gamma-BHC (Lindane)	14.409	14.402	0.007	295982	9.036	9.036
4,4'-DDD	20.447	20.442	0.004	397683	18.841	18.841
4,4'-DDT	21.223	21.218	0.004	451885	18.881	18.881
Dieldrin	19.547	19.543	0.004	585164	19.012	19.012
Endosulfan I	18.887	18.883	0.004	312347	9.773	9.773
Endrin	20.290	20.286	0.004	417602	19.328	19.328
Heptachlor	15.616	15.610	0.006	393022	9.871	9.871
Methoxychlor	23.061	23.057	0.004	1342219	99.836	99.836

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_007.d Page 2
Report Date 12/09/1999 16:08

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.488	11.476	0.012	328131	10.245	10.245
Decachlorobiphenyl	29.289	29.293	0.003	1003424	20.819	20.819

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_008.d Page 1
Report Date 12/09/1999 16:09



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDA L3
Lab ID : INDA L3
Inj Date : 11-NOV-1999 21:56
Operator : gds
Cpnd Sublist: INDA

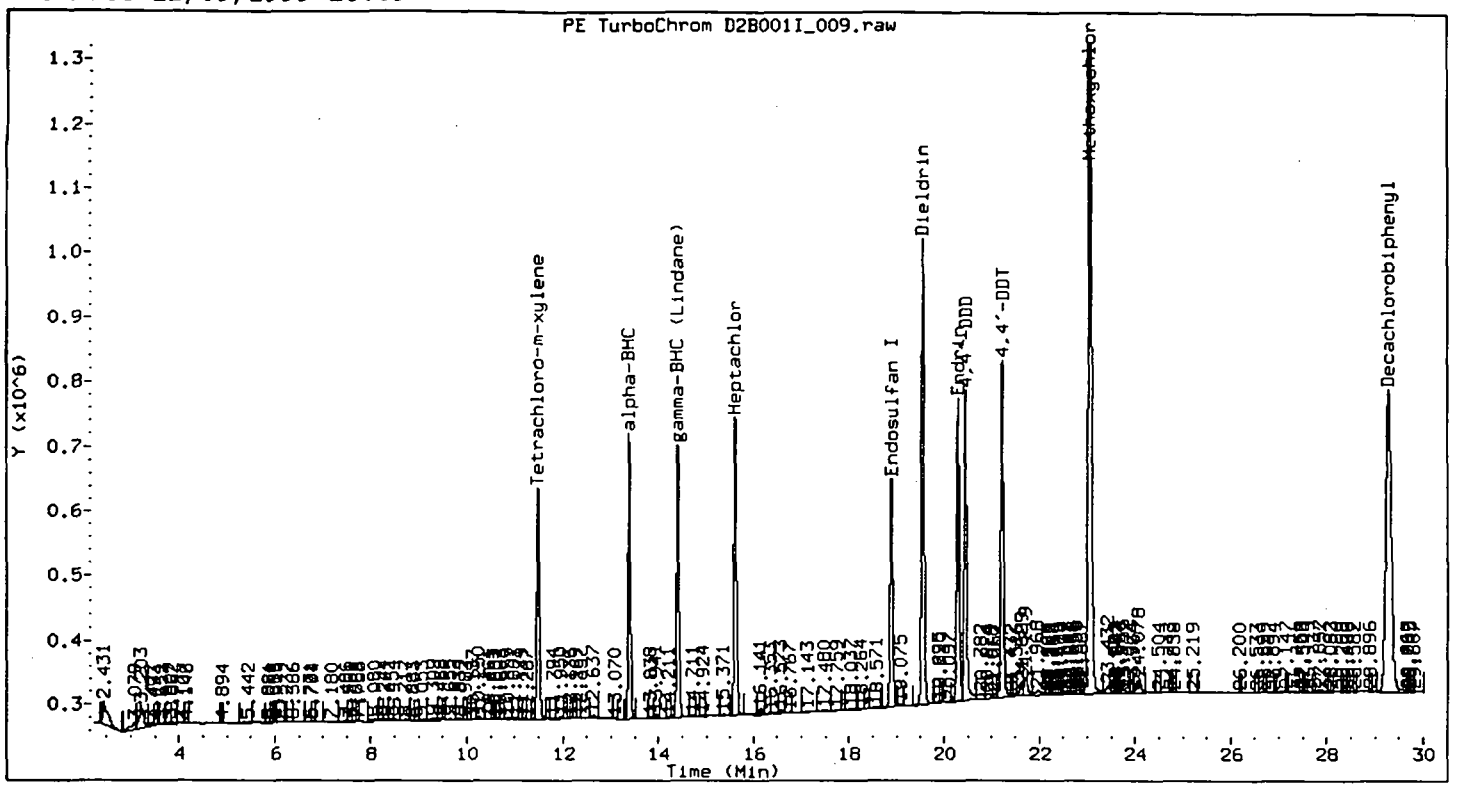
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
alpha-BHC	13.379	13.379	0.000	608597	18.964	18.964
gamma-BHC (Lindane)	14.402	14.402	0.000	627720	19.164	19.164
4,4'-DDD	20.442	20.442	0.000	825594	39.114	39.114
4,4'-DDT	21.218	21.218	0.000	939612	39.259	39.259
Dieldrin	19.543	19.543	0.000	1217558	39.558	39.558
Endosulfan I	18.883	18.883	0.000	648379	20.288	20.288
Endrin	20.286	20.286	0.000	854932	39.570	39.570
Heptachlor	15.610	15.610	0.000	795656	19.983	19.983
Methoxychlor	23.057	23.057	0.000	2739472	203.766	203.766

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_008.d Page 2
Report Date 12/09/1999 16:09

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.476	11.476	0.000	644583	20.126	20.126
Decachlorobiphenyl	29.293	29.293	0.000	1962073	40.709	40.709

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_009.d Page 1
Report Date 12/09/1999 16:09

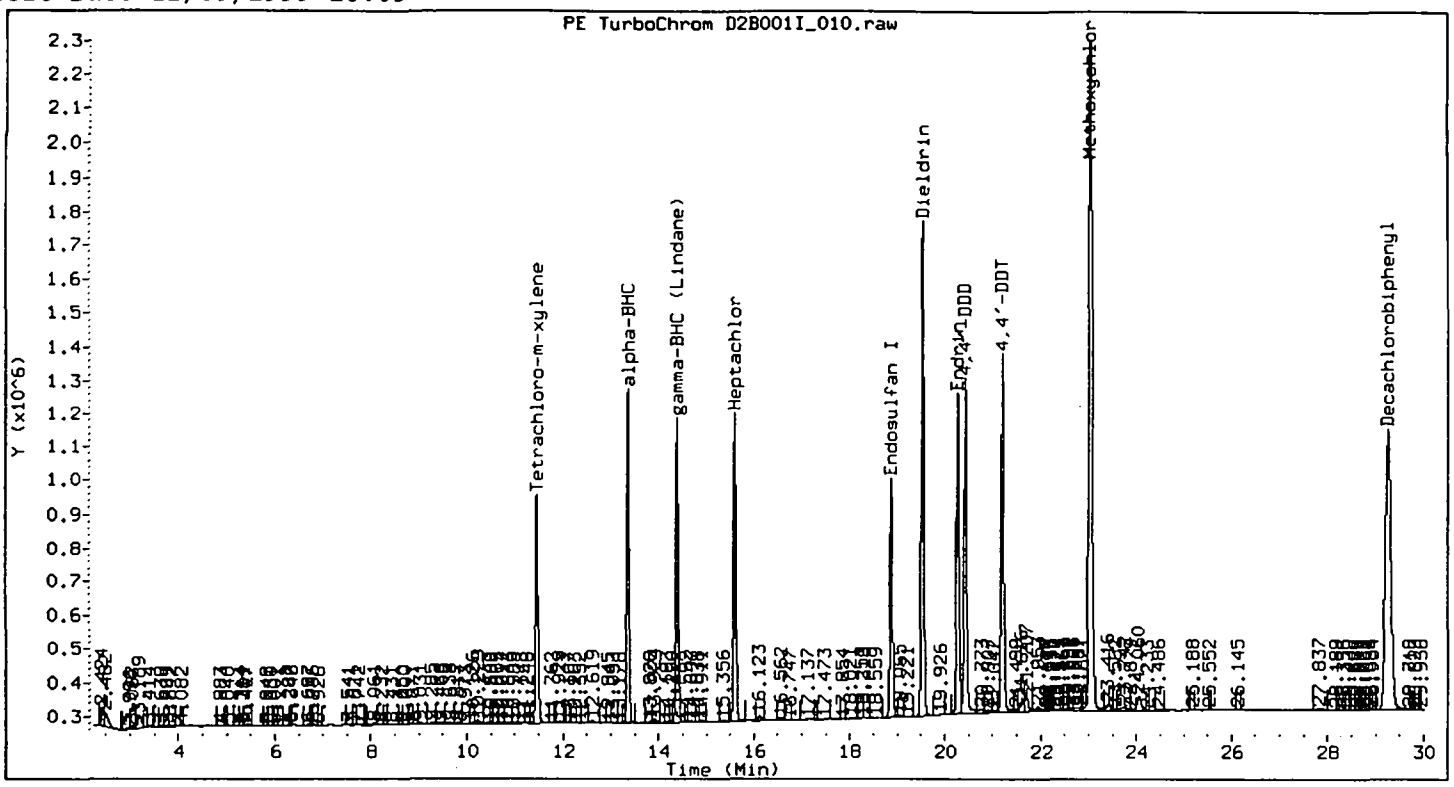


Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDA L4
Lab ID : INDA L4 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 22:35 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
alpha-BHC	13.386	13.379	0.007	1406049	43.812	43.812
gamma-BHC (Lindane)	14.407	14.402	0.004	1426094	43.538	43.538
4,4'-DDD	20.446	20.442	0.003	1846439	87.478	87.478
4,4'-DDT	21.223	21.218	0.004	2083888	87.069	87.069
Dieldrin	19.548	19.543	0.005	2645655	85.957	85.957
Endosulfan I	18.887	18.883	0.004	1341792	41.985	41.985
Endrin	20.290	20.286	0.004	1832513	84.817	84.817
Heptachlor	15.613	15.610	0.003	1641021	41.214	41.214
Methoxychlor	23.058	23.057	0.001	5581049	415.127	415.127

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.484	11.476	0.008	1272190	39.723	39.723
Decachlorobiphenyl	29.280	29.293	0.012	3825160	79.363	79.363

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_010.d Page 1
Report Date 12/09/1999 16:09



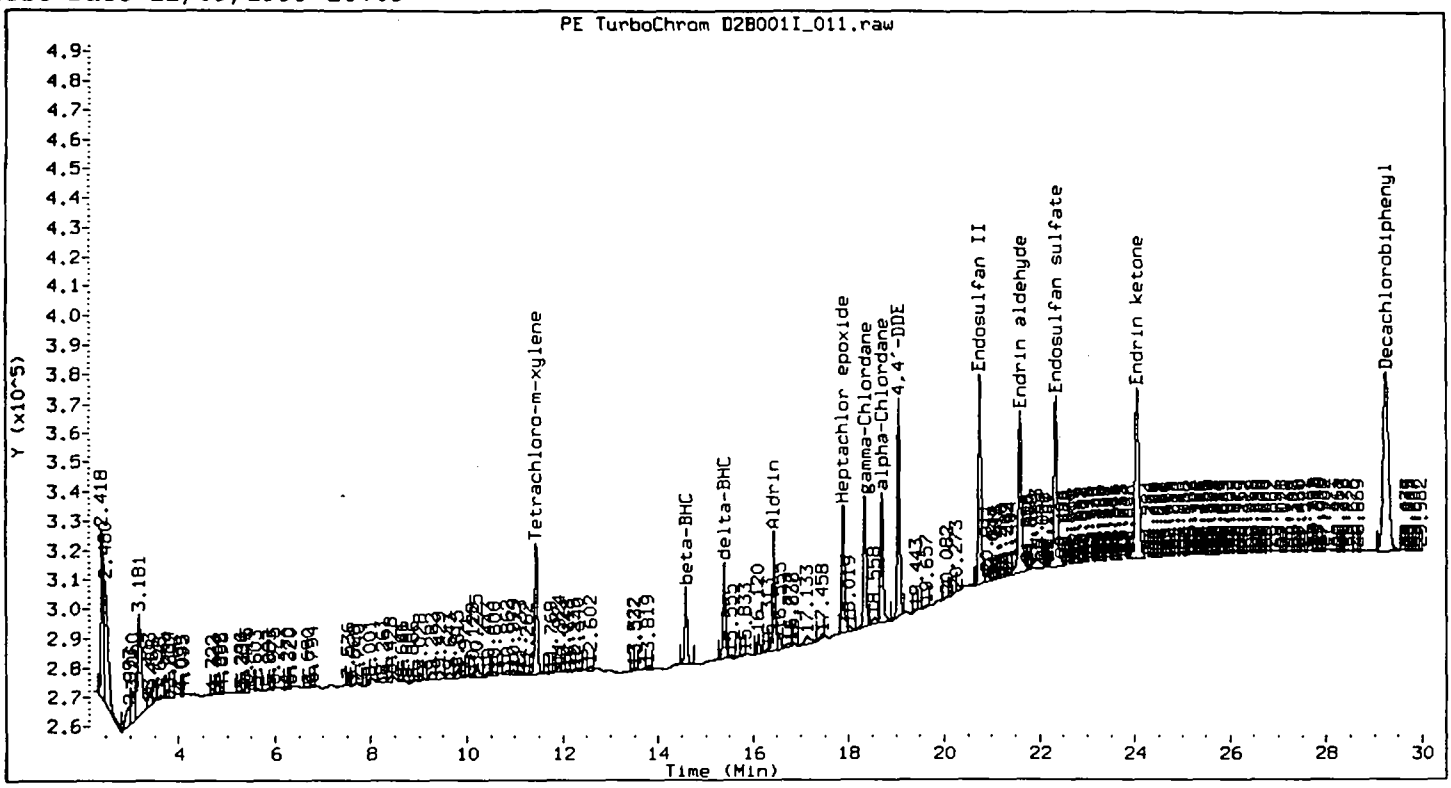
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDA L5
Lab ID : INDA L5 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 23:14 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	13.367	13.379	0.012	3130043	97.531	97.531
gamma-BHC (Lindane)	14.391	14.402	0.012	3005889	91.769	91.769
4,4'-DDD	20.435	20.442	0.008	3690822	174.858	174.858
4,4'-DDT	21.210	21.218	0.008	4170107	174.235	174.235
Dieldrin	19.537	19.543	0.007	5330872	173.199	173.199
Endosulfan I	18.877	18.883	0.007	2600455	81.368	81.368
Endrin	20.278	20.286	0.008	3643489	168.636	168.636
Heptachlor	15.599	15.610	0.011	3202571	80.432	80.432
Methoxychlor	23.042	23.057	0.015	10432169	775.960	775.960

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_010.d Page 2
Report Date 12/09/1999 16:09

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.462	11.476	0.014	2383520	74.422	74.422
Decachlorobiphenyl	29.255	29.293	0.038	6862250	142.376	142.376

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_011.d Page 1
Report Date 12/09/1999 16:09



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDB L1
Lab ID : INDB L1
Inj Date : 11-NOV-1999 23:53
Operator : gds
Cpnd Sublist: INDB

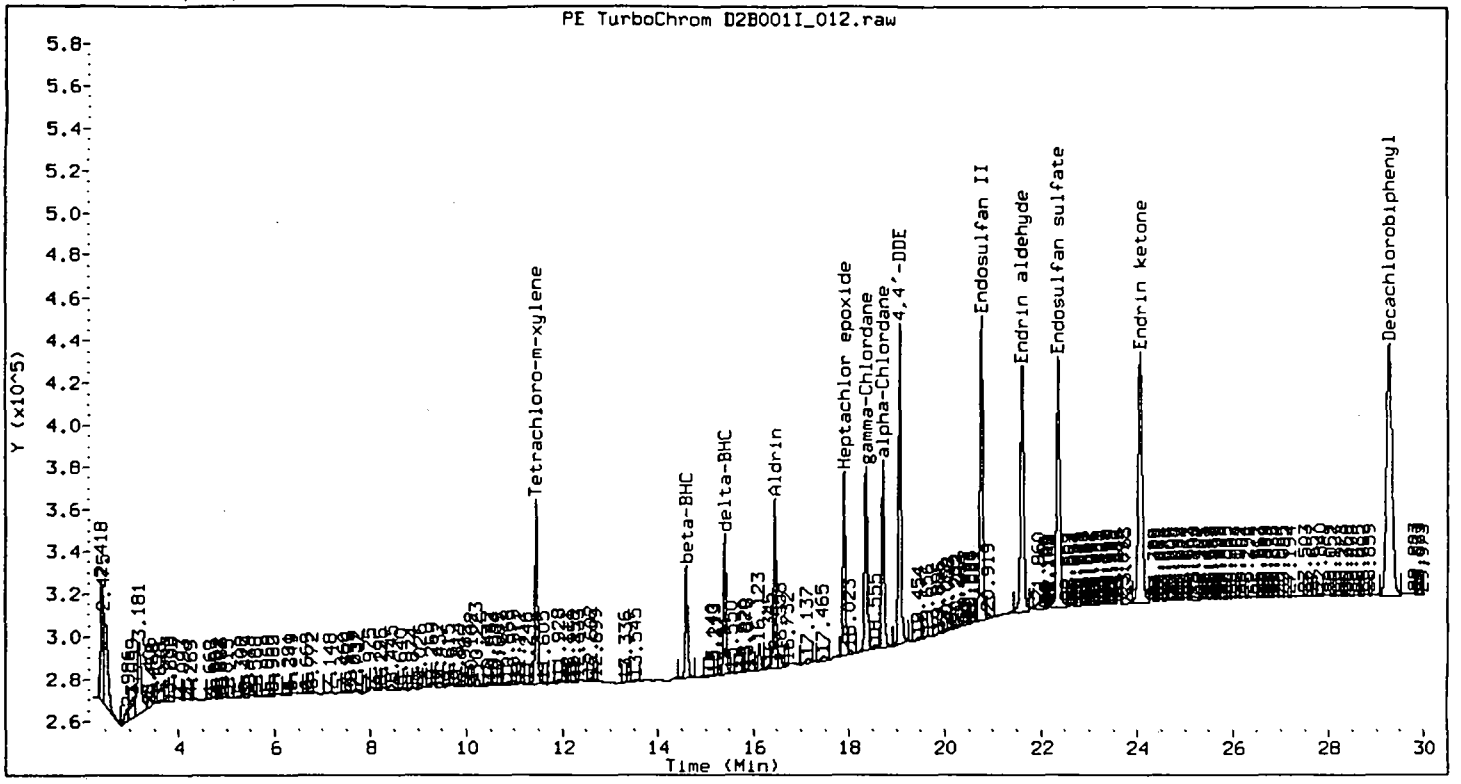
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_1

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Aldrin	16.446	16.442	0.003	157174	4.814	4.814
beta-BHC	14.599	14.597	0.003	99817	4.984	4.984
delta-BHC	15.405	15.403	0.002	127083	4.602	4.602
4,4'-DDE	19.062	19.056	0.006	280288	9.126	9.126
Endosulfan II	20.762	20.757	0.006	298422	9.456	9.456
Endosulfan sulfate	22.354	22.348	0.007	288696	9.699	9.699
Endrin aldehyde	21.609	21.602	0.008	277172	10.041	10.041
Endrin ketone	24.056	24.047	0.008	338129	9.508	9.508
Heptachlor epoxide	17.892	17.887	0.005	165759	4.809	4.809

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_011.d Page 2
Report Date 12/09/1999 16:09

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.351	18.345	0.006	174090	5.012	5.012
alpha-Chlordane	18.708	18.703	0.006	175349	4.950	4.950
Tetrachloro-m-xylene	11.454	11.476	0.022	167901	5.242	5.242
Decachlorobiphenyl	29.242	29.293	0.051	493844	10.246	10.246

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_012.d Page 1
Report Date 12/09/1999 16:09

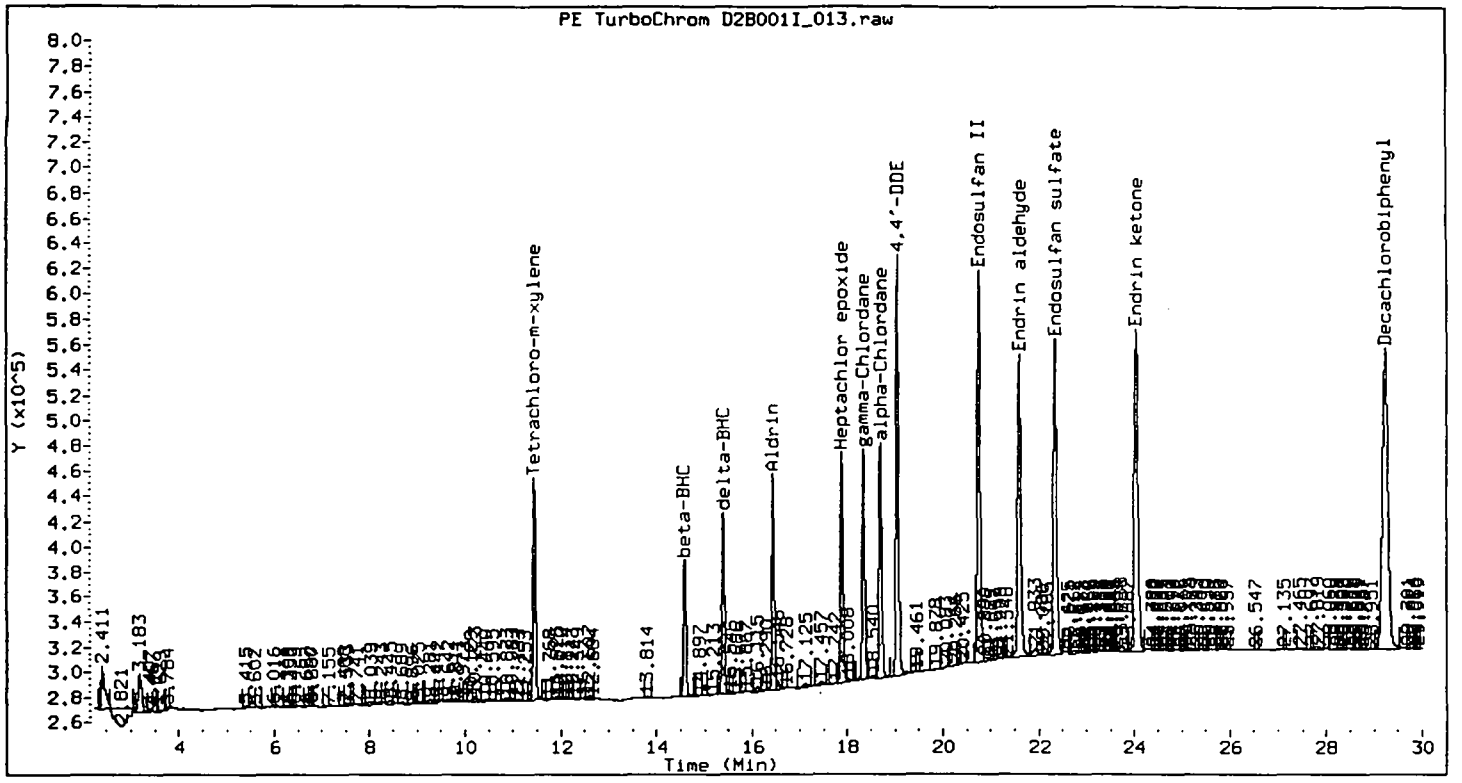


Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDB L2
Lab ID : INDB L2 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 00:32 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	16.451	16.442	0.008	305709	9.363	9.363
beta-BHC	14.602	14.597	0.005	194825	9.728	9.728
delta-BHC	15.409	15.403	0.006	247196	8.951	8.951
4,4'-DDE	19.069	19.056	0.013	565085	18.398	18.398
Endosulfan II	20.773	20.757	0.016	597226	18.925	18.925
Endosulfan sulfate	22.367	22.348	0.020	576971	19.383	19.383
Endrin aldehyde	21.620	21.602	0.018	545113	19.747	19.747
Endrin ketone	24.073	24.047	0.025	678640	19.083	19.083
Heptachlor epoxide	17.898	17.887	0.011	329275	9.552	9.552

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.358	18.345	0.013	335205	9.650	9.650
alpha-Chlordane	18.715	18.703	0.012	342137	9.658	9.658
Tetrachloro-m-xylene	11.455	11.476	0.021	317807	9.923	9.923
Decachlorobiphenyl	29.270	29.293	0.023	959363	19.905	19.905

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_013.d Page 1
Report Date 12/09/1999 16:09



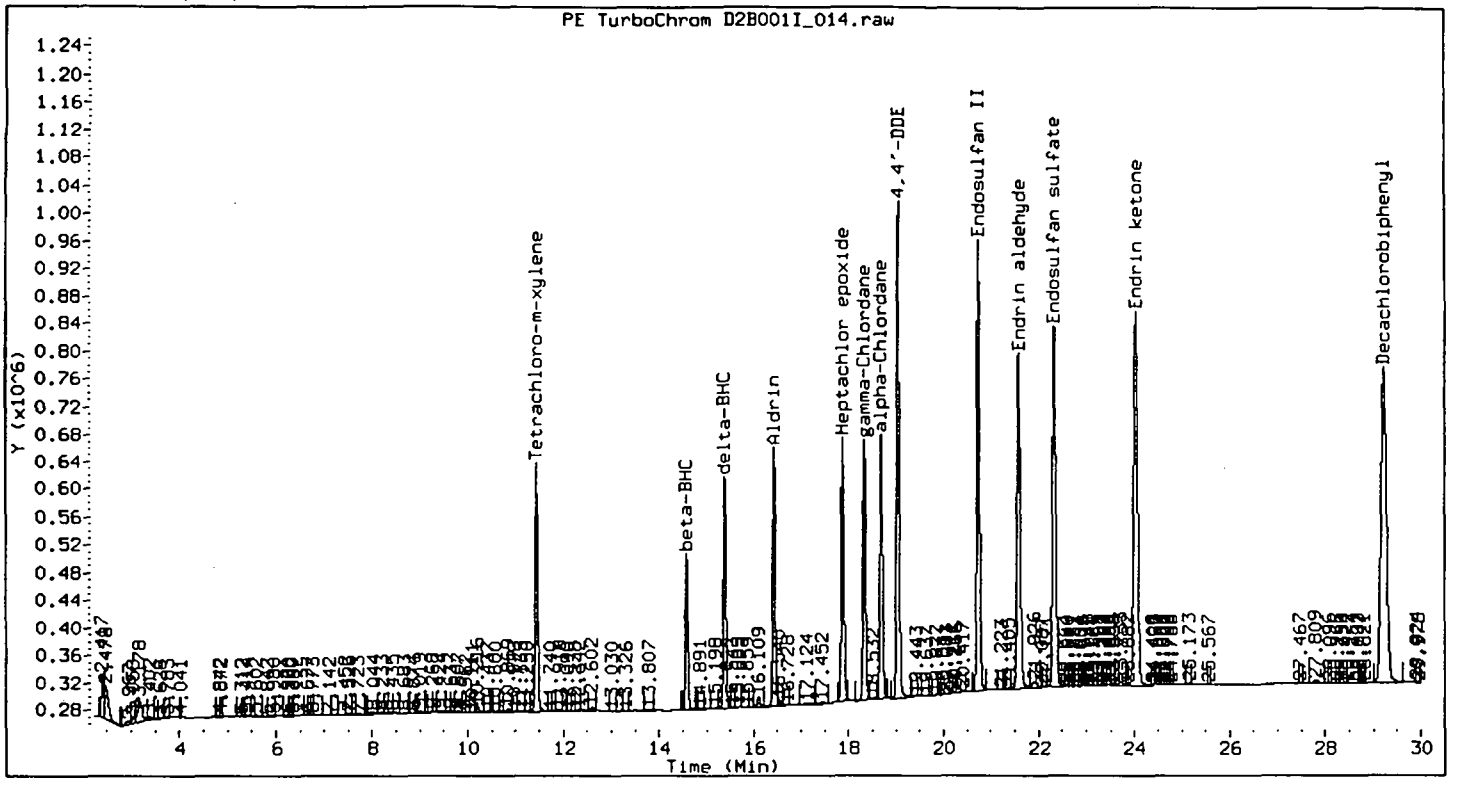
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 01:11 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Aldrin	16.442	16.442	0.000	625611	19.161	19.161
beta-BHC	14.597	14.597	0.000	396259	19.787	19.787
delta-BHC	15.403	15.403	0.000	515559	18.668	18.668
4,4'-DDE	19.056	19.056	0.000	1230812	40.073	40.073
Endosulfan II	20.757	20.757	0.000	1259062	39.897	39.897
Endosulfan sulfate	22.348	22.348	0.000	1179688	39.632	39.632
Endrin aldehyde	21.602	21.602	0.000	1128617	40.886	40.886
Endrin ketone	24.047	24.047	0.000	1399045	39.340	39.340
Heptachlor epoxide	17.887	17.887	0.000	684034	19.844	19.844

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_013.d Page 2
Report Date 12/09/1999 16:09

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.345	18.345	0.000	687940	19.805	19.805
alpha-Chlordane	18.703	18.703	0.000	706914	19.955	19.955
Tetrachloro-m-xylene	11.453	11.476	0.023	636853	19.885	19.885
Decachlorobiphenyl	29.229	29.293	0.063	1925339	39.946	39.946

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_014.d Page 1
Report Date 12/09/1999 16:10

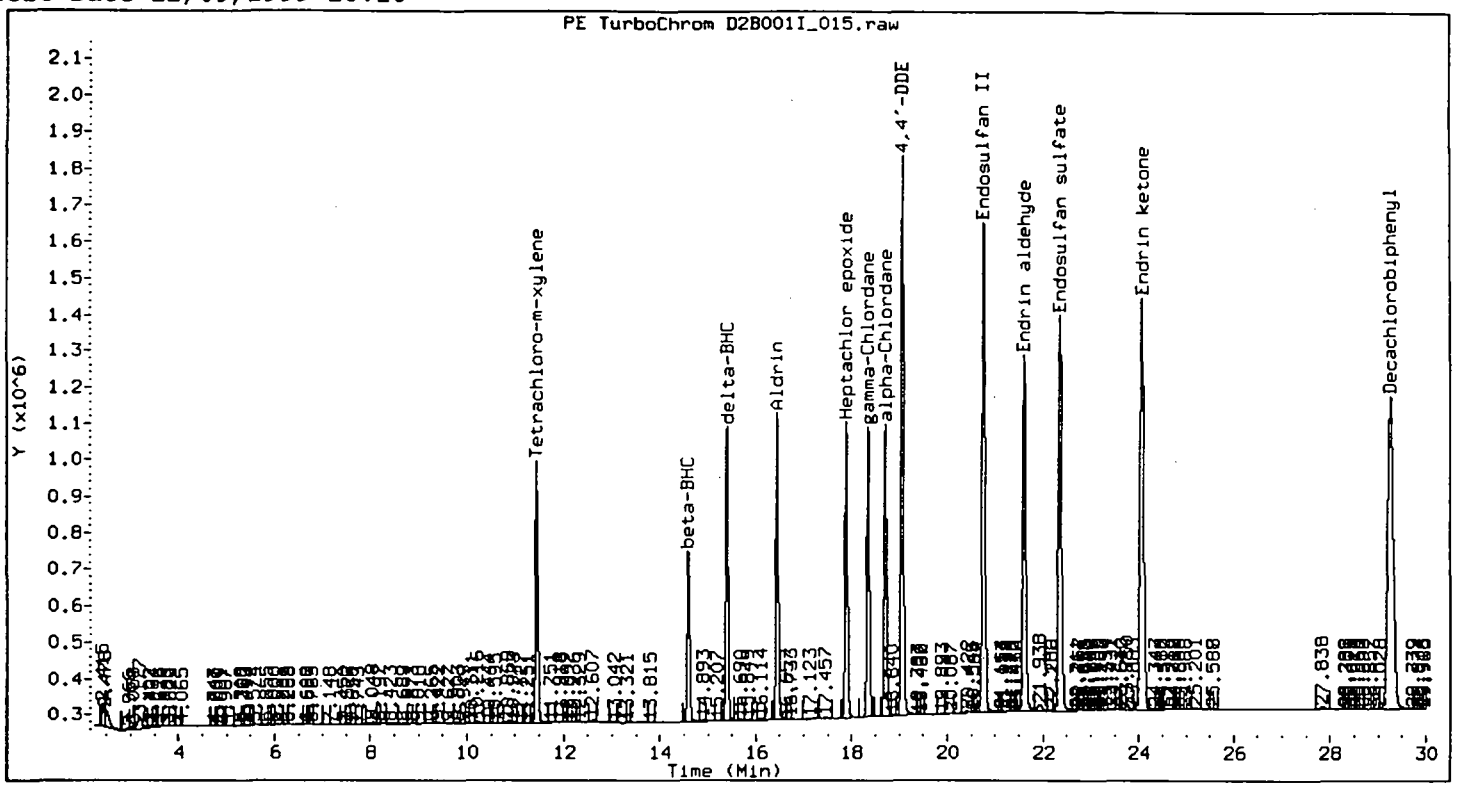


Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDB L4
Lab ID : INDB L4 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 01:50 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	16.438	16.442	0.004	1331377	40.777	40.777
beta-BHC	14.591	14.597	0.006	807565	40.325	40.325
delta-BHC	15.398	15.403	0.005	1144478	41.441	41.441
4,4'-DDE	19.052	19.056	0.003	2593772	84.448	84.448
Endosulfan II	20.753	20.757	0.004	2614091	82.835	82.835
Endosulfan sulfate	22.344	22.348	0.003	2417836	81.227	81.227
Endrin aldehyde	21.598	21.602	0.004	2195995	79.553	79.553
Endrin ketone	24.044	24.047	0.003	2937780	82.609	82.609
Heptachlor epoxide	17.883	17.887	0.004	1402273	40.680	40.680

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.341	18.345	0.004	1397748	40.240	40.240
alpha-Chlordane	18.698	18.703	0.004	1424070	40.200	40.200
Tetrachloro-m-xylene	11.448	11.476	0.027	1273265	39.756	39.756
Decachlorobiphenyl	29.227	29.293	0.066	3715047	77.079	77.079

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_015.d Page 1
Report Date 12/09/1999 16:10

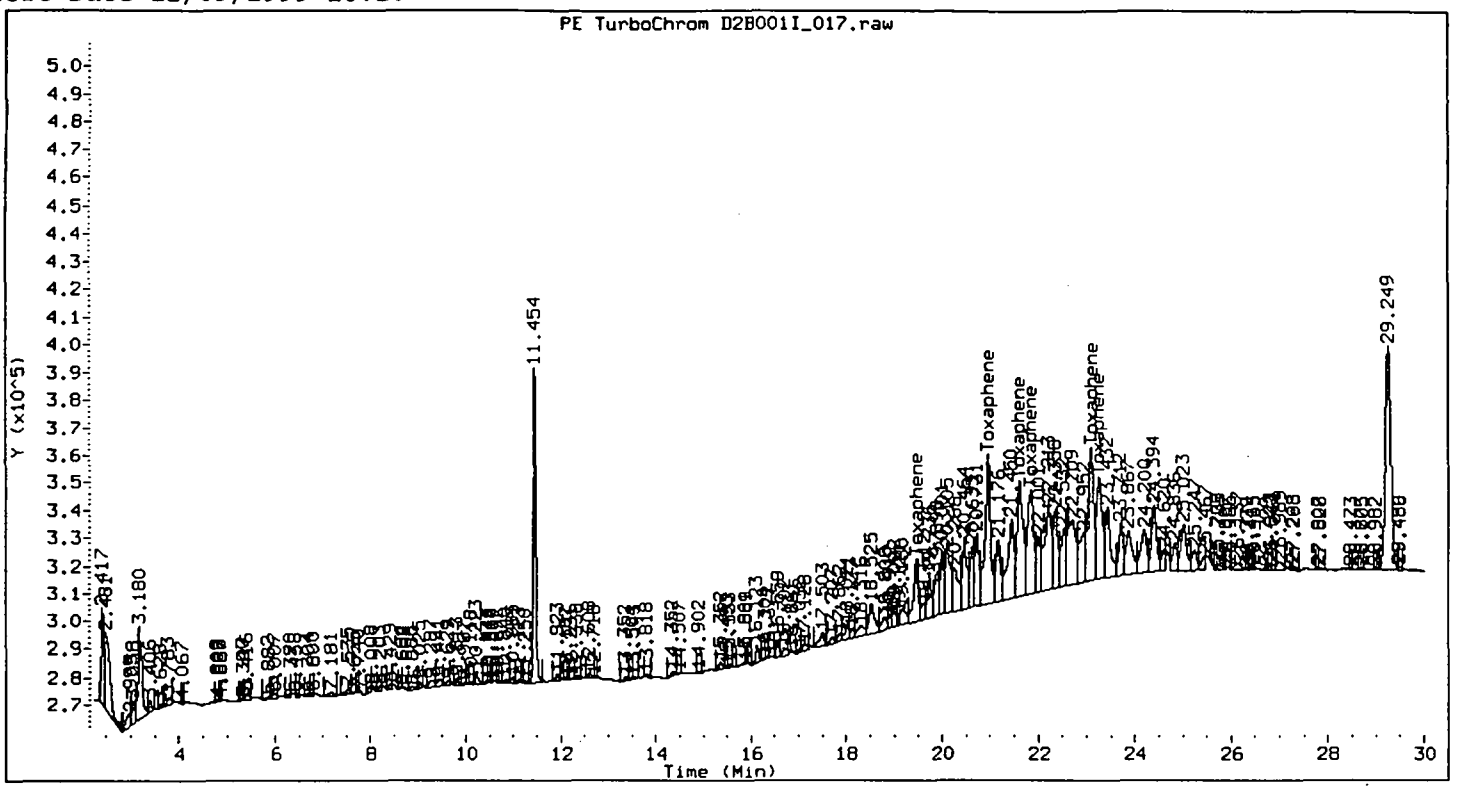


Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDB L5
Lab ID : INDB L5 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 02:29 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	16.442	16.442	0.000	2934383	89.874	89.874
beta-BHC	14.596	14.597	0.001	1654767	82.629	82.629
delta-BHC	15.403	15.403	0.000	2684620	97.210	97.210
4,4'-DDE	19.058	19.056	0.003	5455568	177.622	177.622
Endosulfan II	20.762	20.757	0.005	5429249	172.041	172.041
Endosulfan sulfate	22.358	22.348	0.011	5023800	168.774	168.774
Endrin aldehyde	21.609	21.602	0.008	4381275	158.717	158.717
Endrin ketone	24.063	24.047	0.016	6139112	172.629	172.629
Heptachlor epoxide	17.888	17.887	0.001	2961272	85.907	85.907

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.347	18.345	0.002	2879681	82.904	82.904
alpha-Chlordane	18.704	18.703	0.002	2951395	83.315	83.315
Tetrachloro-m-xylene	11.448	11.476	0.027	2517703	78.612	78.612
Decachlorobiphenyl	29.257	29.293	0.036	7071103	146.709	146.709

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_017.d Page 1
Report Date 12/09/1999 16:10



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : TOX L3
Lab ID : TOX L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 03:46 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: TOXAPH0 Sample Type: CALIB_3

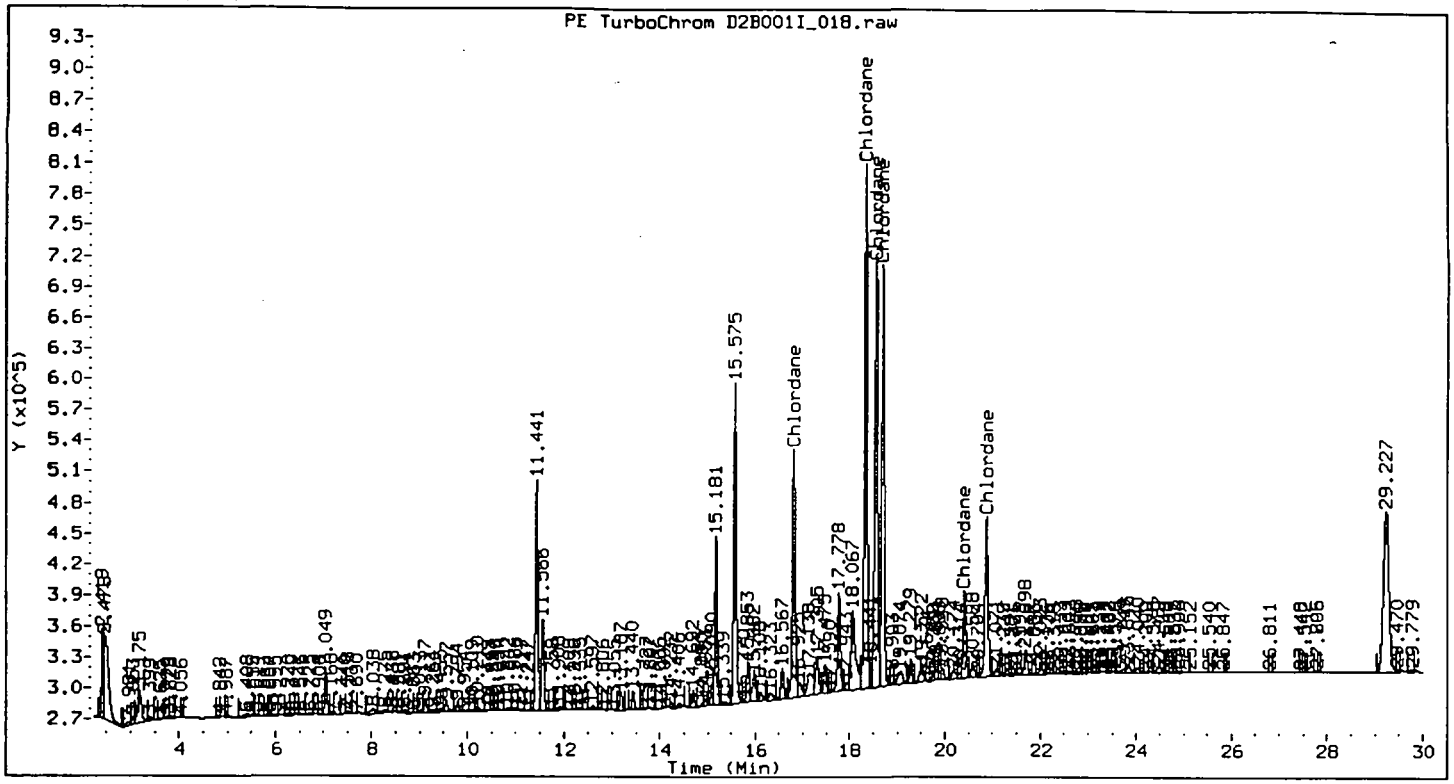
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Toxaphene	(M)	19.468	19.468	0.000	165820	1500.000	1500.000
(2)		------	1.000	------	------	------	------ (*)
(3)		------	1.000	------	------	------	------ (*)
(4)		21.863	23.250	1.387	331643	1712.525	1712.525
(5)		23.100	23.432	0.332	390943	2985.939	2985.939
(6)		------	1.000	------	------	------	------ (*)

Average of peak concentrations: 2070.00

COMMENTS:

* - Mutlicomponent peak not used in quantitation of compound.
M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_018.d Page 1
Report Date 12/09/1999 16:10



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : CHLOR L3
Lab ID : CHLOR L3
Inj Date : 12-NOV-1999 04:25
Operator : gds
Cpnd Sublist: CHLORDANE

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

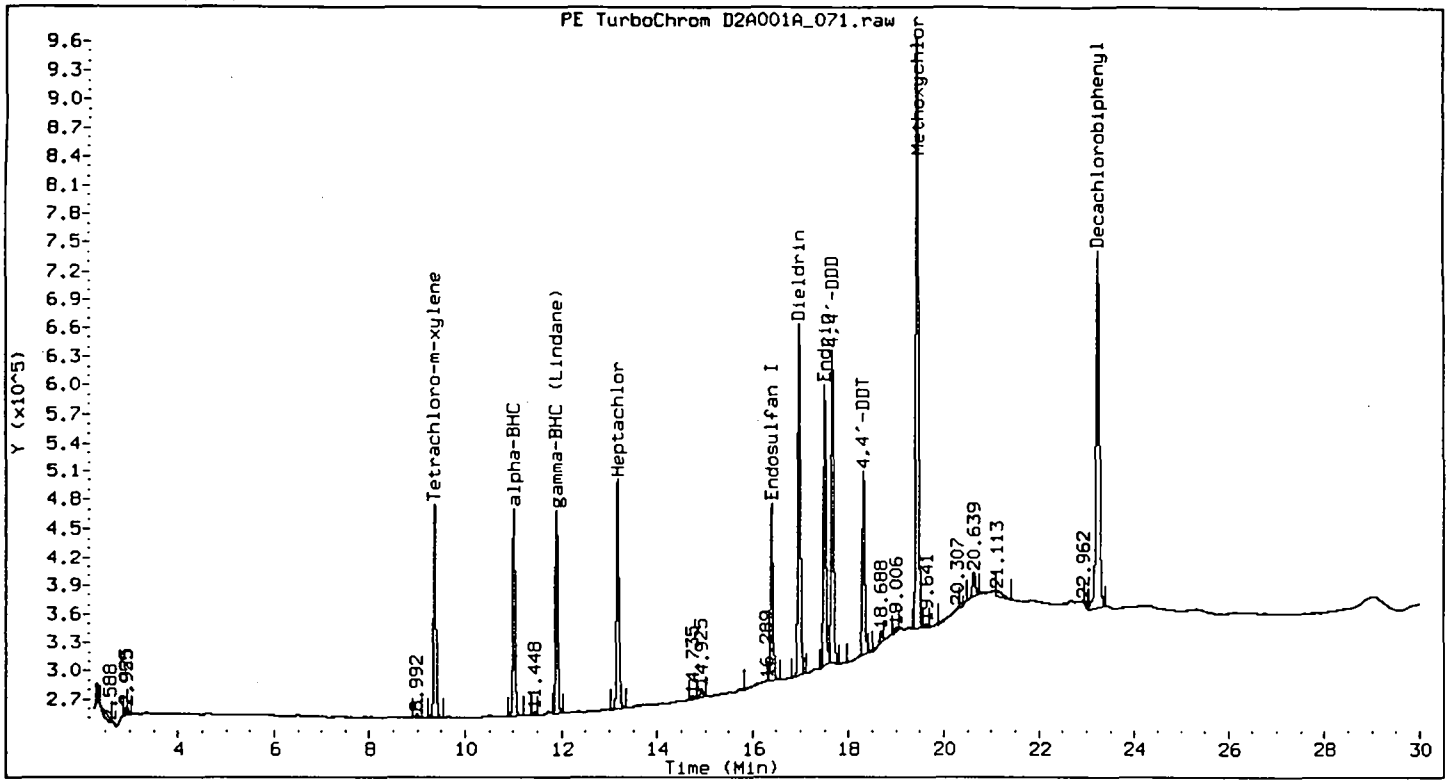
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Chlordane	(M)	16.808	16.808	0.000	972754	500.000	500.000
(2)		18.338	18.441	0.102	1930268	19256.080	19256.080
(3)		18.557	18.696	0.139	1712644	552.421	552.421
(4)		------	1.000	------	------	------	------ (*)
(5)		20.413	20.413	0.000	340917	500.000	500.000
(6)		------	1.000	------	------	------	------ (*)

Average of peak concentrations: 5200.00

COMMENTS:

* - Mutlicomponent peak not used in quantitation of compound.
M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/D2A001A_071.d Page 1
Report Date 12/09/1999 16:03



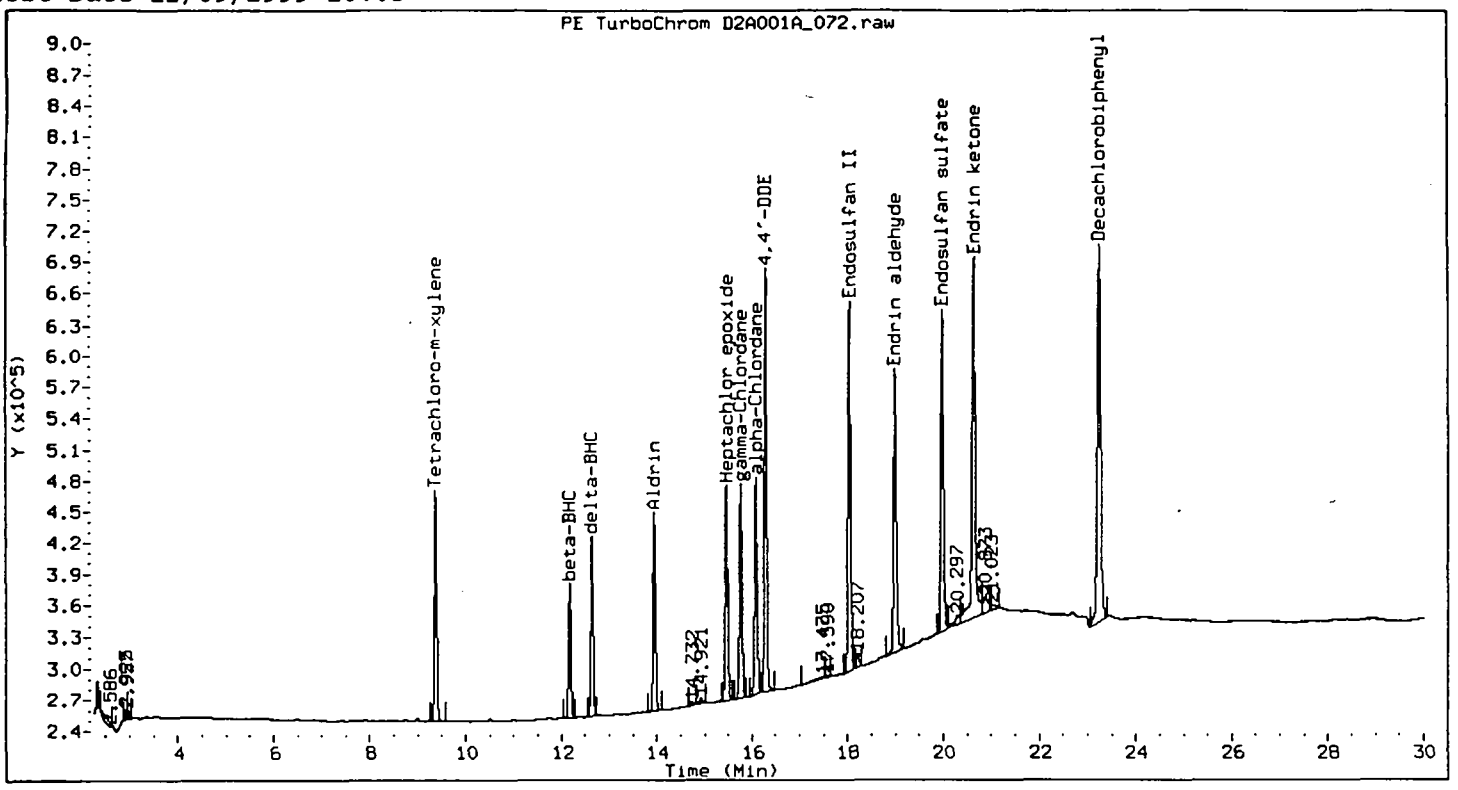
Method : /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/Bf8081.m
Sample Info : INDA L3
Lab ID : INDA L3 Inst ID : HP58902.i
Inj Date : 14-NOV-1999 14:46 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	11.014	11.014	0.000	689327	22.253	22.253
gamma-BHC (Lindane)	11.905	11.905	0.000	694369	22.018	22.018
4,4'-DDD	17.672	17.672	0.000	1098141	50.989	50.989
4,4'-DDT	18.317	18.317	0.000	700649	25.284	25.284
Dieldrin	16.976	16.976	0.000	1295118	41.197	41.197
Endosulfan I	16.398	16.398	0.000	672142	20.597	20.597
Endrin	17.512	17.512	0.000	1057800	40.071	40.071
Heptachlor	13.179	13.179	0.000	838225	19.805	19.805
Methoxychlor	19.450	19.450	0.000	2242743	149.482	149.482

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/D2A001A_071.d Page 2
Report Date 12/09/1999 16:03

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.367	9.364	0.003	743799	22.744	22.744
Decachlorobiphenyl	23.242	23.242	0.000	1873654	41.859	41.859

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/D2A001A_072.d Page 1
Report Date 12/09/1999 16:03



Method : /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/Bf8081.m
Sample Info : INDB L3
Lab ID : INDB L3
Inj Date : 14-NOV-1999 15:25
Operator : gds
Cpnd Sublist: INDB

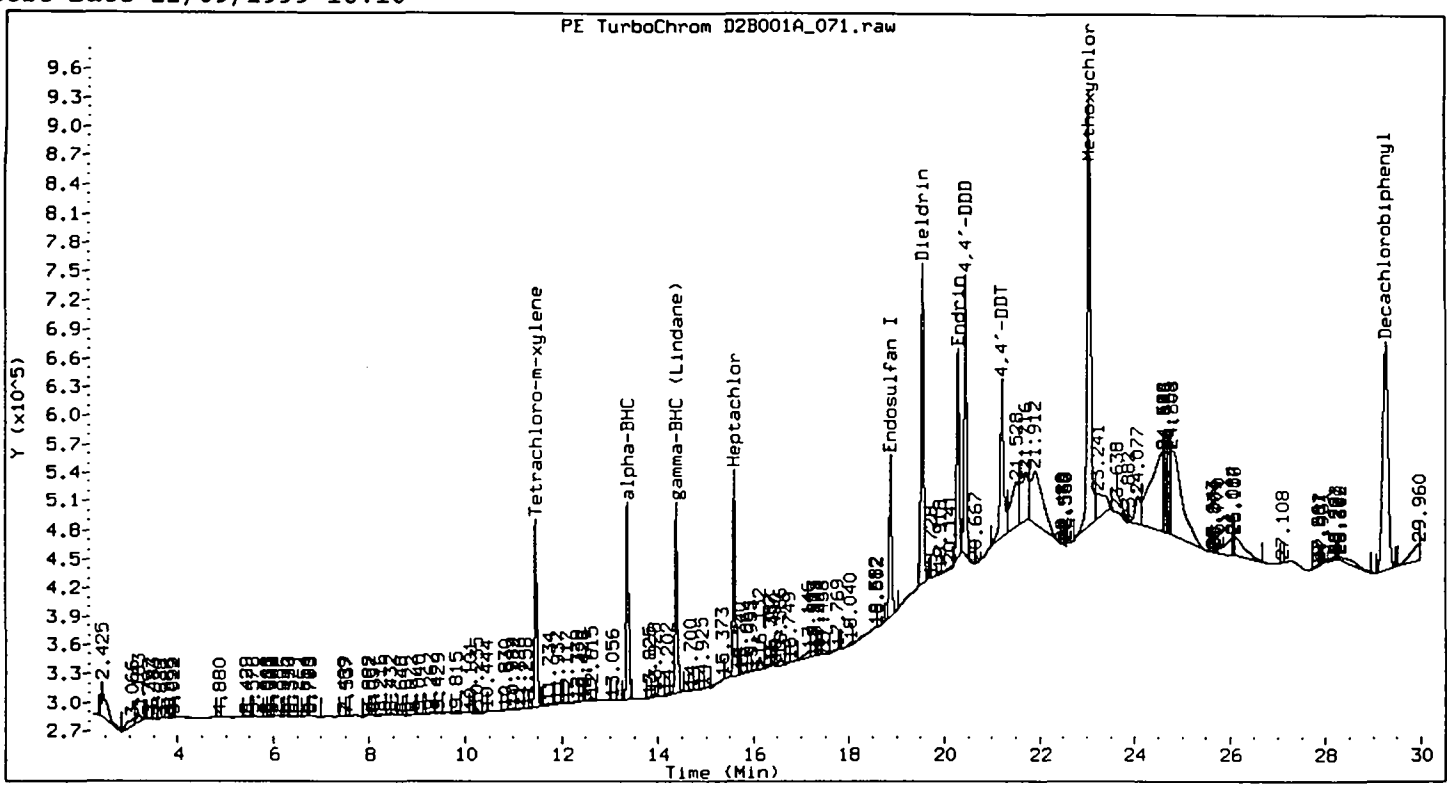
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.945	13.945	0.000	654728	21.011	21.011
beta-BHC	12.169	12.169	0.000	440132	22.314	22.314
delta-BHC	12.639	12.639	0.000	567154	21.590	21.590
4,4'-DDE	16.282	16.282	0.000	1350485	43.194	43.194
Endosulfan II	18.034	18.034	0.000	1292357	40.459	40.459
Endosulfan sulfate	19.981	19.981	0.000	1183288	40.456	40.456
Endrin aldehyde	18.988	18.988	0.000	1065845	38.705	38.705
Endrin ketone	20.633	20.633	0.000	1652034	45.775	45.775
Heptachlor epoxide	15.457	15.457	0.000	733110	20.657	20.657

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/D2A001A_072.d Page 2
Report Date 12/09/1999 16:03

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane	15.760	15.760	0.000	734451	20.192	20.192
alpha-Chlordane	16.078	16.078	0.000	744673	20.437	20.437
Tetrachloro-m-xylene	9.364	9.364	0.000	734554	22.461	22.461
Decachlorobiphenyl	23.242	23.242	0.000	1820259	40.667	40.667

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/D2B001A_071.d Page 1
Report Date 12/09/1999 16:10



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/Br8081.m
Sample Info : INDA L3
Lab ID : INDA L3 Inst ID : HP58902.i
Inj Date : 14-NOV-1999 14:46 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CCALIB_3

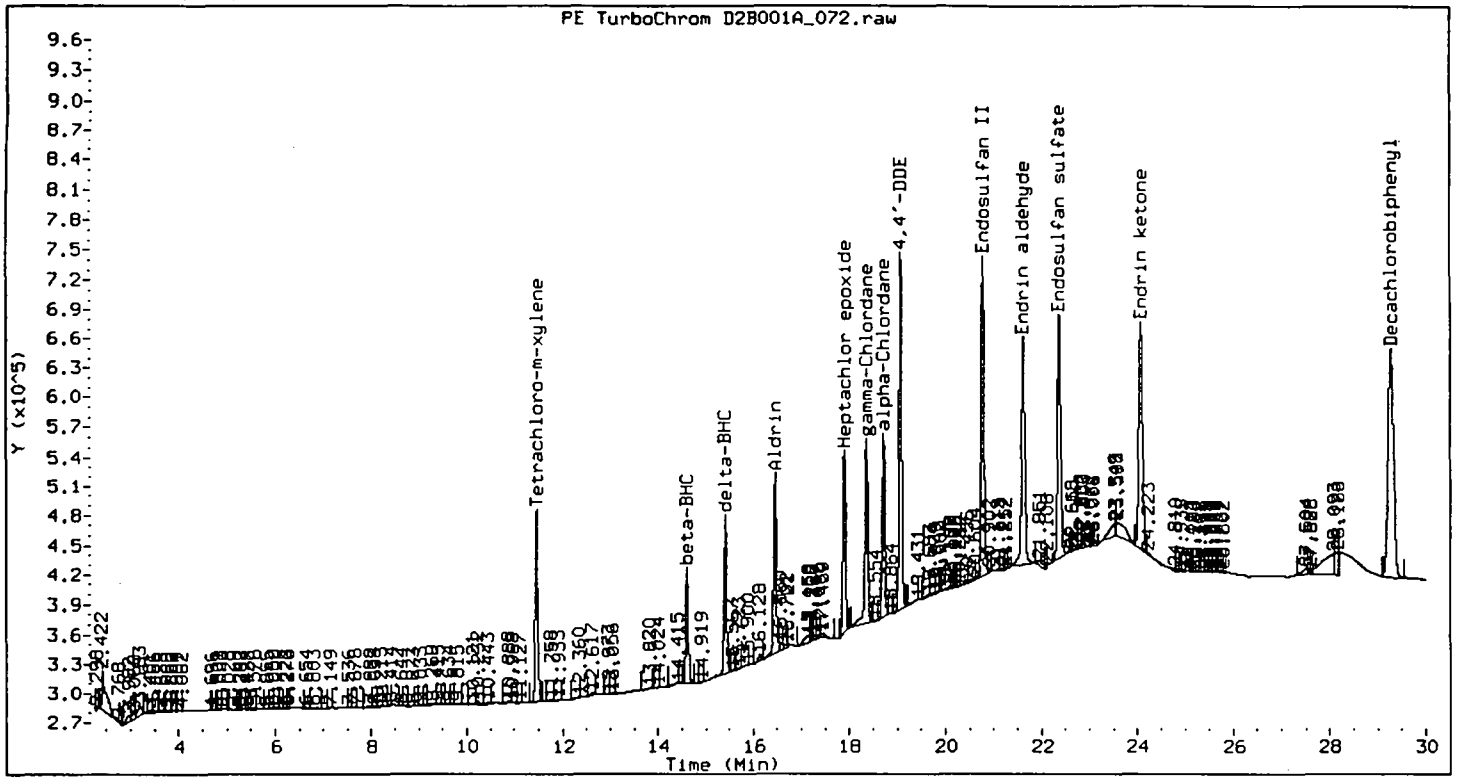
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		13.367	13.367	0.000	679441	21.171	21.171
gamma-BHC (Lindane)		14.393	14.393	0.000	687519	20.990	20.990
4,4'-DDD	(M)	20.443	20.443	0.000	1033894	48.982	48.982
4,4'-DDT	(M)	21.218	21.218	0.000	863852	36.093	36.093
Dieldrin	(M)	19.545	19.545	0.000	1264439	41.081	41.081
Endosulfan I	(M)	18.884	18.884	0.000	634536	19.855	19.855
Endrin	(M)	20.287	20.287	0.000	843524	39.042	39.042
Heptachlor		15.602	15.602	0.000	794592	19.956	19.956
Methoxychlor	(M)	23.052	23.052	0.000	2316285	172.289	172.289

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	11.466	11.463	0.003	696293	21.741	21.741
Decachlorobiphenyl	29.254	29.269	0.015	1882198	39.051	39.051

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/D2B001A_072.d Page 1
Report Date 12/09/1999 16:10



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/Br8081.m
Sample Info : INDB L3
Lab ID : INDB L3 | Inst ID : HP58902.i
Inj Date : 14-NOV-1999 15:25 | Dil Factor : 1
Operator : gds | Sample Matrix : SOIL
Cpnd Sublist: INDB | Sample Type: CCALIB_3

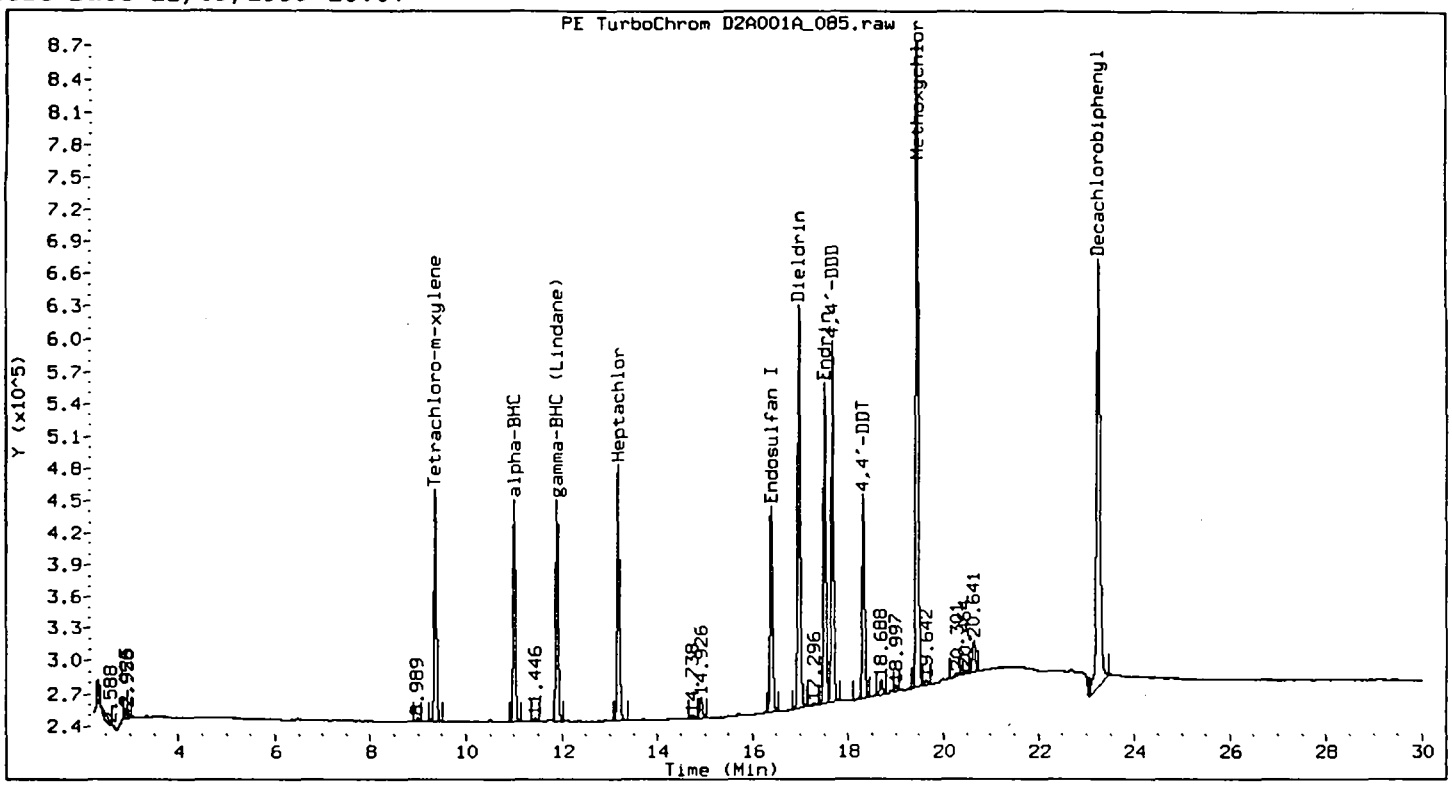
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin		16.456	16.456	0.000	706059	21.625	21.625
beta-BHC		14.611	14.611	0.000	422443	21.094	21.094
delta-BHC		15.418	15.418	0.000	577635	20.916	20.916
4,4'-DDE		19.070	19.070	0.000	1302572	42.409	42.409
Endosulfan II	(M)	20.775	20.775	0.000	1332537	42.225	42.225
Endosulfan sulfate	(M)	22.369	22.369	0.000	1160306	38.980	38.980
Endrin aldehyde	(M)	21.621	21.621	0.000	1131267	40.982	40.982
Endrin ketone	(M)	24.076	24.076	0.000	1256593	35.335	35.335
Heptachlor epoxide		17.901	17.901	0.000	686228	19.908	19.908

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane	18.359	18.359	0.000	768592	22.127	22.127
alpha-Chlordane	18.717	18.717	0.000	703315	19.854	19.854
Tetrachloro-m-xylene	11.463	11.463	0.000	694427	21.683	21.683
Decachlorobiphenyl	29.269	29.269	0.000	1865744	38.710	38.710

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99g.b/D2A001A_085.d Page 1
Report Date 12/09/1999 16:07



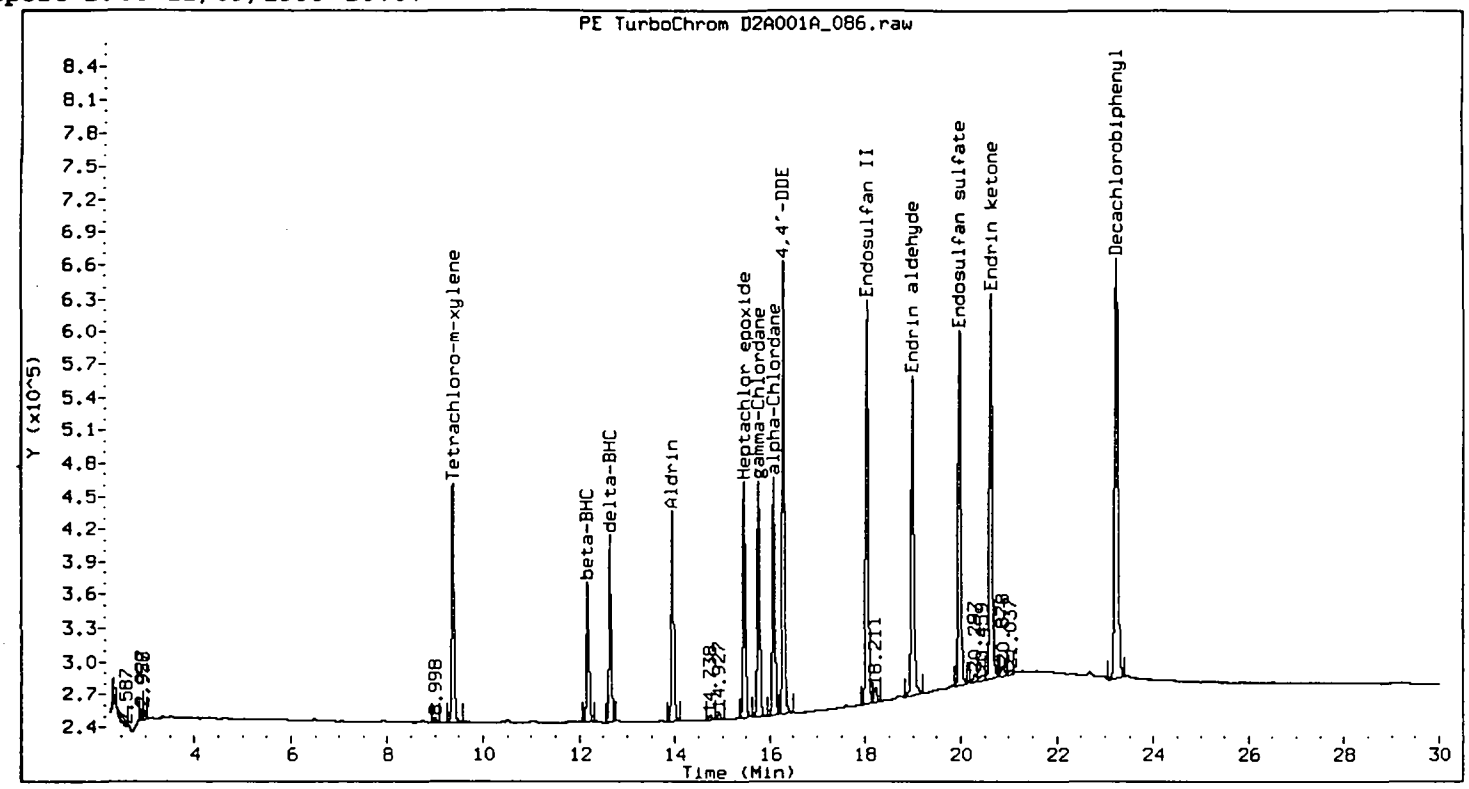
Method : /chem/HP58902.i/8081/front/11-12-99/12nov99g.b/Bf8081.m
Sample Info : INDA L3
Lab ID : INDA L3
Inj Date : 14-NOV-1999 23:52
Operator : gds
Cpnd Sublist: INDA

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	11.013	11.013	0.000	650616	21.003	21.003
gamma-BHC (Lindane)	11.906	11.906	0.000	671842	21.304	21.304
4,4'-DDD	17.674	17.674	0.000	1138491	52.862	52.862
4,4'-DDT	18.319	18.319	0.000	695758	25.108	25.108
Dieldrin	16.977	16.977	0.000	1329108	42.278	42.278
Endosulfan I	16.400	16.400	0.000	695818	21.323	21.323
Endrin	17.513	17.513	0.000	1079136	40.879	40.879
Heptachlor	13.182	13.182	0.000	832032	19.658	19.658
Methoxychlor	19.453	19.453	0.000	2228254	148.516	148.516

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.363	9.372	0.008	718475	21.969	21.969
Decachlorobiphenyl	23.253	23.242	0.011	2060382	46.031	46.031

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99g.b/D2A001A_086.d Page 1
Report Date 12/09/1999 16:07

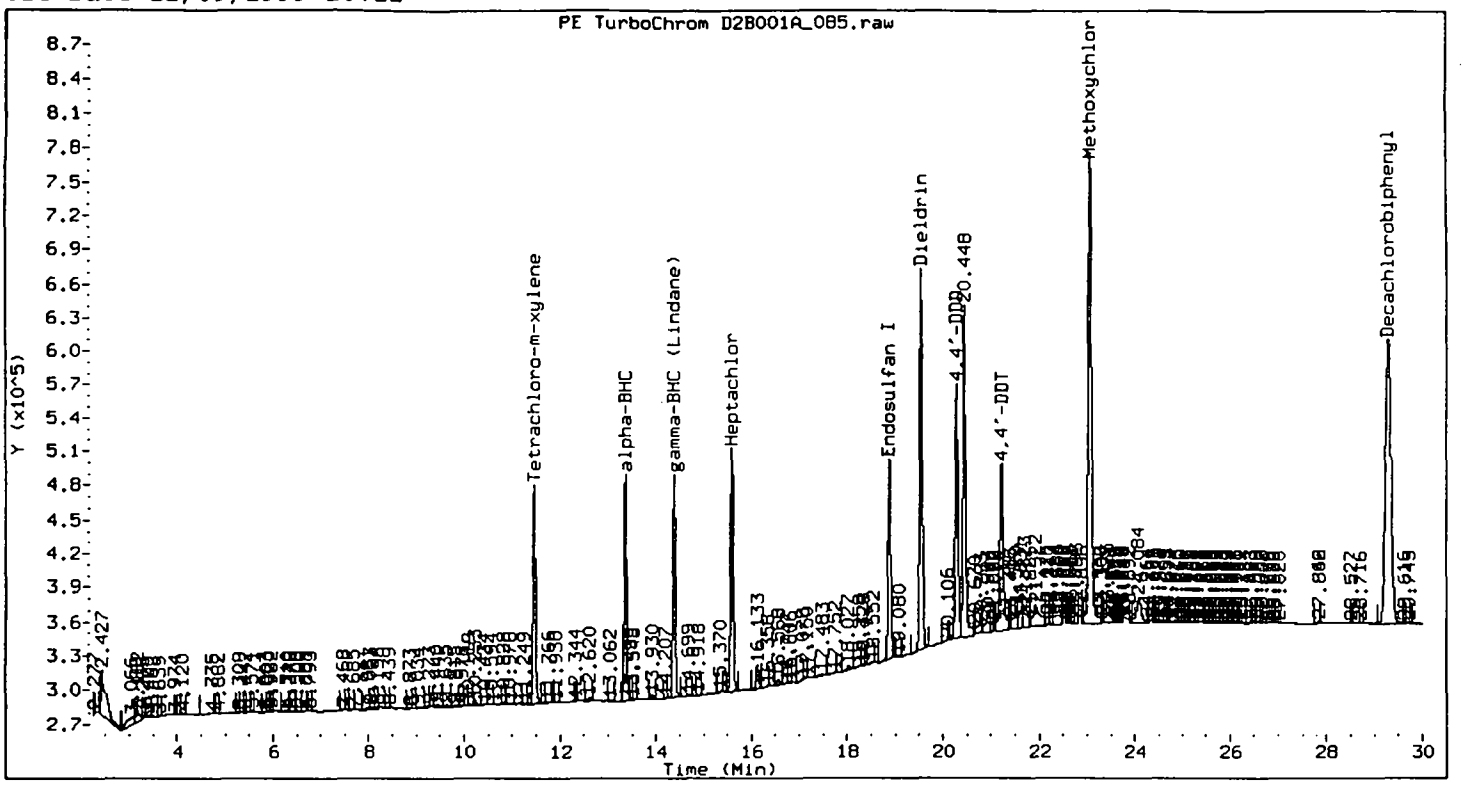


Method : /chem/HP58902.i/8081/front/11-12-99/12nov99g.b/Bf8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 15-NOV-1999 00:31 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.953	13.953	0.000	659409	21.161	21.161
beta-BHC	12.178	12.178	0.000	437501	22.180	22.180
delta-BHC	12.648	12.648	0.000	555069	21.130	21.130
4,4'-DDE	16.286	16.286	0.000	1379138	44.111	44.111
Endosulfan II	18.037	18.037	0.000	1354354	42.400	42.400
Endosulfan sulfate	19.983	19.983	0.000	1239686	42.384	42.384
Endrin aldehyde	18.990	18.990	0.000	1143846	41.538	41.538
Endrin ketone	20.634	20.634	0.000	1435120	39.764	39.764
Heptachlor epoxide	15.463	15.463	0.000	761180	21.447	21.447

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.765	15.765	0.000	768246	21.121	21.121
alpha-Chlordane	16.082	16.082	0.000	773578	21.231	21.231
Tetrachloro-m-xylene	9.372	9.372	0.000	721210	22.053	22.053
Decachlorobiphenyl	23.242	23.242	0.000	1848581	41.299	41.299

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99g.b/D2B001A_085.d Page 1
Report Date 12/09/1999 16:12



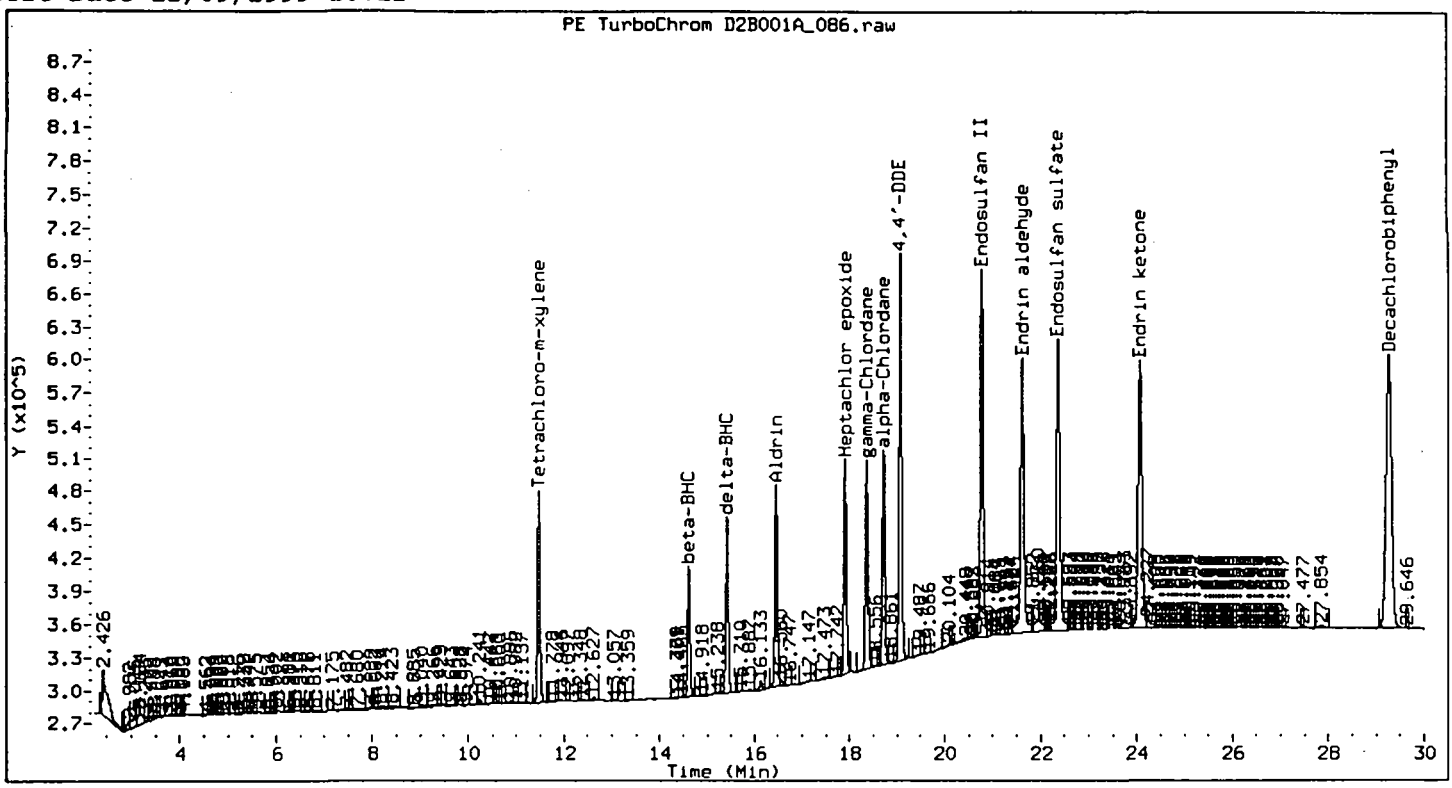
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99g.b/Br8081.m
Sample Info : INDA L3
Lab ID : INDA L3 Inst ID : HP58902.i
Inj Date : 14-NOV-1999 23:52 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	13.370	13.370	0.000	667279	20.792	20.792
gamma-BHC (Lindane)	14.395	14.395	0.000	679589	20.748	20.748
4,4'-DDD	20.290	20.290	0.000	902160	42.741	42.741
4,4'-DDT	21.223	21.223	0.000	693431	28.973	28.973
Dieldrin	19.547	19.547	0.000	1279330	41.565	41.565
Endosulfan I	18.885	18.885	0.000	669566	20.951	20.951
Heptachlor	15.604	15.604	0.000	782252	19.646	19.646
Methoxychlor	23.062	23.062	0.000	2021479	150.361	150.361
Tetrachloro-m-xylene	11.466	11.473	0.007	686107	21.423	21.423

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99g.b/D2B001A_085.d Page 2
Report Date 12/09/1999 16:12

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	29.288	29.265	0.023	2021095	41.933	41.933

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99g.b/D2B001A_086.d Page 1
Report Date 12/09/1999 16:12



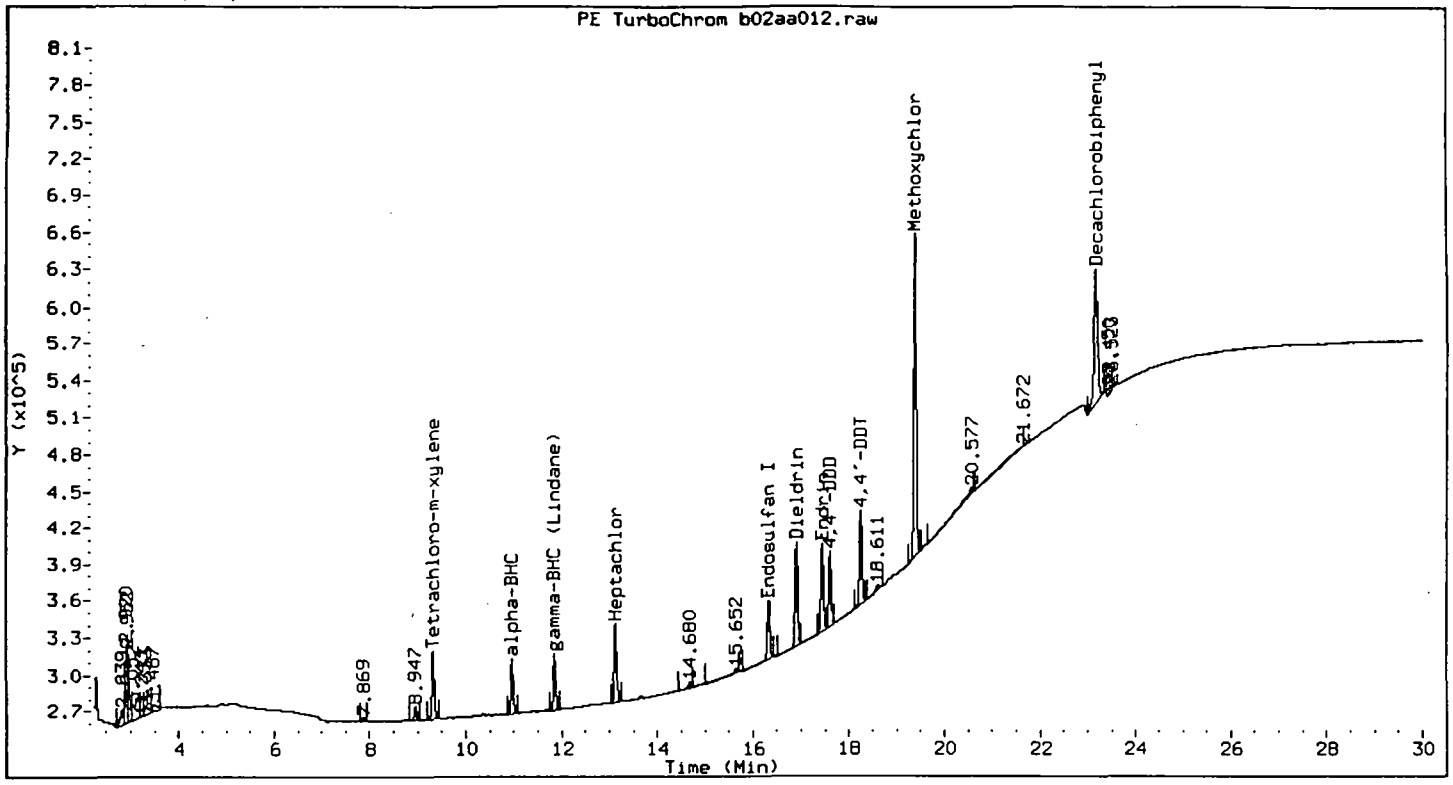
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99g.b/Br8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 15-NOV-1999 00:31 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Aldrin	16.461	16.461	0.000	662420	20.288	20.288
beta-BHC	14.618	14.618	0.000	433268	21.635	21.635
delta-BHC	15.424	15.424	0.000	571179	20.682	20.682
4,4'-DDE	19.074	19.074	0.000	1338003	43.563	43.563
Endosulfan II	20.777	20.777	0.000	1390150	44.051	44.051
Endosulfan sulfate	22.372	22.372	0.000	1332899	44.779	44.779
Endrin aldehyde	21.624	21.624	0.000	1260659	45.669	45.669
Endrin ketone	24.076	24.076	0.000	1375953	38.691	38.691
Heptachlor epoxide	17.905	17.905	0.000	715211	20.748	20.748

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99g.b/D2B001A_086.d Page 2
Report Date 12/09/1999 16:12

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.363	18.363	0.000	713294	20.535	20.535
alpha-Chlordane	18.720	18.720	0.000	728771	20.572	20.572
Tetrachloro-m-xylene	11.473	11.473	0.000	688932	21.511	21.511
Decachlorobiphenyl	29.265	29.265	0.000	1983856	41.161	41.161

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa012.d Page 1
Report Date 12/09/1999 11:30



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDA L1
Lab ID : INDA L1 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 02:14 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_1

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		10.960	10.974	0.014	150396	4.582	4.582
gamma-BHC (Lindane)		11.851	11.864	0.013	156414	4.697	4.697
4,4'-DDD	(M)	17.609	17.614	0.005	215664	9.890	9.890
4,4'-DDT	(M)	18.255	18.258	0.003	286153	9.965	9.965
Dieldrin		16.912	16.918	0.006	319331	10.047	10.047
Endosulfan I		16.337	16.343	0.006	179617	5.397	5.397
Endrin	(M)	17.447	17.451	0.004	265627	10.453	10.453
Heptachlor		13.127	13.137	0.010	226830	5.256	5.256
Methoxychlor	(M)	19.393	19.391	0.003	928309	55.949	55.949

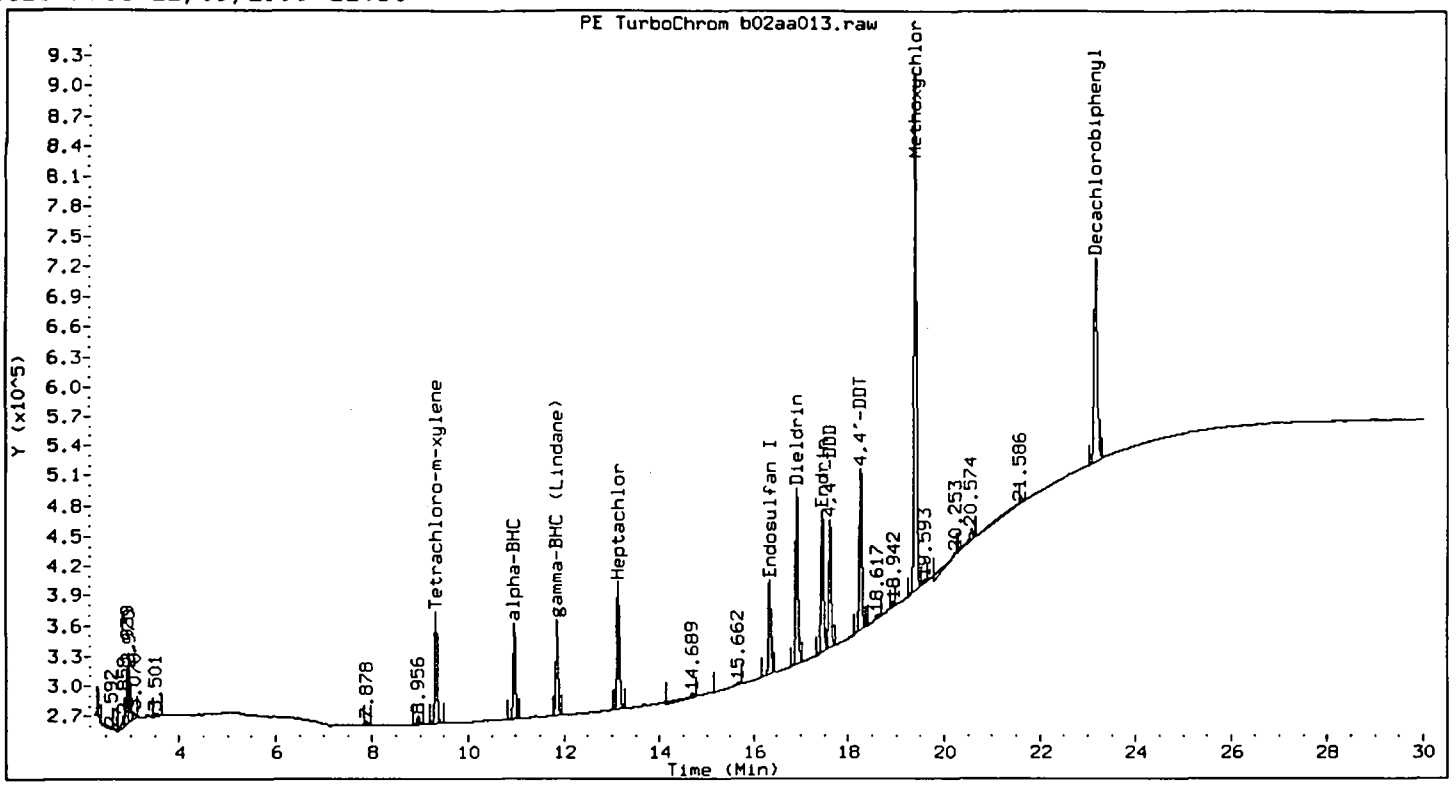
Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa012.d Page 2
Report Date 12/09/1999 11:30

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene		9.319	9.329	0.010	188140	5.032	5.032
Decachlorobiphenyl	(M)	23.179	23.169	0.010	571425	12.051	12.051

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa013.d Page 1
Report Date 12/09/1999 11:30



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDA L2
Lab ID : INDA L2 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 02:53 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_2

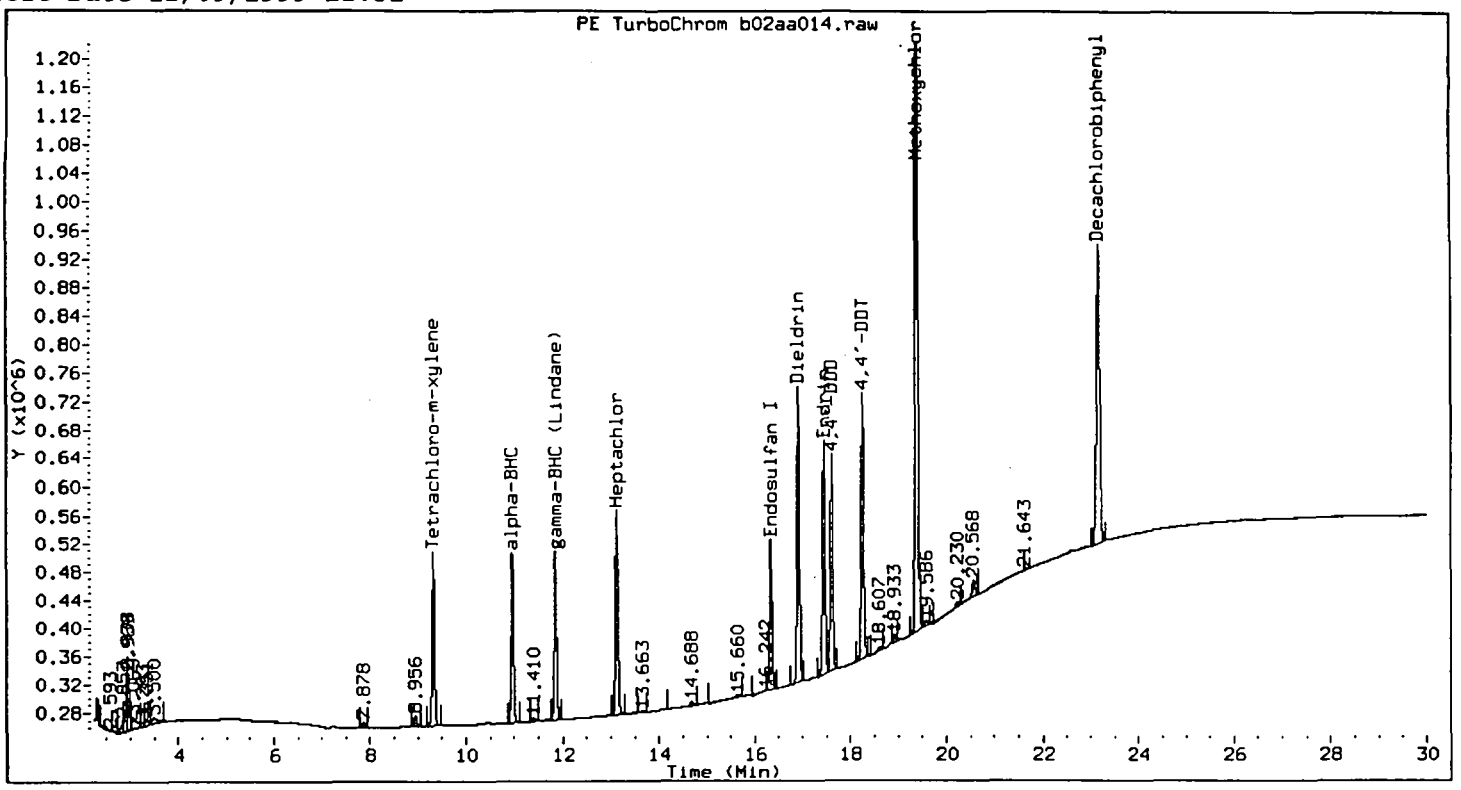
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		10.968	10.974	0.006	307054	9.354	9.354
gamma-BHC (Lindane)		11.859	11.864	0.005	318286	9.558	9.558
4,4'-DDD		17.619	17.614	0.005	432810	19.848	19.848
4,4'-DDT	(M)	18.264	18.258	0.007	578593	20.295	20.295
Dieldrin	(M)	16.922	16.918	0.005	633069	19.989	19.989
Endosulfan I	(M)	16.346	16.343	0.003	341523	10.330	10.330
Endrin		17.457	17.451	0.006	518877	20.419	20.419
Heptachlor		13.134	13.137	0.003	448893	10.401	10.401
Methoxychlor	(M)	19.398	19.391	0.007	1814371	109.404	109.404

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.328	9.329	0.002	373742	9.948	9.948
Decachlorobiphenyl	23.173	23.169	0.004	979951	20.557	20.557

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa014.d Page 1
Report Date 12/09/1999 11:31



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDA L3
Lab ID : INDA L3
Inj Date : 27-NOV-1999 03:32
Operator : gds
Cpnd Sublist: INDA

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

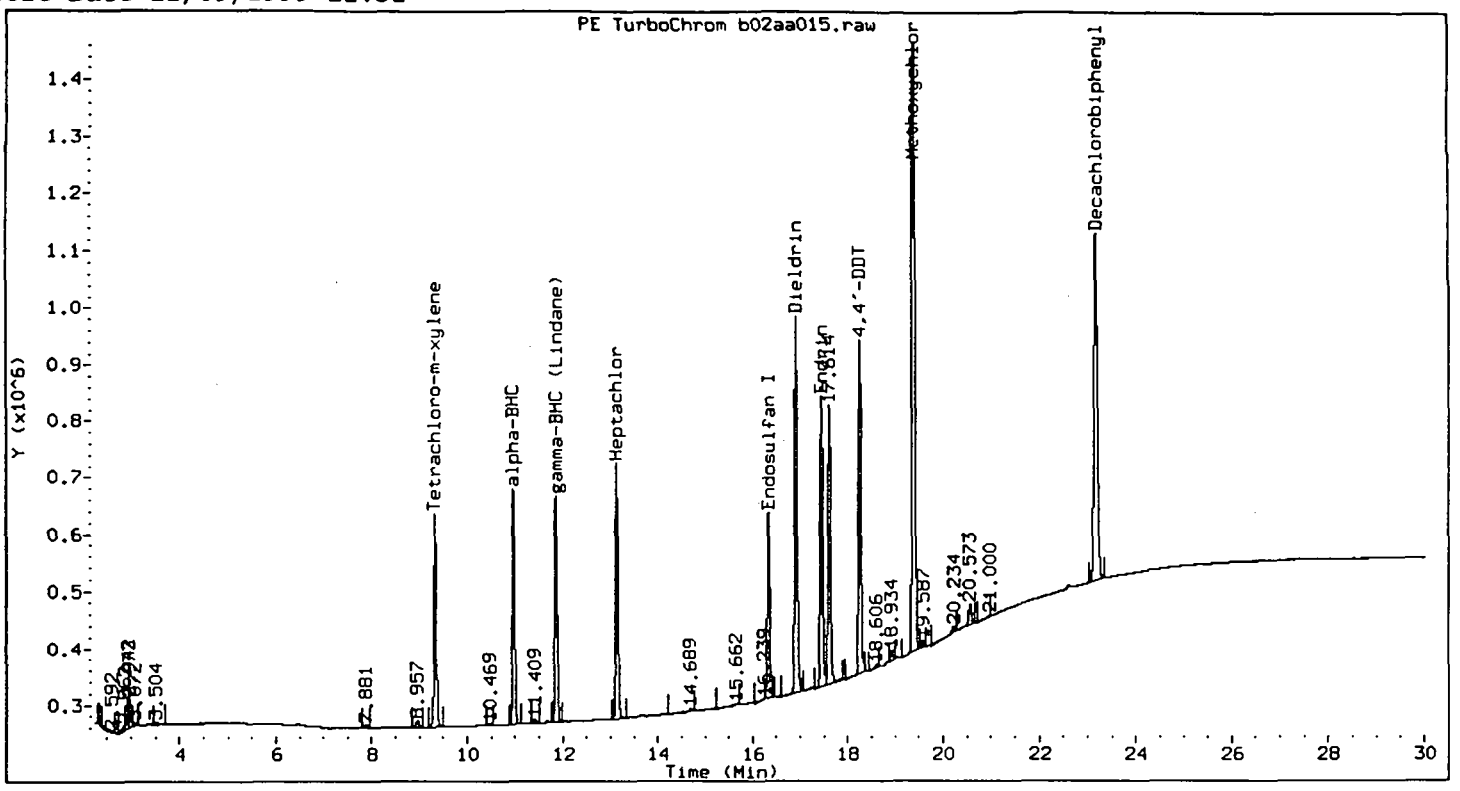
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		10.974	10.974	0.000	747764	22.781	22.781
gamma-BHC (Lindane)		11.864	11.864	0.000	766391	23.014	23.014
4,4'-DDD	(M)	17.614	17.614	0.000	1024410	46.821	46.821
4,4'-DDT	(M)	18.258	18.258	0.000	1328450	46.659	46.659
Dieldrin	(M)	16.918	16.918	0.000	1464550	46.341	46.341
Endosulfan I		16.343	16.343	0.000	758642	22.946	22.946
Endrin	(M)	17.451	17.451	0.000	1201367	47.031	47.031
Heptachlor		13.137	13.137	0.000	998205	23.129	23.129
Methoxychlor	(M)	19.391	19.391	0.000	3846824	232.026	232.026

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	9.329	9.329	0.000	813647	21.687	21.687
Decachlorobiphenyl	23.169	23.169	0.000	2049231	44.340	44.340

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa015.d Page 1
Report Date 12/09/1999 11:31



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDA L4
Lab ID : INDA L4 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 04:11 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_4

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		10.974	10.974	0.000	1236741	37.678	37.678
gamma-BHC (Lindane)		11.864	11.864	0.000	1246550	37.433	37.433
4,4'-DDD	(M)	17.451	17.614	0.163	1834262	81.322	81.322
4,4'-DDT		18.258	18.258	0.000	2070117	72.708	72.708
Dieldrin		16.918	16.918	0.000	2303202	72.877	72.877
Endosulfan I		16.343	16.343	0.000	1154528	34.920	34.920
Endrin	(M)	17.451	17.451	0.000	1834262	71.104	71.104
Heptachlor		13.137	13.137	0.001	1525959	35.357	35.357
Methoxychlor		19.393	19.391	0.003	5644259	340.440	340.440

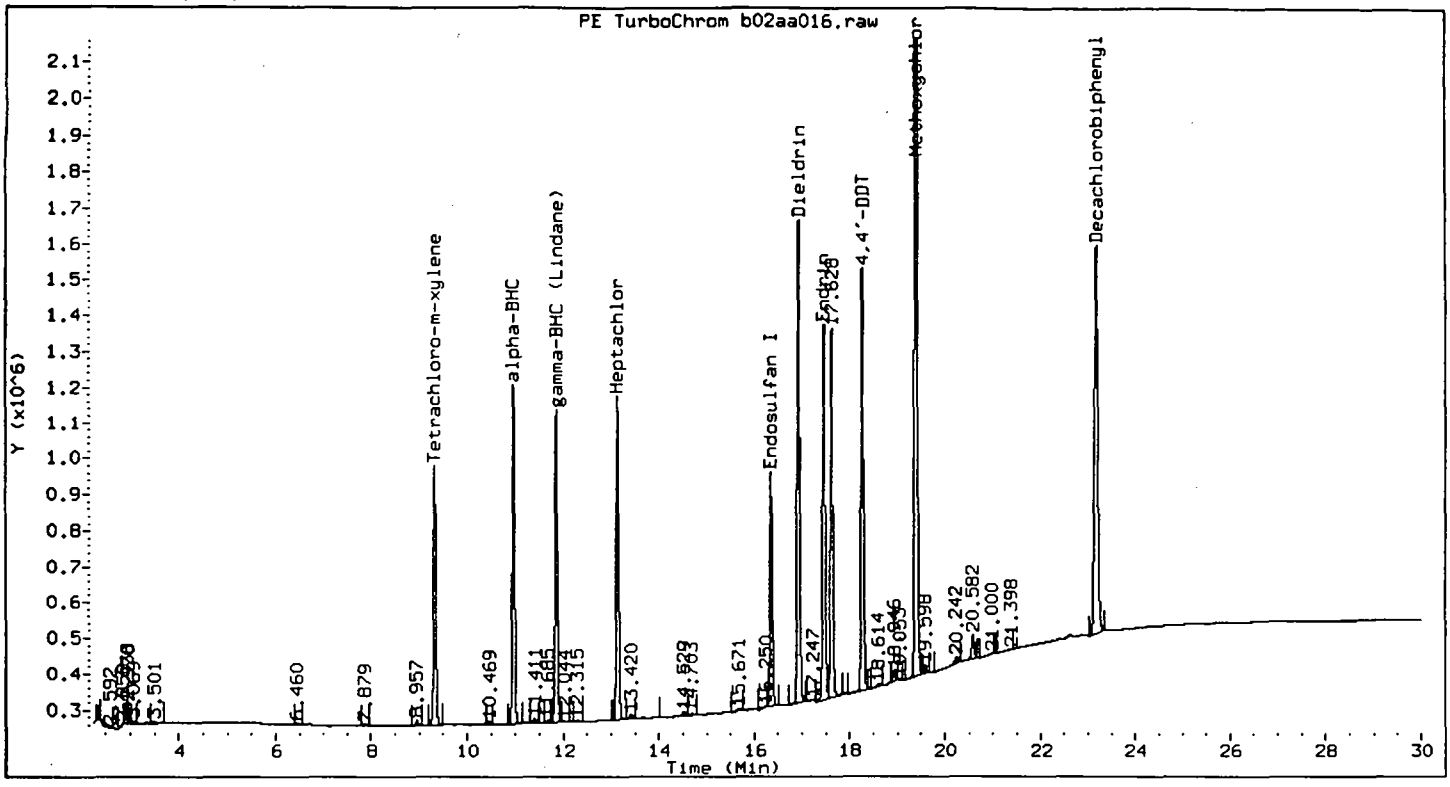
Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa015.d Page 2
Report Date 12/09/1999 11:31

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	9.330	9.329	0.001	1223937	35.125	35.125
Decachlorobiphenyl	23.177	23.169	0.008	2978947	68.121	68.121

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa016.d Page 1
Report Date 12/09/1999 11:31



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDA L5
Lab ID : INDA L5 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 04:50 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_5

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		10.974	10.974	0.000	2802442	85.377	85.377
gamma-BHC (Lindane)		11.866	11.864	0.002	2712921	81.466	81.466
4,4'-DDD	(M)	17.465	17.614	0.149	3774073	163.616	163.616
4,4'-DDT		18.271	18.258	0.013	4116076	144.568	144.568
Dieldrin		16.931	16.918	0.013	4644581	146.963	146.963
Endosulfan I		16.356	16.343	0.013	2275041	68.812	68.812
Endrin	(M)	17.465	17.451	0.014	3774073	146.217	146.217
Heptachlor		13.142	13.137	0.004	2998414	69.474	69.474
Methoxychlor		19.403	19.391	0.012	10273458	619.656	619.656

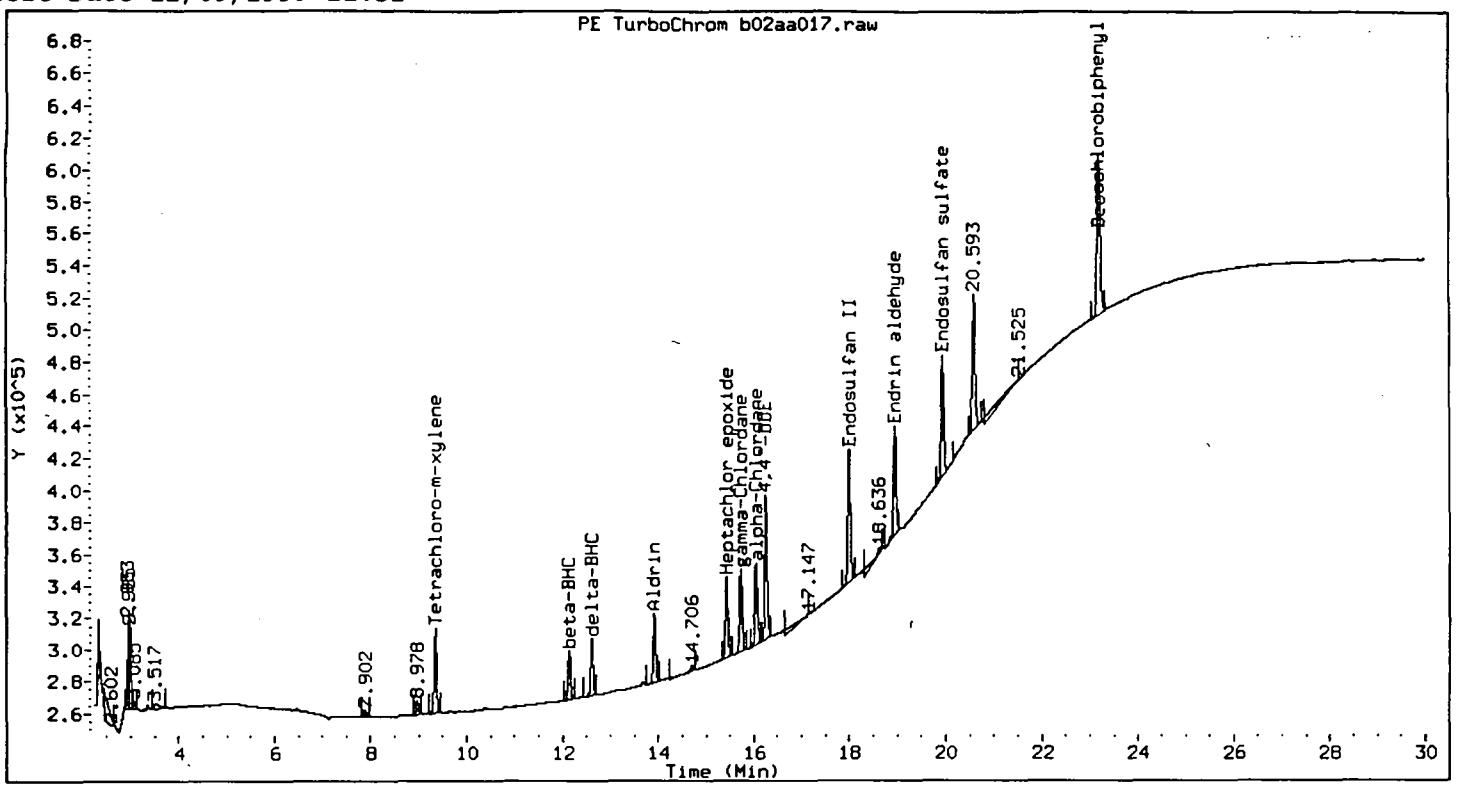
Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa016.d Page 2
Report Date 12/09/1999 11:31

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	9.329	9.329	0.000	2333042	66.954	66.954
Decachlorobiphenyl	23.180	23.169	0.011	5307763	121.375	121.375

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa017.d Page 1
Report Date 12/09/1999 11:32



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDB L1
Lab ID : INDB L1 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 05:29 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_1

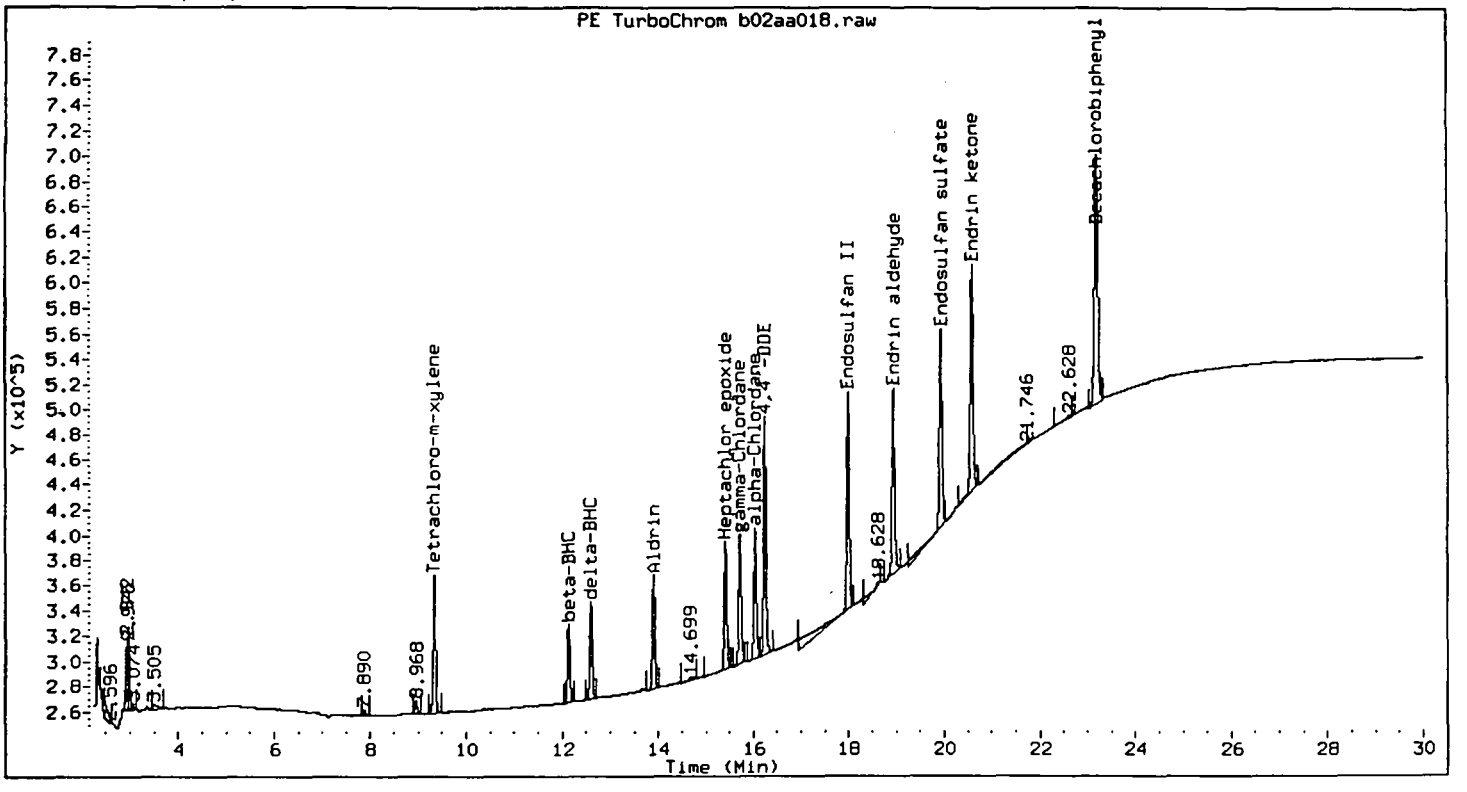
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	(M)	13.920	13.913	0.007	156986	4.550	4.550
beta-BHC		12.146	12.139	0.007	106784	4.799	4.799
delta-BHC		12.613	12.608	0.005	126810	4.180	4.180
4,4'-DDE		16.255	16.245	0.010	307705	8.839	8.839
Endosulfan II	(M)	18.003	17.988	0.015	314899	8.751	8.751
Endosulfan sulfate	(M)	19.944	19.931	0.013	291536	9.026	9.026
Endrin aldehyde		18.956	18.940	0.016	266216	9.269	9.269
Endrin ketone	(M)	19.944	20.581	0.637	291536	8.037	8.037
Heptachlor epoxide		15.430	15.422	0.008	183825	4.742	4.742

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane	15.732	15.723	0.009	199955	5.107	5.107
alpha-Chlordane	16.051	16.041	0.010	185600	4.796	4.796
Tetrachloro-m-xylene	9.351	9.329	0.022	182046	4.852	4.852
Decachlorobiphenyl	23.192	23.169	0.023	480120	10.389	10.389

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa018.d Page 1
Report Date 12/09/1999 11:32

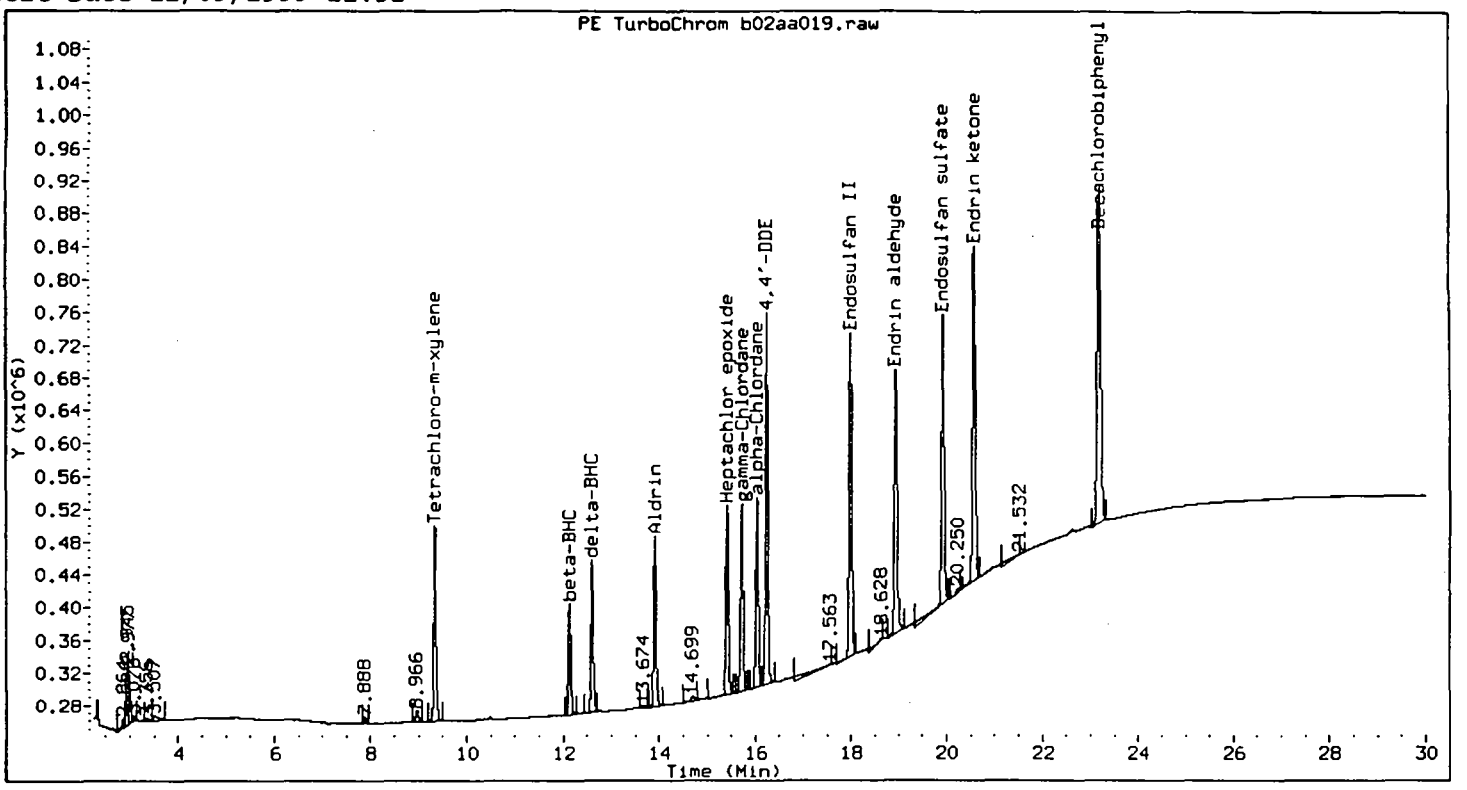


Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDB L2
Lab ID : INDB L2 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 06:08 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.911	13.913	0.003	316034	9.436	9.436
beta-BHC	12.138	12.139	0.001	214655	10.235	10.235
delta-BHC	12.607	12.608	0.002	259415	8.996	8.996
4,4'-DDE	16.243	16.245	0.002	647188	19.512	19.512
Endosulfan II	17.991	17.988	0.003	866132	24.196	24.196
Endosulfan sulfate	19.934	19.931	0.003	667032	20.886	20.886
Endrin aldehyde	18.944	18.940	0.004	587341	20.858	20.858
Endrin ketone	20.585	20.581	0.004	727633	19.594	19.594
Heptachlor epoxide	15.419	15.422	0.002	377493	10.190	10.190

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.722	15.723	0.002	379125	10.114	10.114
alpha-Chlordane	16.039	16.041	0.002	374587	10.105	10.105
Tetrachloro-m-xylene	9.341	9.329	0.012	364844	10.524	10.524
Decachlorobiphenyl	23.188	23.169	0.019	954554	21.956	21.956

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa019.d Page 1
Report Date 12/09/1999 11:32

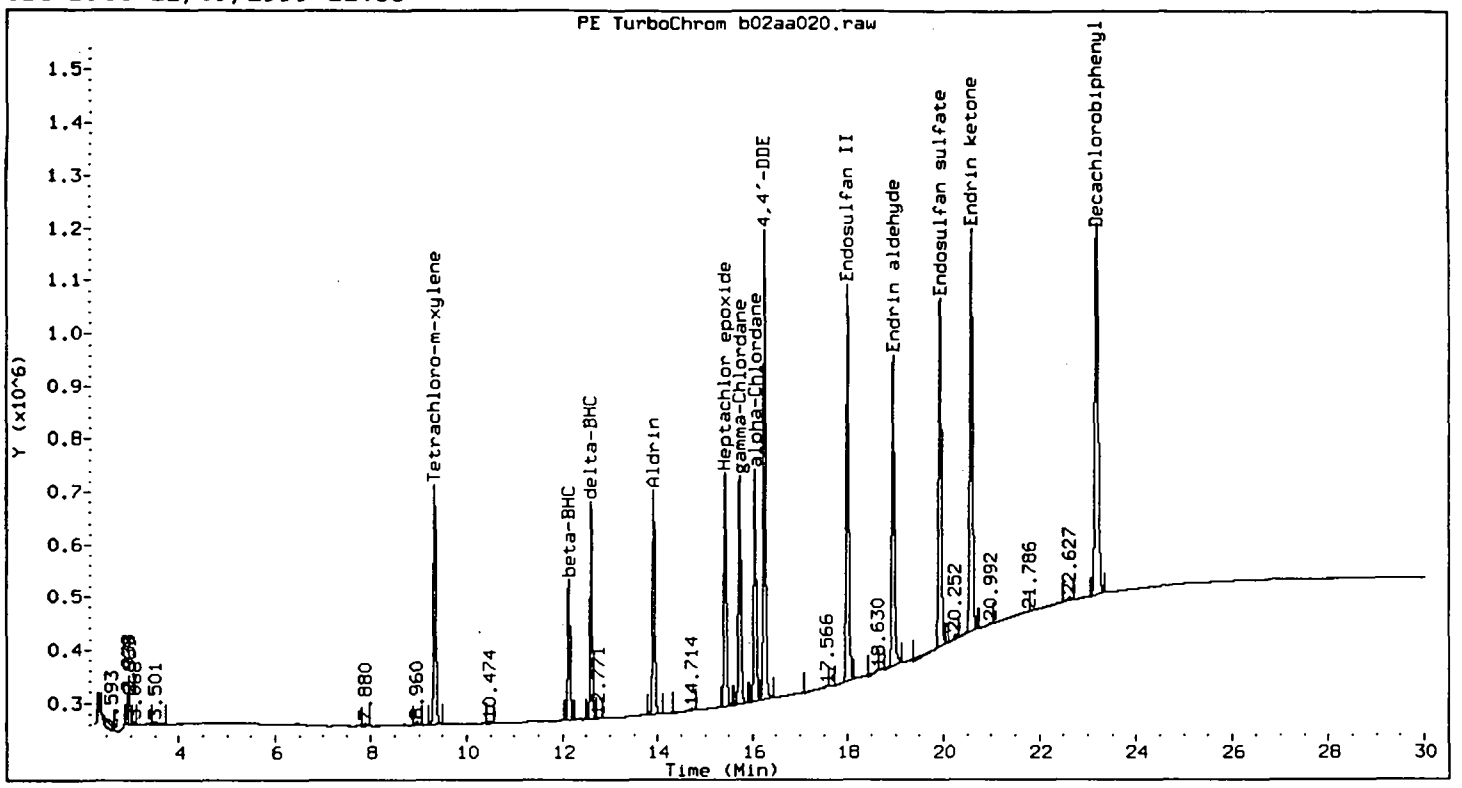


Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 06:47 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.913	13.913	0.000	719058	20.707	20.707
beta-BHC	12.139	12.139	0.000	475318	21.831	21.831
delta-BHC	12.608	12.608	0.000	614879	20.726	20.726
4,4'-DDE	16.245	16.245	0.000	1501440	43.773	43.773
Endosulfan II	17.988	17.988	0.000	1462529	39.763	39.763
Endosulfan sulfate	19.931	19.931	0.000	1426904	42.995	42.995
Endrin aldehyde	18.940	18.940	0.000	1255999	43.707	43.707
Endrin ketone	20.581	20.581	0.000	1625926	42.800	42.800
Heptachlor epoxide	15.422	15.422	0.000	826826	21.616	21.616

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.723	15.723	0.000	820464	21.260	21.260
alpha-Chlordane	16.041	16.041	0.000	826267	21.634	21.634
Tetrachloro-m-xylene	9.338	9.329	0.009	794525	23.046	23.046
Decachlorobiphenyl	23.186	23.169	0.017	1974946	45.817	45.817

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa020.d Page 1
Report Date 12/09/1999 11:33



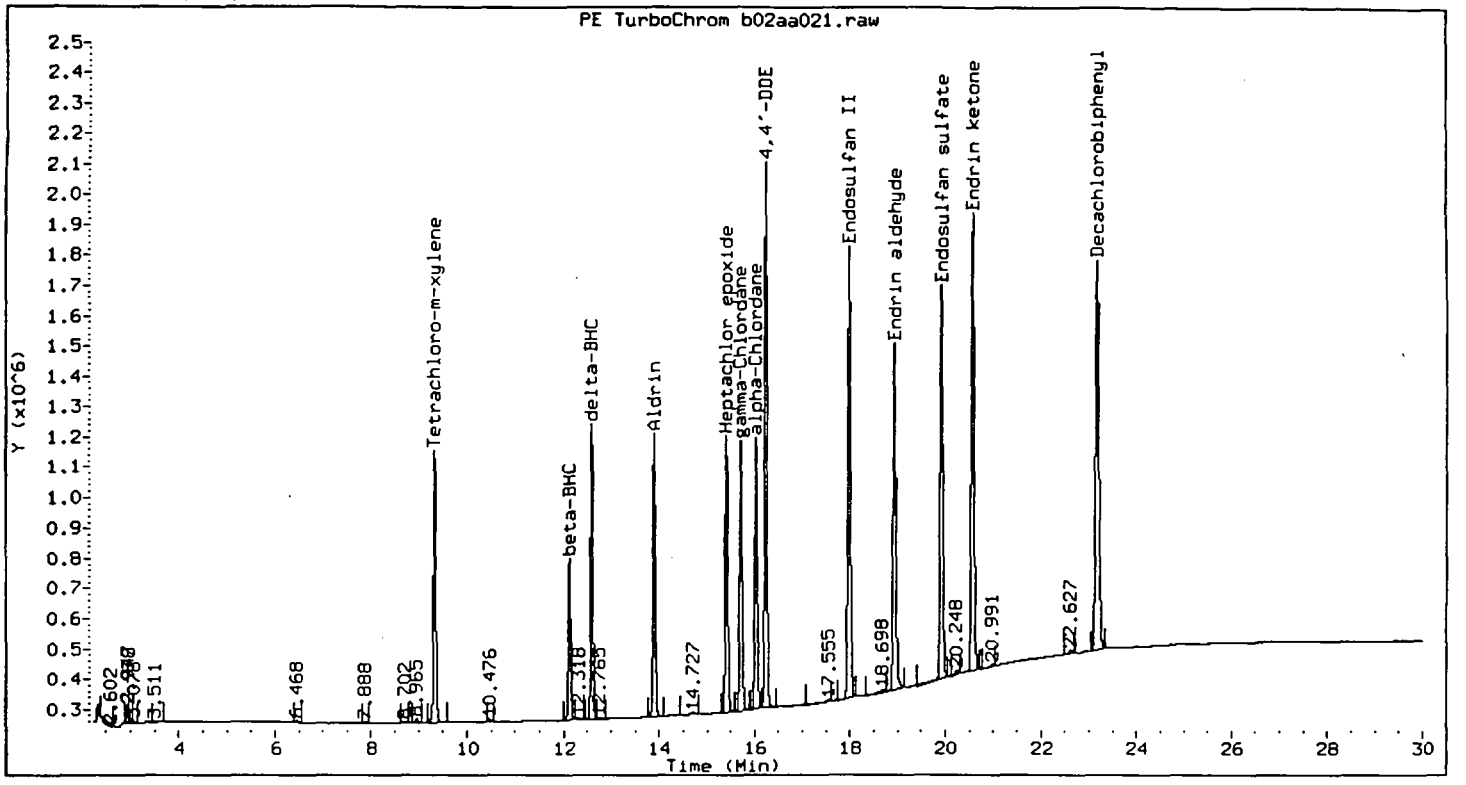
Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDB L4
Lab ID : INDB L4 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 07:26 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.915	13.913	0.002	1412463	40.180	40.180
beta-BHC	12.137	12.139	0.002	888384	40.233	40.233
delta-BHC	12.608	12.608	0.000	1281871	42.629	42.629
4,4'-DDE	16.249	16.245	0.004	2900034	83.598	83.598
Endosulfan II	17.994	17.988	0.006	2747739	74.200	74.200
Endosulfan sulfate	19.935	19.931	0.004	2567682	76.472	76.472
Endrin aldehyde	18.946	18.940	0.006	2286001	79.407	79.407
Endrin ketone	20.584	20.581	0.003	3024192	79.423	79.423
Heptachlor epoxide	15.425	15.422	0.003	1545537	40.006	40.006

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa020.d Page 2
Report Date 12/09/1999 11:33

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.727	15.723	0.004	1527599	39.171	39.171
alpha-Chlordane	16.045	16.041	0.004	1546927	40.112	40.112
Tetrachloro-m-xylene	9.332	9.329	0.003	1472360	41.221	41.221
Decachlorobiphenyl	23.186	23.169	0.017	3458781	78.069	78.069

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa021.d Page 1
Report Date 12/09/1999 11:34

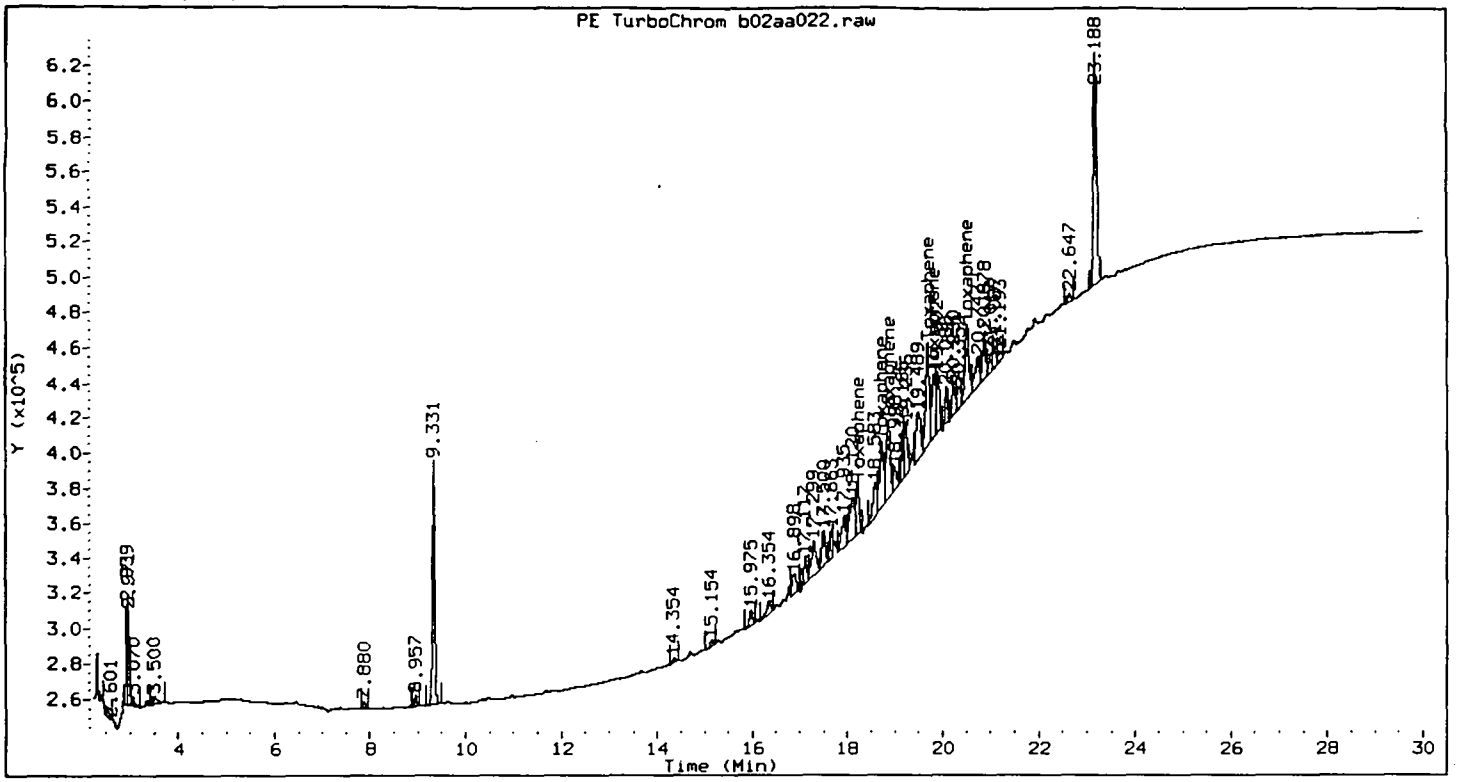


Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDB L5
Lab ID : INDB L5 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 08:05 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Aldrin	13.910	13.913	0.003	3058313	86.701	86.701
beta-BHC	12.136	12.139	0.003	1796270	80.730	80.730
delta-BHC	12.605	12.608	0.003	3008352	99.156	99.156
4,4'-DDE	16.243	16.245	0.002	5944436	170.749	170.749
Endosulfan II	17.989	17.988	0.001	5473659	147.547	147.547
Endosulfan sulfate	19.933	19.931	0.003	4995006	148.197	148.197
Endrin aldehyde	18.942	18.940	0.002	4423206	154.002	154.002
Endrin ketone	20.582	20.581	0.002	5983321	157.349	157.349
Heptachlor epoxide	15.419	15.422	0.002	3147359	81.186	81.186

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.722	15.723	0.002	3091198	78.955	78.955
alpha-Chlordane	16.039	16.041	0.002	3115909	80.509	80.509
Tetrachloro-m-xylene	9.337	9.329	0.007	2904814	78.196	78.196
Decachlorobiphenyl	23.187	23.169	0.018	6337055	138.998	138.998

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa022.d Page 1
Report Date 12/09/1999 11:34



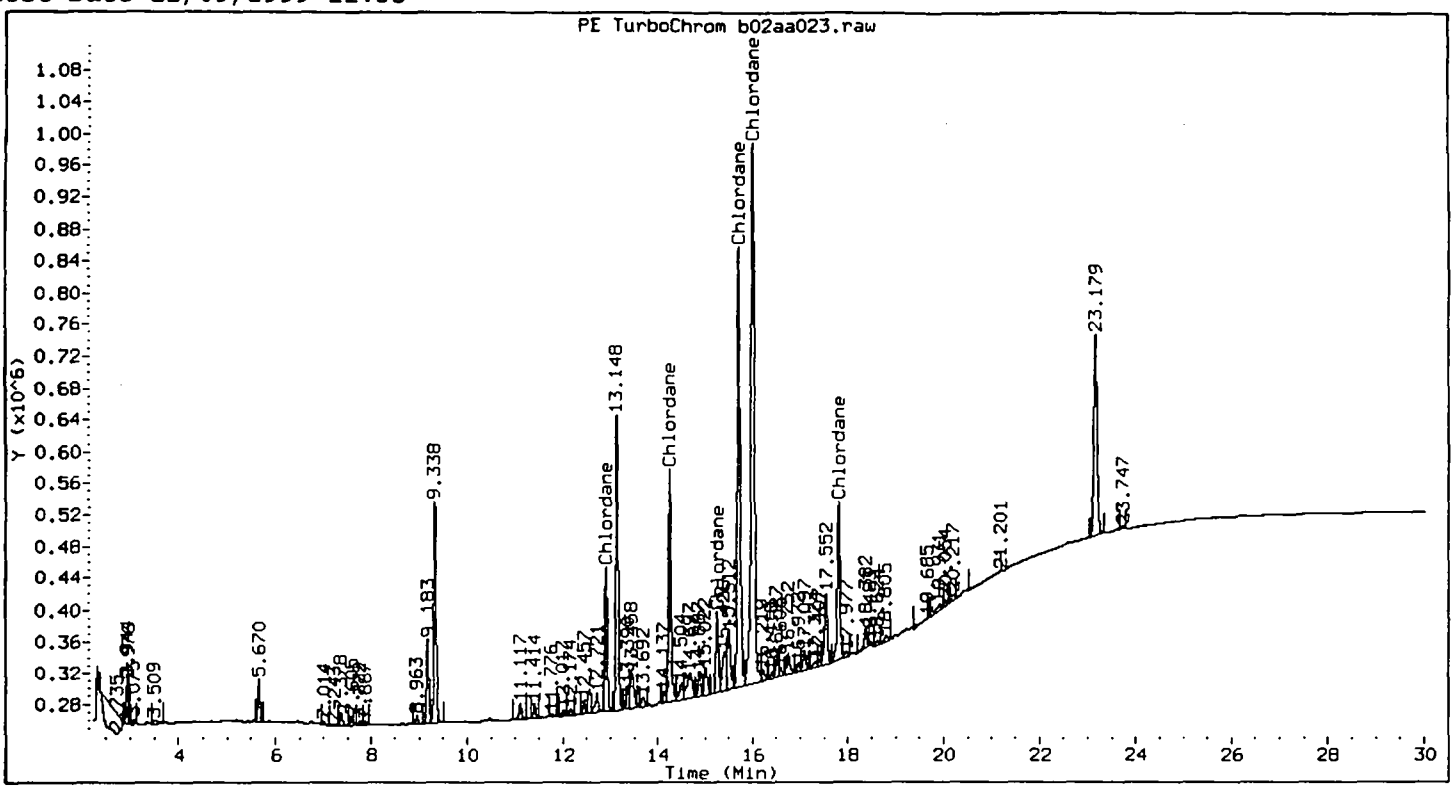
Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : tox 13
Lab ID : tox 13 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 08:44 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: TOXAPH0 Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Toxaphene	(M)	18.222	18.222	0.000	122897	1500.000	1500.000
(2)		18.724	18.724	0.000	209687	1500.000	1500.000
(3)		18.870	18.870	0.000	264678	1500.000	1500.000
(4)		19.692	19.692	0.000	301565	1500.000	1500.000
(5)		19.822	19.822	0.000	182877	1500.000	1500.000
(6)		20.513	20.513	0.000	246355	1500.000	1500.000

Average of peak concentrations: 1500.00

COMMENTS:

M - Compound response manually integrated.



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : chlor 13
Lab ID : chlor 13 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 09:23 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: CHLORDANE Sample Type: CALIB_3

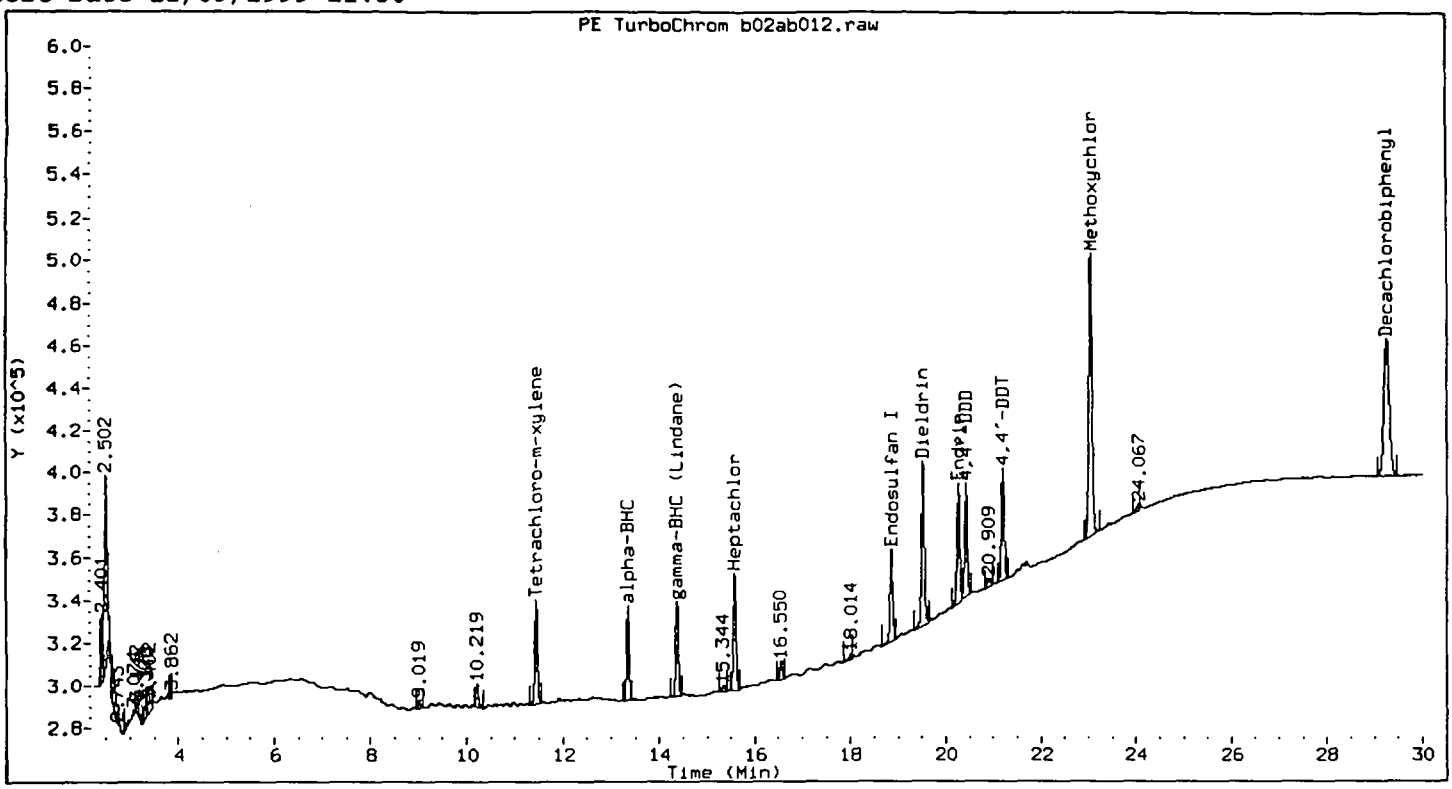
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Chlordane	(M)	12.919	12.919	0.000	627749	500.000	500.000
(2)		14.263	14.263	0.000	1132622	500.000	500.000
(3)		15.268	15.268	0.000	378882	500.000	500.000
(4)		15.726	15.726	0.000	2226608	500.000	500.000
(5)		16.023	16.023	0.000	3616312	500.000	500.000
(6)		17.819	17.819	0.000	801576	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab012.d Page 1
Report Date 12/09/1999 11:30



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDA L1
Lab ID : INDA L1
Inj Date : 27-NOV-1999 02:14
Operator : gds
Cpnd Sublist: INDA

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : OIL
Sample Type: CALIB_1

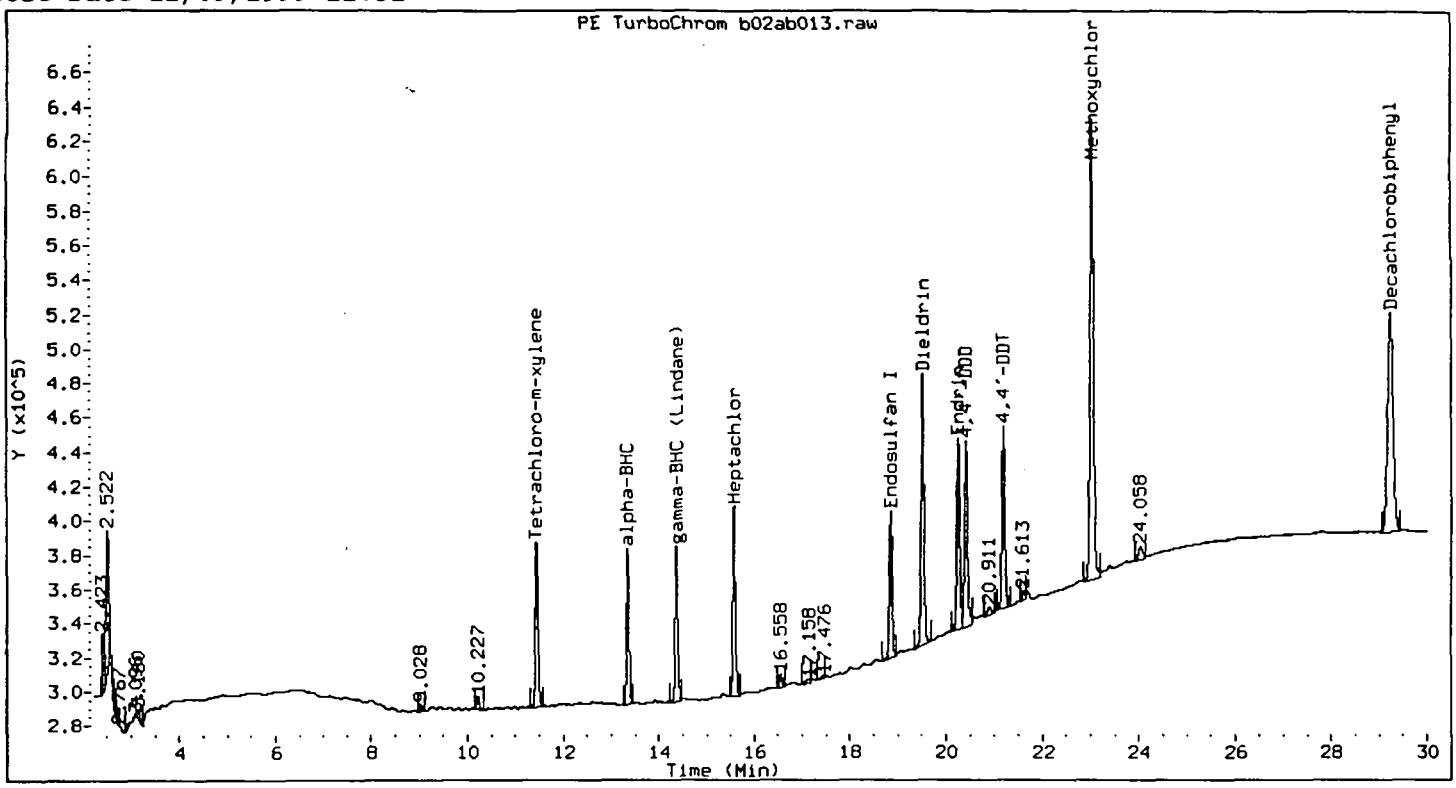
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		13.349	13.363	0.014	157013	5.000	5.000
gamma-BHC (Lindane)		14.374	14.385	0.011	166897	5.000	5.000
,4'-DDD	(M)	20.429	20.427	0.003	209791	9.852	9.852
4,4'-DDT		21.206	21.202	0.004	210814	9.884	9.884
Dieldrin		19.526	19.526	0.000	317042	10.257	10.257
Endosulfan I		18.863	18.865	0.002	168525	5.182	5.182
Endrin	(M)	20.270	20.267	0.003	233628	10.543	10.543
Heptachlor		15.582	15.589	0.007	209897	5.000	5.000
Methoxychlor	(M)	23.047	23.039	0.008	629744	50.000	50.000

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.449	11.463	0.013	185480	5.312	5.312
Decachlorobiphenyl	29.257	29.258	0.001	522286	10.779	10.779

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab013.d Page 1
Report Date 12/09/1999 11:31



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDA L2
Lab ID : INDA L2 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 02:53 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDA Sample Type: CALIB_2

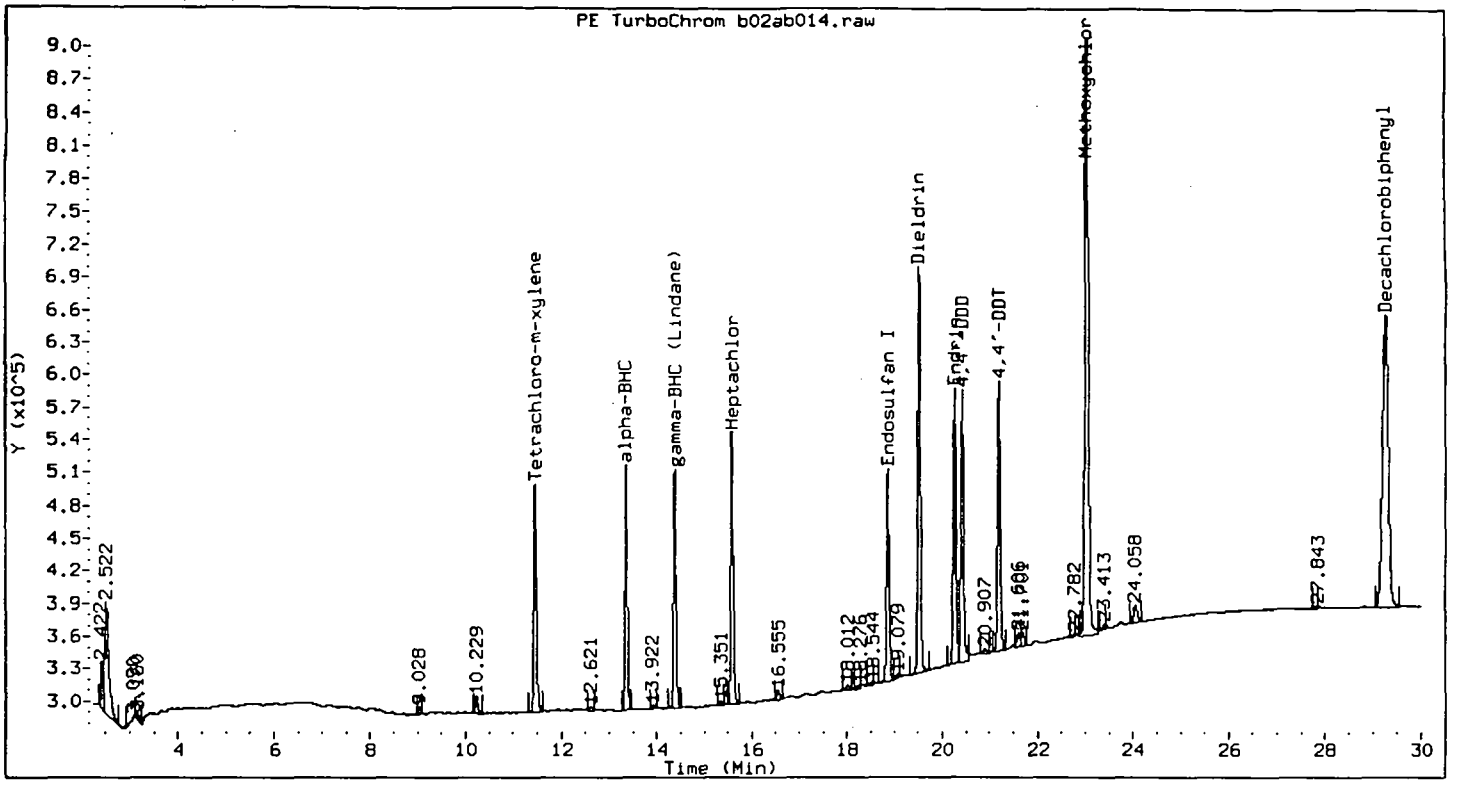
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	(M)	13.357	13.363	0.006	313014	9.984	9.984
gamma-BHC (Lindane)	(M)	14.383	14.385	0.002	331310	9.963	9.963
4,4'-DDD		20.433	20.427	0.006	445871	20.939	20.939
4,4'-DDT		21.207	21.202	0.005	430167	20.168	20.168
Dieldrin		19.532	19.526	0.006	630183	20.389	20.389
Endosulfan I		18.871	18.865	0.006	343027	10.547	10.547
Endrin		20.273	20.267	0.007	460888	20.798	20.798
Heptachlor	(M)	15.591	15.589	0.002	415121	9.944	9.944
Methoxychlor		23.043	23.039	0.004	1290578	101.219	101.219

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.457	11.463	0.006	359082	9.837	9.837
Decachlorobiphenyl	29.237	29.258	0.021	1033358	19.892	19.892

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab014.d Page 1
Report Date 12/09/1999 11:31



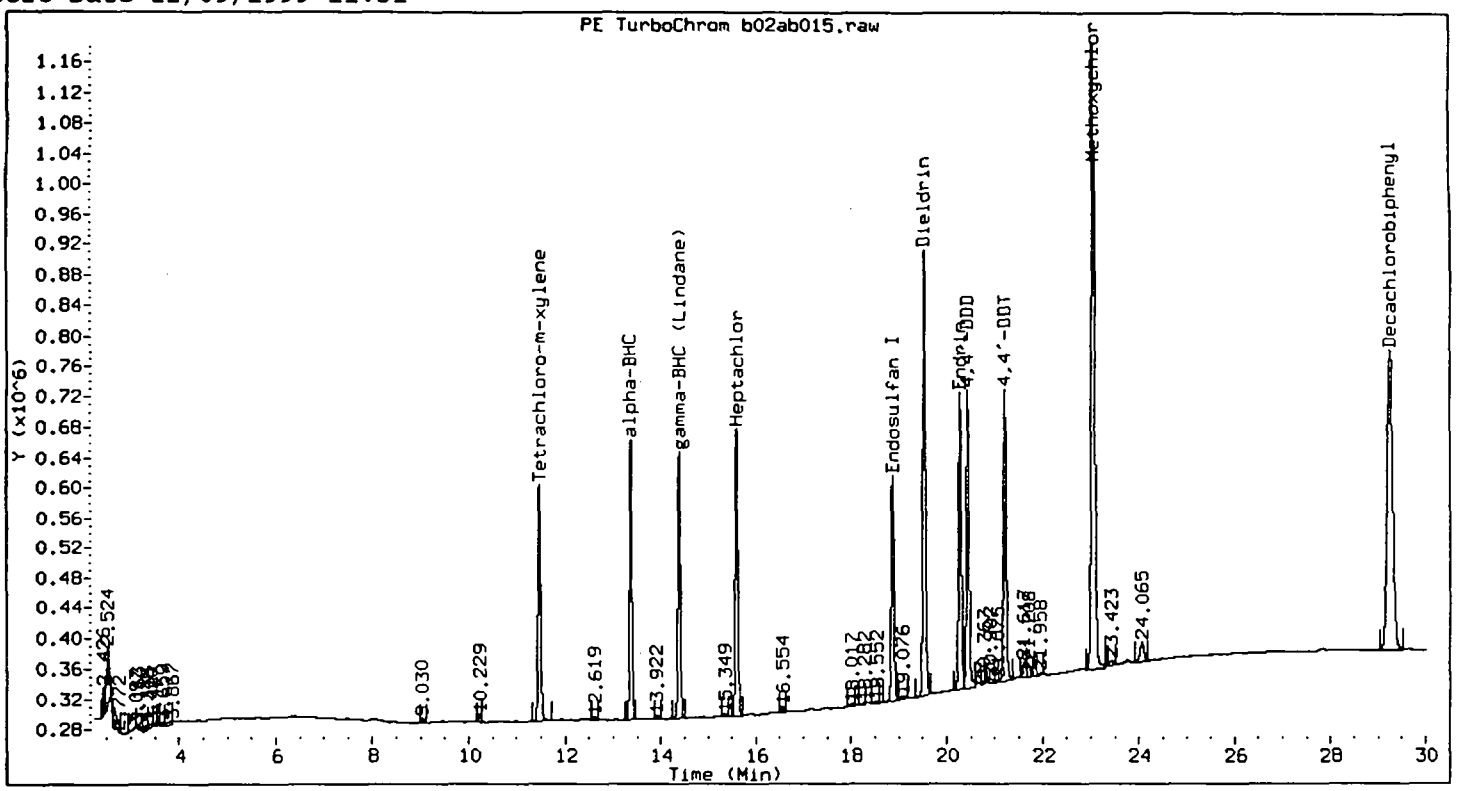
Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDA L3
Lab ID : INDA L3 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 03:32 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDA Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	13.363	13.363	0.000	745327	22.732	22.732
gamma-BHC (Lindane)	14.385	14.385	0.000	766399	22.825	22.825
4,4'-DDD	20.427	20.427	0.000	987810	46.390	46.390
4,4'-DDT	21.202	21.202	0.000	999054	46.841	46.841
Dieldrin	19.526	19.526	0.000	1432906	46.359	46.359
Endosulfan I	18.865	18.865	0.000	756983	23.275	23.275
Endrin	20.267	20.267	0.000	1020313	46.043	46.043
Heptachlor	15.589	15.589	0.000	913868	23.079	23.079
Methoxychlor	23.039	23.039	0.000	2839349	236.210	236.210

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab014.d Page 2
Report Date 12/09/1999 11:31

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.463	11.463	0.000	765225	22.961	22.961
Decachlorobiphenyl	29.258	29.258	0.000	2193880	46.466	46.466

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab015.d Page 1
Report Date 12/09/1999 11:31



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDA L4
Lab ID : INDA L4
Inj Date : 27-NOV-1999 04:11
Operator : gds
Cpnd Sublist: INDA

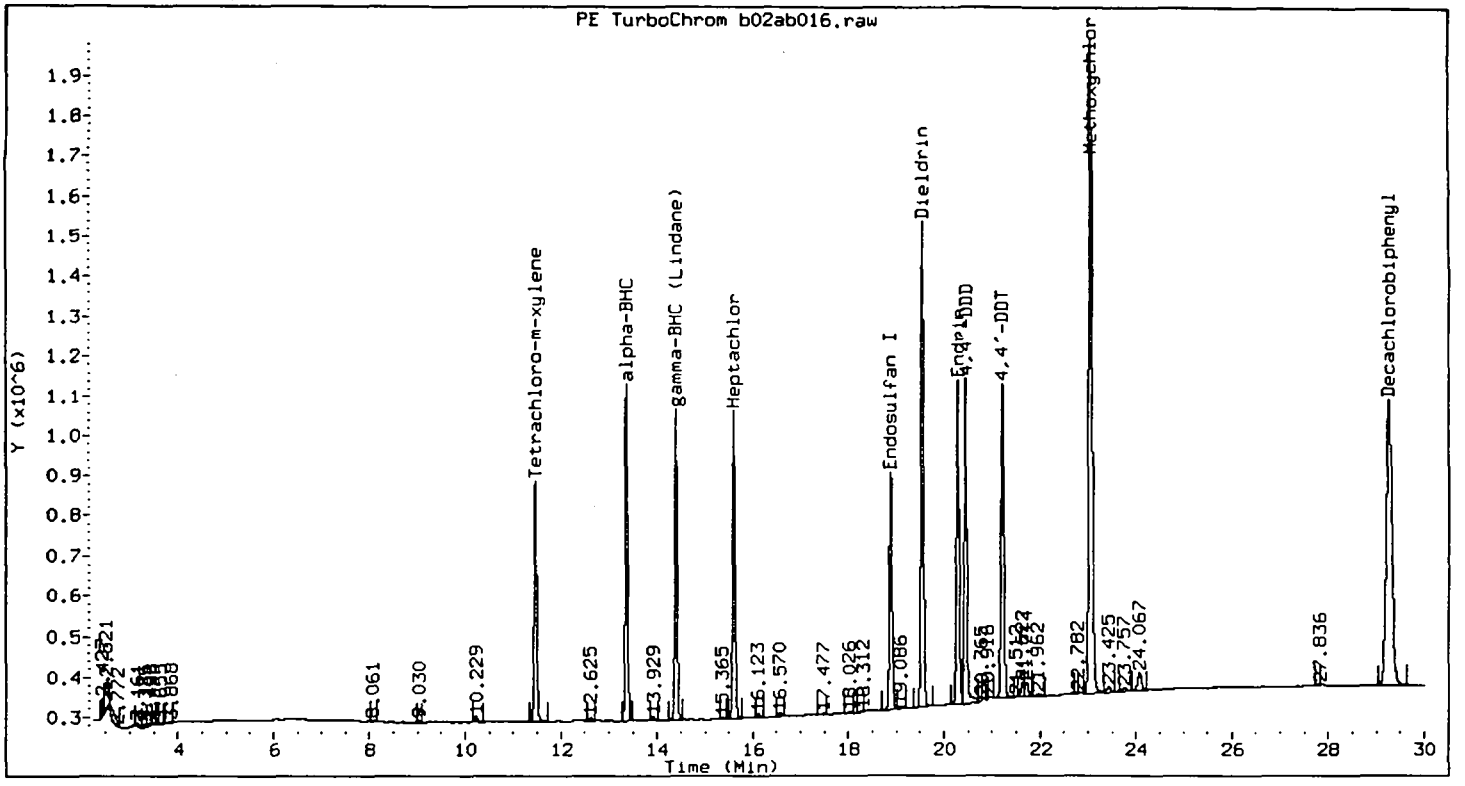
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : OIL
Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
alpha-BHC	13.363	13.363	0.000	1210381	37.177	37.177
gamma-BHC (Lindane)	14.386	14.385	0.001	1218484	36.025	36.025
4,4'-DDD	20.433	20.427	0.006	1519993	71.383	71.383
4,4'-DDT	21.208	21.202	0.007	1549909	72.668	72.668
Dieldrin	19.529	19.526	0.003	2195238	71.023	71.023
Endosulfan I	18.867	18.865	0.002	1147329	35.277	35.277
Endrin	20.273	20.267	0.006	1547173	69.819	69.819
Heptachlor	15.591	15.589	0.002	1384047	33.801	33.801
Methoxychlor	23.048	23.039	0.009	4200582	334.715	334.715

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab015.d Page 2
Report Date 12/09/1999 11:31

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.463	11.463	0.000	1141320	32.656	32.656
Decachlorobiphenyl	29.248	29.258	0.009	3235203	64.969	64.969

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab016.d Page 1
Report Date 12/09/1999 11:32

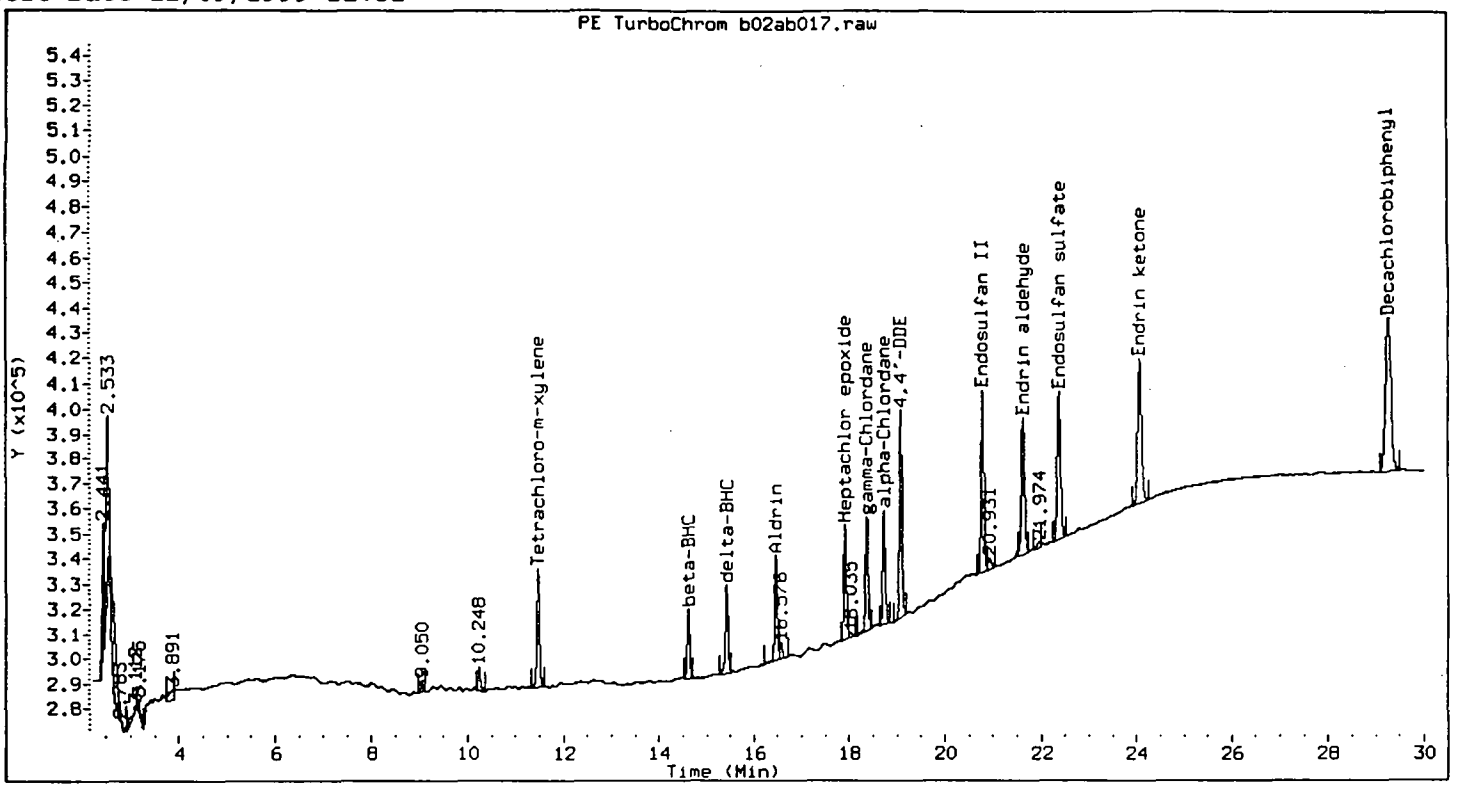


Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDA L5
Lab ID : INDA L5 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 04:50 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDA Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	13.370	13.363	0.007	2696496	82.242	82.242
gamma-BHC (Lindane)	14.396	14.385	0.011	2607577	77.659	77.659
4,4'-DDD	20.442	20.427	0.016	3119887	146.519	146.519
4,4'-DDT	21.217	21.202	0.015	3152581	147.809	147.809
Dieldrin	19.541	19.526	0.015	4490695	145.289	145.289
Endosulfan I	18.881	18.865	0.016	2246251	69.065	69.065
Endrin	20.282	20.267	0.016	3127151	141.118	141.118
Heptachlor	15.602	15.589	0.013	2735836	69.092	69.092
Methoxychlor	23.052	23.039	0.012	7922788	659.108	659.108

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.463	11.463	0.001	2147238	64.428	64.428
Decachlorobiphenyl	29.258	29.258	0.000	5902439	125.013	125.013

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab017.d Page 1
Report Date 12/09/1999 11:32



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDB L1
Lab ID : INDB L1 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 05:29 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDB Sample Type: CALIB_1

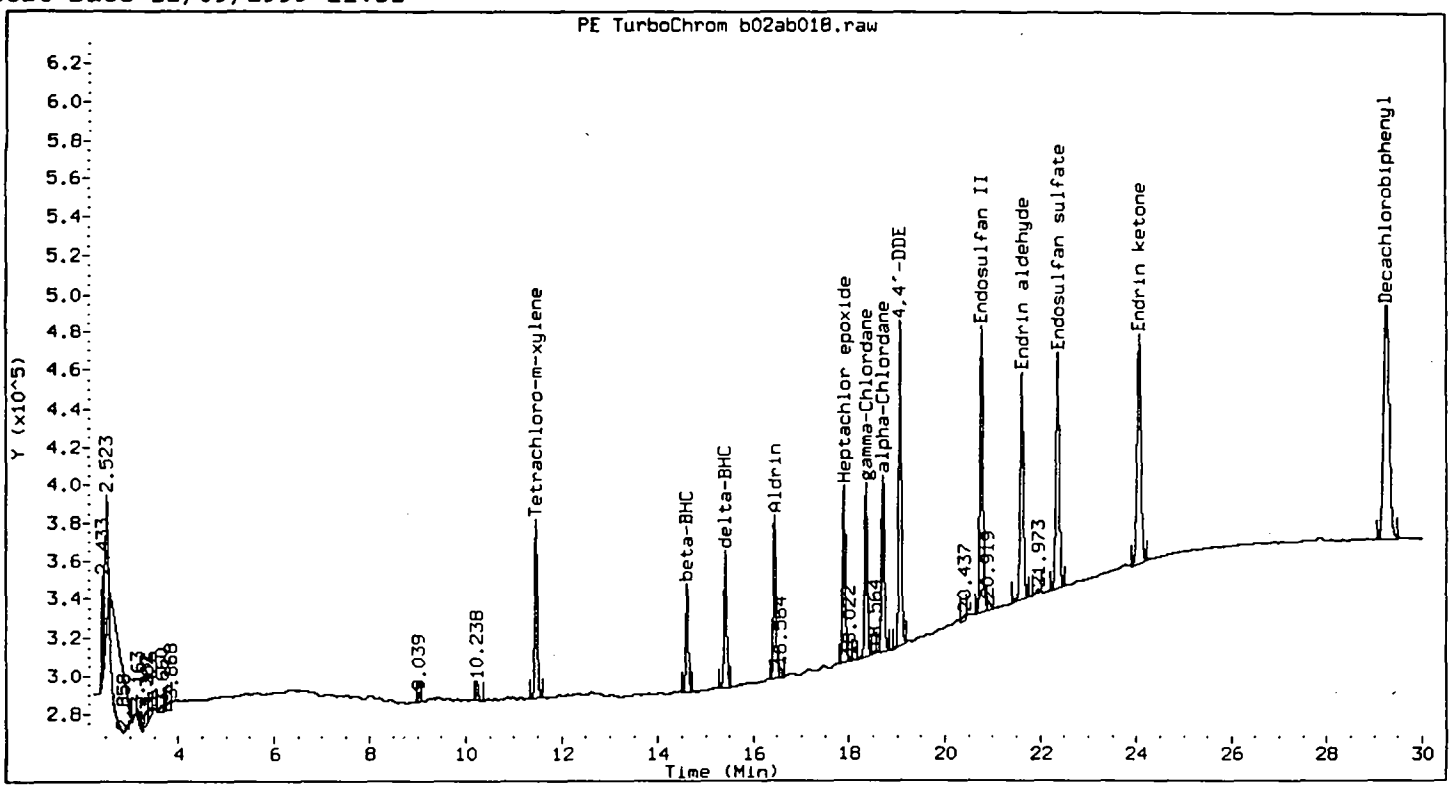
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Aldrin	(M)	16.468	16.457	0.010	164416	4.788	4.788
beta-BHC	(M)	14.627	14.620	0.007	105829	4.971	4.971
delta-BHC	(M)	15.432	15.426	0.007	143077	4.728	4.728
4,4'-DDE	(M)	19.084	19.071	0.013	309848	9.210	9.210
Endosulfan II	(M)	20.786	20.776	0.010	305588	9.331	9.331
Endosulfan sulfate	(M)	22.379	22.372	0.008	281618	9.285	9.285
Endrin aldehyde	(M)	21.633	21.622	0.011	256752	9.413	9.413
Endrin ketone	(M)	24.078	24.078	0.001	328400	9.203	9.203
Heptachlor epoxide	(M)	17.914	17.900	0.014	176406	4.739	4.739

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane	(M)	18.372	18.359	0.013	173733	4.775	4.775
alpha-Chlordane	(M)	18.730	18.716	0.014	173965	4.720	4.720
Tetrachloro-m-xylene	(M)	11.478	11.463	0.016	180564	5.208	5.208
Decachlorobiphenyl	(M)	29.262	29.258	0.004	499137	10.426	10.426

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab018.d Page 1
Report Date 12/09/1999 11:32



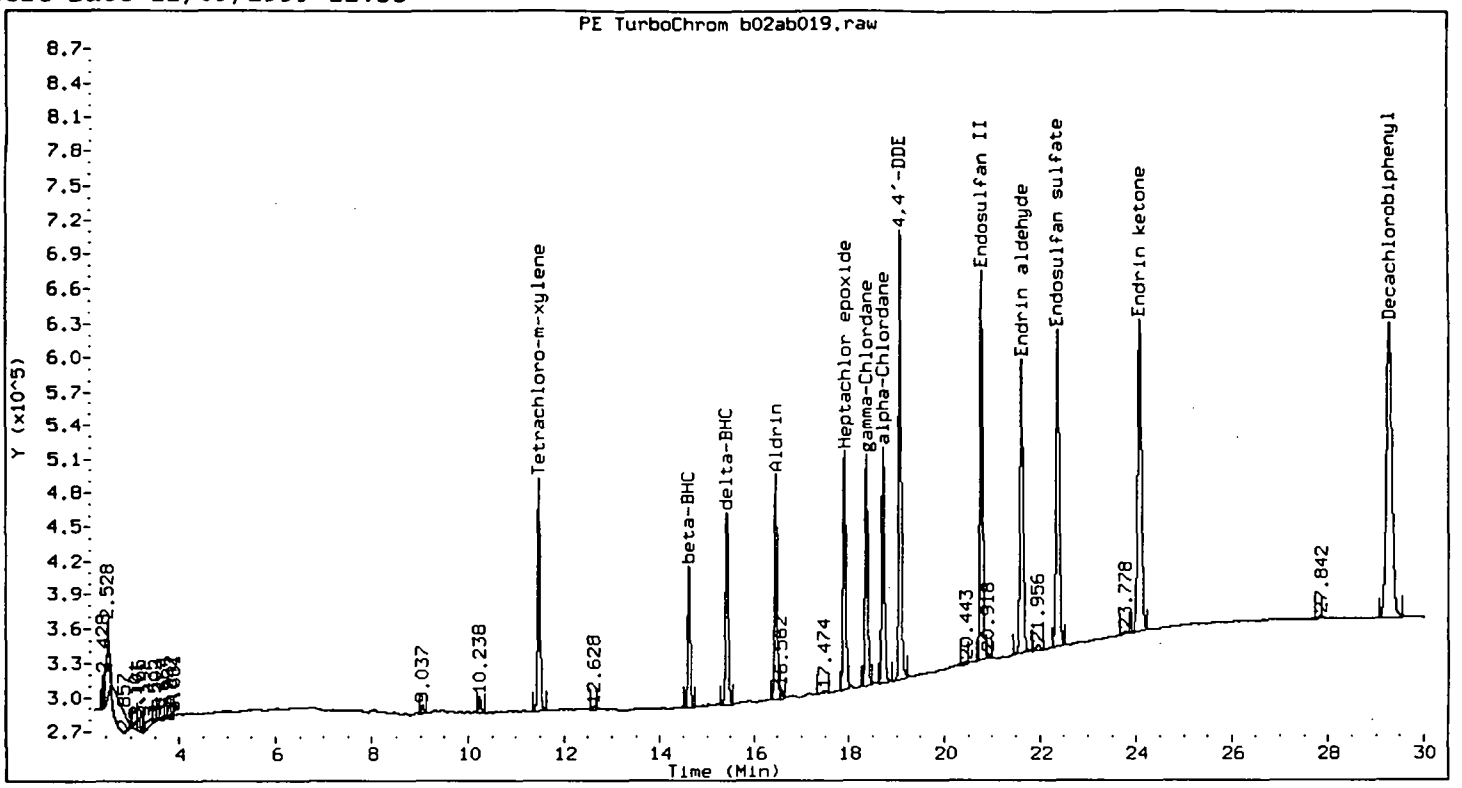
Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDB L2
Lab ID : INDB L2 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 06:08 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDB Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	16.455	16.457	0.003	320320	9.328	9.328
beta-BHC	14.617	14.620	0.003	212673	9.989	9.989
delta-BHC	15.422	15.426	0.004	273097	9.024	9.024
4,4'-DDE	19.073	19.071	0.003	630049	18.728	18.728
Endosulfan II	20.777	20.776	0.001	629547	19.223	19.223
Endosulfan sulfate	22.372	22.372	0.001	580810	19.150	19.150
Endrin aldehyde	21.625	21.622	0.003	548406	20.106	20.106
Endrin ketone	24.076	24.078	0.002	678518	19.015	19.015
Heptachlor epoxide	17.901	17.900	0.001	356064	9.566	9.566

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab018.d Page 2
Report Date 12/09/1999 11:32

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.361	18.359	0.002	354020	9.730	9.730
alpha-Chlordane	18.718	18.716	0.002	353886	9.602	9.602
Tetrachloro-m-xylene	11.471	11.463	0.008	351628	10.141	10.141
Decachlorobiphenyl	29.261	29.258	0.003	996045	20.805	20.805

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab019.d Page 1
Report Date 12/09/1999 11:33



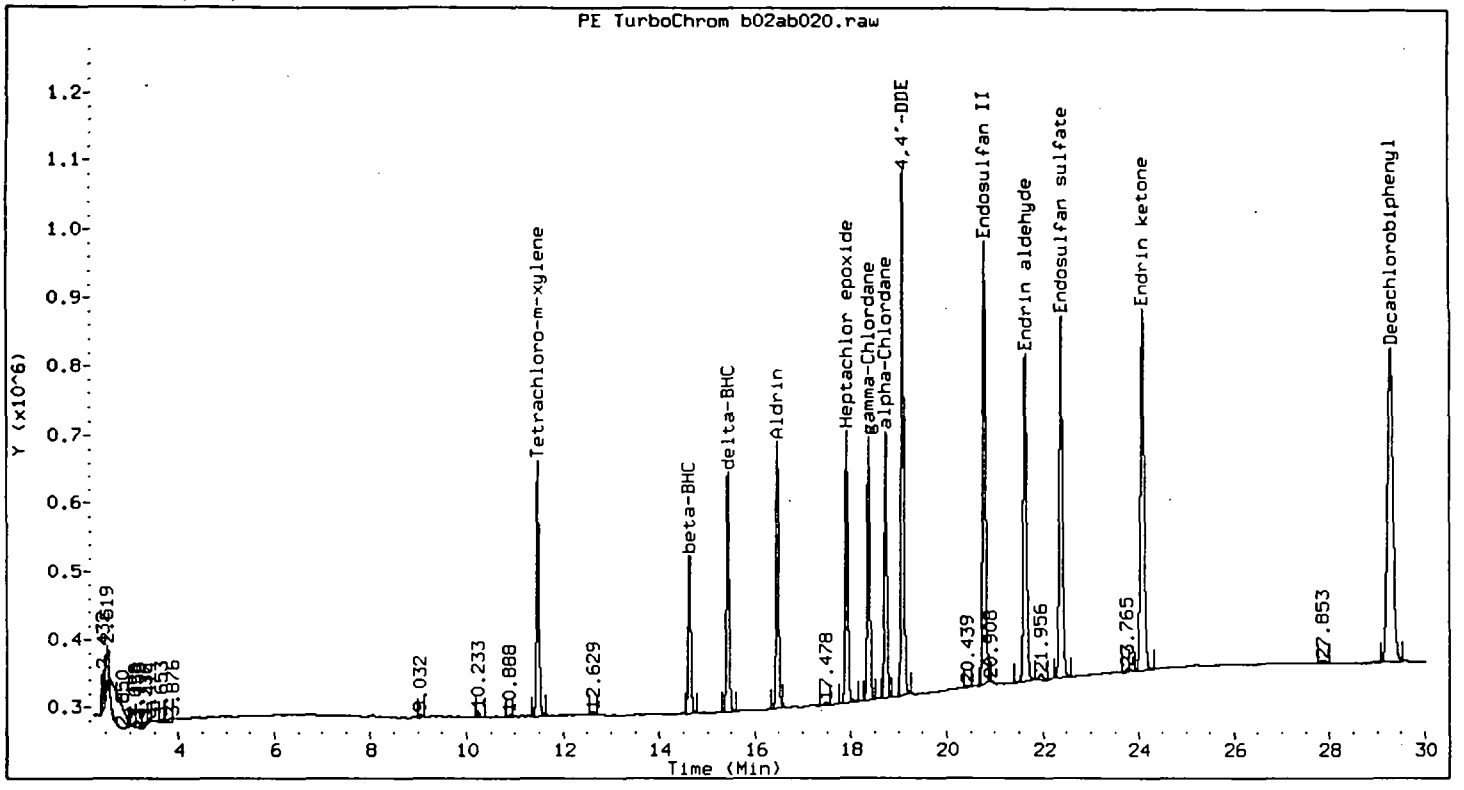
Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 06:47 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDB Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	16.457	16.457	0.000	721412	20.798	20.798
beta-BHC	14.620	14.620	0.000	463373	21.387	21.387
delta-BHC	15.426	15.426	0.000	616221	20.288	20.288
4,4'-DDE	19.071	19.071	0.000	1449961	43.098	43.098
Endosulfan II	20.776	20.776	0.000	1402983	42.840	42.840
Endosulfan sulfate	22.372	22.372	0.000	1305775	43.053	43.053
Endrin aldehyde	21.622	21.622	0.000	1173338	43.018	43.018
Endrin ketone	24.078	24.078	0.000	1503318	42.130	42.130
Heptachlor epoxide	17.900	17.900	0.000	795567	21.373	21.373

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab019.d Page 2
Report Date 12/09/1999 11:33

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.359	18.359	0.000	778202	21.389	21.389
alpha-Chlordane	18.716	18.716	0.000	799606	21.696	21.696
Tetrachloro-m-xylene	11.472	11.463	0.009	747847	22.557	22.557
Decachlorobiphenyl	29.266	29.258	0.008	2126180	45.357	45.357

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab020.d Page 1
Report Date 12/09/1999 11:34



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDB L4
Lab ID : INDB L4 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 07:26 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDB Sample Type: CALIB_4

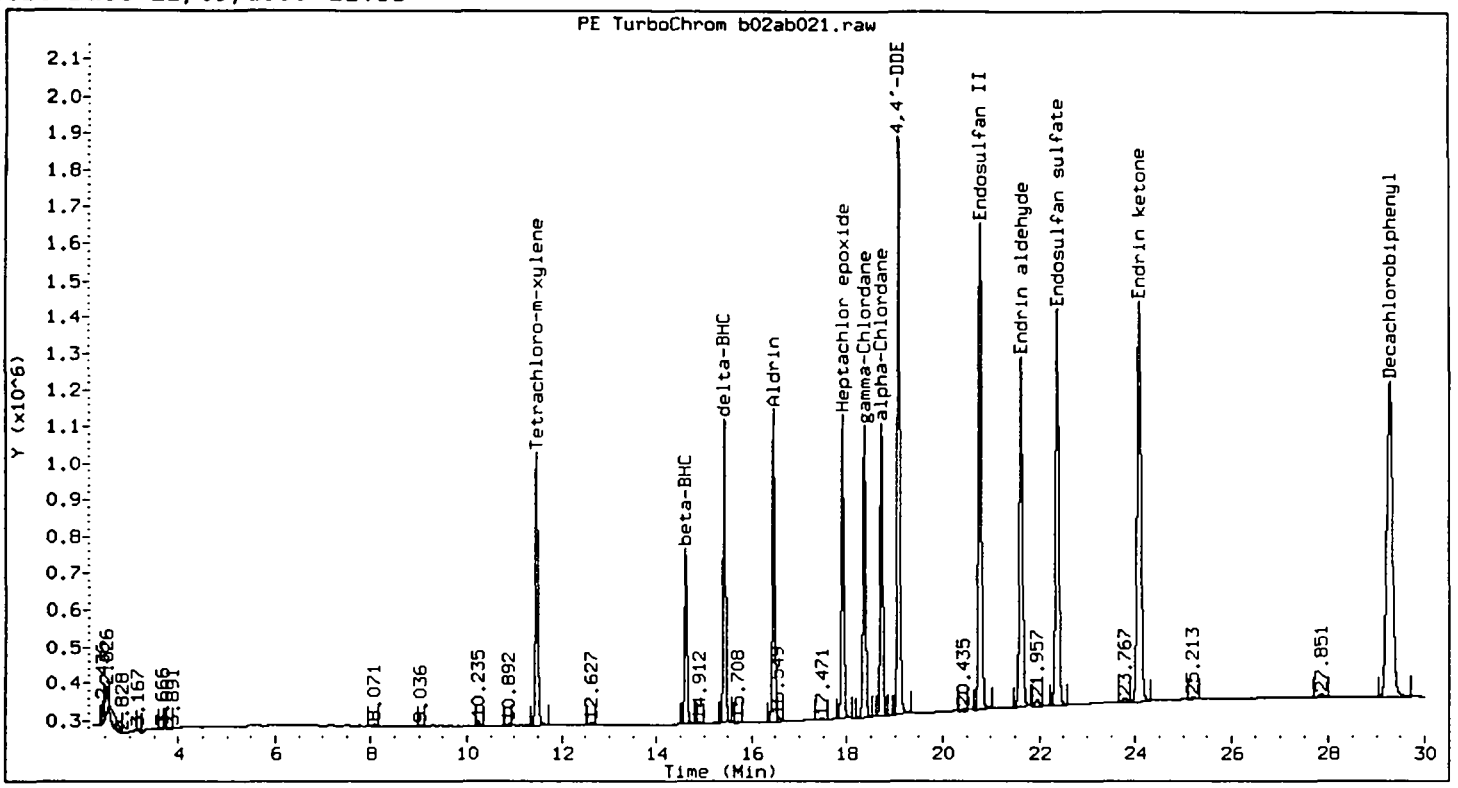
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin		16.463	16.457	0.006	1398415	40.723	40.723
beta-BHC		14.623	14.620	0.003	855877	40.200	40.200
delta-BHC		15.432	15.426	0.006	1228682	40.599	40.599
4,4'-DDE	(M)	19.077	19.071	0.006	2744985	81.592	81.592
Endosulfan II	(M)	20.779	20.776	0.003	2626570	80.201	80.201
Endosulfan sulfate		22.374	22.372	0.003	2455969	80.976	80.976
Endrin aldehyde	(M)	21.626	21.622	0.003	2186351	80.158	80.158
Endrin ketone	(M)	24.078	24.078	0.001	2933364	82.207	82.207
Heptachlor epoxide		17.907	17.900	0.008	1515666	40.718	40.718

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.366	18.359	0.007	1444852	39.713	39.713
alpha-Chlordane	18.723	18.716	0.007	1473211	39.973	39.973
Tetrachloro-m-xylene	11.469	11.463	0.007	1362217	39.288	39.288
Decachlorobiphenyl	29.267	29.258	0.009	3776847	78.889	78.889

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab021.d Page 1
Report Date 12/09/1999 11:35



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDB L5
Lab ID : INDB L5 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 08:05 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDB Sample Type: CALIB_5

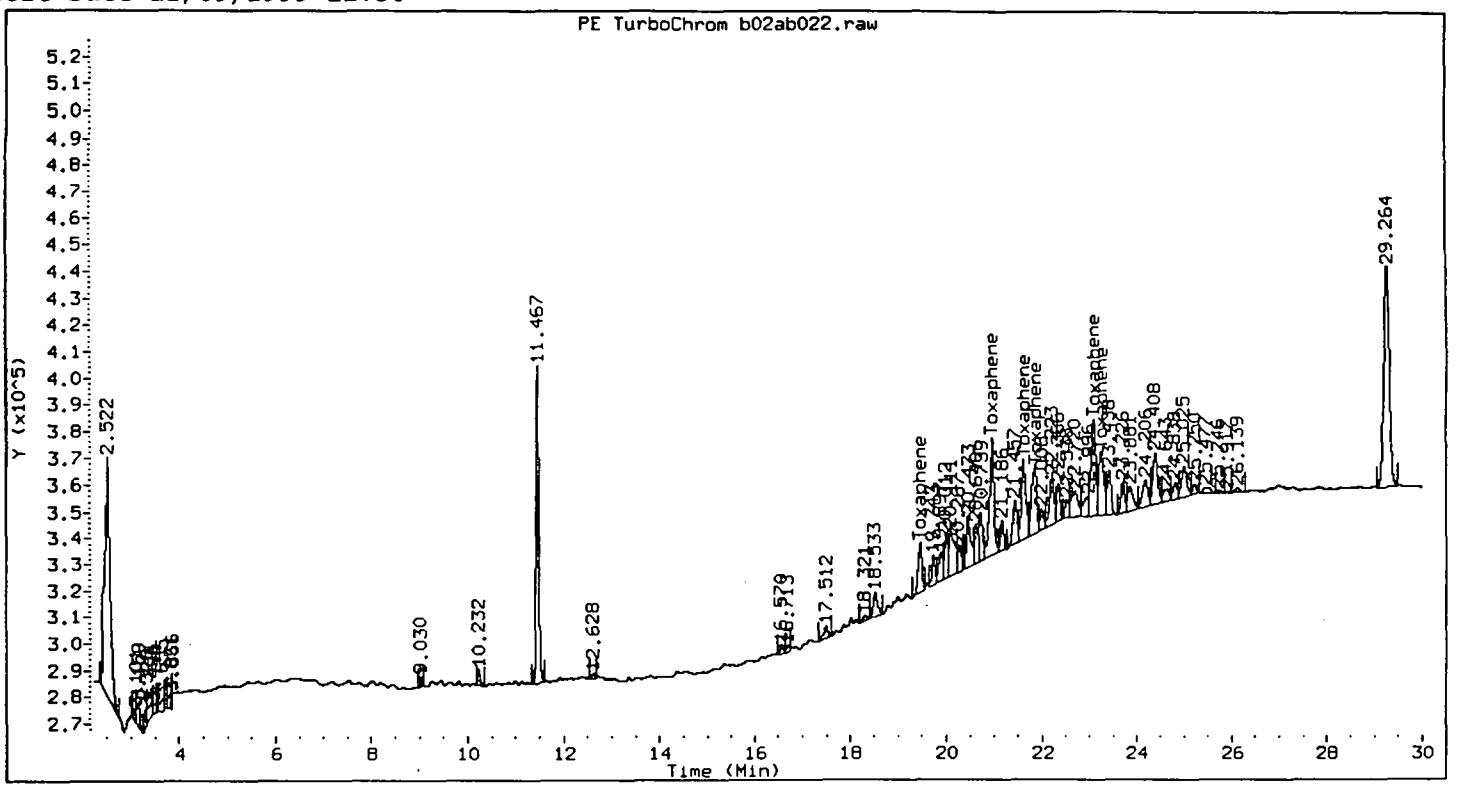
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	(M)	16.457	16.457	0.000	2998639	87.323	87.323
beta-BHC	(M)	14.617	14.620	0.002	1706571	80.156	80.156
delta-BHC	(M)	15.426	15.426	0.000	2753149	90.971	90.971
4,4'-DDE	(M)	19.073	19.071	0.003	5626606	167.245	167.245
Endosulfan II	(M)	20.777	20.776	0.002	5408930	165.160	165.160
Endosulfan sulfate		22.373	22.372	0.002	4976264	164.073	164.073
Endrin aldehyde	(M)	21.624	21.622	0.002	4259163	156.153	156.153
Endrin ketone		24.079	24.078	0.002	5983675	167.691	167.691
Heptachlor epoxide	(M)	17.902	17.900	0.002	3004784	80.723	80.723

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.362	18.359	0.003	2938720	80.772	80.772
alpha-Chlordane	18.718	18.716	0.003	2982780	80.932	80.932
Tetrachloro-m-xylene	11.467	11.463	0.005	2668870	76.973	76.973
Decachlorobiphenyl	29.269	29.258	0.012	7132028	148.971	148.971

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab022.d Page 1
Report Date 12/09/1999 11:36



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : tox 13
Lab ID : tox 13 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 08:44 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: TOXAPH0 Sample Type: CALIB_3

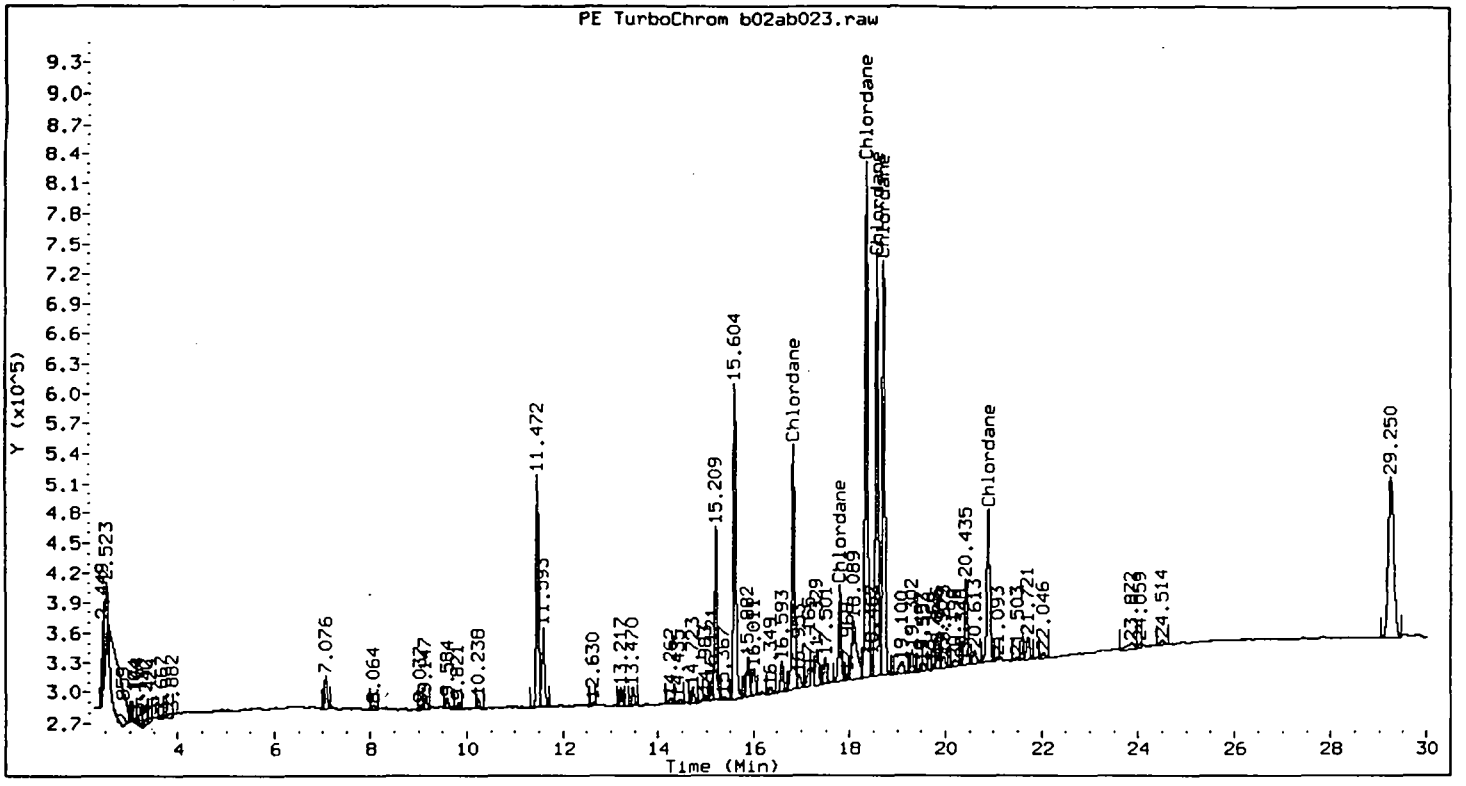
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Toxaphene	(M)	19.475	19.475	0.000	99277	1500.000	1500.000
(2)		20.974	20.974	0.000	279432	1500.000	1500.000
(3)		21.622	21.622	0.000	202153	1500.000	1500.000
(4)		21.868	21.868	0.000	184623	1500.000	1500.000
(5)		23.109	23.109	0.000	256063	1500.000	1500.000
(6)		23.261	23.261	0.000	171460	1500.000	1500.000

Average of peak concentrations: 1500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab023.d Page 1
Report Date 12/09/1999 11:36



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : chlor 13
Lab ID : chlor 13 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 09:23 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: CHLORDANE Sample Type: CALIB_3

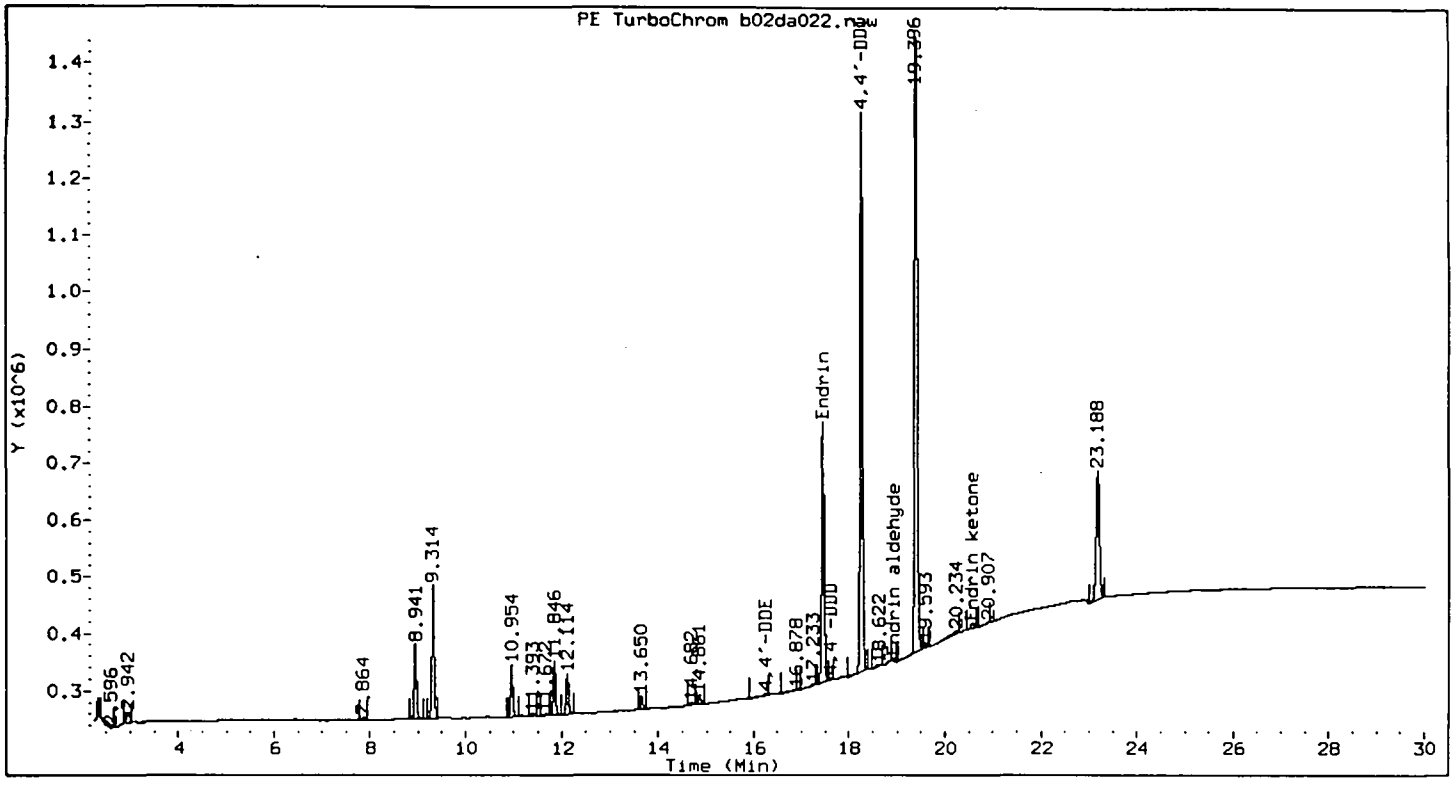
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Chlordane	(M)	16.832	16.832	0.000	1005201	500.000	500.000
(2)		17.802	17.802	0.000	384245	500.000	500.000
(3)		18.362	18.362	0.000	1964528	500.000	500.000
(4)		18.580	18.580	0.000	1734593	500.000	500.000
(5)		18.718	18.718	0.000	1568489	500.000	500.000
(6)		20.898	20.898	0.000	660014	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/b02da022.d Page 1
Report Date 12/03/1999 17:10

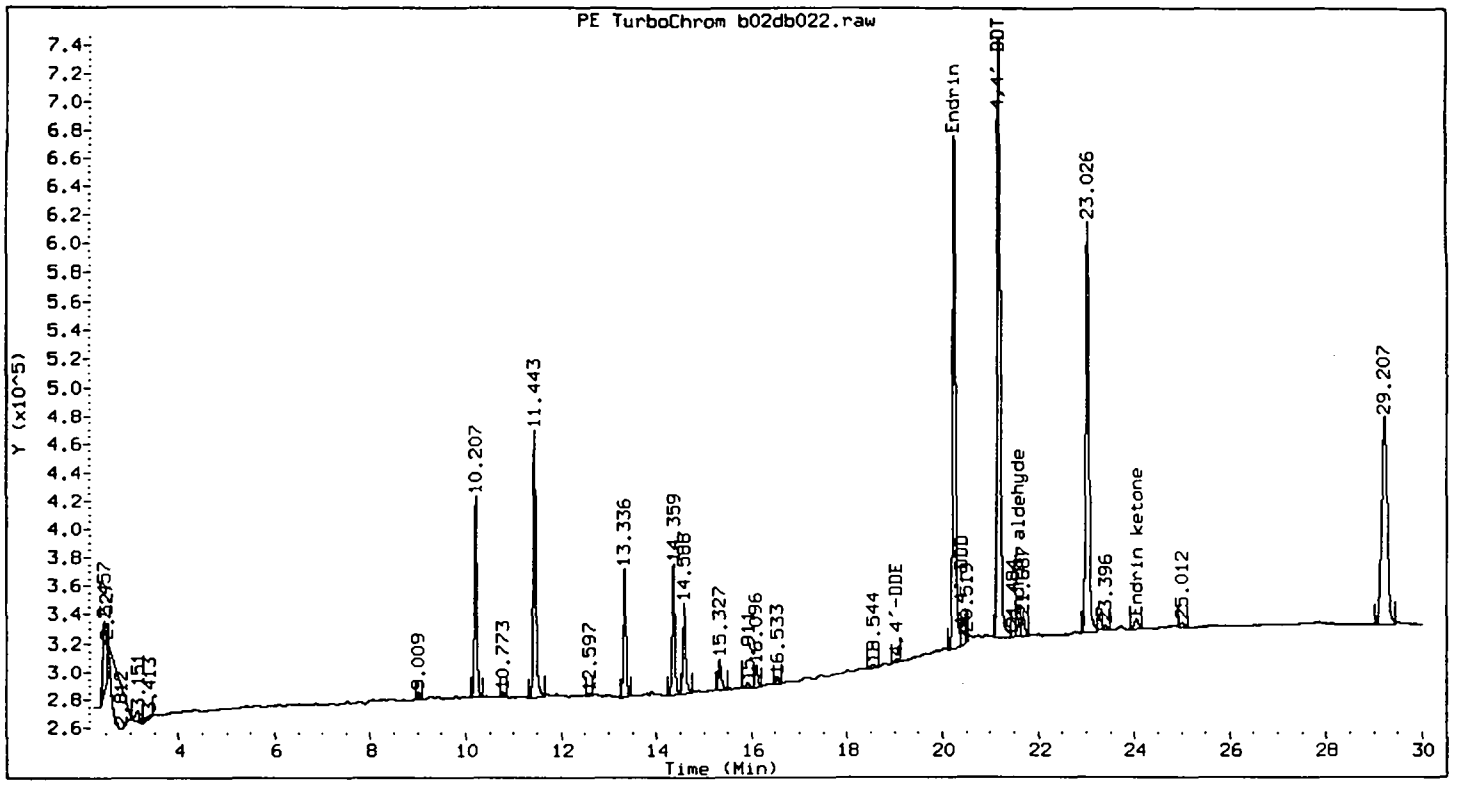


Method : /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/Bf8081.m
Sample Info : evalb
Lab ID : evalb
Inj Date : 03-DEC-1999 01:48
Operator : gds
Cpnd Sublist: END_DDT

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/kg)
4,4'-DDD	17.614	17.633	0.018	10881	0.472	0.157
4,4'-DDE	16.234	16.242	0.008	11889	0.342	0.114
4,4'-DDT	18.257	18.276	0.019	3409345	119.745	39.915
Endrin	17.447	17.467	0.020	1638813	63.492	21.164
Endrin aldehyde	18.932	18.948	0.016	16564	0.577	0.192
Endrin ketone	20.573	20.592	0.018	40883	1.127	0.376

Data File: /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/b02db022.d Page 1
Report Date 12/08/1999 15:17

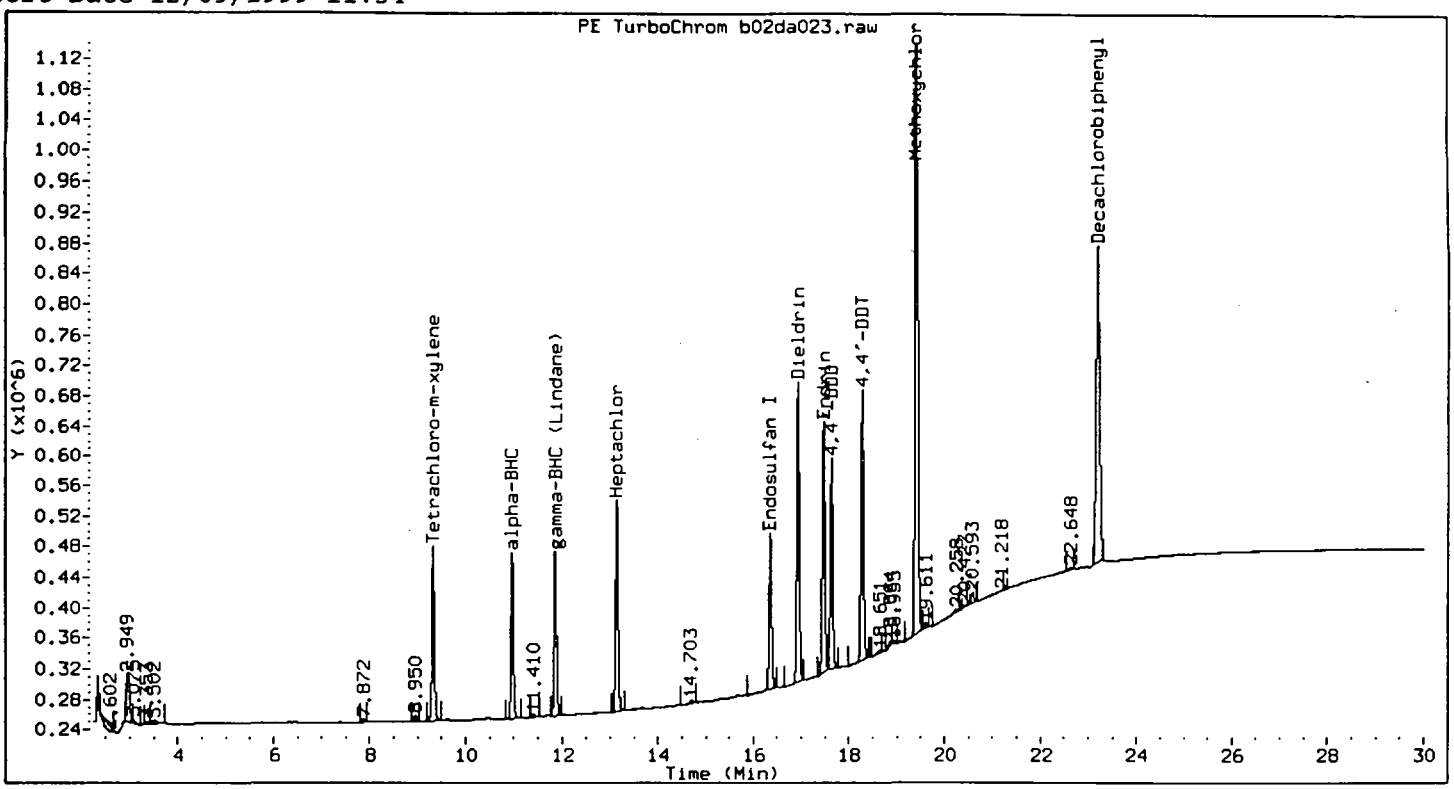


Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/Br8081.m
Sample Info : evalb
Lab ID : evalb
Inj Date : 03-DEC-1999 01:48
Operator : gds
Cpnd Sublist: END_DDT

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
4,4'-DDD	20.407	20.433	0.025	53413	2.508	0.836
4,4'-DDE	19.043	19.073	0.030	13794	0.410	0.137
4,4'-DDT	21.188	21.205	0.017	2156588	101.112	33.704
Endrin	20.251	20.271	0.020	1467186	66.209	22.070
Endrin aldehyde	21.592	21.617	0.026	37090	1.360	0.453
Endrin ketone	24.038	24.068	0.031	40555	1.137	0.379

Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/b02da023.d Page 1
Report Date 12/09/1999 11:34



Method : /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/Bf8081.m
Sample Info : inda 13
Lab ID : inda 13 Inst ID : HP58902.i
Inj Date : 03-DEC-1999 02:27 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	10.970	10.970	0.000	689731	21.013	21.013
gamma-BHC (Lindane)	11.863	11.863	0.000	706826	21.225	21.225
4,4'-DDD	17.637	17.637	0.000	942092	40.842	40.842
4,4'-DDT	18.281	18.281	0.000	1274843	44.776	44.776
Dieldrin	16.937	16.937	0.000	1406084	44.491	44.491
Endosulfan I	16.360	16.360	0.000	746706	22.585	22.585
Endrin	17.472	17.472	0.000	1182491	45.813	45.813
Heptachlor	13.143	13.143	0.000	965970	22.382	22.382
Methoxychlor	19.417	19.417	0.000	3772430	227.539	227.539

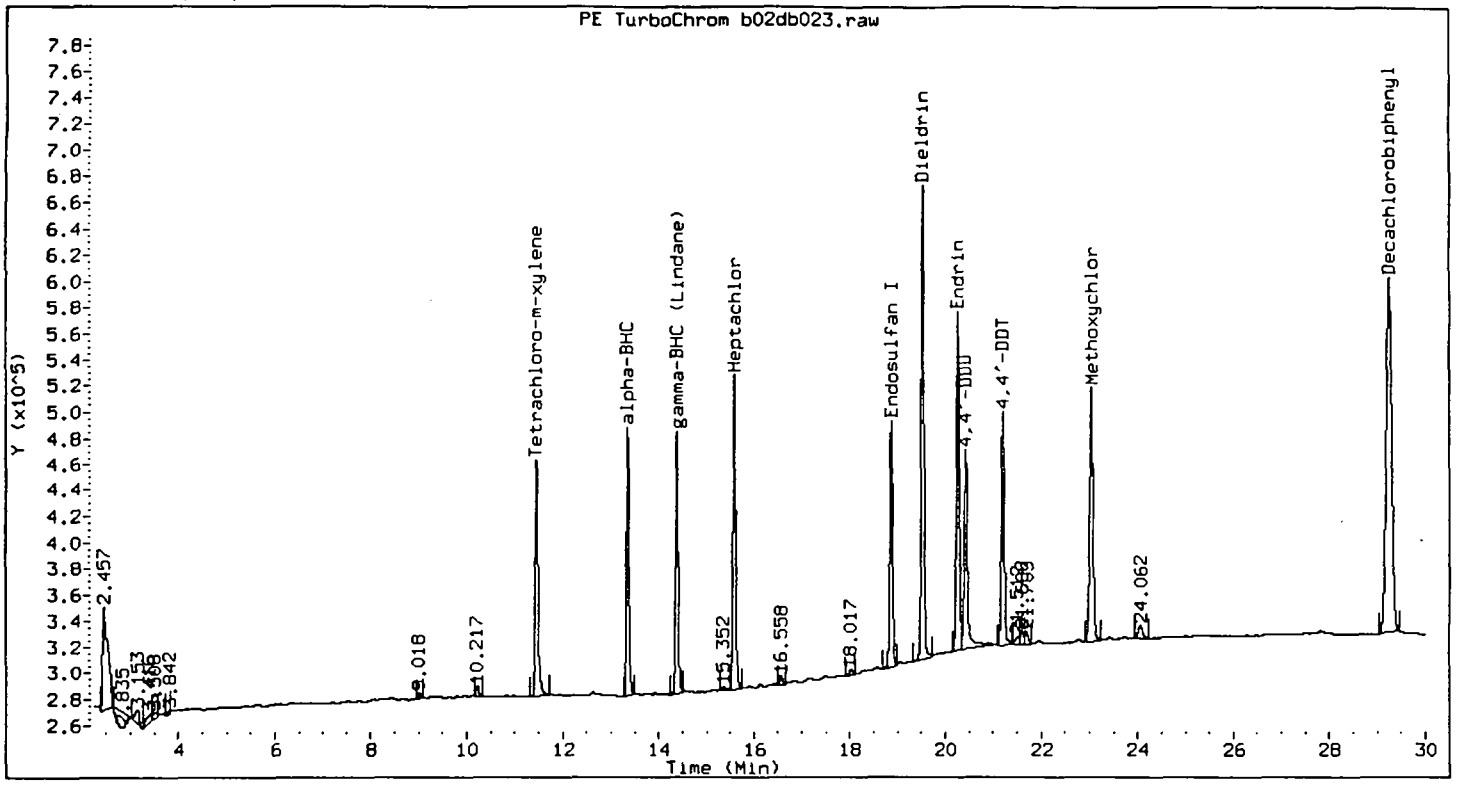
Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/b02da023.d Page 2
Report Date 12/09/1999 11:34

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene		9.325	9.325	0.000	762150	21.872	21.872
Decachlorobiphenyl	(M)	23.206	23.206	0.000	2010707	45.980	45.980

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/b02db023.d Page 1
Report Date 12/09/1999 11:32



Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/Br8081.m
Sample Info : inda 13
Lab ID : inda 13
Inj Date : 03-DEC-1999 02:27
Operator : gds
Cpnd Sublist: INDA

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

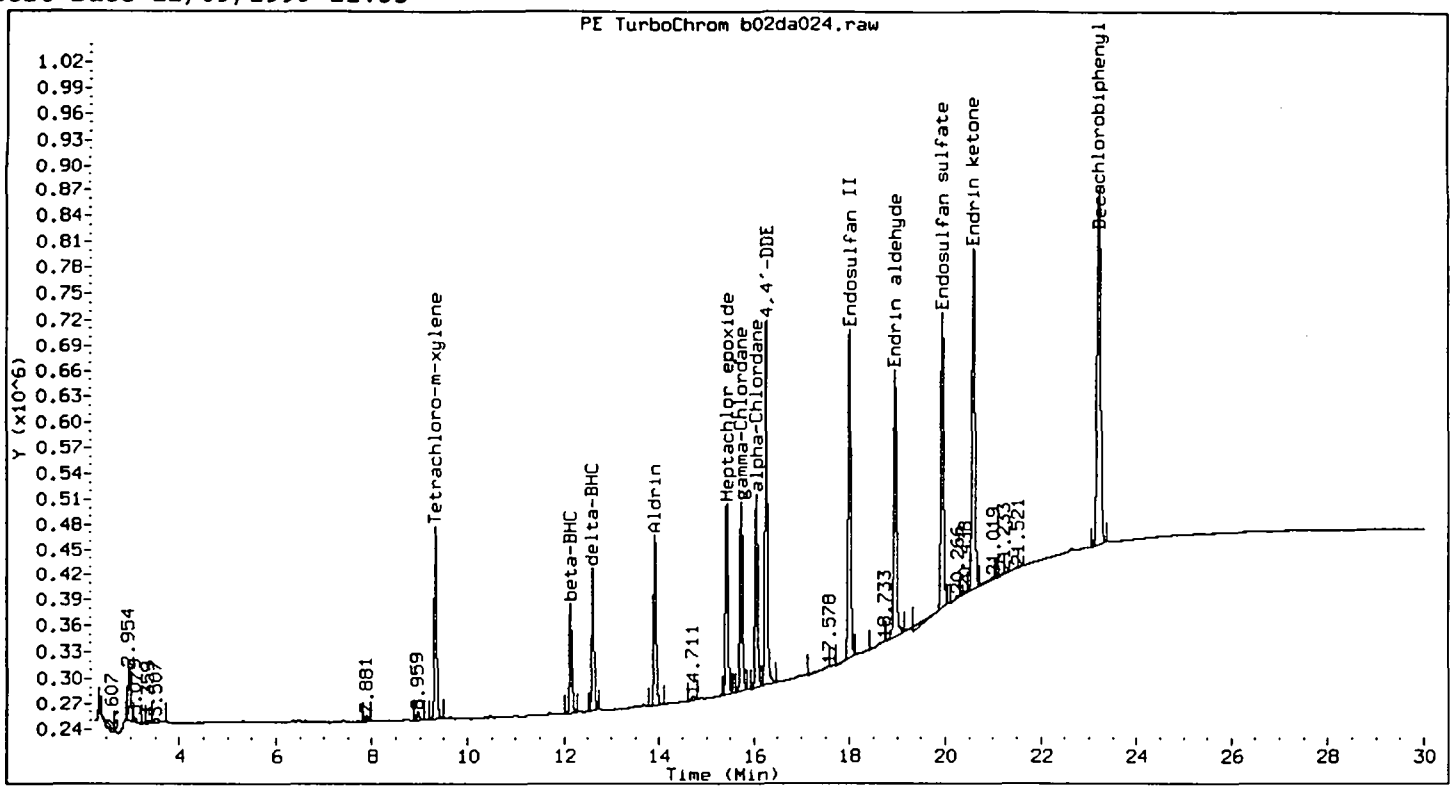
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Alpha-BHC		13.358	13.358	0.000	708283	21.602	21.602
gamma-BHC (Lindane)		14.384	14.384	0.000	723433	21.545	21.545
4,4'-DDD	(M)	20.433	20.433	0.000	716360	33.642	33.642
4,4'-DDT		21.205	21.205	0.000	757453	35.513	35.513
Dieldrin		19.528	19.528	0.000	1412128	45.687	45.687
Endosulfan I		18.867	18.867	0.000	743991	22.875	22.875
Endrin	(M)	20.271	20.271	0.000	1042397	47.040	47.040
Heptachlor		15.590	15.590	0.000	897884	22.676	22.676
Methoxychlor		23.044	23.044	0.000	939208	78.134	78.134

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene		11.458	11.458	0.000	752010	22.564	22.564
Decachlorobiphenyl	(M)	29.239	29.239	0.000	2199970	46.595	46.595

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/b02da024.d Page 1
Report Date 12/09/1999 11:35

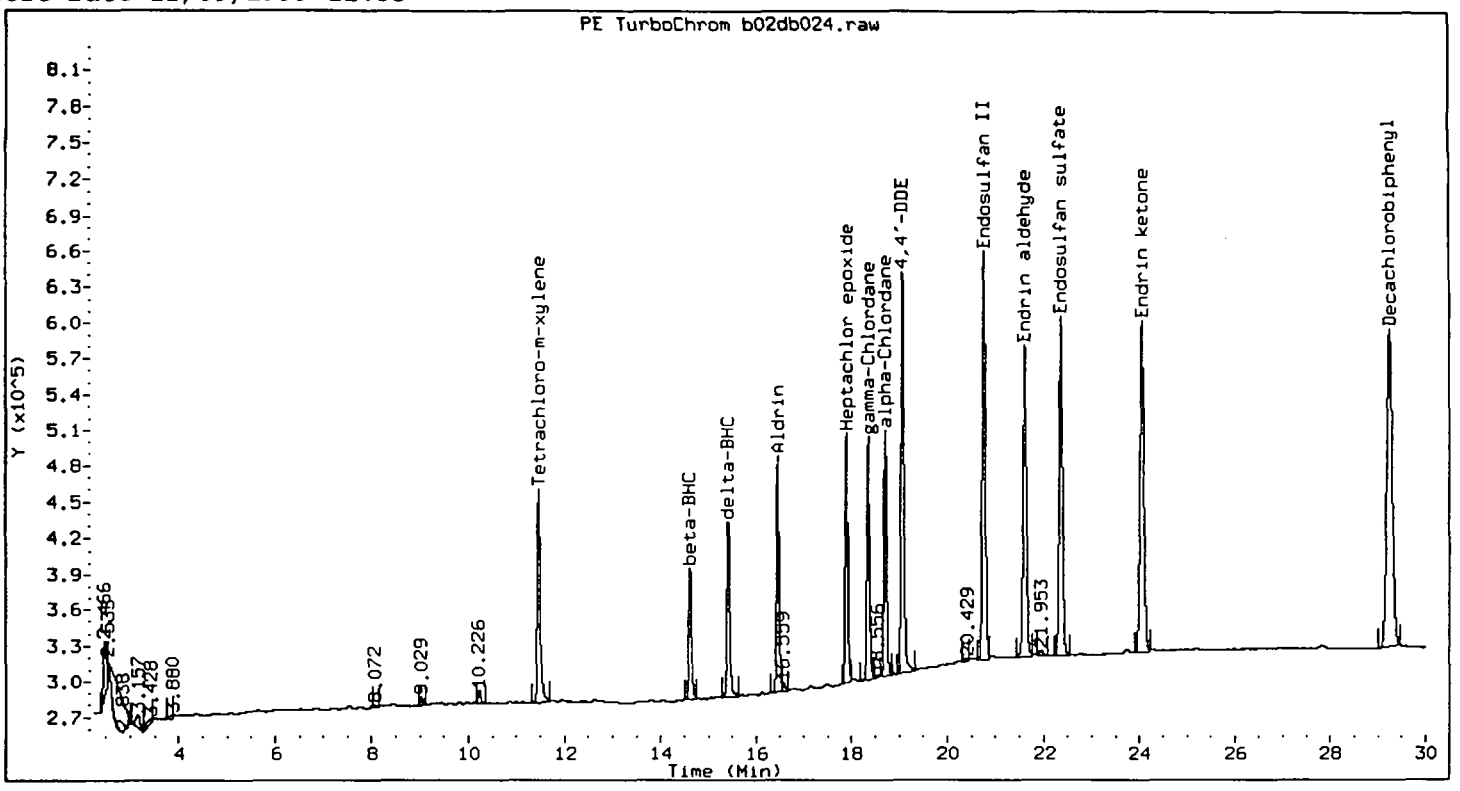


Method : /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/Bf8081.m
Sample Info : indb 13
Lab ID : indb 13 Inst ID : HP58902.i
Inj Date : 03-DEC-1999 03:06 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.920	13.920	0.000	693761	20.110	20.110
beta-BHC	12.141	12.141	0.000	446174	20.053	20.053
delta-BHC	12.612	12.612	0.000	553526	18.244	18.244
4,4'-DDE	16.260	16.260	0.000	1447533	41.579	41.579
Endosulfan II	18.006	18.006	0.000	1432819	39.819	39.819
Endosulfan sulfate	19.948	19.948	0.000	1397371	43.264	43.264
Endrin aldehyde	18.957	18.957	0.000	1257606	43.786	43.786
Endrin ketone	20.600	20.600	0.000	1598129	44.054	44.054
Heptachlor epoxide	15.432	15.432	0.000	794826	20.503	20.503

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.735	15.735	0.000	799624	20.424	20.424
alpha-Chlordane	16.053	16.053	0.000	806800	20.846	20.846
Tetrachloro-m-xylene	9.335	9.325	0.010	755381	21.678	21.678
Decachlorobiphenyl	23.212	23.206	0.006	2011458	45.997	45.997

Data File: /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/b02db024.d Page 1
Report Date 12/09/1999 11:33



Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/Br8081.m
Sample Info : indb 13
Lab ID : indb 13 Inst ID : HP58902.i
Inj Date : 03-DEC-1999 03:06 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CCALIB_3

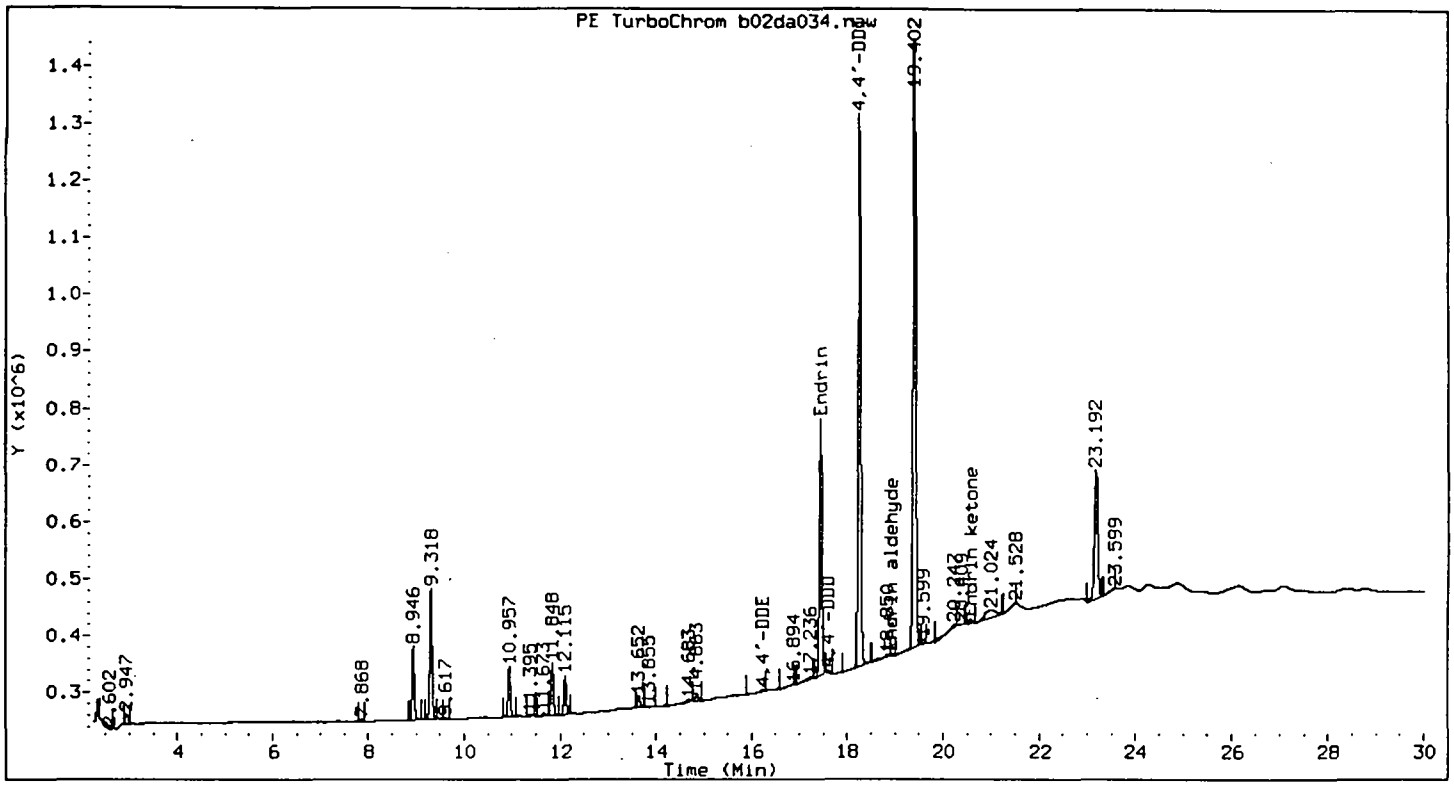
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Aldrin	16.453	16.453	0.000	726048	20.932	20.932
beta-BHC	14.619	14.619	0.000	440274	20.321	20.321
delta-BHC	15.425	15.425	0.000	590185	19.431	19.431
4,4'-DDE	19.073	19.073	0.000	1335190	39.687	39.687
Endosulfan II	20.771	20.771	0.000	1427773	43.596	43.596
Endosulfan sulfate	22.365	22.365	0.000	1339869	44.177	44.177
Endrin aldehyde	21.617	21.617	0.000	1219376	44.706	44.706
Endrin ketone	24.068	24.068	0.000	1536512	43.060	43.060
Heptachlor epoxide	17.898	17.898	0.000	793474	21.316	21.316

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane		18.358	18.358	0.000	783246	21.528	21.528
alpha-Chlordane		18.714	18.714	0.000	785151	21.304	21.304
Tetrachloro-m-xylene		11.468	11.458	0.010	744598	22.342	22.342
Decachlorobiphenyl	(M)	29.247	29.239	0.008	2158472	45.716	45.716

COMMENTS:

M - Compound response manually integrated.

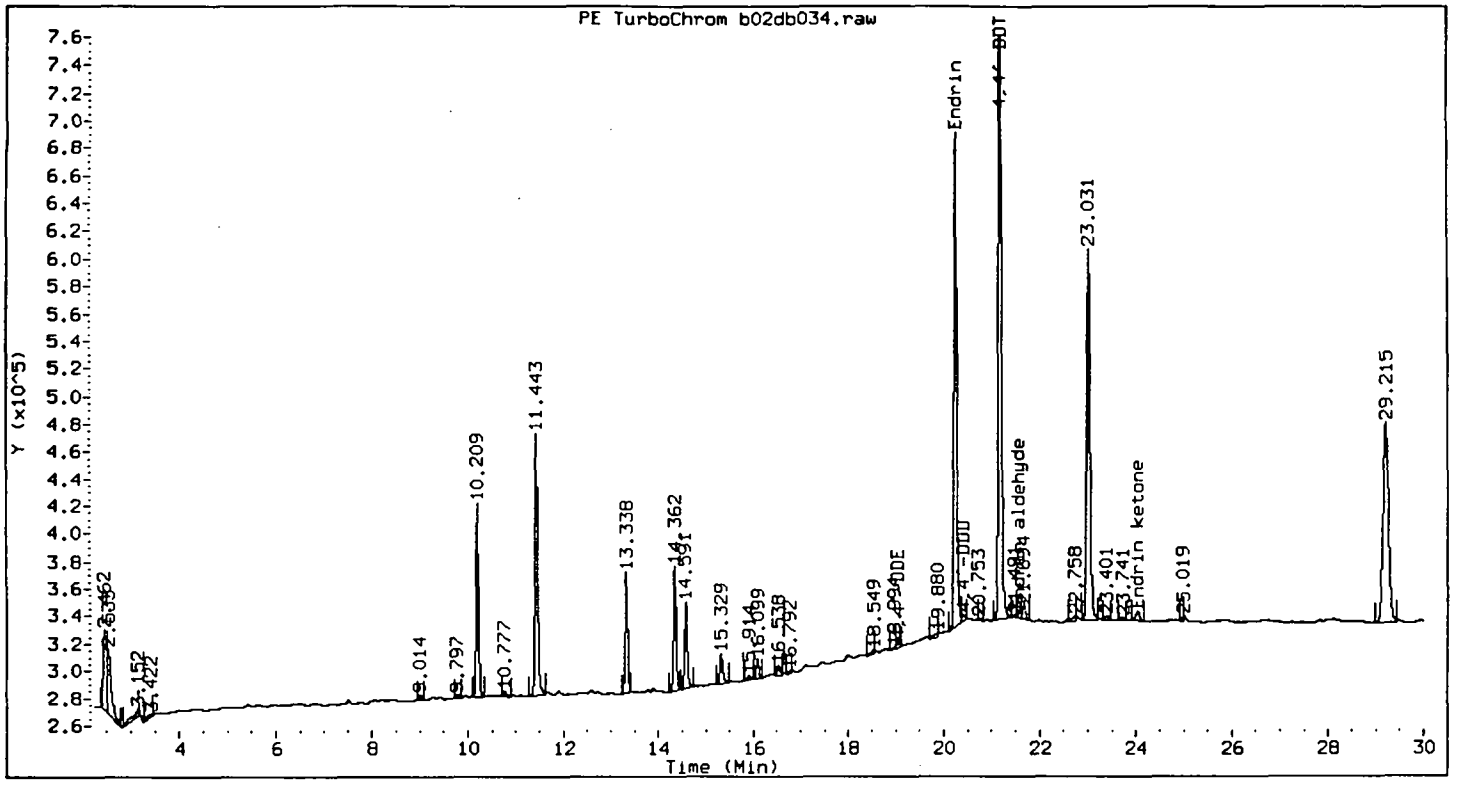
Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/b02da034.d Page 1
Report Date 12/09/1999 13:13



Method : /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/Bf8081.m
Sample Info : evalb
Lab ID : evalb
Inj Date : 03-DEC-1999 09:36
Operator : gds
Cpnd Sublist: END_DDT

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: END/DDT

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/kg)
4,4'-DDD	17.616	17.612	0.004	14705	0.637	0.212
4,4'-DDE	16.235	16.223	0.012	11803	0.339	0.113
4,4'-DDT	18.264	18.257	0.008	3382271	118.794	39.598
Endrin	17.453	17.445	0.008	1627412	63.050	21.017
Endrin aldehyde	18.938	18.919	0.018	13146	0.458	0.153
Endrin ketone	20.579	20.564	0.015	40017	1.103	0.368



Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b/Br8081.m
Sample Info : evalb
Lab ID : evalb
Inj Date : 03-DEC-1999 09:36
Operator : gds
Cpnd Sublist: END_DDT

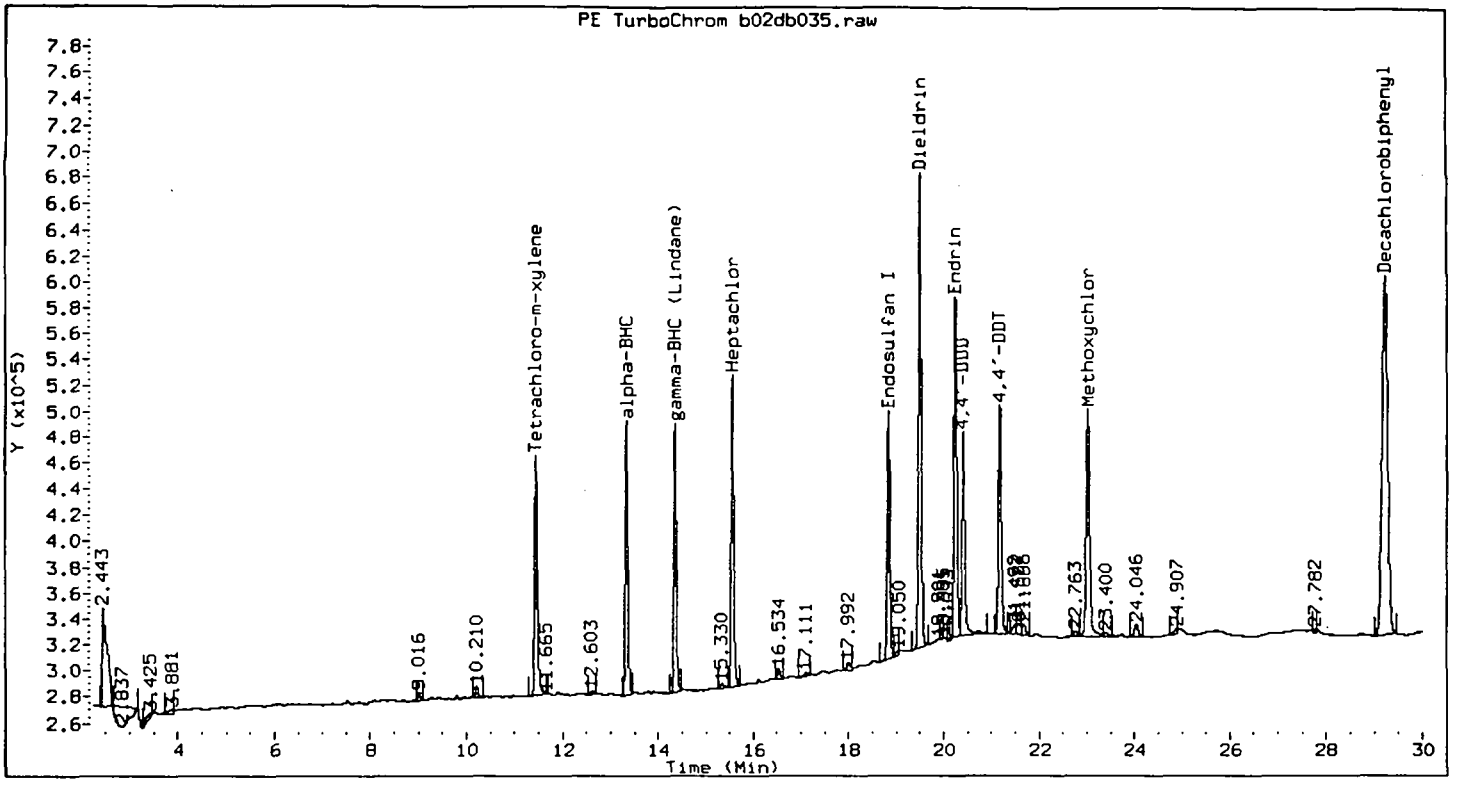
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: END/DDT

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
4,4'-DDD	(M)	20.418	20.414	0.003	23921	1.123	0.374
4,4'-DDE	(M)	19.052	19.036	0.016	15278	0.454	0.151
4,4'-DDT	(M)	21.195	21.188	0.008	2120912	99.439	33.146
Endrin	(M)	20.258	20.251	0.008	1426849	64.389	21.463
Endrin aldehyde	(M)	21.594	21.582	0.012	20218	0.741	0.247
Endrin ketone	(M)	24.040	24.025	0.015	43392	1.216	0.405

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b/b02db035.d Page 1
Report Date 12/09/1999 11:32



Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b/Br8081.m
Sample Info : inda 13
Lab ID : inda 13 Inst ID : HP58902.i
Inj Date : 03-DEC-1999 10:15 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		13.340	13.340	0.000	721742	22.013	22.013
gamma-BHC (Lindane)		14.361	14.361	0.000	736667	21.939	21.939
4,4'-DDD	(M)	20.414	20.414	0.000	651167	30.581	30.581
4,4'-DDT		21.188	21.188	0.000	749866	35.158	35.158
Dieldrin	(M)	19.506	19.506	0.000	1401008	45.327	45.327
Endosulfan I		18.843	18.843	0.000	747352	22.979	22.979
Endrin	(M)	20.251	20.251	0.000	1039641	46.916	46.916
Heptachlor		15.565	15.565	0.000	897758	22.672	22.672
Methoxychlor	(M)	23.029	23.029	0.000	901629	75.008	75.008

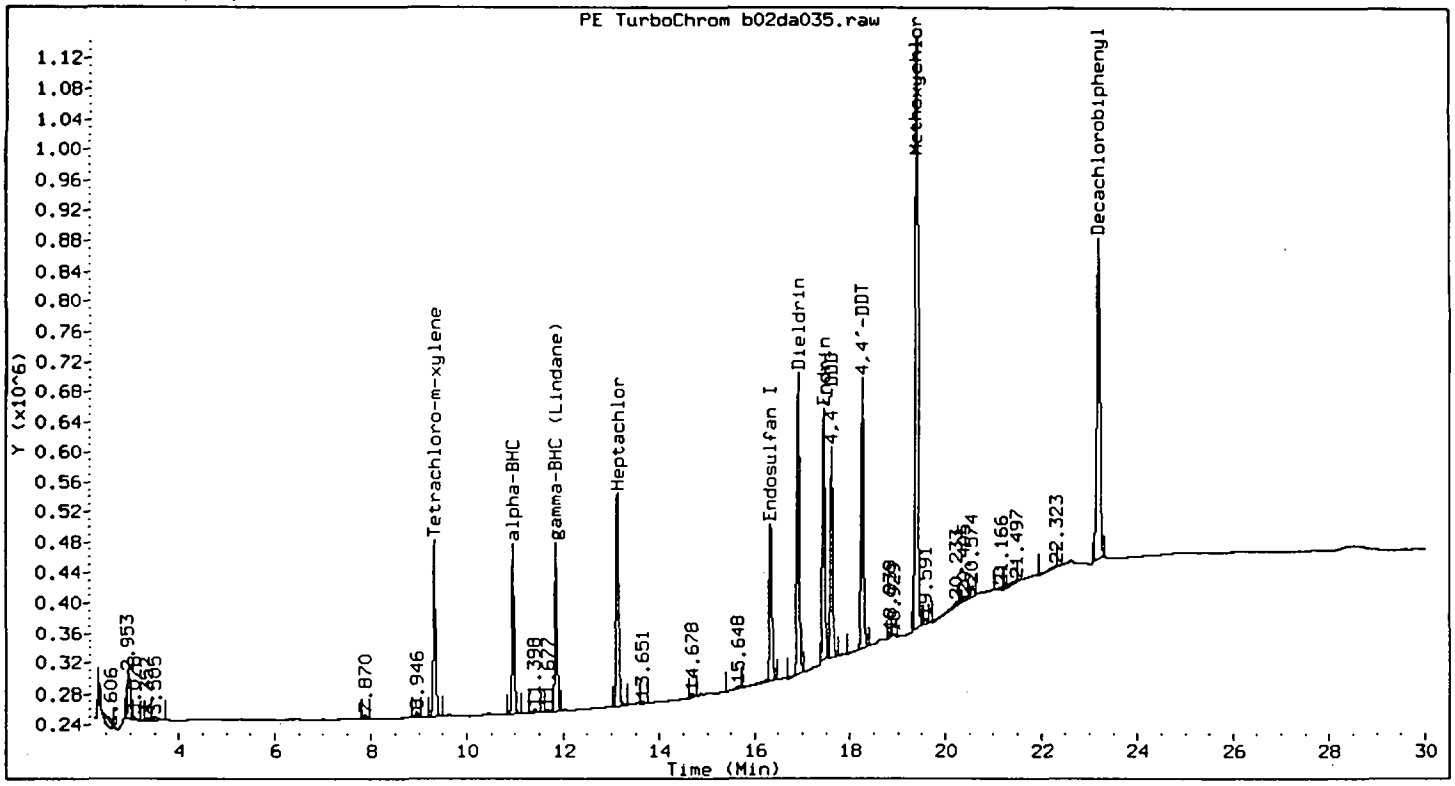
Data File: /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b/b02db035.d Page 2
Report Date 12/09/1999 11:32

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	11.447	11.444	0.003	749194	22.480	22.480
Decachlorobiphenyl	(M)	29.219	29.183	0.036	2240507	47.454	47.454

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/b02da035.d Page 1
Report Date 12/09/1999 11:34



Method : /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/Bf8081.m
Sample Info : inda 13
Lab ID : inda 13 Inst ID : HP58902.i
Inj Date : 03-DEC-1999 10:15 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		10.961	10.961	0.000	701898	21.383	21.383
gamma-BHC (Lindane)		11.851	11.851	0.000	716319	21.510	21.510
4,4'-DDD		17.612	17.612	0.000	956373	41.461	41.461
4,4'-DDT		18.257	18.257	0.000	1293001	45.414	45.414
Dieldrin		16.912	16.912	0.000	1422363	45.006	45.006
Endosulfan I		16.334	16.334	0.000	754800	22.830	22.830
Endrin	(M)	17.445	17.445	0.000	1168738	45.280	45.280
Heptachlor		13.125	13.125	0.000	981952	22.752	22.752
Methoxychlor	(M)	19.395	19.395	0.000	3787192	228.429	228.429

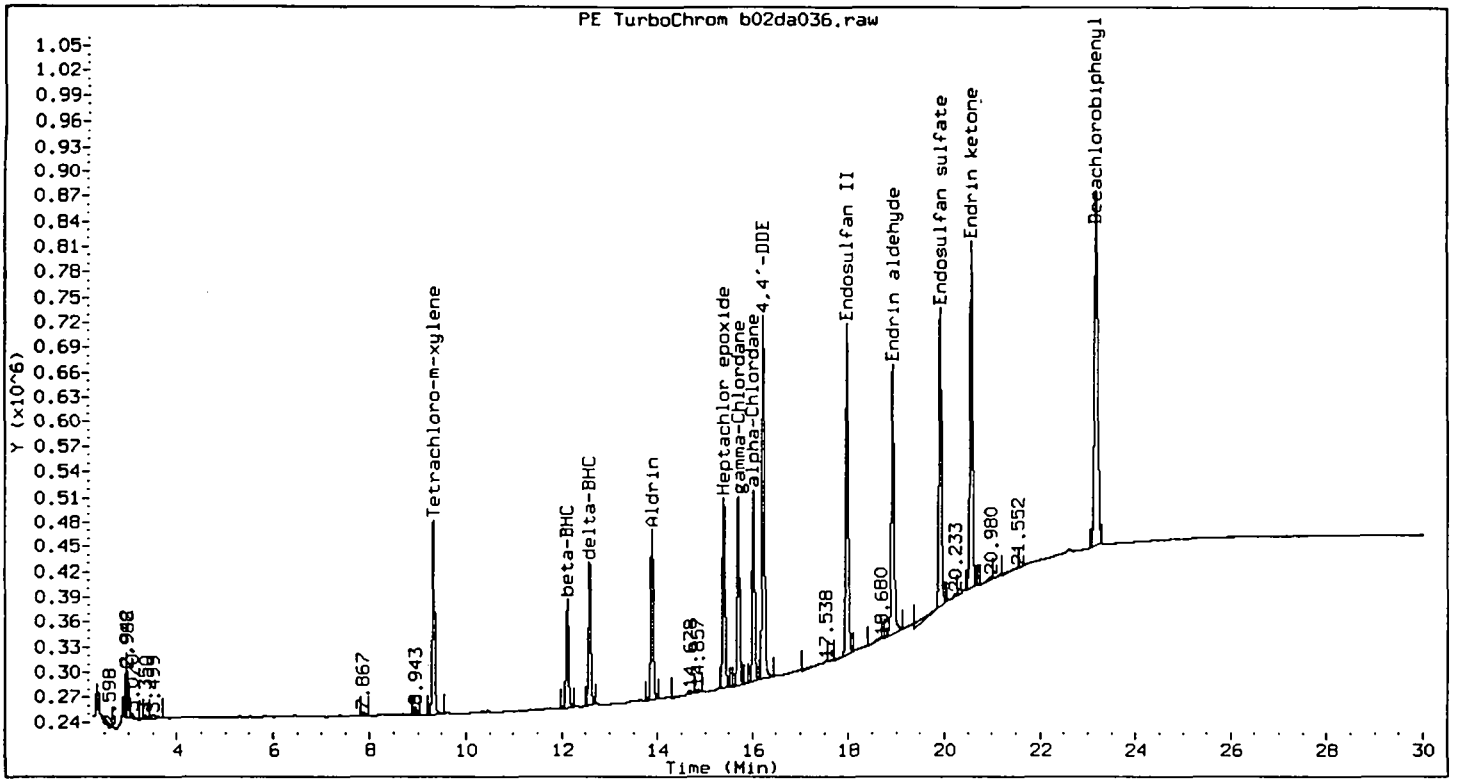
Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/b02da035.d Page 2
Report Date 12/09/1999 11:34

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene		9.320	9.317	0.003	773954	22.211	22.211
Decachlorobiphenyl	(M)	23.192	23.172	0.019	2038556	46.617	46.617

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/b02da036.d Page 1
Report Date 12/09/1999 11:35



Method : /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/Bf8081.m
Sample Info : indb 13
Lab ID : indb 13
Inj Date : 03-DEC-1999 10:54
Operator : gds
Cpnd Sublist: INDB
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.886	13.886	0.000	702946	20.376	20.376
beta-BHC	12.113	12.113	0.000	456750	20.528	20.528
delta-BHC	12.582	12.582	0.000	566901	18.685	18.685
4,4'-DDE	16.223	16.223	0.000	1486789	42.707	42.707
Endosulfan II	17.966	17.966	0.000	1475126	40.995	40.995
Endosulfan sulfate	19.913	19.913	0.000	1448792	44.856	44.856
Endrin aldehyde	18.919	18.919	0.000	1293849	45.048	45.048
Endrin ketone	20.564	20.564	0.000	1632458	45.001	45.001
Heptachlor epoxide	15.394	15.394	0.000	810830	20.915	20.915

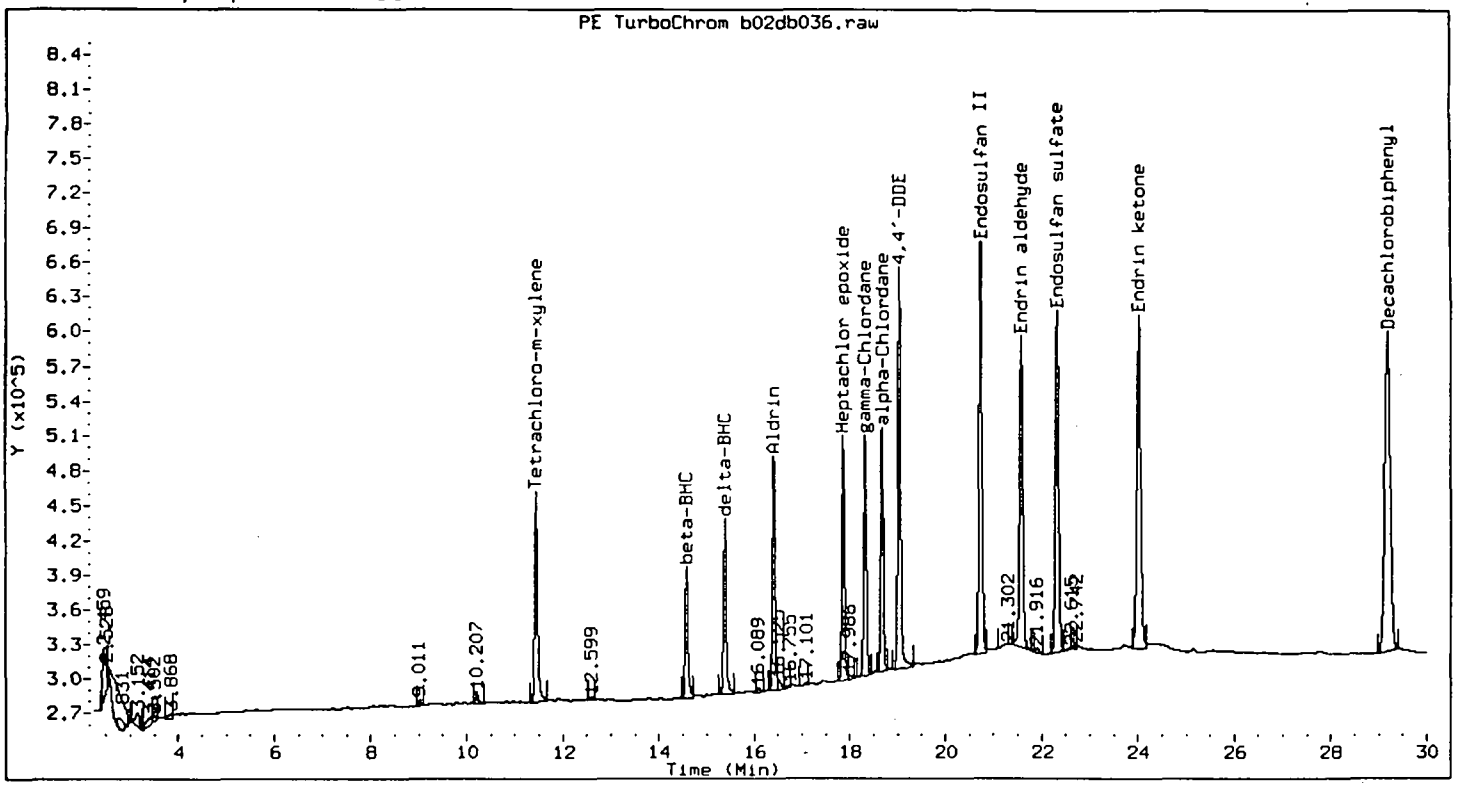
Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99c.b/b02da036.d Page 2
Report Date 12/09/1999 11:35

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane		15.697	15.697	0.000	817214	20.873	20.873
alpha-Chlordane		16.015	16.015	0.000	824560	21.305	21.305
Tetrachloro-m-xylene		9.317	9.317	0.000	778937	22.354	22.354
Decachlorobiphenyl	(M)	23.172	23.172	0.000	2043688	46.734	46.734

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b/b02db036.d Page 1
Report Date 12/09/1999 11:33



Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99c.b/Br8081.m
Sample Info : indb 13
Lab ID : indb 13 Inst ID : HP58902.i
Inj Date : 03-DEC-1999 10:54 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Spnd Sublist: INDB Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin		16.415	16.415	0.000	744445	21.463	21.463
beta-BHC		14.585	14.585	0.000	457057	21.095	21.095
delta-BHC		15.390	15.390	0.000	601577	19.806	19.806
4,4'-DDE		19.036	19.036	0.000	1404272	41.740	41.740
Endosulfan II		20.737	20.737	0.000	1463737	44.695	44.695
Endosulfan sulfate		22.328	22.328	0.000	1375599	45.355	45.355
Endrin aldehyde	(M)	21.582	21.582	0.000	1247750	45.746	45.746
Endrin ketone		24.025	24.025	0.000	1612671	45.195	45.195
Heptachlor epoxide	(M)	17.859	17.859	0.000	807584	21.696	21.696

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane		18.318	18.318	0.000	796332	21.888	21.888
alpha-Chlordane		18.675	18.675	0.000	806297	21.877	21.877
Tetrachloro-m-xylene		11.444	11.444	0.000	760455	22.817	22.817
Decachlorobiphenyl	(M)	29.183	29.183	0.000	2210062	46.809	46.809

COMMENTS:

M - Compound response manually integrated.

Client ID: **method blank**
Site:

Lab Sample No: **WG41661 MB**
Lab Job No: 94106

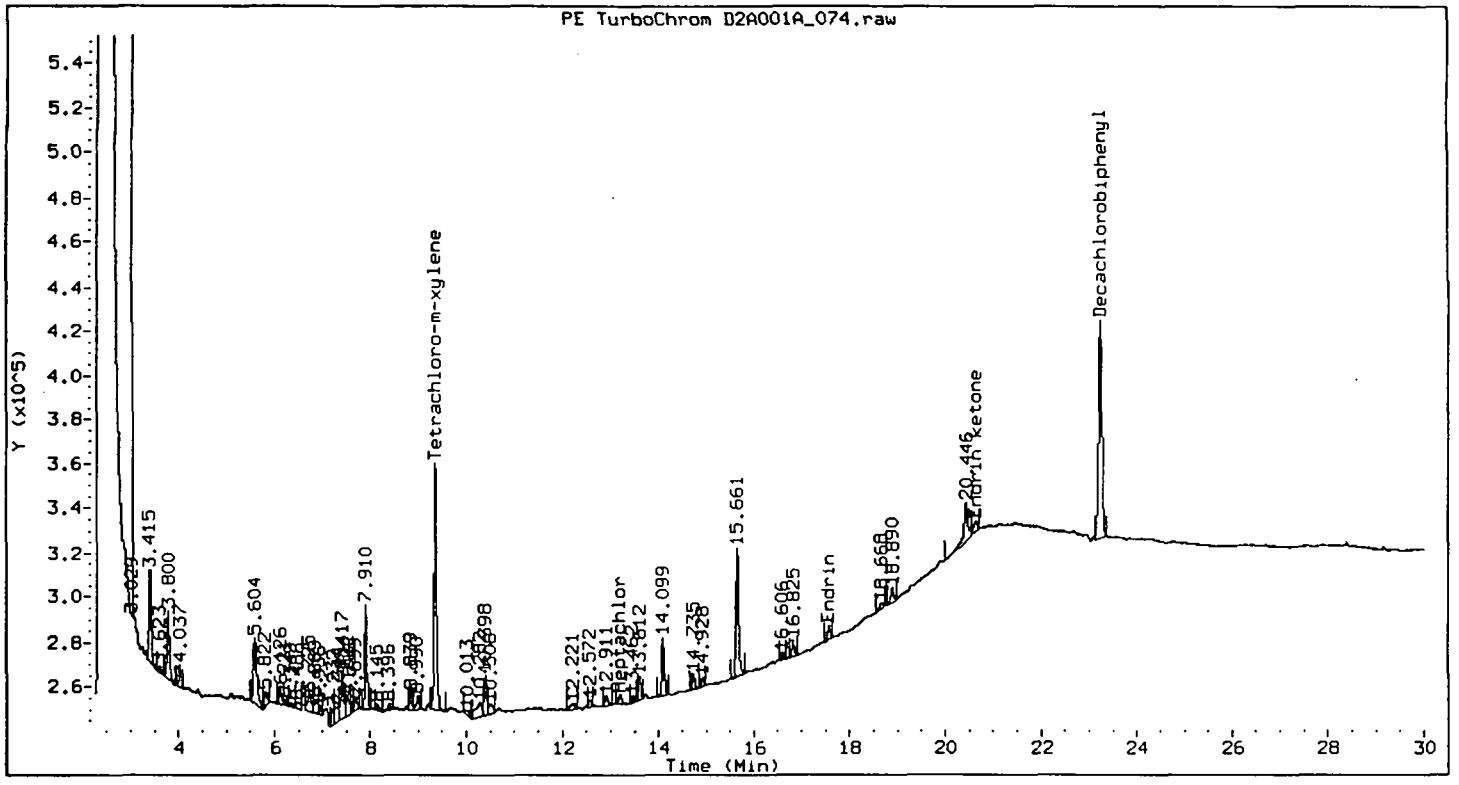
Date Sampled: _____
Date Received: _____
Date Analyzed: 11/14/99
GC Column: Rtx-CLPest
Instrument ID: HP58902.i
Lab File ID: D2A001A_074.d

Matrix: WATER
Level: LOW
Purge Volume: 1000.0 mL
Final Volume: 2.0 mL
Dilution Factor: 1.0

ORGANOCHLORINE PESTICIDES - GC/ECD

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Aldrin	ND	0.01
alpha-BHC	ND	0.01
beta-BHC	ND	0.01
delta-BHC	ND	0.01
gamma-BHC (Lindane)	ND	0.01
4,4'-DDD	ND	0.02
4,4'-DDE	ND	0.02
4,4'-DDT	ND	0.02
Dieldrin	ND	0.02
Endosulfan I	ND	0.01
Endosulfan II	ND	0.02
Endosulfan sulfate	ND	0.02
Endrin	ND	0.02
Endrin aldehyde	ND	0.02
Endrin ketone	ND	0.02
Heptachlor	ND	0.01
Heptachlor epoxide	ND	0.01
Methoxychlor	ND	0.100
Toxaphene	ND	0.500
gamma-Chlordane	ND	0.01
alpha-Chlordane	ND	0.01

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/D2A001A_074.d Page 1
Report Date 12/09/1999 16:04

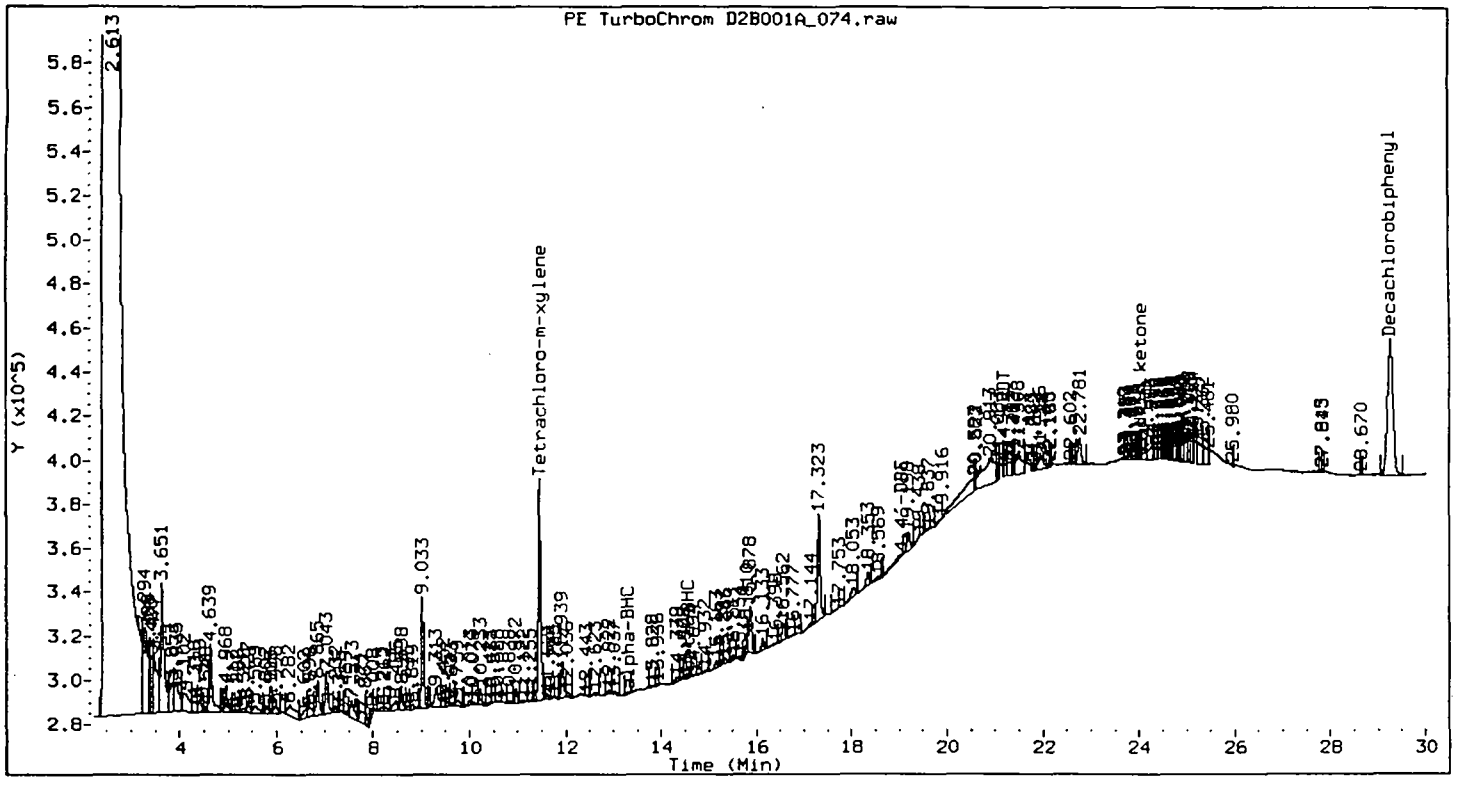


Method : /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/Bf8081.m
Sample Info : WG41661 MB
Lab ID : WG41661 MB
Inj Date : 14-NOV-1999 16:43
Operator : gds
Cpnd Sublist: TCLpest+

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Endrin	17.572	17.512	0.060	24715	0.936	0.002
Endrin ketone	20.653	20.633	0.021	25141	0.697	0.001
Heptachlor	13.198	13.179	0.019	22160	0.524	0.001
Tetrachloro-m-xylene	9.364	9.364	0.000	381353	11.661	0.023
Decachlorobiphenyl	23.243	23.242	0.001	477200	10.661	0.021

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/D2B001A_074.d Page 1
Report Date 12/09/1999 16:11



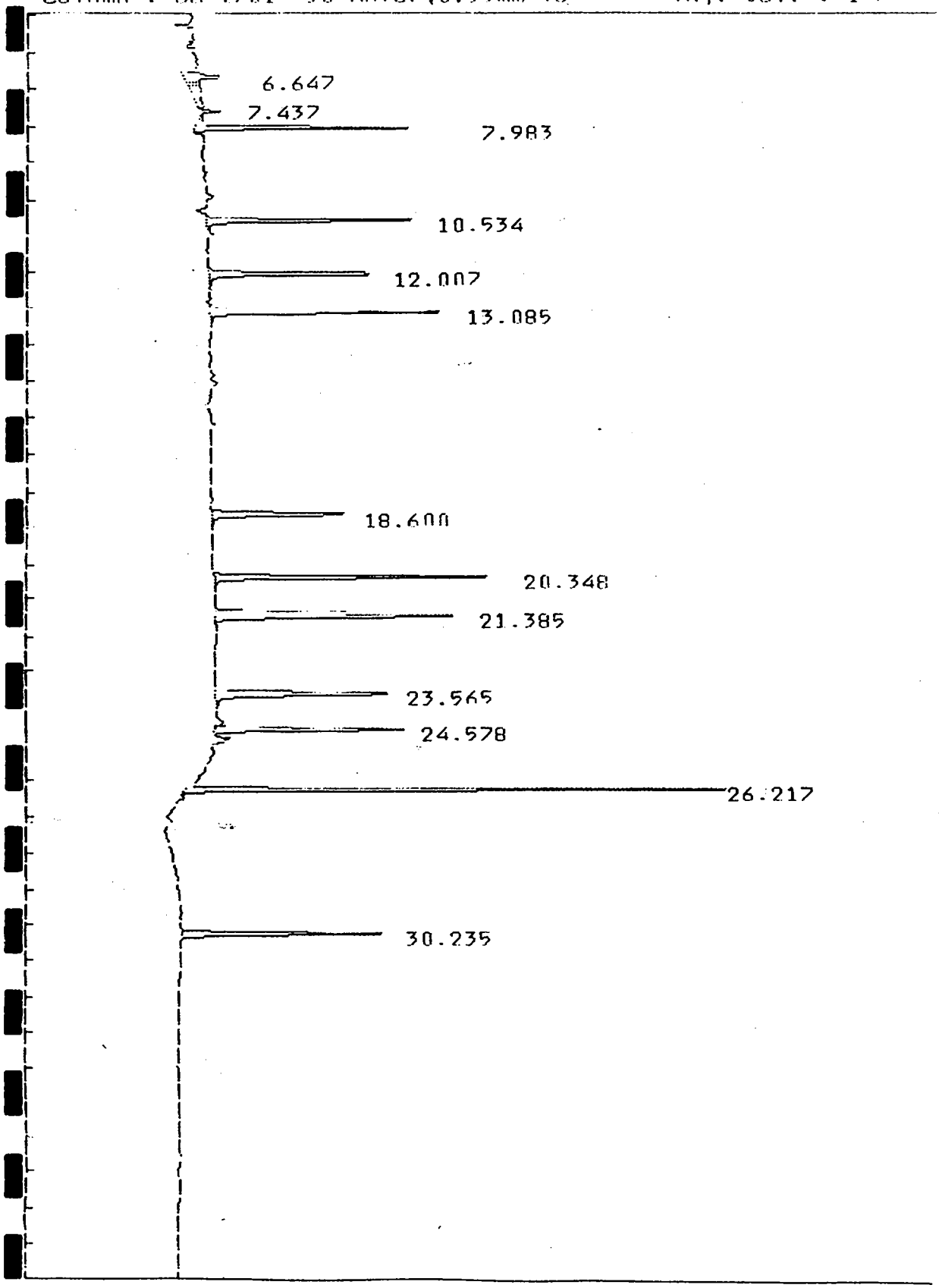
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/Br8081.m
Sample Info : WG41661 MB
Lab ID : WG41661 MB
Inj Date : 14-NOV-1999 16:43
Operator : gds
Cpnd Sublist: TCLpest+

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
alpha-BHC	13.322	13.367	0.045	3108	0.097	0.032
beta-BHC	14.592	14.611	0.018	8005	0.400	0.133
,4'-DDE	19.059	19.070	0.011	15983	0.520	0.173
,4'-DDT	21.205	21.218	0.013	16913	0.707	0.236
Endrin ketone	24.061	24.076	0.015	2710	0.076	0.025
Tetrachloro-m-xylene	11.467	11.463	0.005	364495	11.381	3.794
Decachlorobiphenyl	29.261	29.269	0.008	493098	10.231	3.410

IEA Pesticide Standard Report

Sample Name : INDA L1 Inj:1737 09Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 006.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDA L1 Report No : 33.00
Result File : /DATA/LOOP/RESULT/D4AS01C 006.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1737 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 6 Bottle no. : 6

% Dil-Fact
100.00

Run Status : RunStatusOK

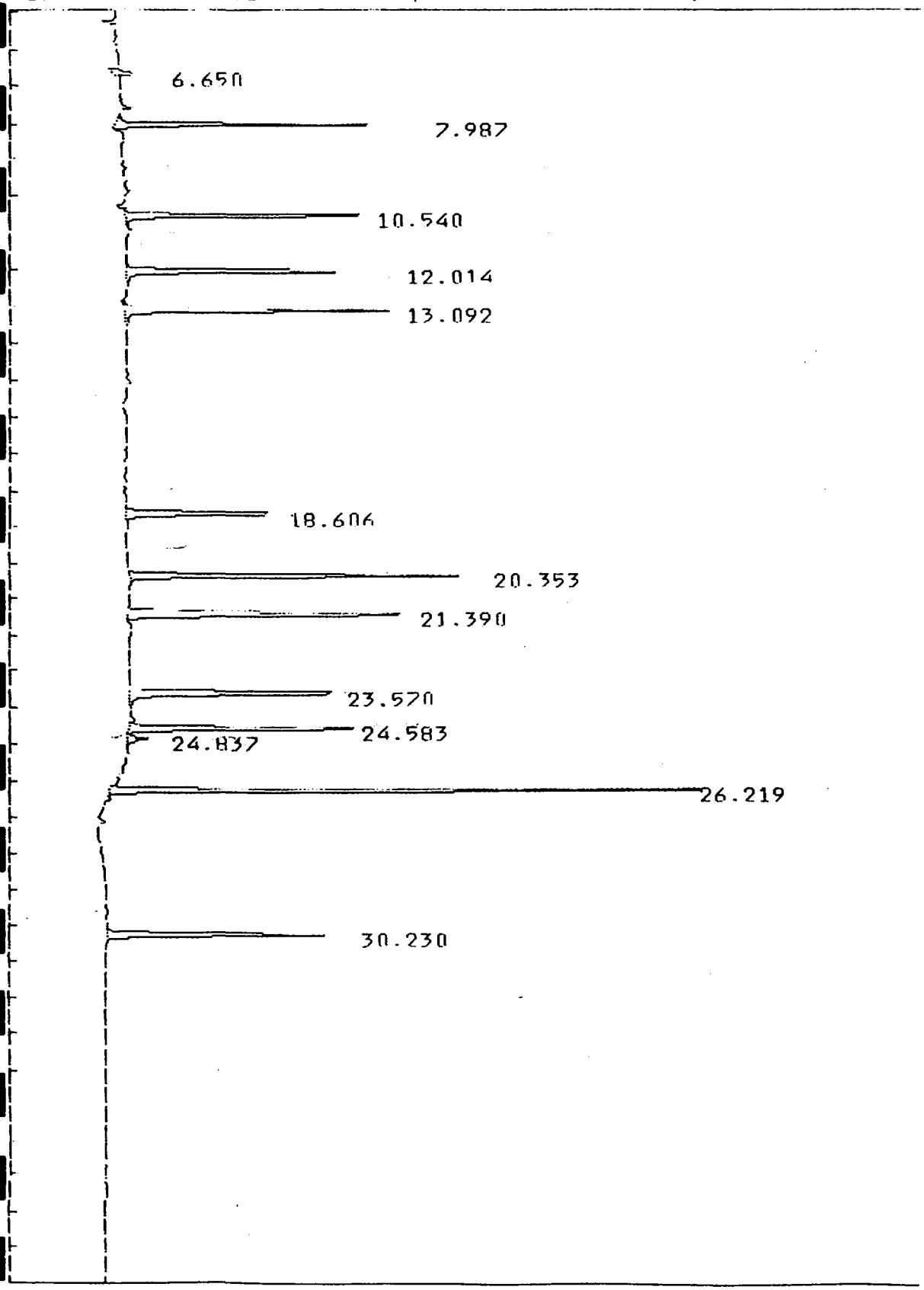
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.65		.152076	39839	PV	0.0000	
2	7.44		.691323	27801	VV	0.0000	
3	7.98	8.01	.070610	105519	BV	6.0325	TCX
4	10.53	10.57	.077571	100380	BV	4.8323	A-BHC
5	12.01	12.04	.086401	103287	PV	4.8607	G-BHC
6	13.09	13.10	.091850	125916	PB	5.0102	HEPTACHLOR
7	18.60	18.65	.109347	90235	BB	5.0751	ENDOSULFAN 1
8	20.35	20.40	.109050	177618	BB	9.6810	DIELDRIN
9	21.39	21.43	.111172	157987	BV	9.8171	ENDRIN
10	23.57	23.61	.117965	126020	BB	9.3709	4,4' DDD
11	24.58	24.61	.091947	108342	VV	8.9295	4,4' DDT
12	26.22	26.24	.062422	222943	VV	49.5980	METHOXYCHLOR
13	30.23	#30.26	.102905	122798	BB	9.5899	DCB

Total Area : 1508686 Total ng inj : 122.797

Report Time : 1818 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 006.RES

ILA Pesticide Standard Report

Sample Name : INDA I 2 Inj:1825 09Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 007.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

Sample Name : INDA L2 Report No : 34.00
Result File : /DATA/LOOP/RESULT/D4AS01C 007.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1825 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 7 Bottle no. : 7

% Dil-Fact
100.00

Run Status : RunStatusOK

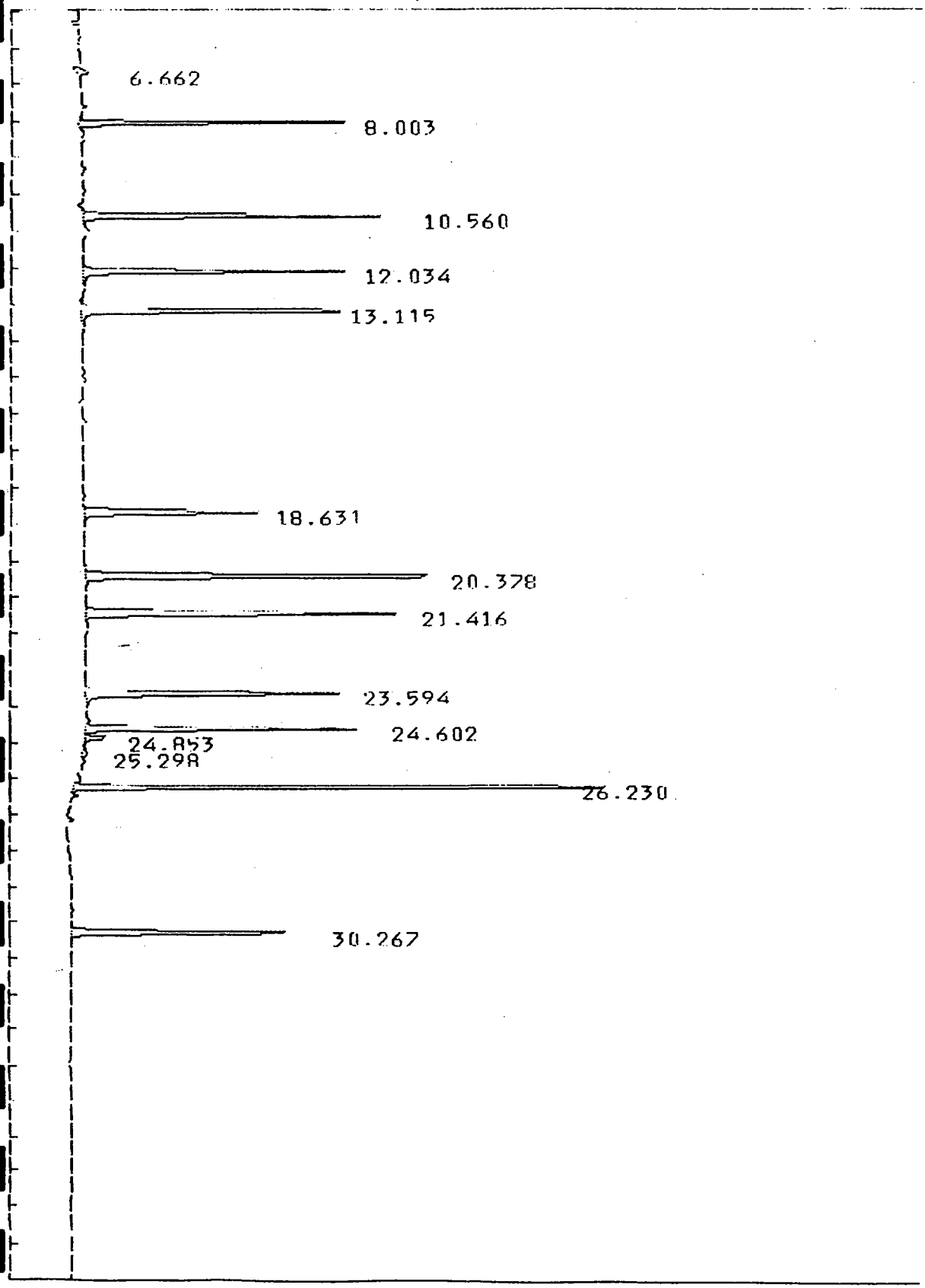
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.65		.122109	28482	BV	0.0000	
2	7.99	8.01	.068620	195283	VV	11.1643	TCX
3	10.54	10.57	.075769	203151	BV	9.7797	A-BHC
4	12.01	12.04	.085536	204901	PV	9.6426	G-BHC
5	13.09	13.10	.096378	254545	BB	10.1284	HEPTACHLOR
6	18.61	18.65	.108737	171856	BV	9.6657	ENDOSULFAN 1
7	20.35	20.40	.108141	351122	BB	19.1378	DIELDRIN
8	21.39	21.43	.110956	313218	BV	19.4630	ENDRIN
9	23.57	23.61	.119540	256833	BB	19.0983	4,4' DDD
10	24.58	24.61	.092531	225820	VV	18.6121	4,4' DDT
11	24.84		.100117	20773	VB	0.0000	
12	26.22	26.24	.063620	420313	VV	93.5066	METHOXYCHLOR
13	30.23	#30.26	.104411	231232	BB	18.0579	DCB

Total Area : 2877531 Total ng inj : 238.257

Report Time : 1907 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 007.RES

IEA Pesticide Standard Report

Sample Name : INDA L3 Inj:1914 09Nov1999
Result : /DATA/LOOP/RESULT/D4A501C 008.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDA L3 Report No : 35.01
Result File : /DATA/LOOP/RESULT/D4AS01C 008.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1914 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 8 Bottle no. : 8

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

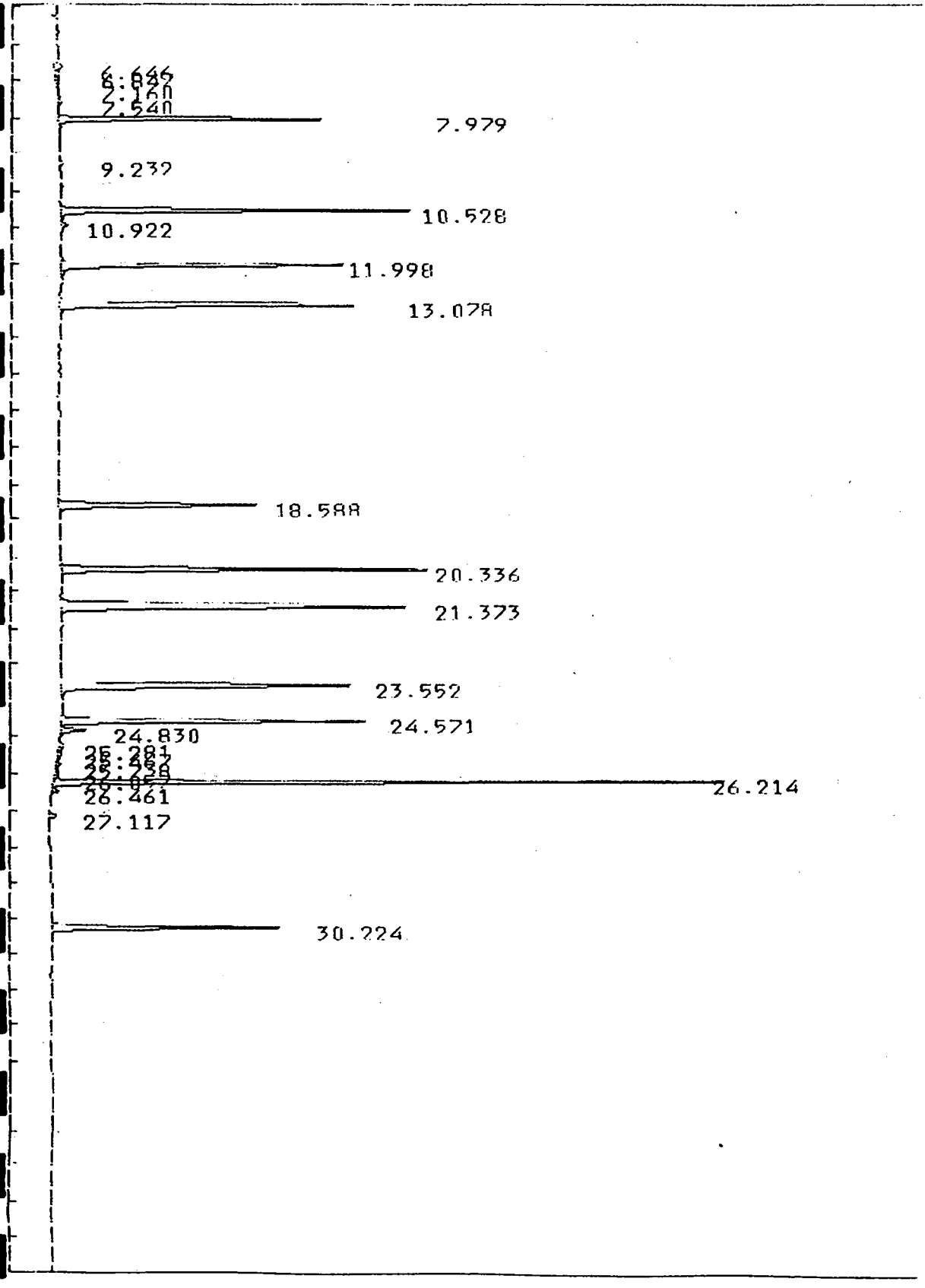
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.66		0.000000	32492	PU	0.0000	
2	8.00	7.99	0.000000	357603	BV	20.4442	TCX
3	10.56	10.54	0.000000	417286	BV	20.0881	A-BHC
4	12.03	12.01	0.000000	417138	BV	19.6305	G-BHC
5	13.12	13.09	0.000000	492272	BV	19.5875	HEPTACHLOR
6	18.63	18.61	0.000000	342307	BV	19.2524	ENDOSULFAN 1
7	20.38	20.35	0.000000	697634	BV	38.0244	DIELDRIN
8	21.42	21.39	0.000000	612866	BV	38.0827	ENDRIN
9	23.59	23.57	0.000000	515227	BB	38.3125	4,4' DDD
10	24.60	24.58	0.000000	447054	VV	36.8461	4,4' DDT
11	24.85		0.000000	36541	VB	0.0000	
12	25.30	25.30	0.000000	13277	BV	1.2762	ENDRIN ALDEHYDE
13	26.23	26.22	0.000000	785438	VV	174.7355	METHOXYCHLOR
14	30.27	#30.23	0.000000	435302	FF	33.9947	DCB

Total Area : 5602436 Total ng inj : 460.275

Report Time : 1457 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 008.RES

IEA Pesticide Standard Report

Sample Name : INDA L4 Inj:2002 09Nov1999
Result : /DATA/LNDP/RESULT/D4A501C D09.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IFA Pesticide Standard Report

Sample Name : INDA L4 Report No : 36.00
Result File : /DATA/LOOP/RESULT/D4AS01C 009.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2002 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 9 Bottle no. : 9

% Dil-Fact
100.00

Run Status : RunStatusOK

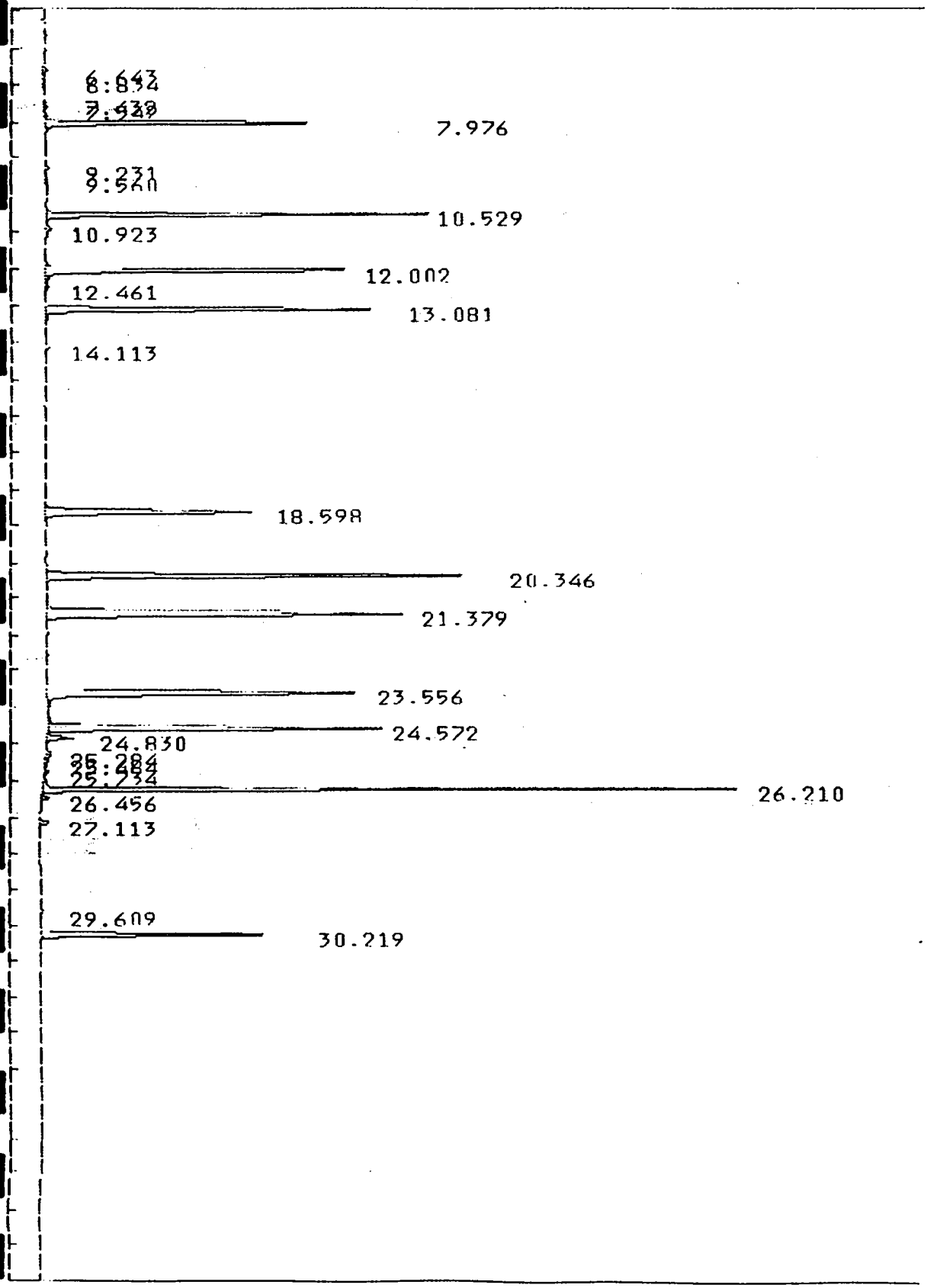
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.65		.143820	41506	PV	0.0000	
2	6.85		.162712	16708	VV	0.0000	
3	7.16		.345653	23083	VV	0.0000	
4	7.54		.070566	10203	VB	0.0000	
5	7.98	8.01	.067147	683601	BV	39.0815	TCX
6	9.23		.086426	10814	BV	0.0000	
7	10.53	10.57	.077006	856017	BV	41.2087	A-BHC
8	10.92		.084721	15610	VV	0.0000	
9	12.00	12.04	.085402	840634	VV	39.5602	G-BHC
10	13.08	13.10	.093137	907364	BV	36.1040	HEPTACHLOR
11	18.59	18.65	.111765	677067	BV	38.0803	ENDOSULFAN 1
12	20.34	20.40	.111142	1386191	BB	75.5541	DIELDRIN
13	21.37	21.43	.113708	1194883	PV	74.2486	ENDRIN
14	23.55	23.61	.117728	1032034	BB	76.7426	4,4' DDD
15	24.57	24.61	.096773	917560	VV	75.6251	4,4' DDT
16	24.83		.084793	67709	VB	0.0000	
17	25.28	25.32	.169554	19221	BV	1.8475	ENDRIN ALDEHYDE
18	25.47		.134671	13537	VV	0.0000	
19	25.74		.092945	14157	VV	0.0000	
20	26.06	26.04	.172217	18418	VV	2.1287	ENDOSULFAN SULFATE
21	26.21	26.24	.065536	1460295	VV	324.8703	METHOXYCHLOR
22	26.46		.060000	15002	VB	0.0000	
23	27.12	27.15	.066247	16633	BV	1.8091	ENDRIN KETONE
24	30.22	#30.26	.107525	784262	BB	61.2466	DCB

Total Area : 11022512 Total ng inj : 888.107

Report Time : 2043 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 009.RES

IEA Pesticide Standard Report

Sample Name : INDA L5 Inj:2053 09Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 010.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

Sample Name : INDA L5 Report No : 37.00
Result File : /DATA/LOOP/RESULT/D4AS01C 010.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2053 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 10 Bottle no. : 10

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline

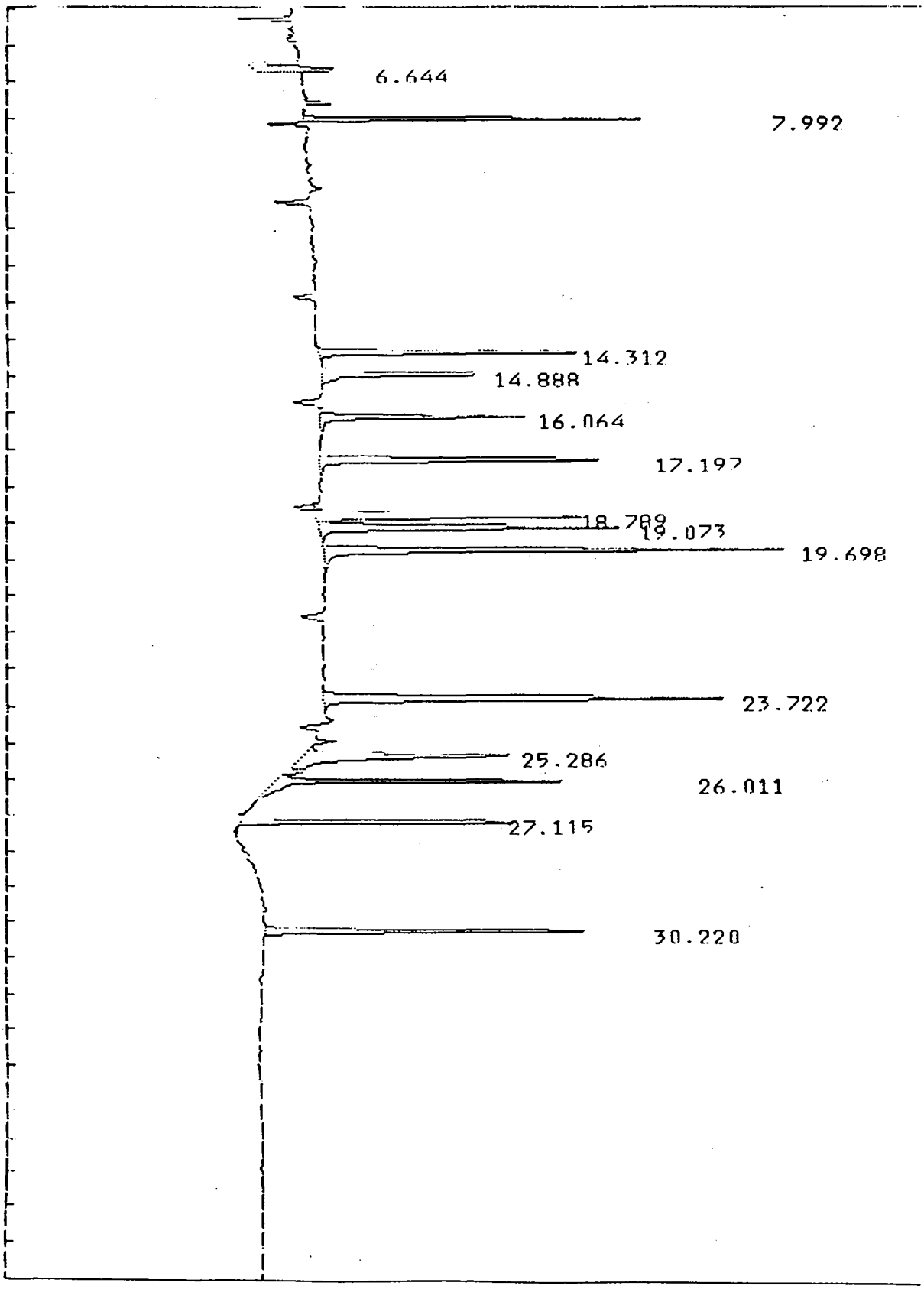
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.64		.157825	44963	PV	0.0000	
2	6.83		.131674	13941	VV	0.0000	
3	7.43		.633264	32233	VV	0.0000	
4	7.54		.068368	12410	VB	0.0000	
5	7.98	8.01	.067571	1239556	BV	70.8654	TCX
6	9.23		.085156	20362	BV	0.0000	
7	9.56		.166193	13818	VV	0.0000	
8	10.53	10.57	.078908	1664575	BV	80.1326	A-BHC
9	10.92		.080361	27629	VV	0.0000	
10	12.00	12.04	.086978	1620097	VV	76.2417	G-BHC
11	12.46		.112747	12824	VB	0.0000	
12	13.08	13.10	.094569	1694921	BV	67.4409	HEPTACHLOR
13	14.11		.099886	15415	VV	0.0000	
14	18.60	18.65	.112071	1284722	BV	72.2566	ENDOSULFAN 1
15	20.35	20.40	.114690	2593856	BB	141.3776	DIELDRIN
16	21.38	21.43	.117788	2207137	PV	137.1489	ENDRIN
17	23.56	23.61	.121769	1982539	PB	147.4226	4,4' DDD
18	24.57	24.61	.098687	1780350	BV	146.7361	4,4' DDT
19	24.83		.081740	126576	VB	0.0000	
20	25.28	25.32	.157533	33369	BV	3.2073	ENDRIN ALDEHYDE
21	25.46		.103449	15367	VV	0.0000	
22	25.73		.065722	15409	VV	0.0000	
23	26.21	26.24	.066255	2599506	HS	578.3097	METHOXYCHLOR
24	26.46		.059669	27437	BT	0.0000	
25	27.11	27.15	.073323	38726	PV	4.2121	ENDRIN KETONE
26	29.61		.095378	13142	BV	0.0000	
27	30.22	#30.26	.109942	1397550	BB	109.1410	DCB

Total Area : 20528428 Total ng inj : 1634.493

Report Time : 2134 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 010.RES

IIA Pesticide Standard Report

Sample Name : INDB 1.1 Inj:2143 09Nov1999
Result : /DATA/LOOP/RESULT/D4A501C 011.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDB 11 Report No : 38.01
Result File : /DATA/LOOP/RESULT/D4AS01C 011.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 2143 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 11 Bottle no. : 11

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

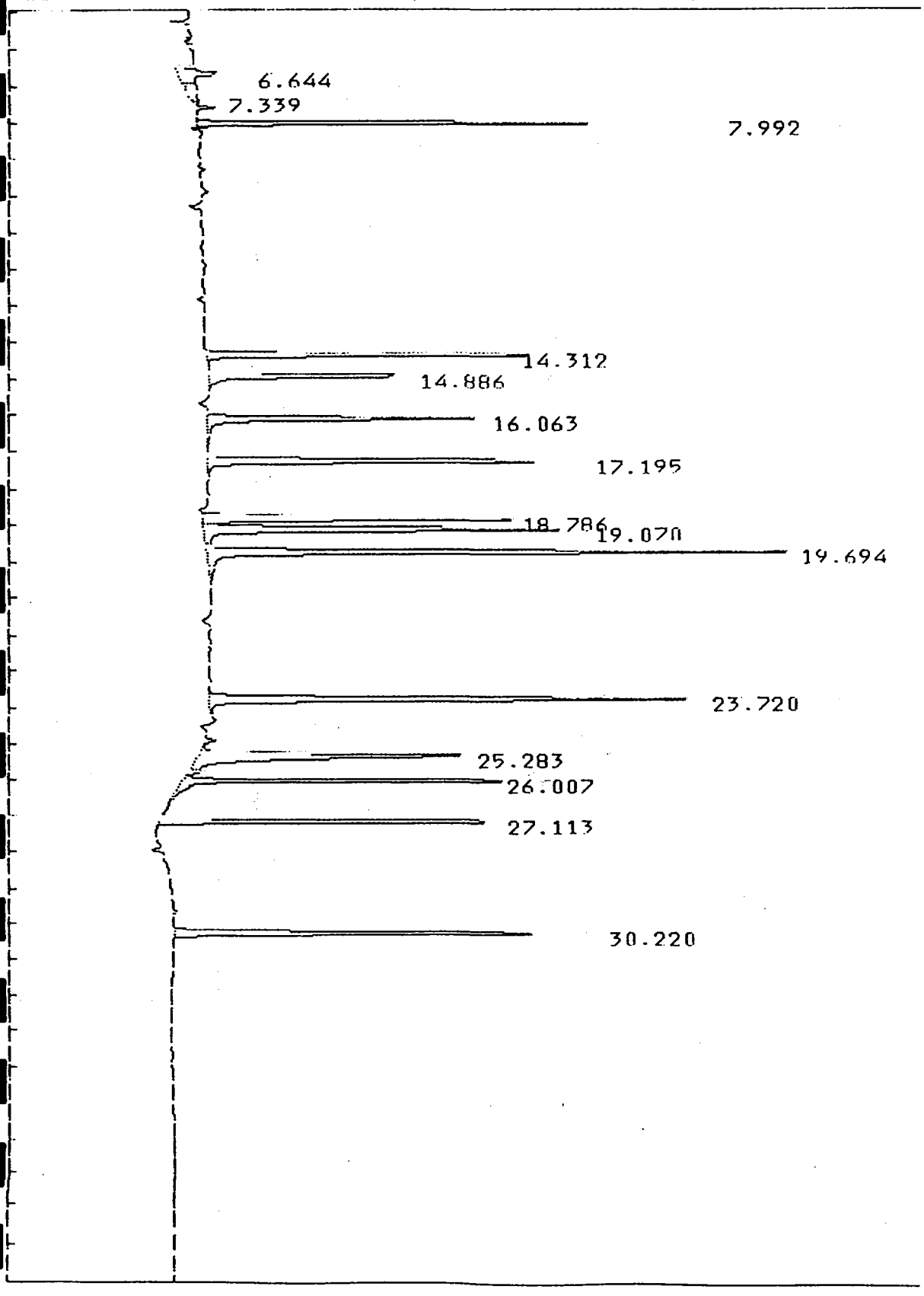
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.64		0.000000	46693	PV	0.0000	
2	7.99	7.99	0.000000	92694	FF	5.2993	TCX
3	14.31	14.33	0.000000	95550	BB	4.6820	ALDRIN
4	14.89	14.91	0.000000	63123	BB	5.2689	B-BHC
5	16.06	16.10	0.000000	74348	BB	4.7280	D-BHC
6	17.20	17.23	0.000000	106910	BB	4.9656	HEPTACHLOR EPOXIDE
7	18.79	18.83	0.000000	100180	BV	4.7255	G-CHLORDANE
8	19.07	19.11	0.000000	113746	VB	4.8871	A-CHLORDANE
9	19.70	19.73	0.000000	177544	BB	9.6612	4,4' DDE
10	23.72	23.75	0.000000	160204	BB	9.5173	ENDOSULFAN II
11	25.29	25.30	0.000000	108519	BV	10.4305	ENDRIN ALDEHYDE
12	26.01	26.02	0.000000	96821	VB	11.1906	ENDOSULFAN SULFATE
13	27.12	27.13	0.000000	78166	BV	8.5019	ENDRIN KETONE
14	30.22	#30.23	0.000000	121181	BB	9.4636	DCB

Total Area : 1435679 Total ng inj : 93.321

Report Time : 1108 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 011.RES

IEA Pesticide Standard Report

Sample Name : INDR L2 Inj:2234 09Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 012.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



HA Pesticide Standard Report

Sample Name : INDB L2 Report No : 39.01
Result File : /DATA/LOOP/RESULT/D4AS01C 012.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 2234 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 12 Bottle no. : 12

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

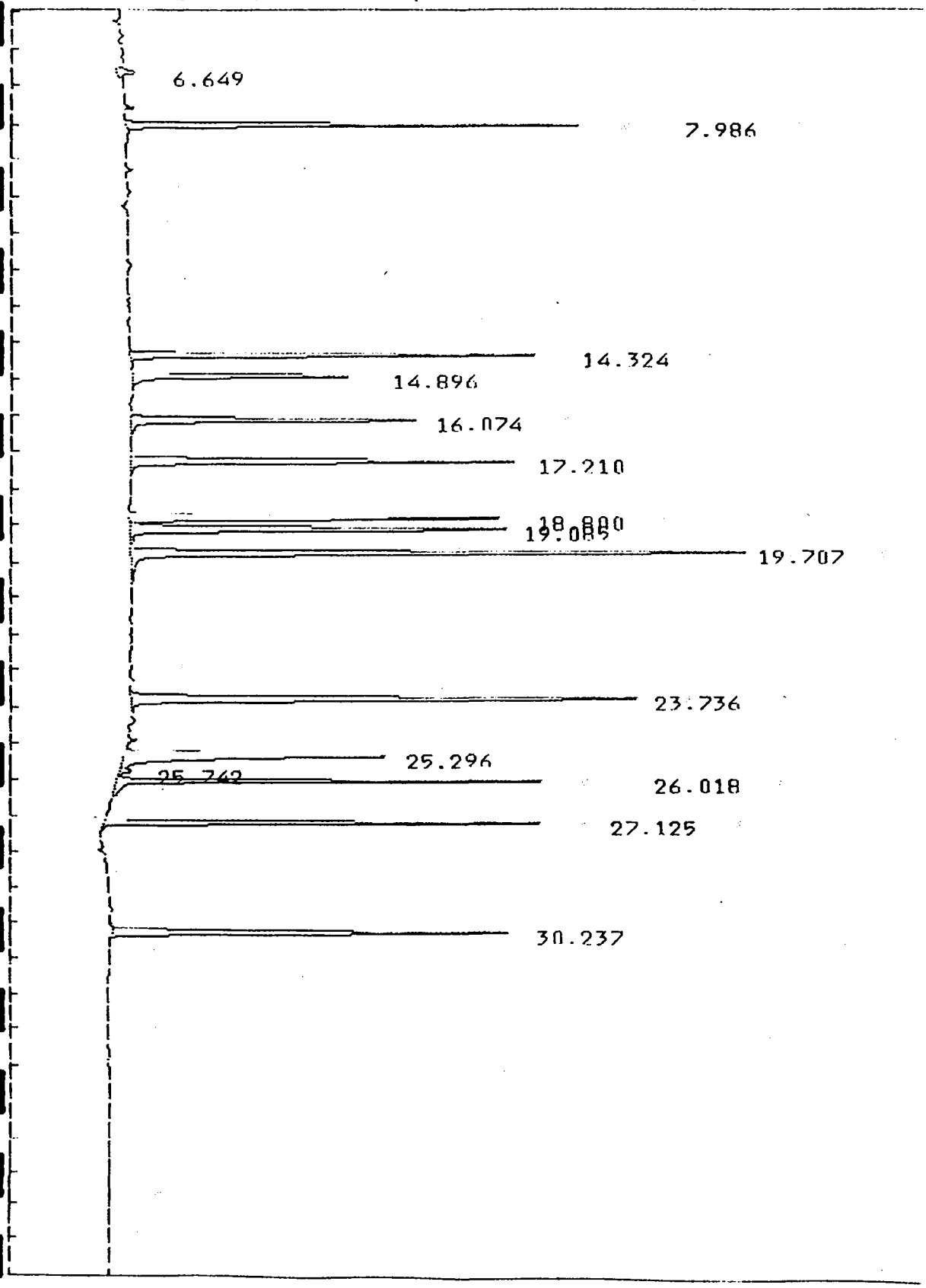
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.64		0.000000	44704	PV	0.0000	
2	7.34		0.000000	23995	VV	0.0000	
3	7.99	7.99	0.000000	180078	FF	10.2951	TCX
4	14.31	14.33	0.000000	190790	BB	9.3487	ALDRIN
5	14.89	14.91	0.000000	119483	BB	9.9733	B-BHC
6	16.06	16.10	0.000000	153945	BB	9.7898	D-BHC
7	17.20	17.23	0.000000	207541	BB	9.6396	HEPTACHLOR EPOXIDE
8	18.79	18.83	0.000000	209675	BV	9.8904	G-CHLORDANE
9	19.07	19.11	0.000000	228789	VV	9.8299	A-CHLORDANE
10	19.69	19.73	0.000000	372313	VB	20.2598	4,4' DDE
11	23.72	23.75	0.000000	318064	PB	18.8953	ENDOSULFAN II
12	25.28	25.30	0.000000	210929	BV	20.2739	ENDRIN ALDEHYDE
13	26.01	26.02	0.000000	178591	VB	20.6415	ENDOSULFAN SULFATE
14	27.11	27.13	0.000000	162512	BV	17.6759	ENDRIN KETONE
15	30.22	#30.23	0.000000	228743	BB	17.8636	DCB

Total Area : 2830152 Total ng inj : 184.377

Report Time : 1114 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 012.RES

IIA Pesticide Standard Report

Sample Name : IND8 13 Inj:2325 09Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 013.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

Sample Name : INDB L3 Report No : 40.00
Result File : /DATA/LOOP/RESULT/D4AS01C 013.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2325 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 13 Bottle no. : 13

% Dil-Fact
100.00

Run Status : RunStatusOK

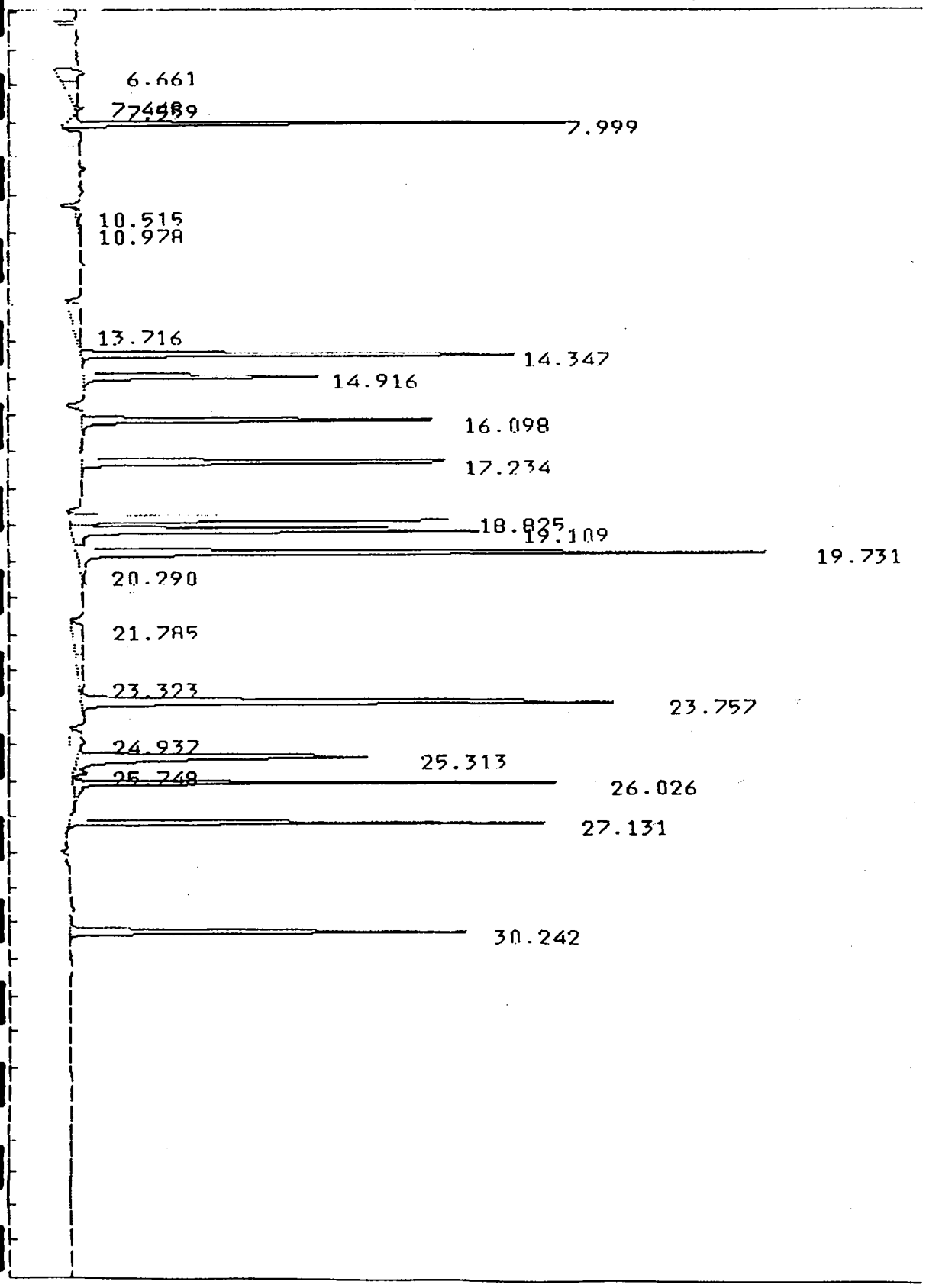
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.65		.136620	28280	PV	0.0000	
2	7.99	7.99	.067117	346224	BV	19.7936	TCX
3	14.32	14.33	.093628	387007	BB	18.9633	ALDRIN
4	14.90	14.91	.102292	227927	BB	19.0250	B-BHC
5	16.07	16.10	.101053	312204	BV	19.8540	D-BHC
6	17.21	17.23	.104596	403063	BB	18.7211	HEPTACHLOR EPOXIDE
7	18.80	18.83	.107064	394829	BV	18.6241	G-CHLORDANE
8	19.08	19.11	.111072	418653	VV	17.9874	A-CHLORDANE
9	19.71	19.73	.113540	722808	VB	39.3323	4,4' DDE
10	23.74	23.75	.123041	616632	PB	36.6323	ENDOSULFAN II
11	25.30	25.30	.141586	393816	BV	37.8524	ENDRIN ALDEHYDE
12	25.74		.098075	12848	VV	0.0000	
13	26.02	26.02	.067360	337281	VB	38.9830	ENDOSULFAN SULFATE
14	27.13	27.13	.070775	327148	BV	35.5829	ENDRIN KETONE
15	30.24	#30.23	.105871	418676	BB	32.6963	DCB

Total Area : 5347397 Total ng inj : 354.048

Report Time : 0006 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 013.RES

ILA Pesticide Standard Report

Sample Name : INDB L4 Inj:0015 10Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 014.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDB L4 Report No : 41.01
Result File : /DATA/LOOP/RESULT/D4AS01C 014.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 0015 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 14 Bottle no. : 14

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

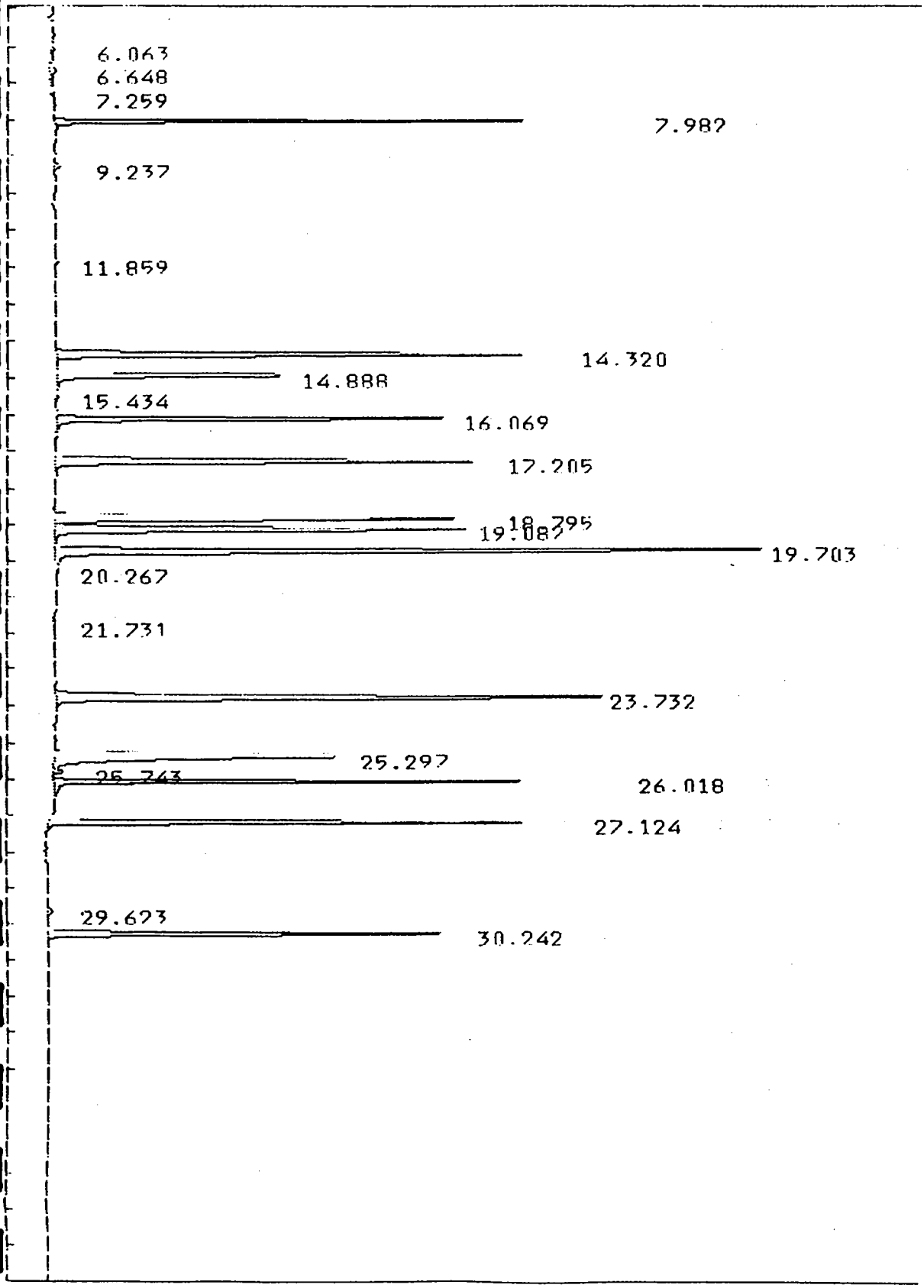
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.66		0.000000	147023	PV	0.0000	
2	7.45		0.000000	104805	VV	0.0000	
3	7.56		0.000000	13386	VB	0.0000	
4	8.00	7.99	0.000000	714808	BV	40.8656	TCX
5	10.51	10.54	0.000000	24138	BV	1.1620	A-BHC
6	10.98		0.000000	11044	VV	0.0000	
7	13.72		0.000000	151966	BV	0.0000	
8	14.35	14.33	0.000000	800668	VB	39.2327	ALDRIN
9	14.92	14.91	0.000000	432871	BB	36.1318	B-BHC
10	16.10	16.10	0.000000	650345	BV	41.3574	D-BHC
11	17.23	17.23	0.000000	778488	PB	36.1584	HEPTACHLOR EPOXIDE
12	18.83	18.83	0.000000	818194	PV	38.5942	G-CHLORDANE
13	19.11	19.11	0.000000	882578	VV	37.9200	A-CHLORDANE
14	19.73	19.73	0.000000	1456143	VV	79.2375	4,4' DDE
15	20.29	20.35	0.000000	15594	VB	.8500	DIELDRIN
16	21.79		0.000000	151681	PV	0.0000	
17	23.32		0.000000	76656	VV	0.0000	
18	23.76	23.75	0.000000	1188188	VB	70.5868	ENDOSULFAN II
19	24.94		0.000000	98408	PB	0.0000	
20	25.31	25.30	0.000000	762340	BV	73.2738	ENDRIN ALDEHYDE
21	25.75		0.000000	26332	VV	0.0000	
22	26.03	26.02	0.000000	665189	PB	76.8825	ENDOSULFAN SULFATE
23	27.13	27.13	0.000000	640522	BV	69.6676	ENDRIN KETONE
24	30.24	#30.23	0.000000	785652	FF	61.3551	DCB

Total Area : 11397020 Total ng inj : 703.275

Report Time : 1128 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 014.RES

IEA Pesticide Standard Report

Sample Name : INDR L5 Inj:0106 10Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 015.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



TPA Pesticide Standard Report

Sample Name : INDB 15 Report No : 42.01
Result File : /DATA/LOOP/RESULT/D4AS01C 015.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 0106 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 15 Bottle no. : 15

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

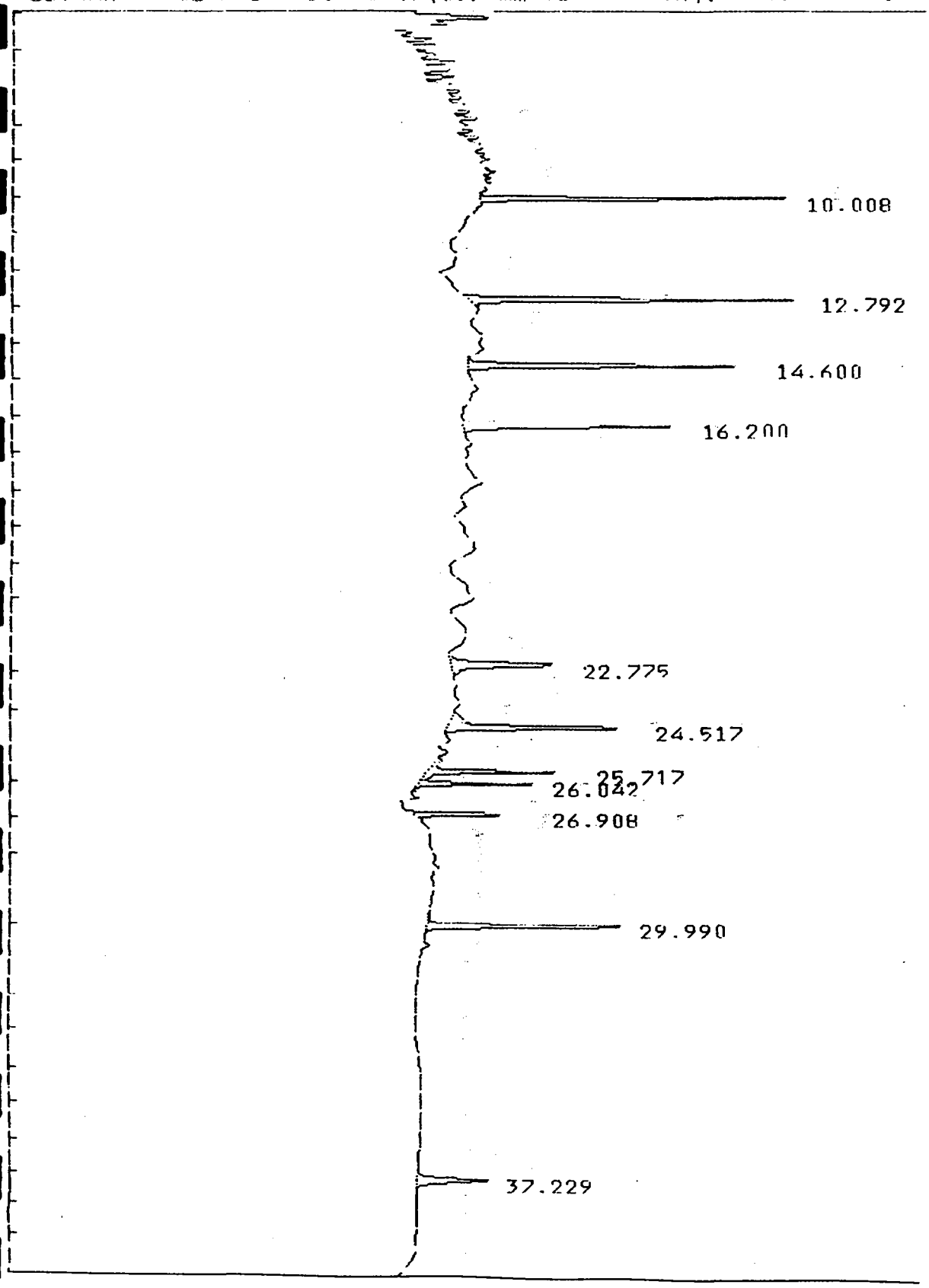
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.06		0.000000	14091	BV	0.0000	
2	6.65		0.000000	43550	PV	0.0000	
3	7.26		0.000000	31413	VV	0.0000	
4	7.98	7.99	0.000000	1232007	PV	70.4339	TCX
5	9.24		0.000000	18438	PV	0.0000	
6	11.86		0.000000	11058	BV	0.0000	
7	14.32	14.33	0.000000	1519687	BB	74.4647	ALDRIN
8	14.89	14.91	0.000000	818168	BB	68.2925	B-BHC
9	15.43		0.000000	10984	BV	0.0000	
10	16.07	16.10	0.000000	1297786	BV	82.5301	D-BHC
11	17.20	17.23	0.000000	1476934	PB	68.5992	HEPTACHLOR EPOXIDE
12	18.80	18.83	0.000000	1468231	BV	69.2564	G-CHLORDANE
13	19.08	19.11	0.000000	1512502	VV	64.9846	A-CHLORDANE
14	19.70	19.73	0.000000	2671501	VV	145.3724	4,4' DDE
15	20.27		0.000000	11512	VB	0.0000	
16	21.73		0.000000	19091	PB	0.0000	
17	23.73	23.75	0.000000	2192521	PB	130.2513	ENDOSULFAN II
18	25.30	25.30	0.000000	1402797	BV	134.8325	ENDRIN ALDEHYDE
19	25.74		0.000000	29076	VV	0.0000	
20	26.02	26.02	0.000000	1207759	PB	139.5928	ENDOSULFAN SULFATE
21	27.12	27.13	0.000000	1225657	VV	133.3110	ENDRIN KETONE
22	29.62		0.000000	16989	BV	0.0000	
23	30.24	#30.23	0.000000	1405226	FF	109.7405	DCB

Total Area : 19636980 Total ng inj : 1291.662

Report Time : 1136 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 015.RES

IEA Pesticide Standard Report

Sample Name : INDA 1.1 Inj 1648 09Nov1999
Result : /DATA/LOOP/RESULT/04BS01C 005.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDA L1 Report No : 32.01
Result File : /DATA/LOOP/RESULT/D4RS01C 005.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1648 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 5 Bottle no. : 6

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline
SpecialInteg

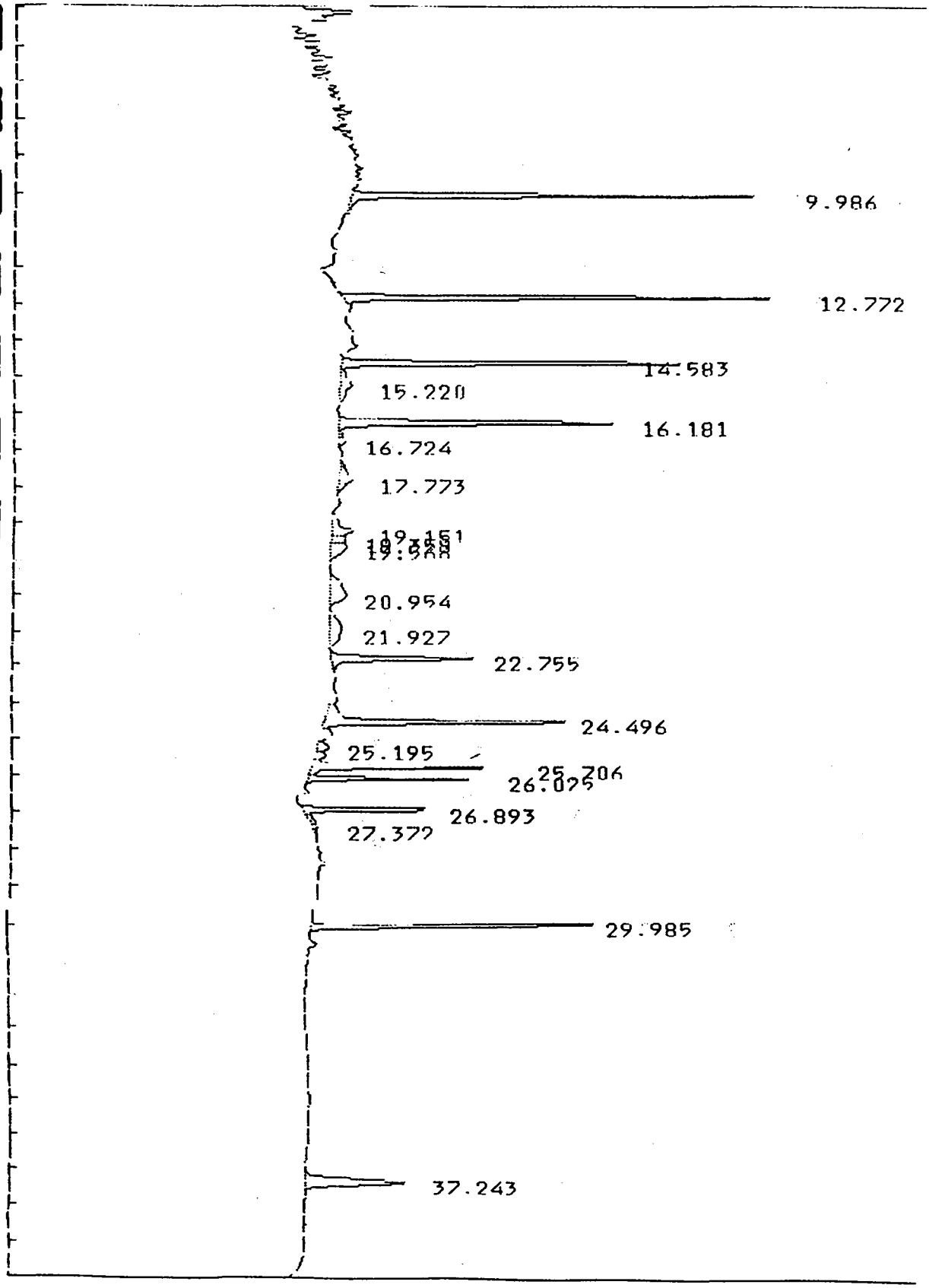
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	10.01	#10.01	0.000000	123898	FF	.0240	TOX
2	12.79	12.76	0.000000	149690	FF	.0233	A-BHC
3	14.60	14.57	0.000000	131036	FF	.0223	G-BHC
4	16.20	16.15	0.000000	115805	FF	.0230	HEPTACHLOR
5	22.78	22.72	0.000000	74749	FF	.0257	ENDOSULFAN I
6	24.52	24.45	0.000000	116660	FF	.0459	DIELDRIN
7	25.72	25.68	0.000000	55581	FF	.0558	ENDRIN
8	26.04	26.02	0.000000	41814	FF	.0427	4,4' DDD
9	26.91	26.87	0.000000	40456	FF	.0404	4,4' DDT
10	29.99	29.94	0.000000	107815	BV	.2011	METHOXYCHLOR
11	37.23		0.000000	62311	BB	0.0000	

Total Area : 1019818 Total ng inj : .504

Report Time : 2153 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP*.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 005.RES

IFA Pesticide Standard Report

Sample Name : INDA L2 Inj 1737 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 006.RES GC : HP58904A
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDA L2 Report No : 33.00
Result File : /DATA/LOOP/RESULT/D4RS01C 006.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904R
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1737 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 6 Bottle no. : 7

% Dil-Fact
100.00

Run Status : RunStatusOK

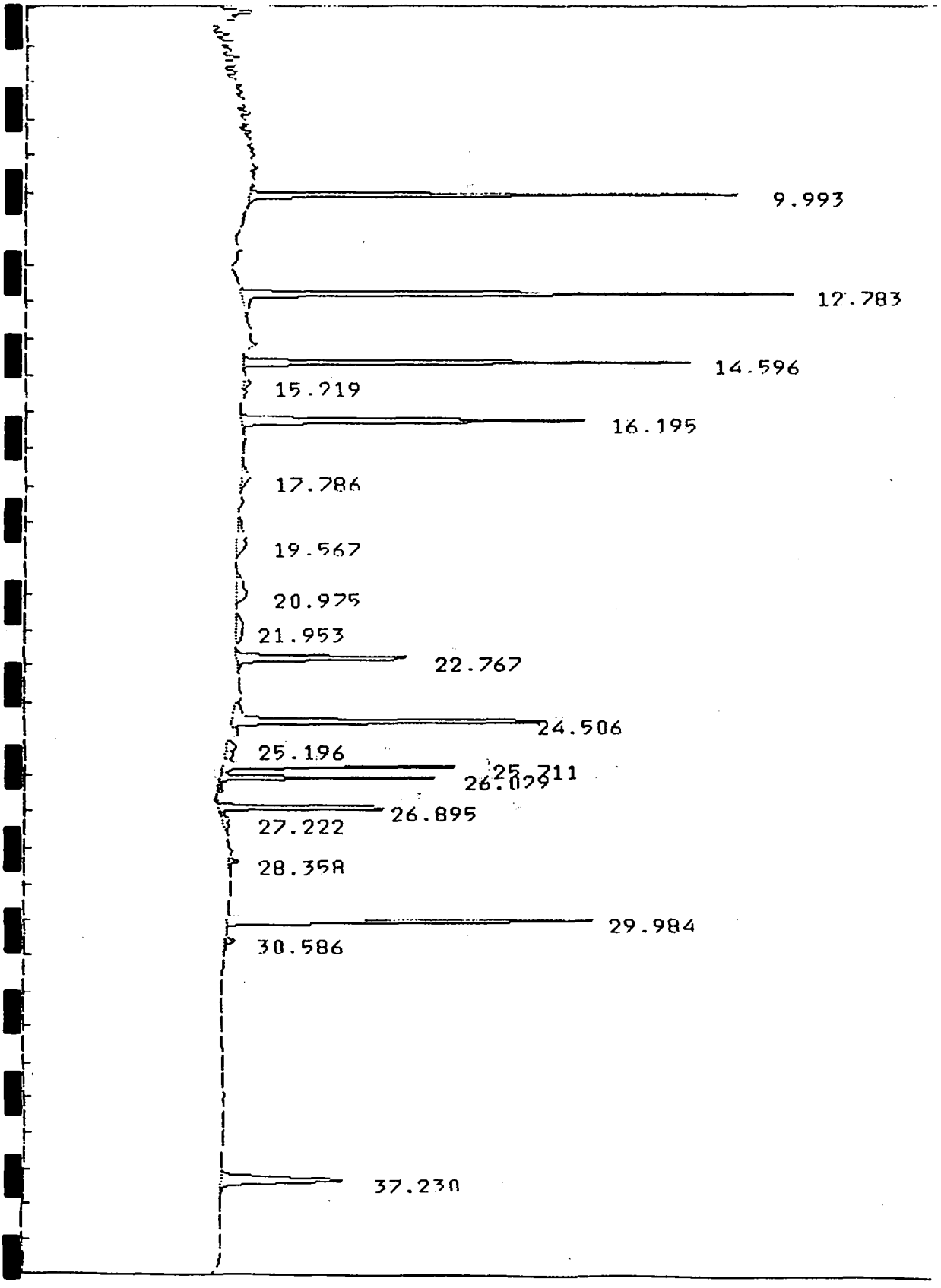
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.01	.082516	241246	BB	.0467	TCX
2	12.77	12.76	.091991	290749	VV	.0452	A-BHC
3	14.58	14.57	.098732	256325	BV	.0436	G-BHC
4	15.22		.506536	39055	VV	0.0000	
5	16.18	16.15	.113670	222364	PV	.0442	HEPTACHLOR
6	16.72	16.74	.275846	10475	VV	.0021	D-BHC
7	17.77		.373035	32200	BV	0.0000	
8	19.15		.211297	32010	BV	0.0000	
9	19.36		.173550	16976	VV	0.0000	
10	19.57		.336638	35055	VV	0.0000	
11	20.95		.574162	65163	VV	0.0000	
12	21.93		.667657	52690	VV	0.0000	
13	22.76	22.72	.131883	130168	PV	.0448	ENDOSULFAN I
14	24.50	24.45	.130278	240009	VV	.0945	DIELDRIN
15	25.20		.203917	16689	VV	0.0000	
16	25.71	25.68	.080362	108438	VV	.1088	ENDRIN
17	26.03	26.02	.065341	83118	VV	.0849	4,4' DDD
18	26.89	26.87	.073004	86016	BV	.0860	4,4' DDT
19	27.37		.375670	14990	VV	0.0000	
20	29.99	29.94	.099962	212672	BV	.3967	METHOXYCHLOR
21	37.24		.181536	123853	BB	0.0000	

Total Area : 2310262 Total ng inj : .998

Report Time : 1820 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904RP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 006.RES

ILA Pesticide Standard Report

Sample Name : INDA L3 Inj 1825 09Nov1999
Result : /DATA/LOOP/RESULT/D4RS01C 007.RES GC : HP5890A
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDA L3 Report No : 34.00
Result File : /DATA/LOOP/RESULT/D4BS01C 007.RLS
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1825 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4BS01C.SEQ
Subseq/Sample : 1/ 7 Bottle no. : 8

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline

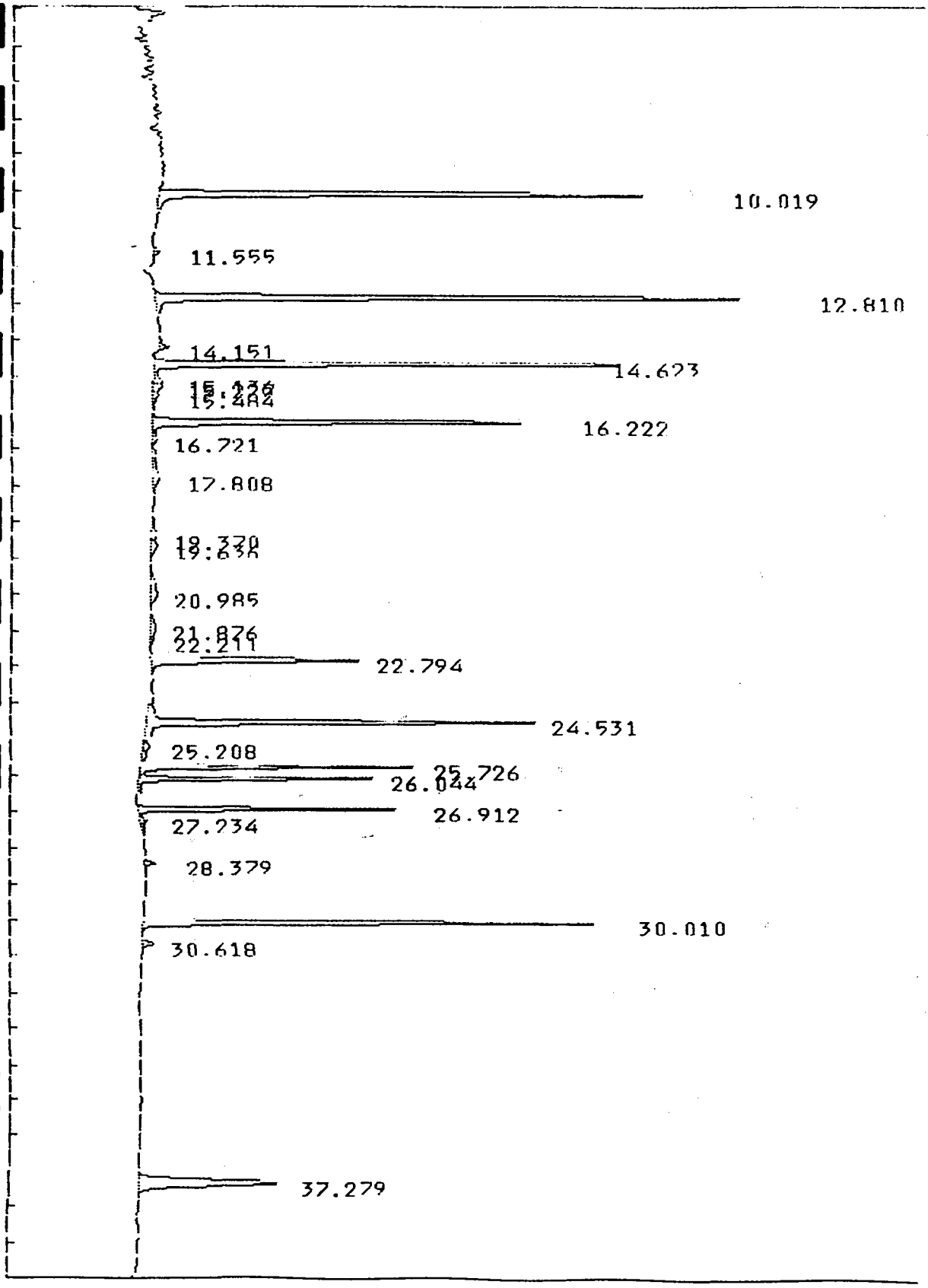
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.01	.082779	446930	BV	.0865	TCX
2	12.78	12.76	.097128	584793	BV	.0909	A-BHC
3	14.60	14.57	.099021	479454	BV	.0816	G-BHC
4	15.22		.164386	11151	VV	0.0000	
5	16.19	16.15	.114766	421787	PV	.0838	HEPTACHLOR
6	17.79		.368669	31314	BV	0.0000	
7	19.57		.661694	64725	BV	0.0000	
8	20.97		.573867	63509	PV	0.0000	
9	21.95		.680092	54588	VV	0.0000	
10	22.77	22.72	.131492	243988	PV	.0839	ENDOSULFAN I
11	24.51	24.45	.122450	441284	VV	.1737	DIELDRIN
12	25.20		.391161	36628	VV	0.0000	
13	25.71	25.68	.077176	204013	VV	.2047	ENDRIN
14	26.03	26.02	.079762	180241	VB	.1842	4,4' DDD
15	26.89	26.87	.079305	173966	BV	.1739	4,4' DDT
16	27.22	27.18	.290134	23562	VV	.0268	ENDRIN ALDEHYDE
17	28.36		.111679	11951	VV	0.0000	
18	29.98	29.94	.100578	419879	BV	.7833	METHOXYCHLOR
19	30.59	30.54	.115230	11673	PB	.0087	ENDRIN KETONE
20	37.23		.187429	239521	BB	0.0000	

Total Area : 4144957 Total ng inj : 1.982

Report Time : 1909 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4BS01C 007.RFS

IEA Pesticide Standard Report

Sample Name : INDA 14 Inj 1914 09Nov1999
Result : /DATA/LOOP/RESULT/D4RS01C 008.RES GC : HP5890A
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDA L4 Report No : 35.00
Result File : /DATA/LOOP/RESULT/D4RS01C 008.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP5890II
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1914 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 8 Bottle no. : 9

% Dil-Fact
100.00

Run Status : RunStatusOK

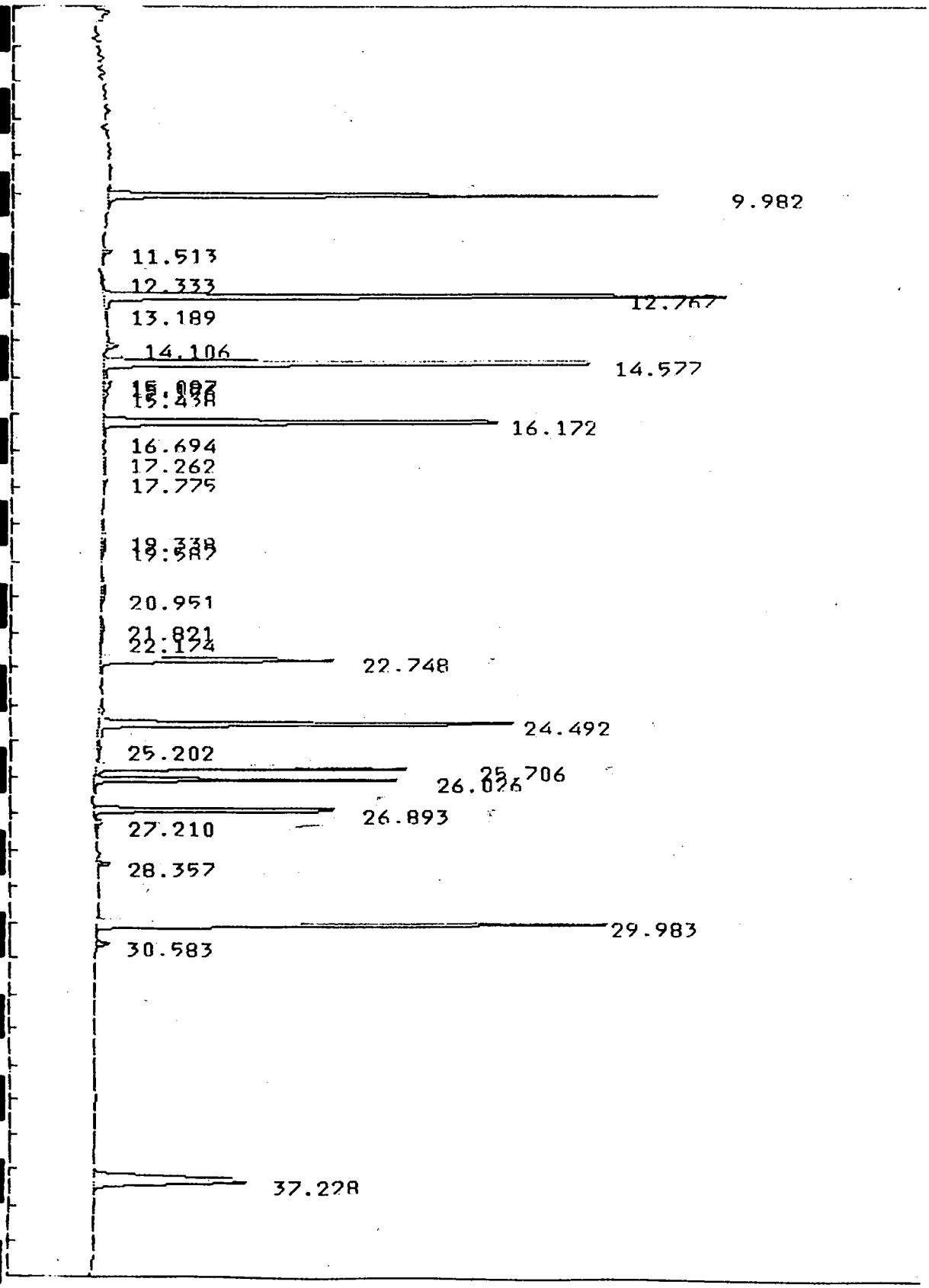
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	10.02	#10.01	.086821	809244	PB	.1567	TCX
2	11.56		.081087	11350	BV	0.0000	
3	12.81		.097072	1065581	BV	0.0000	
4	14.15		.088285	14491	VB	0.0000	
5	14.62		.103307	922661	BV	0.0000	
6	15.14		.197165	31264	VV	0.0000	
7	15.23		.169792	26233	VV	0.0000	
8	15.48		.231046	23719	VV	0.0000	
9	16.22		.118561	805548	VV	0.0000	
10	16.72	16.74	.255292	17658	VV	.0036	D-BHC
11	17.81	17.84	.641368	71546	PV	.0151	ALDRIN
12	19.37		.378814	31479	BV	0.0000	
13	19.64		.315557	29936	VV	0.0000	
14	20.99		.568404	65772	VV	0.0000	
15	21.88		.501649	41468	VV	0.0000	
16	22.21		.219791	13694	VV	0.0000	
17	22.79		.127707	459492	PV	0.0000	
18	24.53		.123794	843001	VV	0.0000	
19	25.21		.368543	35411	VV	0.0000	
20	25.73	25.68	.074458	383391	VV	.3846	ENDRIN
21	26.04	26.02	.069537	353516	VB	.3612	4,4' DDD
22	26.91	26.87	.074055	351937	BV	.3519	4,4' DDT
23	27.23	27.18	.198140	27537	VB	.0313	ENDRIN ALDEHYDE
24	28.38		.085226	18094	VV	0.0000	
25	30.01	29.94	.102223	819924	BV	1.5295	METHOXYCHLOR
26	30.62		.118578	23898	PB	0.0000	
27	37.28		.191586	458190	BB	0.0000	

Total Area : 7756040 Total ng inj : 2.834

Report Time : 1957 09Nov1999
Method : /DATA/LOOP/METHOD/HP5890BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 008.RES

IEA Pesticide Standard Report

Sample Name : INDA L5 Inj 2002 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 009.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ICA Pesticide Standard Report

Sample Name : INDA L5 Report No : 36.00
Result File : /DATA/LOOP/RESULT/D4RS01C 009.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2002 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 9 Bottle no. : 10

% Dil-Fact
100.00

Run Status : RunStatusOK

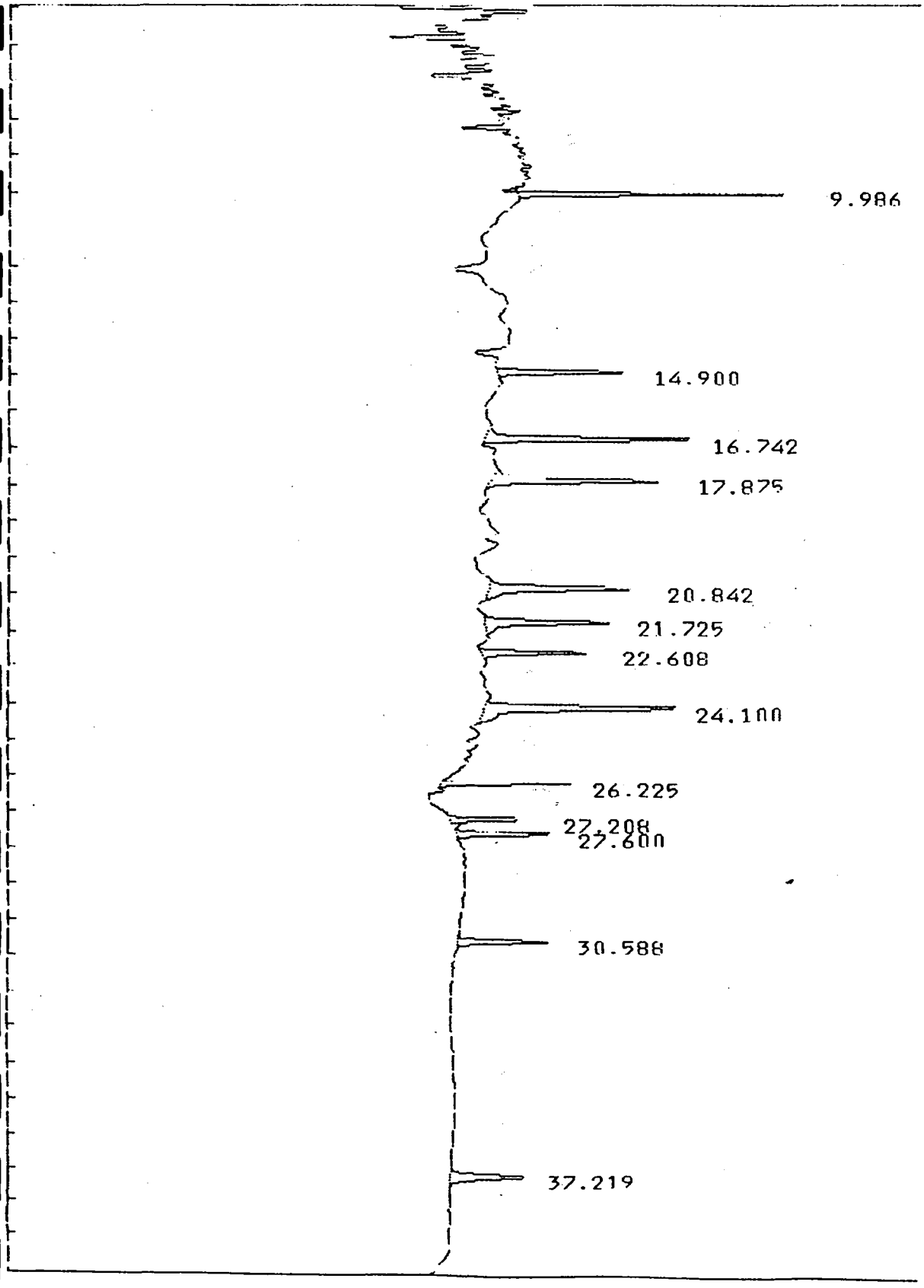
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.98	#10.01	.084963	1423485	BB	.2756	TOX
2	11.51		.086860	25368	BV	0.0000	
3	12.33		.176967	13727	BV	0.0000	
4	12.77	12.76	.099103	1940536	VV	.3018	A-BHC
5	13.19		.152355	11208	VV	0.0000	
6	14.11		.098391	34678	VB	0.0000	
7	14.58	14.57	.104899	1690329	BV	.2878	G-BHC
8	15.09		.176800	38887	VV	0.0000	
9	15.18		.135400	26940	VV	0.0000	
10	15.44		.178591	24805	VV	0.0000	
11	16.17	16.15	.119809	1447803	VV	.2875	HEPTACHLOR
12	16.69	16.74	.228993	12746	VV	.0026	D-BHC
13	17.26		.221173	10201	VV	0.0000	
14	17.78		.408269	41622	VV	0.0000	
15	19.34		.399049	36041	BV	0.0000	
16	19.59		.331105	33099	VV	0.0000	
17	20.95		.571433	66889	VV	0.0000	
18	21.82		.454178	39597	PV	0.0000	
19	22.17		.220835	15244	VV	0.0000	
20	22.75	22.72	.128350	852597	PB	.2931	ENDOSULFAN I
21	24.49	24.45	.124733	1546541	VV	.6088	DIELDRIN
22	25.20		.204877	19819	VV	0.0000	
23	25.71	25.68	.072842	735326	VV	.7377	ENDRIN
24	26.03	26.02	.069437	672918	VB	.6876	4,4' DDD
25	26.89	26.87	.072916	677586	BV	.6774	4,4' DDT
26	27.21	27.18	.157396	32913	VV	.0374	ENDRIN ALDEHYDE
27	28.36		.083722	35492	VV	0.0000	
28	29.98	29.94	.101270	1571945	BV	2.9324	METHOXYCHLOR
29	30.58	30.54	.119822	45526	PB	.0338	ENDRIN KETONE
30	37.23		.191486	835244	BB	0.0000	

Total Area : 13959112 Total ng inj : 7.164

Report Time : 2046 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 009.RES

IEA Pesticide Standard Report

Sample Name : INDR L1 Inj 2053 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 010.RES GC : HP5890A
Column : DB-608 30-Meter,0.53mm ID: Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDB L1 Report No : 37.01
Result File : /DATA/LOOP/RESULT/D4RS01C 010.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2053 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 10 Bottle no. : 11

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

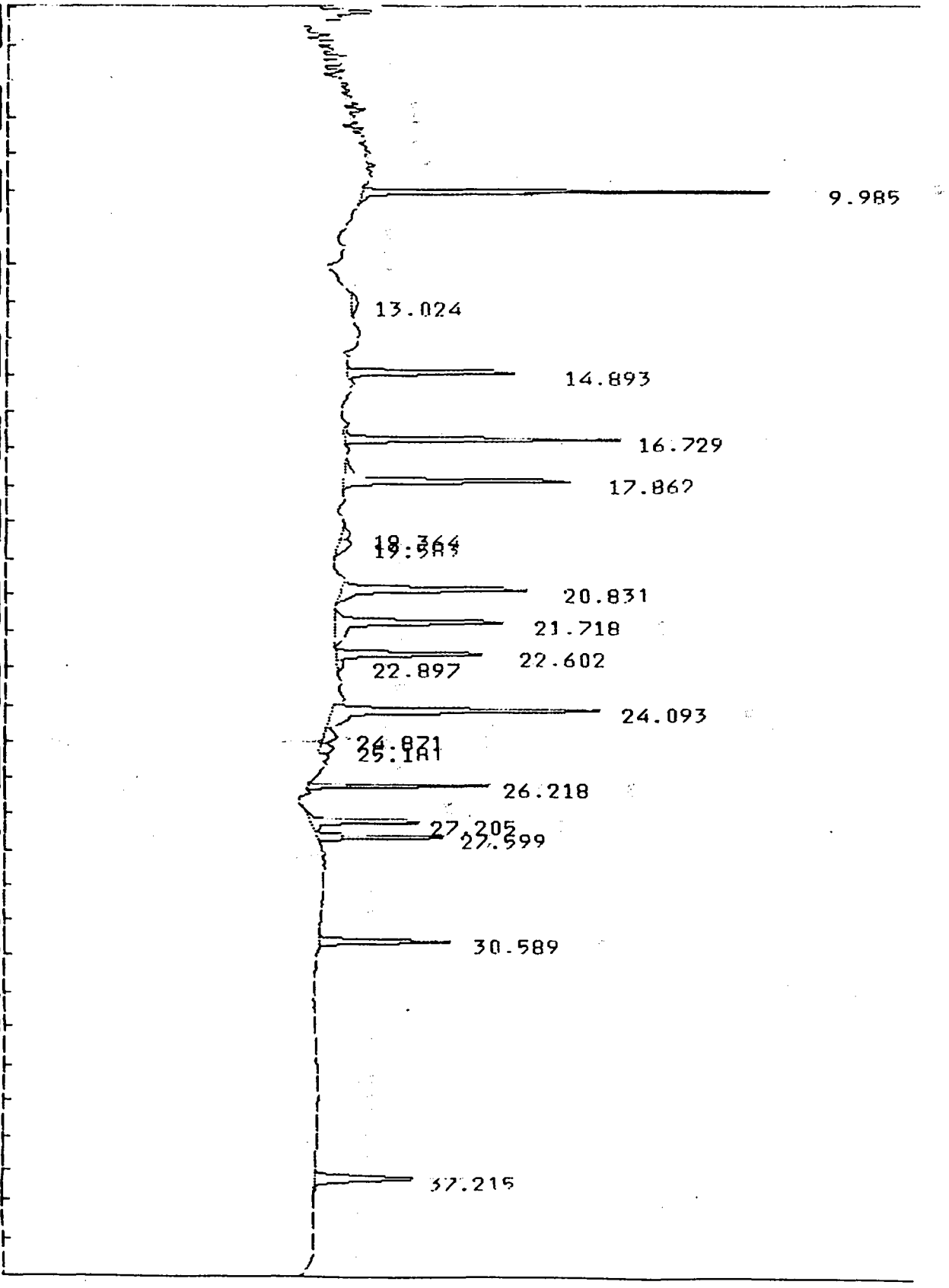
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.01	0.000000	93807	BV	.0182	TCX
2	14.90	14.91	0.000000	60156	FF	.0207	B-BHC
3	16.74	16.74	0.000000	98709	FF	.0202	D-BHC
4	17.88	17.84	0.000000	98478	FF	.0207	ALDRIN
5	20.84	20.81	0.000000	90203	FF	.0232	HEPTACHLOR EPOXIDE
6	21.72	21.69	0.000000	81723	FF	.0247	G-CHLORDANE
7	22.61	22.57	0.000000	62776	FF	.0212	A-CHLORDANE
8	24.10	24.10	0.000000	127869	FF	.0449	4,4' DDE
9	26.22	26.20	0.000000	45319	FF	.0374	ENDOSULFAN II
10	27.21	27.18	0.000000	32124	FF	.0365	ENDRIN ALDEHYDE
11	27.60	27.57	0.000000	41630	FF	.0391	ENDOSULFAN SULFATE
12	30.59	30.54	0.000000	44842	BB	.0333	ENDRIN KETONE
13	37.22	37.12	0.000000	62355	BB	.0380	DCB

Total Area : 939992 Total ng inj : .378

Report Time : 2156 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP*.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 010.RES

ILA Pesticide Standard Report

Sample Name : INDB L2 Inj 2143 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 011.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

Sample Name : INDB L2 Report No : 38.00
Result File : /DATA/LOOP/RESULT/D4RS01C 011.RLS
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 2143 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 11 Bottle no. : 12

% Oil-Fact
100.00

Run Status : RunStatusOK

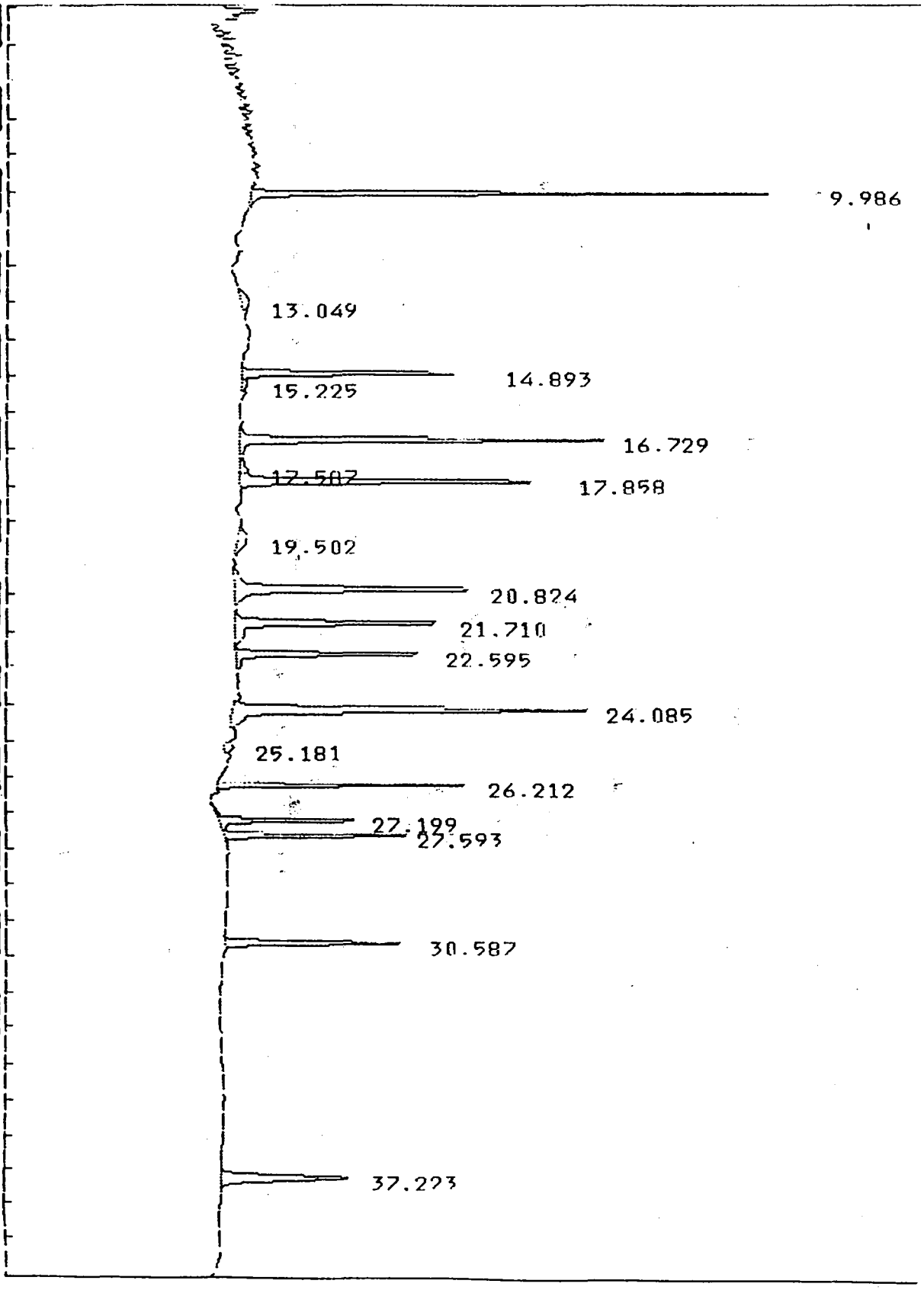
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.98	#10.00	.081863	234934	BV	.0455	TCX
2	13.02		.395483	15732	BV	0.0000	
3	14.89	14.91	.097344	120145	BV	.0413	B-BHC
4	16.73	16.75	.103761	193500	VV	.0396	D-BHC
5	17.86	17.87	.134535	210553	BV	.0443	ALDRIN
6	19.36		.218823	11631	BV	0.0000	
7	19.58		.302299	22914	VV	0.0000	
8	20.83	20.84	.135236	175123	BV	.0450	HEPTACHLOR EPOXIDE
9	21.72	21.72	.158244	186306	PV	.0564	G-CHLORDANE
10	22.60	22.60	.123609	125047	PV	.0422	A-CHLORDANE
11	22.90		.235736	10244	VV	0.0000	
12	24.09	24.11	.145686	270765	VV	.0951	4,4' DDE
13	24.87		.312644	25807	VV	0.0000	
14	25.18		.210752	18245	VV	0.0000	
15	26.22	26.22	.070644	93512	VV	.0772	ENDOSULFAN II
16	27.20	27.20	.096185	86077	BV	.0979	ENDRIN ALDEHYDE
17	27.60	27.59	.080765	84766	VV	.0796	ENDOSULFAN SULFATE
18	30.59	30.58	.106412	93192	BB	.0693	ENDRIN KETONE
19	37.22	37.24	.184707	123874	BB	.0756	DCB

Total Area : 2102367 Total ng inj : .809

Report Time : 2227 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 011.RES

IEA Pesticide Standard Report

Sample Name : INDR L3 Inj 2234 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 012.RES GC : HP58904A
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDB L3 Report No : 39.00
Result File : /DATA/LOOP/RESULT/D4RS01C 012.RLS
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 2234 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 12 Bottle no. : 13

% Dil-Fact
100.00

Run Status : RunStatusOK

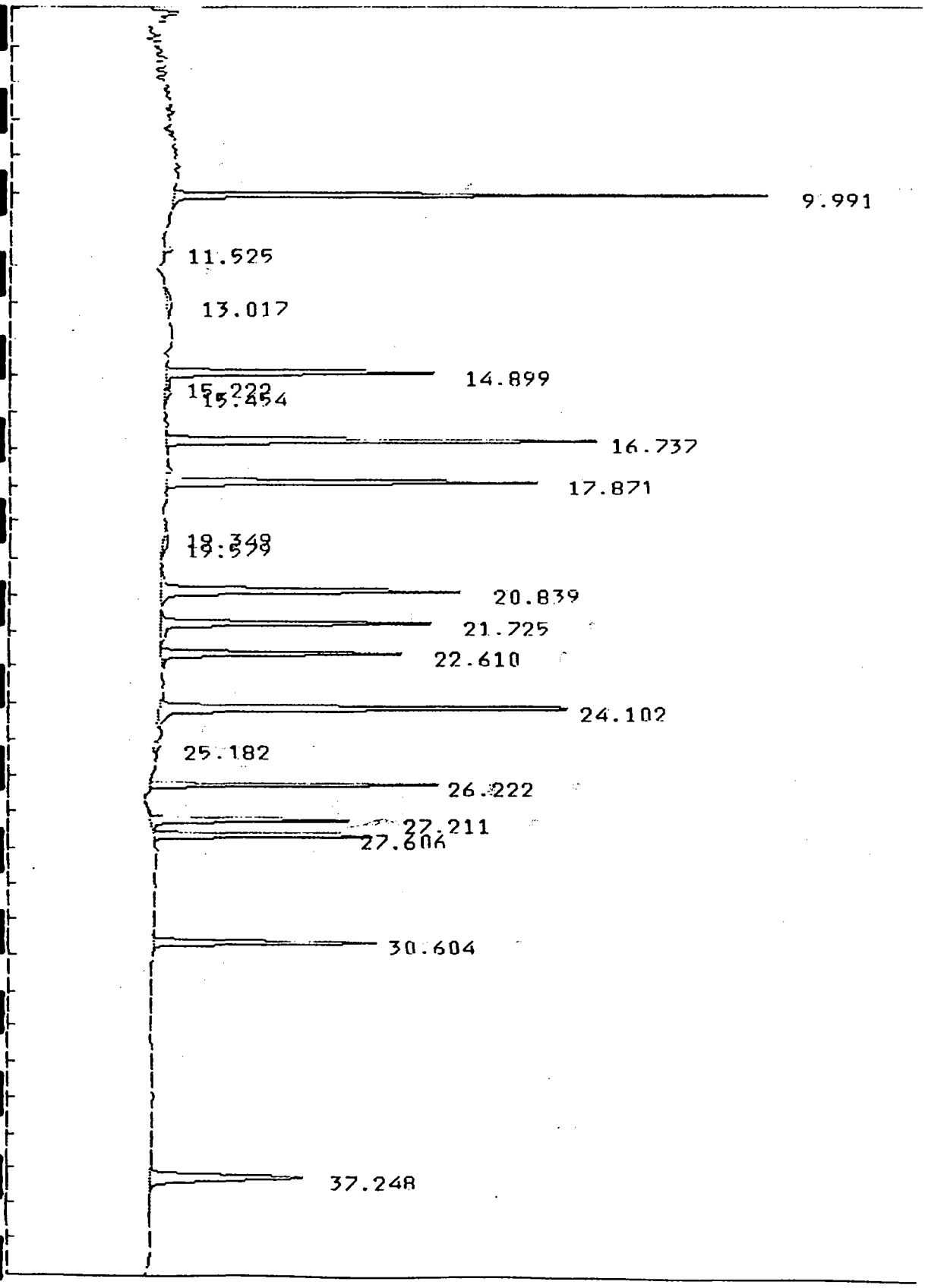
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.00	.084756	453676	BB	.0878	TCX
2	13.05		.466442	30122	BV	0.0000	
3	14.89	14.91	.100031	231127	BV	.0794	B-BHC
4	15.22		.244038	13757	VV	0.0000	
5	16.73	16.75	.108456	396587	VV	.0811	D-BHC
6	17.59		.260935	18523	VV	0.0000	
7	17.86	17.87	.123271	375561	VV	.0791	ALDRIN
8	19.50		.511865	43406	BV	0.0000	
9	20.82	20.84	.144410	365817	VV	.0940	HEPTACHLOR EPOXIDE
10	21.71	21.72	.146117	321136	VV	.0972	G-CHLORDANE
11	22.59	22.60	.130010	251735	PV	.0850	A-CHLORDANE
12	24.09	24.11	.136815	489967	VV	.1721	4,4' DDE
13	25.18		.213655	17955	VV	0.0000	
14	26.21	26.22	.070737	186367	PV	.1540	ENDOSULFAN II
15	27.20	27.20	.089417	153882	BV	.1750	ENDRIN ALDEHYDE
16	27.59	27.59	.079990	166941	VV	.1567	ENDOSULFAN SULFATE
17	30.59	30.58	.107648	188208	BB	.1399	ENDRIN KETONE
18	37.22	37.24	.188763	239767	BB	.1463	DCB

Total Area : 3944532 Total ng inj : 1.548

Report Time : 2317 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 012.RES

IEA Pesticide Standard Report

Sample Name : INDR L4 Inj 2325 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 013.RES GC : HP5890A
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

Sample Name : INDB L4 Report No : 40.00
Result File : /DATA/LOOP/RESULT/D4RS01C 013.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2325 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 13 Bottle no. : 14

% Oil-Fact
100.00

Run Status : RunStatusOK

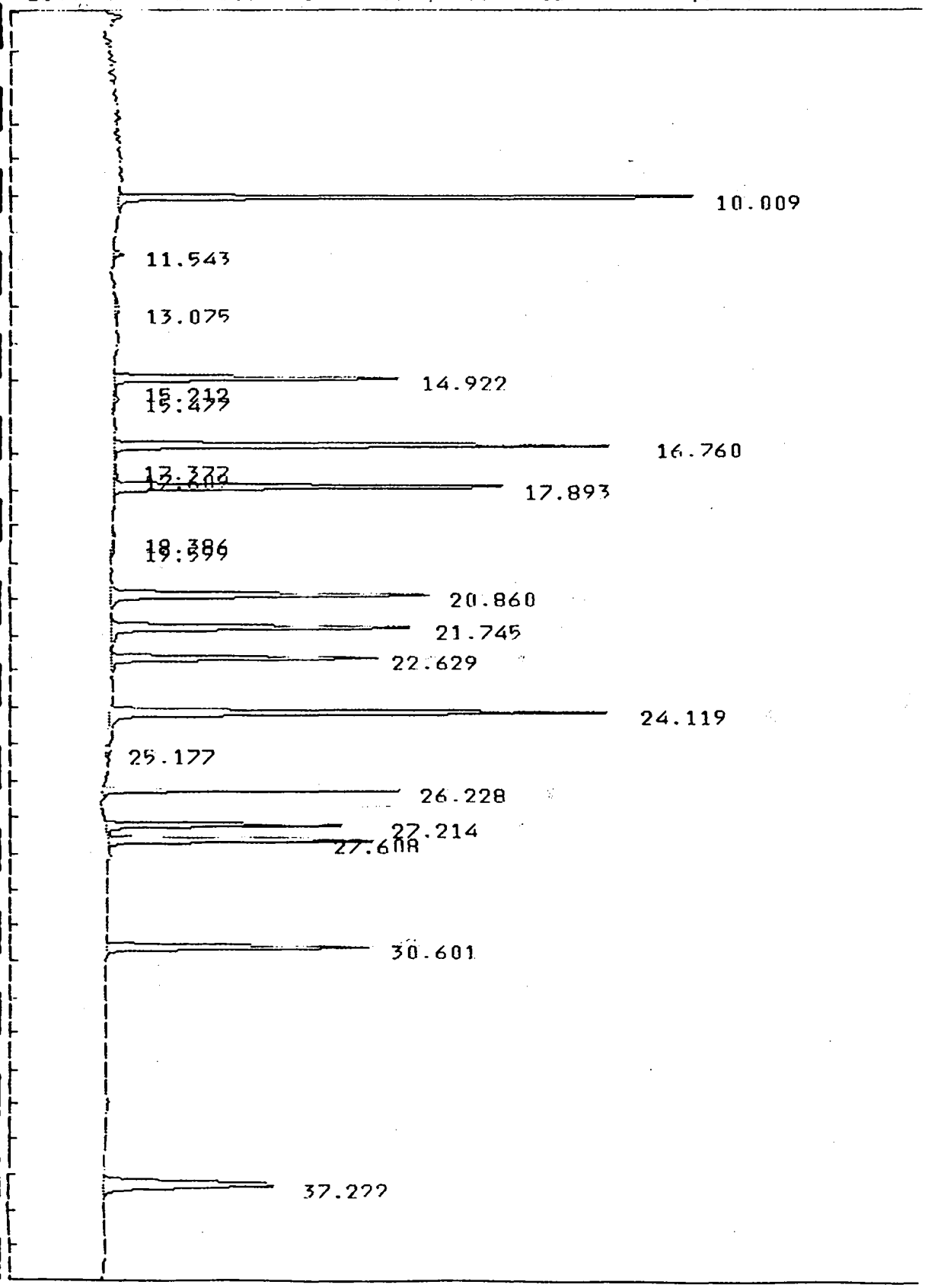
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.00	.084532	808447	BB	.1565	TCX
2	11.52		.087365	12805	BV	0.0000	
3	13.02		.534720	36956	PV	0.0000	
4	14.90	14.91	.102375	439894	VV	.1511	B-BHC
5	15.22		.202709	14028	VV	0.0000	
6	15.45		.179494	15312	VV	0.0000	
7	16.74	16.75	.104053	728459	VV	.1490	D-BHC
8	17.87	17.87	.121320	701393	VV	.1477	ALDRIN
9	19.35		.231197	13167	BV	0.0000	
10	19.58		.309161	23718	VV	0.0000	
11	20.84	20.84	.133034	631119	VV	.1622	HEPTACHLOR EPOXIDE
12	21.73	21.72	.134395	566859	VV	.1717	G-CHLORDANE
13	22.61	22.60	.127656	478799	PV	.1617	A-CHLORDANE
14	24.10	24.11	.131952	913402	VV	.3209	4,4' DDE
15	25.18		.217733	17869	VV	0.0000	
16	26.22	26.22	.071196	377371	PV	.3117	ENDOSULFAN II
17	27.21	27.20	.084538	292563	BV	.3328	ENDRIN ALDEHYDE
18	27.61	27.59	.082275	336571	VV	.3160	ENDOSULFAN SULFATE
19	30.60	30.58	.108861	393904	PB	.2929	ENDRIN KETONE
20	37.25	37.24	.192988	455600	BB	.2780	DCB

Total Area : 7258236 Total ng inj : 2.959

Report Time : 0008 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 013.RES

IEA Pesticide Standard Report

Sample Name : INDR L5 Inj 0015 10Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 014.RES GC : HP5890A
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDB L5 Report No : 41.00
Result File : /DATA/LOOP/RESULT/D4RS01C 014.RLS
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 0015 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 14 Bottle no. : 15

% Dil-Fact
100.00

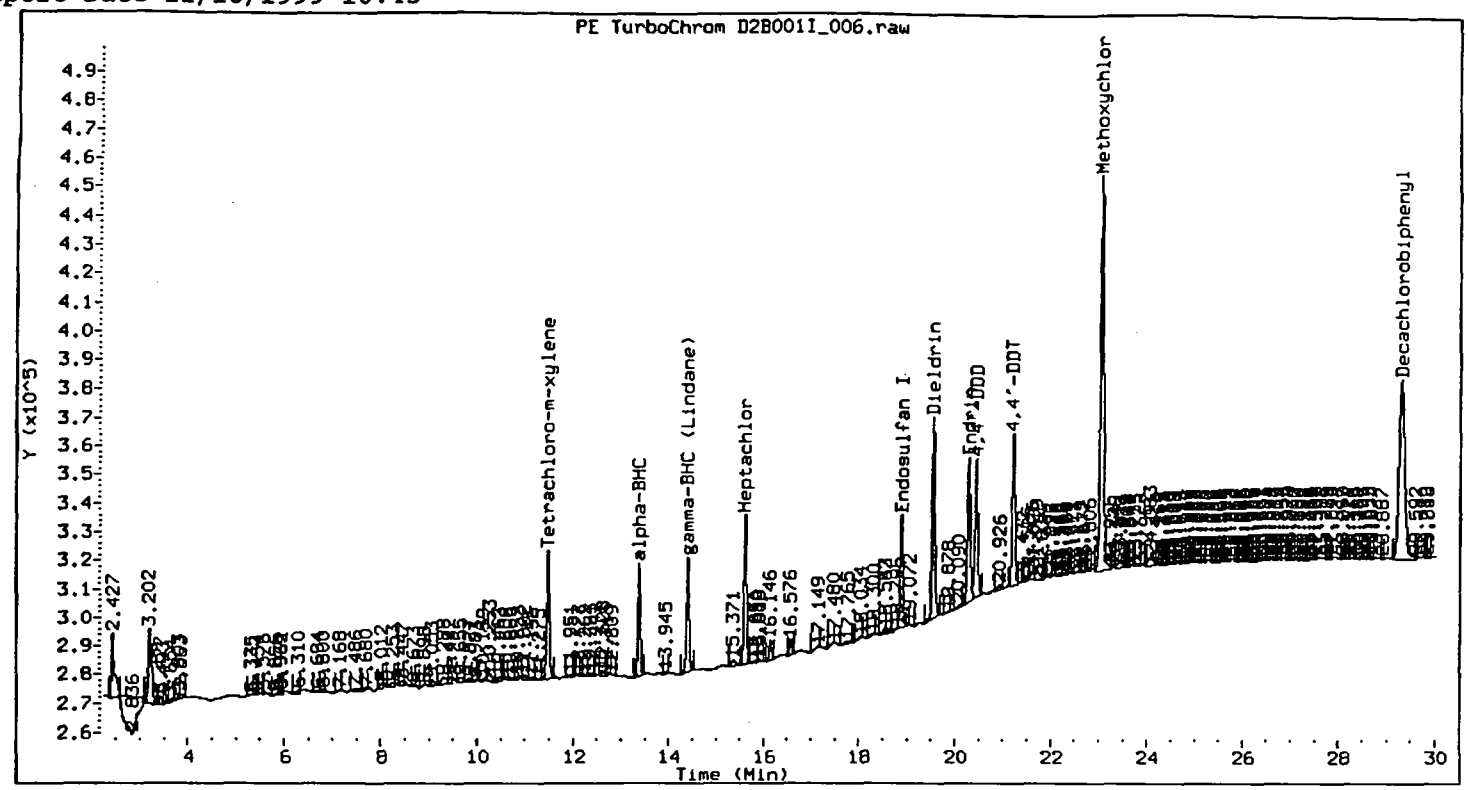
Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	10.01	#10.00	.086347	1459840	PB	.2827	TCX
2	11.54		.087502	24758	BU	0.0000	
3	13.07		.557640	36616	PV	0.0000	
4	14.92	14.91	.102377	789498	BV	.2712	D-BHC
5	15.21		.165310	10668	VV	0.0000	
6	15.48		.159672	21483	VV	0.0000	
7	16.76	16.75	.107629	1371774	VV	.2806	D-BHC
8	17.38		.195247	10258	VV	0.0000	
9	17.61		.144798	15958	VV	0.0000	
10	17.89	17.87	.123057	1293646	VV	.2725	ALDRIN
11	19.39		.204479	12727	BV	0.0000	
12	19.60		.321303	25454	VV	0.0000	
13	20.86	20.84	.131196	1113850	VV	.2862	HEPTACHLOR EPOXIDE
14	21.75	21.72	.131326	1019720	VV	.3088	G-CHLORDANE
15	22.63	22.60	.127980	888823	PV	.3001	A-CHLORDANE
16	24.12	24.11	.132306	1661849	VV	.5838	4,4' DDE
17	25.18		.222917	21611	VV	0.0000	
18	26.23	26.22	.074048	728827	VV	.6021	ENDOSULFAN II
19	27.21	27.20	.082508	536764	BV	.6105	ENDRIN ALDEHYDE
20	27.61	27.59	.082919	641848	VV	.6026	ENDOSULFAN SULFATE
21	30.60	30.58	.112301	762575	PB	.5669	ENDRIN KETONE
22	37.22	37.24	.192446	833428	BB	.5085	DCB

Total Area : 13281978 Total ng inj : 5.476

Report Time : 0058 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 014.RES

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_006.d Page 1
Report Date 11/18/1999 10:45



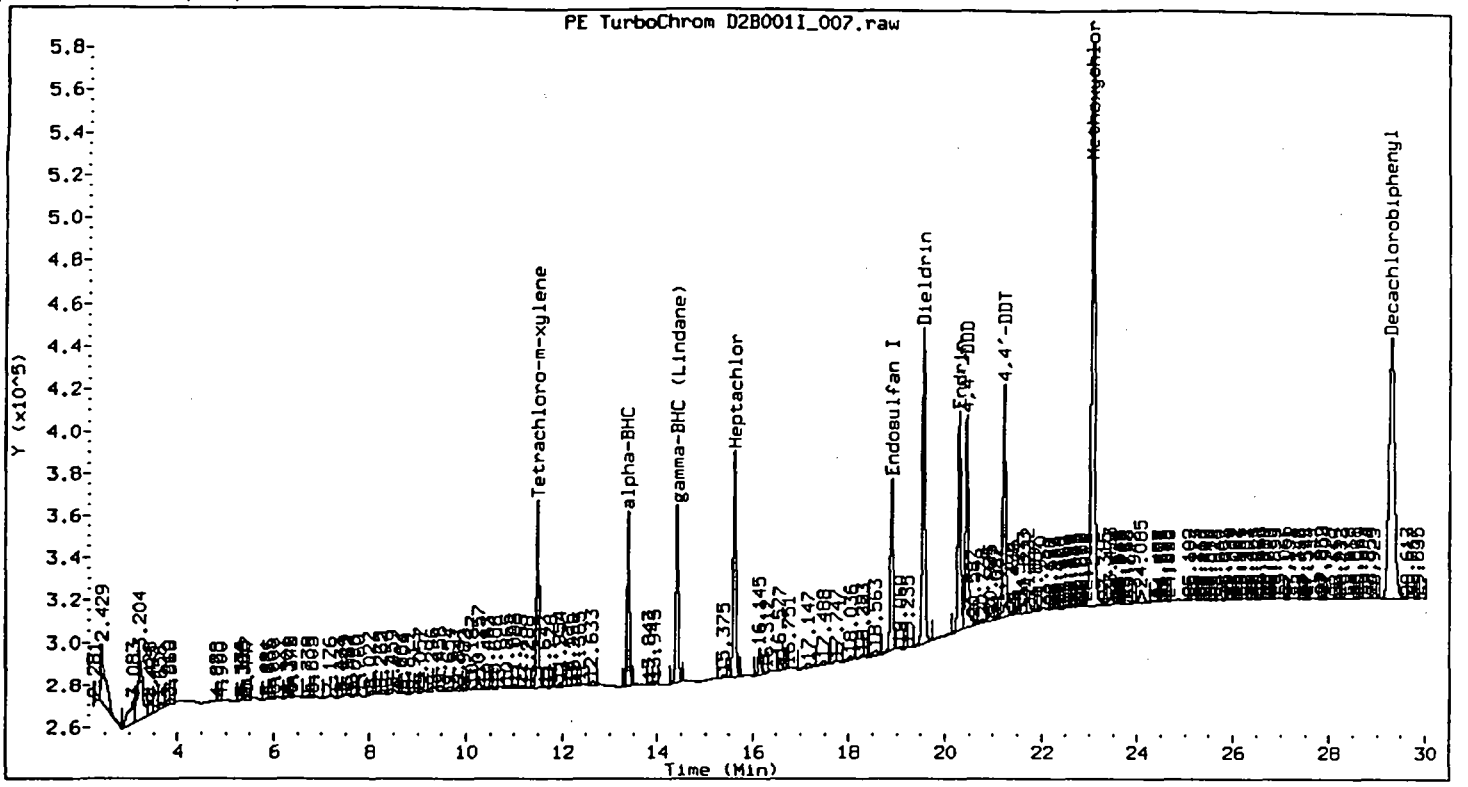
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDA L1
Lab ID : INDA L1 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 20:38 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_1

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	13.383	13.379	0.004	137635	4.234	4.234
gamma-BHC (Lindane)	14.407	14.402	0.004	147824	4.466	4.466
4,4'-DDD	20.445	20.442	0.003	188656	11.023	11.023
4,4'-DDT	21.219	21.218	0.001	214727	6.715	6.715
Dieldrin	19.547	19.543	0.004	278089	9.010	9.010
Endosulfan I	18.887	18.883	0.003	150458	4.725	4.725
Endrin	20.288	20.286	0.003	200963	8.752	8.752
Heptachlor	15.615	15.610	0.005	194716	4.889	4.889
Methoxychlor	23.060	23.057	0.003	655434	48.983	48.983

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_006.d Page 2
Report Date 11/18/1999 10:45

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.483	11.476	0.007	167468	5.220	5.220
Decachlorobiphenyl	29.297	29.293	0.004	510635	10.737	10.737

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_007.d Page 1
Report Date 11/18/1999 10:45



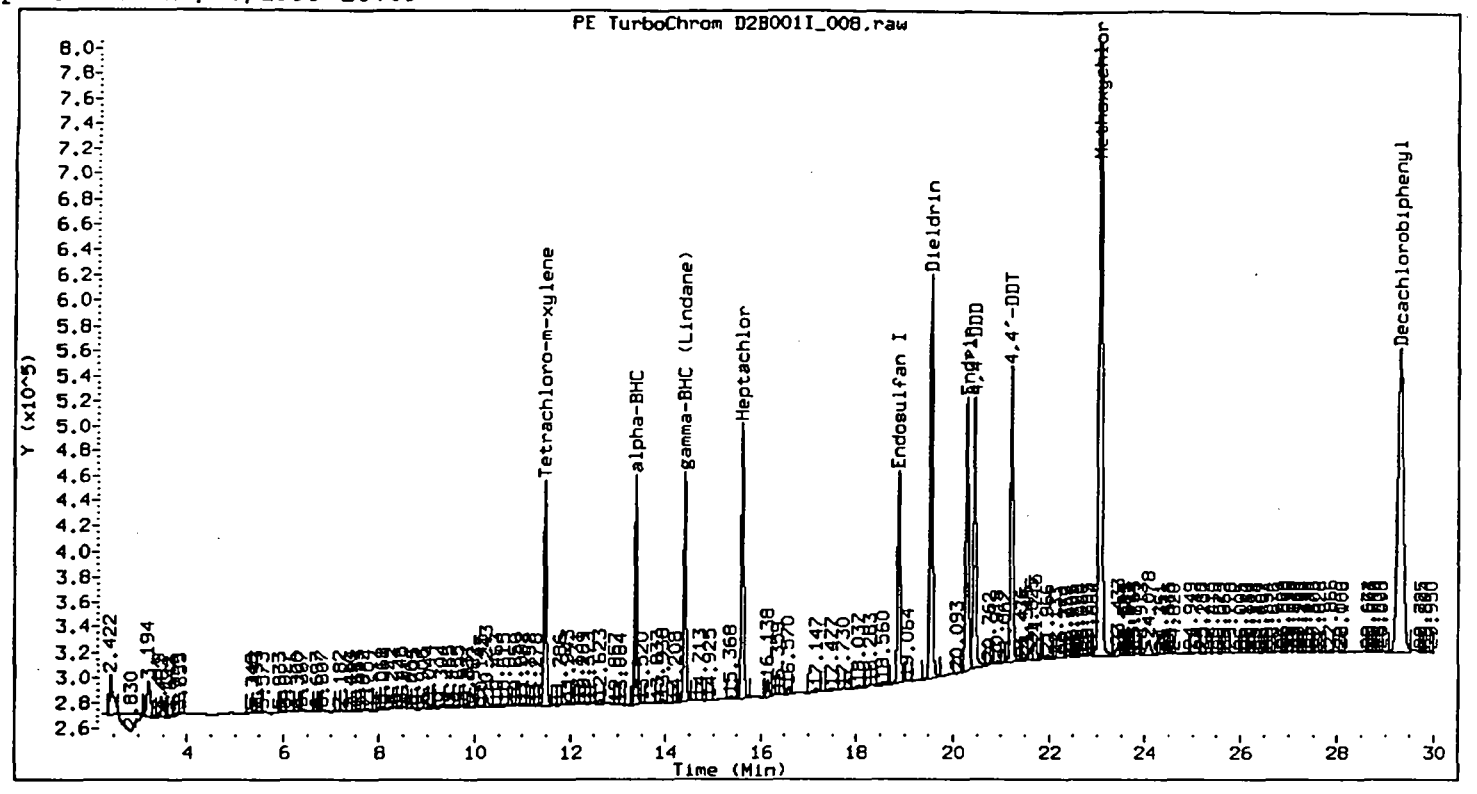
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDA L2
Lab ID : INDA L2 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 21:17 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	13.388	13.379	0.009	282298	8.684	8.684
gamma-BHC (Lindane)	14.409	14.402	0.007	295982	8.943	8.943
4,4'-DDD	20.447	20.442	0.004	397683	23.236	23.236
4,4'-DDT	21.223	21.218	0.004	451885	14.132	14.132
Dieldrin	19.547	19.543	0.004	585164	18.959	18.959
Endosulfan I	18.887	18.883	0.004	312347	9.809	9.809
Endrin	20.290	20.286	0.004	417602	18.187	18.187
Heptachlor	15.616	15.610	0.006	393022	9.869	9.869
Methoxychlor	23.061	23.057	0.004	1342219	100.308	100.308

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_007.d Page 2
Report Date 11/18/1999 10:45

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.488	11.476	0.012	328131	10.162	10.162
Decachlorobiphenyl	29.289	29.293	0.003	1003424	20.905	20.905

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_008.d Page 1
Report Date 11/18/1999 10:09



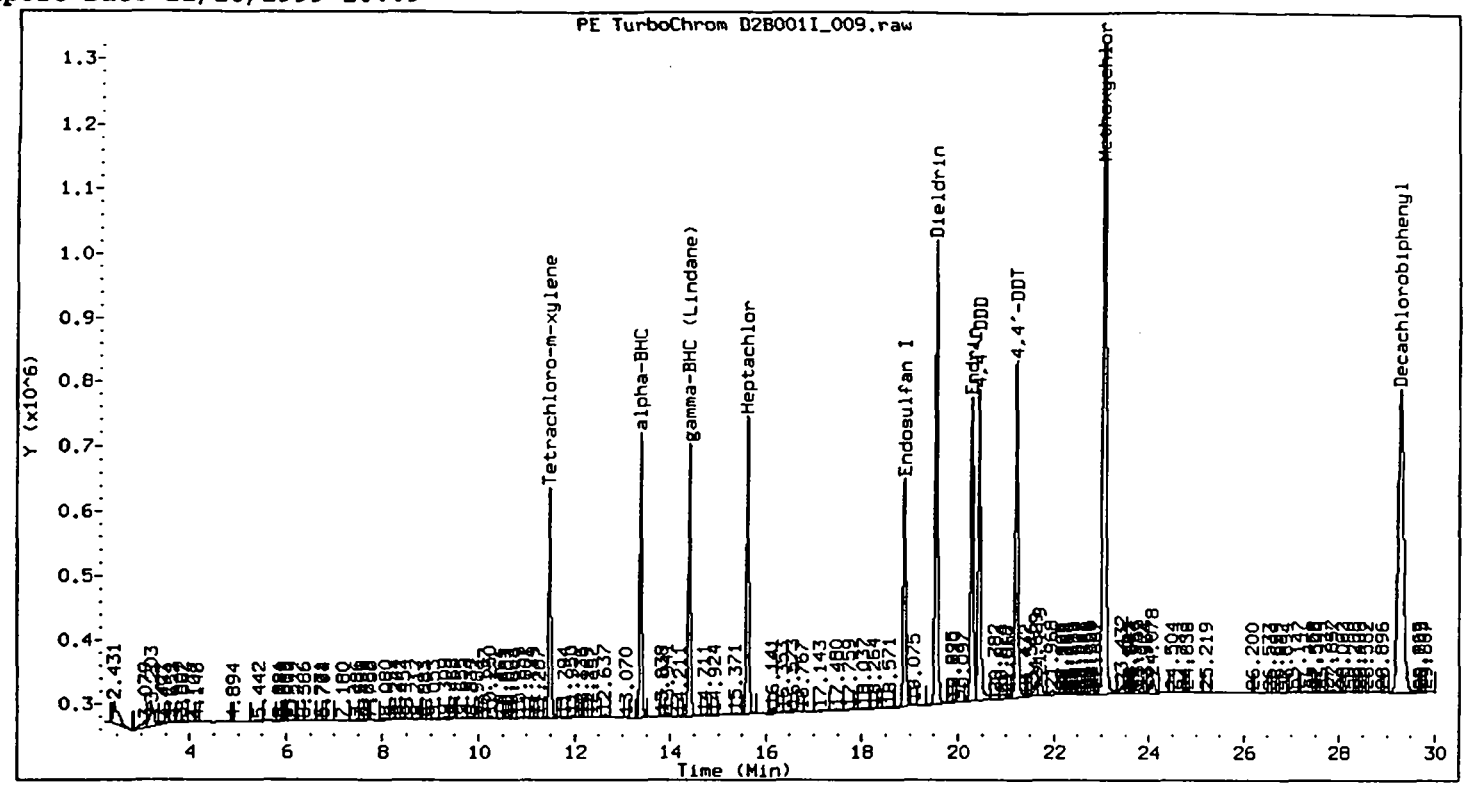
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDA L3
Lab ID : INDA L3 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 21:56 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
alpha-BHC	13.379	13.379	0.000	608597	18.964	18.964
gamma-BHC (Lindane)	14.402	14.402	0.000	627720	19.164	19.164
4,4'-DDD	20.442	20.442	0.000	825594	39.114	39.114
4,4'-DDT	21.218	21.218	0.000	939612	39.259	39.259
Dieldrin	19.543	19.543	0.000	1217558	39.558	39.558
Endosulfan I	18.883	18.883	0.000	648379	20.288	20.288
Endrin	20.286	20.286	0.000	854932	39.570	39.570
Heptachlor	15.610	15.610	0.000	795656	19.983	19.983
Methoxychlor	23.057	23.057	0.000	2739472	203.766	203.766

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_008.d Page 2
Report Date 11/18/1999 10:09

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.476	11.476	0.000	644583	19.914	19.914
Decachlorobiphenyl	29.293	29.293	0.000	1962073	40.721	40.721

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_009.d Page 1
Report Date 11/18/1999 10:09



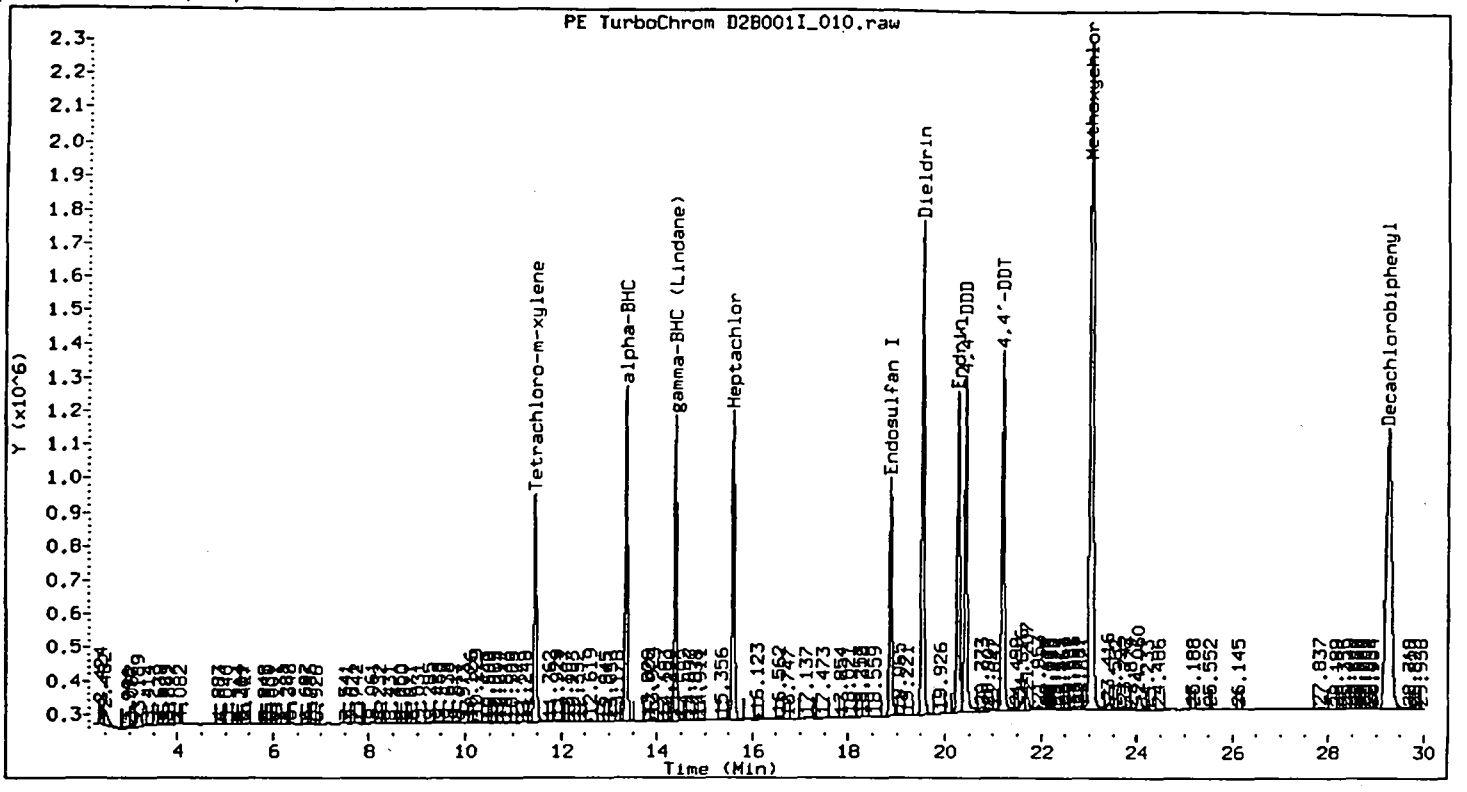
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDA L4
Lab ID : INDA L4 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 22:35 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	13.386	13.379	0.007	1406049	43.812	43.812
gamma-BHC (Lindane)	14.407	14.402	0.004	1426094	43.538	43.538
4,4'-DDD	20.446	20.442	0.003	1846439	87.478	87.478
4,4'-DDT	21.223	21.218	0.004	2083888	87.069	87.069
Dieldrin	19.548	19.543	0.005	2645655	85.957	85.957
Endosulfan I	18.887	18.883	0.004	1341792	41.985	41.985
Endrin	20.290	20.286	0.004	1832513	84.817	84.817
Heptachlor	15.613	15.610	0.003	1641021	41.214	41.214
Methoxychlor	23.058	23.057	0.001	5581049	415.127	415.127

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_009.d Page 2
Report Date 11/18/1999 10:09

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.484	11.476	0.008	1272190	39.311	39.311
Decachlorobiphenyl	29.280	29.293	0.012	3825160	78.936	78.936

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_010.d Page 1
Report Date 11/18/1999 10:09



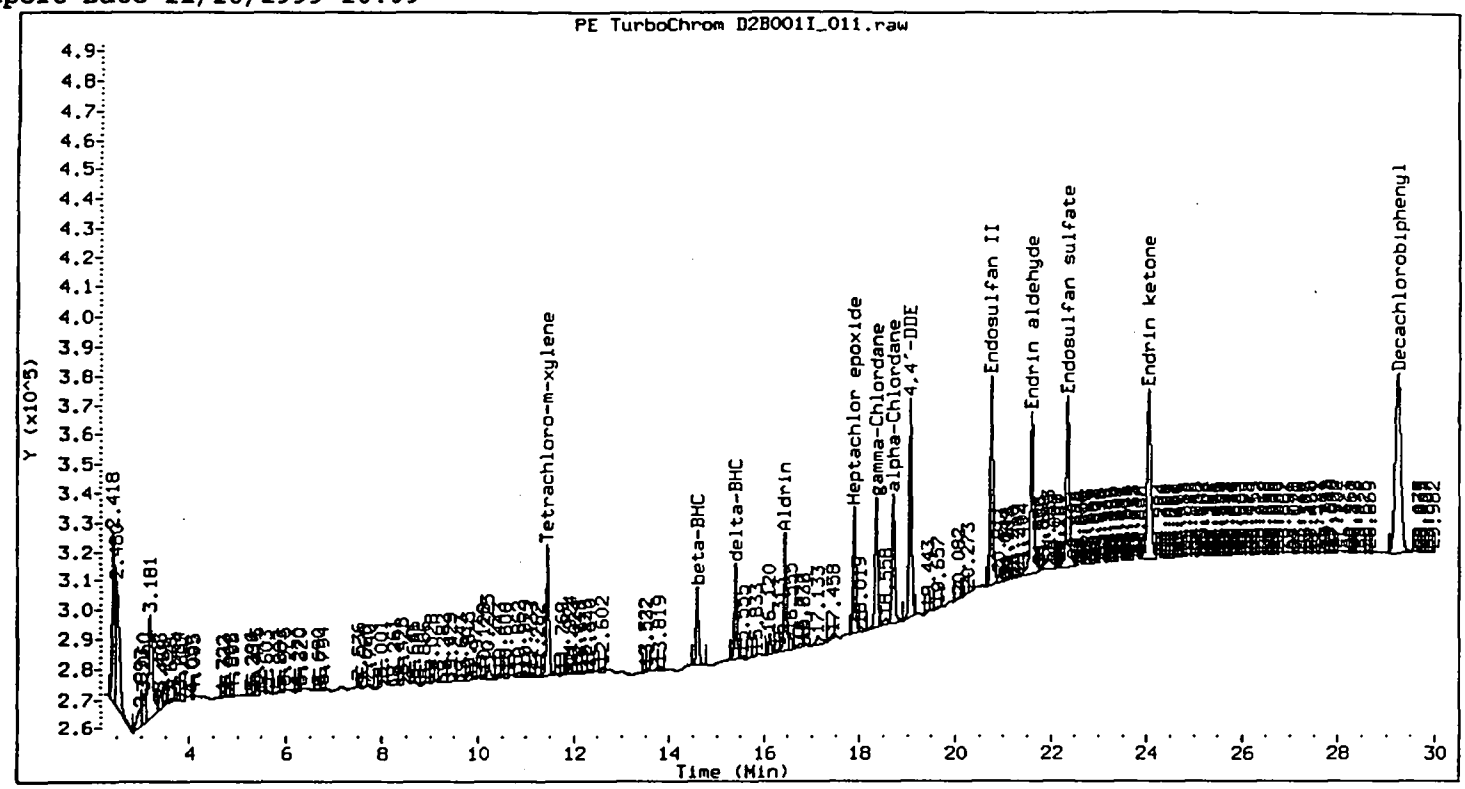
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDA L5
Lab ID : INDA L5 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 23:14 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	13.367	13.379	0.012	3130043	97.531	97.531
gamma-BHC (Lindane)	14.391	14.402	0.012	3005889	91.769	91.769
4,4'-DDD	20.435	20.442	0.008	3690822	174.858	174.858
4,4'-DDT	21.210	21.218	0.008	4170107	174.235	174.235
Dieldrin	19.537	19.543	0.007	5330872	173.199	173.199
Endosulfan I	18.877	18.883	0.007	2600455	81.368	81.368
Endrin	20.278	20.286	0.008	3643489	168.636	168.636
Heptachlor	15.599	15.610	0.011	3202571	80.432	80.432
Methoxychlor	23.042	23.057	0.015	10432169	775.960	775.960

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_010.d Page 2
Report Date 11/18/1999 10:09

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.462	11.476	0.014	2383520	74.422	74.422
Decachlorobiphenyl	29.255	29.293	0.038	6862250	142.376	142.376

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_011.d Page 1
Report Date 11/18/1999 10:09



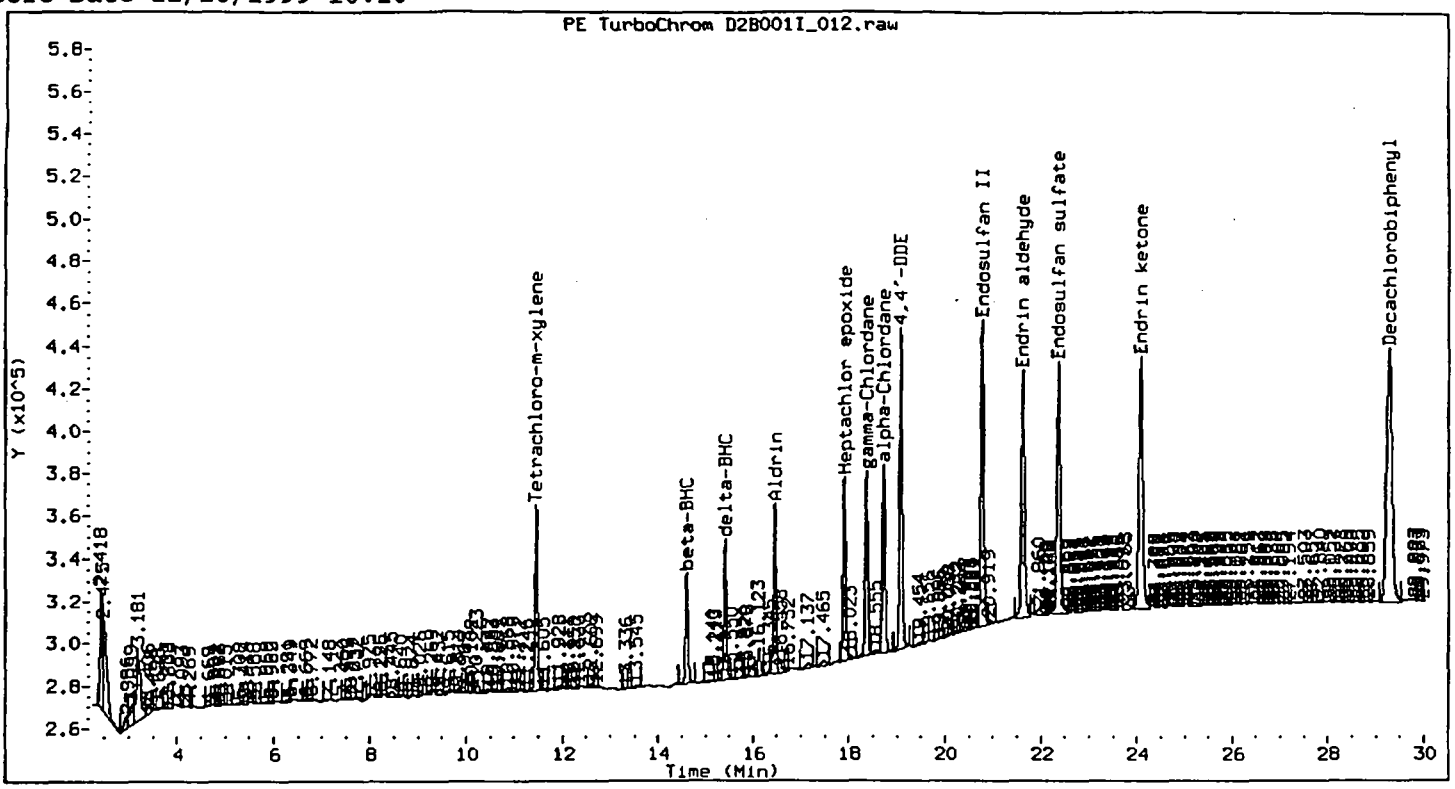
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDB L1
Lab ID : INDB L1 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 23:53 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_1

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	16.446	16.442	0.003	157174	4.814	4.814
beta-BHC	14.599	14.597	0.003	99817	4.984	4.984
delta-BHC	15.405	15.403	0.002	127083	4.602	4.602
4,4'-DDE	19.062	19.056	0.006	280288	9.126	9.126
Endosulfan II	20.762	20.757	0.006	298422	9.456	9.456
Endosulfan sulfate	22.354	22.348	0.007	288696	9.699	9.699
Endrin aldehyde	21.609	21.602	0.008	277172	10.041	10.041
Endrin ketone	24.056	24.047	0.008	338129	9.508	9.508
Heptachlor epoxide	17.892	17.887	0.005	165759	4.809	4.809

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_011.d Page 2
Report Date 11/18/1999 10:09

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.351	18.345	0.006	174090	5.012	5.012
alpha-Chlordane	18.708	18.703	0.006	175349	4.950	4.950
Tetrachloro-m-xylene	11.454	11.476	0.022	167901	5.252	5.252
Decachlorobiphenyl	29.242	29.293	0.051	493844	10.358	10.358

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_012.d Page 1
Report Date 11/18/1999 10:10



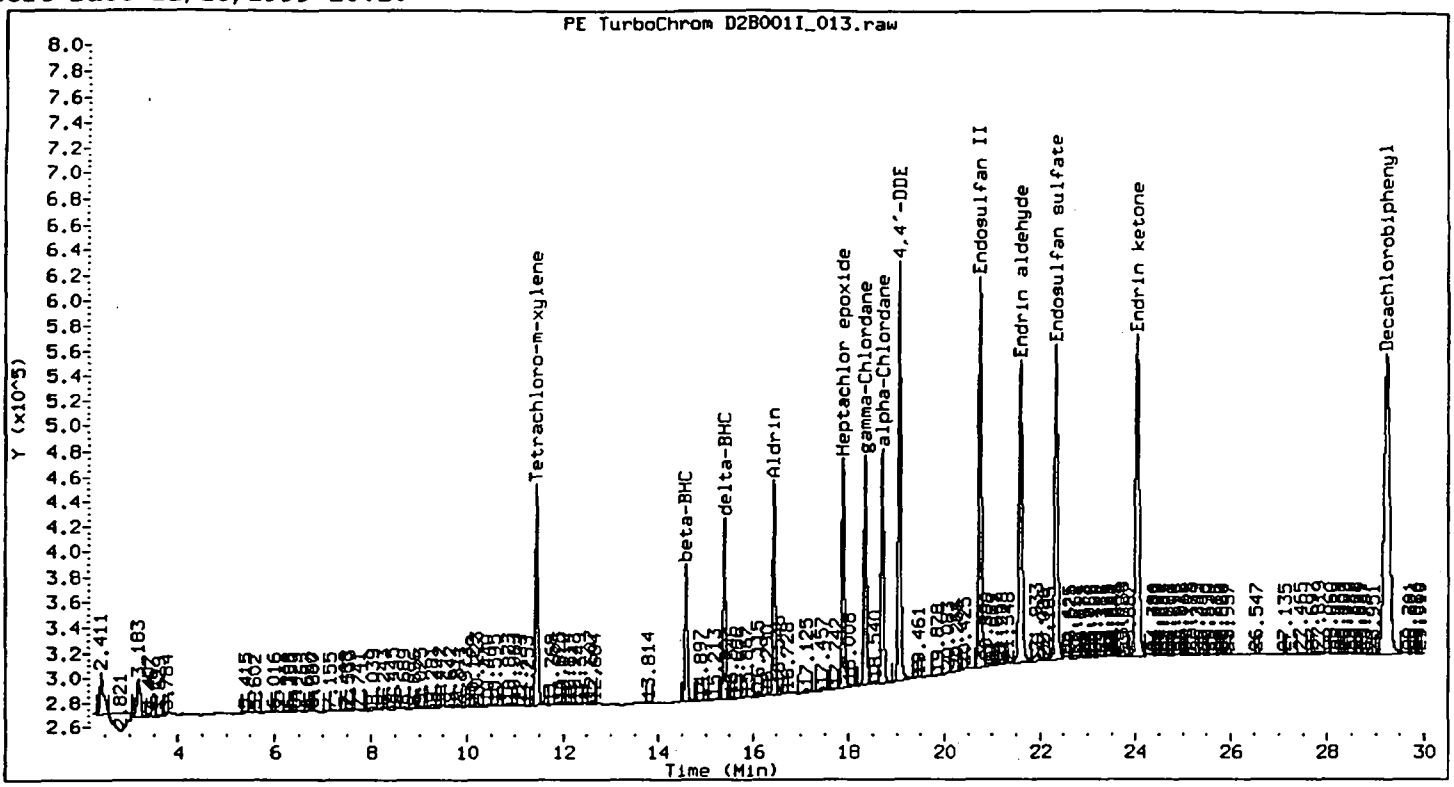
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDB L2
Lab ID : INDB L2 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 00:32 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	16.451	16.442	0.008	305709	9.363	9.363
beta-BHC	14.602	14.597	0.005	194825	9.728	9.728
delta-BHC	15.409	15.403	0.006	247196	8.951	8.951
4,4'-DDE	19.069	19.056	0.013	565085	18.398	18.398
Endosulfan II	20.773	20.757	0.016	597226	18.925	18.925
Endosulfan sulfate	22.367	22.348	0.020	576971	19.383	19.383
Endrin aldehyde	21.620	21.602	0.018	545113	19.747	19.747
Endrin ketone	24.073	24.047	0.025	678640	19.083	19.083
Heptachlor epoxide	17.898	17.887	0.011	329275	9.552	9.552

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_012.d Page 2
Report Date 11/18/1999 10:10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.358	18.345	0.013	335205	9.650	9.650
alpha-Chlordane	18.715	18.703	0.012	342137	9.658	9.658
Tetrachloro-m-xylene	11.455	11.476	0.021	317807	10.006	10.006
Decachlorobiphenyl	29.270	29.293	0.023	959363	20.309	20.309

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_013.d Page 1
Report Date 11/18/1999 10:10



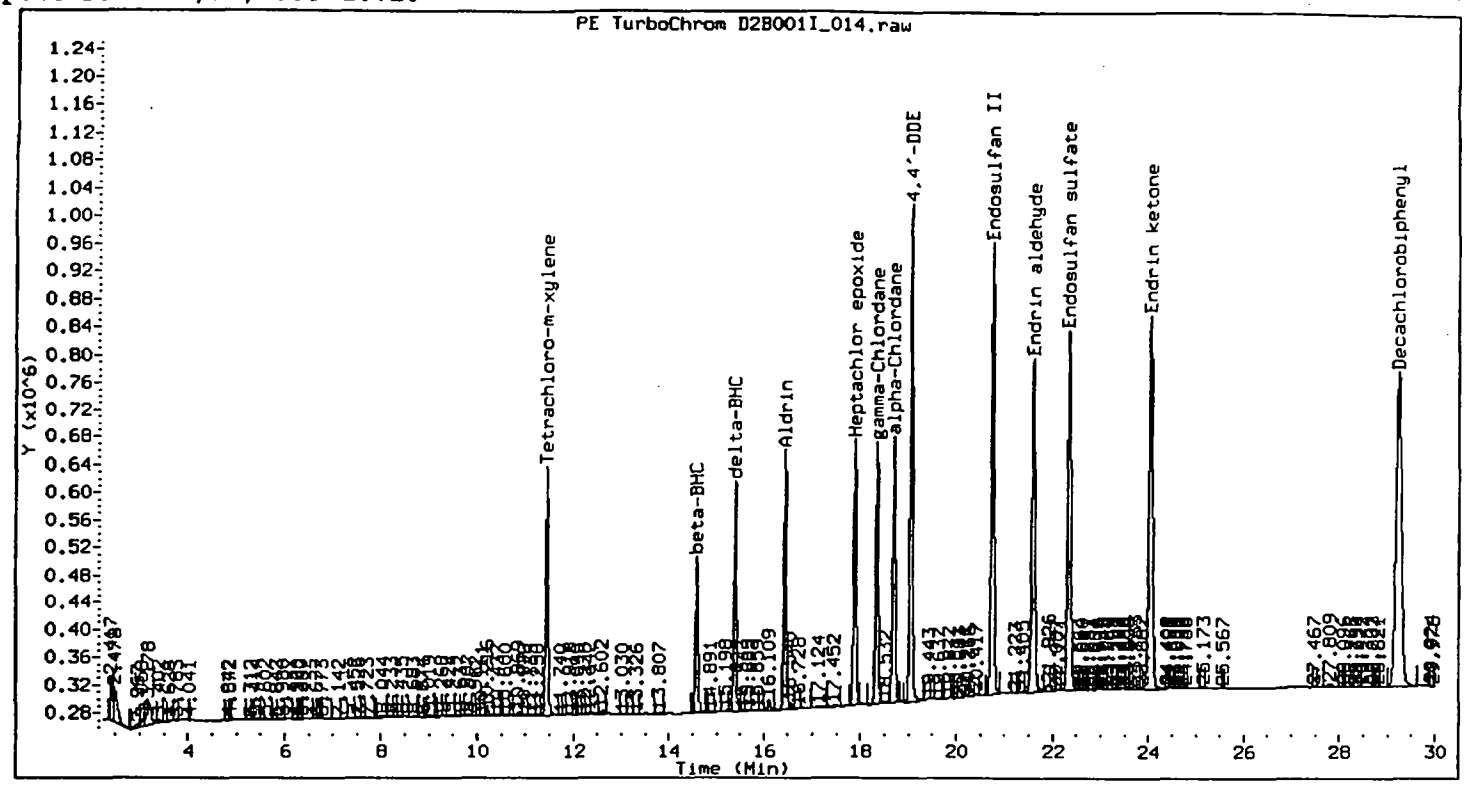
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 01:11 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Aldrin	16.442	16.442	0.000	625611	19.161	19.161
beta-BHC	14.597	14.597	0.000	396259	19.787	19.787
delta-BHC	15.403	15.403	0.000	515559	18.668	18.668
4,4'-DDE	19.056	19.056	0.000	1230812	40.073	40.073
Endosulfan II	20.757	20.757	0.000	1259062	39.897	39.897
Endosulfan sulfate	22.348	22.348	0.000	1179688	39.632	39.632
Endrin aldehyde	21.602	21.602	0.000	1128617	40.886	40.886
Endrin ketone	24.047	24.047	0.000	1399045	39.340	39.340
Heptachlor epoxide	17.887	17.887	0.000	684034	19.844	19.844

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_013.d Page 2
Report Date 11/18/1999 10:10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.345	18.345	0.000	687940	19.805	19.805
alpha-Chlordane	18.703	18.703	0.000	706914	19.955	19.955
Tetrachloro-m-xylene	11.453	11.476	0.023	636853	20.052	20.052
Decachlorobiphenyl	29.229	29.293	0.063	1925339	40.758	40.758

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_014.d Page 1
Report Date 11/18/1999 10:10

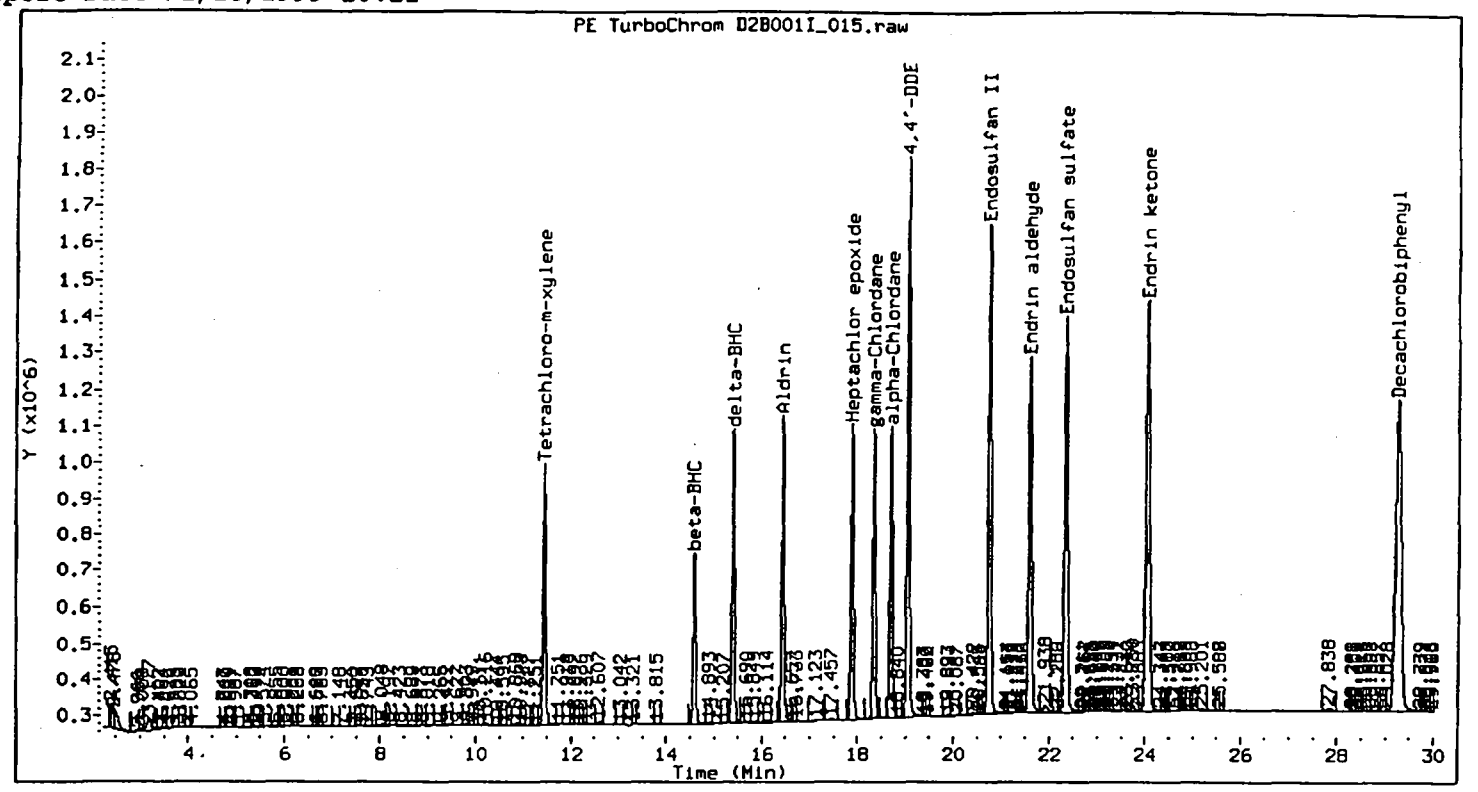


Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDB L4
Lab ID : INDB L4 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 01:50 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Aldrin	16.438	16.442	0.004	1331377	40.777	40.777
beta-BHC	14.591	14.597	0.006	807565	40.325	40.325
delta-BHC	15.398	15.403	0.005	1144478	41.441	41.441
4,4'-DDE	19.052	19.056	0.003	2593772	84.448	84.448
Endosulfan II	20.753	20.757	0.004	2614091	82.835	82.835
Endosulfan sulfate	22.344	22.348	0.003	2417836	81.227	81.227
Endrin aldehyde	21.598	21.602	0.004	2195995	79.553	79.553
Endrin ketone	24.044	24.047	0.003	2937780	82.609	82.609
Heptachlor epoxide	17.883	17.887	0.004	1402273	40.680	40.680

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.341	18.345	0.004	1397748	40.240	40.240
alpha-Chlordane	18.698	18.703	0.004	1424070	40.200	40.200
Tetrachloro-m-xylene	11.448	11.476	0.027	1273265	40.083	40.083
Decachlorobiphenyl	29.227	29.293	0.066	3715047	79.106	79.106

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_015.d Page 1
Report Date 11/18/1999 10:11

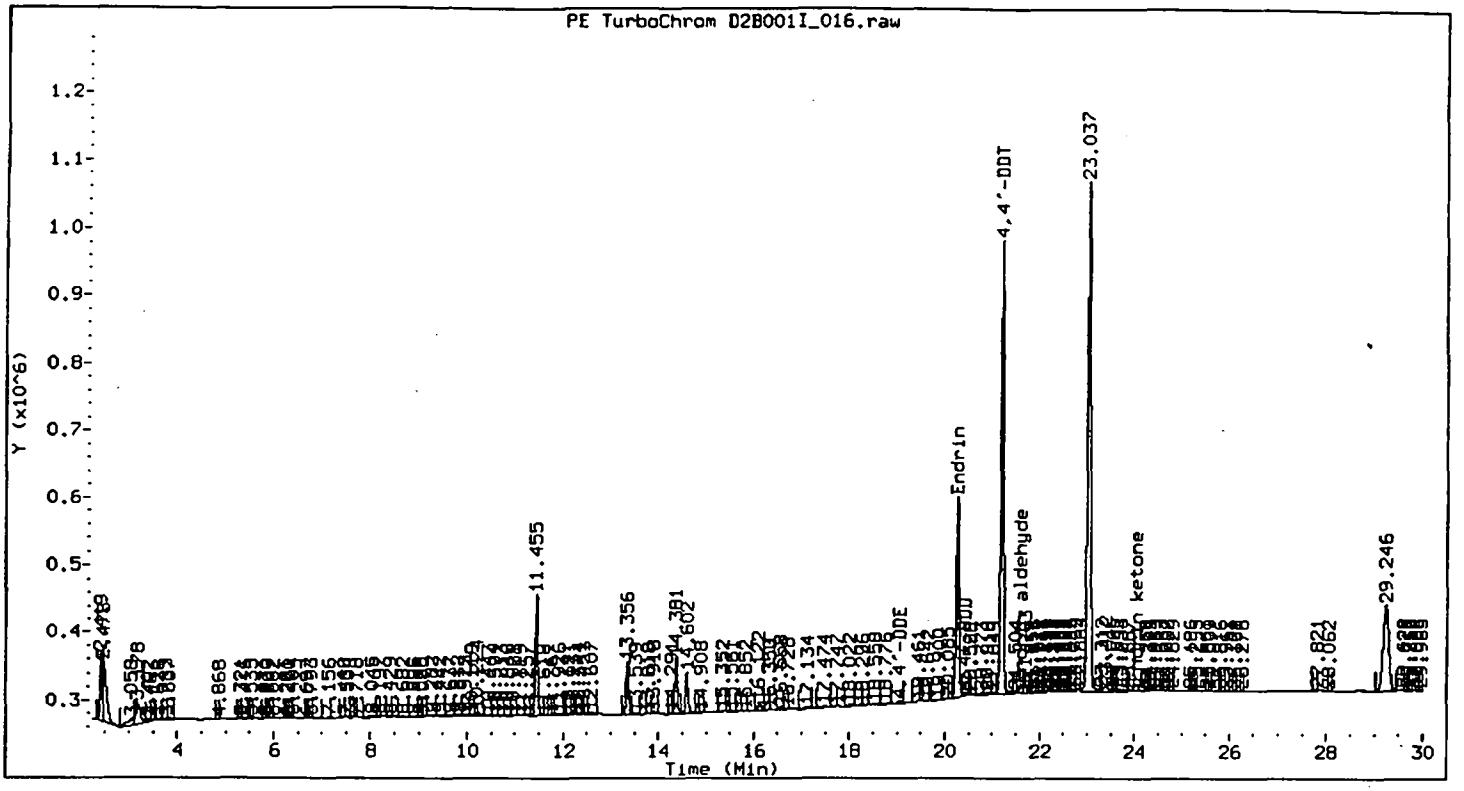


Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : INDB L5
Lab ID : INDB L5
Inj Date : 12-NOV-1999 02:29
Operator : gds
Spnd Sublist: INDB

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	16.442	16.442	0.000	2934383	89.874	89.874
beta-BHC	14.596	14.597	0.001	1654767	82.629	82.629
delta-BHC	15.403	15.403	0.000	2684620	97.210	97.210
4,4'-DDE	19.058	19.056	0.003	5455568	177.622	177.622
Endosulfan II	20.762	20.757	0.005	5429249	172.041	172.041
Endosulfan sulfate	22.358	22.348	0.011	5023800	168.774	168.774
Endrin aldehyde	21.609	21.602	0.008	4381275	158.717	158.717
Endrin ketone	24.063	24.047	0.016	6139112	172.629	172.629
Heptachlor epoxide	17.888	17.887	0.001	2961272	85.907	85.907

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_016.d Page 1
Report Date 11/18/1999 11:00

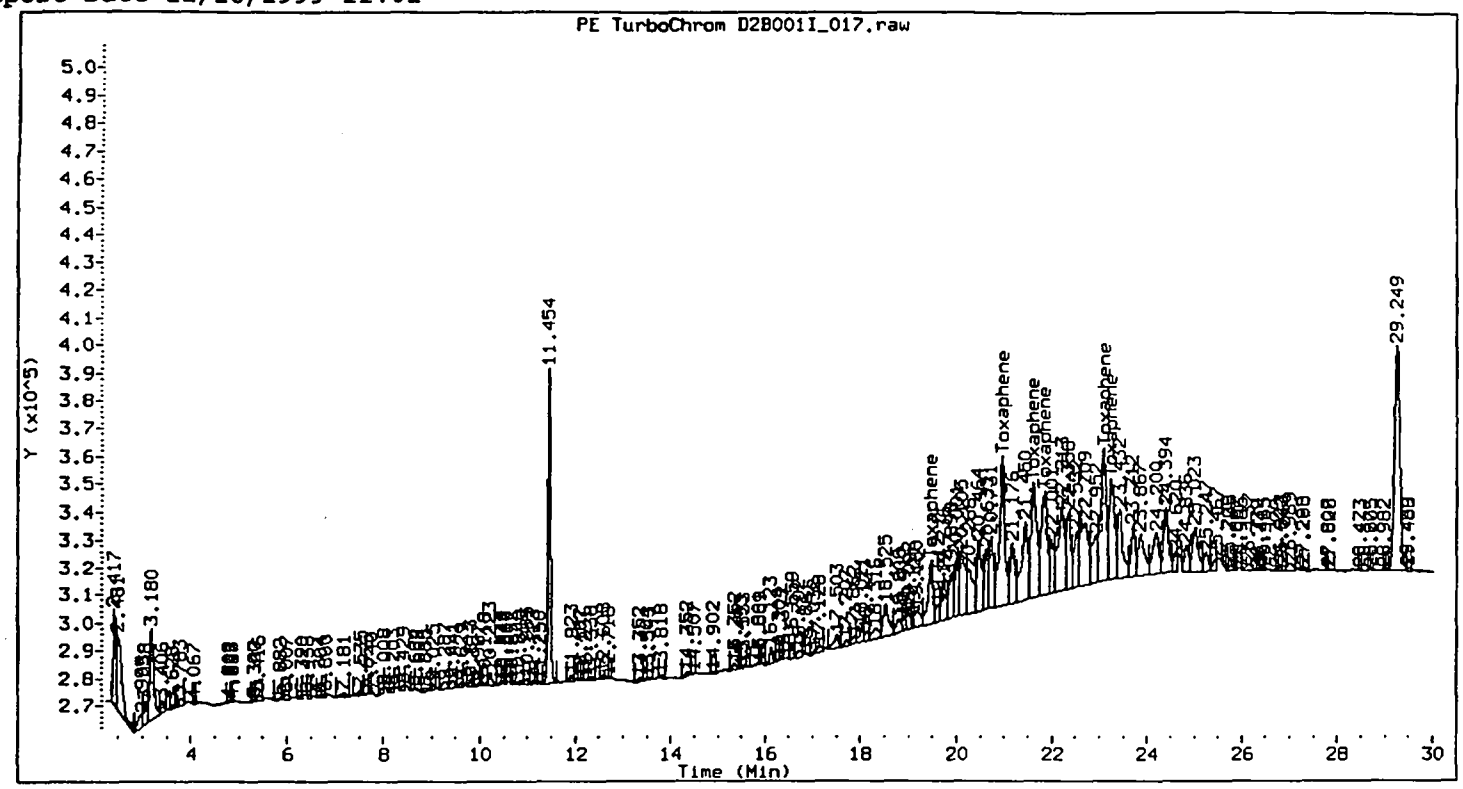


Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : EVALB
Lab ID : EVALB
Inj Date : 12-NOV-1999 03:08
Operator : gds
Cpnd Sublist: END_DDT

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: END/DDT

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
4,4'-DDD	20.428	20.442	0.014	28137	1.644	1.096
4,4'-DDE	19.065	19.056	0.009	17882	0.582	0.388
4,4'-DDT	21.207	21.218	0.011	2640664	82.583	55.056
Endrin	20.274	20.286	0.012	1157186	50.397	33.598
Endrin aldehyde	21.613	21.602	0.012	55187	1.999	1.333
Endrin ketone	24.054	24.047	0.007	77234	2.172	1.448

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_017.d Page 1
Report Date 11/18/1999 11:01



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : TOX L3
Lab ID : TOX L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 03:46 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: TOXAPH0 Sample Type: CALIB_3

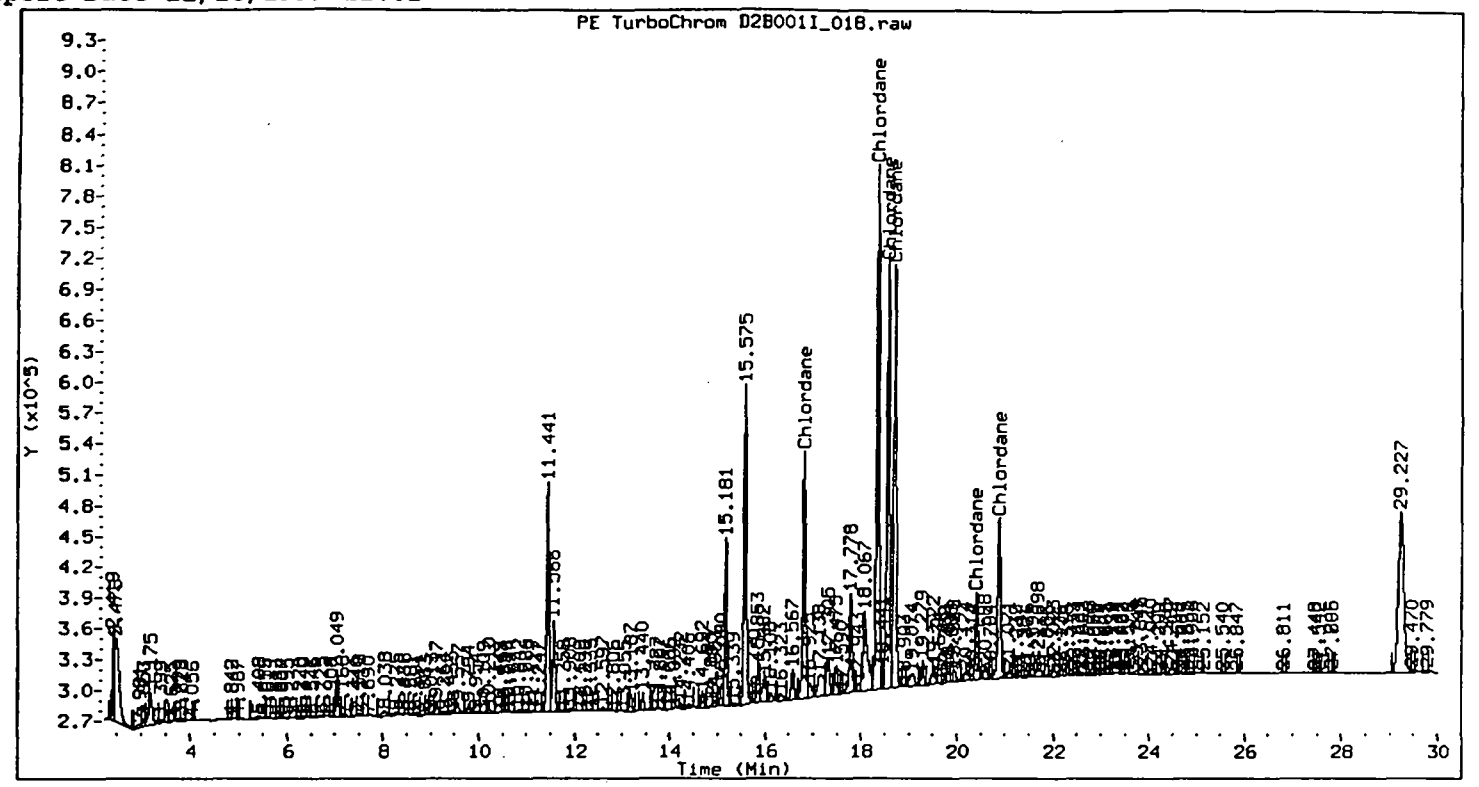
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Toxaphene	(M)	19.468	19.468	0.000	165820	1500.000	1500.000
(2)		20.965	1.000	19.965	430882	1500.000	1500.000
(3)		21.614	1.000	20.614	354188	1500.000	1500.000
(4)		21.863	23.250	1.387	331643	1500.000	1500.000
(5)		23.100	23.432	0.332	390943	1500.000	1500.000
(6)		23.250	1.000	22.250	290486	1500.000	1500.000

Average of peak concentrations: 1500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/D2B001I_018.d Page 1
Report Date 11/18/1999 11:02



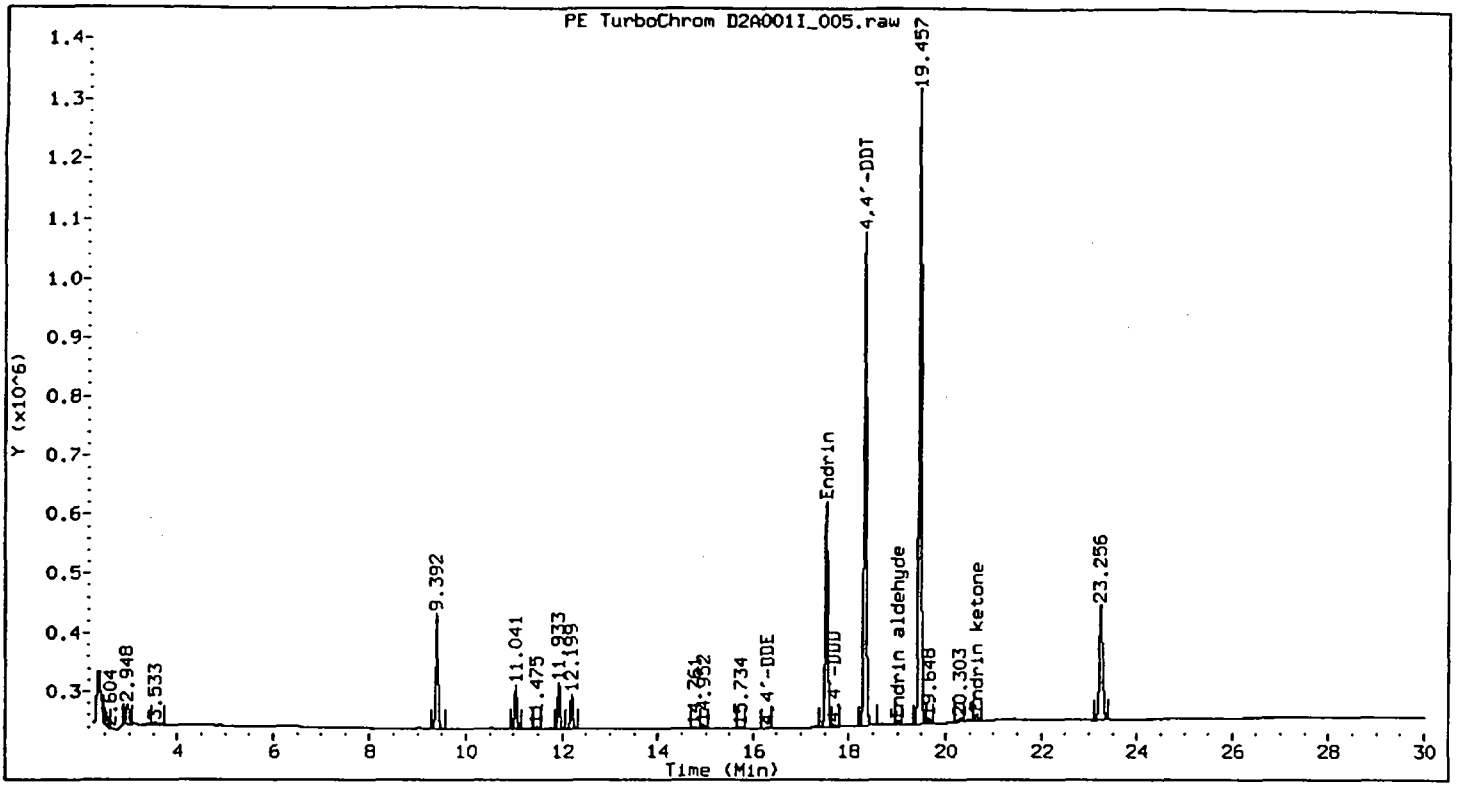
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99.b/Br8081.m
Sample Info : CHLOR L3
Lab ID : CHLOR L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 04:25 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: CHLORDANE Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Chlordane	(M)	16.808	16.808	0.000	972754	500.000	500.000
(2)		18.338	18.441	0.102	1930268	500.000	500.000
(3)		18.557	18.696	0.139	1712644	500.000	500.000
(4)		18.696	1.000	17.696	1550127	500.000	500.000
(5)		20.413	20.413	0.000	340917	500.000	500.000
(6)		20.877	1.000	19.877	687184	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

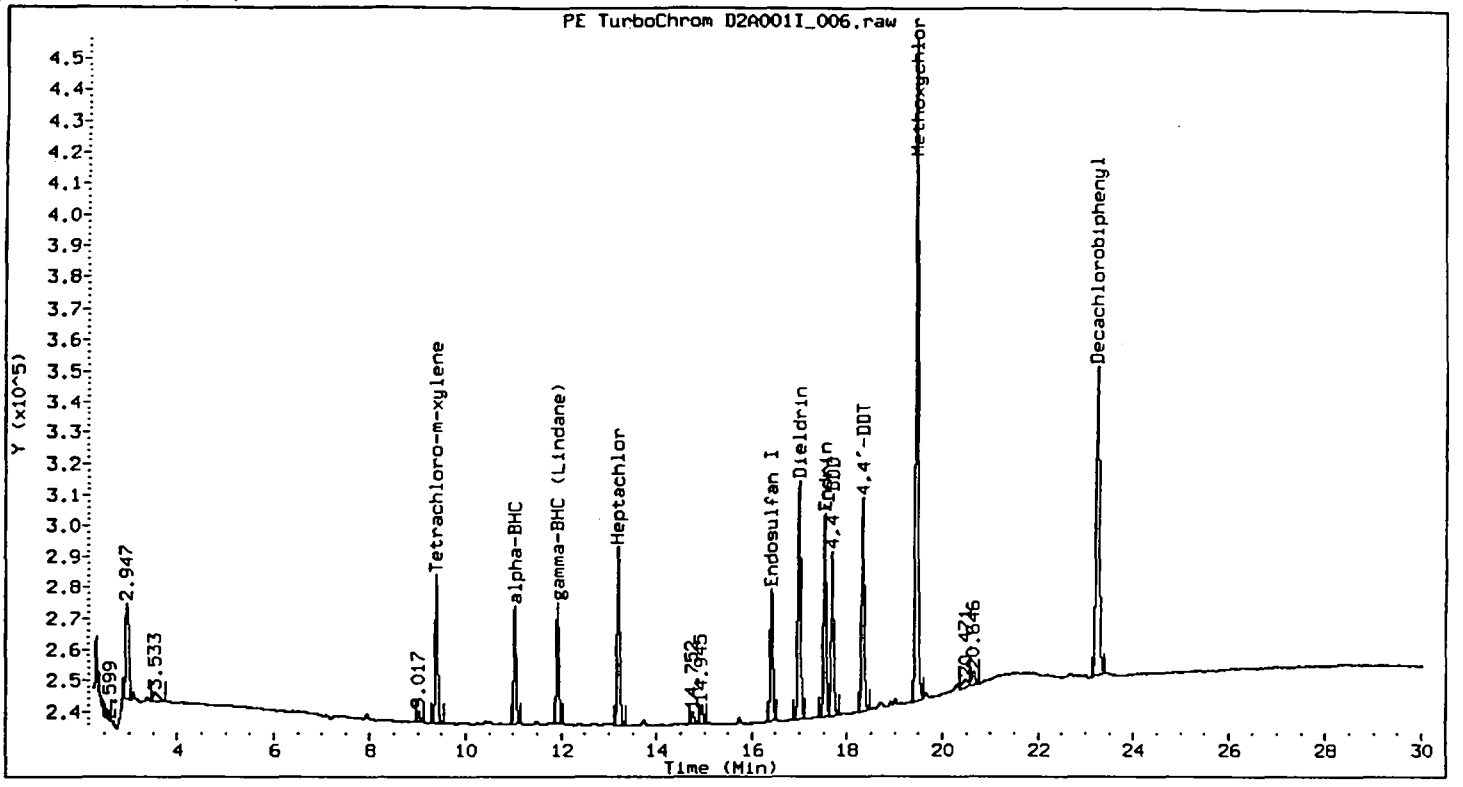


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : EVAL B
Lab ID : EVAL B
Inj Date : 11-NOV-1999 19:59
Operator : gds
Cpnd Sublist: END_DDT

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: END/DDT

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
4,4'-DDD	17.689	17.712	0.023	16683	0.775	0.516
4,4'-DDE	16.306	16.273	0.033	11086	0.355	0.236
4,4'-DDT	18.330	18.354	0.024	2876614	103.808	69.206
Endrin	17.530	17.503	0.027	1385998	52.503	35.002
Endrin aldehyde	19.012	18.977	0.034	25348	0.920	0.614
Endrin ketone	20.647	20.619	0.027	46275	1.282	0.855

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_006.d Page 1
Report Date 11/18/1999 10:59



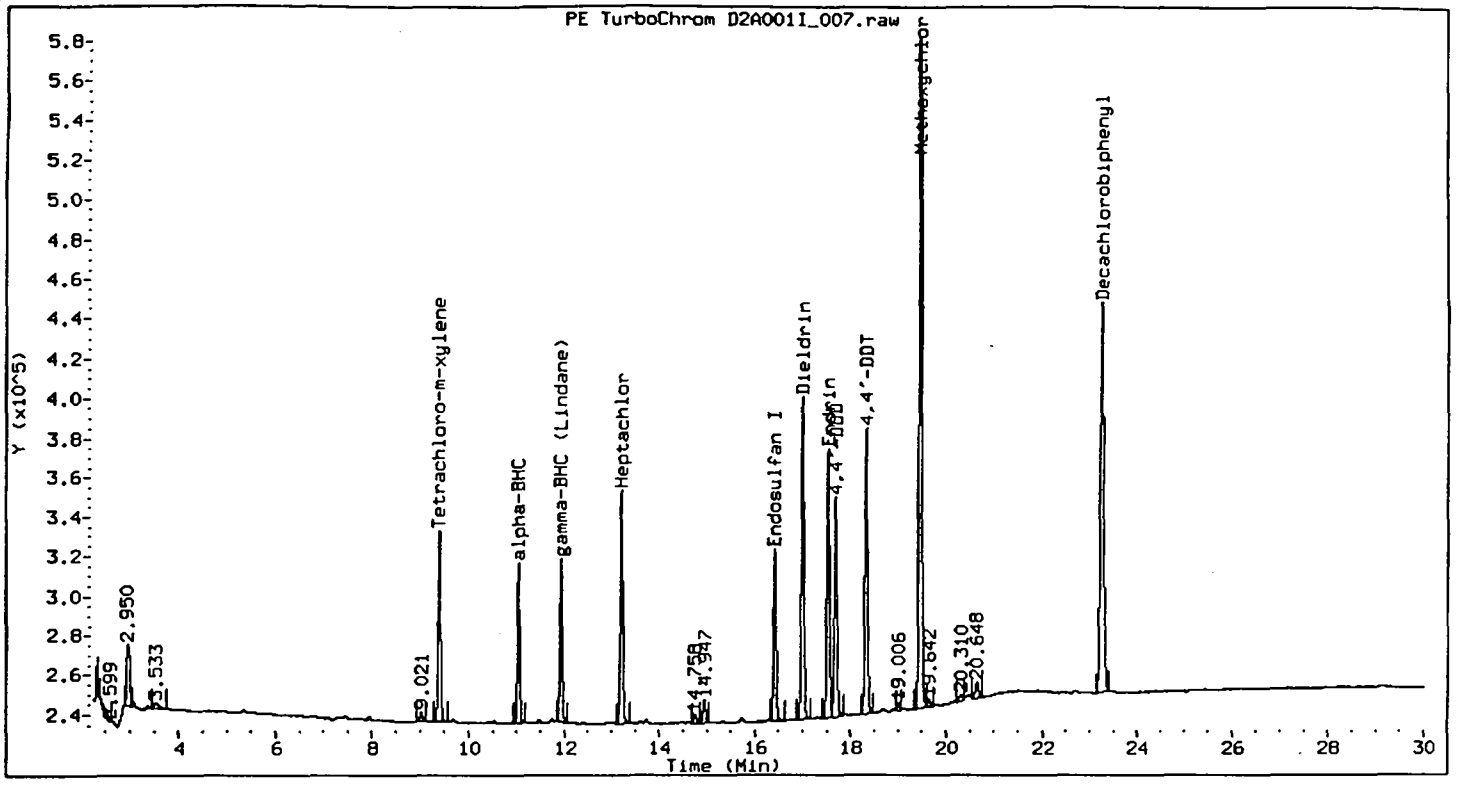
Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDA L1
Lab ID : INDA L1 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 20:38 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_1

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Alpha-BHC	11.036	11.062	0.027	126901	5.000	5.000
gamma-BHC (Lindane)	11.928	11.977	0.049	132533	5.000	5.000
4,4'-DDD	17.683	17.712	0.029	192775	10.000	10.000
4,4'-DDT	18.326	18.354	0.028	255162	10.000	10.000
Dieldrin	16.988	17.017	0.029	284702	10.000	10.000
Endosulfan I	16.413	16.442	0.029	155284	5.000	5.000
Endrin	17.523	17.503	0.020	247346	10.000	10.000
Heptachlor	13.203	13.229	0.027	206949	5.000	5.000
Methoxychlor	19.456	19.484	0.028	770617	50.000	50.000

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_006.d Page 2
Report Date 11/18/1999 10:59

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	9.387	9.412	0.024	162925	4.963	4.963
Decachlorobiphenyl	23.257	23.296	0.039	479276	10.864	10.864

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_007.d Page 1
Report Date 11/18/1999 10:59



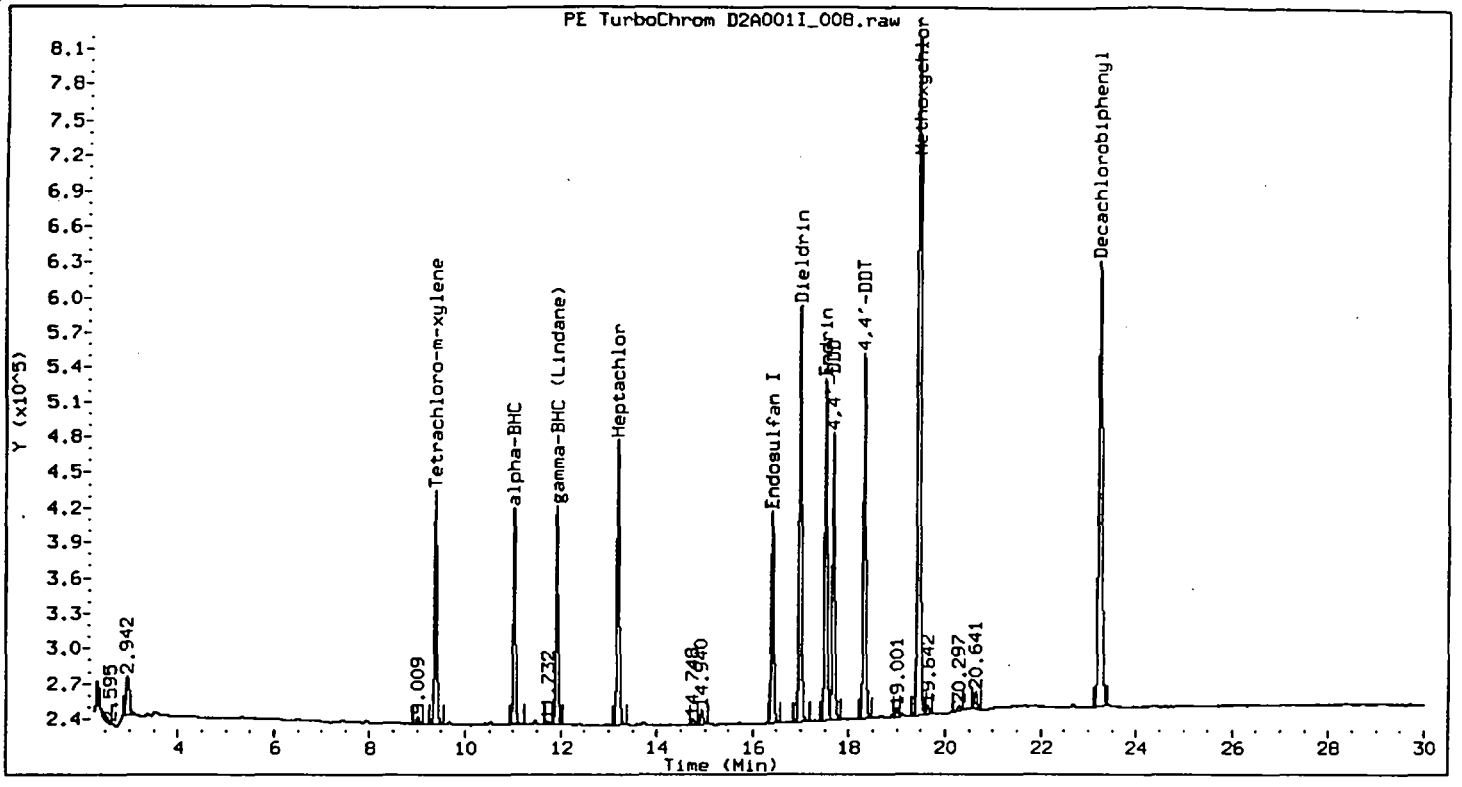
Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDA L2
Lab ID : INDA L2 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 21:17 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	11.041	11.062	0.022	264228	10.201	10.201
gamma-BHC (Lindane)	11.932	11.977	0.044	276058	10.203	10.203
4,4'-DDD	17.683	17.712	0.029	404459	20.479	20.479
4,4'-DDT	18.325	18.354	0.029	528087	20.342	20.342
Dieldrin	16.989	17.017	0.028	591510	20.381	20.381
Endosulfan I	16.414	16.442	0.028	321635	10.175	10.175
Endrin	17.523	17.503	0.020	508016	20.266	20.266
Heptachlor	13.207	13.229	0.022	417621	10.045	10.045
Methoxychlor	19.457	19.484	0.027	1551378	100.328	100.328

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_007.d Page 2
Report Date 11/18/1999 10:59

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.393	9.412	0.018	328075	9.929	9.929
Decachlorobiphenyl	23.258	23.296	0.038	946620	21.249	21.249

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_008.d Page 1
Report Date 11/18/1999 10:59



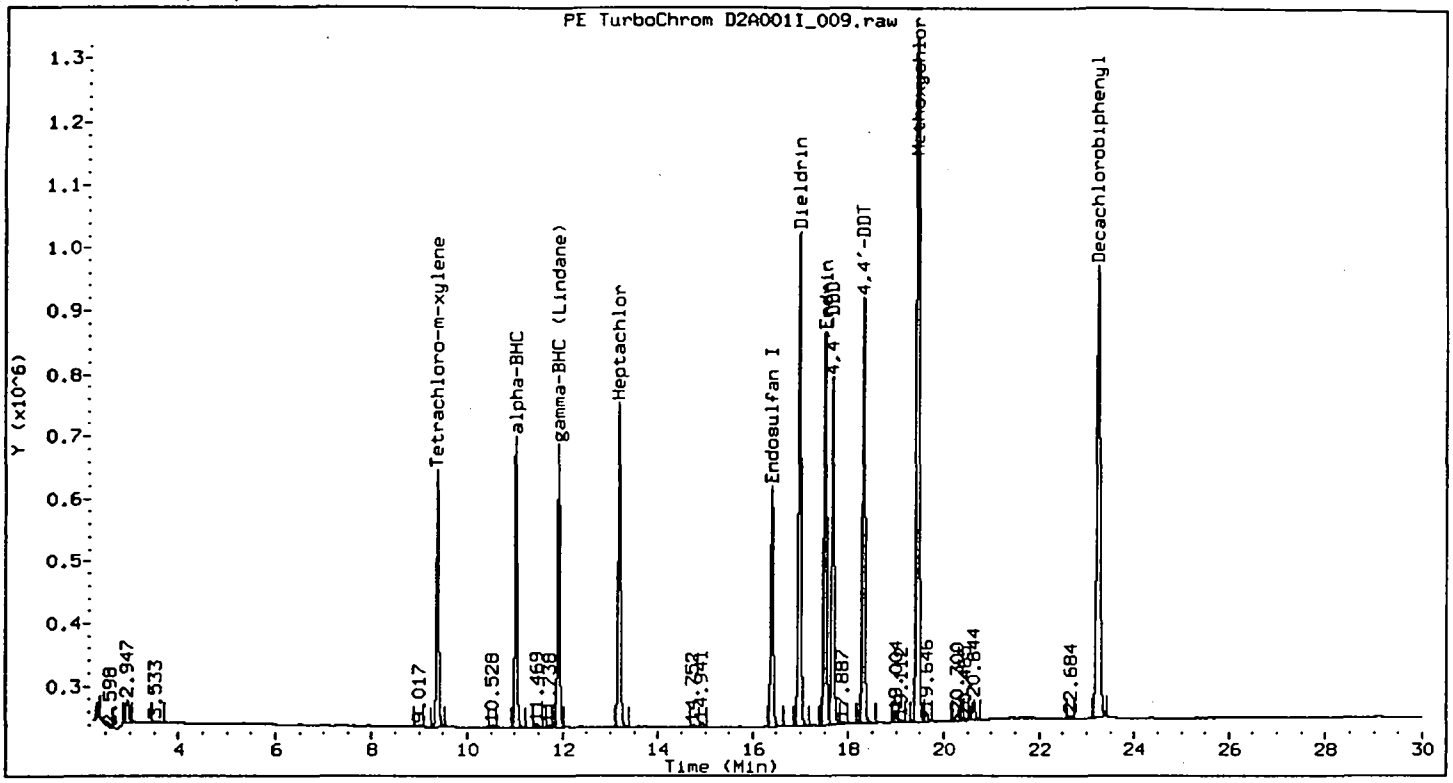
Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDA L3
Lab ID : INDA L3
Inj Date : 11-NOV-1999 21:56
Operator : gds
Cpnd Sublist: INDA

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	11.029	11.062	0.033	584836	21.649	21.649
gamma-BHC (Lindane)	11.921	11.977	0.056	609603	21.619	21.619
4,4'-DDD	17.677	17.712	0.034	851314	42.017	42.017
4,4'-DDT	18.320	18.354	0.034	1109601	41.787	41.787
Dieldrin	16.983	17.017	0.034	1253872	42.080	42.080
Endosulfan I	16.408	16.442	0.034	654237	20.459	20.459
Endrin	17.517	17.503	0.014	1055942	41.391	41.391
Heptachlor	13.196	13.229	0.033	847201	20.250	20.250
Methoxychlor	19.451	19.484	0.033	3083428	199.604	199.604

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.380	9.412	0.032	661286	19.979	19.979
Decachlorobiphenyl	23.253	23.296	0.043	1845530	41.225	41.225

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_009.d Page 1
Report Date 11/18/1999 11:00

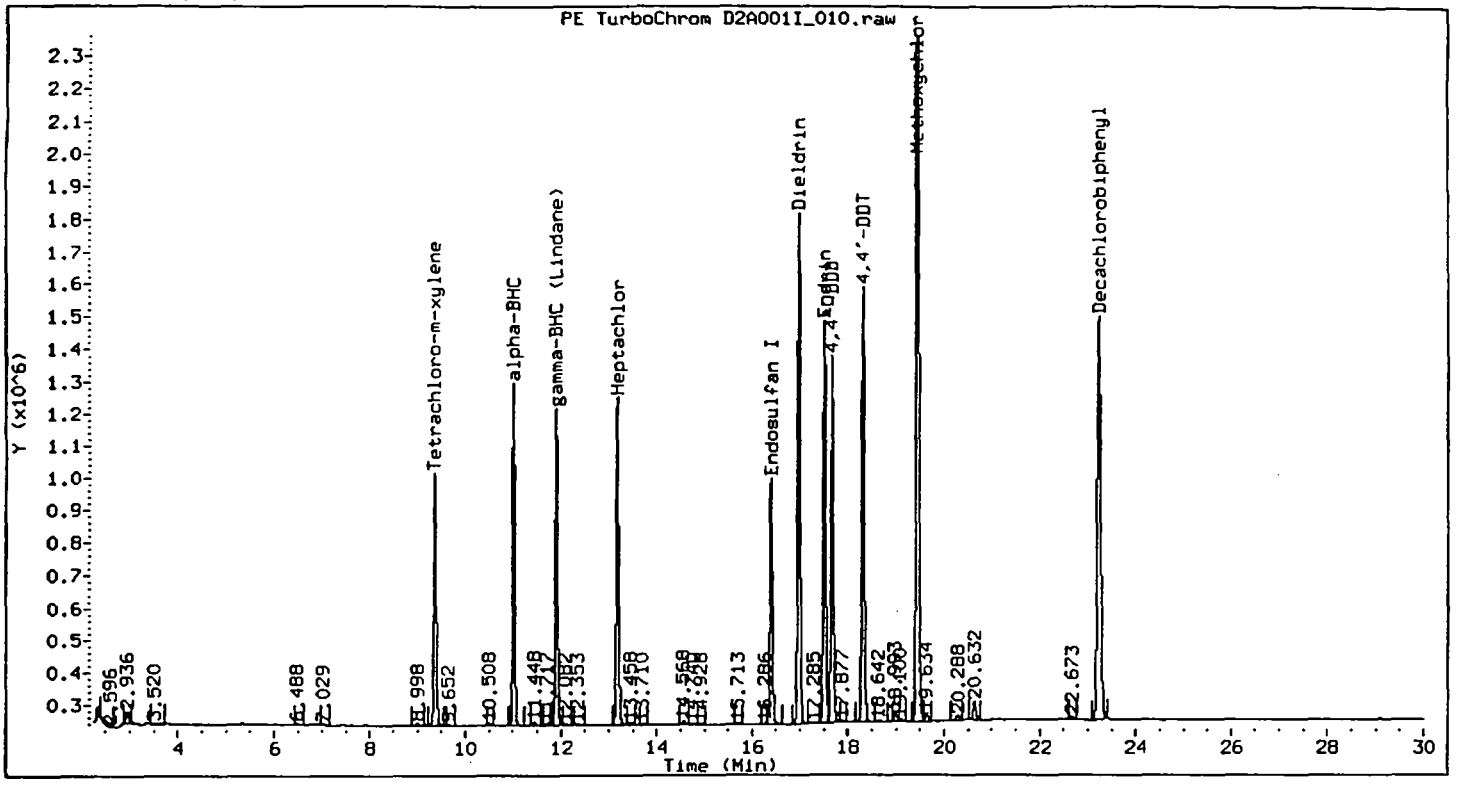


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDA L4
Lab ID : INDA L4 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 22:35 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Alpha-BHC	11.037	11.062	0.025	1391302	48.047	48.047
gamma-BHC (Lindane)	11.928	11.977	0.048	1409207	47.043	47.043
4,4'-DDD	17.680	17.712	0.032	1863051	88.641	88.641
4,4'-DDT	18.323	18.354	0.032	2377896	86.956	86.956
Dieldrin	16.985	17.017	0.032	2714022	88.033	88.033
Endosulfan I	16.410	16.442	0.032	1362428	41.923	41.923
Endrin	17.520	17.503	0.017	2235285	85.582	85.582
Heptachlor	13.200	13.229	0.029	1746320	41.292	41.292
Methoxychlor	19.453	19.484	0.031	6022465	392.347	392.347

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	9.387	9.412	0.024	1335529	40.359	40.359
Decachlorobiphenyl	23.252	23.296	0.044	3512861	78.065	78.065

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_010.d Page 1
Report Date 11/18/1999 11:00



Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDA L5
Lab ID : INDA L5
Inj Date : 11-NOV-1999 23:14
Operator : gds
Cpnd Sublist: INDA

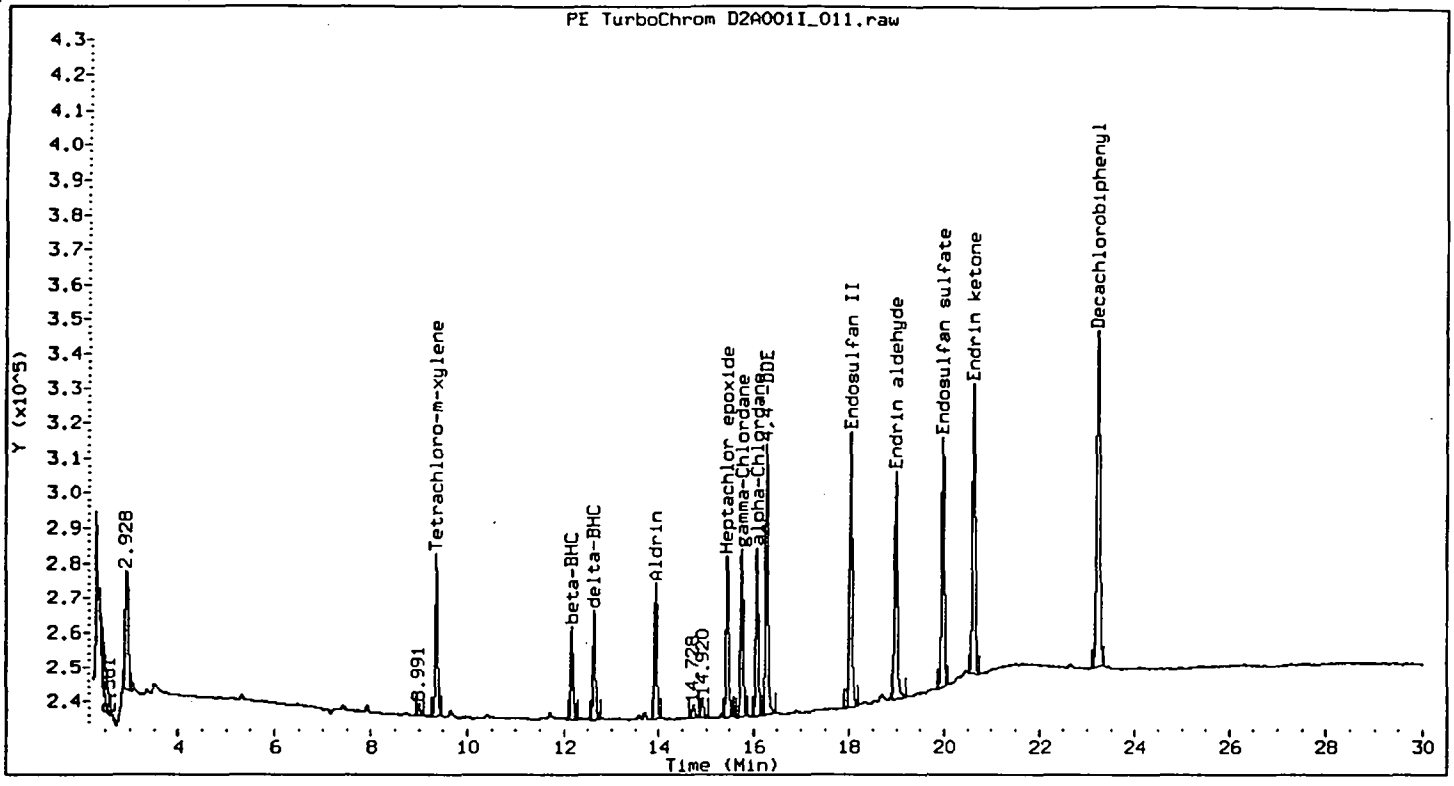
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	11.016	11.062	0.047	3124717	100.871	100.871
gamma-BHC (Lindane)	11.907	11.977	0.070	3028551	96.035	96.035
4,4'-DDD	17.669	17.712	0.043	3778190	175.428	175.428
4,4'-DDT	18.312	18.354	0.042	4667179	168.424	168.424
Dieldrin	16.973	17.017	0.045	5418789	172.370	172.370
Endosulfan I	16.398	16.442	0.045	2653463	81.314	81.314
Endrin	17.508	17.503	0.005	4402751	166.781	166.781
Heptachlor	13.181	13.229	0.048	3396208	80.242	80.242
Methoxychlor	19.442	19.484	0.042	10894257	726.117	726.117

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_010.d Page 2
Report Date 11/18/1999 11:00

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.367	9.412	0.045	2533868	77.480	77.480
Decachlorobiphenyl	23.235	23.296	0.061	6159257	137.604	137.604

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_011.d Page 1
Report Date 11/18/1999 11:00



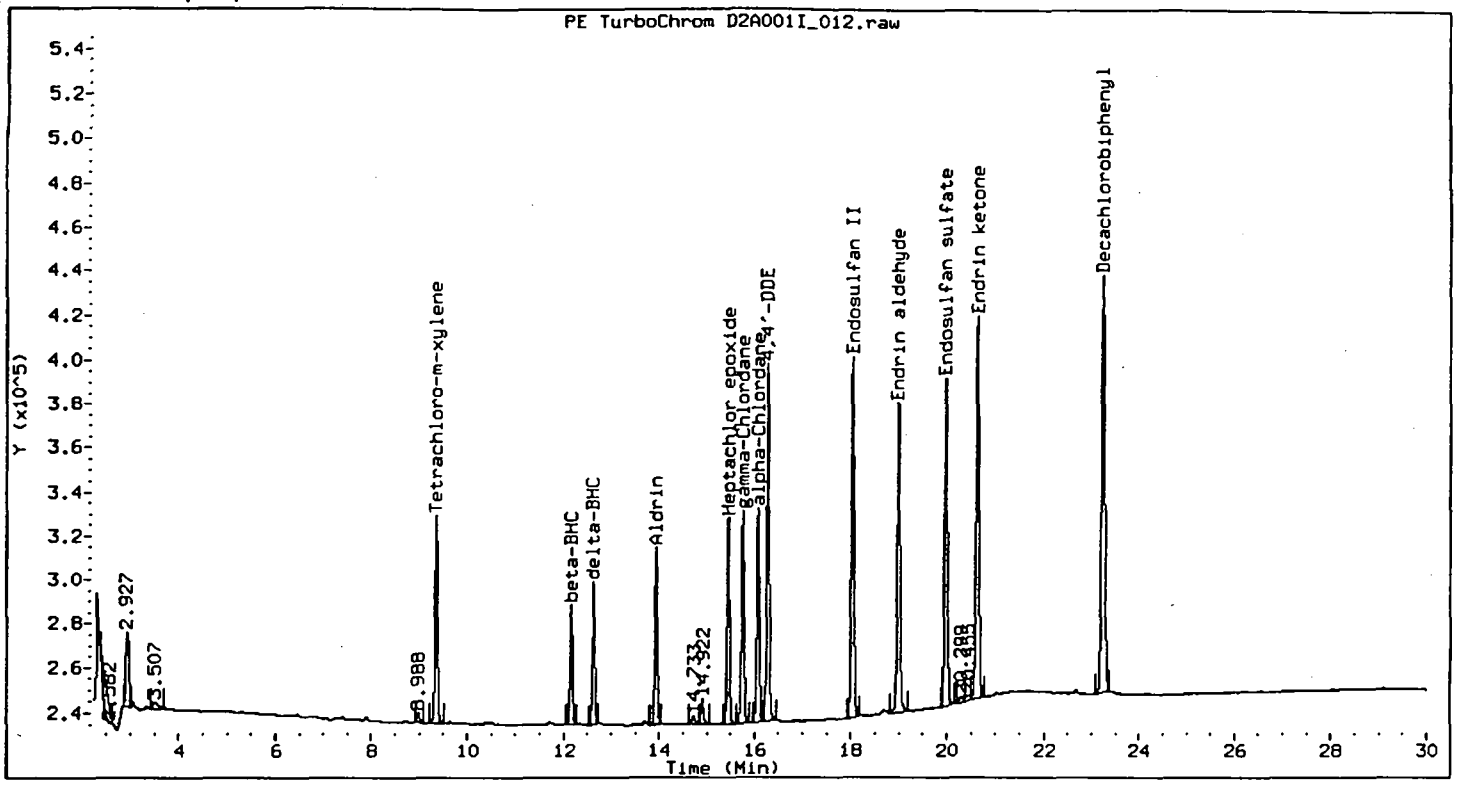
Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDB L1
Lab ID : INDB L1 Inst ID : HP58902.i
Inj Date : 11-NOV-1999 23:53 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_1

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.939	13.937	0.002	141453	5.000	5.000
beta-BHC	12.165	12.162	0.003	94714	5.000	5.000
delta-BHC	12.633	12.632	0.001	110156	5.000	5.000
4,4'-DDE	16.277	16.273	0.005	279023	10.000	10.000
Endosulfan II	18.031	18.023	0.008	303482	10.000	10.000
Endosulfan sulfate	19.977	19.969	0.008	277176	10.000	10.000
Endrin aldehyde	18.985	18.977	0.008	262336	10.000	10.000
Endrin ketone	20.627	20.619	0.007	335262	10.000	10.000
Heptachlor epoxide	15.453	15.449	0.004	169267	5.000	5.000

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_011.d Page 2
Report Date 11/18/1999 11:00

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane	15.756	15.750	0.006	181757	5.000	5.000
alpha-Chlordane	16.074	16.068	0.006	176389	5.000	5.000
Tetrachloro-m-xylene	9.360	9.412	0.052	160544	5.000	5.000
Decachlorobiphenyl	23.230	23.296	0.066	460277	10.000	10.000

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_012.d Page 1
Report Date 11/18/1999 11:01



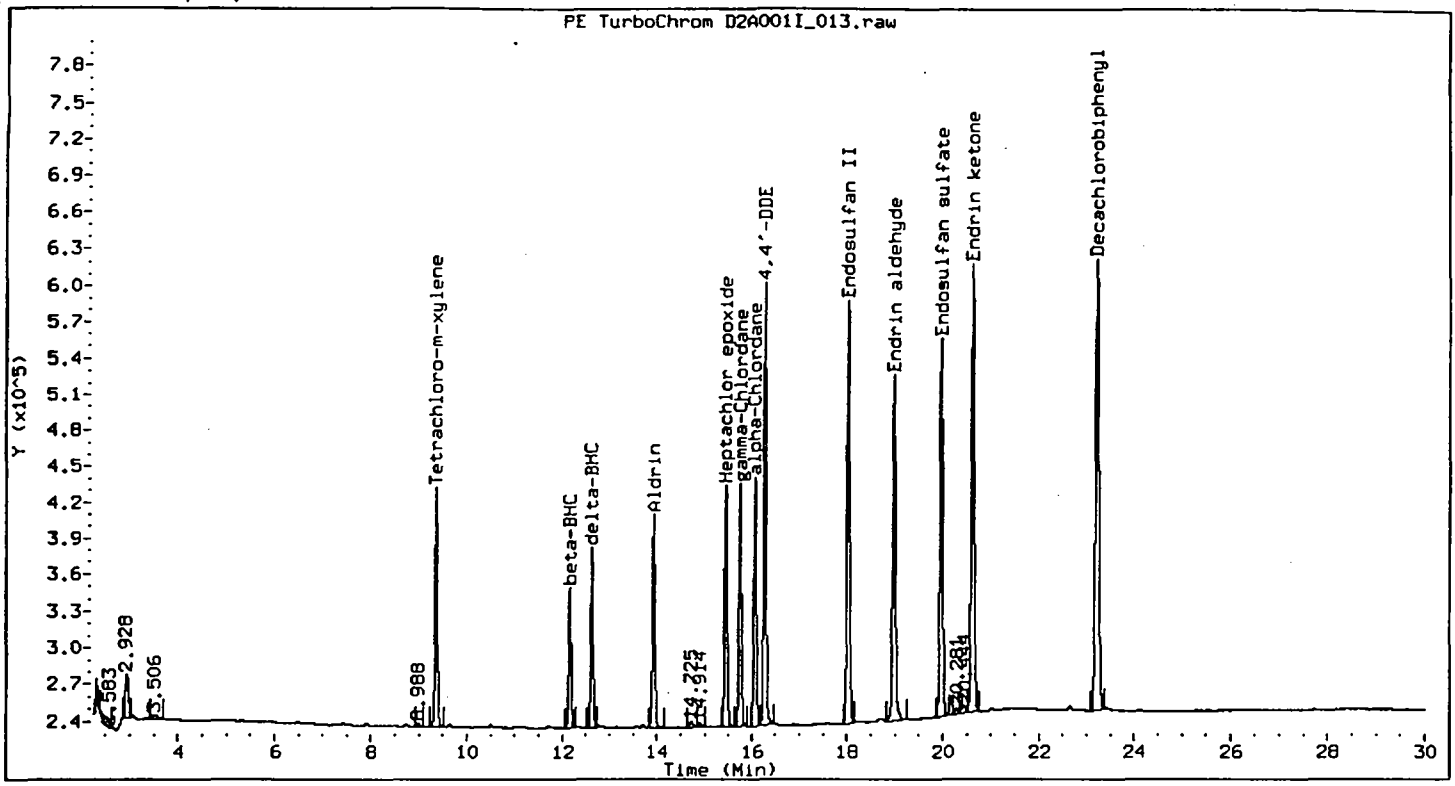
Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDB L2
Lab ID : INDB L2 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 00:32 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.943	13.937	0.006	282402	9.991	9.991
beta-BHC	12.167	12.162	0.005	188465	9.975	9.975
delta-BHC	12.636	12.632	0.004	220511	10.002	10.002
4,4'-DDE	16.281	16.273	0.008	567996	20.177	20.177
Endosulfan II	18.036	18.023	0.012	608315	20.022	20.022
Endosulfan sulfate	19.984	19.969	0.015	571695	20.308	20.308
Endrin aldehyde	18.992	18.977	0.014	555224	20.566	20.566
Endrin ketone	20.636	20.619	0.017	699978	20.430	20.430
Heptachlor epoxide	15.457	15.449	0.008	338741	10.003	10.003

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_012.d Page 2
Report Date 11/18/1999 11:01

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.759	15.750	0.009	355360	9.887	9.887
alpha-Chlordane	16.077	16.068	0.008	350634	9.970	9.970
Tetrachloro-m-xylene	9.358	9.412	0.053	317253	9.940	9.940
Decachlorobiphenyl	23.243	23.296	0.053	903308	19.811	19.811

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_013.d Page 1
Report Date 11/18/1999 11:01

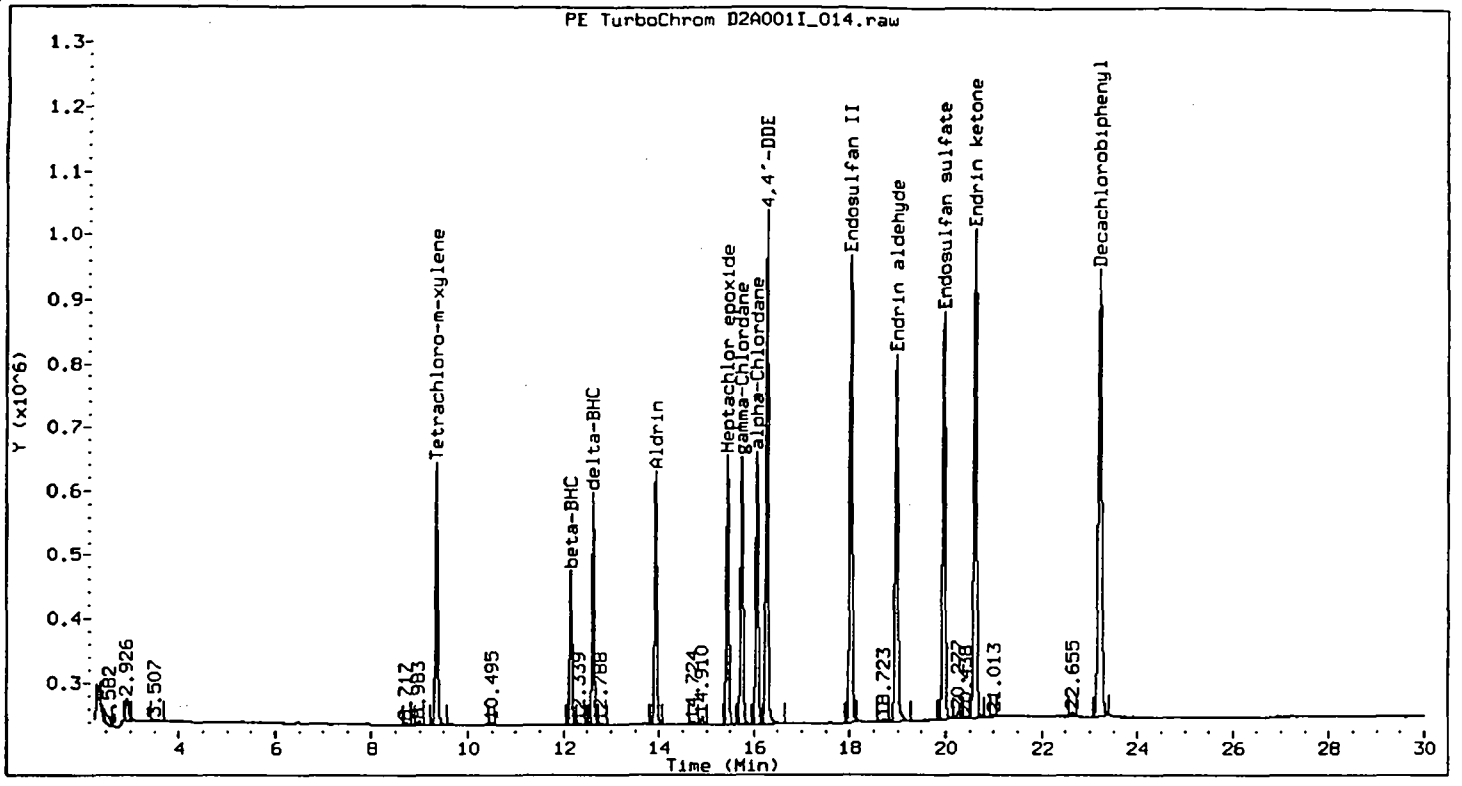


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 01:11 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.937	13.937	0.000	607120	20.962	20.962
beta-BHC	12.162	12.162	0.000	392192	20.498	20.498
delta-BHC	12.632	12.632	0.000	490409	20.308	20.308
4,4'-DDE	16.273	16.273	0.000	1241419	42.642	42.642
Endosulfan II	18.023	18.023	0.000	1286155	41.526	41.526
Endosulfan sulfate	19.969	19.969	0.000	1184125	41.352	41.352
Endrin aldehyde	18.977	18.977	0.000	1137998	41.409	41.409
Endrin ketone	20.619	20.619	0.000	1466965	41.834	41.834
Heptachlor epoxide	15.449	15.449	0.000	706414	20.566	20.566

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.750	15.750	0.000	715730	19.942	19.942
alpha-Chlordane	16.068	16.068	0.000	728535	20.471	20.471
Tetrachloro-m-xylene	9.357	9.412	0.055	655597	20.357	20.357
Decachlorobiphenyl	23.220	23.296	0.076	1801895	39.678	39.678

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_014.d Page 1
Report Date 11/18/1999 11:02



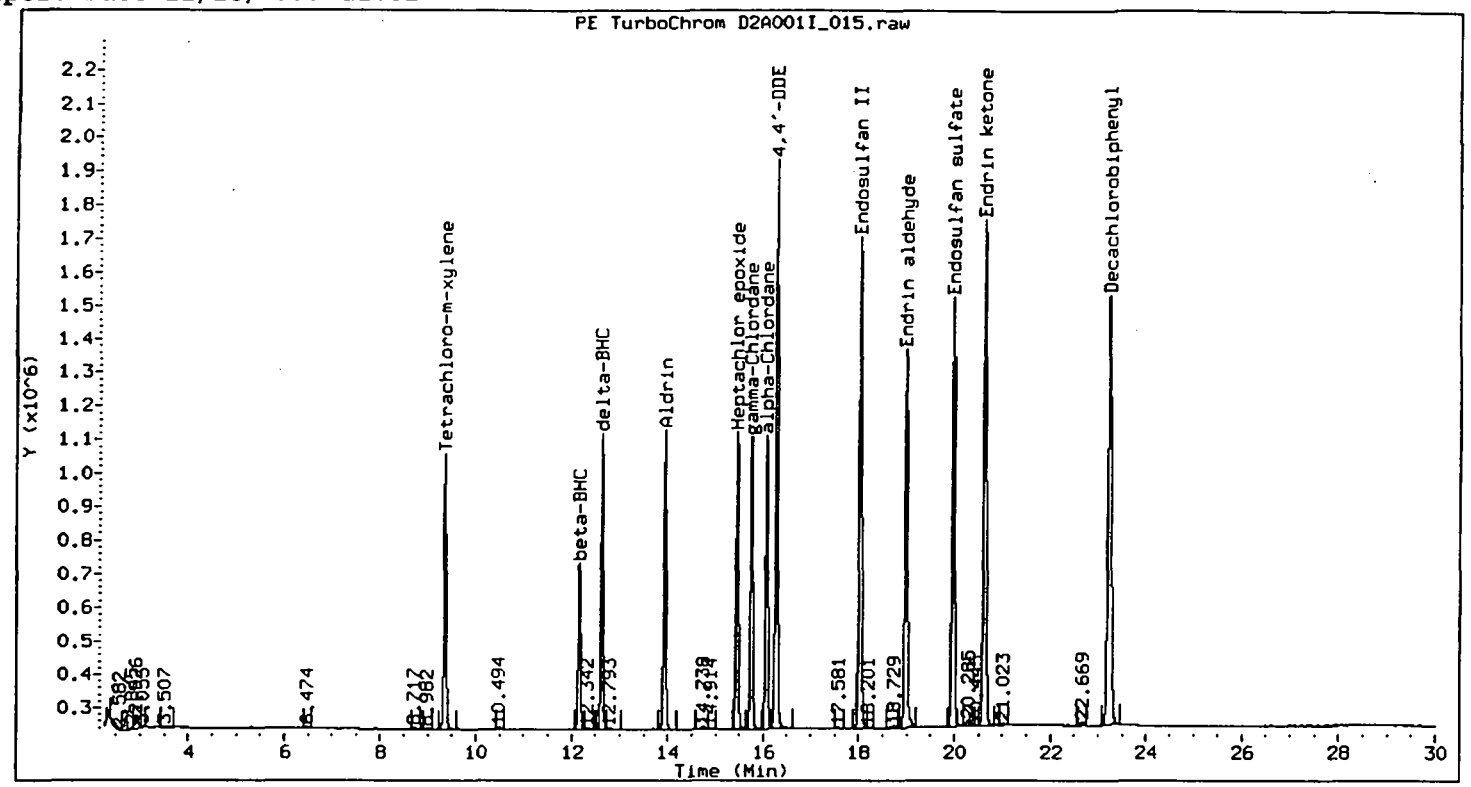
Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDB L4
Lab ID : INDB L4 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 01:50 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.932	13.937	0.004	1303638	43.645	43.645
beta-BHC	12.158	12.162	0.003	813082	41.844	41.844
delta-BHC	12.628	12.632	0.004	1137993	40.840	40.840
4,4'-DDE	16.268	16.273	0.004	2698325	89.152	89.152
Endosulfan II	18.021	18.023	0.003	2647731	84.045	84.045
Endosulfan sulfate	19.966	19.969	0.003	2409308	83.064	83.064
Endrin aldehyde	18.974	18.977	0.003	2237058	81.047	81.047
Endrin ketone	20.616	20.619	0.003	3007378	84.245	84.245
Heptachlor epoxide	15.445	15.449	0.004	1461090	41.872	41.872

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_014.d Page 2
Report Date 11/18/1999 11:02

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane	15.746	15.750	0.004	1469687	40.707	40.707
alpha-Chlordane	16.064	16.068	0.004	1494583	41.478	41.478
Tetrachloro-m-xylene	9.352	9.412	0.059	1336866	41.123	41.123
Decachlorobiphenyl	23.218	23.296	0.078	3419864	76.426	76.426

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_015.d Page 1
Report Date 11/18/1999 11:02



Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : INDB L5
Lab ID : INDB L5 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 02:29 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_5

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin		13.937	13.937	0.000	2906269	93.266	93.266
beta-BHC		12.161	12.162	0.001	1671805	84.757	84.757
delta-BHC	(M)	12.632	12.632	0.000	2742428	104.407	104.407
4,4'-DDE		16.271	16.273	0.002	5641620	180.443	180.443
Endosulfan II		18.023	18.023	0.000	5391745	168.795	168.795
Endosulfan sulfate		19.973	19.969	0.003	4835547	165.325	165.325
Endrin aldehyde		18.979	18.977	0.002	4364629	158.498	158.498
Endrin ketone		20.623	20.619	0.004	6025779	166.963	166.963
Heptachlor epoxide		15.448	15.449	0.001	3030134	85.379	85.379

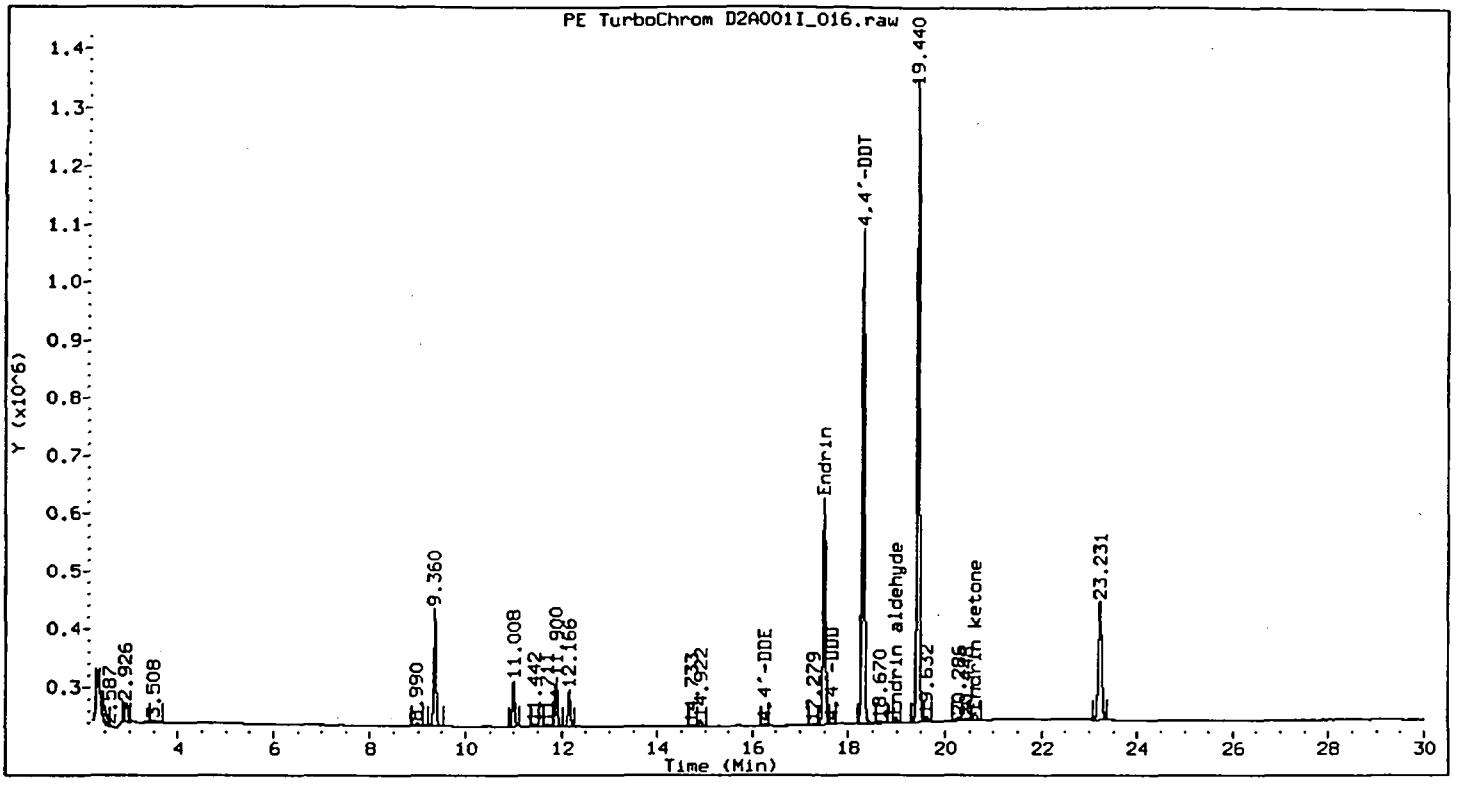
Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_015.d Page 2
Report Date 11/18/1999 11:02

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.749	15.750	0.001	2996032	82.369	82.369
alpha-Chlordane	16.067	16.068	0.001	3044190	83.547	83.547
Tetrachloro-m-xylene	9.351	9.412	0.061	2689028	81.260	81.260
Decachlorobiphenyl	23.233	23.296	0.063	6350169	141.117	141.117

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_016.d Page 1
Report Date 11/18/1999 11:02



Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : EVALB
Lab ID : EVALB
Inj Date : 12-NOV-1999 03:08
Operator : gds
Cpnd Sublist: END_DDT

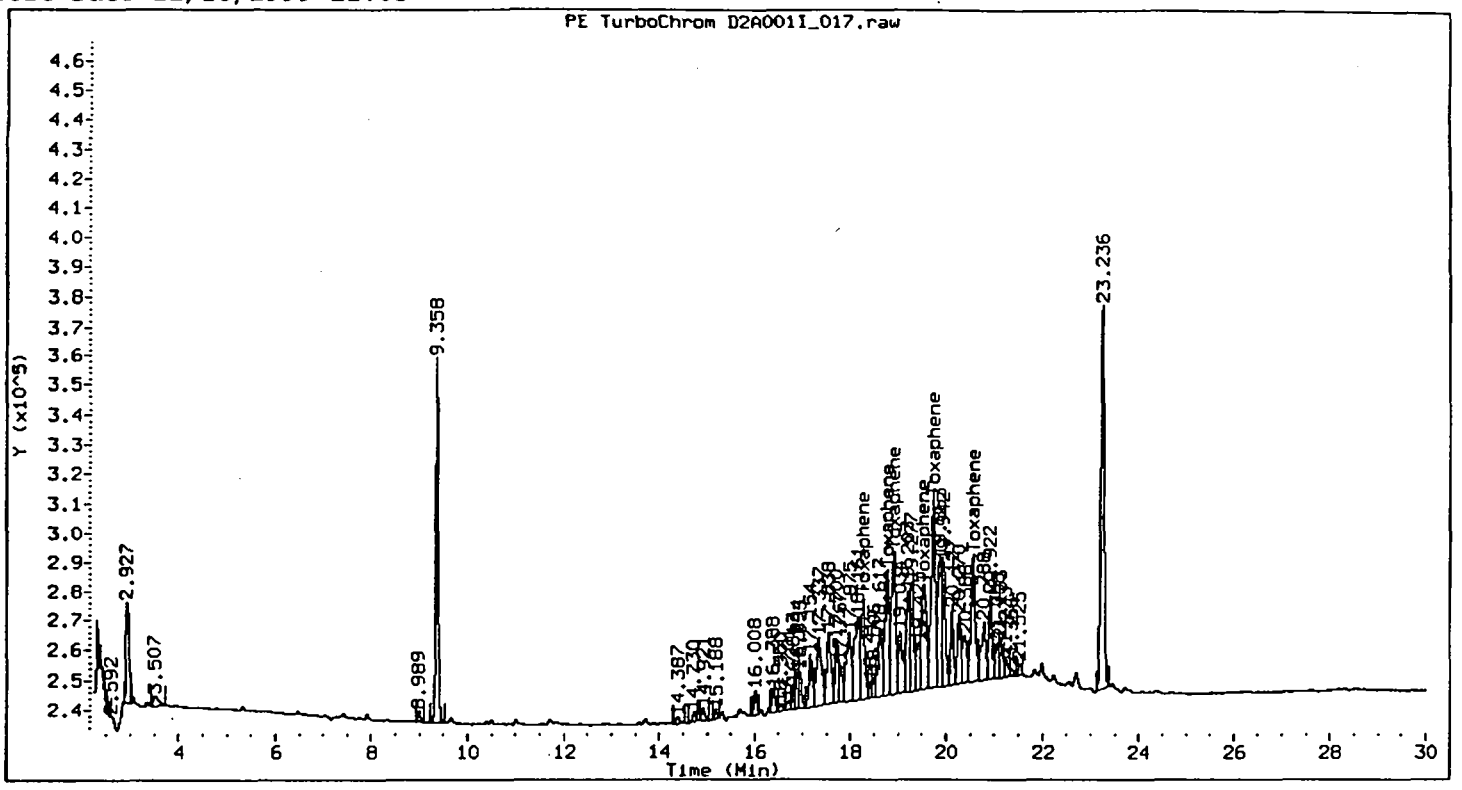
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: END/DDT

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
,4'-DDD	------	17.712	------	------	------	------ (*)
4,4'-DDE	16.281	16.273	0.008	11464	0.367	0.244
,4'-DDT	------	18.354	------	------	------	------ (*)
Endrin	------	17.503	------	------	------	------ (*)
Endrin aldehyde	18.989	18.977	0.012	31492	1.144	0.762
Endrin ketone	20.626	20.619	0.007	61376	1.701	1.134

COMMENTS:

* - Mutlicomponent peak not used in quantitation of compound.

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_017.d Page 1
Report Date 11/18/1999 11:03

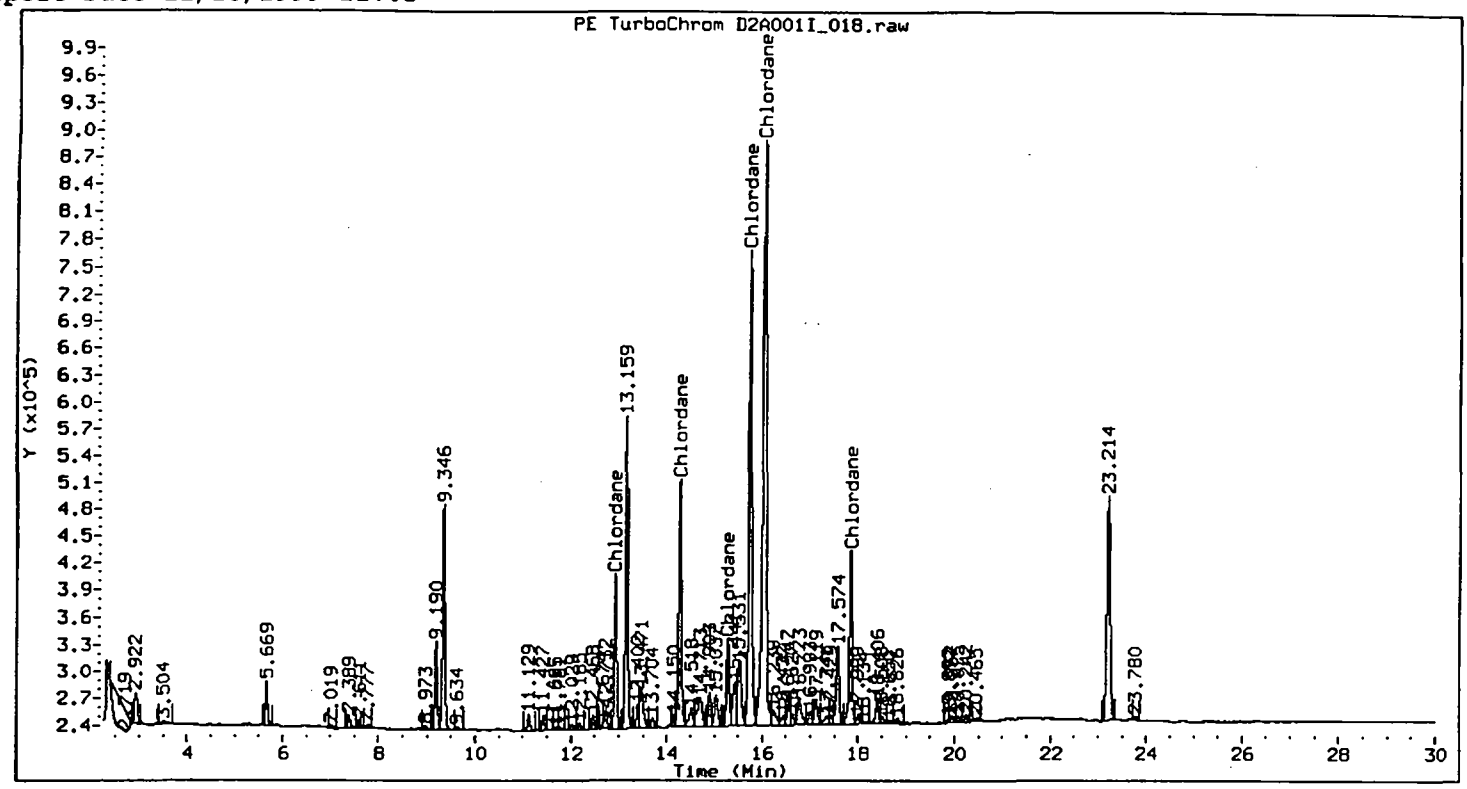


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : TOX L3
Lab ID : TOX L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 03:46 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: TOXAPH0 Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Toxaphene	18.262	18.262	0.000	168549	1500.000	1500.000
(2)	18.765	18.765	0.000	259904	1500.000	1500.000
(3)	18.910	18.910	0.000	316155	1500.000	1500.000
(4)	19.527	19.527	0.000	269217	1500.000	1500.000
(5)	19.733	19.733	0.000	375003	1500.000	1500.000
(6)	20.556	20.556	0.000	263259	1500.000	1500.000

Average of peak concentrations: 1500.00

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/D2A001I_018.d Page 1
Report Date 11/18/1999 11:03



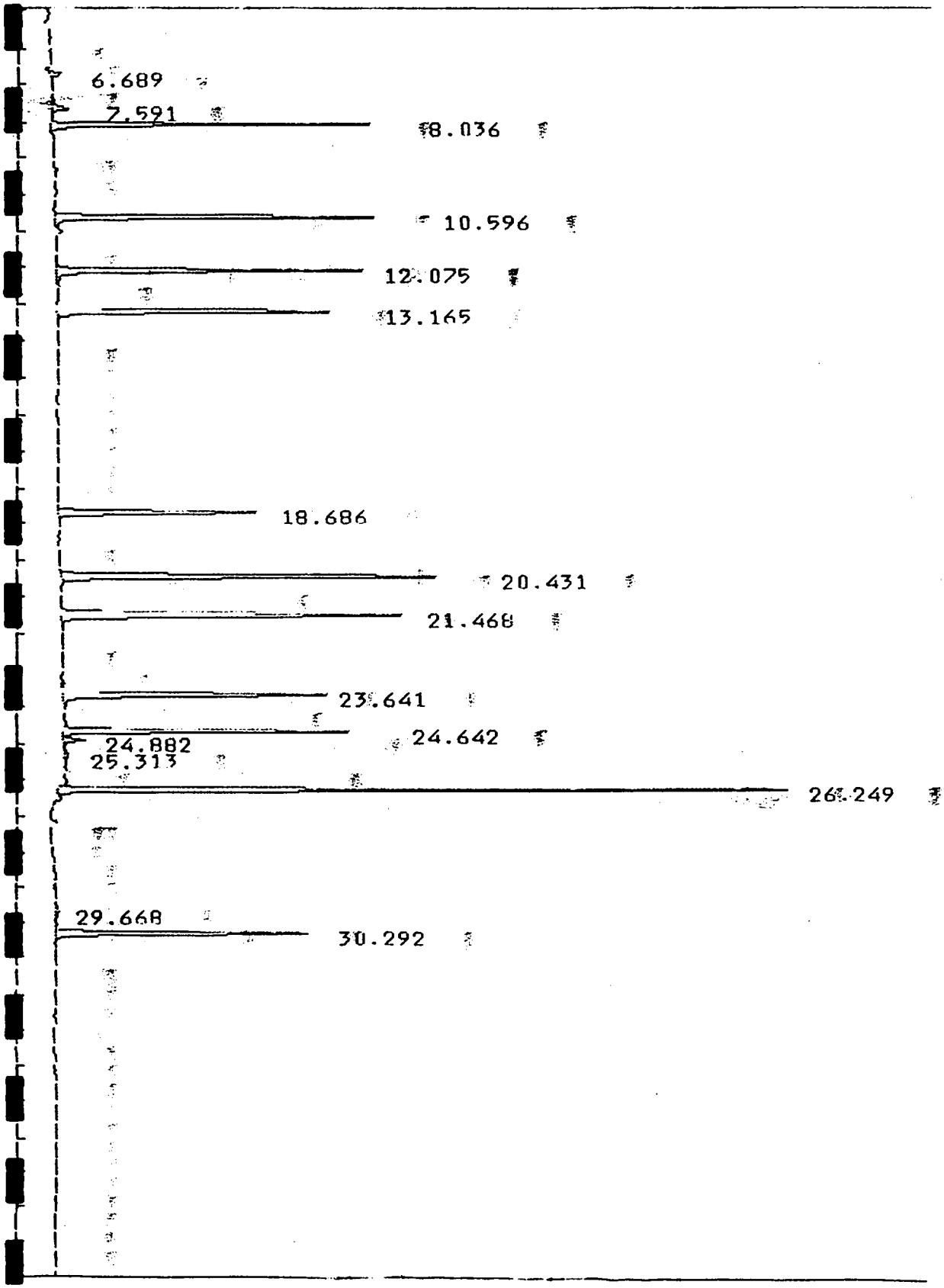
Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99.b/Bf8081.m
Sample Info : CHLOR L3
Lab ID : CHLOR L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 04:25 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: CHLORDANE Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Chlordane	12.932	12.932	0.000	586131	500.000	500.000
(2)	14.277	14.277	0.000	1059432	500.000	500.000
(3)	15.743	15.743	0.000	2149188	500.000	500.000
(4)	16.040	16.040	0.000	3507346	500.000	500.000
(5)	17.843	17.843	0.000	776455	500.000	500.000
(6)	15.285	15.285	0.000	366051	500.000	500.000

Average of peak concentrations: 500.00

IEA Pesticide Standard Report

Sample Name : INDA L3 Inj:0917 24Nov1999
Result : /DATA/LOOP/RESULT/D4AS01J 020.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDA L3 Report No : 558.01
Result File : /DATA/LOOP/RESULT/D4AS01J 020.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP5890A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 0917 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
Subseq/Sample : 1/ 20 Bottle no. : 20

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

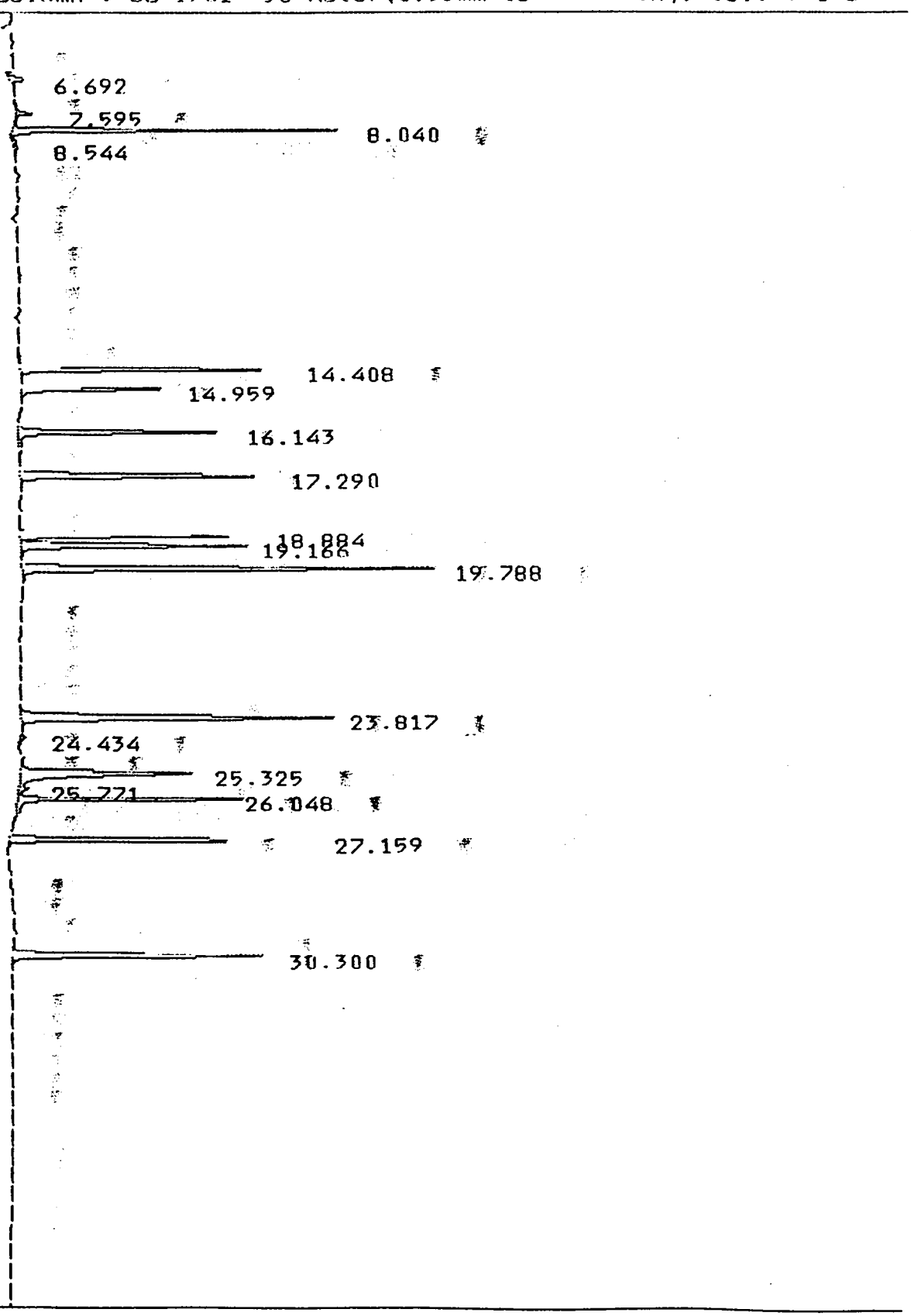
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.69		0.000000	21713	PB	0.0000	
2	7.59		0.000000	23534	VB	0.0000	
3	8.04	7.99	0.000000	364530	BB	20.0083	TCX
4	10.60	10.54	0.000000	417839	BV	20.1933	A-BHC
5	12.07		0.000000	414405	BV	0.0000	
6	13.17		0.000000	430667	BV	0.0000	
7	18.69	18.61	0.000000	337387	PV	19.7684	ENDOSULFAN 1
8	20.43		0.000000	667890	PB	0.0000	
9	21.47	21.39	0.000000	591932	BV	39.1930	ENDRIN
10	23.64	23.57	0.000000	483313	BV	37.9873	4,4' DDD
11	24.64	24.58	0.000000	436873	VV	39.0763	4,4' DDT
12	24.88		0.000000	31139	PV	0.0000	
13	25.31	25.30	0.000000	10991	BV	1.2011	ENDRIN ALDEHYDE
14	26.25	26.22	0.000000	778091	VV	199.6131	METHOXYCHLOR
15	29.67		0.000000	17355	VB	0.0000	
16	30.29	#30.23	0.000000	427031	FF	40.0855	DCB

Total Area : 5454691 Total ng inj : 417.126

Report Time : 1044 24Nov1999
Method : /DATA/LOOP/METHOD/HP5890AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01J 020.RES

IEA Pesticide Standard Report

Sample Name : INDB L3 Inj:1005 24Nov1999
Result : /DATA/LOOP/RESULT/D4AS01J 021.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDB L3 Report No :359.01
Result File : /DATA/LOOP/RESULT/D4AS01J 021.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1005 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
Subseq/Sample : 1/ 21 Bottle no. : 21

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

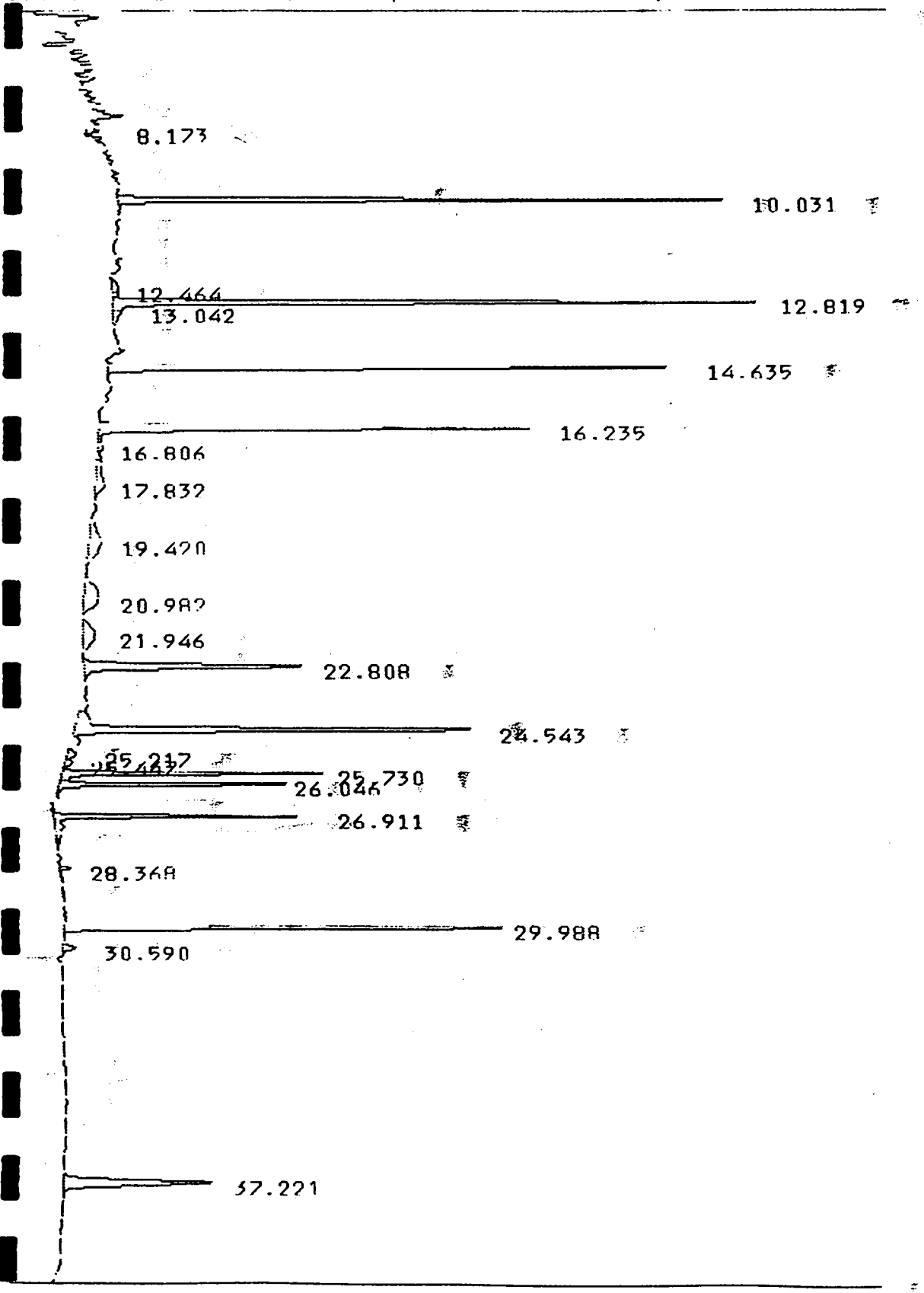
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.69		0.000000	25356	BV	0.0000	
2	7.59		0.000000	23312	BB	0.0000	
3	8.04	7.99	0.000000	360495	BB	19.7868	TCX
4	8.54		0.000000	14564	BB	0.0000	
5	14.41		0.000000	365815	BB	0.0000	
6	14.96	14.90	0.000000	220187	PB	19.3079	B-BHC
7	16.14		0.000000	328653	BV	0.0000	
8	17.29	17.21	0.000000	382572	VB	19.0876	HEPTACHLOR EPOXIDE
9	18.88		0.000000	361891	BV	0.0000	
10	19.17		0.000000	389260	VV	0.0000	
11	19.79	19.71	0.000000	680772	VV	38.1001	4,4' DDE
12	23.82		0.000000	585762	BB	0.0000	
13	24.43		0.000000	11446	BV	0.0000	
14	25.33	25.30	0.000000	373957	BV	40.8679	ENDRIN ALDEHYDE
15	25.77		0.000000	16953	VV	0.0000	
16	26.05	26.02	0.000000	321555	VB	37.4727	ENDOSULFAN SULFATE
17	27.16	27.12	0.000000	312957	BV	39.3262	ENDRIN KETONE
18	30.30	#30.23	0.000000	419082	FF	39.3394	DCB

Total Area : 5194591 Total ng inj : 253.289

Report Time : 1131 24Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01J 021.RES

IEA Pesticide Standard Report

mple Name : INDA L3 Inj 0825 24Nov1999
esult : /DATA/LOOP/RESULT/D4RS01J 019.RES GC : HP58904B
olumn : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IFA Pesticide Standard Report

mple Name : INDA L3 Report No :355.00
sult File : /DATA/LOOP/RESULT/D4BS01J 019.RES
lumn Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
strument : HP58904B
lculation : ExternalSTD
n Time : 40.00 Mins. Injected on 0825 24Nov1999
quence File : /DATA/LOOP/SEQUENCE/S4BS01J.SEQ
hseq/Sample : 1/ 19 Bottle no. : 20

Dil-Fact
100.00

n Status : RunStatusOK

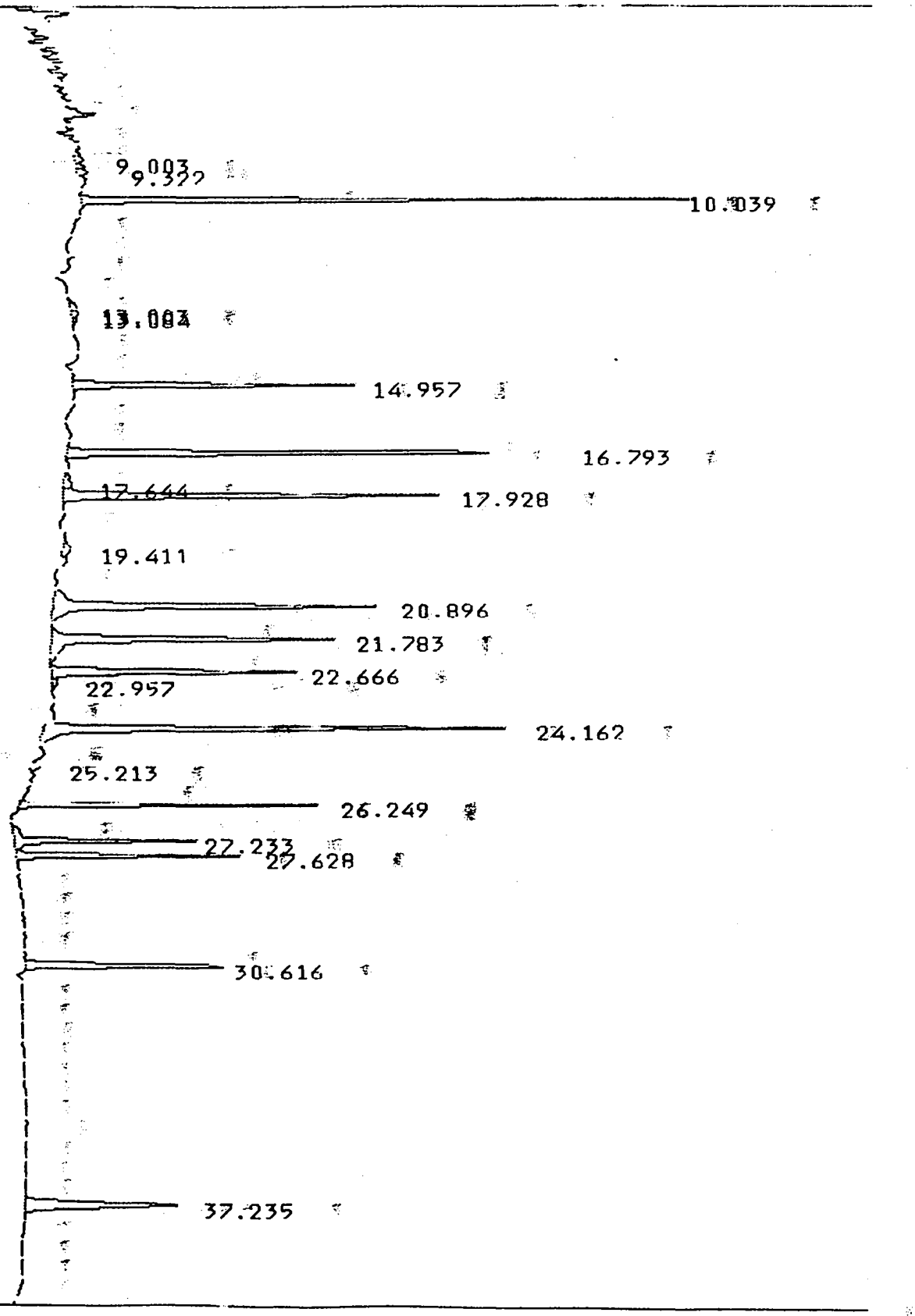
#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.17		.086658	10226	BV	0.0000	
2	10.03	#10.00	.079952	478620	PV	21.8998	TCX
3	12.46		.255790	15003	BV	0.0000	
4	12.82	12.78	.094653	635476	VV	22.8728	A-BHC
5	13.04		.234217	20932	VV	0.0000	
6	14.63	14.60	.099527	541432	BV	22.5578	G-BHC
7	16.24	16.19	.116470	486993	BV	23.2511	HEPTACHLOR
8	16.81		.222353	11553	VV	0.0000	
9	17.83	17.87	.562855	48224	VV	2.5862	ALDRIN
0	19.42		.704867	83783	BV	0.0000	
1	20.98		.672210	91426	PV	0.0000	
2	21.95		.629258	70591	PV	0.0000	
3	22.81	22.77	.127077	275619	PV	22.1167	ENDOSULFAN I
4	24.54	24.51	.119535	489666	VV	44.5962	DIELDRIN
5	25.22		.174590	14191	VV	0.0000	
6	25.45		.152538	11156	VV	0.0000	
7	25.73	25.72	.083661	213875	VV	41.9857	ENDRIN
8	26.05	26.03	.067783	189522	VB	44.1364	4,4' DDD
9	26.91	26.90	.089534	222470	BB	52.1496	4,4' DDT
0	28.37		.161602	17576	PV	0.0000	
1	29.99	29.99	.103074	478309	BV	230.0668	METHOXYCHLOR
2	30.59	30.59	.153947	17223	VB	3.6583	ENDRIN KETONE
3	37.22	37.24	.182808	262765	BB	44.7490	DCB

tal Area : 4686634 Total ng inj : 576.626

port Time : 0908 24Nov1999
thod : /DATA/LOOP/METHOD/HP58904BP.MTH
sult File : /DATA/LOOP/RESULT/D4BS01J 019.RES

IEA Pesticide Standard Report

Sample Name : INDB L3 Inj 0917 24Nov1999
Result : /DATA/LOOP/RESULT/D4BS01J 020.RES GC : HP5890B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDB L3 Report No : 356.00
Result File : /DATA/LOOP/RESULT/D4RS01J 020.RLS
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP589040
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 0917 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01J.SEQ
Subseq/Sample : 1/ 20 Bottle no. : 21

% Dil-Fact
100.00

Run Status : RunStatusOK

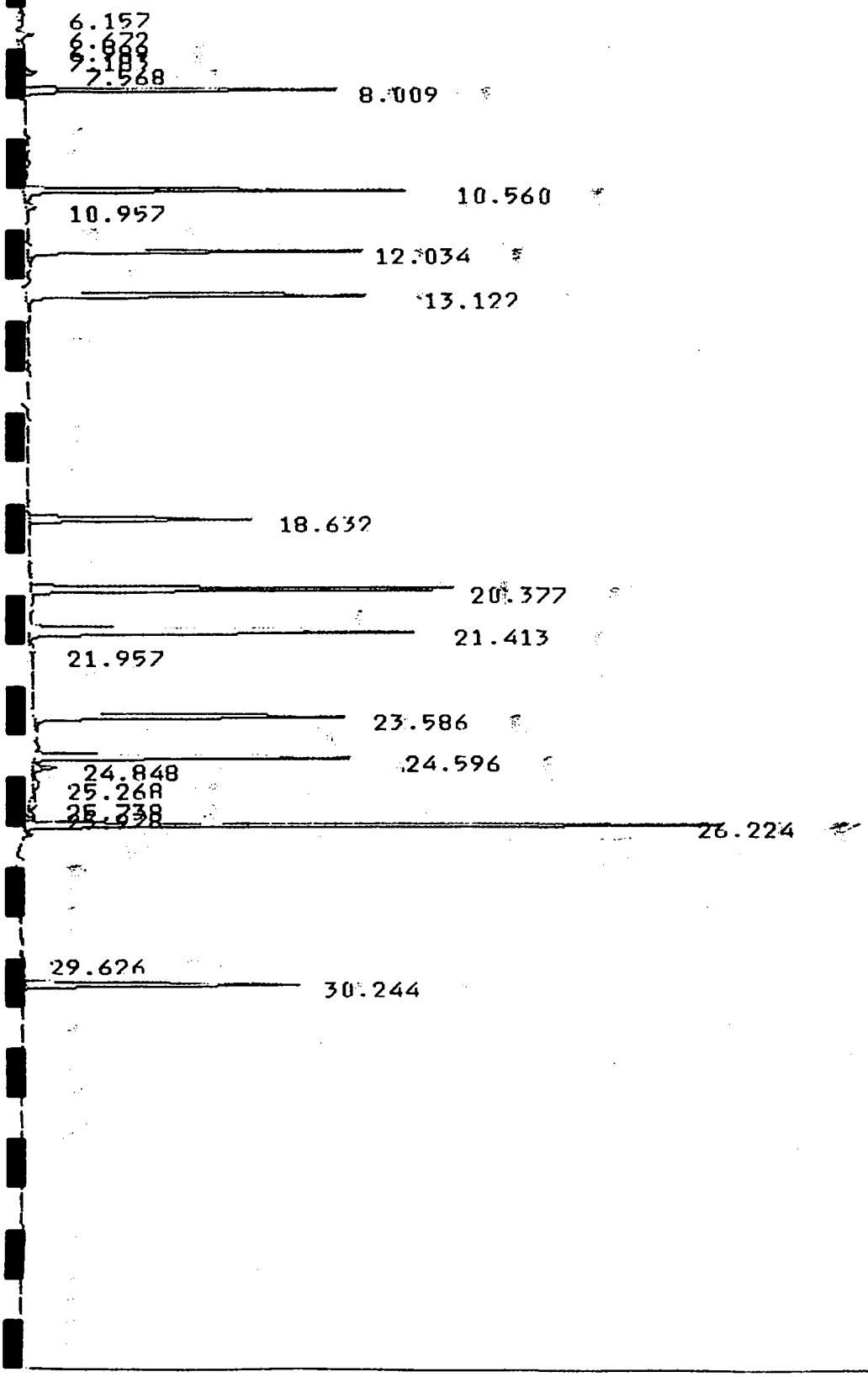
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.00		.122842	11263	VV	0.0000	
2	9.32		.114637	11400	VV	0.0000	
3	10.04	#10.00	.080287	477214	PV	21.8355	TCX
4	13.00		.238593	14875	BV	0.0000	
5	13.08		.220786	12757	VB	0.0000	
6	14.96	14.90	.097111	261895	PV	23.1889	B-BHC
7	16.79	16.74	.101758	452217	BV	23.9827	D-BHC
8	17.64		.281389	21360	VV	0.0000	
9	17.93	17.87	.122119	435724	VV	23.3670	ALDRIN
10	19.41		.271848	19005	BV	0.0000	
11	20.90	20.84	.143511	430514	PV	25.7654	HEPTACHLOR EPOXIDE
12	21.78	21.73	.141849	377225	PV	24.1966	G-CHLORDANE
13	22.67	22.61	.124090	284890	PV	23.4574	A-CHLORDANE
14	22.96		.213569	10597	VV	0.0000	
15	24.16	24.10	.136579	583971	VV	48.3580	4,4' DDE
16	25.21		.167456	12506	VV	0.0000	
17	26.25	26.22	.071523	209015	VV	45.1632	ENDOSULFAN II
18	27.23	27.21	.097286	175970	BV	47.8829	ENDRIN ALDEHYDE
19	27.63	27.60	.082345	177099	VV	42.5821	ENDOSULFAN SULFATE
20	30.62	30.59	.107272	213557	PB	45.3603	ENDRIN KETONE
21	37.23	37.24	.183565	257871	BB	43.9155	DCB

Total Area : 4450926 Total ng inj : 439.055

Report Time : 1000 24Nov1999
Method : /DATA/LOOP/METHOD/HP589040P.MTH
Result File : /DATA/LOOP/RESULT/D4RS01J 020.RES

IEA Pesticide Standard Report

Sample Name : INDA L3 Inj:2108 24Nov1999
Result : /DATA/LOOP/RESULT/D4A501J 034.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

ample Name : INDA L3 Report No :372.00
esult File : /DATA/LOOP/RESULT/D4AS01J 034.RES
olumn Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
nstrument : HP58904A
alculation : ExternalSTD
un Time : 40.00 Mins. Injected on 2108 24Nov1999
equence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
ubseq/Sample : 1/ 34 Bottle no. : 34

Dil-Fact
100.00

un Status : RunStatusOK

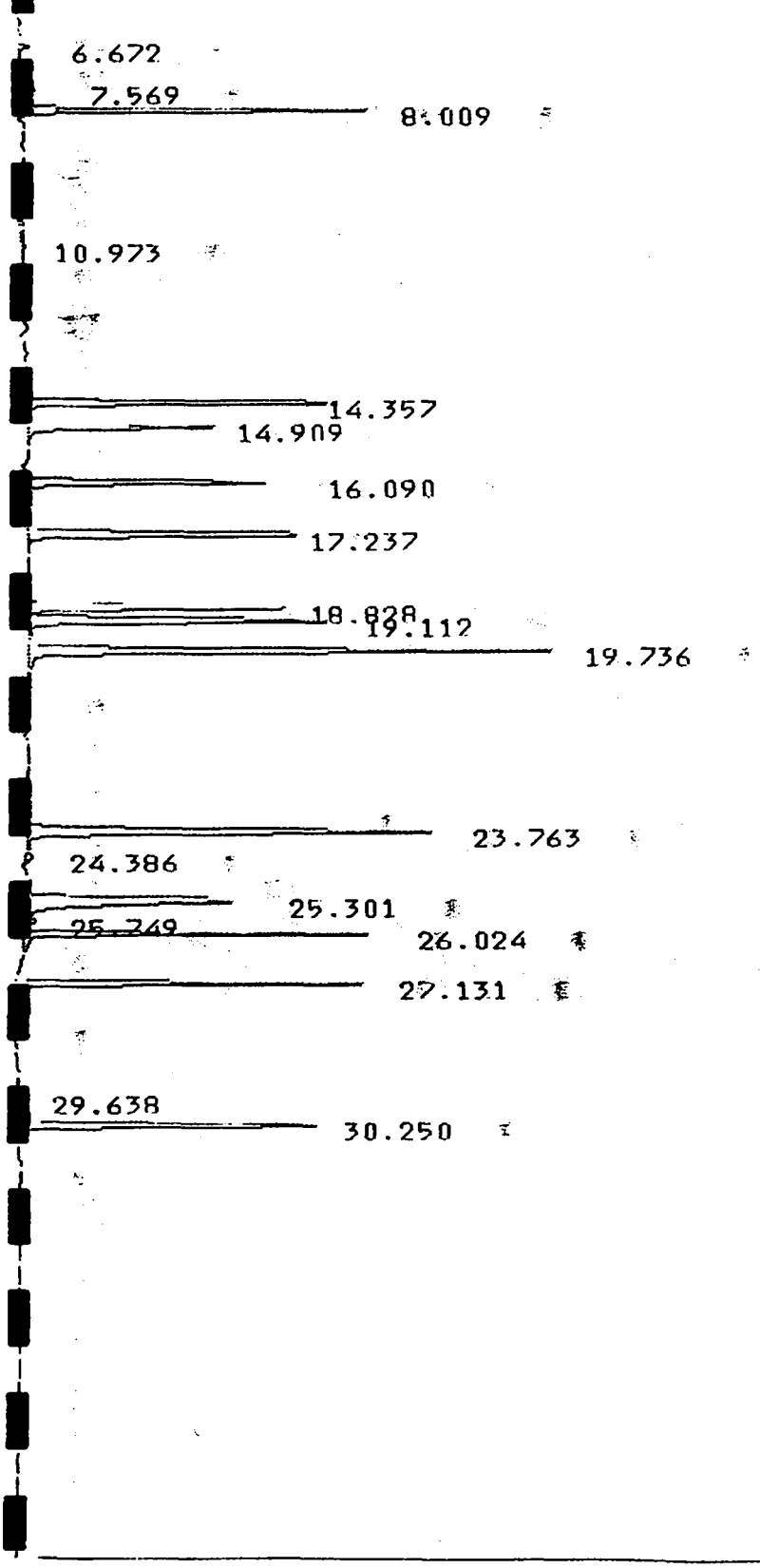
#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.16		.177987	12628	VV	0.0000	
2	6.67		.144678	36081	PV	0.0000	
3	6.99		.209823	15357	VV	0.0000	
4	7.18		.203003	11045	VV	0.0000	
5	7.57		.119964	28985	VB	0.0000	
6	8.01	7.99	.067052	377003	BV	20.6929	TCX
7	10.56	10.54	.078500	453939	BV	21.9379	A-BHC
8	10.96		.102451	13323	VV	0.0000	
9	12.03	12.01	.085381	431985	BV	20.9153	G-BHC
10	13.12	13.09	.093018	473865	BV	19.8894	HEPTACHLOR
11	18.63	18.61	.104460	336977	BV	19.7444	ENDOSULFAN 1
12	20.38	20.35	.107414	698789	PB	40.4860	DIELDRIN
13	21.41	21.39	.112107	621891	BV	41.1767	ENDRIN
14	21.96		.257515	10445	PV	0.0000	
15	23.59	23.57	.115020	508697	BV	39.9825	4,4' DDD
16	24.60	24.58	.091350	434091	VV	38.8275	4,4' DDT
17	24.85		.089045	35377	PV	0.0000	
18	25.27	25.30	.195945	16437	BV	1.7963	ENDRIN ALDEHYDE
19	25.74		.169567	19980	VV	0.0000	
20	25.98	26.02	.115079	10018	VV	1.1675	ENDOSULFAN SULFATE
21	26.22	26.22	.064202	791036	VV	202.9341	METHOXYCHLOR
22	29.63		.386889	16386	BB	0.0000	
23	30.24	#30.23	.106499	422544	BB	39.6644	DCB

otal Area : 5776881 Total ng inj : 509.215

eport Time : 2149 24Nov1999
ethod : /DATA/LOOP/METHOD/HP58904AP.MTH
esult File : /DATA/LOOP/RESULT/D4AS01J 034.RES

IEA Pesticide Standard Report

mple Name : INDB L3 Inj:2156 24Nov1999
esult : /DATA/LOOP/RESULT/D4AS01J 035.RES GC: HP58904A
olumn : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

ample Name : INDB L3 Report No :373.00
esult File : /DATA/LOOP/RESULT/D4AS01J 035.RES
lumn Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
nstrument : HP58904A
alculation : ExternalSTD
n Time : 40.00 Mins. Injected on 2156 24Nov1999
equence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
uhseq/Sample : 1/ 35 Bottle no. : 35

Dil-Fact
100.00

n Status : RunStatusOK

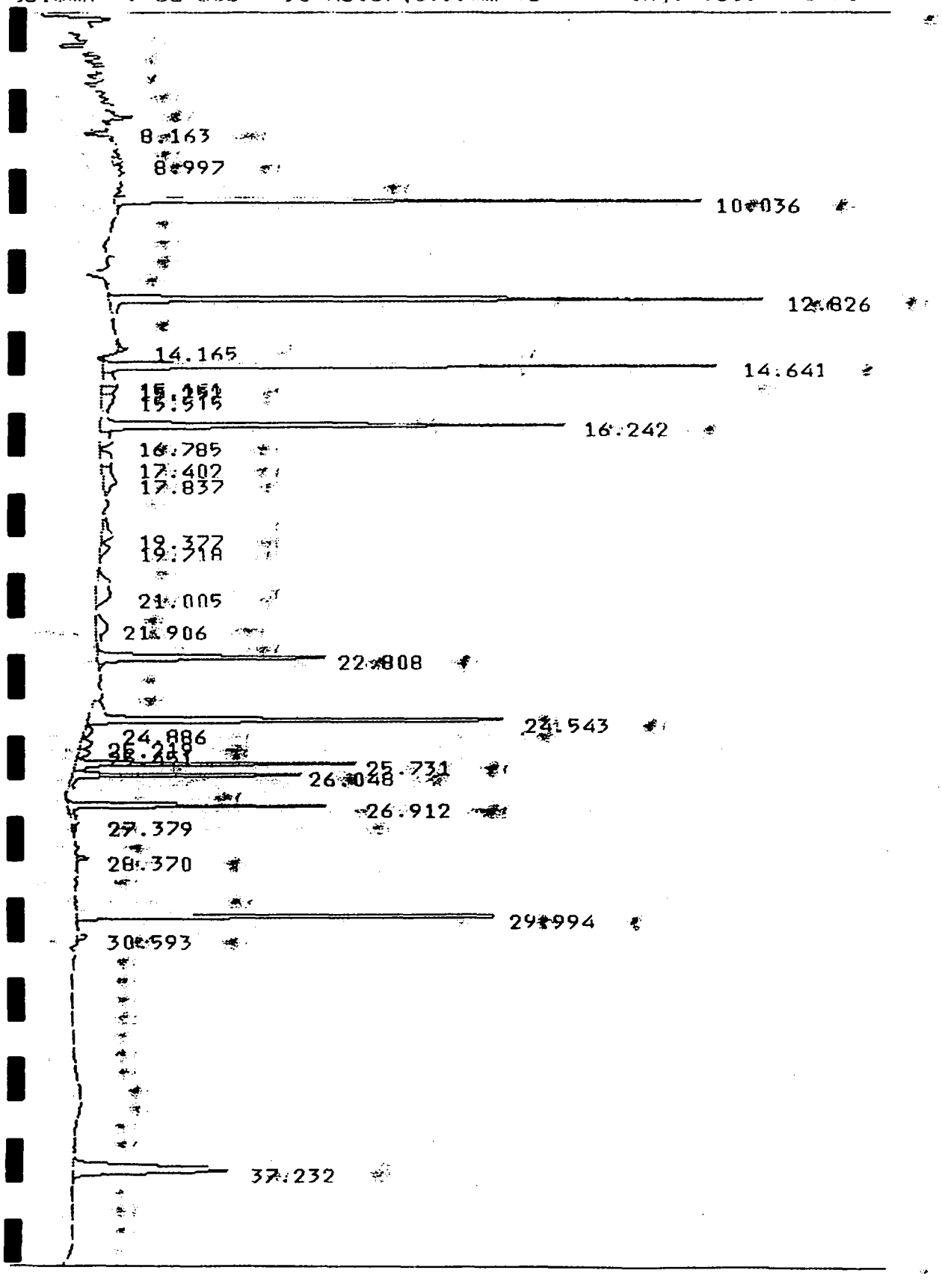
#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.67		.102546	18890	PB	0.0000	
2	7.57		.082469	19760	BB	0.0000	
3	8.01	7.99	.066903	369060	BV	20.2569	TCX
4	10.97		.974142	22615	BV	0.0000	
5	14.36	14.32	.092493	389634	BV	20.1778	ALDRIN
6	14.91	14.90	.098048	229100	BB	20.0894	B-BHC
7	16.09	16.07	.103242	342352	BB	21.8462	D-BHC
8	17.24	17.21	.104614	402741	BB	20.0938	HEPTACHLOR EPOXIDE
9	18.83	18.80	.106182	380940	BV	19.1322	G-CHLORDANE
10	19.11	19.08	.111958	419717	VV	19.5163	A-CHLORDANE
11	19.74	19.71	.110720	731334	VB	40.9299	4,4' DDE
12	23.76	23.73	.122470	612277	PB	40.3371	ENDOSULFAN II
13	24.39		.185669	14331	BV	0.0000	
14	25.30	25.30	.139853	382392	BV	41.7897	ENDRIN ALDEHYDE
15	25.75		.114727	15451	VV	0.0000	
16	26.02	26.02	.065421	325621	VB	37.9466	ENDOSULFAN SULFATE
17	27.13	27.12	.070298	321562	BV	40.4075	ENDRIN KETONE
18	29.64		.530069	25893	BB	0.0000	
19	30.25	#30.23	.103697	402108	BB	37.7460	DCB

tal Area : 5425778 Total ng inj : 380.269

port Time : 2237 24Nov1999
thod : /DATA/LOOP/METHOD/HP58904AP.MTH
esult File : /DATA/LOOP/RESULT/D4AS01J 035.RES

ICA Pesticide Standard Report

Sample Name : INDA L3 Inj 2020 24Nov1999
Result : /DATA/LOOP/RESULT/D4RS01J 033.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

ample Name : INDA L3 Report No :369.00
esult File : /DATA/LOOP/RESULT/D4BS01J 033.RES
olumn Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
nstrument : HP58904B
alculation : ExternalSTD
un Time : 40.00 Mins. Injected on 2020 24Nov1999
equence File : /DATA/LOOP/SEQUENCE/S4BS01J.SEQ
uhseq/Sample : 1/ 33 Bottle no. : 34

Dil-Fact
100.00

un Status : RunStatusOK
EndOffBaseline

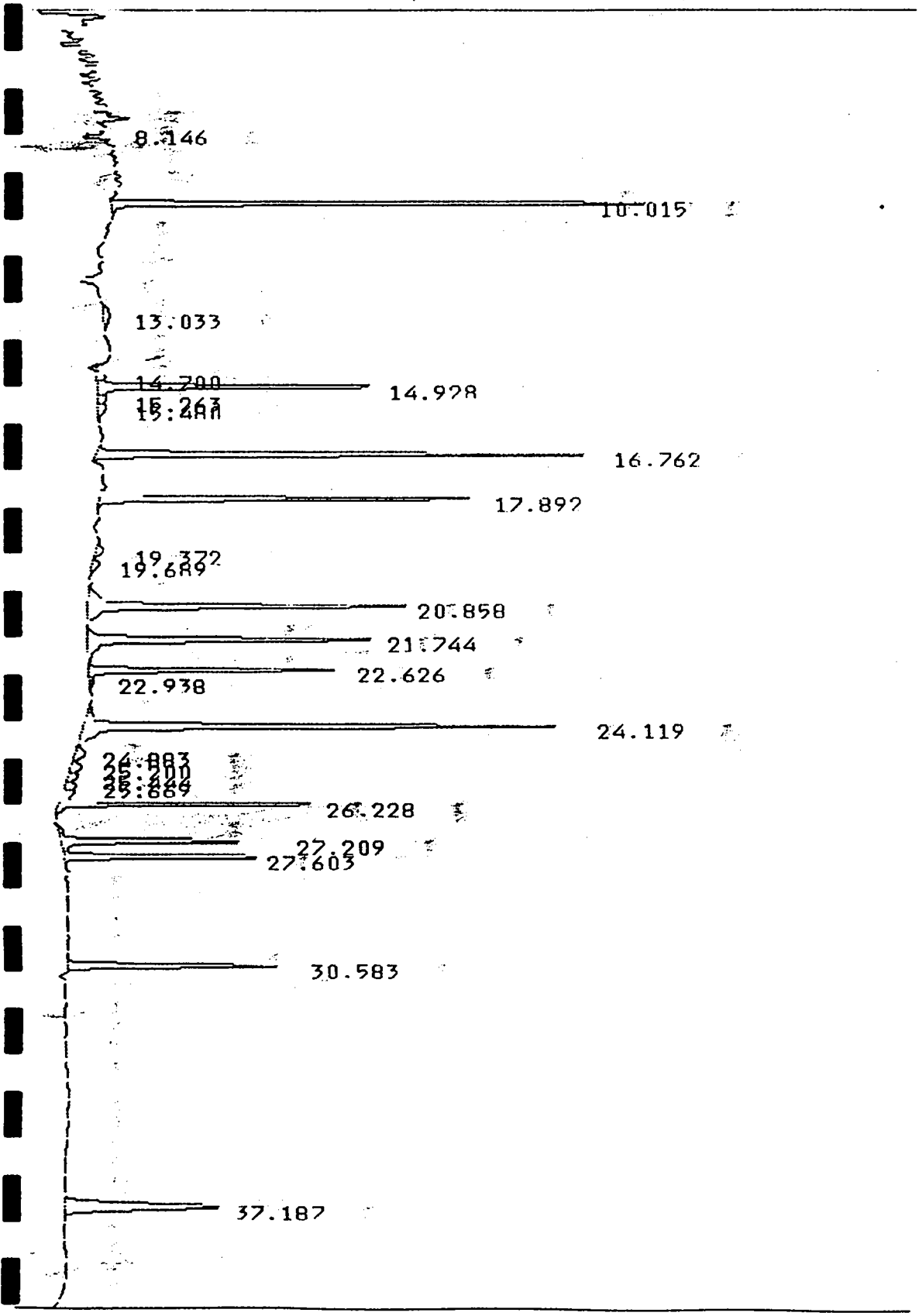
k#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.16		.086502	10978	BV	0.0000	
2	9.00		.119437	10678	VV	0.0000	
3	10.04	#10.00	.080539	476919	PV	21.8220	TCX
4	12.83	12.78	.095936	699804	BV	25.1882	A-BHC
5	14.17		.131988	14726	BB	0.0000	
6	14.64	14.60	.102654	618429	BV	25.7657	G-BHC
7	15.15		.251547	38959	VV	0.0000	
8	15.25		.199149	29153	VV	0.0000	
9	15.51		.336589	42632	VV	0.0000	
10	16.24	16.19	.120494	552626	VV	26.3846	HEPTACHLOR
11	16.78	16.74	.190432	22416	VV	1.1888	D-BHC
12	17.40		.422012	39533	PV	0.0000	
13	17.84	17.87	.519581	64408	VV	3.4540	ALDRIN
14	19.38		.374463	35725	BV	0.0000	
15	19.72		.281074	22102	VV	0.0000	
16	21.01		.661243	89210	VV	0.0000	
17	21.91		.541962	59787	PV	0.0000	
18	22.81	22.77	.126568	293516	PV	23.5528	ENDOSULFAN I
19	24.54	24.51	.118369	518982	VV	47.2661	DIELDRIN
20	24.89		.253161	19053	VV	0.0000	
21	25.22		.187495	19254	VV	0.0000	
22	25.45		.166871	17156	VV	0.0000	
23	25.73	25.72	.076769	240854	VV	47.2817	ENDRIN
24	26.05	26.03	.071616	212032	VB	49.3785	4,4' DDD
25	26.91	26.90	.073451	197475	BV	46.2906	4,4' DDT
26	27.38		.315023	22941	VV	0.0000	
27	28.37		.085382	10793	PV	0.0000	
28	29.99	29.99	.100345	482270	BV	231.9719	METHOXYCHLOR
29	30.59	30.59	.159609	16027	VB	3.4041	ENDRIN KETONE
30	37.23	37.24	.184265	271614	BB	46.2558	DCB

otal Area : 5150050 Total ng inj : 599.205

eport Time : 2104 24Nov1999
ethod : /DATA/LOOP/METHOD/HP58904BP.MTH
esult File : /DATA/LOOP/RESULT/D4BS01J 033.RES

IEA Pesticide Standard Report

ample Name : INDB L3 Inj 2108 24Nov1999
esult : /DATA/LOOP/RESULT/D4BS01J 034.RES GC : HP5890A
olumn : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDB L3 Report No :370.00
Result File : /DATA/LOOP/RESULT/D4BS01J 034.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2108 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4BS01J.SEQ
Subseq/Sample : 1/ 34 Bottle no. : 35

% Dil-Fact
100.00

Run Status : RunStatusOK

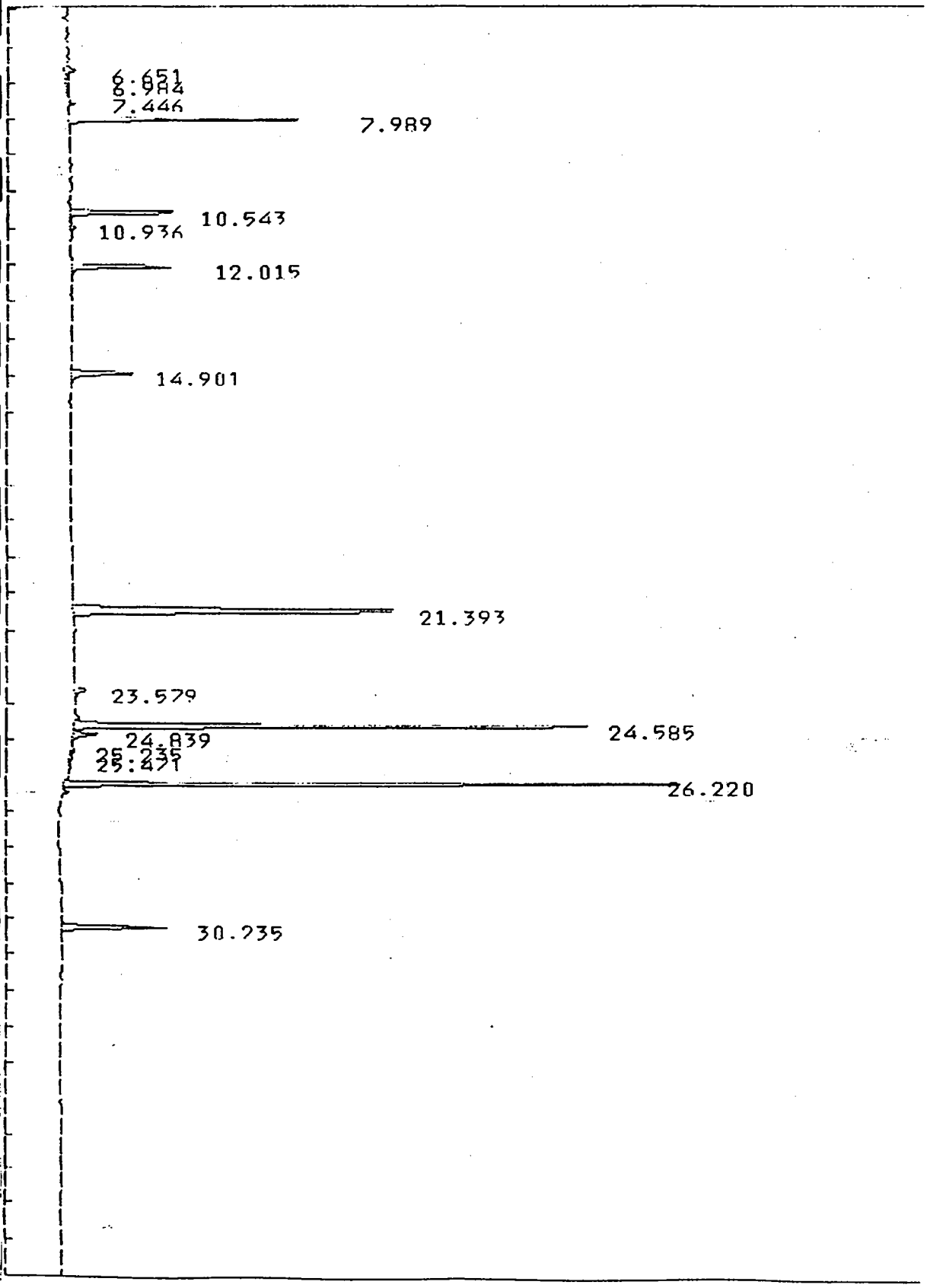
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.15		.090864	11540	BV	0.0000	
2	10.02	#10.00	.080911	475528	PV	21.7583	TCX
3	13.03		.429448	24428	BV	0.0000	
4	14.70		.167624	14374	BV	0.0000	
5	14.93	14.90	.105638	302973	VV	26.8260	B-BHC
6	15.26		.197356	15665	VV	0.0000	
7	15.48		.240160	20364	VV	0.0000	
8	16.76	16.74	.101341	467678	BV	24.8026	D-BHC
9	17.89	17.87	.120653	440175	VV	23.6057	ALDRIN
10	19.37		.201079	14019	BV	0.0000	
11	19.69		.250647	16475	PV	0.0000	
12	20.86	20.84	.142351	439786	VV	26.3203	HEPTACHLOR EPOXIDE
13	21.74	21.73	.135053	363925	PV	23.3455	G-CHLORDANE
14	22.63	22.61	.124570	290622	PV	23.9294	A-CHLORDANE
15	22.94		.225650	10212	VV	0.0000	
16	24.12	24.10	.138804	611535	BV	50.6406	4,4' DDE
17	24.88		.265873	23134	VV	0.0000	
18	25.20		.197522	19967	VV	0.0000	
19	25.44		.169892	16051	VV	0.0000	
20	25.67	25.72	.209774	20933	VV	4.1093	ENDRIN
21	26.23	26.22	.076185	230864	VV	49.8842	ENDOSULFAN II
22	27.21	27.21	.091602	176106	BV	47.9201	ENDRIN ALDEHYDE
23	27.60	27.60	.080817	185899	VV	44.6978	ENDOSULFAN SULFATE
24	30.58	30.59	.108751	219510	PB	46.6248	ENDRIN KETONE
25	37.19	37.24	.183705	259214	BB	44.1442	DCB

Total Area : 4670979 Total ng inj : 458.607

Report Time : 2152 24Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4BS01J 034.RES

IEA Pesticide Standard Report

Sample Name : EVAL B Inj:1648 09Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 005.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : EVAL B Report No : 32.00
Result File : /DATA/LOOP/RESULT/D4AS01C 005.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1648 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 5 Bottle no. : 5

% Dil-Fact
100.00

Run Status : RunStatusOK

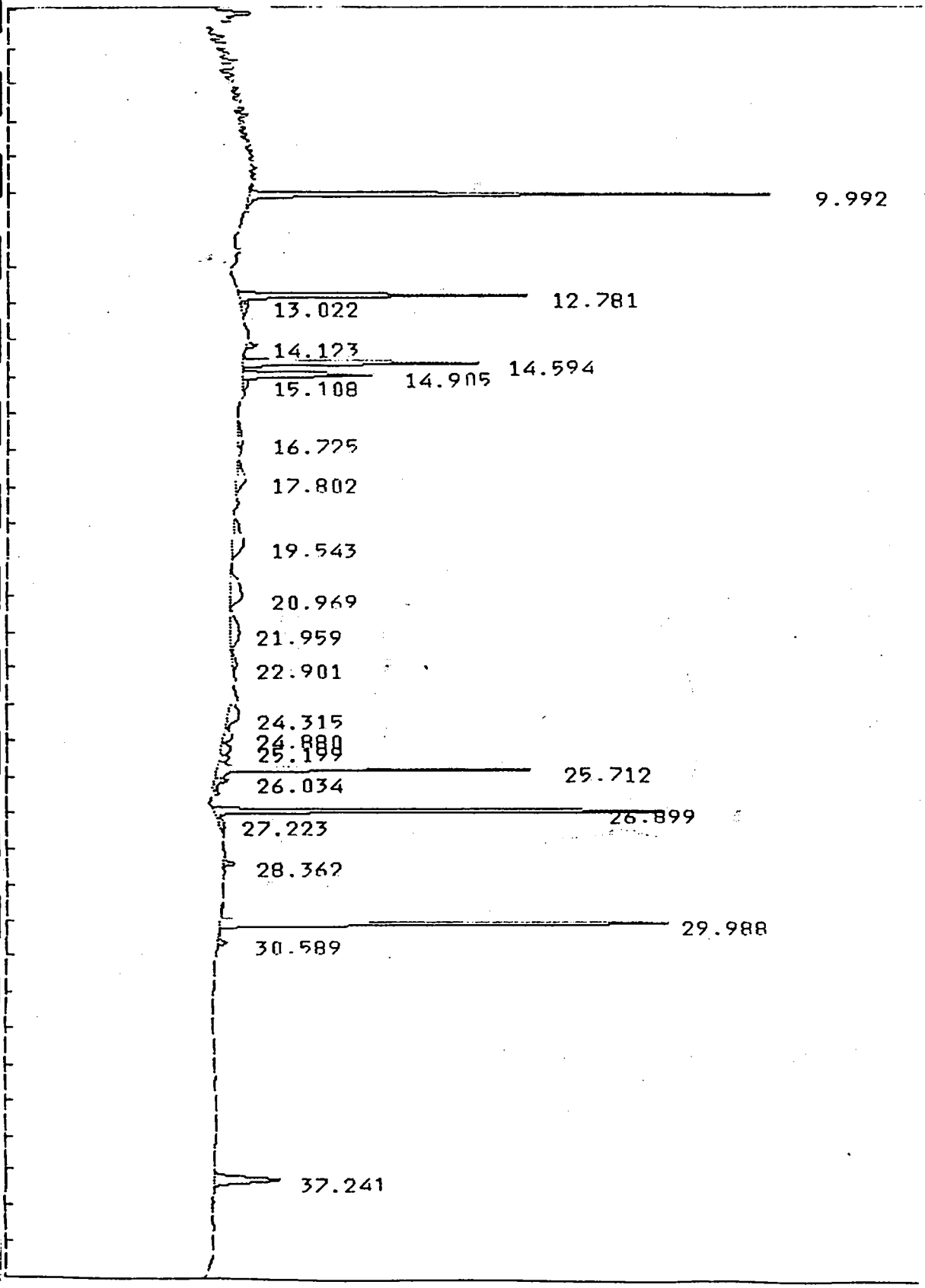
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.65		.147118	36663	PV	0.0000	
2	6.98		.195388	11528	VV	0.0000	
3	7.45		.286051	11417	VV	0.0000	
4	7.99	8.01	.066600	355194	BV	20.3064	TCX
5	10.54	10.57	.076348	191817	BV	9.2341	A-BHC
6	10.94		.093021	11127	VB	0.0000	
7	12.01	12.04	.086144	202505	VV	9.5299	G-BHC
8	14.90	14.93	.102801	132549	BV	11.0639	B-BHC
9	21.39	21.43	.112294	786981	BV	48.9021	ENDRIN
10	23.58	23.61	.150553	31710	BB	2.3580	4,4' DDD
11	24.58	24.61	.095622	1124228	VV	92.6586	4,4' DDT
12	24.84		.087180	43977	VB	0.0000	
13	25.24		.187330	10467	BV	0.0000	
14	25.47		.165162	11472	VV	0.0000	
15	26.22	26.24	.064266	947433	VV	210.7746	METHOXYCHLOR
16	30.24	#30.26	.105189	229148	BB	17.8952	DCB

Total Area : 4138218 Total ng inj : 422.723

Report Time : 1729 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 005.RES

IEA Pesticide Standard Report

Sample Name : EVAL B Inj 1600 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 004.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : EVAL B Report No : 31.00
Result File : /DATA/LOOP/RESULT/D4RS01C 004.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP589040
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1600 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 4 Bottle no. : 5

% Dil-Fact
100.00

Run Status : RunStatusOK

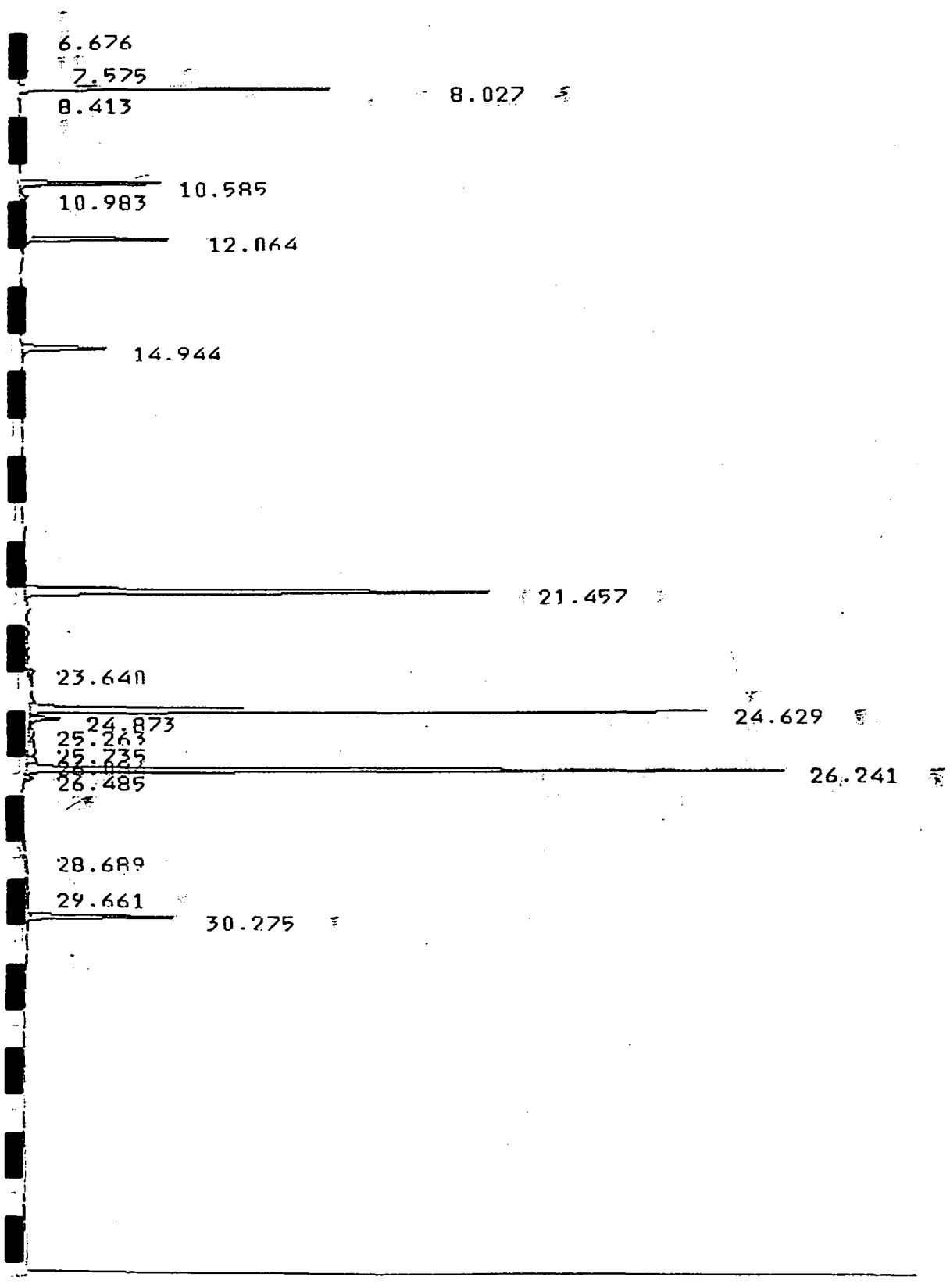
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.01	.082038	445556	BB	.0863	TCX
2	12.78	12.76	.093367	277951	BV	.0432	A-BHC
3	13.02		.212144	15172	VV	0.0000	
4	14.12		.092391	10182	PB	0.0000	
5	14.59	14.57	.096732	234628	BV	.0399	G-BHC
6	14.90	14.91	.097431	129407	PV	.0445	B-BHC
7	15.11		.189247	10385	VV	0.0000	
8	16.73	16.74	.425814	21310	BV	.0044	D-BHC
9	17.80	17.84	.507405	47510	VV	.0100	ALDRIN
10	19.54		.675108	73119	BV	0.0000	
11	20.97		.571260	64108	VV	0.0000	
12	21.96		.668908	55147	PV	0.0000	
13	22.90		.396675	14072	PV	0.0000	
14	24.32		.438195	49703	VV	0.0000	
15	24.88		.312284	25567	VV	0.0000	
16	25.20		.222003	21783	VV	0.0000	
17	25.71	25.68	.077856	261724	VV	.7626	ENDRIN
18	26.03	26.02	.164179	24917	VV	.0255	4,4' DDD
19	26.90	26.87	.074114	422487	BV	.4224	4,4' DDT
20	27.22	27.18	.213737	16550	VV	.0188	ENDRIN ALDEHYDE
21	28.36		.089223	11073	VV	0.0000	
22	29.99	29.94	.100978	506570	BV	.9450	METHOXYCHLOR
23	30.59	30.54	.118210	11304	PB	.0084	ENDRIN KETONE
24	37.24		.184483	119200	BB	0.0000	

Total Area : 2869425 Total ng inj : 1.911

Report Time : 1644 09Nov1999
Method : /DATA/LOOP/METHOD/HP589040P.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 004.RES

IEA Pesticide Standard Report

mple Name : EVAL B Inj:0825 24Nov1999
esult : /DATA/LNOP/RESULT/D4AS01J 019.RES GC: HP5890A
lumn : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

mple Name : EVAL B Report No :357.00
sult File : /DATA/LOOP/RESULT/D4AS01J 019.RES
lumn Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
strument : HP58904A
lculation : ExternalSTD
n Time : 40.00 Mins. Injected on 0825 24Nov1999
quence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
hseq/Sample : 1/ 19 Bottle no. : 19

Dil-Fact
100.00

n Status : RunStatusOK

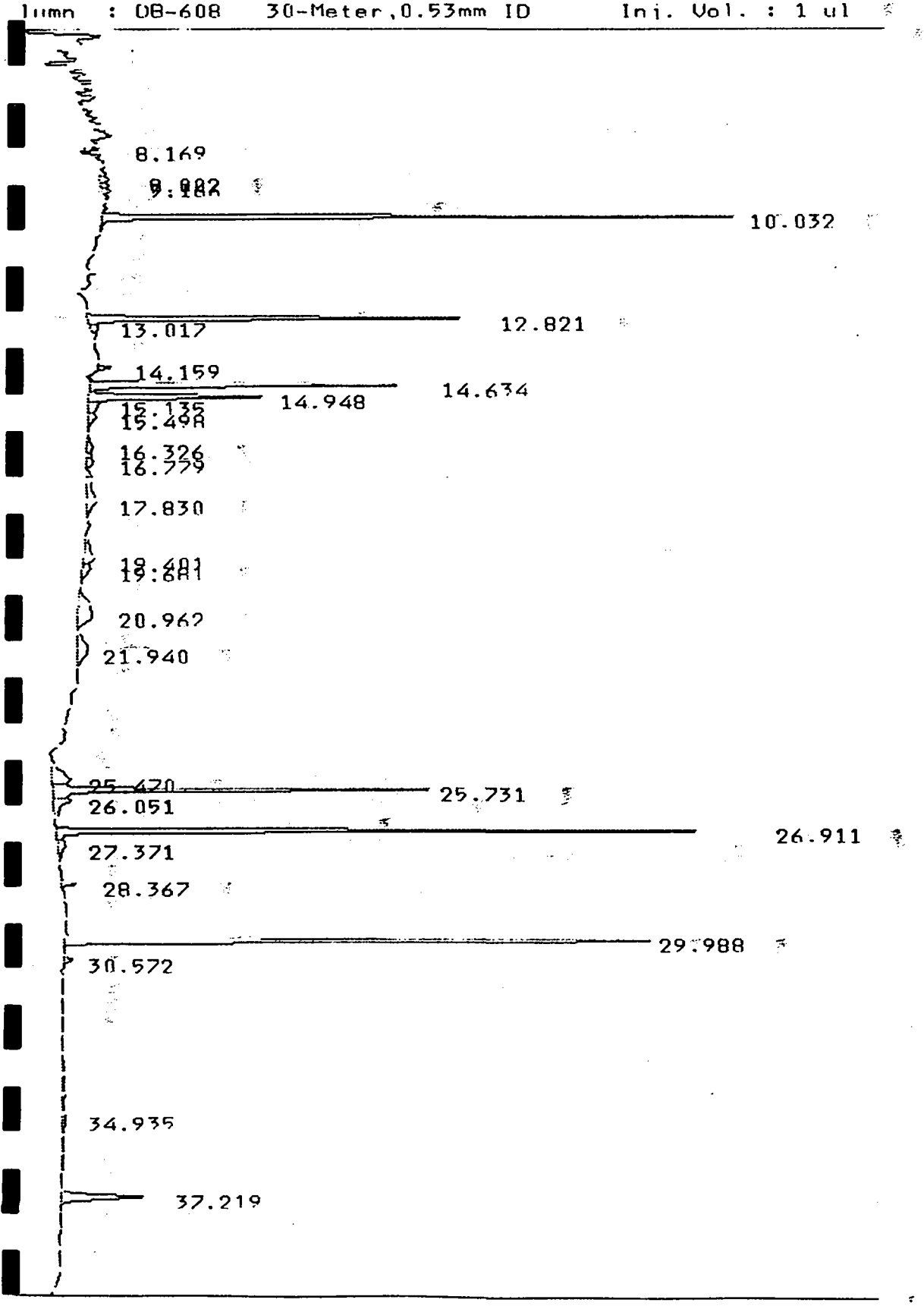
#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.68		.105923	25087	PB	0.0000	
2	7.57		.089892	17938	VB	0.0000	
3	8.03	7.99	.067524	387248	BV	21.2552	TCX
4	8.41		.187918	10310	BV	0.0000	
5	10.58	10.54	.077348	205840	BV	9.9478	A-BHC
6	10.98		.096131	12711	VB	0.0000	
7	12.06	12.01	.085575	207213	VV	10.0326	G-BHC
8	14.94	14.90	.100329	130374	BB	11.4323	B-BHC
9	21.46	21.39	.111168	796390	BV	52.7306	ENDRIN
0	23.64	23.57	.179388	20412	PV	1.6044	4,4' DDD
1	24.63	24.58	.091467	1100510	VV	98.4356	4,4' DDT
2	24.87		.084083	40531	PV	0.0000	
3	25.26	25.30	.219393	15684	BV	1.7140	ENDRIN ALDEHYDE
4	25.74		.286575	35837	VV	0.0000	
5	26.08	26.02	.185756	25586	VV	2.9817	ENDOSULFAN SULFATE
6	26.24	26.22	.063635	1003526	VV	257.4466	METHOXYCHLOR
7	26.48		.066573	11193	VB	0.0000	
8	28.69		.385580	12933	BV	0.0000	
9	29.66		.855807	23013	VB	0.0000	
0	30.27	#30.23	.101404	226197	PB	21.2332	DCB

tal Area : 4308531 Total ng inj : 488.814

hort Time : 0906 24Nov1999
thod : /DATA/LOOP/METHOD/HP58904AP.MTH
sult File : /DATA/LOOP/RESULT/D4AS01J 019.RES

IEA Pesticide Standard Report

mple Name : EVAL B Inj 0733 24Nov1999
sult : /DATA/LOOP/RESULT/D4BS01J 018.RES GC : HP58904A
lumn : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

mple Name : EVAL B Report No :354.00
sult File : /DATA/LOOP/RESULT/D4BS01J 018.RES
umn Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
strument : HP58904B
lculation : ExternalSTD
n Time : 40.00 Mins. Injected on 0733 24Nov1999
quence File : /DATA/LOOP/SEQUENCE/S4BS01J.SEQ
hseq/Sample : 1/ 18 Bottle no. : 19

Dil-Fact
100.00

n Status : RunStatusOK

#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.17		.085764	10435	BV	0.0000	
2	9.00		.115872	10506	VV	0.0000	
3	9.17		.116239	10387	VV	0.0000	
4	10.03	#10.00	.080617	503574	PV	23.0416	TCX
5	12.82	12.78	.093773	341564	VV	12.2940	A-BHC
6	13.02		.191412	15793	VV	0.0000	
7	14.16		.086224	11219	VB	0.0000	
8	14.63	14.60	.098440	297882	BV	12.4107	G-BHC
9	14.95	14.90	.101138	168816	VV	14.9474	B-BHC
10	15.13		.227582	25666	VV	0.0000	
11	15.50		.207839	16996	VV	0.0000	
12	16.33		.292159	16464	PV	0.0000	
13	16.78	16.74	.202406	12474	VV	.6615	D-BHC
14	17.83	17.87	.617947	52469	VV	2.8138	ALDRIN
15	19.40		.398559	38783	BV	0.0000	
16	19.68		.282908	22090	VV	0.0000	
17	20.96		.661295	85816	VV	0.0000	
18	21.94		.592461	57622	PV	0.0000	
19	25.47		.357000	60839	PV	0.0000	
20	25.73	25.72	.080643	332839	VV	65.3394	ENDRIN
21	26.05	26.03	.247550	45651	VV	10.6314	4,4' DDD
22	26.91	26.90	.073496	485285	BV	113.7567	4,4' DDT
23	27.37		.337314	27081	VB	0.0000	
24	28.37		.082912	12329	PV	0.0000	
25	29.99	29.99	.101098	629080	VV	302.5876	METHOXYCHLOR
26	30.57	30.59	.147813	11445	VB	2.4309	ENDRIN KETONE
27	34.93		1.940251	53275	BB	0.0000	
28	37.22	37.24	.180794	141828	BB	24.1533	DCB

tal Area : 3498210 Total ng inj : 585.068

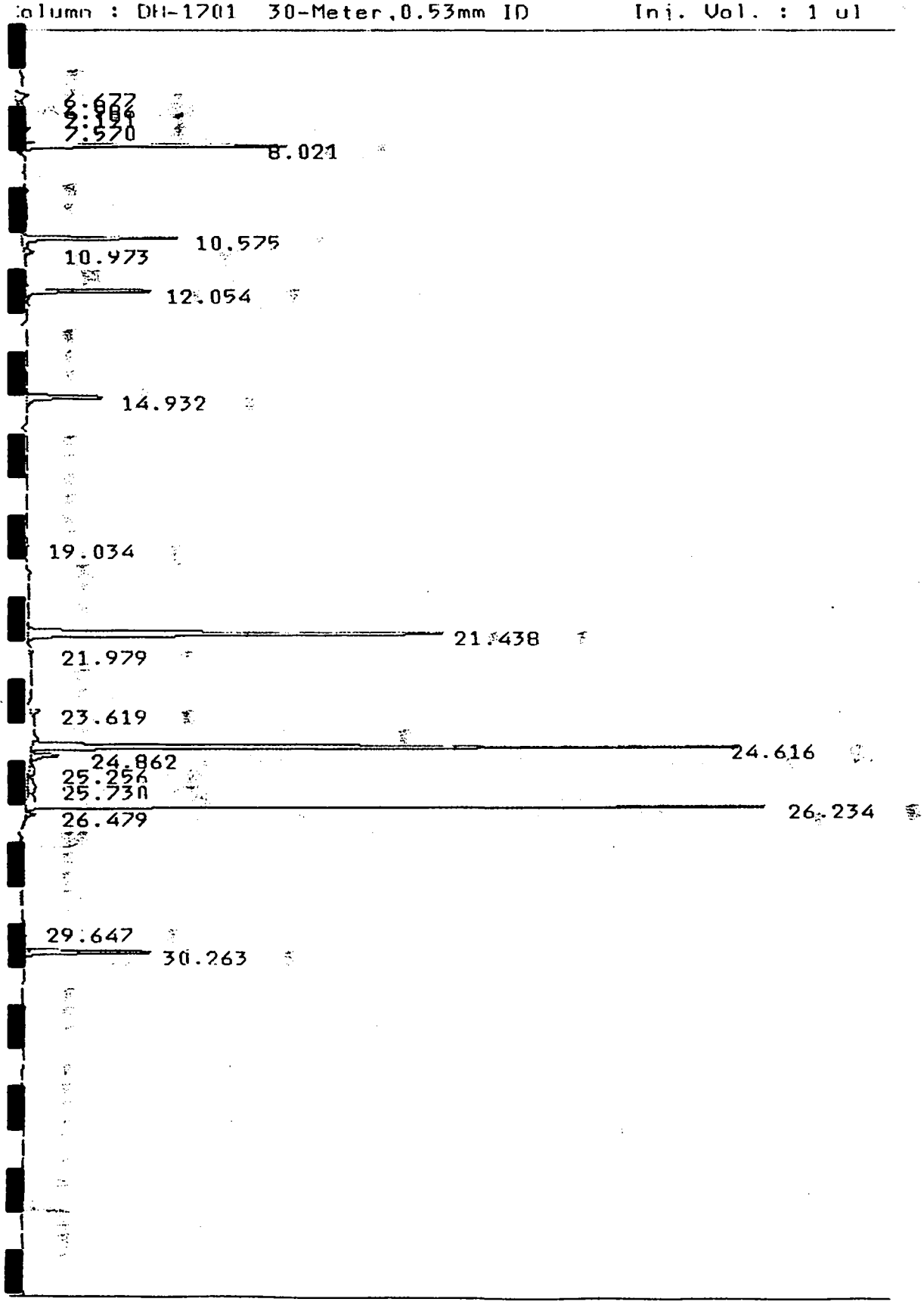
port Time : 0816 24Nov1999
thod : /DATA/LOOP/METHOD/HP58904BP.MTH
sult File : /DATA/LOOP/RESULT/D4BS01J 018.RES

(EA Pesticide Standard Report

ample Name : EVAL B Inj:2020 24Nov1999

[illegible]04A5011J 033.RES GC: HP58904A

olumn : DH-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

ample Name : EVAL B Report No :371.00
esult File : /DATA/LOOP/RESULT/D4AS01J 033.RES
lumn Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
strument : HP58904A
alculation : ExternalSTD
n Time : 40.00 Mins. Injected on 2020 24Nov1999
quence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
ubseq/Sample : 1/ 33 Bottle no. : 33

Dil-Fact
100.00

n Status : RunStatusOK
EndOffBaseline

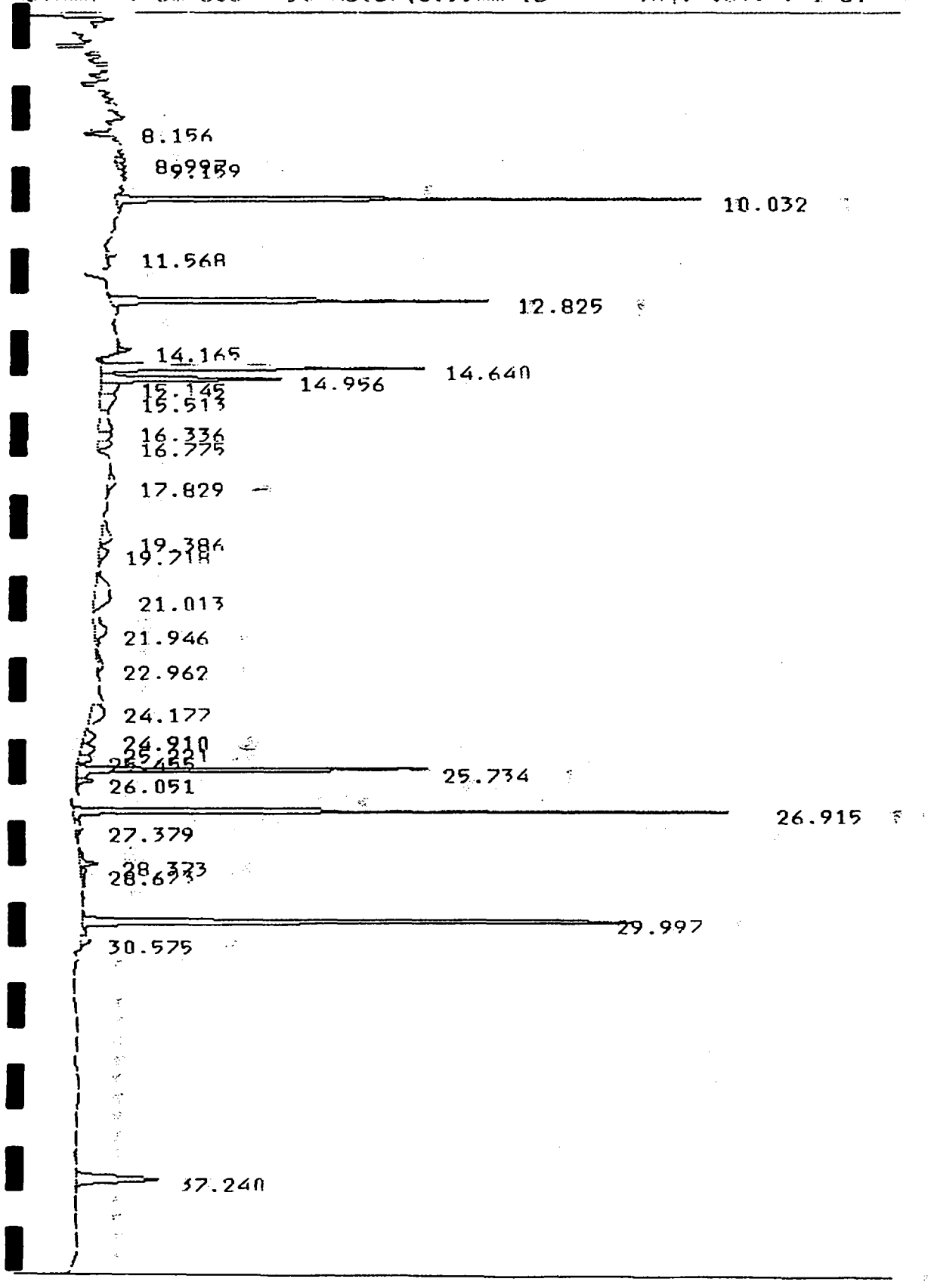
#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.68		.163253	39650	PV	0.0000	
2	6.99		.119909	10734	VV	0.0000	
3	7.19		.226704	15146	VV	0.0000	
4	7.57		.073685	11046	VB	0.0000	
5	8.02	7.99	.067923	385878	BV	21.1800	TCX
6	10.58	10.54	.081992	218448	BV	10.5571	A-BHC
7	10.97		.113857	16646	VB	0.0000	
8	12.05	12.01	.086277	211713	PV	10.2505	G-BHC
9	14.93	14.90	.100870	131919	BB	11.5678	B-BHC
0	19.03	19.08	.396030	21787	PV	1.0131	A-CHLORDANE
11	21.44	21.39	.113341	797604	BV	52.8110	ENDRIN
12	21.98		.181654	11304	PB	0.0000	
3	23.62	23.57	.109406	15165	BV	1.1919	4,4' DDD
4	24.62	24.58	.092412	1061807	VV	94.9738	4,4' DDT
15	24.86		.090165	42476	PV	0.0000	
16	25.26	25.30	.217313	19794	BV	2.1632	ENDRIN ALDEHYDE
7	25.73		.320798	40194	PV	0.0000	
18	26.23	26.22	.064701	995216	VV	255.3146	METHOXYCHLOR
19	26.48		.066625	10858	VB	0.0000	
0	29.65		.957622	24428	VB	0.0000	
1	30.26	#30.23	.099572	212624	BB	19.9591	DCB

tal Area : 4294438 Total ng inj : 480.982

eport Time : 2101 24Nov1999
thod : /DATA/LOOP/METHOD/HP58904AP.MTH
esult File : /DATA/LOOP/RESULT/D4AS01J 033.RES

IEA Pesticide Standard Report

ample Name : EVAL B Inj 1932 24Nov1999
esult : /DATA/I NOP/RESULT/D4BS01J 032.RES GC : HP5890A
olumn : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

Sample Name : EVAL B Report No :368.00
Result File : /DATA/LOOP/RESULT/D4RS01J 032.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1932 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01J.SEQ
Subseq/Sample : 1/ 32 Bottle no. : 33

Dil-Fact
100.00

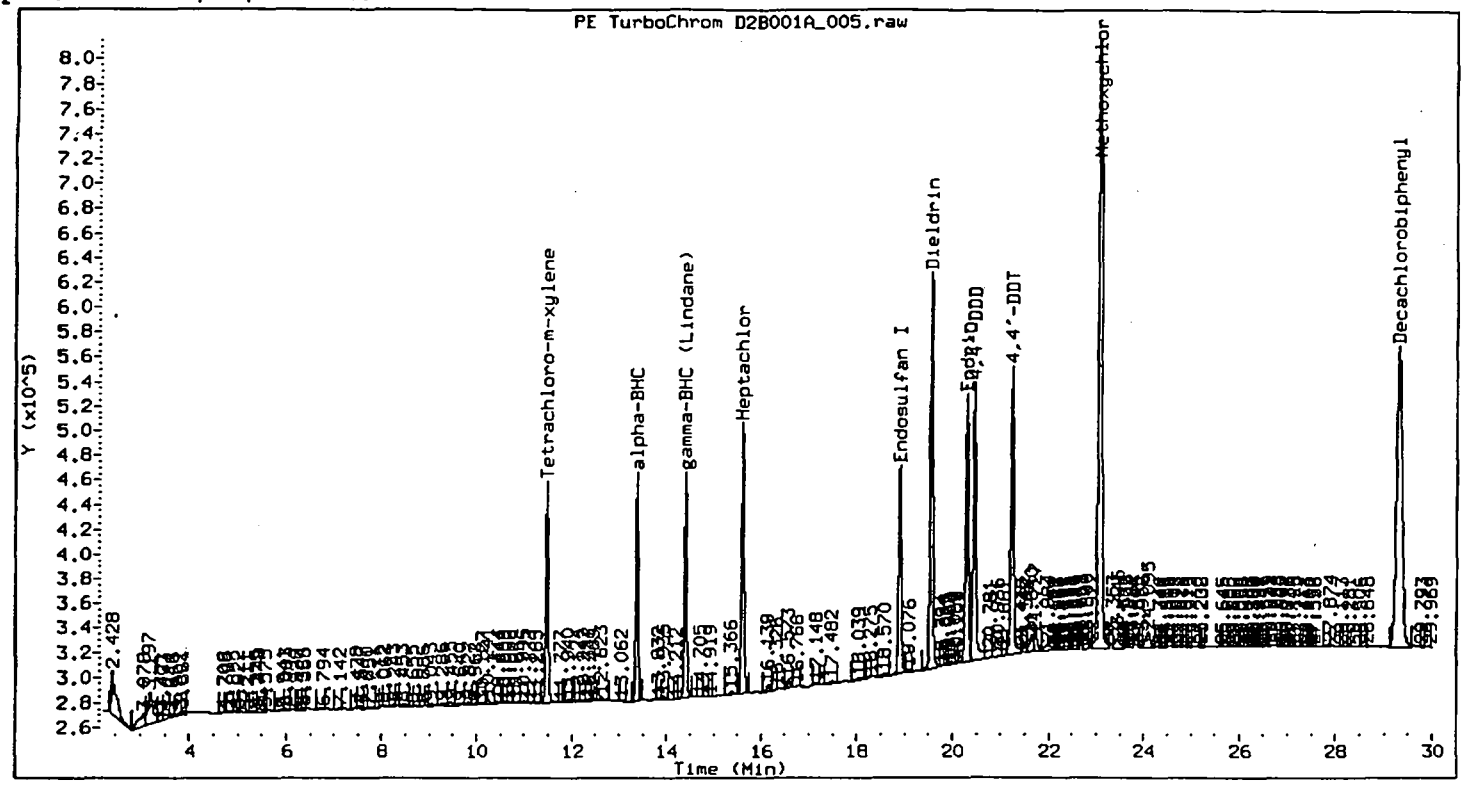
Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.16		.085157	12478	BV	0.0000	
2	9.00		.114260	11148	VV	0.0000	
3	9.16		.118764	11053	VV	0.0000	
4	10.03	#10.00	.081552	475644	PV	21.7636	TCX
5	11.57		.110916	10908	BB	0.0000	
6	12.83	12.78	.091564	339215	PV	12.2095	A-BHC
7	14.16		.089712	12418	VB	0.0000	
8	14.64	14.60	.102452	321202	BV	13.3823	G-BHC
9	14.96	14.90	.107808	191408	VV	16.9478	B-BHC
10	15.15		.267784	48849	VV	0.0000	
11	15.51		.330732	51685	VV	0.0000	
12	16.34		.354402	45654	VV	0.0000	
13	16.78	16.74	.198031	26859	VV	1.4244	D-BHC
14	17.83	17.87	.308624	19531	BV	1.0474	ALDRIN
15	19.39		.309896	29926	VV	0.0000	
16	19.72		.302479	25168	PV	0.0000	
17	21.01		.673657	100961	VV	0.0000	
18	21.95		.541105	59772	PV	0.0000	
19	22.96		.392506	18557	VV	0.0000	
20	24.18	24.10	.482496	56582	VV	4.6855	~~4,4' DDE~~
21	24.91		.251056	23825	VV	0.0000	
22	25.22		.212298	26225	VV	0.0000	
23	25.45		.174100	21598	VV	0.0000	
24	25.73	25.72	.075918	309765	PV	60.8097	ENDRIN
25	26.05	26.03	.106625	18866	VV	4.3936	4,4' DDD
26	26.91	26.90	.074182	486735	BV	114.0965	4,4' DDT
27	27.38		.268083	20817	VV	0.0000	
28	28.37		.158877	29709	BV	0.0000	
29	28.62		.398275	17245	VB	0.0000	
30	30.00	29.99	.102499	614322	BV	295.4891	METHOXYCHLOR
31	30.57	30.59	.165817	14514	VB	3.0829	ENDRIN KETONE
32	37.24	37.24	.182477	141383	BB	24.0776	DCB

Total Area : 3594026 Total ng inj : 573.410

Report Time : 2016 24Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01J 032.RES

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99b.b/D2B001A_005.d Page 1
Report Date 11/18/1999 10:45



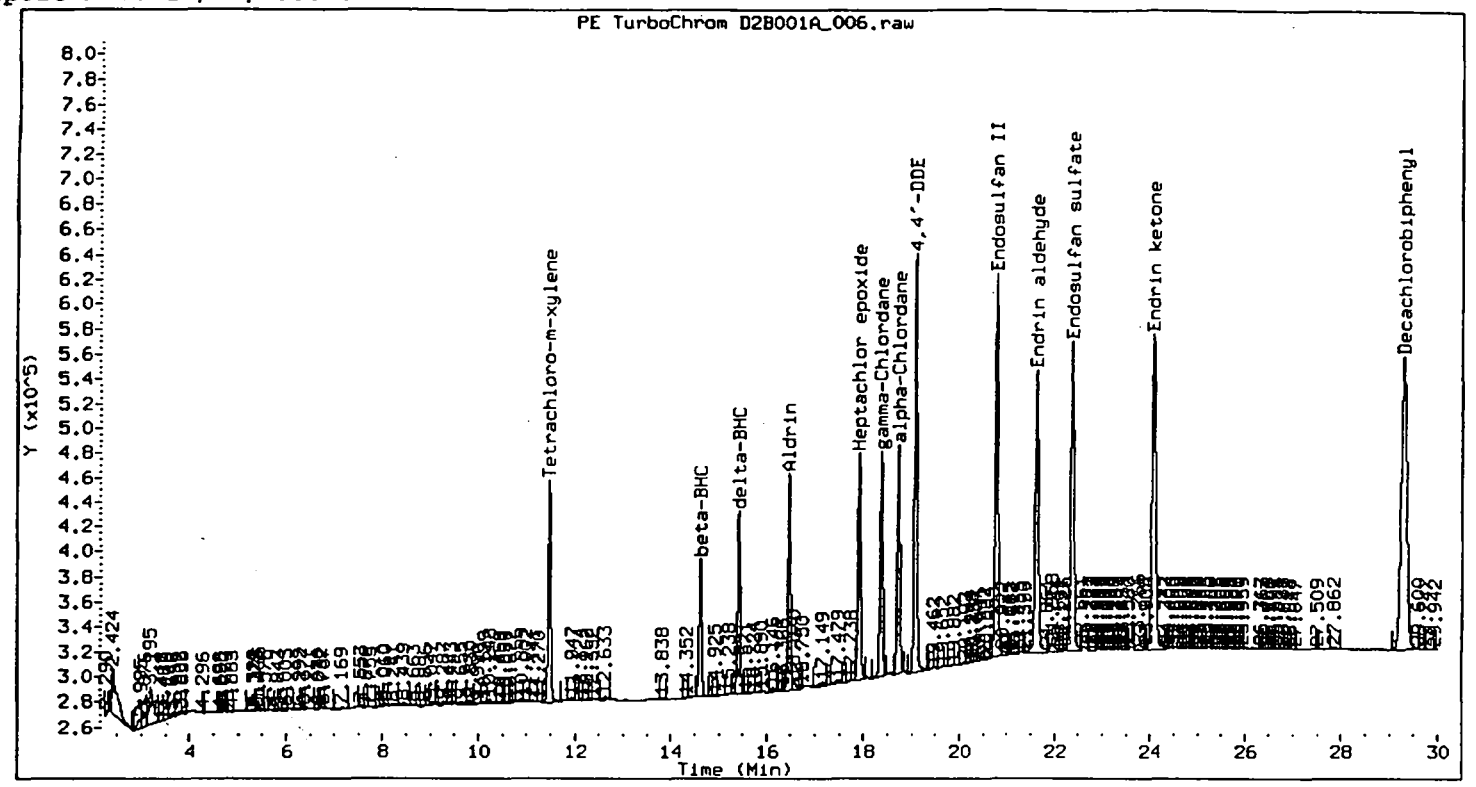
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99a.b/Br8081.m
Sample Info : INDA L3
Lab ID : INDA L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 19:54 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	13.374	13.374	0.000	614659	19.153	19.153
gamma-BHC (Lindane)	14.399	14.399	0.000	635096	19.389	19.389
4,4'-DDD	20.453	20.453	0.000	921863	43.675	43.675
4,4'-DDT	21.230	21.230	0.000	984363	41.129	41.129
Dieldrin	19.552	19.552	0.000	1234651	40.114	40.114
Endosulfan I	18.891	18.891	0.000	653386	20.444	20.444
Endrin	20.295	20.295	0.000	892168	41.293	41.293
Heptachlor	15.608	15.608	0.000	799145	20.070	20.070
Methoxychlor	23.071	23.071	0.000	2770957	206.108	206.108

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99b.b/D2B001A_005.d Page 2
Report Date 11/18/1999 10:45

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	11.473	11.478	0.006	651808	20.352	20.352
Decachlorobiphenyl	29.301	29.293	0.008	1983038	41.144	41.144

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99b.b/D2B001A_006.d Page 1
Report Date 11/18/1999 10:46



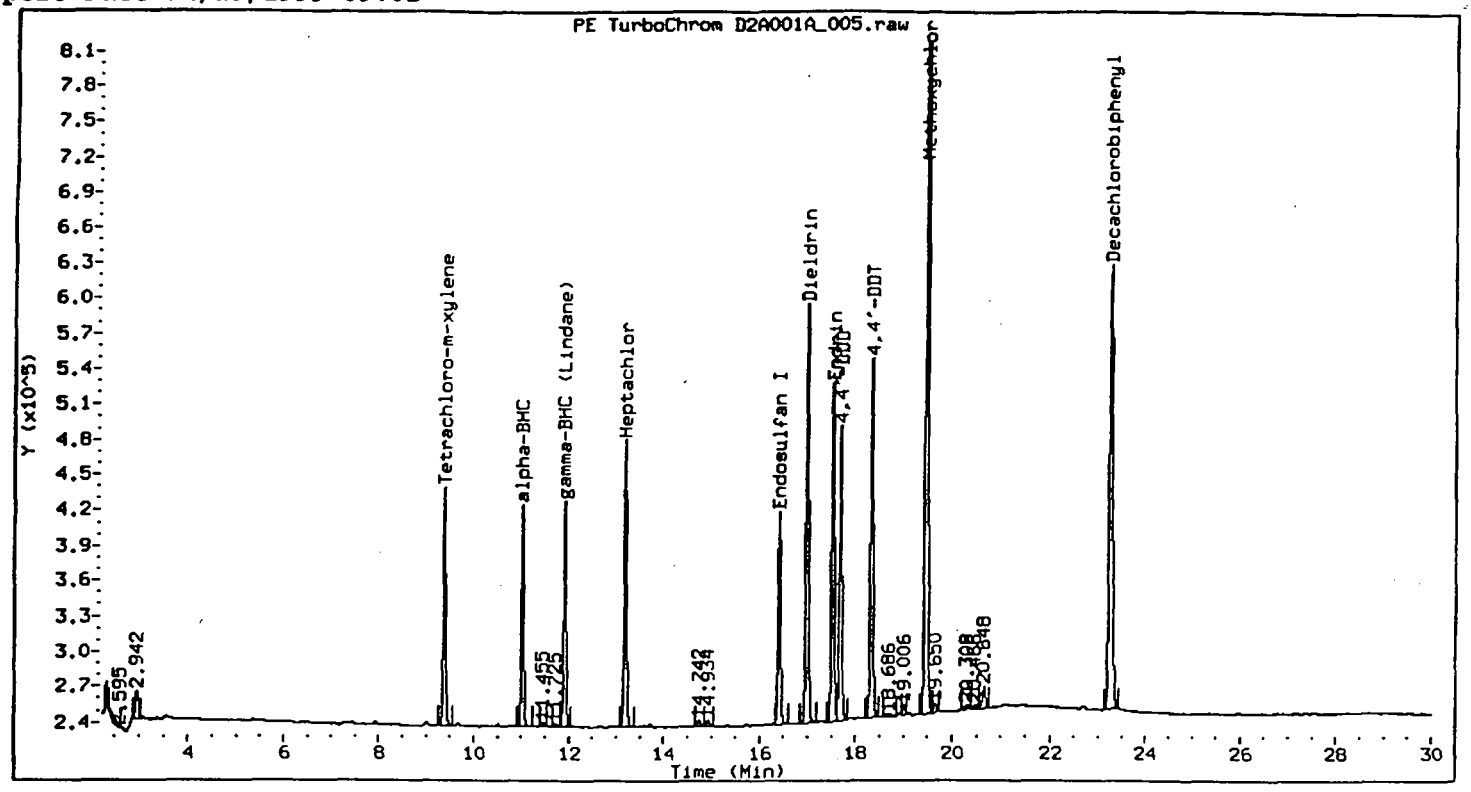
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99a.b/Br8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 20:32 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Spnd Sublist: INDB Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Aldrin	16.471	16.471	0.000	635689	19.470	19.470
beta-BHC	14.624	14.624	0.000	399458	19.946	19.946
delta-BHC	15.432	15.432	0.000	526037	19.048	19.048
4,4'-DDE	19.078	19.078	0.000	1242108	40.440	40.440
Endosulfan II	20.779	20.779	0.000	1270866	40.271	40.271
Endosulfan sulfate	22.374	22.374	0.000	1196799	40.206	40.206
Endrin aldehyde	21.626	21.626	0.000	1081507	39.179	39.179
Endrin ketone	24.080	24.080	0.000	1420351	39.940	39.940
Heptachlor epoxide	17.913	17.913	0.000	689109	19.991	19.991

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99b.b/D2B001A_006.d Page 2
Report Date 11/18/1999 10:46

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.370	18.370	0.000	680115	19.580	19.580
alpha-Chlordane	18.727	18.727	0.000	691959	19.533	19.533
Tetrachloro-m-xylene	11.478	11.478	0.000	646358	20.182	20.182
Decachlorobiphenyl	29.293	29.293	0.000	1923534	39.909	39.909

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/D2A001A_005.d Page 1
Report Date 11/29/1999 09:01

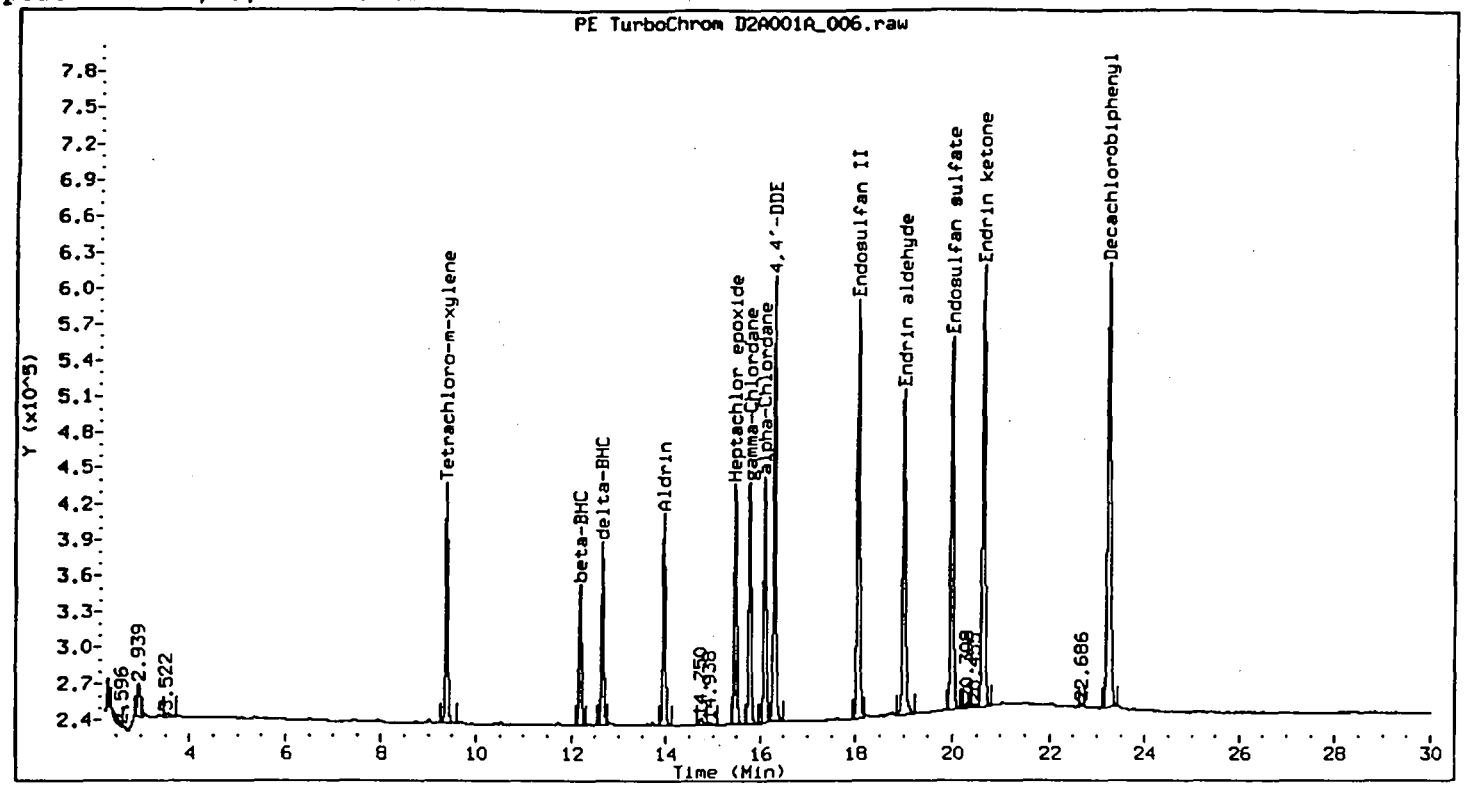


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/Bf8081.m
Sample Info : INDA L3
Lab ID : INDA L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 19:54 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cond Sublist: INDA Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	11.023	11.023	0.000	595509	19.224	19.224
gamma-BHC (Lindane)	11.915	11.915	0.000	621498	19.708	19.708
4'-DDD	17.681	17.681	0.000	872906	40.530	40.530
,4'-DDT	18.324	18.324	0.000	1088183	39.269	39.269
eldrin	16.984	16.984	0.000	1261381	40.124	40.124
dosulfan I	16.407	16.407	0.000	659875	20.222	20.222
drin	17.520	17.520	0.000	1050874	39.808	39.808
ptachlor	13.189	13.189	0.000	846518	20.001	20.001
thoxychlor	19.458	19.458	0.000	3059343	203.909	203.909

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.375	9.380	0.005	669847	20.482	20.482
Decachlorobiphenyl	23.264	23.248	0.016	1851613	41.367	41.367

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/D2A001A_006.d Page 1
Report Date 11/29/1999 09:01

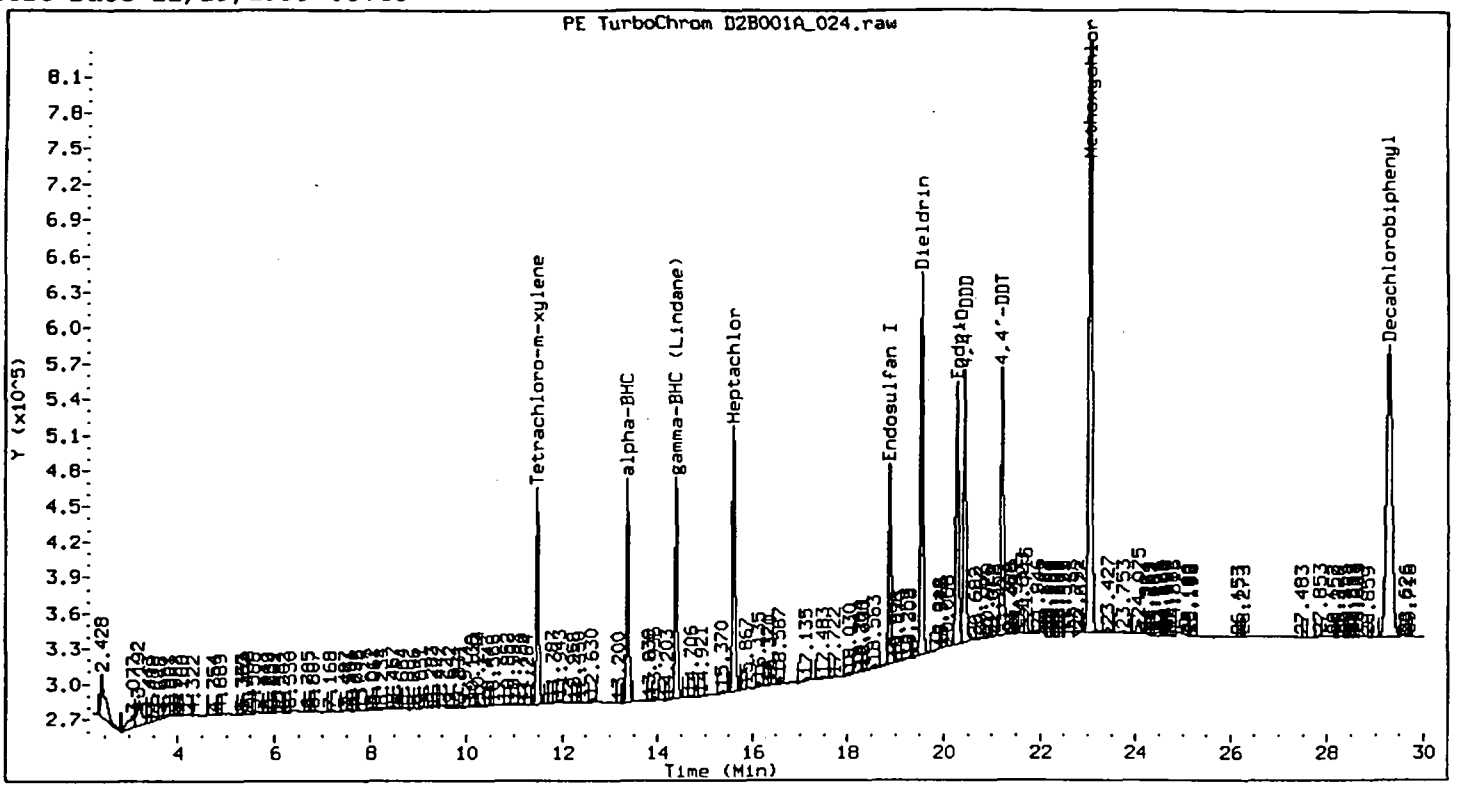


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/Bf8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 12-NOV-1999 20:32 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cond Sublist: INDB Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.963	13.963	0.000	608212	19.518	19.518
beta-BHC	12.188	12.188	0.000	402073	20.384	20.384
delta-BHC	12.658	12.658	0.000	507129	19.305	19.305
4,4'-DDE	16.298	16.298	0.000	1247643	39.905	39.905
Endosulfan II	18.048	18.048	0.000	1290872	40.412	40.412
Endosulfan sulfate	19.990	19.990	0.000	1189244	40.660	40.660
Endrin aldehyde	19.000	19.000	0.000	1076641	39.097	39.097
Endrin ketone	20.640	20.640	0.000	1463298	40.545	40.545
Heptachlor epoxide	15.477	15.477	0.000	709860	20.001	20.001

mpounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
mma-Chlordane	15.777	15.777	0.000	719805	19.789	19.789
lpha-Chlordane	16.095	16.095	0.000	728062	19.981	19.981
trachloro-m-xylene	9.380	9.380	0.000	664341	20.314	20.314
ecachlorobiphenyl	23.248	23.248	0.000	1797706	40.163	40.163

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/D2B001A_024.d Page 1
Report Date 11/29/1999 08:48



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/Br8081.m
Sample Info : INDA L3
Lab ID : INDA L3 Inst ID : HP58902.i
Inj Date : 13-NOV-1999 08:14 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDA Sample Type: CCALIB_3

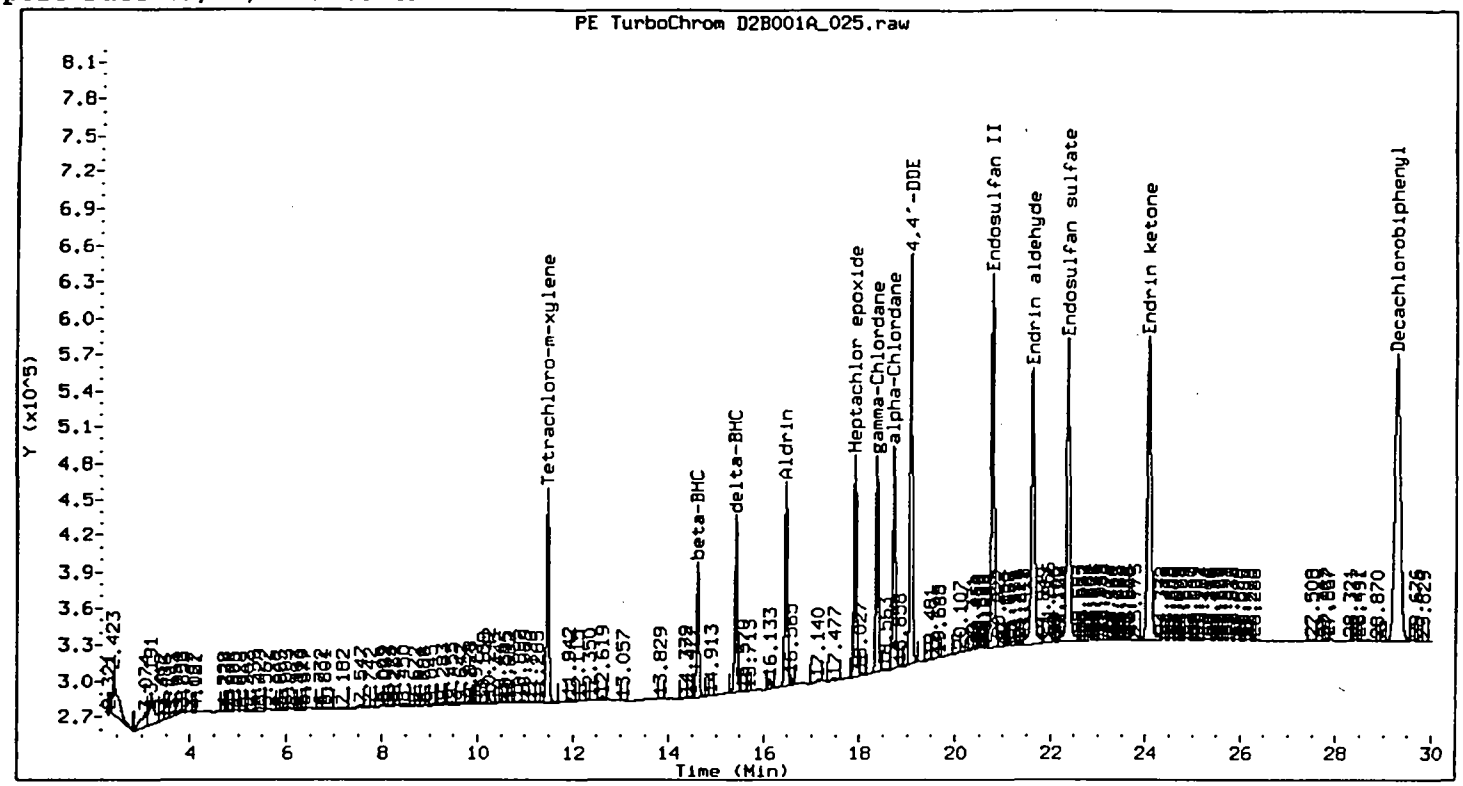
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		13.378	13.378	0.000	625261	19.483	19.483
gamma-BHC (Lindane)		14.402	14.402	0.000	643303	19.640	19.640
4,4'-DDD	(M)	20.442	20.442	0.000	874395	41.426	41.426
4,4'-DDT	(M)	21.218	21.218	0.000	888073	37.105	37.105
Dieldrin	(M)	19.543	19.543	0.000	1210249	39.321	39.321
Endosulfan I	(M)	18.883	18.883	0.000	648586	20.294	20.294
Endrin	(M)	20.285	20.285	0.000	868144	40.181	40.181
Heptachlor		15.608	15.608	0.000	811074	20.370	20.370
Methoxychlor	(M)	23.053	23.053	0.000	2699140	200.766	200.766

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.476	11.476	0.000	653784	20.414	20.414
Decachlorobiphenyl	29.276	29.276	0.000	1980810	41.097	41.097

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/D2B001A_025.d Page 1
Report Date 11/29/1999 08:49

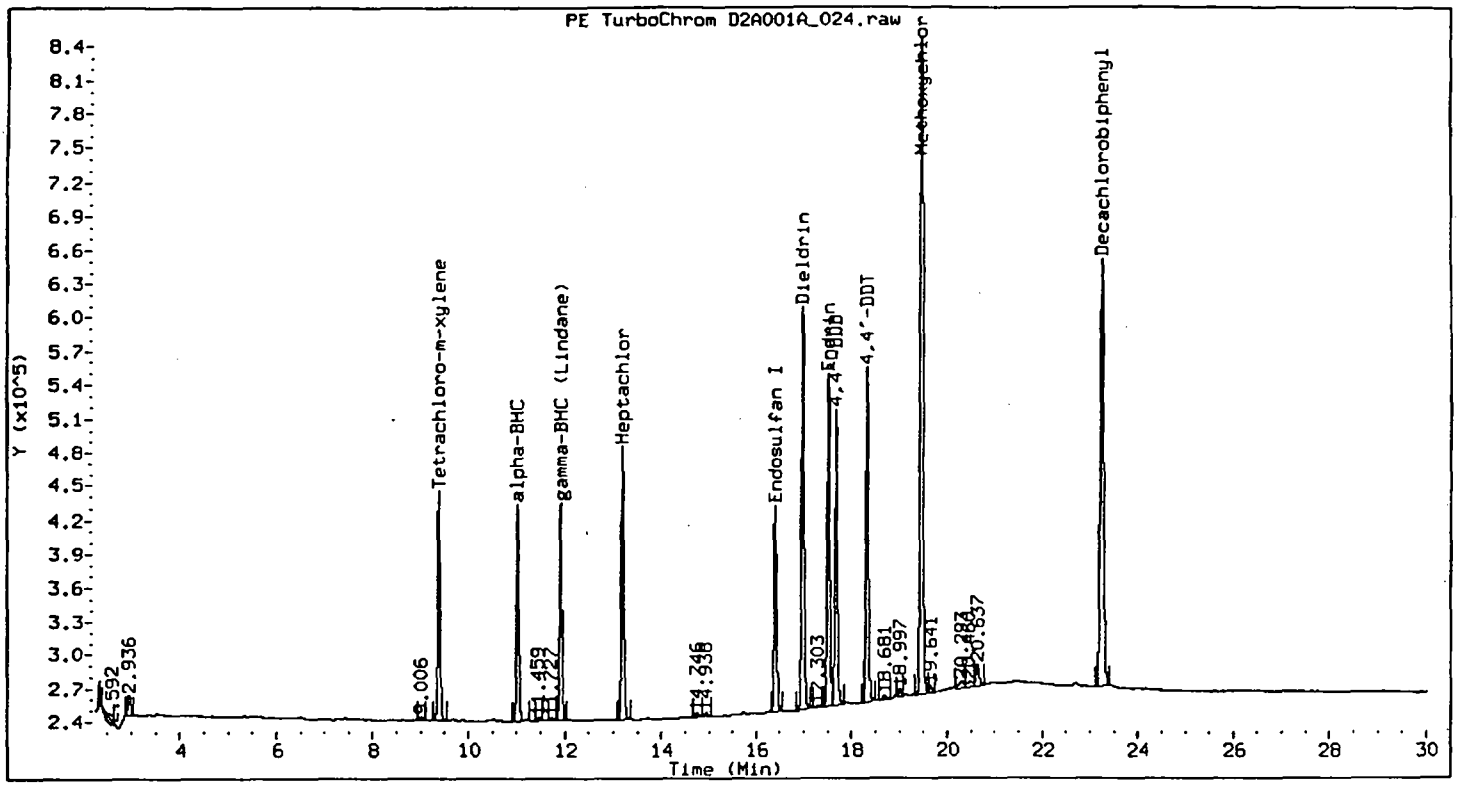


Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/Br8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 13-NOV-1999 08:53 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDB Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Aldrin	16.462	16.462	0.000	622207	19.057	19.057
beta-BHC	14.615	14.615	0.000	403594	20.153	20.153
delta-BHC	15.422	15.422	0.000	522613	18.924	18.924
4,4'-DDE	19.076	19.076	0.000	1217590	39.642	39.642
Endosulfan II	20.779	20.779	0.000	1283383	40.668	40.668
Endosulfan sulfate	22.373	22.373	0.000	1235619	41.511	41.511
Endrin aldehyde	21.626	21.626	0.000	1120276	40.584	40.584
Endrin ketone	24.079	24.079	0.000	1419943	39.928	39.928
Heptachlor epoxide	17.907	17.907	0.000	682145	19.789	19.789

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/D2B001A_025.d Page 2
Report Date 11/29/1999 08:49

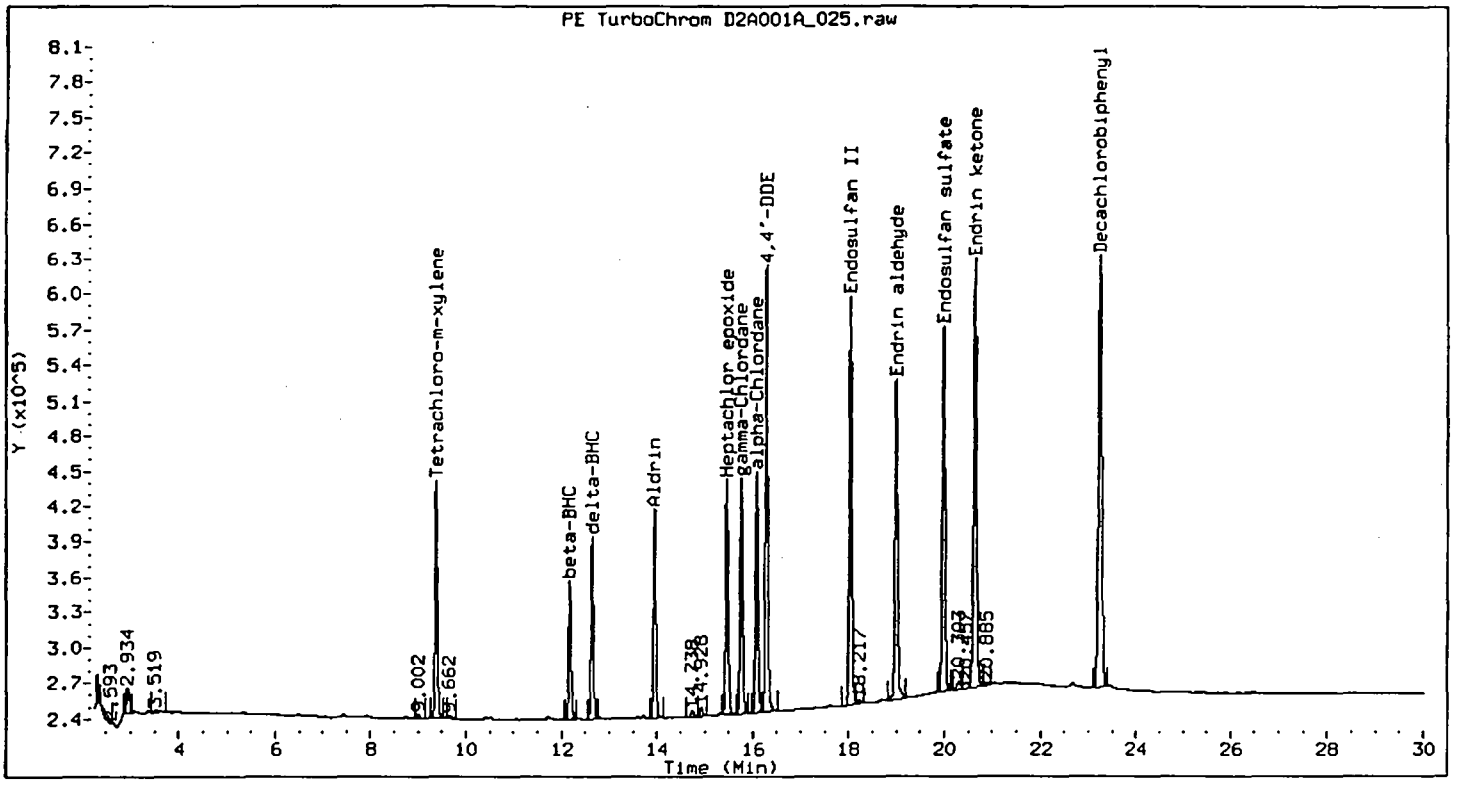
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.365	18.365	0.000	673408	19.387	19.387
alpha-Chlordane	18.723	18.723	0.000	684367	19.319	19.319
Tetrachloro-m-xylene	11.472	11.476	0.004	651181	20.332	20.332
Decachlorobiphenyl	29.280	29.276	0.004	1908797	39.603	39.603



Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99c.b/Bf8081.m
Sample Info : INDA L3
Lab ID : INDA L3 Inst ID : HP58902.i
Inj Date : 13-NOV-1999 08:14 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cmpnd Sublist: INDA Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/kg)
alpha-BHC	11.027	11.023	0.003	619696	20.005	6.668
gamma-BHC (Lindane)	11.918	11.915	0.003	634361	20.116	6.705
4,4'-DDD	17.672	17.681	0.008	913414	42.411	14.137
4,4'-DDT	18.317	18.324	0.008	1064196	38.404	12.801
Dieldrin	16.978	16.984	0.006	1272411	40.475	13.492
Endosulfan I	16.402	16.407	0.005	660406	20.238	6.746
Endrin	17.513	17.520	0.007	1079082	40.877	13.626
Heptachlor	13.193	13.189	0.003	850396	20.092	6.697
Methoxychlor	19.448	19.458	0.010	3056114	203.694	67.898

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.377	9.380	0.003	679707	20.784	6.928
Decachlorobiphenyl	23.247	23.248	0.002	1843736	41.191	13.730

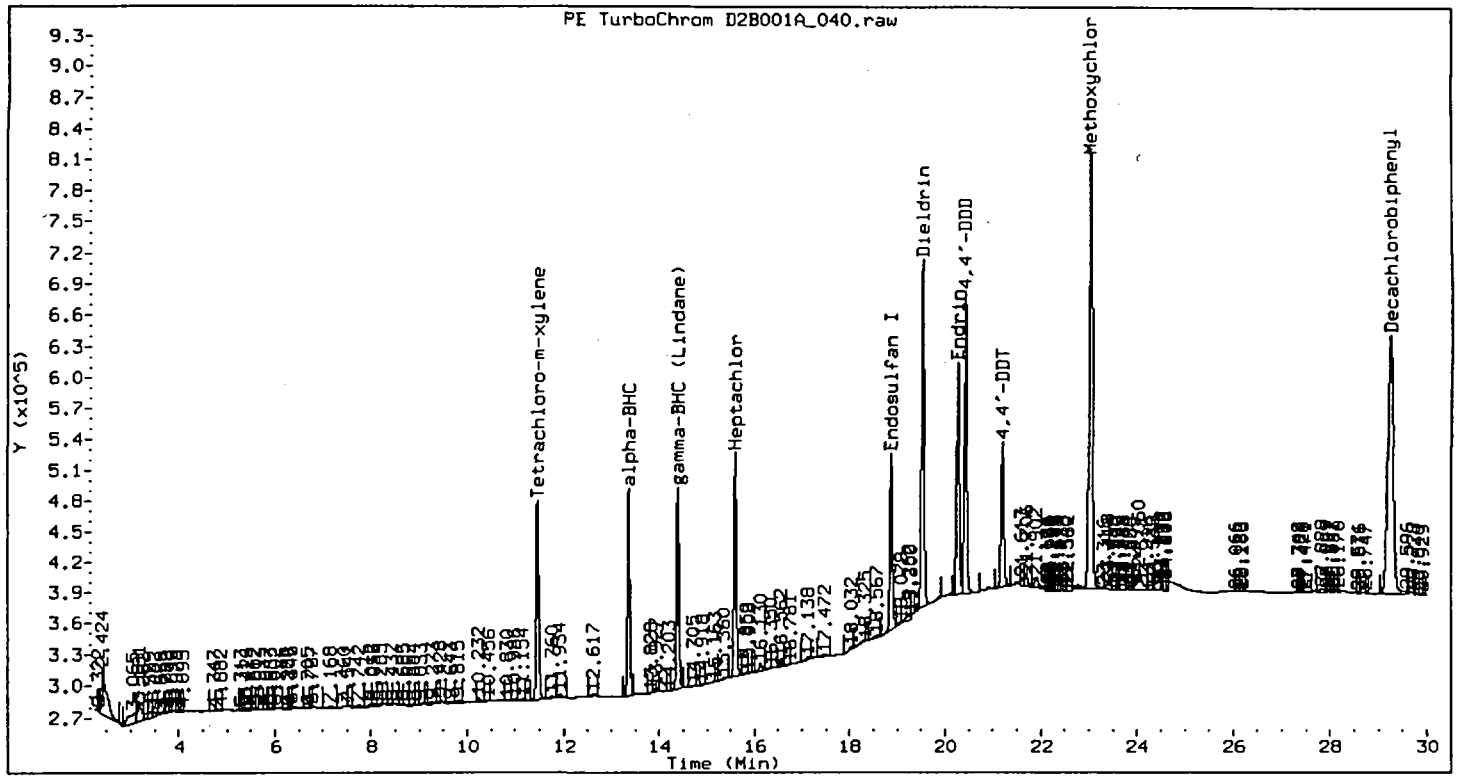


Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99c.b/Bf8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 13-NOV-1999 08:53 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/kg)
Aldrin	13.952	13.963	0.012	610908	19.605	6.535
beta-BHC	12.178	12.188	0.010	404238	20.494	6.831
delta-BHC	12.646	12.658	0.012	504998	19.224	6.408
4,4'-DDE	16.288	16.298	0.010	1270421	40.634	13.545
Endosulfan II	18.042	18.048	0.007	1283854	40.193	13.398
Endosulfan sulfate	19.988	19.990	0.002	1179066	40.312	13.437
Endrin aldehyde	18.997	19.000	0.003	1074568	39.022	13.007
Endrin ketone	20.640	20.640	0.000	1473364	40.824	13.608
Heptachlor epoxide	15.465	15.477	0.012	707952	19.948	6.649

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.767	15.777	0.011	717429	19.724	6.575
alpha-Chlordane	16.085	16.095	0.010	727952	19.978	6.659
Tetrachloro-m-xylene	9.375	9.380	0.005	667335	20.406	6.802
Decachlorobiphenyl	23.247	23.248	0.001	1777409	39.709	13.236

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99d.b/D2B001A_040.d Page 1
Report Date 12/08/1999 19:17



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99d.b/Br8081.m
Sample Info : INDA L3
Lab ID : INDA L3 Inst ID : HP58902.i
Inj Date : 13-NOV-1999 18:37 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
alpha-BHC		13.367	13.367	0.000	670984	20.908	20.908
gamma-BHC (Lindane)		14.392	14.392	0.000	680681	20.781	20.781
4,4'-DDD	(M)	20.435	20.435	0.000	1070431	50.713	50.713
4,4'-DDT	(M)	21.207	21.207	0.000	565897	23.644	23.644
Dieldrin	(M)	19.537	19.537	0.000	1244640	40.438	40.438
Endosulfan I		18.877	18.877	0.000	660146	20.656	20.656
Endrin	(M)	20.277	20.277	0.000	880550	40.756	40.756
Heptachlor		15.600	15.600	0.000	797003	20.017	20.017
Methoxychlor	(M)	23.042	23.042	0.000	2007202	149.299	149.299

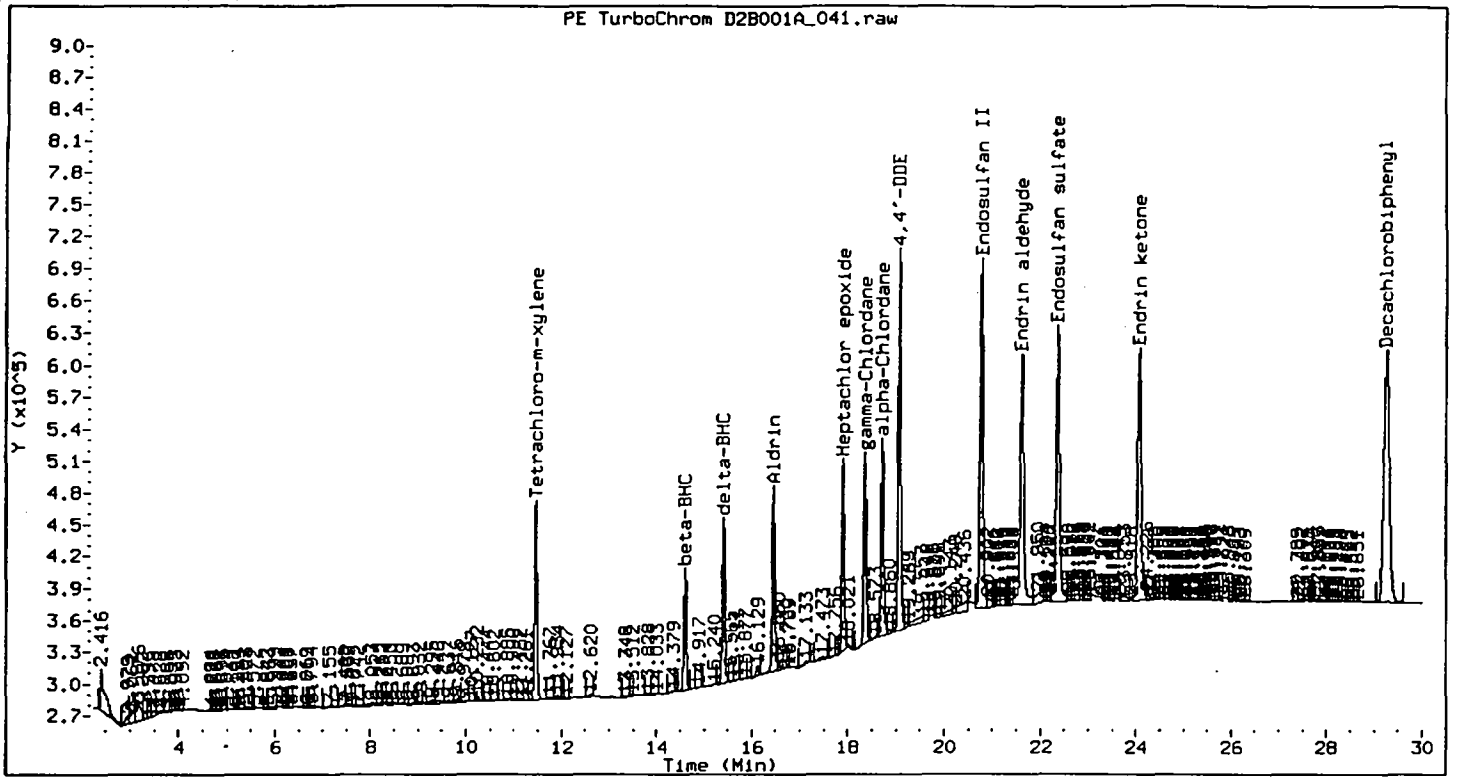
Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99d.b/D2B001A_040.d Page 2
Report Date 12/08/1999 19:17

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.464	11.464	0.000	692955	21.637	21.637
Decachlorobiphenyl	29.242	29.242	0.000	2026348	42.042	42.042

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99d.b/D2B001A_041.d Page 1
Report Date 11/30/1999 14:24



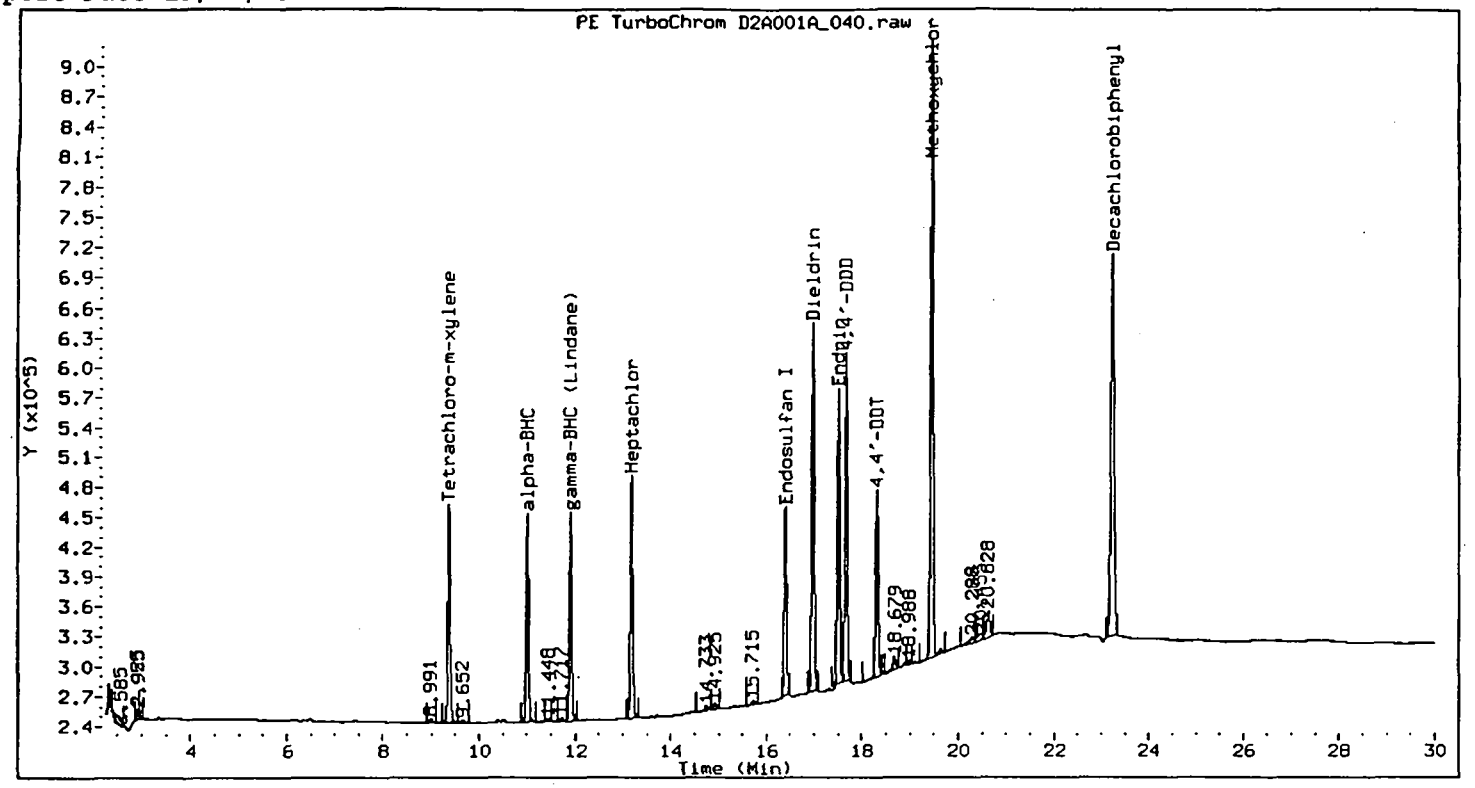
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99d.b/Br8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 13-NOV-1999 19:16 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDB Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	16.458	16.458	0.000	647243	19.824	19.824
beta-BHC	14.613	14.613	0.000	412550	20.600	20.600
delta-BHC	15.420	15.420	0.000	545493	19.752	19.752
4,4'-DDE	19.068	19.068	0.000	1298693	42.283	42.283
Endosulfan II	20.772	20.772	0.000	1377656	43.655	43.655
Endosulfan sulfate	22.365	22.365	0.000	1262195	42.403	42.403
Endrin aldehyde	21.618	21.618	0.000	1209210	43.805	43.805
Endrin ketone	24.069	24.069	0.000	1319863	37.114	37.114
Heptachlor epoxide	17.901	17.901	0.000	667616	19.368	19.368

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99d.b/D2B001A_041.d Page 2
Report Date 11/30/1999 14:24

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.359	18.359	0.000	674461	19.417	19.417
alpha-Chlordane	18.717	18.717	0.000	714153	20.160	20.160
Tetrachloro-m-xylene	11.465	11.464	0.001	674073	21.047	21.047
Decachlorobiphenyl	29.261	29.242	0.019	1879398	38.993	38.993

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99d.b/D2A001A_040.d Page 1
Report Date 11/30/1999 14:13



Method : /chem/HP58902.i/8081/front/11-12-99/12nov99d.b/Bf8081.m
Sample Info : INDA L3
Lab ID : INDA L3 Inst ID : HP58902.i
Inj Date : 13-NOV-1999 18:37 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CCALIB_3

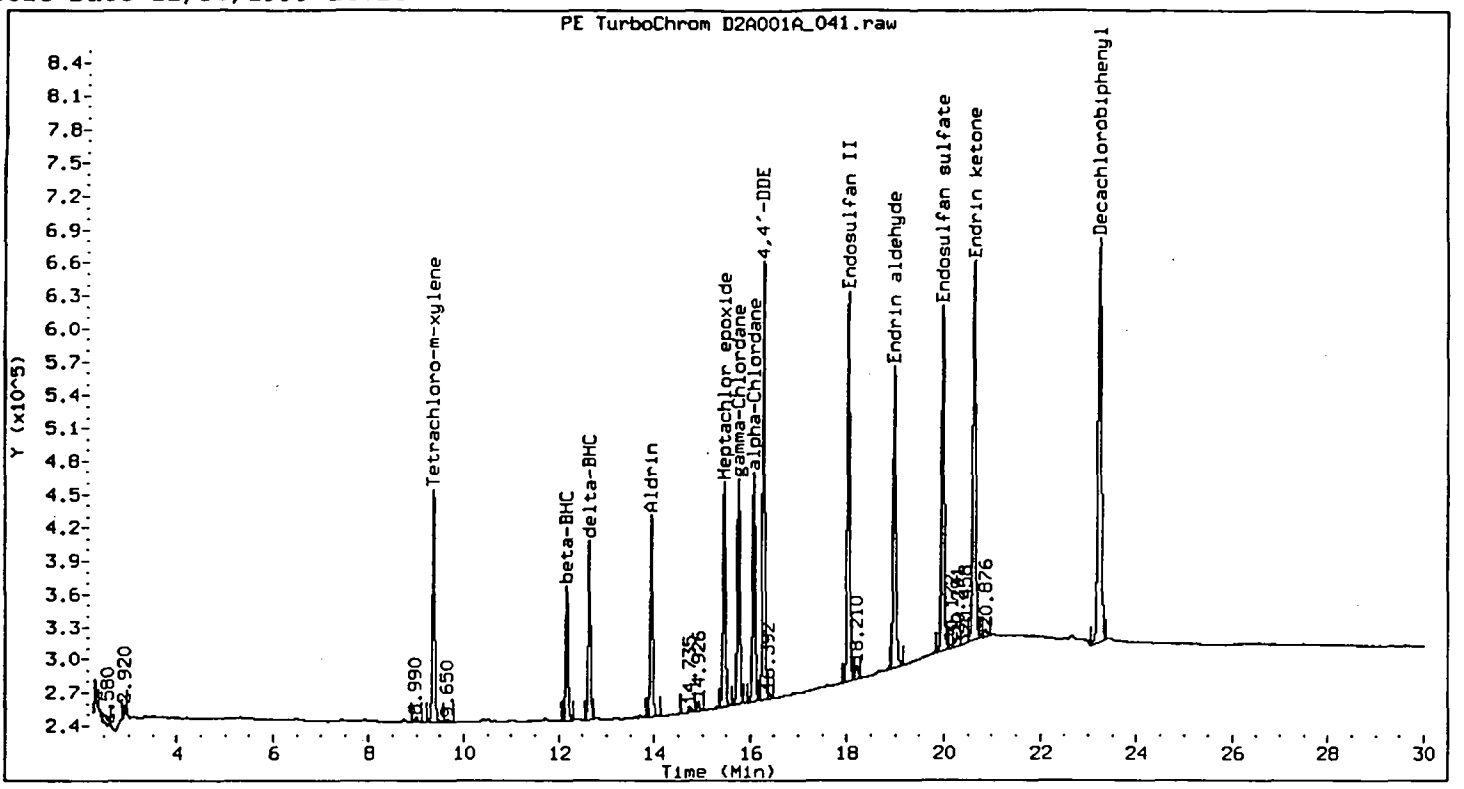
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		11.013	11.013	0.000	661978	21.370	21.370
gamma-BHC (Lindane)		11.906	11.906	0.000	680080	21.565	21.565
4,4'-DDD	(M)	17.668	17.668	0.000	1075658	49.945	49.945
4,4'-DDT		18.311	18.311	0.000	683463	24.664	24.664
Dieldrin	(M)	16.971	16.971	0.000	1297489	41.273	41.273
Endosulfan I	(M)	16.396	16.396	0.000	658785	20.188	20.188
Endrin	(M)	17.507	17.507	0.000	1030244	39.027	39.027
Heptachlor		13.181	13.181	0.000	845558	19.978	19.978
Methoxychlor	(M)	19.442	19.442	0.000	2228834	148.555	148.555

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene		9.363	9.363	0.000	727233	22.237	22.237
Decachlorobiphenyl	(M)	23.232	23.232	0.000	1838223	41.068	41.068

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99d.b/D2A001A_041.d Page 1
Report Date 11/30/1999 14:14



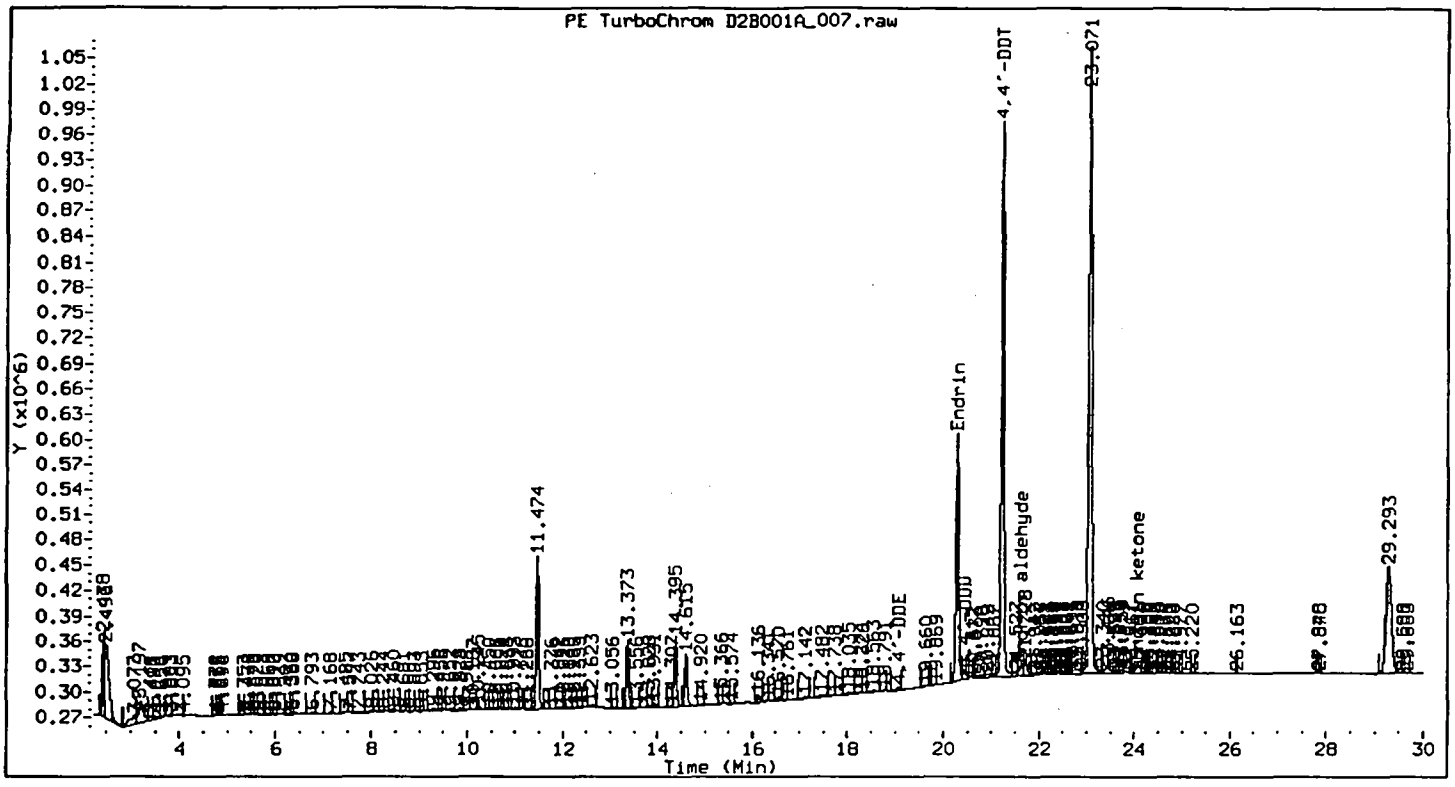
Method : /chem/HP58902.i/8081/front/11-12-99/12nov99d.b/Bf8081.m
Sample Info : INDB L3
Lab ID : INDB L3 Inst ID : HP58902.i
Inj Date : 13-NOV-1999 19:16 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.949	13.949	0.000	635497	20.394	20.394
beta-BHC	12.172	12.172	0.000	420852	21.336	21.336
delta-BHC	12.643	12.643	0.000	540762	20.586	20.586
4,4'-DDE	16.285	16.285	0.000	1311777	41.956	41.956
Endosulfan II	18.035	18.035	0.000	1295647	40.562	40.562
Endosulfan sulfate	19.980	19.980	0.000	1206071	41.235	41.235
Endrin aldehyde	18.988	18.988	0.000	1064680	38.663	38.663
Endrin ketone	20.631	20.631	0.000	1403732	38.895	38.895
Heptachlor epoxide	15.463	15.463	0.000	725630	20.446	20.446

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99d.b/D2A001A_041.d Page 2
Report Date 11/30/1999 14:14

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane	15.763	15.763	0.000	732807	20.147	20.147
alpha-Chlordane	16.082	16.082	0.000	742652	20.382	20.382
Tetrachloro-m-xylene	9.363	9.363	0.000	700924	21.433	21.433
Decachlorobiphenyl	23.238	23.232	0.006	1790282	39.997	39.997

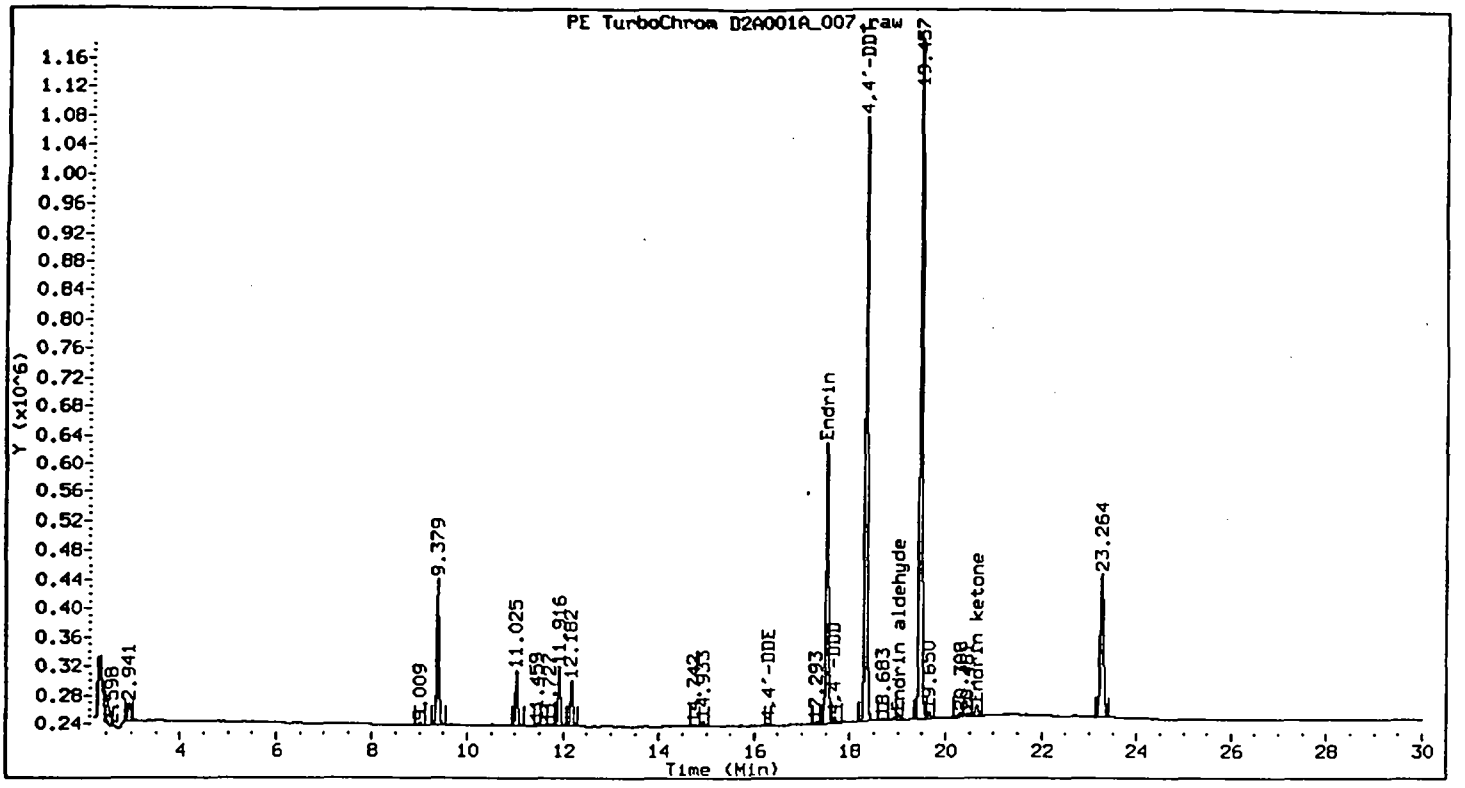
Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99b.b/D2B001A_007.d Page 1
Report Date 11/30/1999 09:56



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99a.b/Br8081.m
Sample Info : EVALB
Lab ID : EVALB
Inst ID : HP58902.i
Inj Date : 12-NOV-1999 21:11
Dil Factor : 1
Operator : gds
Sample Matrix : SOIL
Tpnd Sublist: END_DDT
Sample Type: END/DDT

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
,4'-DDD	20.450	20.453	0.003	54260	2.571	1.714
4,4'-DDE	19.078	19.078	0.001	17833	0.581	0.387
,4'-DDT	21.232	21.230	0.002	2596647	108.493	72.329
Endrin	20.296	20.295	0.001	1152998	53.366	35.577
Endrin aldehyde	21.639	21.626	0.013	59018	2.138	1.425
ndrin ketone	24.086	24.080	0.006	84773	2.384	1.589

000669

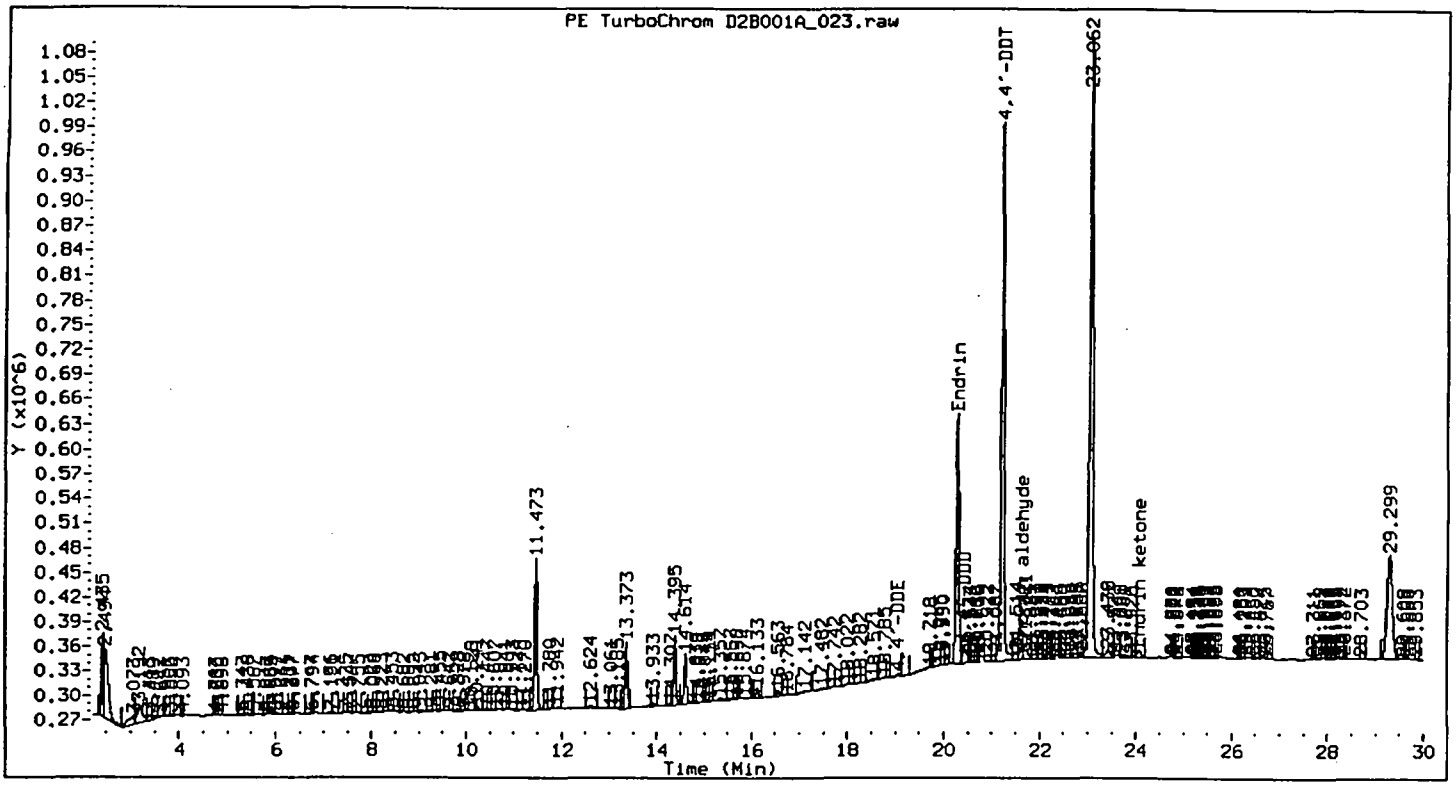


ethod : /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/Bf8081.m
ample Info : EVALB
b ID : EVALB
j Date : 12-NOV-1999 21:11
perator : gds
nd Sublist: END_DDT

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: END/DDT

pounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/kg)
,4'-DDD	17.677	17.681	0.004	37321	1.733	1.155
'-DDE	16.291	16.298	0.008	11812	0.378	0.252
'-DDT	18.323	18.324	0.002	2891409	104.342	69.561
drin	17.517	17.520	0.003	1412897	53.522	35.681
rin aldehyde	19.007	19.000	0.007	34551	1.255	0.836
drin ketone	20.648	20.640	0.008	69861	1.936	1.290

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/D2B001A_023.d Page 1
Report Date 11/30/1999 10:08



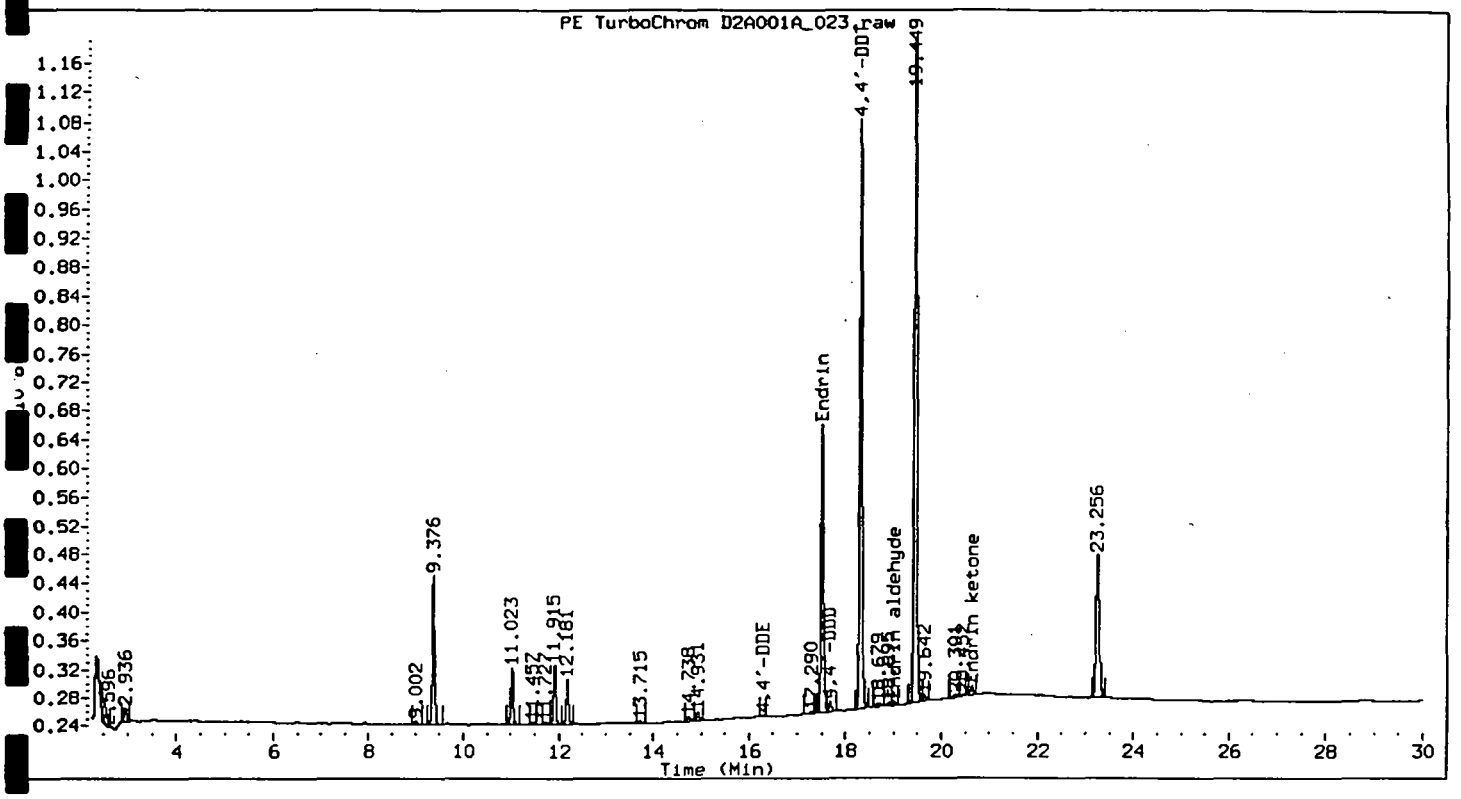
Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99c.b/Br8081.m
Sample Info : EVAL B
Lab ID : EVAL B
Inj Date : 13-NOV-1999 07:35
Operator : gds
Cpnd Sublist: END_DDT

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: END/DDT

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
4,4'-DDD	20.441	20.442	0.001	112464	5.328	1.776
4,4'-DDE	19.069	19.076	0.007	20696	0.674	0.225
4,4'-DDT	21.222	21.218	0.004	2656822	111.007	37.002
Endrin	20.286	20.285	0.001	1213116	56.148	18.716
Endrin aldehyde	21.629	21.626	0.003	52156	1.889	0.630
Endrin ketone	24.078	24.079	0.001	49032	1.379	0.460

File: /chem/HP58902.i/8081/front/11-12-99/12NOV99c.b/D2A001A_023.d Page 1
rt Date 11/30/1999 09:36

000671

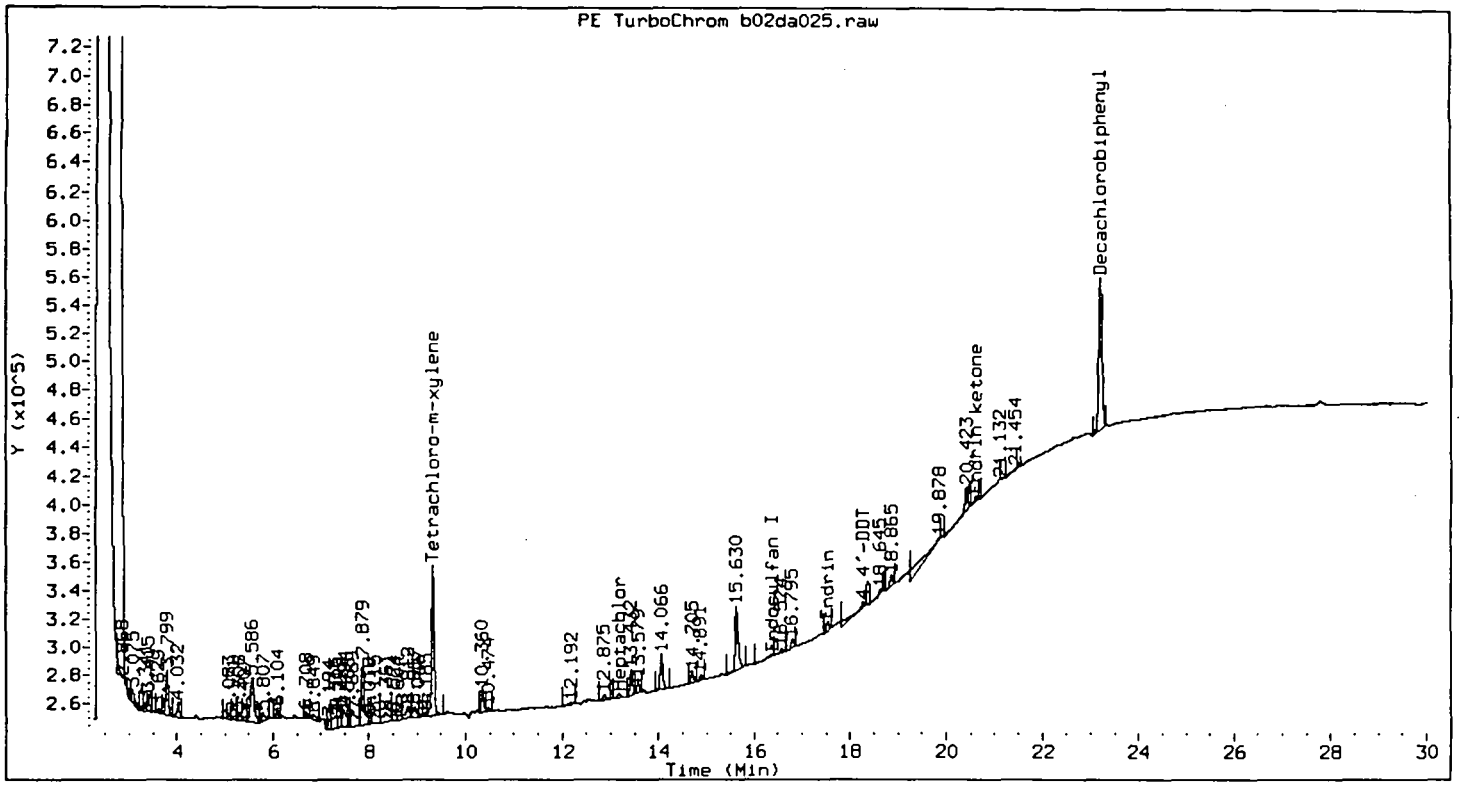


od : /chem/HP58902.i/8081/front/11-12-99/12NOV99c.b/Bf8081.m
e Info : EVAL B
D : EVAL B
Date : 13-NOV-1999 07:35
tor : gds
Sublist: END_DDT

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: BLANK

nds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/kg)
D	17.672	17.672	0.000	56141	2.607	0.869
DE	16.288	16.288	0.000	10889	0.348	0.116
T	18.317	18.317	0.000	2825763	101.973	33.991
	17.513	17.513	0.000	1449703	54.916	18.305
aldehyde	18.997	18.997	0.001	24661	0.896	0.299
ketone	20.639	20.640	0.001	55552	1.539	0.513

Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/b02da025.d Page 1
Report Date 12/09/1999 11:36



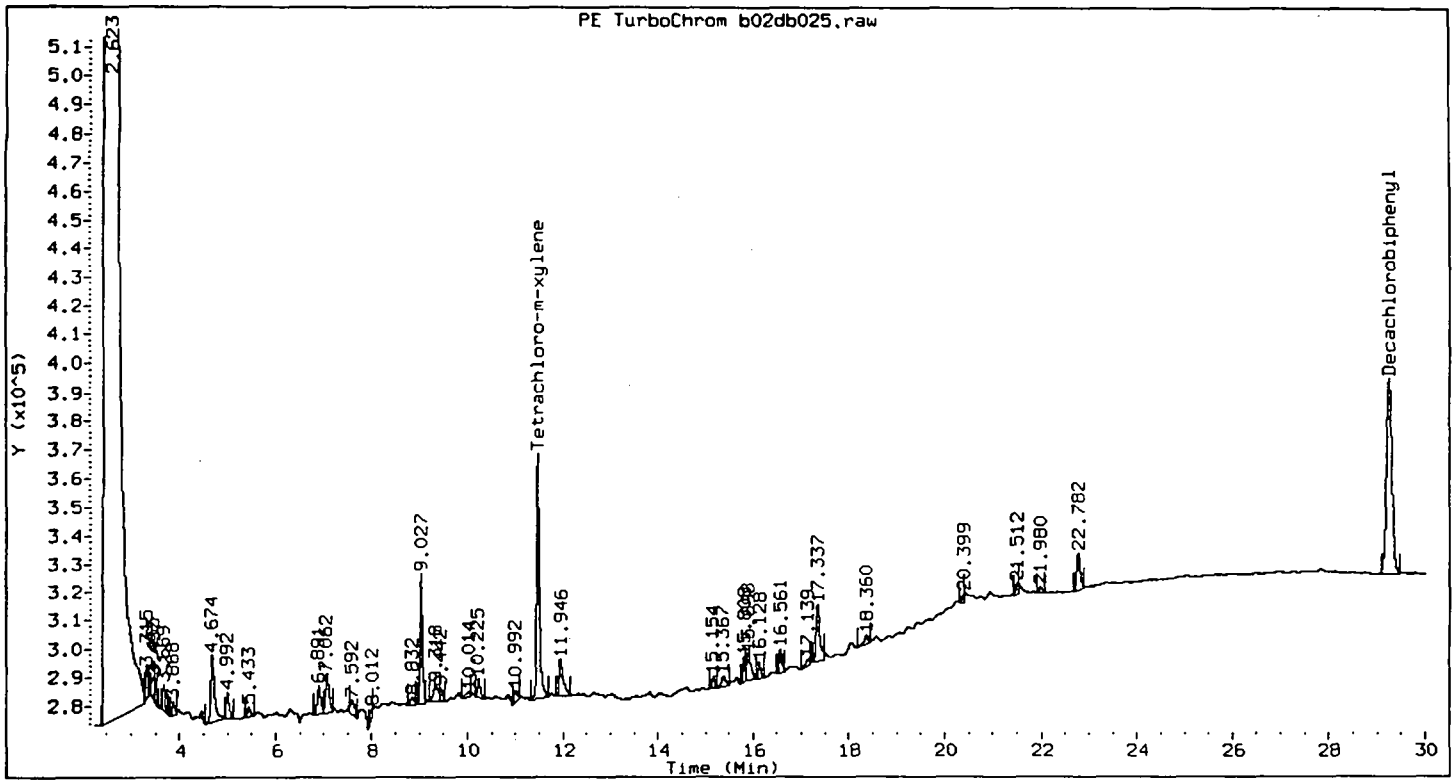
Method : /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/Bf8081.m
Sample Info : wg41661 mb RR
Lab ID : wg41661 mb
Inj Date : 03-DEC-1999 03:45
Operator : gds
Cpnd Sublist: TCLpest+

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
~~4,4'-DDT~~	~~18.279~~	~~18.281~~	~~0.002~~	~~54785~~	~~1.924~~	~~0.004~~
~~Endosulfan I~~	~~16.372~~	~~16.360~~	0.012	13082	0.396	0.001
~~Endrin~~	~~17.541~~	~~17.472~~	0.069	24890	~~0.964~~	~~0.002~~
~~Endrin ketone~~	~~20.620~~	~~20.600~~	~~0.020~~	~~13824~~	~~0.381~~	~~0.001~~
~~Heptachlor~~	~~13.179~~	~~13.143~~	0.036	~~18723~~	~~0.434~~	~~0.001~~
Tetrachloro-m-xylene	9.332	9.325	0.008	384162	11.025	0.022
Decachlorobiphenyl	23.215	23.206	0.009	516945	11.821	0.024

GDS
12-9-99

Data File: /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/b02db025.d Page 1
Report Date 12/09/1999 11:33



Method : /chem/HP58902.i/8081/rear/11-26-99/02dec99b.b/Br8081.m
Sample Info : wg41661 mb
Lab ID : wg41661 mb
Inj Date : 03-DEC-1999 03:45
Operator : gds
Cpnd Sublist: TCLpest+

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Tetrachloro-m-xylene	11.467	11.458	0.009	369547	11.088	0.022
Decachlorobiphenyl	29.247	29.239	0.008	547744	11.601	0.023

FORM 1
PEST ORGANICS ANALYSIS DATA SHEET

CLIENT ID

Method Blank

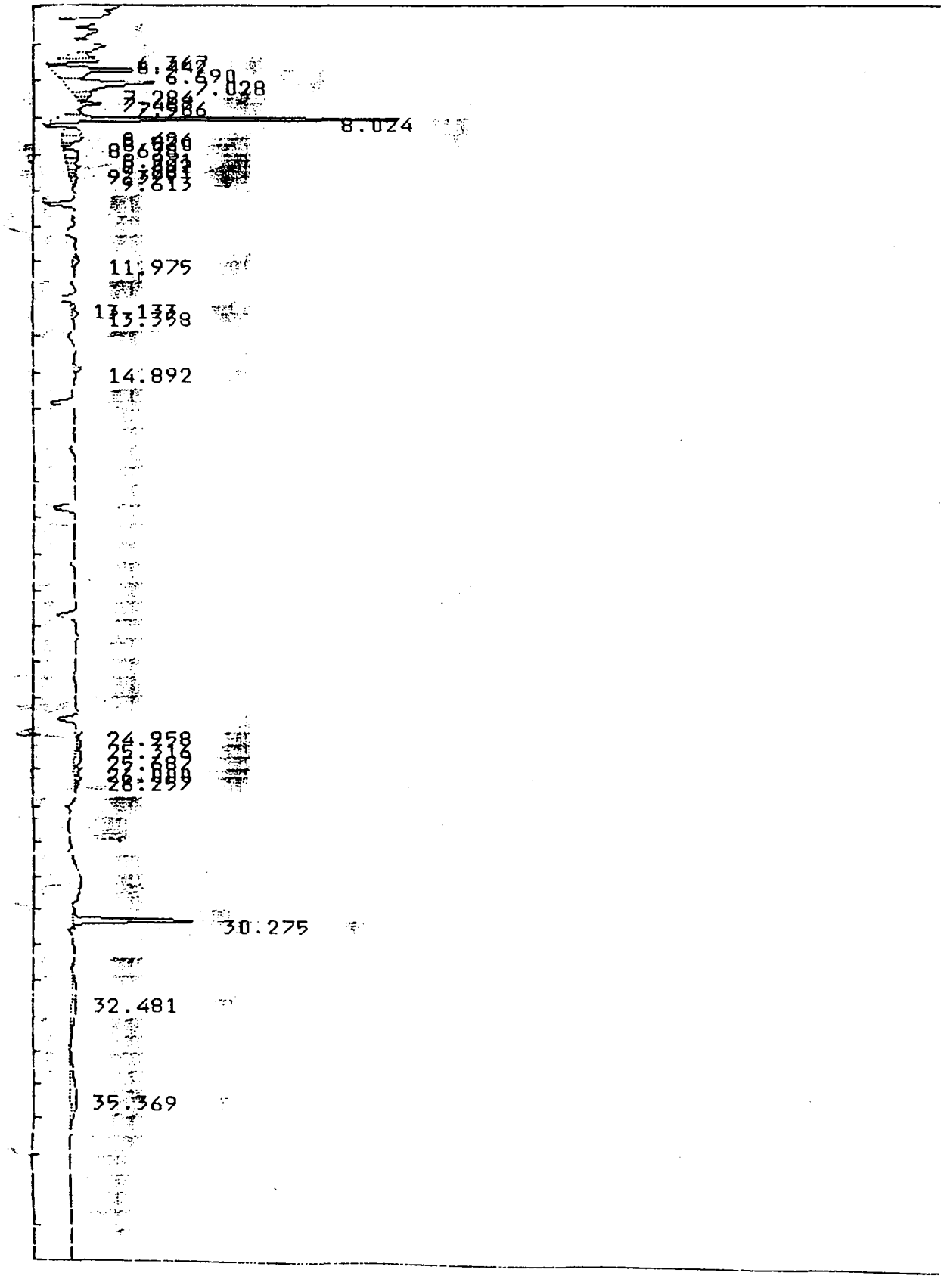
Lab Name: STL - Whippany
Matrix: (soil/water): Soil
Sample wt/vol: 30 (g/ml) g
%Moisture: 0
Extraction: (SepF/Cont/Sonc) Sonc
Concentrated Extract Volume: 10000(µl)
Injection Volume: 1 (µl)
GPC Cleanup: (Y/N) N pH:_____

Client: OGDEN
Lab Sample ID: WG41651 MB
Lab File ID: D4AS01J_032
Date Received: NA
Date Extracted: 10/15/99
Date Analyzed: 11/24/99
Dilution Factor: 1
Sulfur Cleanup: Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/Kg	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
3098-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor Epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	3.3	U
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan Sulfate	3.3	U
50-29-3	4,4'-DDT	3.3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin Ketone	3.3	U
7421-93-4	Endrin Aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	83	U

IEA Pesticide Standard Report

Sample Name : WG41651 METHOD BLANK Inj:1932 24Nov1999
Result : /DATA/LOOP/RESULT/D4AS01J_032.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

[illegible] : [illegible] Report No :370.01
Result File : /DATA/LOOP/RESULT/D4AS01J 032.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1932 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
Subseq/Sample : 1/ 32 Bottle no. : 32

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline
SpecialInteg

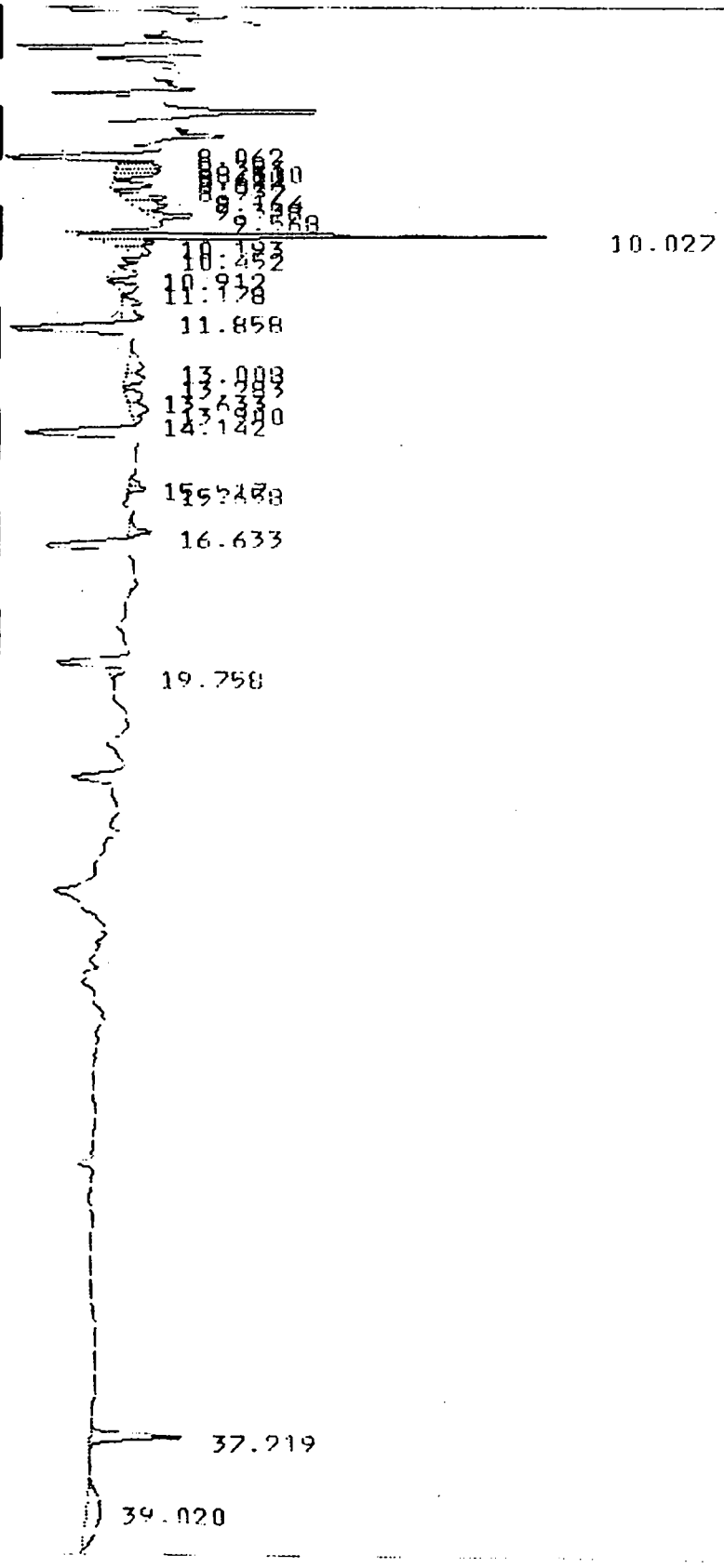
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.37		0.000000	44368	VV	0.0000	
2	6.44		0.000000	57244	VV	0.0000	
3	6.69		0.000000	244641	PV	0.0000	
4	7.03		0.000000	245762	VV	0.0000	
5	7.28		0.000000	44362	VV	0.0000	
6	7.47		0.000000	11084	VV	0.0000	
7	7.59		0.000000	23107	VB	0.0000	
8	8.02	7.99	0.000000	500365	VV	27.4639	TCX
9	8.43		0.000000	46445	BV	0.0000	
10	8.52		0.000000	48604	VV	0.0000	
11	8.70		0.000000	11762	VV	0.0000	
12	8.97		0.000000	47004	BV	0.0000	
13	9.09		0.000000	22013	VV	0.0000	
14	9.28		0.000000	22527	VV	0.0000	
15	9.40		0.000000	13454	VV	0.0000	
16	9.61		0.000000	25138	VV	0.0000	
17	11.98	12.01	0.000000	18850	FF	.9127	G-BHC
18	13.13	13.09	0.000000	8775	FF	.3683	HEPTACHLOR
19	13.36		0.000000	14447	FF	0.0000	
20	14.89	14.90	0.000000	12543	FF	1.0998	B-BHC
21	24.96		0.000000	10059	FF	0.0000	
22	25.32	25.30	0.000000	14870	BV	1.6251	ENDRIN ALDEHYDE
23	25.69		0.000000	33764	VV	0.0000	
24	26.00	26.02	0.000000	21132	PV	2.4626	ENDOSULFAN SULFATE
25	26.26	26.22	0.000000	18272	VB	4.6874	METHOXYCHLOR
26	30.28	#30.23	0.000000	212428	FF	19.9407	DCB
27	32.48		0.000000	81658	BV	0.0000	
28	35.37		0.000000	127627	PV	0.0000	

Total Area : 1982306 Total ng inj : 58.561

Report Time : 1359 08Dec1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01J 032.RES

IEA Pesticide Standard Report

Sample Name : WG[illegible]651 METHOD BLANK Inj 1844 24Nov1999
Result : /DATA/LOOP/RESULT/D4BS010 031.RES GC : HP5890B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : WG4[illegible]651 M[illegible]OD B[illegible]NK Report No :367 02
Result File : /DATA/LOOP/RESULT/D4BS01J 031.RES
Column Type : DB-[illegible]08 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1844 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4BS01J.SEQ
Subseq/Sample : 1/ 31 Bottle no. : 32

% Dil-Fact
100.00

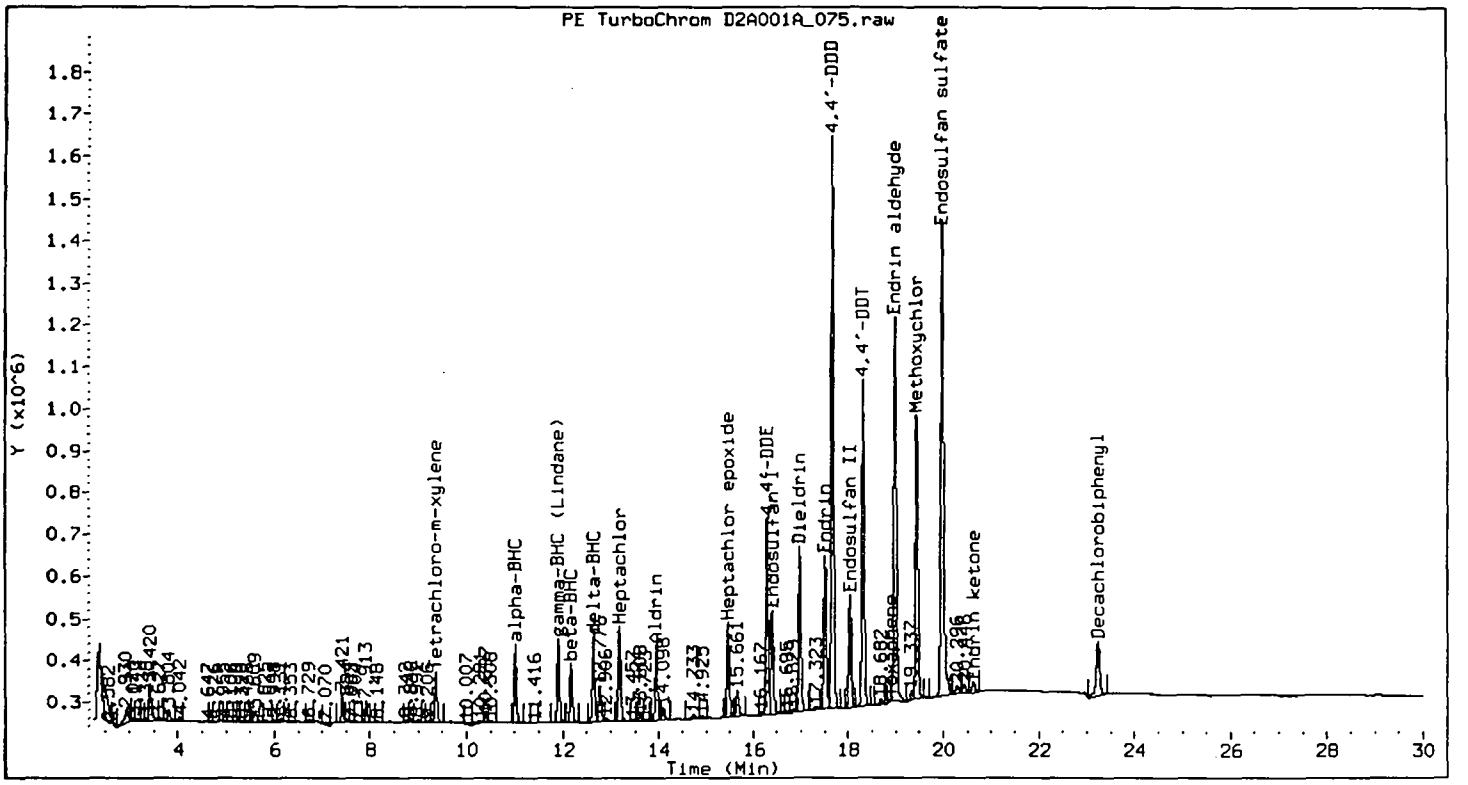
Run Status : RunStatusOK
EndOffBaseline
SpecialInteg

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.06		0.000000	51183	BV	0.0000	
2	8.39		0.000000	18921	BV	0.0000	
3	8.51		0.000000	40125	VV	0.0000	
4	8.61		0.000000	27342	VV	0.0000	
5	8.69		0.000000	30618	VV	0.0000	
6	8.94		0.000000	42025	VV	0.0000	
7	9.16		0.000000	51811	PV	0.0000	
8	9.34		0.000000	44262	VV	0.0000	
9	9.57		0.000000	46067	VB	0.0000	
10	10.03	#10.00	0.000000	315362	PV	14.4297	TOX
11	10.19		0.000000	57529	VV	0.0000	
12	10.45		0.000000	39632	VB	0.0000	
13	10.91		0.000000	23956	BB	0.0000	
14	11.18		0.000000	31755	BB	0.0000	
15	11.86		0.000000	55554	FF	0.0000	
16	13.01		0.000000	33457	FF	0.0000	
17	13.28		0.000000	25987	FF	0.0000	
18	13.63		0.000000	27743	FF	0.0000	
19	13.90		0.000000	35408	FF	0.0000	
20	14.14		0.000000	10486	FF	0.0000	
21	15.52		0.000000	11256	FF	0.0000	
22	15.66		0.000000	13631	FF	0.0000	
23	16.63		0.000000	25040	FF	0.0000	
24	19.76		0.000000	20385	FF	0.0000	
25	37.22	37.24	0.000000	130540	BV	22.[illegible]09	DCB
26	39.02		0.000000	110375	BU	0.0000	

Total Area : 1320450 Total ng inj : 36.661

Report Time : 1441 08Dec1999
Method : /DATA/LOOP/METHOD/HP58904BPJ.MTH
Result File : /DATA/LOOP/RESULT/D4BS01J 031.RES

Data File: /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/D2A001A_075.d Page 1
Report Date 12/09/1999 16:04



Method : /chem/HP58902.i/8081/front/11-12-99/12nov99f.b/Bf8081.m
Sample Info : WG41661 BS
Lab ID : WG41661 BS
Inj Date : 14-NOV-1999 17:22
Operator : gds
Cpnd Sublist: TCLpest+

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BS

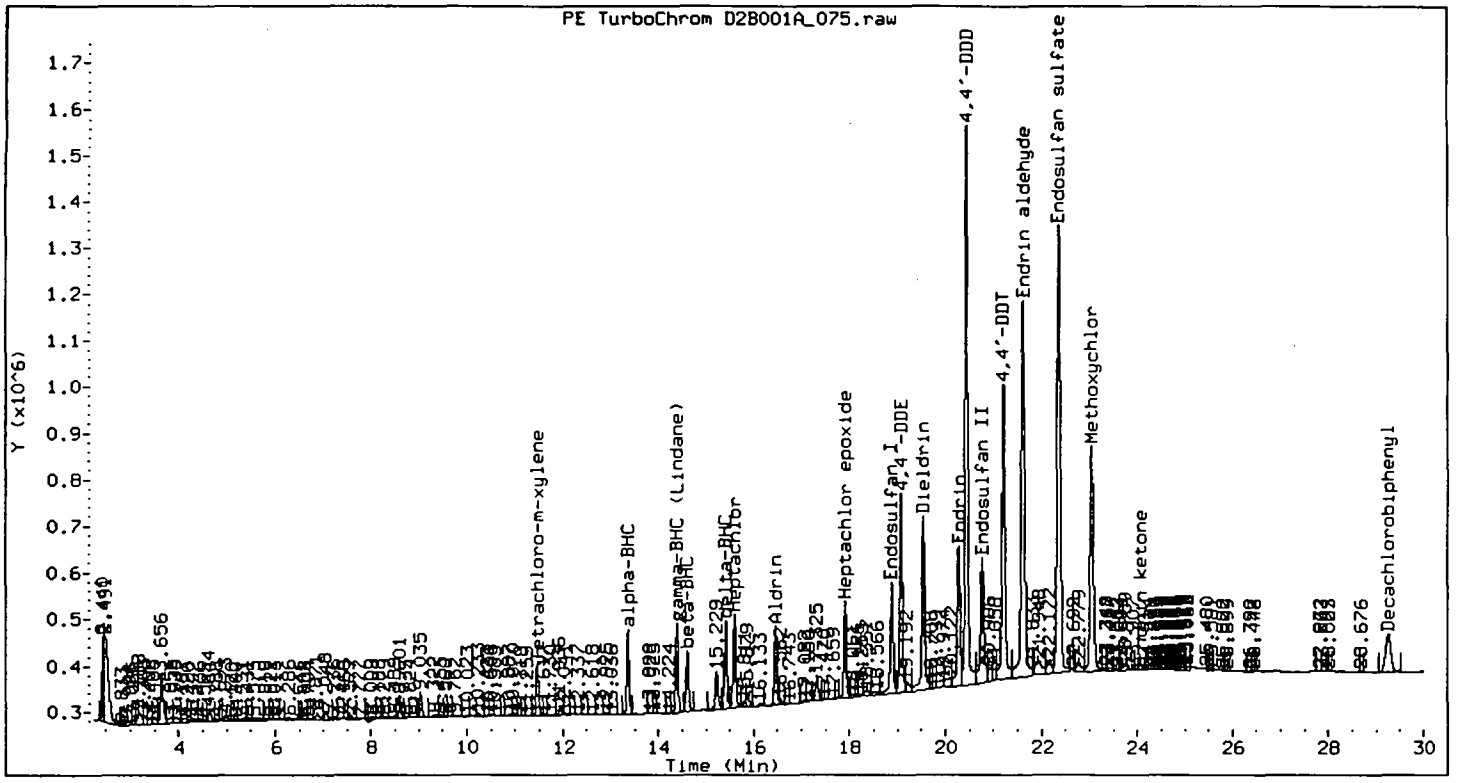
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
ldrin	13.949	13.945	0.004	619444	19.879	0.040
alpha-BHC	11.014	11.014	0.000	607846	19.622	0.039
eta-BHC	12.172	12.169	0.003	503568	25.530	0.051
delta-BHC	12.643	12.639	0.004	680231	25.895	0.052
amma-BHC (Lindane)	11.907	11.905	0.002	663716	21.046	0.042
,4'-DDD	17.671	17.672	0.002	4481299	208.074	0.416
4,4'-DDE	16.288	16.282	0.006	1531227	48.975	0.098
,4'-DDT	18.314	18.317	0.003	2636694	95.150	0.190
Dieldrin	16.975	16.976	0.001	1401128	44.569	0.089

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Endosulfan I	16.398	16.398	0.001	915425	28.053	0.056
Endosulfan II	18.040	18.034	0.006	998859	31.270	0.063
Endosulfan sulfate	19.984	19.981	0.003	4544011	155.357	0.311
Endrin	17.511	17.512	0.001	1326872	50.263	0.101
Endrin aldehyde	18.993	18.988	0.005	3492561	126.830	0.254
Endrin ketone	20.637	20.633	0.004	126305	3.500	0.007
Heptachlor	13.182	13.179	0.002	813459	19.220	0.038
Heptachlor epoxide	15.463	15.457	0.006	809057	22.796	0.046
Methoxychlor	19.447	19.450	0.003	2360974	157.362	0.315
Toxaphene	18.314	18.279	0.035	2636694	23465.230	46.930
(2)	------	18.781	------	------	------	------ (*)
(3)	18.892	18.927	0.035	15901	75.442	0.151
(4)	------	19.543	------	------	------	------ (*)
(5)	------	19.748	------	------	------	------ (*)
(6)	20.637	20.570	0.067	126305	719.662	1.439
Average of peak concentrations:						16.20
Tetrachloro-m-xylene	9.366	9.364	0.002	425936	13.024	0.026
Decachlorobiphenyl	23.239	23.242	0.003	734196	16.403	0.033

COMMENTS:

* - Mutlicomponent peak not used in quantitation of compound.

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/D2B001A_075.d Page 1
Report Date 12/09/1999 16:11



Method : /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/Br8081.m
Sample Info : WG41661 BS
Lab ID : WG41661 BS
Inj Date : 14-NOV-1999 17:22
Operator : gds
Cpnd Sublist: TCLpest+

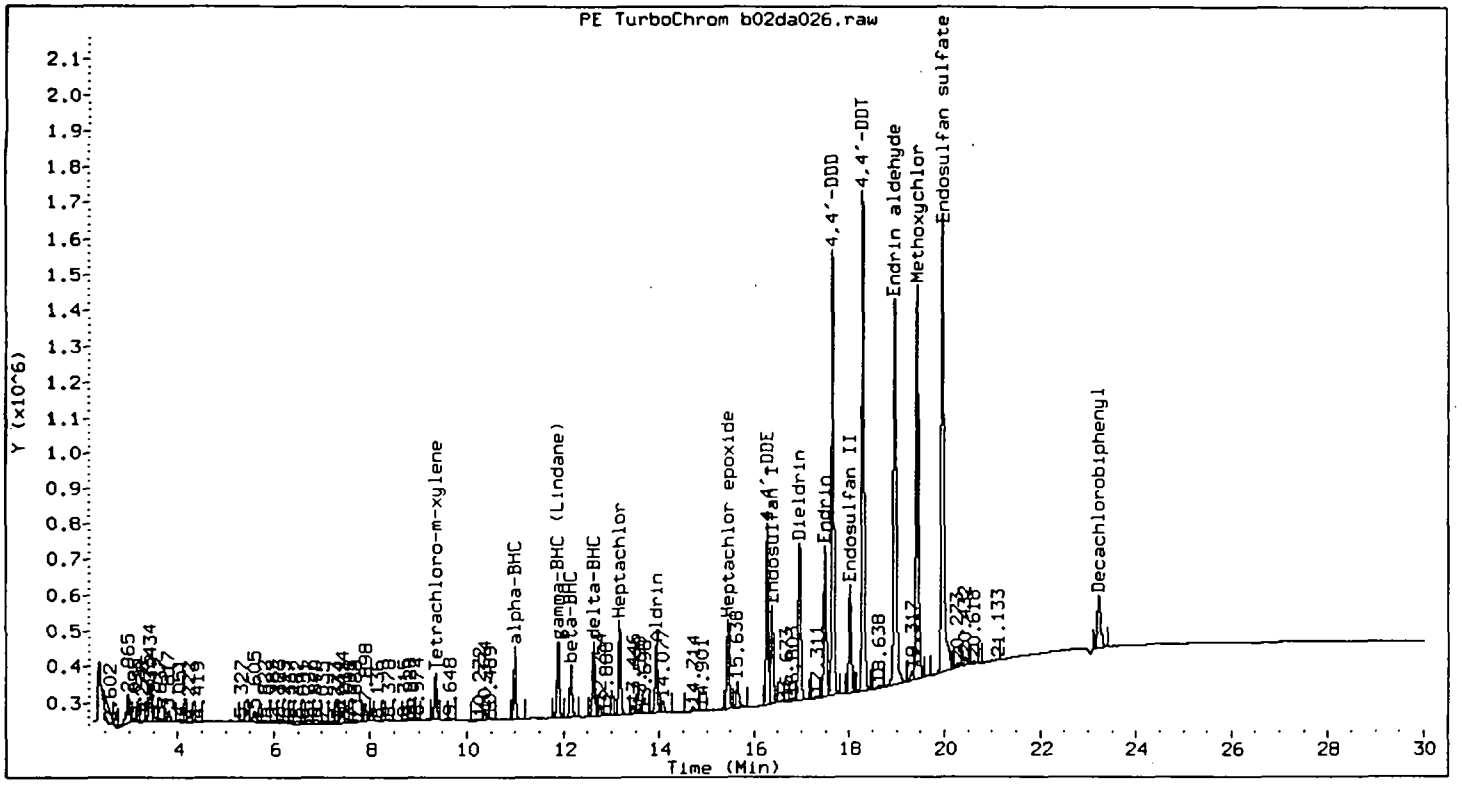
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BS

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Aldrin	16.462	16.456	0.006	611262	18.722	6.241
alpha-BHC	13.371	13.367	0.003	617954	19.255	6.418
beta-BHC	14.616	14.611	0.005	481632	24.050	8.017
delta-BHC	15.423	15.418	0.006	687576	24.897	8.299
gamma-BHC (Lindane)	14.395	14.393	0.002	672863	20.542	6.847
4,4'-DDD	20.442	20.443	0.002	4654587	* 220.518	73.506
4,4'-DDE	19.076	19.070	0.006	1592958	51.863	17.288
4,4'-DDT	21.217	21.218	0.001	2771804	115.811	38.604
Dieldrin	19.543	19.545	0.003	1662259	54.006	18.002

Data File: /chem/HP58902.i/8081/rear/11-12-99/12nov99f.b/D2B001A_075.d Page 2
Report Date 12/09/1999 16:11

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Endosulfan I	18.883	18.884	0.002	1039391	32.523	10.841
Endosulfan II	20.777	20.775	0.003	1371873	43.472	14.491
Endosulfan sulfate	22.371	22.369	0.002	4537132	152.425	50.808
Endrin	20.284	20.287	0.002	1350090	62.488	20.829
Endrin aldehyde	21.624	21.621	0.003	3996137	144.765	48.255
Endrin ketone	24.069	24.076	0.007	93735	2.636	0.879
Heptachlor	15.603	15.602	0.002	764827	19.208	6.403
Heptachlor epoxide	17.908	17.901	0.008	778500	22.584	7.528
Methoxychlor	23.051	23.052	0.002	2403632	178.786	59.595
Tetrachloro-m-xylene	11.466	11.463	0.003	413725	12.918	4.306
Decachlorobiphenyl	29.253	29.269	0.017	631048	13.093	4.364

Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/b02da026.d Page 1
Report Date 12/09/1999 11:36



Method : /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/Bf8081.m
Sample Info : wg41661 bs
Lab ID : wg41661 bs RR
Inj Date : 03-DEC-1999 04:24
Operator : gds
Cpnd Sublist: TCLpest+

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BS

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
ldrin	13.932	13.920	0.012	658132	19.077	0.038
alpha-BHC	10.994	10.970	0.024	624886	19.037	0.038
eta-BHC	12.153	12.141	0.013	513011	23.056	0.046
delta-BHC	12.624	12.612	0.013	681573	22.465	0.045
gamma-BHC (Lindane)	11.887	11.863	0.023	680285	20.428	0.041
,4'-DDD	17.649	17.637	0.012	4137027	179.351	0.359
4,4'-DDE	16.268	16.260	0.008	1641738	47.158	0.094
,4'-DDT	18.293	18.281	0.012	4759650	167.172	0.334
Dieldrin	16.951	16.937	0.014	1532984	48.506	0.097

GDS
12-9-99

Data File: /chem/HP58902.i/8081/front/11-26-99/02dec99b.b/b02da026.d Page 2
Report Date 12/09/1999 11:36

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Endosulfan I		16.373	16.360	0.013	985535	29.809	0.060
Endosulfan II		18.014	18.006	0.008	1108957	30.819	0.062
Endosulfan sulfate		19.959	19.948	0.011	5227840	161.860	0.324
Endrin		17.485	17.472	0.013	1522898	59.001	0.118
Endrin aldehyde		18.967	18.957	0.009	4230146	147.280	0.295
Heptachlor		13.165	13.143	0.022	942021	21.827	0.044
Heptachlor epoxide		15.442	15.432	0.010	867555	22.379	0.045
Methoxychlor		19.431	19.417	0.014	3930900	237.097	0.474
Tetrachloro-m-xylene	(M)	9.350	9.325	0.025	417792	11.990	0.024
Decachlorobiphenyl	(M)	23.227	23.206	0.022	724220	16.561	0.033

COMMENTS:

M - Compound response manually integrated.

FORM 1
PEST ORGANICS ANALYSIS DATA SHEET

CLIENT ID

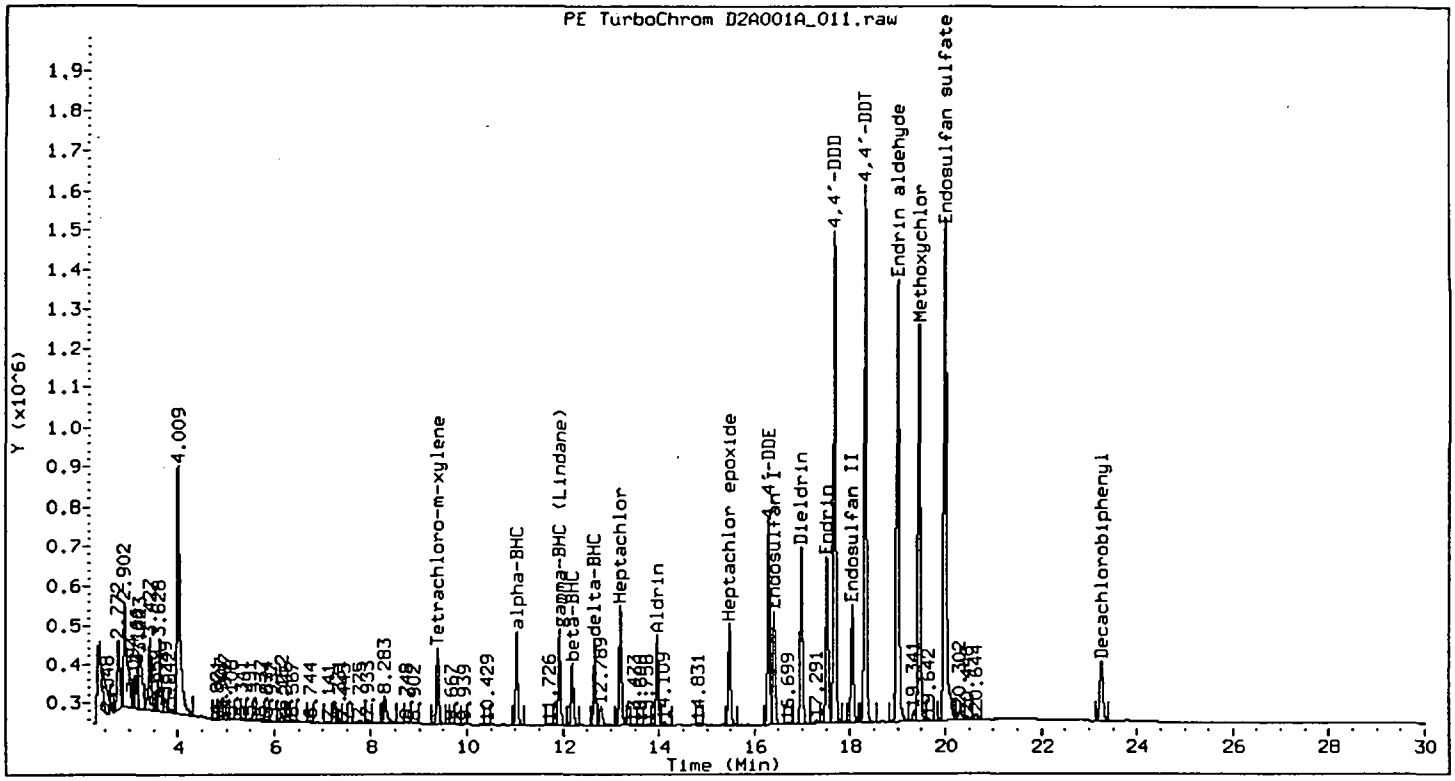
Blank Spike

Lab Name: STL - Whippany
Matrix: (soil/water): Soil
Sample wt/vol: 30 (g/ml) g
%Moisture: 0
Extraction: (SepF/Cont/Sonc) Sonc
Concentrated Extract Volume: 10000(µl)
Injection Volume: 1 (µl)
GPC Cleanup: (Y/N) N pH:_____

Client: OGDEN
Lab Sample ID: WG41651 BS
Lab File ID: D2A001A_011
Date Received: NA
Date Extracted: 10/15/99
Date Analyzed: 11/12/99
Dilution Factor: 1
Sulfur Cleanup: Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/Kg	Q
319-84-6	alpha-BHC	8.0	
319-85-7	beta-BHC	9.2	
319-86-8	delta-BHC	9.1	
58-89-9	gamma-BHC (Lindane)	8.4	
76-44-8	Heptachlor	8.5	
3098-00-2	Aldrin	8.6	
1024-57-3	Heptachlor Epoxide	8.6	
959-98-8	Endosulfan I	11	
60-57-1	Dieldrin	17	
72-55-9	4,4'-DDE	18	
72-20-8	Endrin	19	
33213-65-9	Endosulfan II	12	
72-54-8	4,4'-DDD	64	
1031-07-8	Endosulfan Sulfate	60	
50-29-3	4,4'-DDT	55	
72-43-5	Methoxychlor	78	
53494-70-5	Endrin Ketone	3.3	U
7421-93-4	Endrin Aldehyde	52	
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	83	U

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/D2A001A_011.d Page 1
Report Date 12/09/1999 13:02



Method : /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/Bf8081.m
Sample Info : WG41651 BS
Lab ID : WG41651 BS
Inj Date : 12-NOV-1999 23:47
Operator : gds
Cpnd Sublist: TCLpest

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: BS

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.963	13.963	0.001	801609	25.725	8.575
alpha-BHC	11.033	11.023	0.009	741611	23.940	7.980
beta-BHC	12.188	12.188	0.001	543899	27.575	9.192
delta-BHC	12.658	12.658	0.000	717229	27.303	9.101
gamma-BHC (Lindane)	11.924	11.915	0.009	791572	25.101	8.367
4,4'-DDD	17.675	17.681	0.006	4104663	190.586	63.529
4,4'-DDE	16.294	16.298	0.004	1682855	53.825	17.942
4,4'-DDT	18.317	18.324	0.008	4606542	166.236	55.412
Dieldrin	16.982	16.984	0.003	1585471	50.433	16.811

Data File: /chem/HP58902.i/8081/front/11-12-99/12NOV99b.b/D2A001A_011.d Page 2
Report Date 12/09/1999 13:02

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Endosulfan I	16.406	16.407	0.002	1053531	32.285	10.762
Endosulfan II	18.045	18.048	0.003	1110732	34.773	11.591
Endosulfan sulfate	19.991	19.990	0.001	5250351	179.507	59.836
Endrin	17.516	17.520	0.004	1520230	57.588	19.196
Endrin aldehyde	18.997	19.000	0.003	4292054	155.863	51.954
Heptachlor	13.196	13.189	0.007	1084038	25.613	8.538
Heptachlor epoxide	15.473	15.477	0.003	919931	25.921	8.640
Methoxychlor	19.450	19.458	0.008	3531201	235.359	78.453
Tetrachloro-m-xylene	9.384	9.380	0.004	662543	20.259	6.753
Decachlorobiphenyl	23.259	23.248	0.011	740468	16.543	5.514

AEN/NJ
Organic Extractions -AQUEOUS / Matrix

Batch: 18097 Extract File#: _____ Extraction Method: SEP FUNNEL Date: 15-OCT-99 Analyst: JK 10/15/99

Luis Batch: WG41661 Relinquished To Storage(Init/Date): _____ Concentration (Finish) Date: 27-OCT-99 Analyst: John M. Kopinski

Analysis: PST-8081-T Removed From Storage(Init/Date): _____

Returned To Storage(Init/Date): _____

BS LOT #: SS1327E MS LOT #: SS1327E MSD LOT #: SS1327E
BS LOT VOLUME: .2ml MS LOT VOLUME: .2ml MSD LOT VOLUME: .2ml Spike witnessed by: _____

Lab ID	Client ID	Sample Vol	Int. pH	BN pH	AE pH	Initial Vol.	Split Aliquot	Final Vol.	Surr. Lot	Vol	Comments
94105001	EQUIPBLK05	1000 ml	6					2 ml	SS1319E	.2 ml	
94105002	DECONWATER	1000 ml	6					2 ml	SS1319E	.2 ml	
94106006	SW-2-1-01	1000 ml	6					2 ml	SS1319E	.2 ml	
94106006MS	SW-2-1-01	500 ml	6					2 ml	SS1319E	.2 ml	
94106006MSD	SW-2-1-01	500 ml	6					2 ml	SS1319E	.2 ml	
94106007	SW-2-1-02	1000 ml	6					2 ml	SS1319E	.2 ml	
QE-18097E	BLANK	1000 ml	5					2 ml	SS1319E	.2 ml	
QE-18097ES	BL.SP.	1000 ml	5					2 ml	SS1319E	.2 ml	

GTS
10.15 99

000689

10/26

AEN/NJ
Organic Extractions -SOIL/SEDIMENT/SLUDGE / Matrix

Batch: 17627 Extract File#: 137 Extraction Method: SONICATION Date: 15-OCT-99 Analyst: John M. Kopinski

Luis Batch: WG41651 Relinquished To Storage(Init/Date): _____ Concentration (Finish) Date: _____ Analyst:

Analysis: PST-8081-T Removed From Storage(Init/Date): _____

Returned To Storage(Init/Date): _____

pH/Cu + ICAN 10/20/99

BS LOT #: SS1327E MS LOT #: SS1335E MSD LOT #: SS1335E
BS LOT VOLUME: 1ml MS LOT VOLUME: 1ml MSD LOT VOLUME: 1ml Spike witnessed by: _____

Lab ID	Client ID	Sample Wgt	pH	% Sol	% Sol Dec	Initial Vol.	Split Aliquot	Final Vol.	Surr. Lot	Vol	Comments
94011001	SB-5-2-01	30.0 g		89.68				10ml	SS1319E	1 ml	Post only
94011002	SB-5-2-02	30.0		87.35					SS1319E	1 ml	florisil cleanup
94011003	SB-9-3-01	30.0		88.08					SS1319E	1 ml	
94011005	SB-8-1-01	30.0		87.22					SS1319E	1 ml	
94011007	SB-4-3-01	30.2		90.69					SS1319E	1 ml	
94011011	SB-7-2-01	30.5		92.74					SS1319E	1 ml	
94011012	SB-7-7-01	30.0		89.47					SS1319E	1 ml	
94011014	SB-6-4-01	30.3		92.67					SS1319E	1 ml	
94011016	SB-1-2-01	30.2		90.95					SS1319E	1 ml	
94011017	SB-2-1-01	30.2		87.06					SS1319E	1 ml	
94023001	MW3D-S0-44			84.66					SS1319E	1 ml	
94023002MS	MW3DS044MS	30.0		84.66					SS1319E	1 ml	Post PCB split
94023003MSD	MW3DS044MS	30.5		84.66					SS1319E	1 ml	florisil cleanup
94023004	MW5D-S0-44	30.0		84.87					SS1319E	1 ml	
94058001	MW4S-S0-04	30.1							SS1319E	1 ml	
94058002	MW4S-S0-18	30.0							SS1319E	1 ml	
94058003	MW4S-S00UP	30.1							SS1319E	1 ml	
94058004	MW6D-S0-04	30.0							SS1319E	1 ml	
94058005	MW6D-S0-28	30.4							SS1319E	1 ml	
94058006	MW6D-S0-50	30.2							SS1319E	1 ml	
94106008	S-2-1-01	30.4							SS1319E	1 ml	
94106009	S-2-1-02	30.0							SS1319E	1 ml	
QE-17627E	BLANK	30.0							SS1319E	1 ml	
QE-17627ES	BL.SP.	30.0							SS1319E	1 ml	

000690

PCB's

Severn Trent Laboratories - Whippany
GC ORGANICS SURROGATE RECOVERY

Matrix: WATER Level: LOW Lab Job No: 94106

	LABORATORY SAMPLE NO.	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	WG41663-MB	50	48	0
02	WG41663-BS	61	57	0
03	94106-006	46	43	0
04	94106-007	47	44	0
05	94106-007MS	58	56	0
06	94106-007MSD	58	56	0
07				
08				
09				
10				
11				
12				
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24				
25				
26				
27				
28				
29				
30				

S1 (DCB) = Decachlorobiphenyl ADVISORY QC LIMITS (35-155)

Column to be used to flag recovery values
* Values outside of advisory QC limits
D Surrogate diluted out
R Surrogate removed during H2SO4 cleanup procedure
** Not detected due to coeluting interference

Severn Trent Laboratories - Whippany
GC ORGANICS SURROGATE RECOVERY

Matrix: SOIL Level: LOW Lab Job No: 94106

	LABORATORY SAMPLE NO.	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	WG41652-MB	70	63	0
02	WG41652-BS	74	69	0
03	94106-008	57	59	0
04	94106-009	66	62	0
05	94023-001	66	65	0
06	94023-002MS	71	68	0
07	94023-003MSD	68	64	0
08				
09				
10				
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30				

	ADVISORY QC LIMITS
S1 (DCB) = Decachlorobiphenyl	(38-157)

Column to be used to flag recovery values
* Values outside of advisory QC limits
D Surrogate diluted out
R Surrogate removed during H2SO4 cleanup procedure
** Not detected due to coeluting interference

SEVERN TRENT LABORATORIES - WHIPPANY

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix: WATER

Level: LOW

Matrix Spike - Lab Sample No.: 94106-007

MS Sample from Lab Job No: 94106

QA Batch: WG41663

Compound	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Aroclor-1016	4.0	0.00	3.5	88	72-129
Aroclor-1260	4.0	0.00	3.8	95	55-134

Compound	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	4.0	3.1	77	13	22	72-129
Aroclor-1260	4.0	3.8	96	1	19	55-134

Column to be used to flag recovery and RPD values with an asterik
* Values outside of QC limits
RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 4 outside limits

COMMENTS:

SEVERN TRENT LABORATORIES - WHIPPANY

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix: SOIL

Level: LOW

Matrix Spike - Lab Sample No.: 94023-001

MS Sample from Lab Job No: 94023

QA Batch: WG41652

Compound	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS % REC #	QC. LIMITS REC.
Aroclor-1016	390	0.00	362	93	75-135
Aroclor-1260	390	0.00	384	98	61-139

Compound	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	390	339	87	7	20	75-135
Aroclor-1260	390	366	94	5	24	61-139

Column to be used to flag recovery and RPD values with an asterik
* Values outside of QC limits
RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 4 outside limits

COMMENTS:

SEVERN TRENT LABORATORIES - WHIPPANY

BLANK SPIKE RECOVERY

QA Batch: WG41663

Compound	SPIKE ADDED (ug/L)	BS CONCENTRATION (ug/L)	BS % REC.	QC. LIMITS REC.
Aroclor-1016	2.0	1.6	78	72-129
Aroclor-1260	2.0	1.8	91	55-134

Column to be used to flag recovery values with an asterik

Spike Recovery: 0 out of 2 outside limits

SEVERN TRENT LABORATORIES - WHIPPANY

BLANK SPIKE RECOVERY

QA Batch: WG41652

Compound	SPIKE ADDED (ug/kg)	BS CONCENTRATION (ug/kg)	BS % REC.	QC. LIMITS REC.
Aroclor-1016	330	304	92	75-135
Aroclor-1260	330	332	101	61-139

Column to be used to flag recovery values with an asterik

Spike Recovery: 0 out of 2 outside limits

Severn Trent Laboratories - Whippany
GC ORGANICS METHOD BLANK SUMMARY

LAB SAMPLE NO..

Method Blank

Matrix: WATER

Level: LOW

Instrument ID: HP68906

Date Analyzed: 11/08/99

Time Analyzed: 1609

Lab File ID: PCB6A2069

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

	CLIENT ID.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	Blank Spike	WG41663-BS	pcb6a2070.d	11/08/99
02	SW-2-1-01	94106-006	pcb6a2071.d	11/08/99
03	SW-2-1-02	94106-007	pcb6a2072.d	11/08/99
04	SW-2-1-02MS	94106-007MS	pcb6a2073.d	11/08/99
05	SW-2-1-02MSD	94106-007MSD	pcb6a2074.d	11/08/99
06				
07				
08				
09				
10				
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17				
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21				
22				
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30				

COMMENTS:

Severn Trent Laboratories - Whippany
GC ORGANICS METHOD BLANK SUMMARY

LAB SAMPLE NO.

Method Blank

Matrix: SOIL

Date Analyzed: 10/28/99

Level: LOW

Time Analyzed: 1319

Instrument ID: HP68906

Lab File ID: PCB6A1901

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

	CLIENT ID.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	Blank Spike	WG41652-BS	pcb6a1902.d	10/28/99
02	MW3D-SO-44	94023-001	pcb6a1903.d	10/28/99
03	MW3DSO44MS	94023-002MS	pcb6a1904.d	10/28/99
04	MW3DSO44MSD	94023-003MSD	pcb6a1905.d	10/28/99
05	S-2-1-01	94106-008	pcb6a1913.d	10/28/99
06	S-2-1-02	94106-009	pcb6a1914.d	10/28/99
07				
08				
09				
10				
11				
12				
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29				
30				

COMMENTS:

Severn Trent Laboratories - Whippany

Client ID: **SW-2-1-01**
Site:

Lab Sample ID: **94106-006**
Lab Job No: 94106

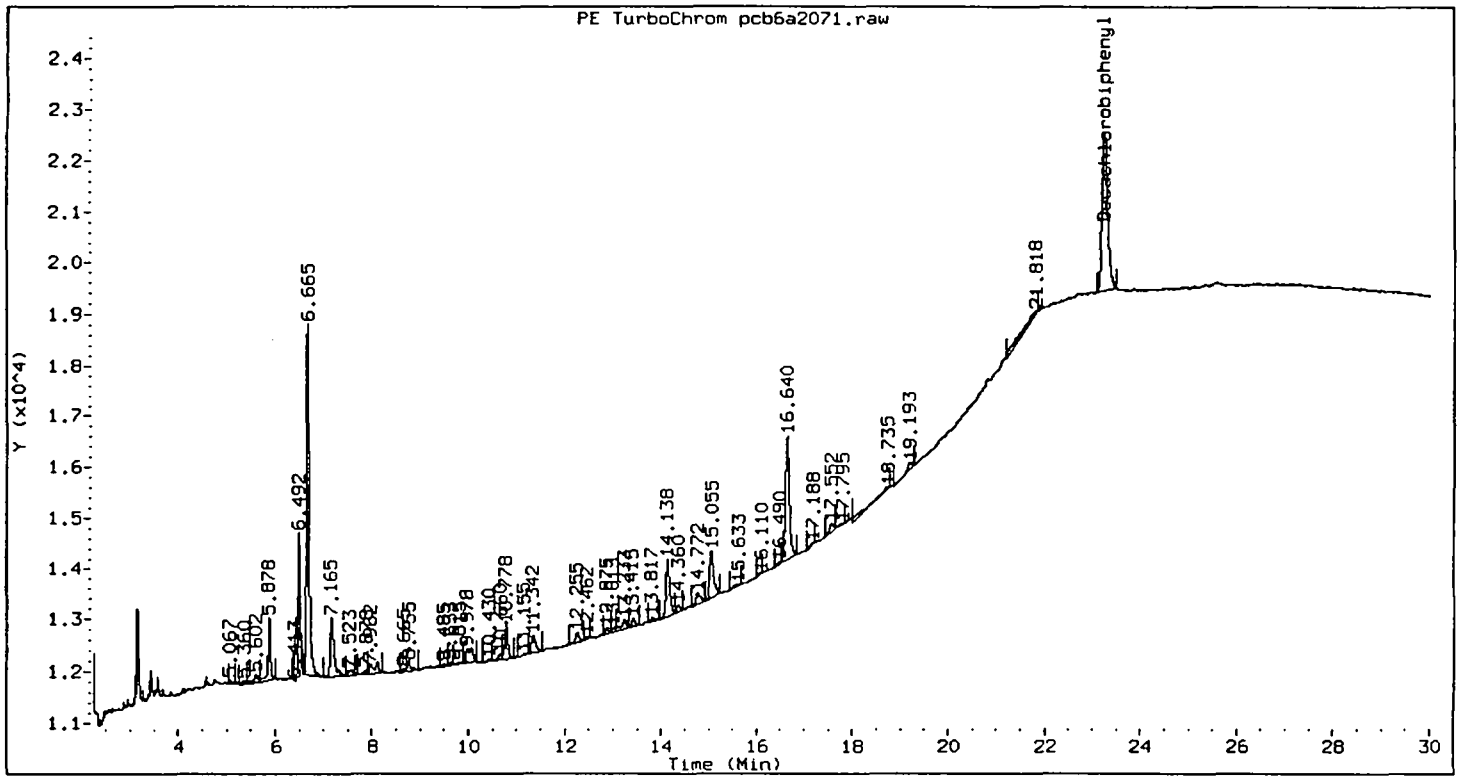
Date Sampled: 10/13/99
Date Received: 10/13/99
Date Extracted: 10/15/99
Date Analyzed: 11/08/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

Matrix: WATER
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2071.d
Rear File ID: pcb6b2071.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	ND	0.200	R
Aroclor-1221	ND	0.200	R
Aroclor-1232	ND	0.200	R
Aroclor-1242	ND	0.200	R
Aroclor-1248	ND	0.200	R
Aroclor-1254	ND	0.200	R
Aroclor-1260	ND	0.200	R

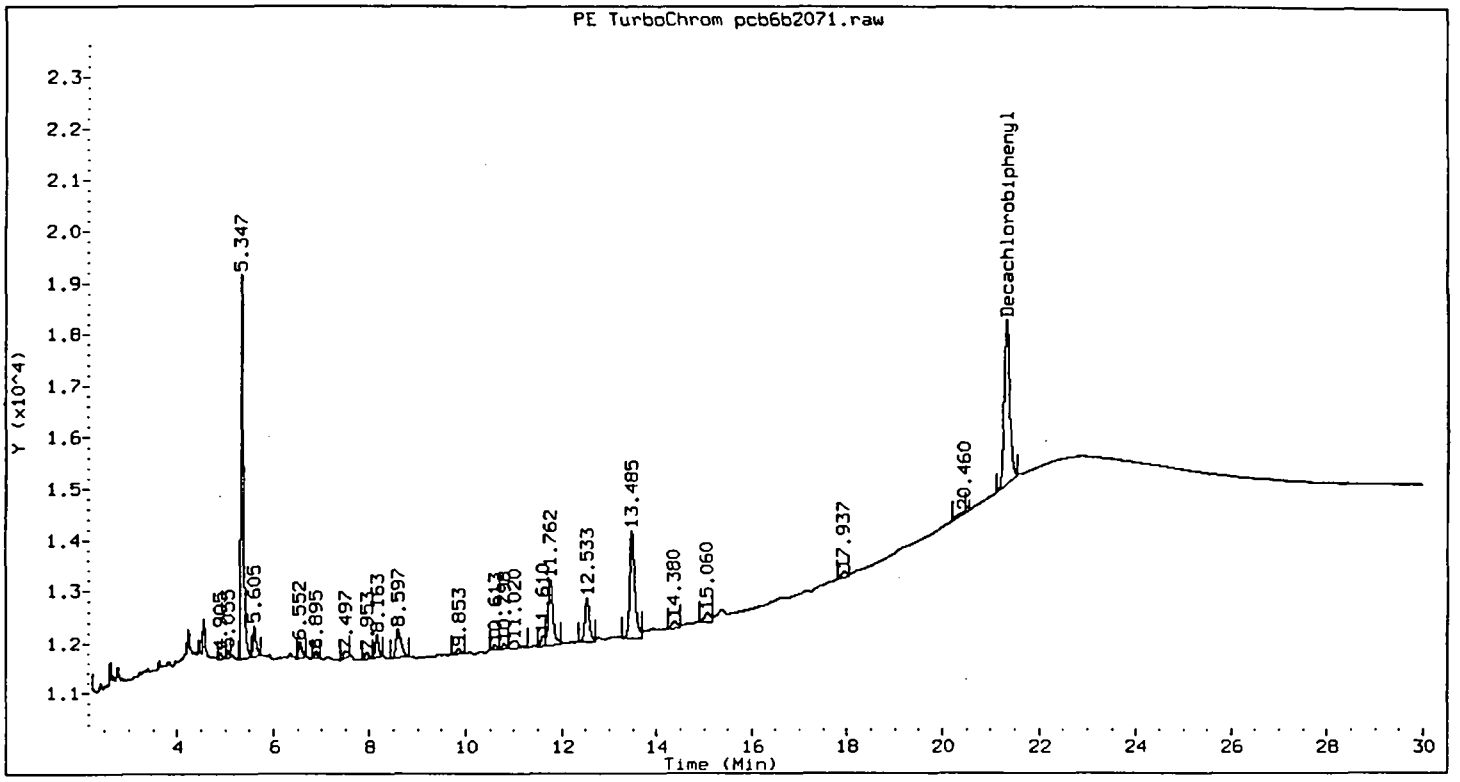
Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99.b/pcb6a2071.d Page 1
Report Date 11/09/1999 17:53



Method : /chem/HP68906.i/8082/front/10-19-99/08nov99.b/Xf8082.m
Sample Info : 94106-006
Lab ID : 94106-006 Inst ID : HP68906.i
Inj Date : 08-NOV-1999 17:25 Dil Factor : 1
Operator : DavidW Sample Matrix : WATER
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	23.243	23.237	0.007	24946	9.147	0.018

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/pcb6b2071.d Page 1
Report Date 11/09/1999 17:54



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/Xr8082.m
Sample Info : 94106-006
Lab ID : 94106-006 Inst ID : HP68906.i
Inj Date : 08-NOV-1999 17:25 Dil Factor : 1
Operator : DavidW Sample Matrix : WATER
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.328	21.330	0.002	26085	8.637	0.017

COMMENTS:

M - Compound response manually integrated.

11/22/99

Severn Trent Laboratories - Whippany

Client ID: **SW-2-1-02**
Site:

Lab Sample ID: **94106-007**
Lab Job No: 94106

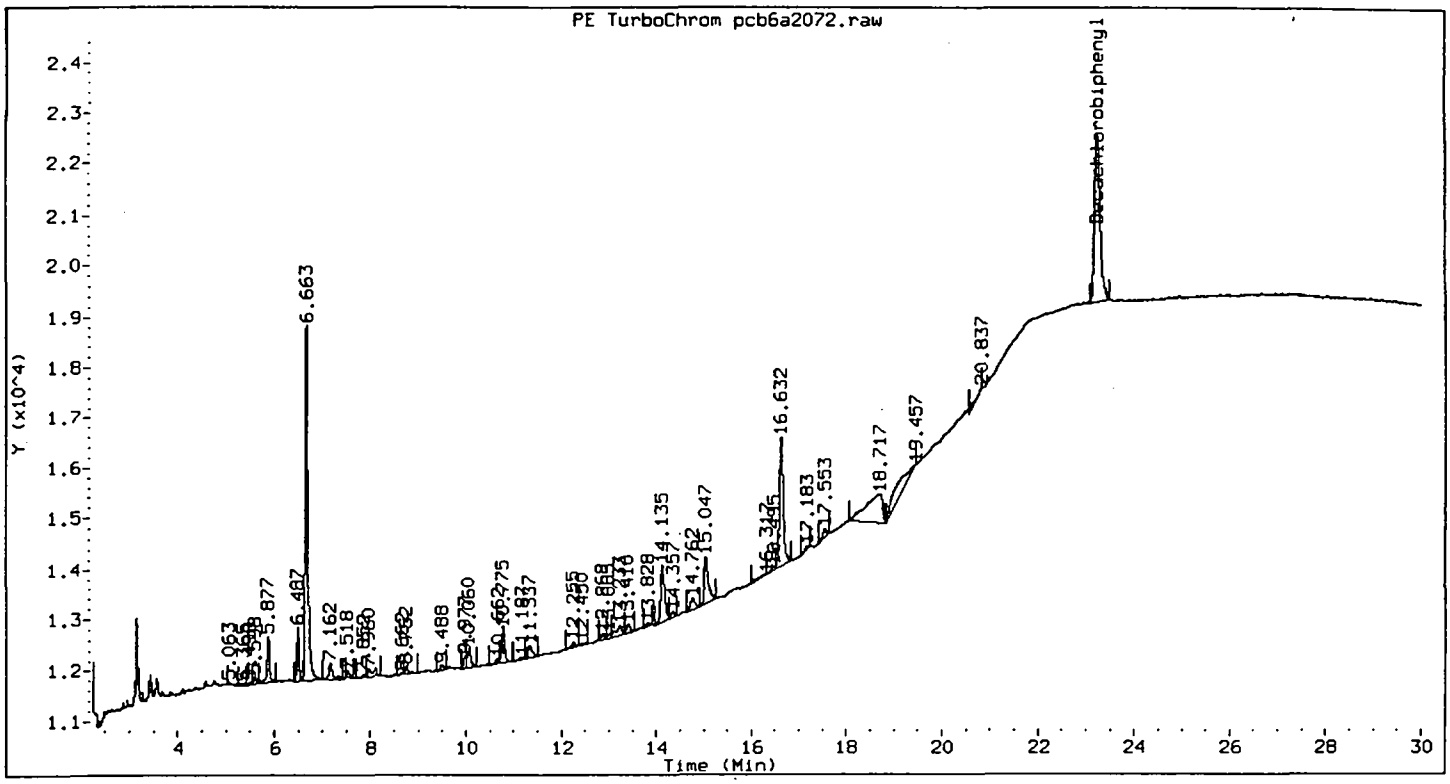
Date Sampled: 10/13/99
Date Received: 10/13/99
Date Extracted: 10/15/99
Date Analyzed: 11/08/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

Matrix: WATER
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2072.d
Rear File ID: pcb6b2072.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	ND	0.200	R
Aroclor-1221	ND	0.200	R
Aroclor-1232	ND	0.200	R
Aroclor-1242	ND	0.200	R
Aroclor-1248	ND	0.200	R
Aroclor-1254	ND	0.200	R
Aroclor-1260	ND	0.200	R

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99.b/pcb6a2072.d Page 1
Report Date 11/09/1999 17:53

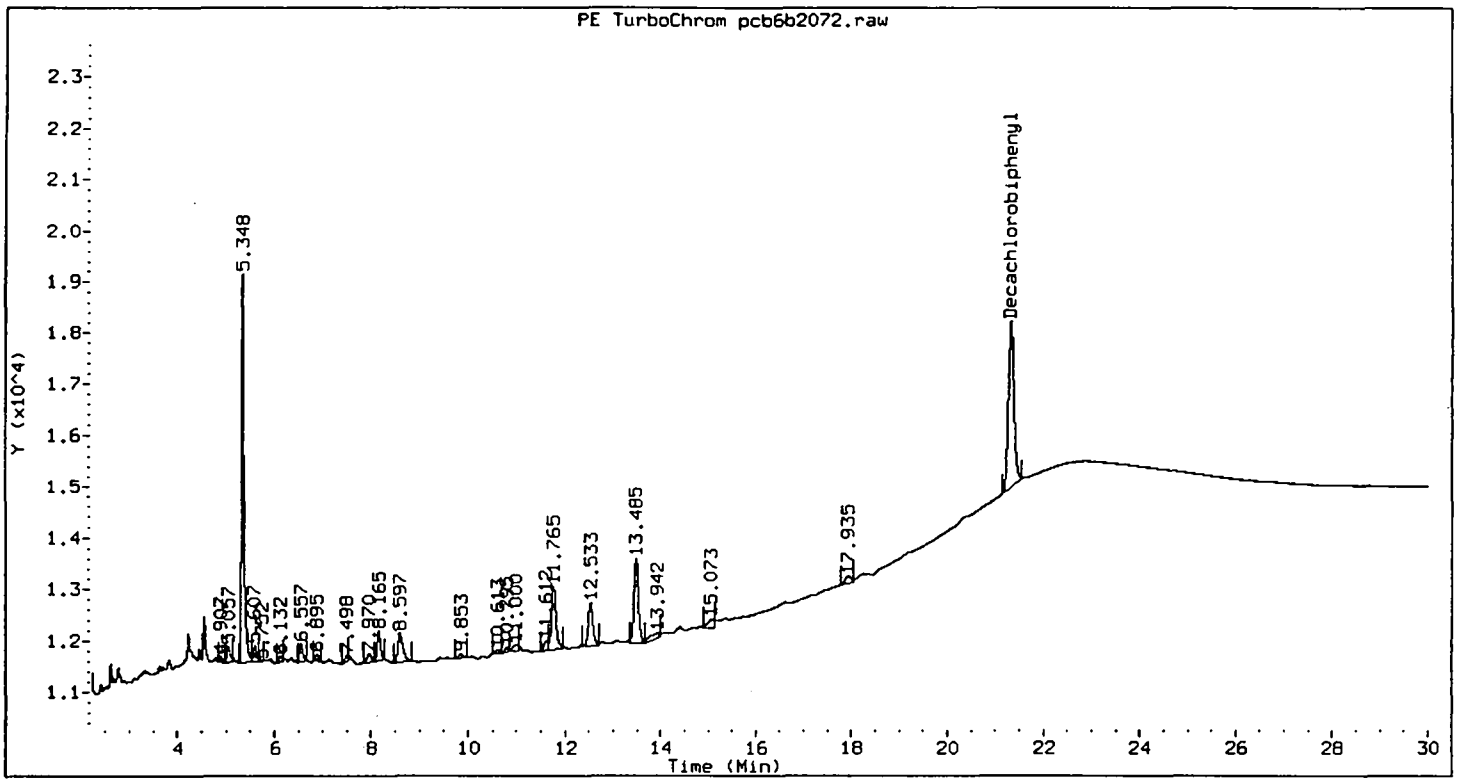


Method : /chem/HP68906.i/8082/front/10-19-99/08nov99.b/Xf8082.m
Sample Info : 94106-007
Lab ID : 94106-007 Inst ID : HP68906.i
Inj Date : 08-NOV-1999 18:03 Dil Factor : 1
Operator : DavidW Sample Matrix : WATER
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/L)
Decachlorobiphenyl	23.237	23.237	0.000	25901	9.497	0.019

11/22/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/pcb6b2072.d Page 1
Report Date 11/09/1999 17:55



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/Xr8082.m
Sample Info : 94106-007
Lab ID : 94106-007 Inst ID : HP68906.i
Inj Date : 08-NOV-1999 18:03 Dil Factor : 1
Operator : DavidW Sample Matrix : WATER
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.327	21.330	0.003	26583	8.802	0.018

COMMENTS:

M - Compound response manually integrated.

11/22/99

Severn Trent Laboratories - Whippany

Client ID: **S-2-1-01**
Site:

Lab Sample ID: **94106-008**
Lab Job No: 94106

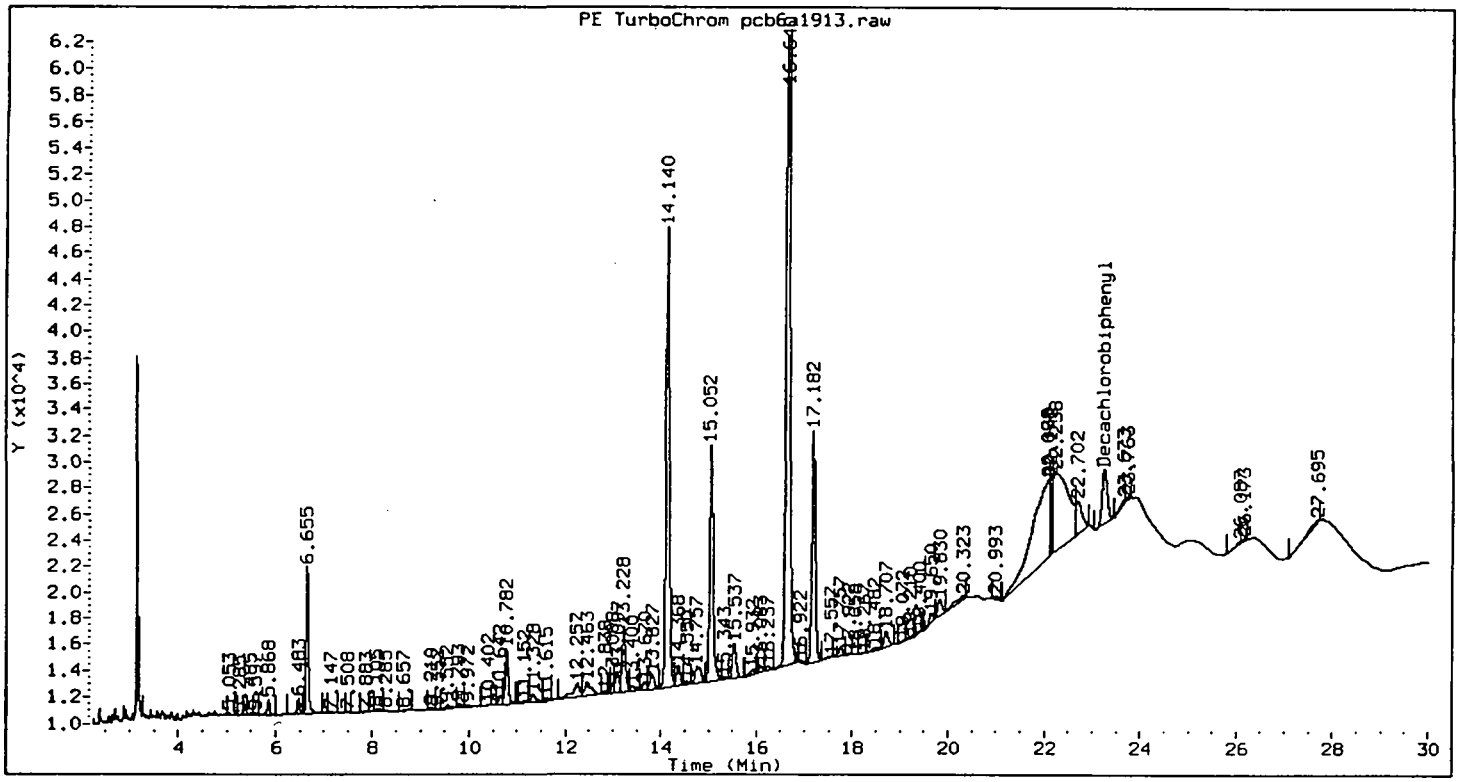
Date Sampled: 10/13/99
Date Received: 10/13/99
Date Extracted: 10/15/99
Date Analyzed: 10/28/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1913.d
Rear File ID: pcb6b1913.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 65

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	ND	92.8	R
Aroclor-1221	ND	92.8	R
Aroclor-1232	ND	92.8	R
Aroclor-1242	ND	92.8	R
Aroclor-1248	ND	92.8	R
Aroclor-1254	ND	92.8	R
Aroclor-1260	ND	92.8	R

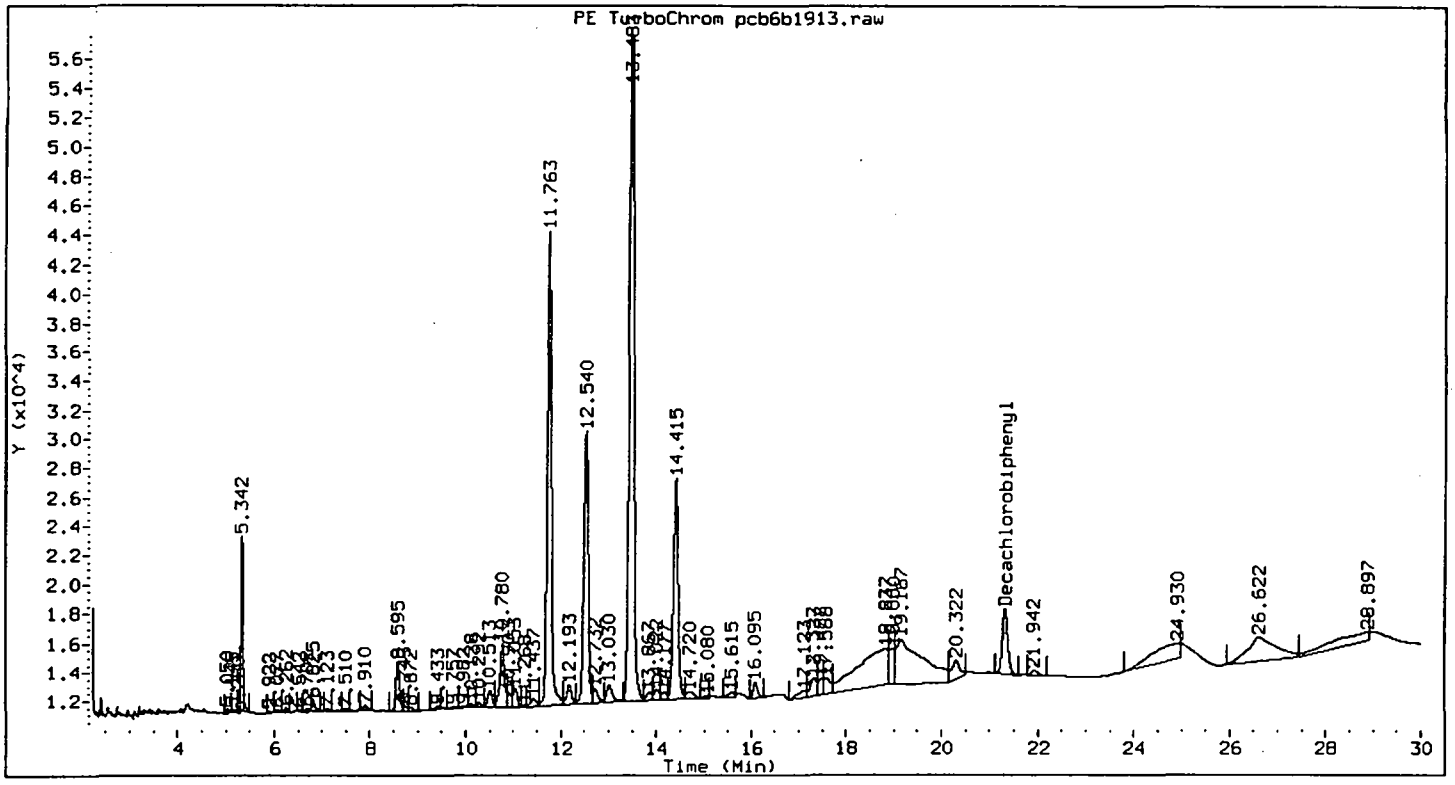
Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1913.d Page 1
Report Date 10/29/1999 12:30



Method : /chem/HP68906.i/8082/front/10-19-99/28oct99.b/Xf8082.m
Sample Info : 94106-008;30.4;;;64.9
Lab ID : 94106-008 Inst ID : HP68906.i
Inj Date : 28-OCT-1999 21:02 Dil Factor : 1
Operator : DavidW Sample Matrix : SOIL
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	23.245	23.247	0.002	31310	11.480	10.759

11/8/99



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/Xr8082.m
Sample Info : 94106-008;30.4;;;64.9
Lab ID : 94106-008 Inst ID : HP68906.i
Inj Date : 28-OCT-1999 21:02 Dil Factor : 1
Operator : DavidW Sample Matrix : SOIL
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Decachlorobiphenyl	(M)	21.327	21.317	0.010	35671	11.811	11.069

COMMENTS:

M - Compound response manually integrated.

11/8/99

Severn Trent Laboratories - Whippany

Client ID: **S-2-1-02**
Site:

Lab Sample ID: **94106-009**
Lab Job No: 94106

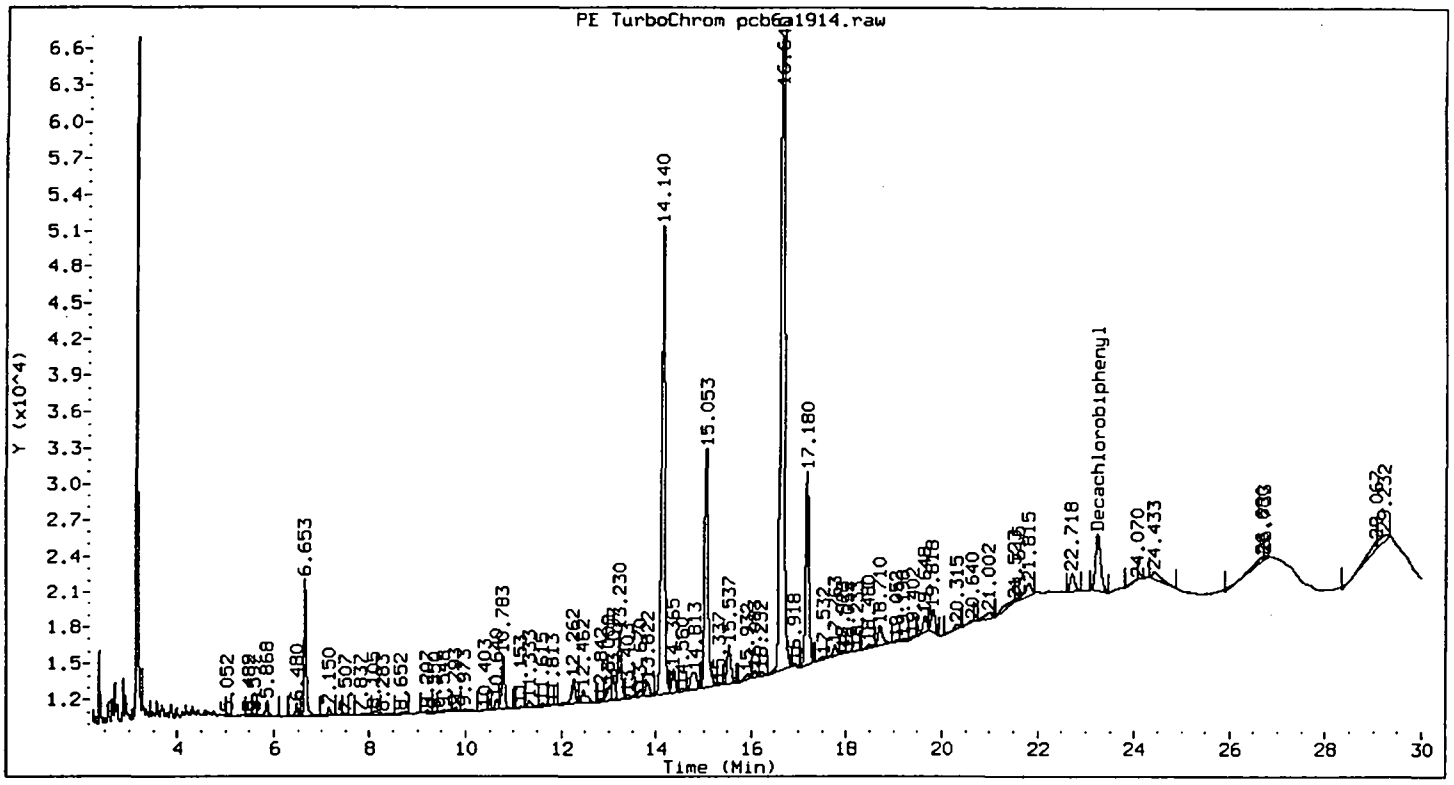
Date Sampled: 10/13/99
Date Received: 10/13/99
Date Extracted: 10/15/99
Date Analyzed: 10/28/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1914.d
Rear File ID: pcb6b1914.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 60

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	ND	82.3	R
Aroclor-1221	ND	82.3	R
Aroclor-1232	ND	82.3	R
Aroclor-1242	ND	82.3	R
Aroclor-1248	ND	82.3	R
Aroclor-1254	ND	82.3	R
Aroclor-1260	ND	82.3	R

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1914.d Page 1
Report Date 10/29/1999 12:30

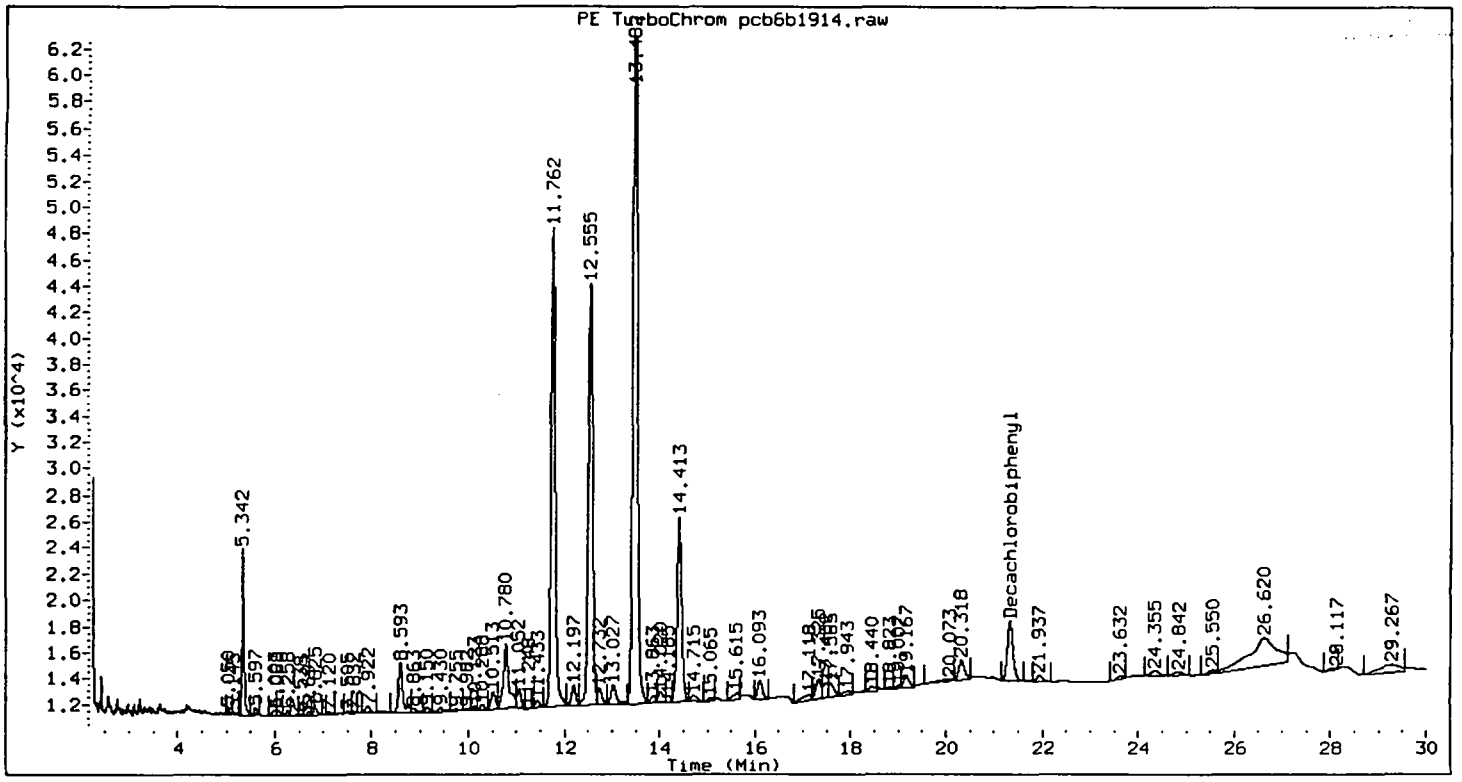


Method : /chem/HP68906.i/8082/front/10-19-99/28oct99.b/Xf8082.m
Sample Info : 94106-009;;;;59.9
Lab ID : 94106-009 Inst ID : HP68906.i
Inj Date : 28-OCT-1999 21:40 Dil Factor : 1
Operator : DavidW Sample Matrix : SOIL
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	23.247	23.247	0.000	36134	13.249	11.013

11/8/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1914.d Page 1
Report Date 10/29/1999 12:32



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/Xr8082.m
Sample Info : 94106-009;;;;59.9
Lab ID : 94106-009 Inst ID : HP68906.i
Inj Date : 28-OCT-1999 21:40 Dil Factor : 1
Operator : DavidW Sample Matrix : SOIL
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	21.330	21.317	0.013	37538	12.429	10.331

11/8/99

GC ORGANICS INITIAL CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Calibration Files:

/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1755.d
/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1756.d
/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d
/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1757.d
/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1758.d

Compound		Level 1	Level 2	Level 3	Level 4	Level 5	Coefficients a0	a1	a2	%RSD or R^2
Aroclor-1016	1	57.93	51.95	51.85	47.32	46.15		51.04		9.12138
	2	123.14	114.36	113.07	99.88	94.35		108.96		10.69276
	3	214.43	201.58	205.37	187.23	181.93		198.11		6.73070
	4	86.59	81.31	82.81	75.30	71.08		79.42		7.78433
	5	64.04	59.72	61.55	57.30	57.47		60.01		4.75141
	6	104.34	91.97	93.91	84.06	82.07		91.27		9.72088
Aroclor-1260	1	142.14	134.20	134.18	119.16	114.60		128.85		8.93834
	2	161.05	154.25	159.76	141.68	136.40		150.63		7.33175
	3	112.03	105.94	110.78	100.89	99.93		105.91		5.21546
	4	220.78	217.66	228.52	211.76	210.41		217.83		3.36401
	5	162.92	159.91	169.83	157.22	157.30		161.44		3.24773
	6	56.12	62.52	61.84	56.30	56.60		58.68		5.47537
Tetrachloro-m-xylene		1983.00	1886.00	2018.32	1951.28	2042.34		1976.19		3.09378
Decachlorobiphenyl		2917.20	2709.92	2911.16	2562.82	2535.57		2727.33		6.71052

Comments:

* = %RSD exceeded maximum upper limit. Linear regression used for quantitation.

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS INITIAL CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Calibration Files:

/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1755.d
/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1756.d
/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d
/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1757.d
/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1758.d/pcb6b1758.raw

Compound		Level 1	Level 2	Level 3	Level 4	Level 5	Coefficients a0	a1	a2	%RSD or R^2
Aroclor-1016	1	59.23	56.06	54.80	48.14	44.35		52.52		11.60958
	2	151.48	134.92	129.61	111.91	101.11		125.81		15.69525
	3	61.63	57.29	57.24	51.44	48.51		55.22		9.44421
	4	255.59	238.24	237.32	212.60	198.29		228.41		9.96446
	5	99.09	90.37	89.60	79.91	74.82		86.76		10.97335
	6	96.21	88.88	90.05	80.06	74.72		85.99		9.92787
Aroclor-1260	1	206.72	189.23	187.88	163.80	151.90		179.91		12.15579
	2	222.82	195.19	194.24	170.41	159.03		188.34		13.14365
	3	141.62	132.12	133.75	120.22	117.11		128.97		7.85041
	4	312.56	301.16	309.97	284.22	276.84		296.95		5.31791
	5	190.28	175.44	180.39	167.78	163.95		175.57		5.94204
	6	76.81	72.16	73.41	67.36	66.11		71.17		6.20214
Tetrachloro-m-xylene		2092.20	2114.24	2290.80	2208.22	2230.42		2187.18		3.78346
Decachlorobiphenyl		3290.80	3039.92	3179.96	2847.94	2742.61		3020.25		7.51139

Comments:

* = %RSD exceeded maximum upper limit. Linear regression used for quantitation.

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Midpoint Calibration File:

/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1759.d/pcb6a1759.raw

Compound	Midpoint Standard Response Factor
Aroclor-1221	29.49
2	9.83
3	26.01
4	19.64
5	70.36
6	14.35

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Midpoint Calibration File:

/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1759.d/pcb6b1759.raw

Compound	Midpoint Standard Response Factor
Aroclor-1221	27.52
2	30.13
3	21.64
4	67.65
5	22.24
6	9.88

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Midpoint Calibration File:

/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1760.d/pcb6a1760.raw

Compound	Midpoint Standard Response Factor
Aroclor-1232	17.96
2	60.49
3	50.40
4	85.12
5	24.48
6	38.31

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Midpoint Calibration File:

/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1760.d/pcb6b1760.raw

Compound	Midpoint Standard Response Factor
Aroclor-1232	21.28
2	17.09
3	59.76
4	62.87
5	24.85
6	98.74

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Midpoint Calibration File:

/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1761.d/pcb6a1761.raw

Compound	Midpoint Standard Response Factor
Aroclor-1242	44.17
2	80.93
3	147.19
4	59.21
5	43.64
6	71.58

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Midpoint Calibration File:

/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1761.d/pcb6b1761.raw

Compound	Midpoint Standard Response Factor
Aroclor-1242	44.84
2	94.01
3	169.83
4	64.69
5	75.63
6	74.04

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Midpoint Calibration File:

/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1762.d/pcb6a1762.raw

Compound	Midpoint Standard Response Factor
Aroclor-1248	43.19
2	97.49
3	114.68
4	84.38
5	52.41
6	98.42

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Midpoint Calibration File:

/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1762.d/pcb6b1762.raw

Compound	Midpoint Standard Response Factor
Aroclor-1248	47.74
2	112.86
3	105.28
4	110.45
5	120.01
6	88.73

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Midpoint Calibration File:

/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1763.d/pcb6a1763.raw

Compound	Midpoint Standard Response Factor
Aroclor-1254	80.17
2	162.67
3	161.13
4	117.93
5	71.79
6	152.20

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Midpoint Calibration File:

/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1763.d/pcb6b1763.raw

Compound	Midpoint Standard Response Factor
Aroclor-1254	71.56
2	130.16
3	156.13
4	198.52
5	140.36
6	152.21

Comments:

+ = Multi-component peak not used in calibration of compound.

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1900.d
Method: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/Xf8082.m

Sample Information: AR1660-500 ppb
Injection Date: 28-OCT-1999 12:20

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	7.802	500	521.19	4.24
Aroclor-1016	2	8.653	500	510.21	2.04
Aroclor-1016	3	9.795	500	501.31	0.26
Aroclor-1016	4	10.128	500	506.37	1.27
Aroclor-1016	5	10.403	500	495.80	0.84
Aroclor-1016	6	11.345	500	483.54	3.29
Aroclor-1260	1	14.823	500	506.36	1.27
Aroclor-1260	2	15.553	500	512.21	2.44
Aroclor-1260	3	17.758	500	544.26	8.85
Aroclor-1260	4	18.703	500	510.51	2.10
Aroclor-1260	5	19.837	500	522.40	4.48
Aroclor-1260	6	21.813	500	564.18	12.84

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	6.657	25	24.26	2.95
Decachlorobiphenyl	23.247	25	24.63	1.48

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1900.d
Method: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/Xr8082.m

Sample Information: AR1660-500 ppb
Injection Date: 28-OCT-1999 12:20

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	6.340	500	508.34	1.67
Aroclor-1016	2	7.117	500	498.92	0.22
Aroclor-1016	3	7.725	500	503.45	0.69
Aroclor-1016	4	7.883	500	499.35	0.13
Aroclor-1016	5	8.255	500	491.37	1.73
Aroclor-1016	6	9.427	500	481.82	3.64
Aroclor-1260	1	12.728	500	480.45	3.91
Aroclor-1260	2	13.012	500	474.86	5.03
Aroclor-1260	3	15.615	500	469.64	6.07
Aroclor-1260	4	16.083	500	478.83	4.23
Aroclor-1260	5	17.580	500	458.93	8.21
Aroclor-1260	6	19.155	500	449.37	10.13

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	5.338	25	23.88	4.50
Decachlorobiphenyl	21.317	25	21.66	13.35

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1900.d
Injection Date: 28-OCT-1999 12:20

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	7.802	(7.732 - 7.872)	7.802	
	8.655	(8.585 - 8.725)	8.653	
	9.793	(9.723 - 9.863)	9.795	
	10.125	(10.055 - 10.195)	10.128	
	10.402	(10.332 - 10.472)	10.403	
	11.347	(11.277 - 11.417)	11.345	
Aroclor-1260	14.823	(14.753 - 14.893)	14.823	
	15.552	(15.482 - 15.622)	15.553	
	17.755	(17.685 - 17.825)	17.758	
	18.702	(18.632 - 18.772)	18.703	
	19.835	(19.765 - 19.905)	19.837	
	21.813	(21.743 - 21.883)	21.813	
Tetrachloro-m-xylene	6.653	(6.603 - 6.703)	6.657	
Decachlorobiphenyl	23.243	(23.143 - 23.343)	23.247	

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1900.d
Injection Date: 28-OCT-1999 12:20

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	6.342	(6.272 - 6.412)	6.340	
	7.120	(7.050 - 7.190)	7.117	
	7.728	(7.658 - 7.798)	7.725	
	7.885	(7.815 - 7.955)	7.883	
	8.257	(8.187 - 8.327)	8.255	
	9.432	(9.362 - 9.502)	9.427	
Aroclor-1260	12.728	(12.658 - 12.798)	12.728	
	13.012	(12.942 - 13.082)	13.012	
	15.615	(15.545 - 15.685)	15.615	
	16.088	(16.018 - 16.158)	16.083	
	17.575	(17.505 - 17.645)	17.580	
	19.150	(19.080 - 19.220)	19.155	
Tetrachloro-m-xylene	5.338	(5.288 - 5.388)	5.338	
Decachlorobiphenyl	21.318	(21.218 - 21.418)	21.317	

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/pcb6a1918.d
Method: /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/Xf8082.m

Sample Information: AR1660-500 ppb
Injection Date: 29-OCT-1999 00:11

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	7.803	500	549.21	9.84
Aroclor-1016	2	8.655	500	530.24	6.05
Aroclor-1016	3	9.795	500	524.66	4.93
Aroclor-1016	4	10.128	500	530.04	6.01
Aroclor-1016	5	10.405	500	518.39	3.68
Aroclor-1016	6	11.347	500	506.06	1.21
Aroclor-1260	1	14.825	500	520.33	4.07
Aroclor-1260	2	15.553	500	524.88	4.98
Aroclor-1260	3	17.757	500	519.18	3.84
Aroclor-1260	4	18.703	500	517.25	3.45
Aroclor-1260	5	19.837	500	516.57	3.31
Aroclor-1260	6	21.818	500	534.35	6.87

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	6.655	25	24.51	1.94
Decachlorobiphenyl	23.247	25	24.49	2.05

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/pcb6b1918.d
Method: /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/Xr8082.m

Sample Information: AR1660-500 ppb
Injection Date: 29-OCT-1999 00:11

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	6.347	500	514.23	2.85
Aroclor-1016	2	7.123	500	505.37	1.07
Aroclor-1016	3	7.733	500	518.31	3.66
Aroclor-1016	4	7.893	500	515.95	3.19
Aroclor-1016	5	8.265	500	511.32	2.26
Aroclor-1016	6	9.435	500	507.66	1.53
Aroclor-1260	1	12.737	500	501.42	0.28
Aroclor-1260	2	13.020	500	497.76	0.45
Aroclor-1260	3	15.623	500	486.35	2.73
Aroclor-1260	4	16.097	500	504.46	0.89
Aroclor-1260	5	17.585	500	492.06	1.59
Aroclor-1260	6	19.162	500	493.06	1.39

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	5.342	25	24.34	2.66
Decachlorobiphenyl	21.325	25	23.84	4.65

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/pcb6a1918.d
Injection Date: 29-OCT-1999 00:11

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	7.802	(7.732 - 7.872)	7.803	
	8.655	(8.585 - 8.725)	8.655	
	9.793	(9.723 - 9.863)	9.795	
	10.125	(10.055 - 10.195)	10.128	
	10.402	(10.332 - 10.472)	10.405	
	11.347	(11.277 - 11.417)	11.347	
Aroclor-1260	14.823	(14.753 - 14.893)	14.825	
	15.552	(15.482 - 15.622)	15.553	
	17.755	(17.685 - 17.825)	17.757	
	18.702	(18.632 - 18.772)	18.703	
	19.835	(19.765 - 19.905)	19.837	
	21.813	(21.743 - 21.883)	21.818	
Tetrachloro-m-xylene	6.653	(6.603 - 6.703)	6.655	
Decachlorobiphenyl	23.243	(23.143 - 23.343)	23.247	

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/pcb6b1918.d
Injection Date: 29-OCT-1999 00:11

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	6.342	(6.272 - 6.412)	6.347	
	7.120	(7.050 - 7.190)	7.123	
	7.728	(7.658 - 7.798)	7.733	
	7.885	(7.815 - 7.955)	7.893	
	8.257	(8.187 - 8.327)	8.265	
	9.432	(9.362 - 9.502)	9.435	
Aroclor-1260	12.728	(12.658 - 12.798)	12.737	
	13.012	(12.942 - 13.082)	13.020	
	15.615	(15.545 - 15.685)	15.623	
	16.088	(16.018 - 16.158)	16.097	
	17.575	(17.505 - 17.645)	17.585	
	19.150	(19.080 - 19.220)	19.162	
Tetrachloro-m-xylene	5.338	(5.288 - 5.388)	5.342	
Decachlorobiphenyl	21.318	(21.218 - 21.418)	21.325	

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99.b/pcb6a2064.d
Method: /chem/HP68906.i/8082/front/10-19-99/08nov99.b/Xf8082.m

Sample Information: AR1660-500 ppb
Injection Date: 08-NOV-1999 12:54

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	7.817	500	542.80	8.56
Aroclor-1016	2	8.658	500	534.58	6.92
Aroclor-1016	3	9.807	500	510.04	2.01
Aroclor-1016	4	10.138	500	545.84	9.17
Aroclor-1016	5	10.410	500	531.94	6.39
Aroclor-1016	6	11.348	500	522.17	4.43
Aroclor-1260	1	14.818	500	536.84	7.37
Aroclor-1260	2	15.550	500	539.44	7.89
Aroclor-1260	3	17.750	500	522.14	4.43
Aroclor-1260	4	18.700	500	529.36	5.87
Aroclor-1260	5	19.832	500	522.92	4.58
Aroclor-1260	6	21.815	500	510.17	2.03

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	6.663	25	24.80	0.80
Decachlorobiphenyl	23.237	25	24.31	2.76

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/pcb6b2064.d
Method: /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/Xr8082.m

Sample Information: AR1660-500 ppb
Injection Date: 08-NOV-1999 12:54

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	6.360	500	541.90	8.38
Aroclor-1016	2	7.132	500	497.22	0.56
Aroclor-1016	3	7.740	500	508.53	1.71
Aroclor-1016	4	7.910	500	501.29	0.26
Aroclor-1016	5	8.278	500	467.29	6.54
Aroclor-1016	6	9.443	500	464.80	7.04
Aroclor-1260	1	12.742	500	499.20	0.16
Aroclor-1260	2	13.030	500	490.79	1.84
Aroclor-1260	3	15.630	500	475.34	4.93
Aroclor-1260	4	16.103	500	497.38	0.52
Aroclor-1260	5	17.593	500	480.26	3.95
Aroclor-1260	6	19.170	500	457.95	8.41

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	5.350	25	24.24	3.03
Decachlorobiphenyl	21.330	25	21.86	12.57

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/front/10-19-99/08nov99.b/pcb6a2064.d
Injection Date: 08-NOV-1999 12:54

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	7.802	(7.732 - 7.872)	7.817	
	8.655	(8.585 - 8.725)	8.658	
	9.793	(9.723 - 9.863)	9.807	
	10.125	(10.055 - 10.195)	10.138	
	10.402	(10.332 - 10.472)	10.410	
	11.347	(11.277 - 11.417)	11.348	
Aroclor-1260	14.823	(14.753 - 14.893)	14.818	
	15.552	(15.482 - 15.622)	15.550	
	17.755	(17.685 - 17.825)	17.750	
	18.702	(18.632 - 18.772)	18.700	
	19.835	(19.765 - 19.905)	19.832	
	21.813	(21.743 - 21.883)	21.815	
Tetrachloro-m-xylene	6.653	(6.603 - 6.703)	6.663	
Decachlorobiphenyl	23.243	(23.143 - 23.343)	23.237	

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/pcb6b2064.d
Injection Date: 08-NOV-1999 12:54

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	6.342	(6.272 - 6.412)	6.360	
	7.120	(7.050 - 7.190)	7.132	
	7.728	(7.658 - 7.798)	7.740	
	7.885	(7.815 - 7.955)	7.910	
	8.257	(8.187 - 8.327)	8.278	
	9.432	(9.362 - 9.502)	9.443	
Aroclor-1260	12.728	(12.658 - 12.798)	12.742	
	13.012	(12.942 - 13.082)	13.030	
	15.615	(15.545 - 15.685)	15.630	
	16.088	(16.018 - 16.158)	16.103	
	17.575	(17.505 - 17.645)	17.593	
	19.150	(19.080 - 19.220)	19.170	
Tetrachloro-m-xylene	5.338	(5.288 - 5.388)	5.350	
Decachlorobiphenyl	21.318	(21.218 - 21.418)	21.330	

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2080.d
Method: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/Xf8082.m

Sample Information: AR1660-500 ppb
Injection Date: 08-NOV-1999 23:45

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	7.822	500	559.89	11.98
Aroclor-1016	2	8.662	500	543.86	8.77
Aroclor-1016	3	9.810	500	515.96	3.19
Aroclor-1016	4	10.142	500	553.71	10.74
Aroclor-1016	5	10.415	500	538.22	7.64
Aroclor-1016	6	11.352	500	521.79	4.36
Aroclor-1260	1	14.822	500	554.73	10.95
Aroclor-1260	2	15.553	500	555.29	11.06
Aroclor-1260	3	17.755	500	536.49	7.30
Aroclor-1260	4	18.700	500	535.48	7.10
Aroclor-1260	5	19.833	500	534.09	6.82
Aroclor-1260	6	21.813	500	489.84	2.03

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	6.668	25	25.05	0.19
Decachlorobiphenyl	23.240	25	24.75	1.02

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/pcb6b2080.d
Method: /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/Xr8082.m

Sample Information: AR1660-500 ppb
Injection Date: 08-NOV-1999 23:45

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	6.355	500	557.22	11.44
Aroclor-1016	2	7.127	500	494.27	1.15
Aroclor-1016	3	7.735	500	511.76	2.35
Aroclor-1016	4	7.902	500	506.02	1.20
Aroclor-1016	5	8.273	500	475.28	4.94
Aroclor-1016	6	9.440	500	470.97	5.81
Aroclor-1260	1	12.737	500	503.42	0.68
Aroclor-1260	2	13.020	500	496.63	0.67
Aroclor-1260	3	15.627	500	485.83	2.83
Aroclor-1260	4	16.098	500	506.89	1.38
Aroclor-1260	5	17.590	500	496.40	0.72
Aroclor-1260	6	19.165	500	478.27	4.35

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	5.347	25	23.29	6.82
Decachlorobiphenyl	21.327	25	23.50	6.00

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2080.d
Injection Date: 08-NOV-1999 23:45

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	7.802	(7.732 - 7.872)	7.822	
	8.655	(8.585 - 8.725)	8.662	
	9.793	(9.723 - 9.863)	9.810	
	10.125	(10.055 - 10.195)	10.142	
	10.402	(10.332 - 10.472)	10.415	
	11.347	(11.277 - 11.417)	11.352	
Aroclor-1260	14.823	(14.753 - 14.893)	14.822	
	15.552	(15.482 - 15.622)	15.553	
	17.755	(17.685 - 17.825)	17.755	
	18.702	(18.632 - 18.772)	18.700	
	19.835	(19.765 - 19.905)	19.833	
	21.813	(21.743 - 21.883)	21.813	
Tetrachloro-m-xylene	6.653	(6.603 - 6.703)	6.668	
Decachlorobiphenyl	23.243	(23.143 - 23.343)	23.240	

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/pcb6b2080.d
Injection Date: 08-NOV-1999 23:45

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	6.342	(6.272 - 6.412)	6.355	
	7.120	(7.050 - 7.190)	7.127	
	7.728	(7.658 - 7.798)	7.735	
	7.885	(7.815 - 7.955)	7.902	
	8.257	(8.187 - 8.327)	8.273	
	9.432	(9.362 - 9.502)	9.440	
Aroclor-1260	12.728	(12.658 - 12.798)	12.737	
	13.012	(12.942 - 13.082)	13.020	
	15.615	(15.545 - 15.685)	15.627	
	16.088	(16.018 - 16.158)	16.098	
	17.575	(17.505 - 17.645)	17.590	
	19.150	(19.080 - 19.220)	19.165	
Tetrachloro-m-xylene	5.338	(5.288 - 5.388)	5.347	
Decachlorobiphenyl	21.318	(21.218 - 21.418)	21.327	

Severn Trent Laboratories - Whippany
GC ORGANICS ANALYTICAL SEQUENCE SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

	Lab Sample ID	Client Sample ID	Lab File ID	Sample Type	Inj. Date	Inj. Time
1	AR1660-500 ppb		pcb6a1754.d	CALIB_3	10/19/99	2040
2	AR1660-100 ppb		pcb6a1755.d	CALIB_1	10/19/99	2118
3	AR1660-250 ppb		pcb6a1756.d	CALIB_2	10/19/99	2155
4	AR1660-1000 ppb		pcb6a1757.d	CALIB_4	10/19/99	2233
5	AR1660-2000 ppb		pcb6a1758.d	CALIB_5	10/19/99	2311
6	AR1221-500 ppb		pcb6a1759.d	CALIB_3	10/19/99	2349
7	AR1232-500 ppb		pcb6a1760.d	CALIB_3	10/20/99	0027
8	AR1242-500 ppb		pcb6a1761.d	CALIB_3	10/20/99	0104
9	AR1248-500 ppb		pcb6a1762.d	CALIB_3	10/20/99	0142
10	AR1254-500 ppb		pcb6a1763.d	CALIB_3	10/20/99	0220
11	AR1660-500 ppb		pcb6a1900.d	CCALIB_3	10/28/99	1220
12	WG41652-MB		pcb6a1901.d	BLANK	10/28/99	1319
13	WG41652-BS		pcb6a1902.d	BS	10/28/99	1357
14	94023-001	MW3D-SO-44	pcb6a1903.d	SAMPLE	10/28/99	1435
15	94023-002MS	MW3DSO44MS	pcb6a1904.d	MS	10/28/99	1513
16	94023-003MSD	MW3DSO44MSD	pcb6a1905.d	MSD	10/28/99	1559
17	94106-008	S-2-1-01	pcb6a1913.d	SAMPLE	10/28/99	2102
18	94106-009	S-2-1-02	pcb6a1914.d	SAMPLE	10/28/99	2140
19	AR1660-500 ppb		pcb6a1918.d	CCALIB_3	10/29/99	0011
20	AR1660-500 ppb		pcb6a2064.d	CCALIB_3	11/08/99	1254
21	WG41663-MB		pcb6a2069.d	BLANK	11/08/99	1609
22	WG41663-BS		pcb6a2070.d	BS	11/08/99	1647
23	94106-006	SW-2-1-01	pcb6a2071.d	SAMPLE	11/08/99	1725
24	94106-007	SW-2-1-02	pcb6a2072.d	SAMPLE	11/08/99	1803
25	94106-007MS	SW-2-1-02MS	pcb6a2073.d	MS	11/08/99	1841
26	94106-007MSD	SW-2-1-02MSD	pcb6a2074.d	MSD	11/08/99	1918
27	AR1660-500 ppb		pcb6a2080.d	CCALIB_3	11/08/99	2345

Severn Trent Laboratories - Whippany
Pesticide/PCB Retention Time Shift Summary

(for databatch - /chem/HP68906.i/8082/front/10-19-99/28oct99.b,
as of 11/22/1999 14:11)

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Dates of Analysis: 10/28/99 to 10/28/99

Retention Time Shift Marker - Decachlorobiphenyl
QC Limit for RT Shift is 0.10 min

Absolute Surrogate RT From Cal. Standard Level 3: DCB = 23.247

Lab Sample ID	Data File	Injection Time	RT	DLT RT
WG41652-MB	pcb6a1901.d	28-OCT-1999 13:19	23.248	0.002
WG41652-BS	pcb6a1902.d	28-OCT-1999 13:57	23.243	0.003
94023-001	pcb6a1903.d	28-OCT-1999 14:35	23.248	0.002
94023-002MS	pcb6a1904.d	28-OCT-1999 15:13	23.245	0.002
94023-003MSD	pcb6a1905.d	28-OCT-1999 15:59	23.252	0.005
94106-008	pcb6a1913.d	28-OCT-1999 21:02	23.245	0.002
94106-009	pcb6a1914.d	28-OCT-1999 21:40	23.247	0.000

D = Surrogate diluted out.

Severn Trent Laboratories - Whippany
Pesticide/PCB Retention Time Shift Summary

(for databatch - /chem/HP68906.i/8082/rear/10-19-99/28oct99.b,
as of 11/22/1999 14:11)

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Dates of Analysis: 10/28/99 to 10/28/99

Retention Time Shift Marker - Decachlorobiphenyl
QC Limit for RT Shift is 0.10 min

Absolute Surrogate RT From Cal. Standard Level 3: DCB = 21.317

Lab Sample ID	Data File	Injection Time	RT	DLT RT
WG41652-MB	pcb6b1901.d	28-OCT-1999 13:19	21.315	0.002
WG41652-BS	pcb6b1902.d	28-OCT-1999 13:57	21.322	0.005
94023-001	pcb6b1903.d	28-OCT-1999 14:35	21.322	0.005
94023-002MS	pcb6b1904.d	28-OCT-1999 15:13	21.322	0.005
94023-003MSD	pcb6b1905.d	28-OCT-1999 15:59	21.323	0.007
94106-008	pcb6b1913.d	28-OCT-1999 21:02	21.327	0.010
94106-009	pcb6b1914.d	28-OCT-1999 21:40	21.330	0.013

D = Surrogate diluted out.

Severn Trent Laboratories - Whippany
Pesticide/PCB Retention Time Shift Summary

(for databatch - /chem/HP68906.i/8082/front/10-19-99/08nov99.b,
as of 11/22/1999 14:11)

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Dates of Analysis: 11/08/99 to 11/08/99

Retention Time Shift Marker - Decachlorobiphenyl
QC Limit for RT Shift is 0.10 min

Absolute Surrogate RT From Cal. Standard Level 3: DCB = 23.237

Lab Sample ID	Data File	Injection Time	RT	DLT RT
WG41663-MB	pcb6a2069.d	08-NOV-1999 16:09	23.242	0.005
WG41663-BS	pcb6a2070.d	08-NOV-1999 16:47	23.245	0.008
94106-006	pcb6a2071.d	08-NOV-1999 17:25	23.243	0.007
94106-007	pcb6a2072.d	08-NOV-1999 18:03	23.237	0.000
94106-007MS	pcb6a2073.d	08-NOV-1999 18:41	23.238	0.002
94106-007MSD	pcb6a2074.d	08-NOV-1999 19:18	23.237	0.000

D = Surrogate diluted out.

Severn Trent Laboratories - Whippany
Pesticide/PCB Retention Time Shift Summary

(for databatch - /chem/HP68906.i/8082/rear/10-19-99/08nov99.b,
as of 11/22/1999 14:11)

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Dates of Analysis: 11/08/99 to 11/08/99

Retention Time Shift Marker - Decachlorobiphenyl
QC Limit for RT Shift is 0.10 min

Absolute Surrogate RT From Cal. Standard Level 3: DCB = 21.330

Lab Sample ID	Data File	Injection Time	RT	DLT RT
WG41663-MB	pcb6b2069.d	08-NOV-1999 16:09	21.330	0.000
WG41663-BS	pcb6b2070.d	08-NOV-1999 16:47	21.328	0.002
94106-006	pcb6b2071.d	08-NOV-1999 17:25	21.328	0.002
94106-007	pcb6b2072.d	08-NOV-1999 18:03	21.327	0.003
94106-007MS	pcb6b2073.d	08-NOV-1999 18:41	21.327	0.003
94106-007MSD	pcb6b2074.d	08-NOV-1999 19:18	21.327	0.003

D = Surrogate diluted out.

GC ORGANICS RPD SUMMARY

Lab ID:WG41652-BS
Instrument ID:HP68906.i
Column(1) ID:pcb6a1902.d

Client ID: Blank Spike
Injection Date: 28-OCT-1999 13:57
Column(2) ID:pcb6b1902.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1016	1	304.00	
	2	292.00	4.03
Aroclor-1260	1	332.00	
	2	309.00	7.18

GC ORGANICS RPD SUMMARY

Lab ID:94023-002MS
Instrument ID:HP68906.i
Column(1) ID:pcb6a1904.d

Client ID: MW3DS044MS
Injection Date: 28-OCT-1999 15:13
Column(2) ID:pcb6b1904.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1016	1	362.00	
	2	343.00	5.39
Aroclor-1260	1	384.00	
	2	359.00	6.73

GC ORGANICS RPD SUMMARY

Lab ID:94023-003MSD
Instrument ID:HP68906.i
Column(1) ID:pcb6a1905.d

Client ID: MW3DS044MSD
Injection Date: 28-OCT-1999 15:59
Column(2) ID:pcb6b1905.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1016	1	339.00	
	2	323.00	4.83
Aroclor-1260	1	366.00	
	2	334.00	9.14

GC ORGANICS RPD SUMMARY

Lab ID:WG41663-BS
Instrument ID:HP68906.i
Column(1) ID:pcb6a2070.d

Client ID: Blank Spike-W
Injection Date: 08-NOV-1999 16:47
Column(2) ID:pcb6b2070.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1016	1	1.56	
	2	1.43	8.70
Aroclor-1260	1	1.82	
	2	1.69	7.41

GC ORGANICS RPD SUMMARY

Lab ID:94106-007MS
Instrument ID:HP68906.i
Column(1) ID:pcb6a2073.d

Client ID: SW-2-1-02MS
Injection Date: 08-NOV-1999 18:41
Column(2) ID:pcb6b2073.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1016	1	3.53	
	2	3.24	8.57
Aroclor-1260	1	3.79	
	2	3.51	7.67

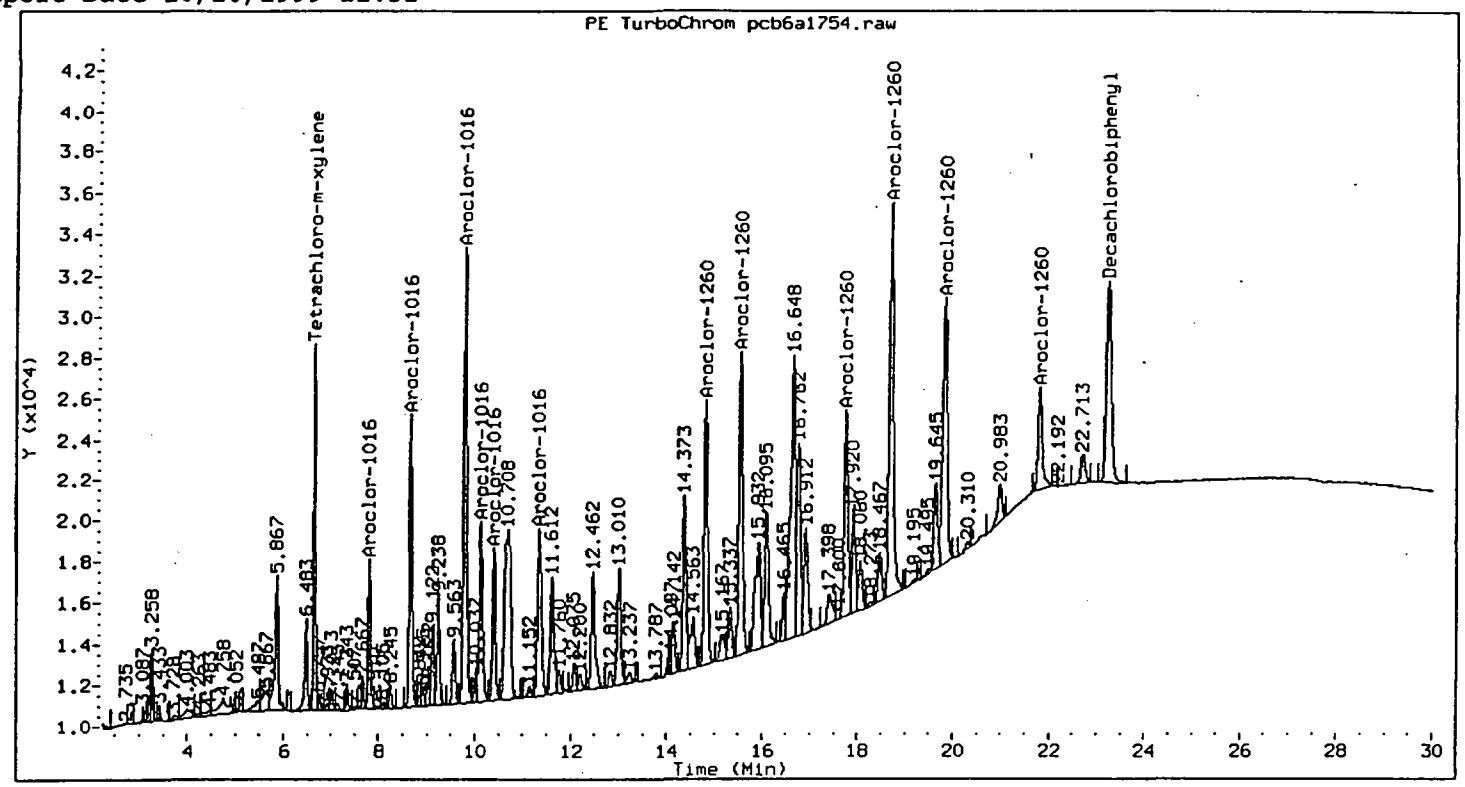
GC ORGANICS RPD SUMMARY

Lab ID:94106-007MSD
Instrument ID:HP68906.i
Column(1) ID:pcb6a2074.d

Client ID: SW-2-1-02MSD
Injection Date: 08-NOV-1999 19:18
Column(2) ID:pcb6b2074.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1016	1	3.09	
	2	2.79	10.20
Aroclor-1260	1	3.82	
	2	3.54	7.61

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d Page 1
Report Date 10/20/1999 11:32



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 19-OCT-1999 20:40
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.802	7.802	0.000	25923	507.909	507.909
(2)		8.655	8.655	0.000	56535	518.858	518.858
(3)		9.793	9.793	0.000	102685	518.325	518.325
(4)		10.125	10.125	0.000	41403	521.329	521.329
(5)		10.402	10.402	0.000	30773	512.762	512.762
(6)		11.347	11.347	0.000	46957	514.479	514.479
Average of peak concentrations:							516.00
Aroclor-1260	(M)	14.823	14.823	0.000	67090	520.664	520.664
(2)		15.552	15.552	0.000	79882	530.330	530.330
(3)		17.755	17.755	0.000	55389	522.959	522.959
(4)		18.702	18.702	0.000	114258	524.540	524.540
(5)		19.835	19.835	0.000	84917	526.008	526.008
(6)		21.813	21.813	0.000	30921	526.975	526.975
Average of peak concentrations:							525.00

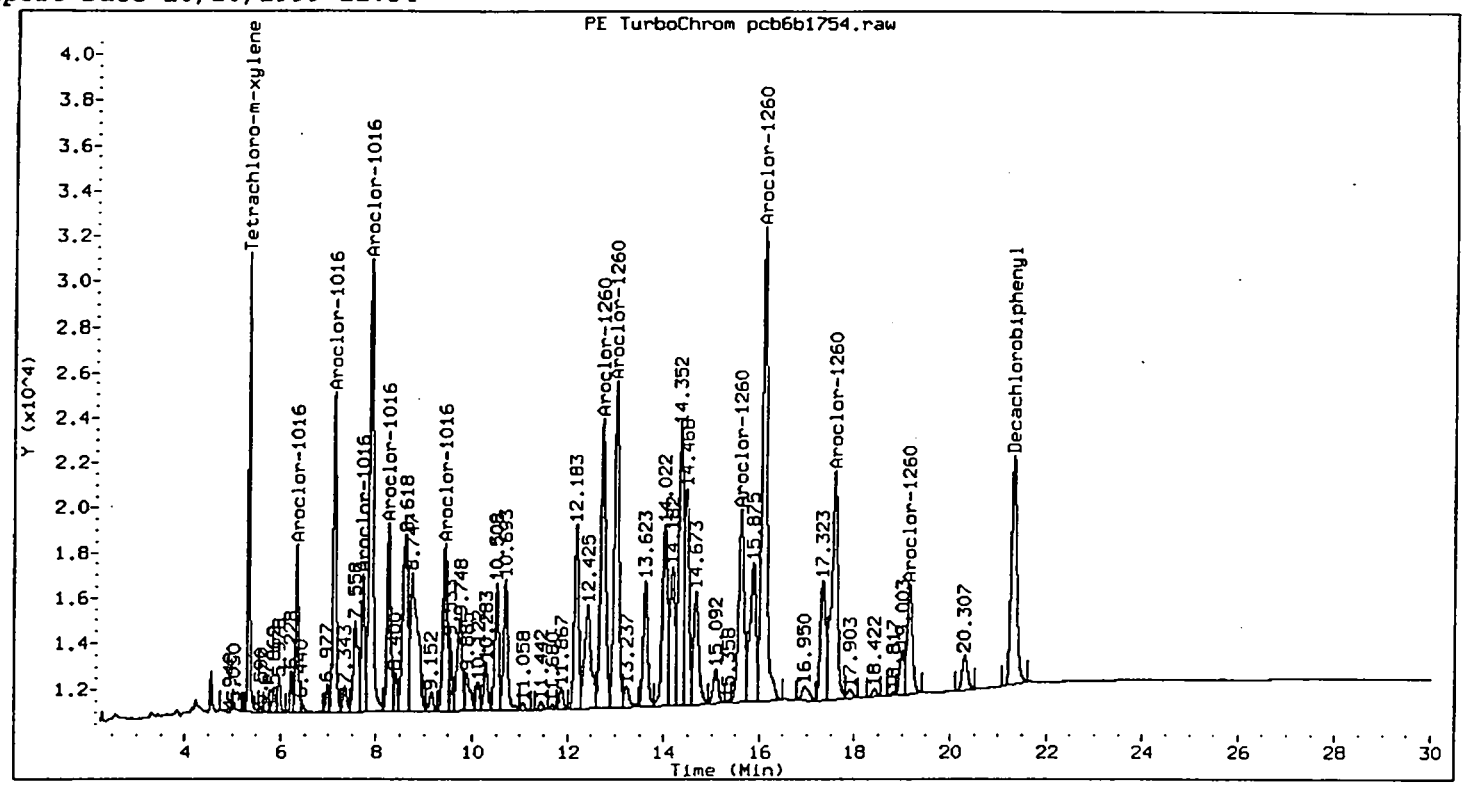
Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d Page 2
Report Date 10/20/1999 11:32

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	6.653	6.653	0.000	50458	25.533	25.533
Decachlorobiphenyl	(M)	23.243	23.243	0.000	72779	26.685	26.685

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d Page 1
Report Date 10/20/1999 11:34



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 19-OCT-1999 20:40
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	6.342	6.342	0.000	27399	521.731	521.731
(2)		7.120	7.120	0.000	64803	515.101	515.101
(3)		7.728	7.728	0.000	28621	518.295	518.295
(4)		7.885	7.885	0.000	118659	519.508	519.508
(5)		8.257	8.257	0.000	44802	516.396	516.396
(6)		9.432	9.432	0.000	45027	523.654	523.654
Average of peak concentrations:							519.00
Aroclor-1260	(M)	12.728	12.728	0.000	93939	522.156	522.156
(2)		13.012	13.012	0.000	97119	515.663	515.663
(3)		15.615	15.615	0.000	66875	518.551	518.551
(4)		16.088	16.088	0.000	154987	521.930	521.930
(5)		17.575	17.575	0.000	90196	513.736	513.736
(6)		19.150	19.150	0.000	36706	515.741	515.741
Average of peak concentrations:							518.00

10/21/99

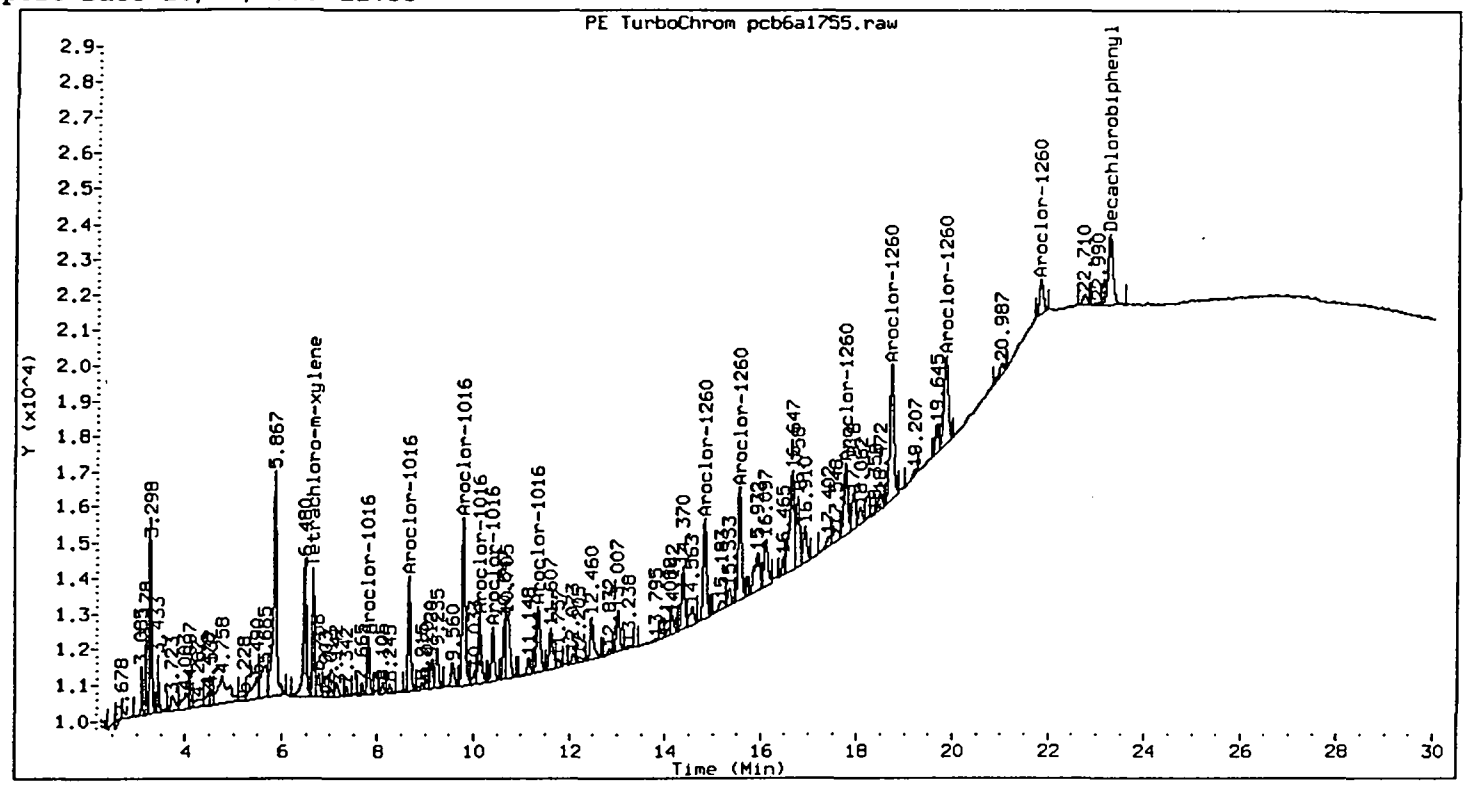
Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d Page 2
Report Date 10/20/1999 11:34

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	5.338	5.338	0.000	57270	26.184	26.184
Decachlorobiphenyl	(M)	21.318	21.318	0.000	79499	26.322	26.322

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1755.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1660-100 ppb
Lab ID : AR1660-100 ppb
Inj Date : 19-OCT-1999 21:18
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_1

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.800	7.802	0.002	5793	113.502	113.502
(2)		8.653	8.655	0.002	12314	113.013	113.013
(3)		9.788	9.793	0.005	21443	108.238	108.238
(4)		10.123	10.125	0.002	8659	109.030	109.030
(5)		10.400	10.402	0.002	6404	106.708	106.708
(6)		11.342	11.347	0.005	10434	114.319	114.319
Average of peak concentrations:							111.00
Aroclor-1260	(M)	14.822	14.823	0.002	14214	110.310	110.310
(2)		15.547	15.552	0.005	16105	106.920	106.920
(3)		17.752	17.755	0.003	11203	105.774	105.774
(4)		18.698	18.702	0.003	22078	101.357	101.357
(5)		19.833	19.835	0.002	16292	100.919	100.919
(6)		21.810	21.813	0.003	5612	95.643	95.643
Average of peak concentrations:							103.00

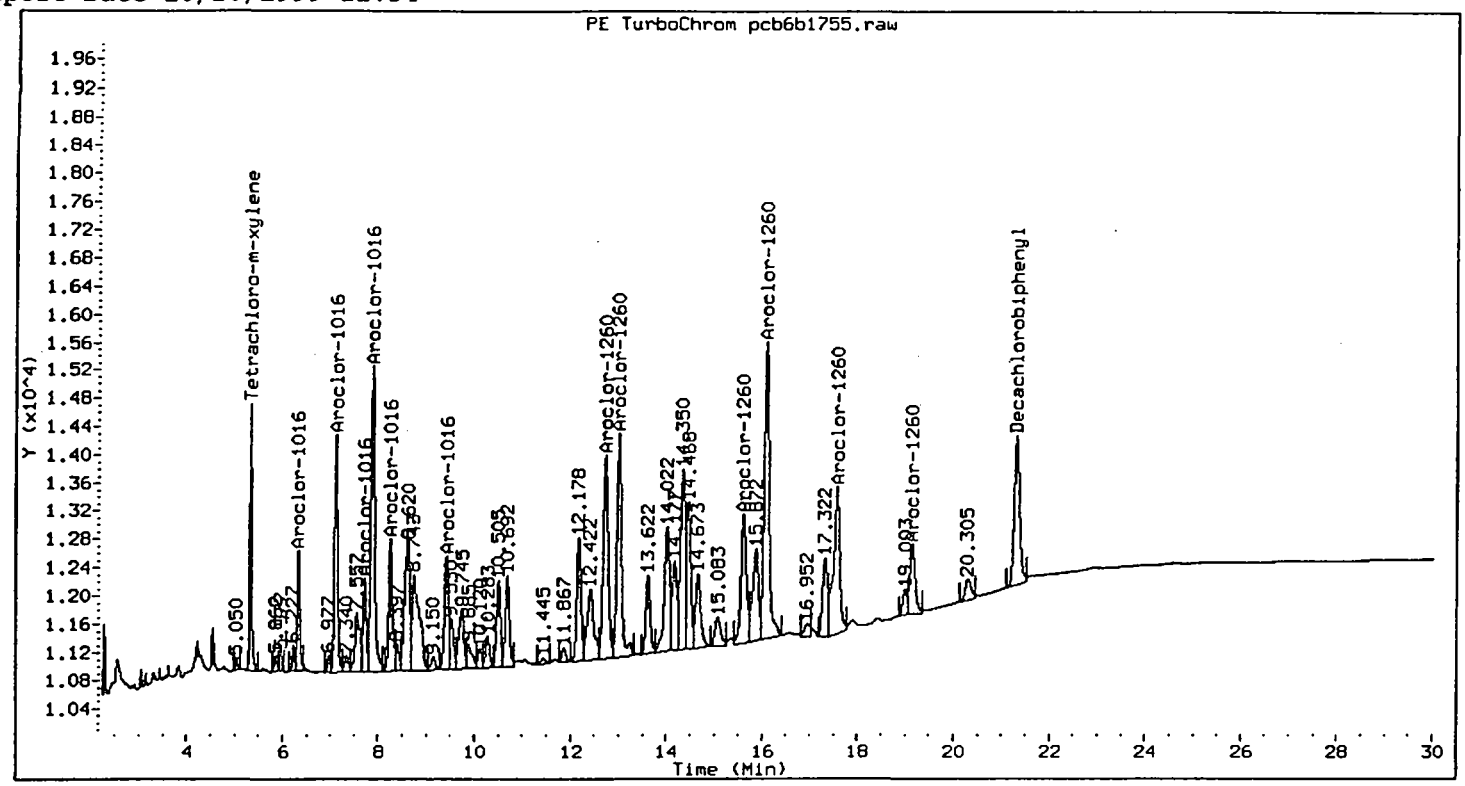
Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1755.d Page 2
Report Date 10/20/1999 11:33

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	6.648	6.653	0.005	9915	5.017	5.017
Decachlorobiphenyl	(M)	23.238	23.243	0.005	14586	5.348	5.348

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1755.d Page 1
Report Date 10/20/1999 11:34



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1660-100 ppb
Lab ID : AR1660-100 ppb
Inj Date : 19-OCT-1999 21:18
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_1

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.338	6.342	0.003	5923	112.786	112.786
(2)		7.118	7.120	0.002	15148	120.407	120.407
(3)		7.725	7.728	0.003	6163	111.605	111.605
(4)		7.883	7.885	0.002	25559	111.901	111.901
(5)		8.255	8.257	0.002	9909	114.213	114.213
(6)		9.428	9.432	0.003	9621	111.890	111.890
Average of peak concentrations:							114.00
Aroclor-1260	(M)	12.727	12.728	0.002	20672	114.905	114.905
(2)		13.010	13.012	0.002	22282	118.308	118.308
(3)		15.612	15.615	0.003	14162	109.813	109.813
(4)		16.083	16.088	0.005	31256	105.257	105.257
(5)		17.573	17.575	0.002	19028	108.379	108.379
(6)		19.152	19.150	0.002	7681	107.923	107.923
Average of peak concentrations:							111.00

10/21/99

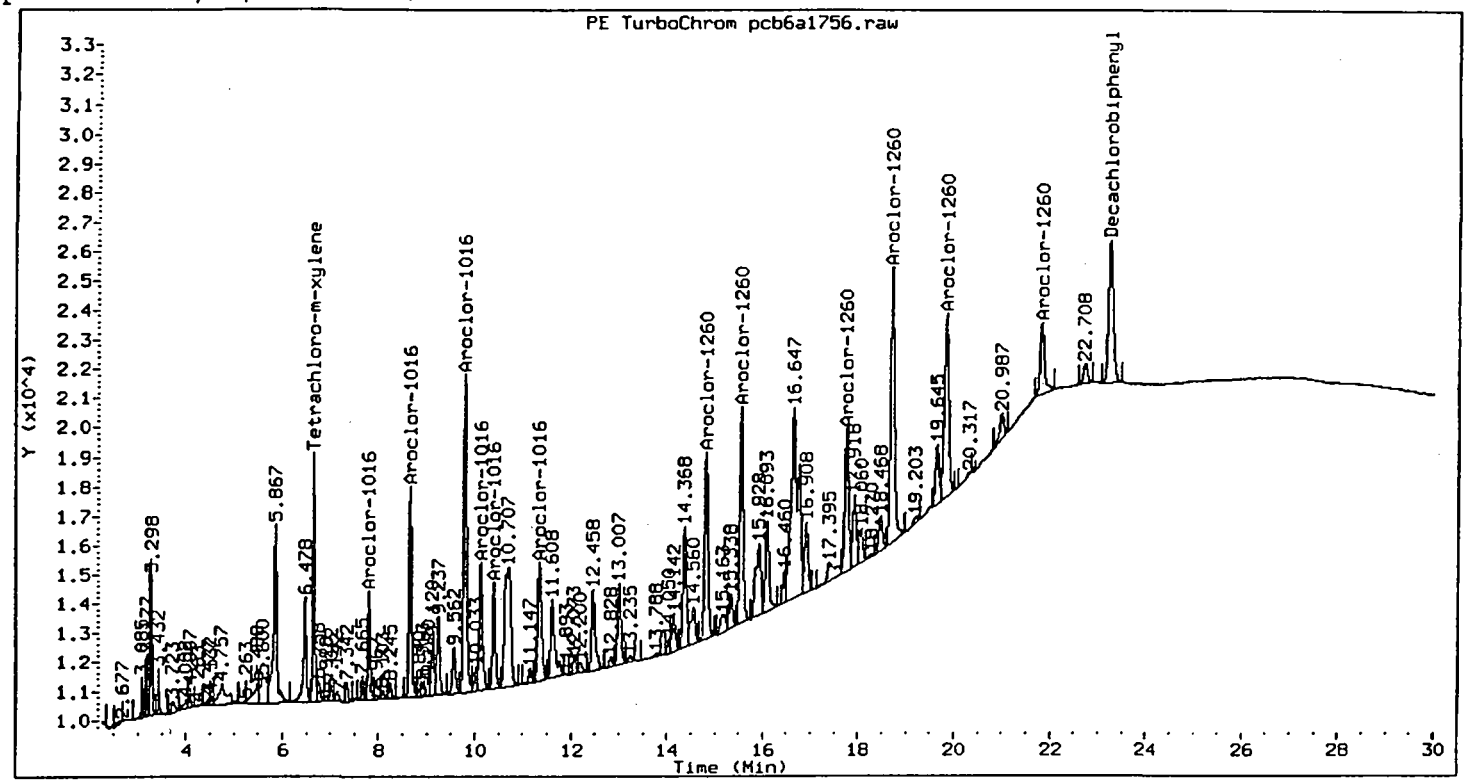
Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1755.d Page 2
Report Date 10/20/1999 11:34

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	5.335	5.338	0.003	10461	4.783	4.783
Decachlorobiphenyl	21.318	21.318	0.000	16454	5.448	5.448

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1756.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1660-250 ppb
Lab ID : AR1660-250 ppb
Inj Date : 19-OCT-1999 21:55
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_2

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.800	7.802	0.002	12987	254.454	254.454
(2)		8.653	8.655	0.002	28590	262.389	262.389
(3)		9.790	9.793	0.003	50396	254.385	254.385
(4)		10.123	10.125	0.002	20327	255.949	255.949
(5)		10.400	10.402	0.002	14931	248.791	248.791
(6)		11.342	11.347	0.005	22992	251.909	251.909
Average of peak concentrations:							255.00
Aroclor-1260	(M)	14.820	14.823	0.003	33549	260.363	260.363
(2)		15.550	15.552	0.002	38562	256.010	256.010
(3)		17.753	17.755	0.002	26485	250.060	250.060
(4)		18.698	18.702	0.003	54414	249.806	249.806
(5)		19.835	19.835	0.000	39978	247.639	247.639
(6)		21.813	21.813	0.000	15630	266.376	266.376
Average of peak concentrations:							255.00

10/21/99

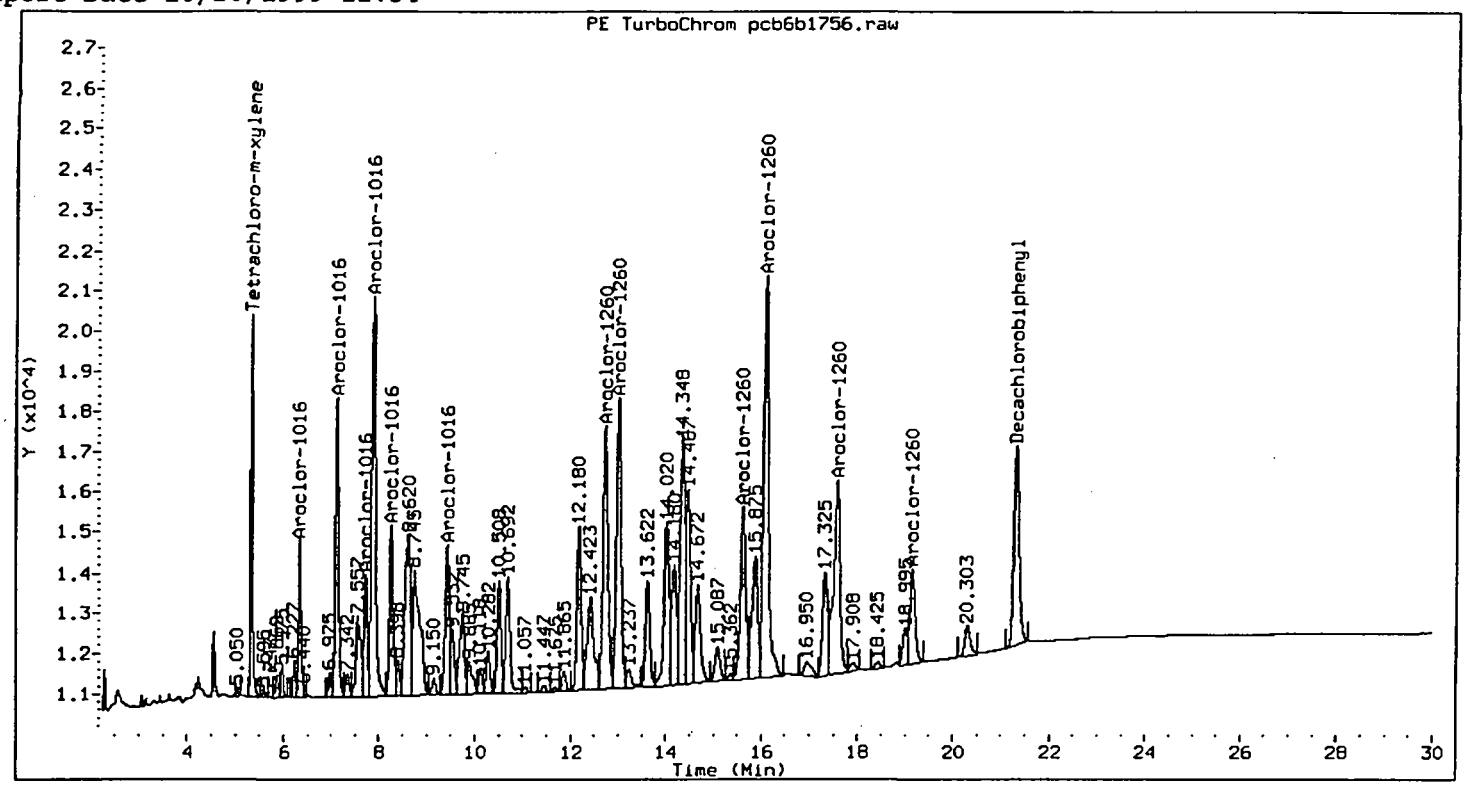
Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1756.d Page 2
Report Date 10/20/1999 11:33

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	6.650	6.653	0.003	23575	11.930	11.930
Decachlorobiphenyl		23.238	23.243	0.005	33874	12.420	12.420

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1756.d Page 1
Report Date 10/20/1999 11:34



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1660-250 ppb
Lab ID : AR1660-250 ppb
Inj Date : 19-OCT-1999 21:55
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_2

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.338	6.342	0.003	14015	266.873	266.873
(2)		7.118	7.120	0.002	33731	268.118	268.118
(3)		7.725	7.728	0.003	14322	259.356	259.356
(4)		7.882	7.885	0.003	59559	260.759	260.759
(5)		8.255	8.257	0.002	22592	260.399	260.399
(6)		9.428	9.432	0.003	22221	258.425	258.425
Average of peak concentrations:							262.00
Aroclor-1260	(M)	12.727	12.728	0.002	47307	262.954	262.954
(2)		13.010	13.012	0.002	48798	259.098	259.098
(3)		15.615	15.615	0.000	33031	256.124	256.124
(4)		16.083	16.088	0.005	75289	253.541	253.541
(5)		17.578	17.575	0.003	43860	249.817	249.817
(6)		19.148	19.150	0.002	18041	253.487	253.487
Average of peak concentrations:							256.00

/21/99

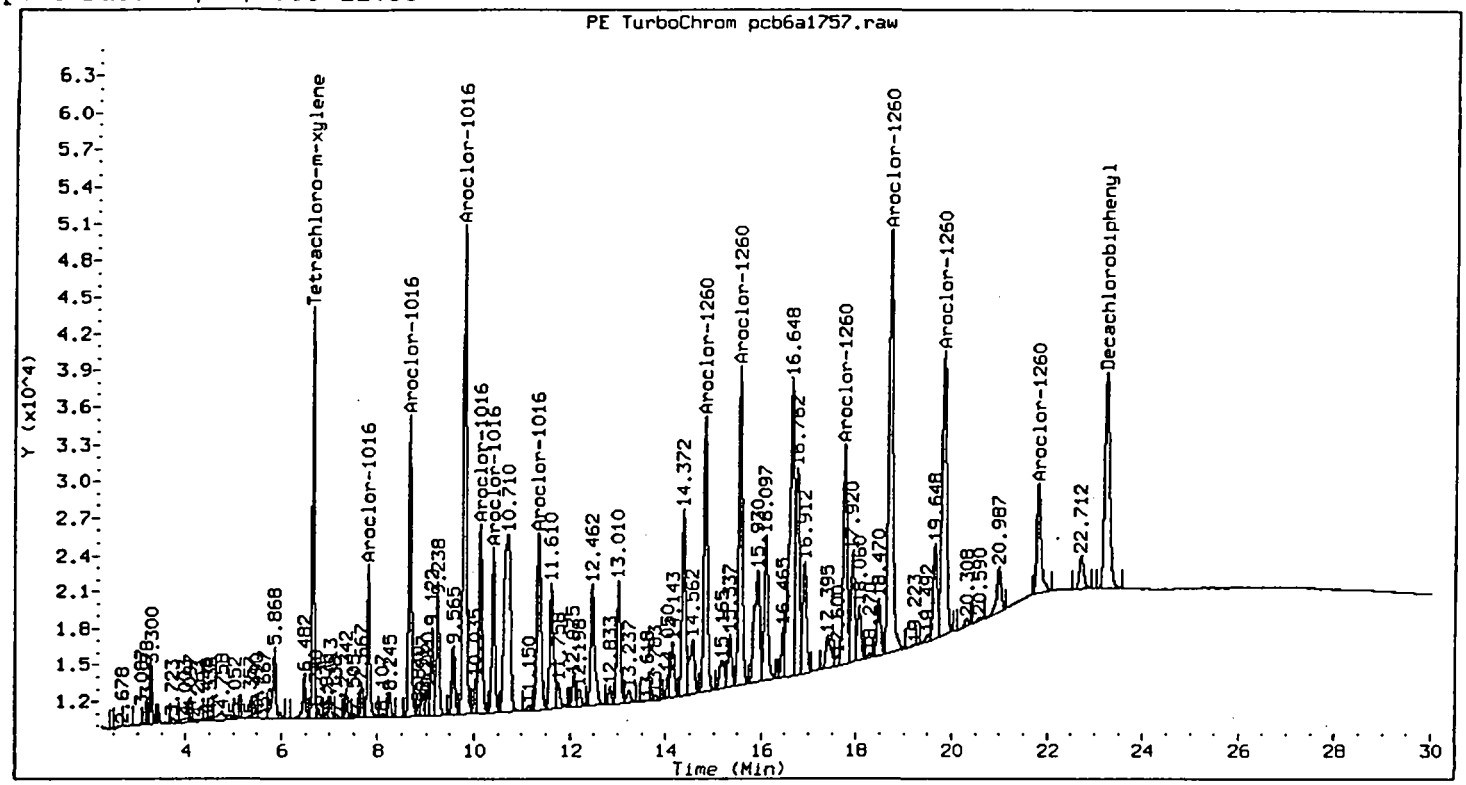
Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1756.d Page 2
Report Date 10/20/1999 11:34

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene		5.337	5.338	0.002	26428	12.083	12.083
Decachlorobiphenyl	(M)	21.318	21.318	0.000	37999	12.581	12.581

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1757.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1660-1000 ppb
Lab ID : AR1660-1000 ppb
Inj Date : 19-OCT-1999 22:33
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_4

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.802	7.802	0.000	47316	927.061	927.061
(2)		8.655	8.655	0.000	99882	916.681	916.681
(3)		9.792	9.793	0.002	187231	945.089	945.089
(4)		10.127	10.125	0.002	75303	948.183	948.183
(5)		10.403	10.402	0.002	57296	954.707	954.707
(6)		11.347	11.347	0.000	84058	920.973	920.973
Average of peak concentrations:							935.00
Aroclor-1260	(M)	14.823	14.823	0.000	119158	924.746	924.746
(2)		15.552	15.552	0.000	141677	940.581	940.581
(3)		17.757	17.755	0.002	100891	952.569	952.569
(4)		18.702	18.702	0.000	211762	972.165	972.165
(5)		19.837	19.835	0.002	157221	973.887	973.887
(6)		21.813	21.813	0.000	56302	959.534	959.534
Average of peak concentrations:							954.00

10/21/99

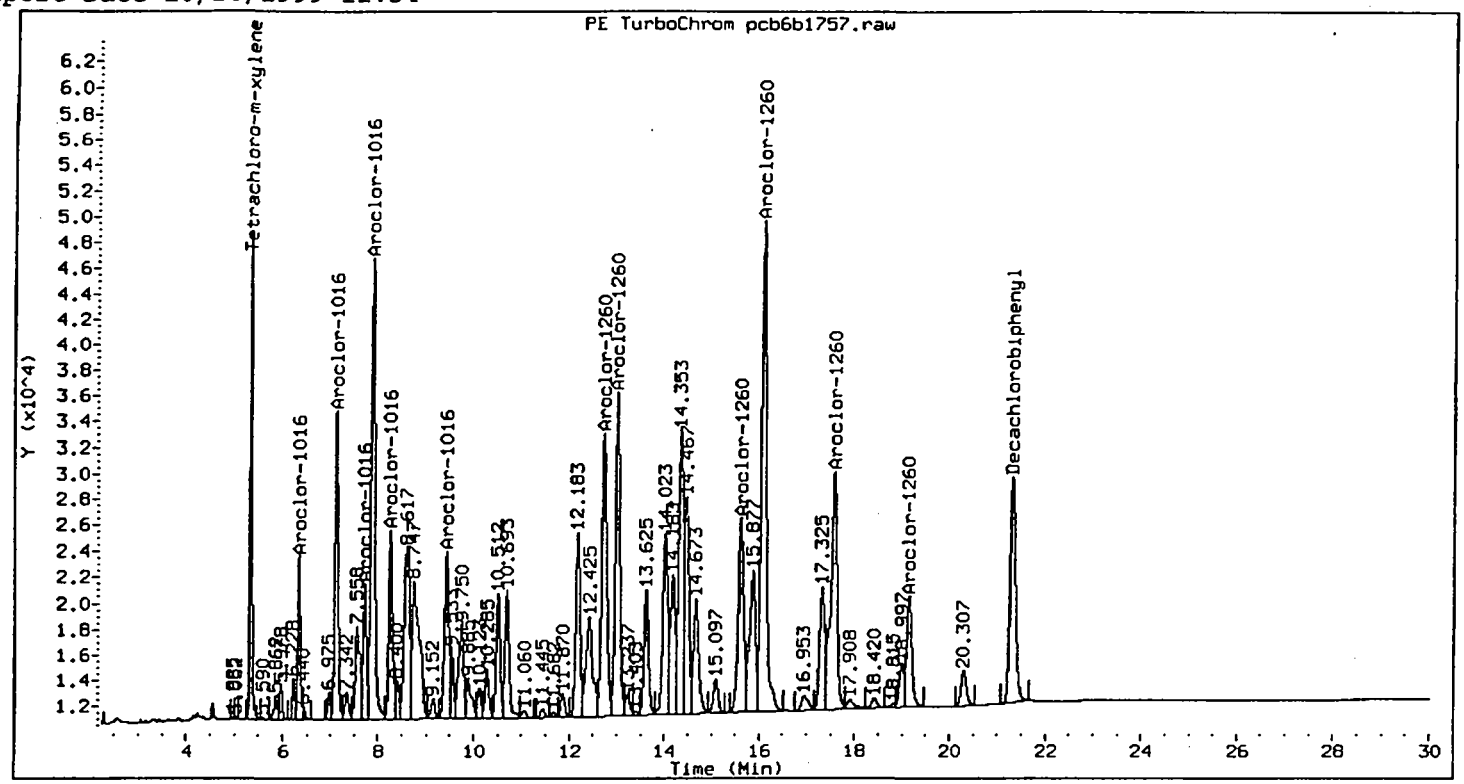
Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1757.d Page 2
Report Date 10/20/1999 11:33

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	6.653	6.653	0.000	97564	49.370	49.370
Decachlorobiphenyl		23.245	23.243	0.002	128141	46.984	46.984

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1757.d Page 1
Report Date 10/20/1999 11:34



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1660-1000 ppb
Lab ID : AR1660-1000 ppb
Inj Date : 19-OCT-1999 22:33
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_4

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	6.342	6.342	0.000	48141	916.699	916.699
(2)		7.120	7.120	0.000	111907	889.518	889.518
(3)		7.728	7.728	0.000	51438	931.487	931.487
(4)		7.885	7.885	0.000	212602	930.805	930.805
(5)		8.258	8.257	0.002	79910	921.057	921.057
(6)		9.433	9.432	0.002	80063	931.116	931.116
Average of peak concentrations:							920.00
Aroclor-1260	(M)	12.730	12.728	0.002	163801	910.482	910.482
(2)		13.012	13.012	0.000	170413	904.824	904.824
(3)		15.617	15.615	0.002	120220	932.190	932.190
(4)		16.088	16.088	0.000	284217	957.122	957.122
(5)		17.578	17.575	0.003	167783	955.654	955.654
(6)		19.153	19.150	0.003	67362	946.476	946.476
Average of peak concentrations:							934.00

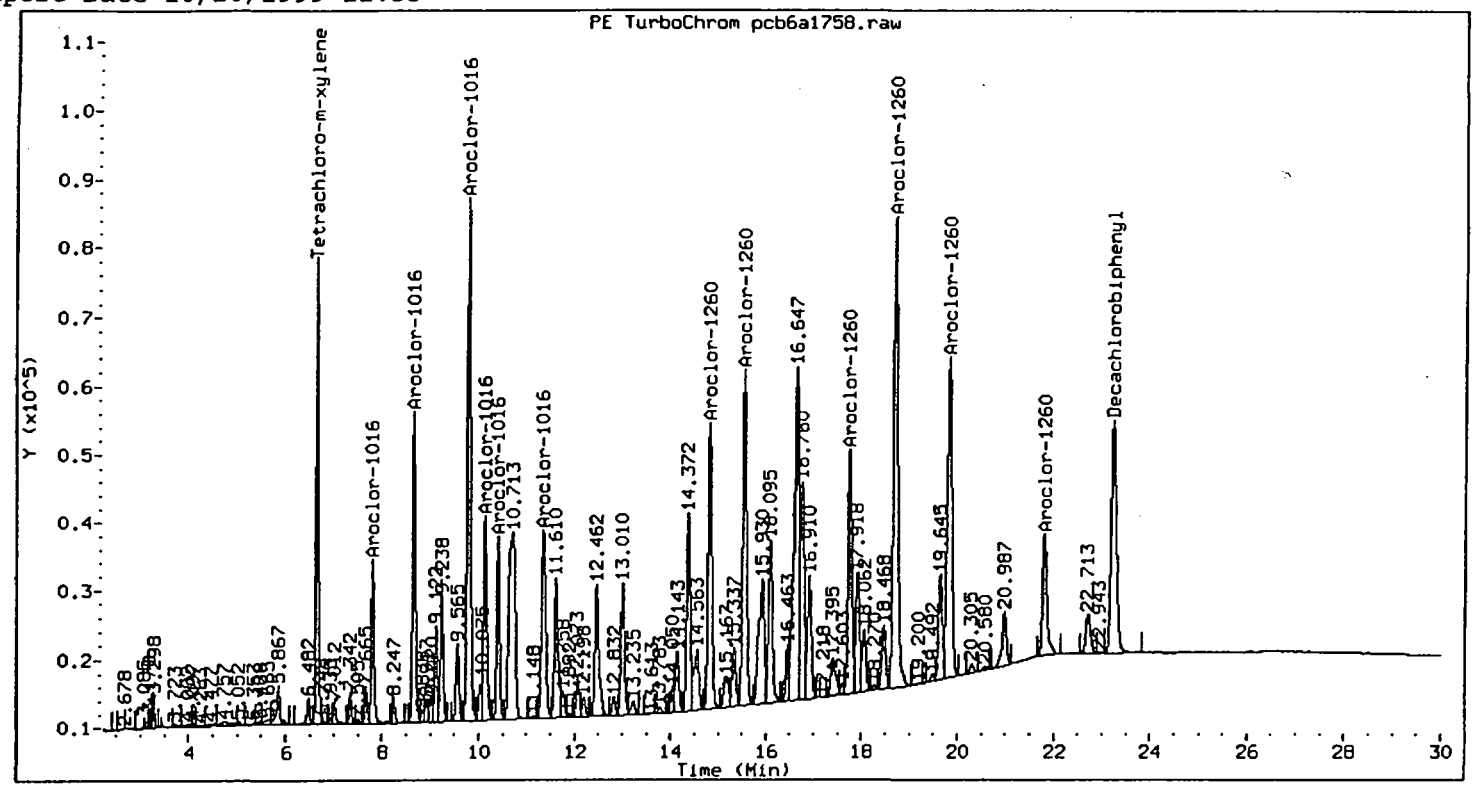
Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1757.d Page 2
Report Date 10/20/1999 11:34

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene		5.338	5.338	0.000	110411	50.481	50.481
Decachlorobiphenyl	(M)	21.318	21.318	0.000	142397	47.147	47.147

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1758.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1660-2000 ppb
Lab ID : AR1660-2000 ppb
Inj Date : 19-OCT-1999 23:11
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_5

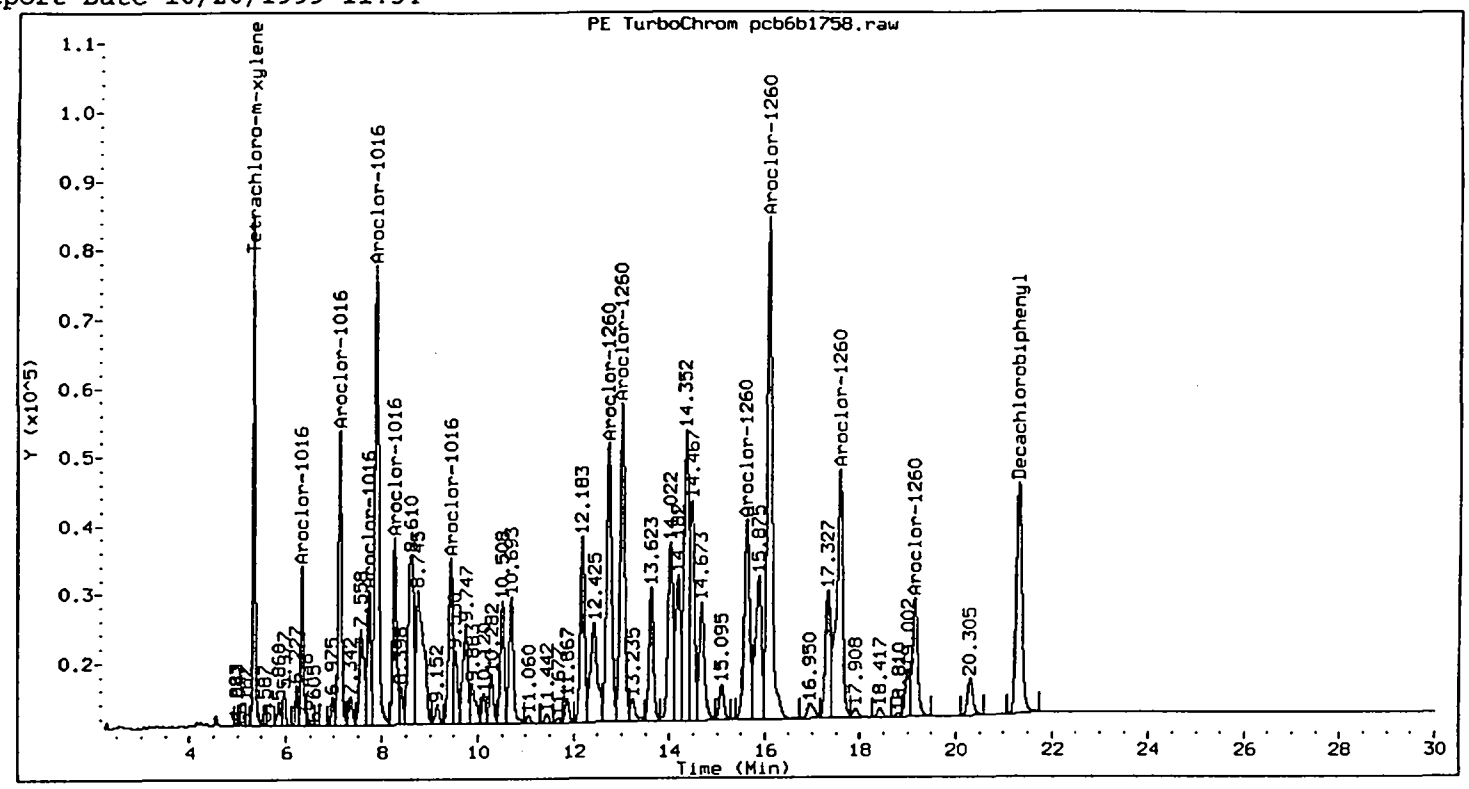
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.802	7.802	0.000	92307	1808.569	1808.569
(2)		8.655	8.655	0.000	188701	1731.829	1731.829
(3)		9.792	9.793	0.002	363864	1836.682	1836.682
(4)		10.127	10.125	0.002	142168	1790.119	1790.119
(5)		10.402	10.402	0.000	114930	1915.047	1915.047
(6)		11.345	11.347	0.002	164149	1798.481	1798.481
Average of peak concentrations:							1810.00
Aroclor-1260	(M)	14.823	14.823	0.000	229200	1778.746	1778.746
(2)		15.550	15.552	0.002	272793	1811.049	1811.049
(3)		17.757	17.755	0.002	199868	1887.068	1887.068
(4)		18.702	18.702	0.000	420823	1931.931	1931.931
(5)		19.837	19.835	0.002	314592	1948.703	1948.703
(6)		21.812	21.813	0.002	113196	1929.157	1929.157
Average of peak concentrations:							1880.00

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	6.652	6.653	0.002	204234	103.347	103.347
Decachlorobiphenyl		23.245	23.243	0.002	253557	92.969	92.969

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1758.d Page 1
Report Date 10/20/1999 11:34



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1660-2000 ppb
Lab ID : AR1660-2000 ppb
Inj Date : 19-OCT-1999 23:11
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_5

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.340	6.342	0.002	88698	1688.984	1688.984
(2)		7.118	7.120	0.002	202230	1607.470	1607.470
(3)		7.727	7.728	0.002	97018	1756.891	1756.891
(4)		7.883	7.885	0.002	396573	1736.260	1736.260
(5)		8.253	8.257	0.003	149646	1724.847	1724.847
(6)		9.430	9.432	0.002	149439	1737.944	1737.944
Average of peak concentrations:							1710.00
Aroclor-1260	(M)	12.728	12.728	0.000	303805	1688.688	1688.688
(2)		13.012	13.012	0.000	318057	1688.754	1688.754
(3)		15.615	15.615	0.000	234223	1816.174	1816.174
(4)		16.087	16.088	0.002	553682	1864.566	1864.566
(5)		17.577	17.575	0.002	327898	1867.633	1867.633
(6)		19.153	19.150	0.003	132218	1857.741	1857.741
Average of peak concentrations:							1800.00

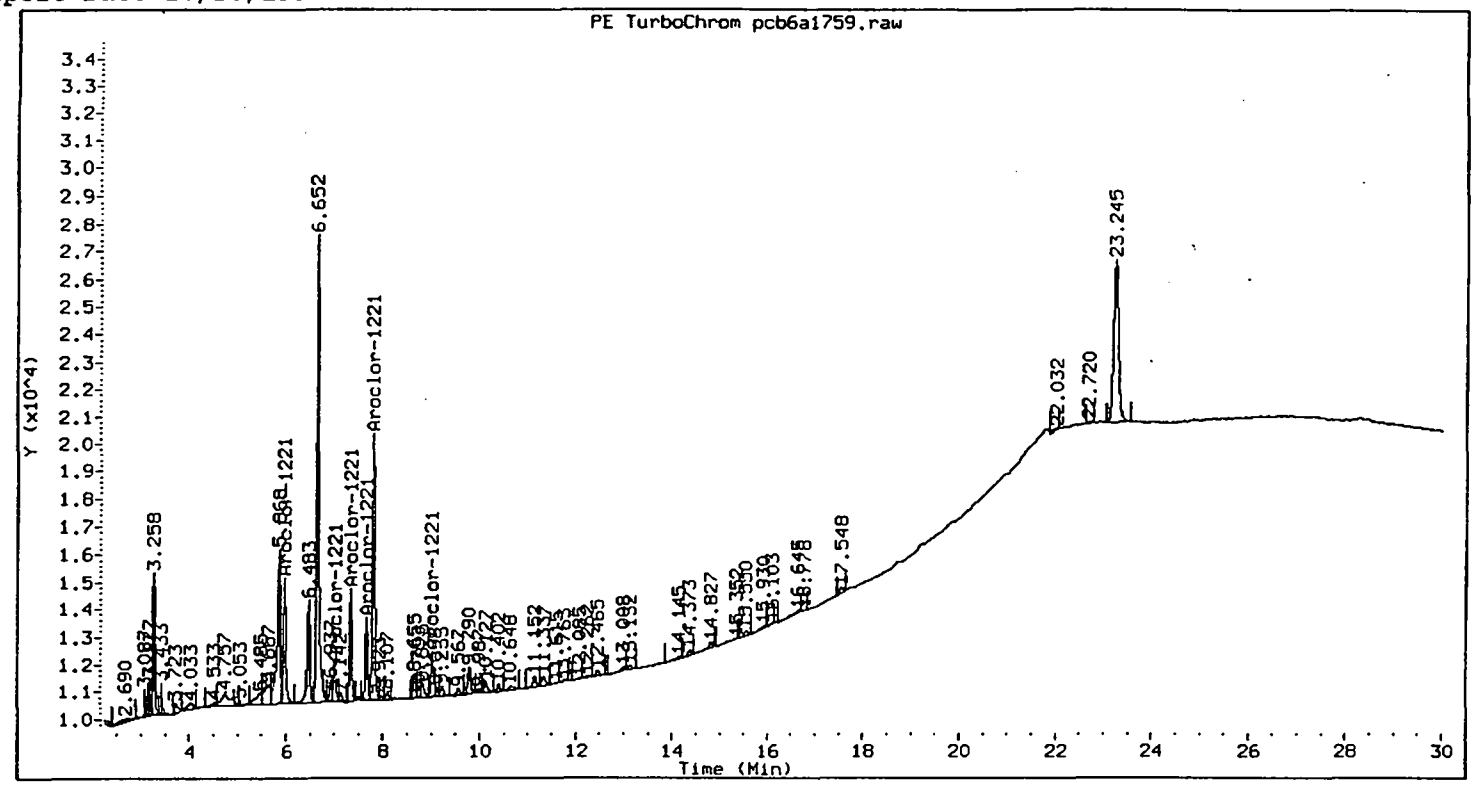
Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1758.d Page 2
Report Date 10/20/1999 11:34

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	5.337	5.338	0.002	223042	101.977	101.977
Decachlorobiphenyl	(M)	21.318	21.318	0.000	274261	90.808	90.808

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1759.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1221-500 ppb
Lab ID : AR1221-500 ppb
Inj Date : 19-OCT-1999 23:49
Operator : DavidW
Cpnd Sublist: AR12210
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1221	(M)	5.977	5.977	0.000	14743	500.000	500.000
(2)		7.012	7.012	0.000	4914	500.000	500.000
(3)		7.342	7.342	0.000	13004	500.000	500.000
(4)		7.667	7.667	0.000	9821	500.000	500.000
(5)		7.803	7.803	0.000	35179	500.000	500.000
(6)		9.020	9.020	0.000	7174	500.000	500.000

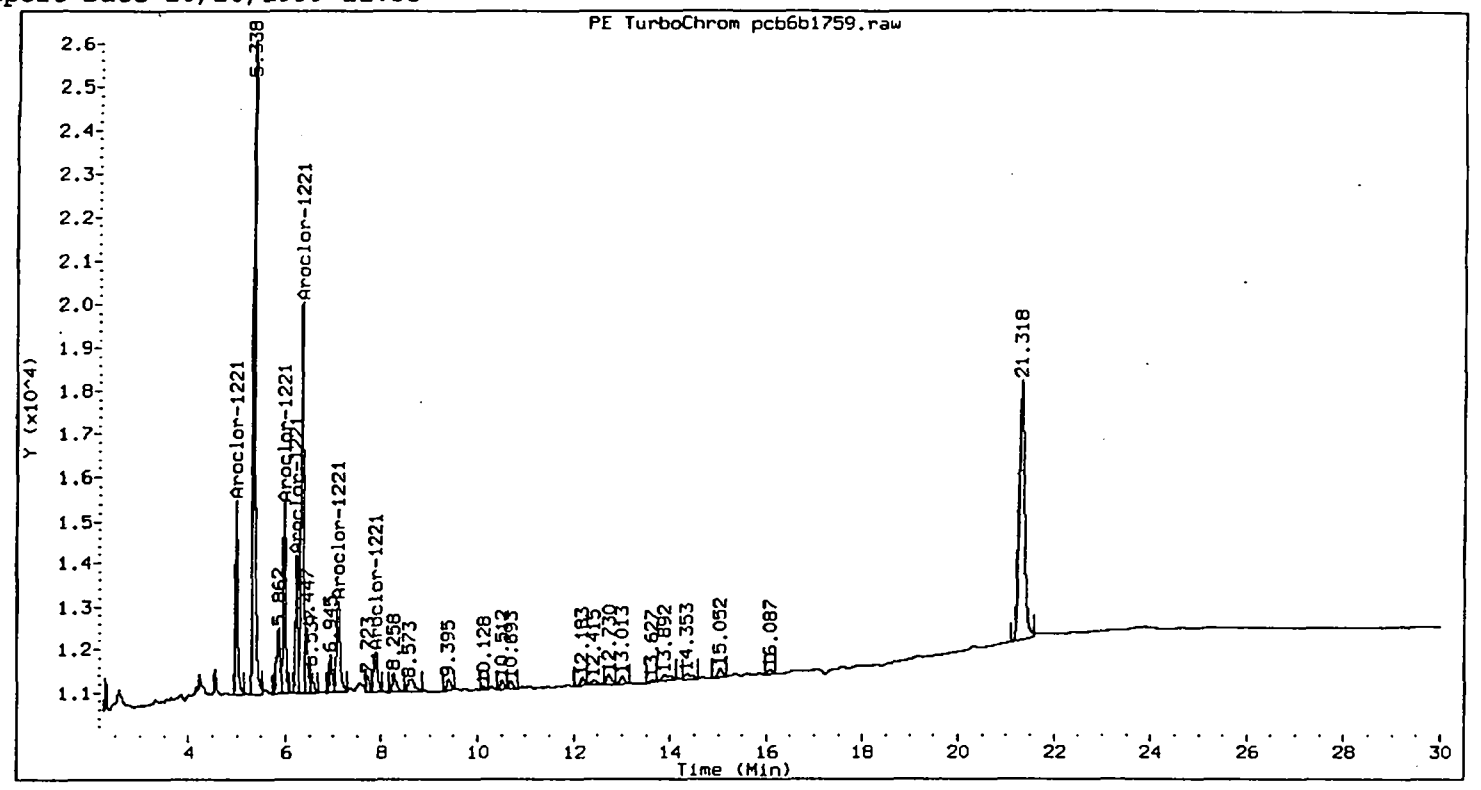
Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

10/21/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1759.d Page 1
Report Date 10/20/1999 11:35



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1221-500 ppb
Lab ID : AR1221-500 ppb
Inj Date : 19-OCT-1999 23:49
Operator : DavidW
Cpnd Sublist: AR12210

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1221	(M)	4.985	4.985	0.000	13760	500.000	500.000
(2)		5.977	5.977	0.000	15065	500.000	500.000
(3)		6.228	6.228	0.000	10822	500.000	500.000
(4)		6.342	6.342	0.000	33827	500.000	500.000
(5)		7.102	7.102	0.000	11118	500.000	500.000
(6)		7.885	7.885	0.000	4939	500.000	500.000

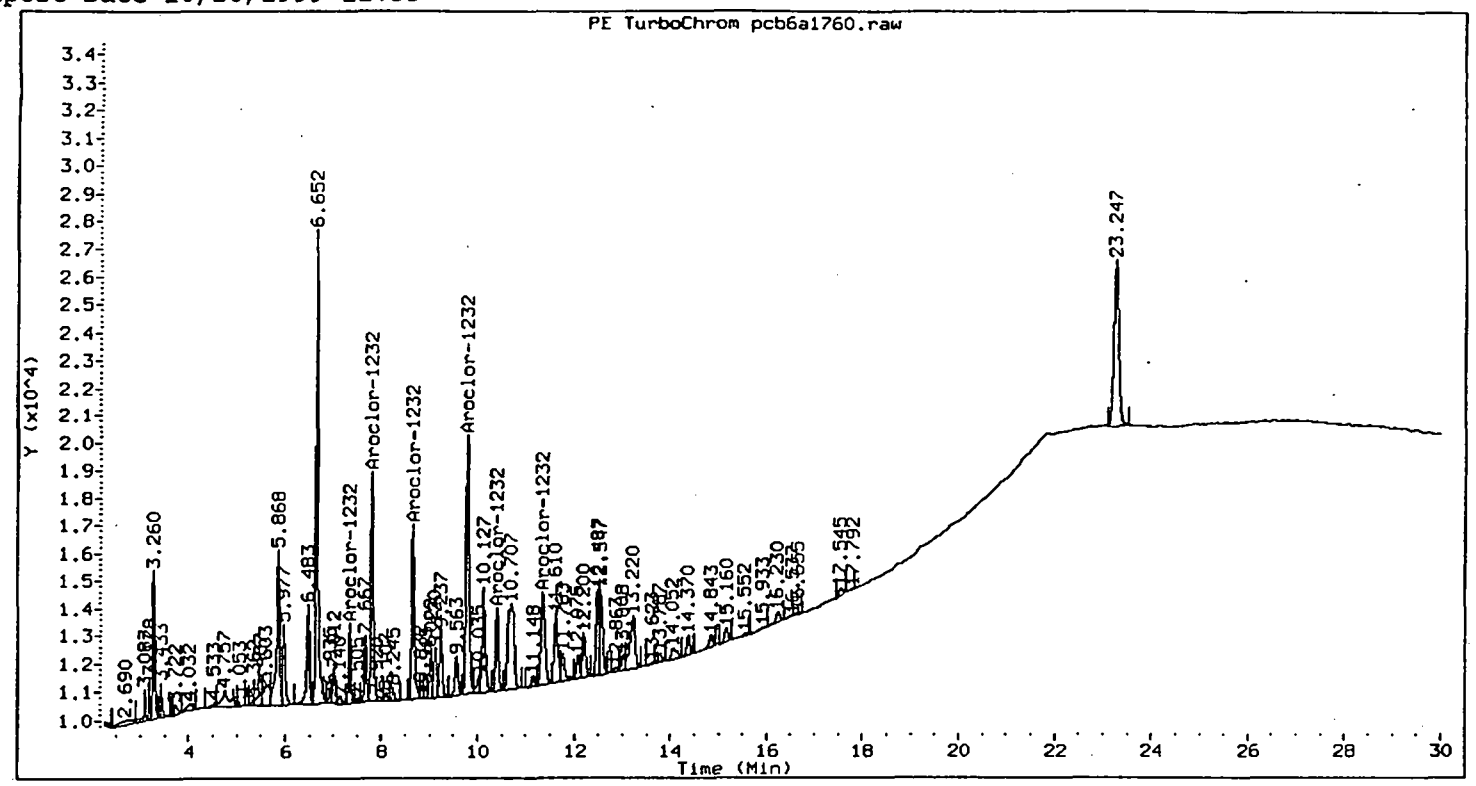
Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

10/20/99

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1760.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1232-500 ppb
Lab ID : AR1232-500 ppb
Inj Date : 20-OCT-1999 00:27
Operator : DavidW
Cpnd Sublist: AR12320

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

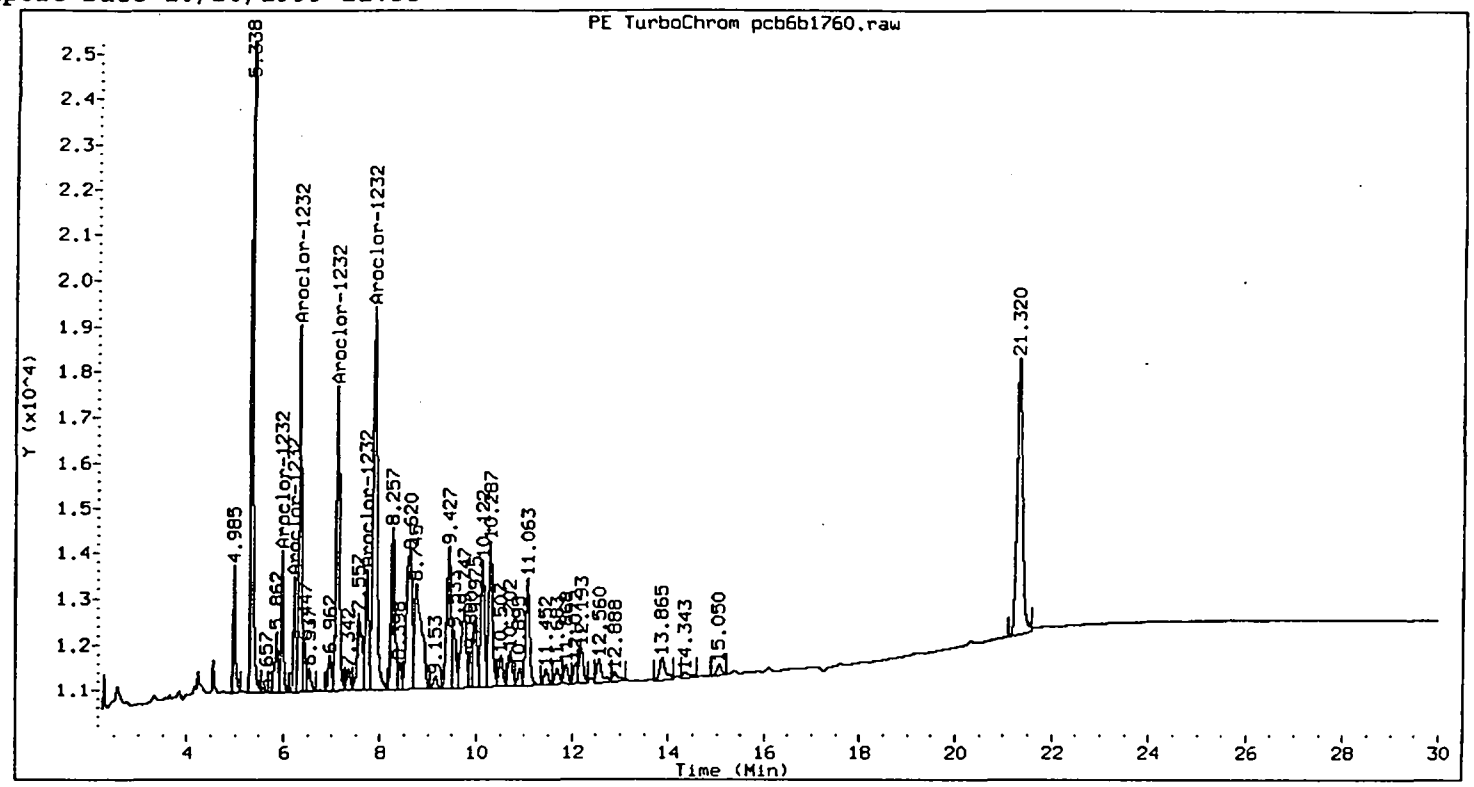
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1232	(M)	7.340	7.340	0.000	8979	500.000	500.000
(2)		7.803	7.803	0.000	30246	500.000	500.000
(3)		8.655	8.655	0.000	25200	500.000	500.000
(4)		9.790	9.790	0.000	42558	500.000	500.000
(5)		10.402	10.402	0.000	12240	500.000	500.000
(6)		11.347	11.347	0.000	19156	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1760.d Page 1
Report Date 10/20/1999 11:35



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1232-500 ppb
Lab ID : AR1232-500 ppb
Inj Date : 20-OCT-1999 00:27
Operator : DavidW
Cpnd Sublist: AR12320
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1232	(M)	5.977	5.977	0.000	10638	500.000	500.000
(2)		6.228	6.228	0.000	8546	500.000	500.000
(3)		6.342	6.342	0.000	29878	500.000	500.000
(4)		7.117	7.117	0.000	31436	500.000	500.000
(5)		7.728	7.728	0.000	12426	500.000	500.000
(6)		7.885	7.885	0.000	49369	500.000	500.000

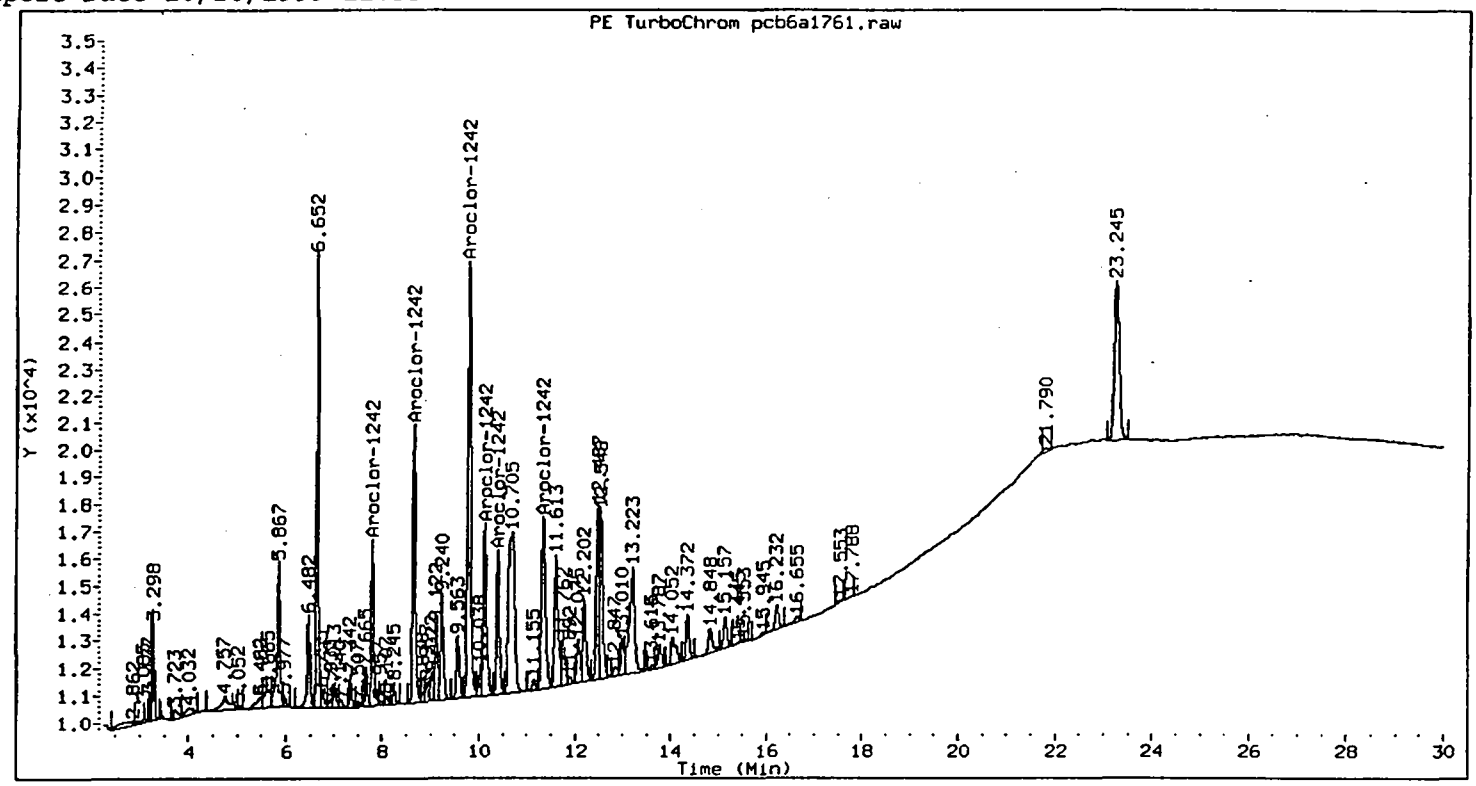
Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

10/21/9

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1761.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1242-500 ppb
Lab ID : AR1242-500 ppb
Inj Date : 20-OCT-1999 01:04
Operator : DavidW
Cpnd Sublist: AR12420

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1242	(M)	7.802	7.802	0.000	22084	500.000	500.000
(2)		8.655	8.655	0.000	40463	500.000	500.000
(3)		9.793	9.793	0.000	73595	500.000	500.000
(4)		10.127	10.127	0.000	29605	500.000	500.000
(5)		10.403	10.403	0.000	21821	500.000	500.000
(6)		11.347	11.347	0.000	35792	500.000	500.000

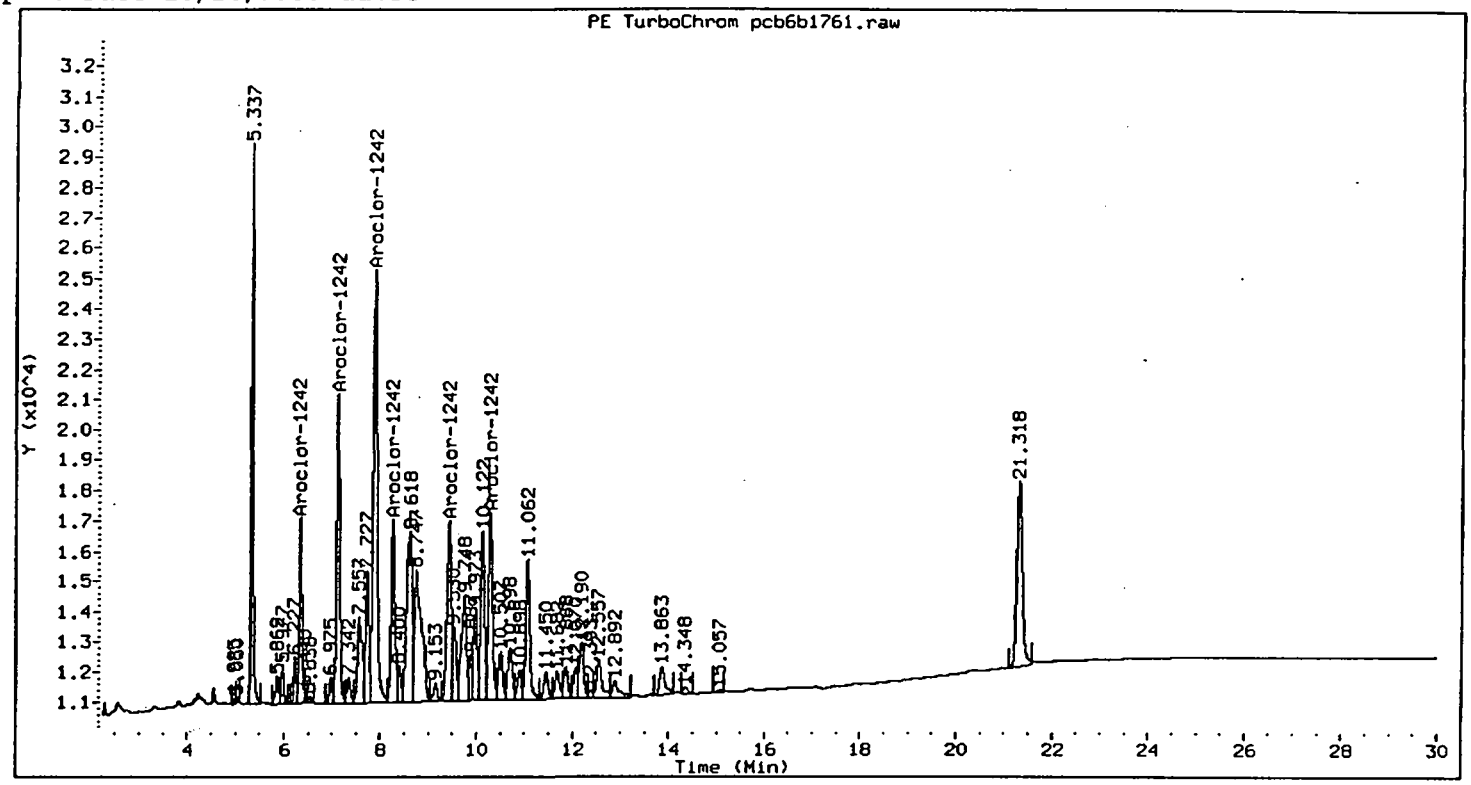
Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

10/21/9

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1761.d Page 1
Report Date 10/20/1999 11:35



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1242-500 ppb
Lab ID : AR1242-500 ppb
Inj Date : 20-OCT-1999 01:04
Operator : DavidW
Cpnd Sublist: AR12420

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

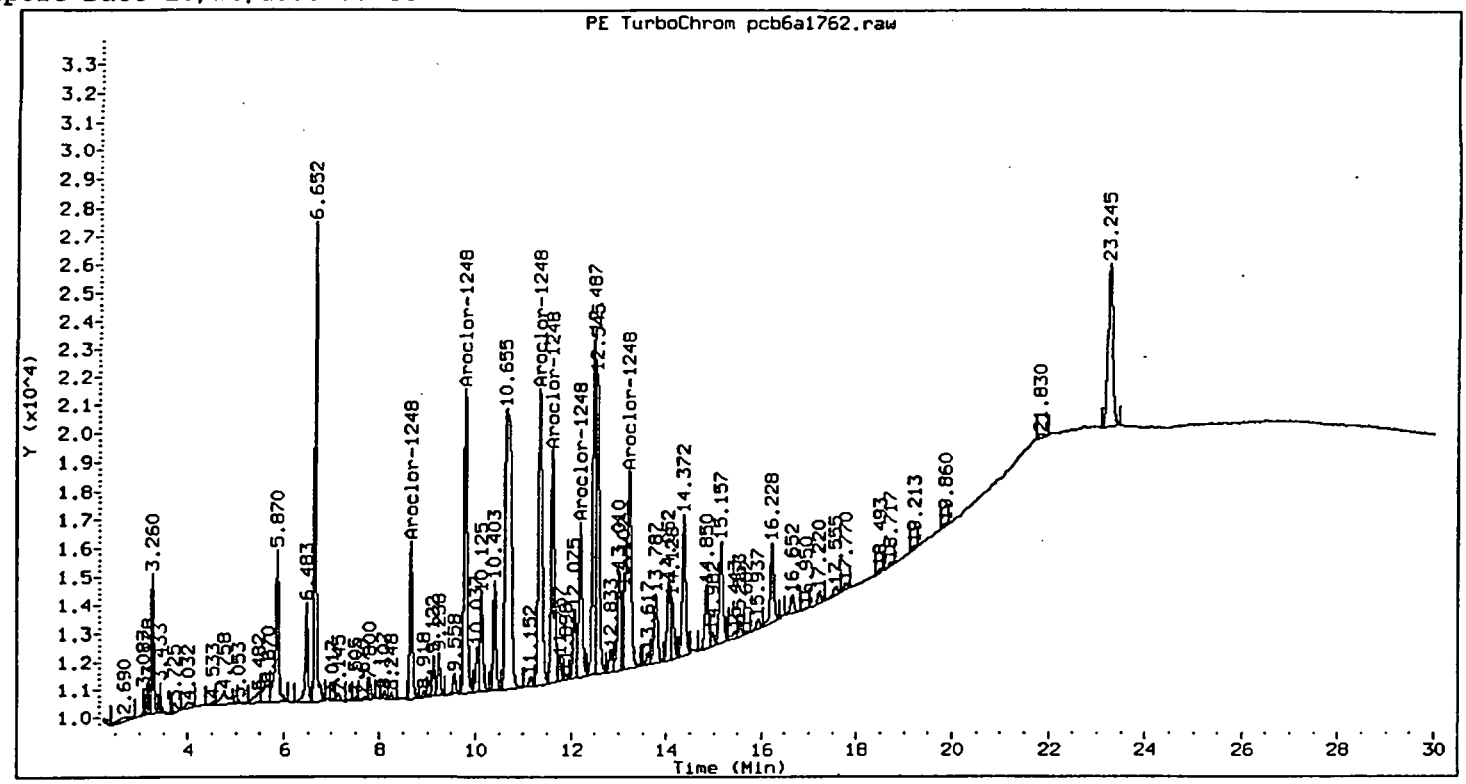
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1242	(M)	6.340	6.340	0.000	22421	500.000	500.000
(2)		7.118	7.118	0.000	47004	500.000	500.000
(3)		7.885	7.885	0.000	84916	500.000	500.000
(4)		8.257	8.257	0.000	32343	500.000	500.000
(5)		9.428	9.428	0.000	37816	500.000	500.000
(6)		10.287	10.287	0.000	37021	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1762.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1248-500 ppb
Lab ID : AR1248-500 ppb
Inj Date : 20-OCT-1999 01:42
Operator : DavidW
Cpnd Sublist: AR12480

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

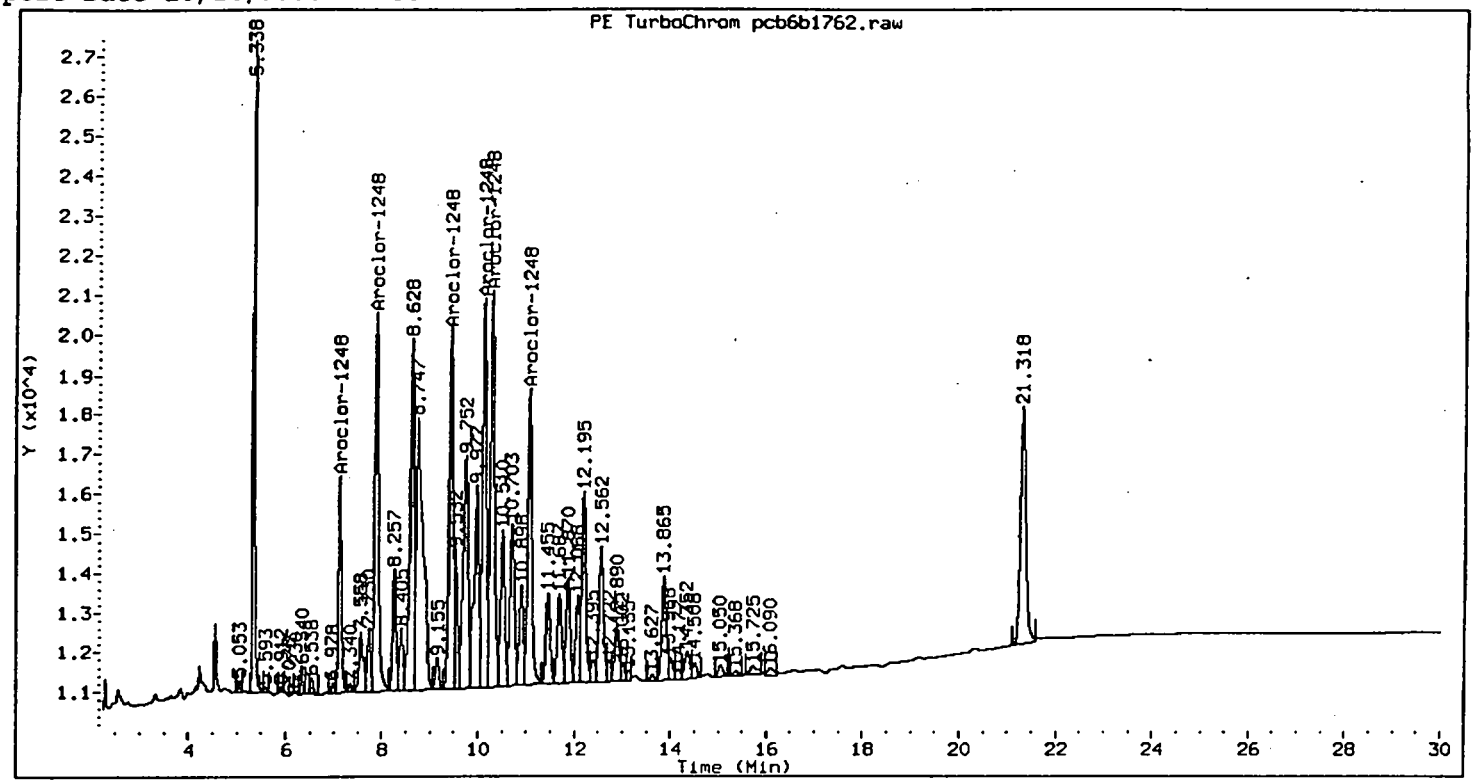
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1248	(M)	8.655	8.655	0.000	21597	500.000	500.000
(2)		9.790	9.790	0.000	48744	500.000	500.000
(3)		11.347	11.347	0.000	57340	500.000	500.000
(4)		11.612	11.612	0.000	42190	500.000	500.000
(5)		12.200	12.200	0.000	26204	500.000	500.000
(6)		13.225	13.225	0.000	49208	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1762.d Page 1
Report Date 10/20/1999 11:35



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1248-500 ppb
Lab ID : AR1248-500 ppb
Inj Date : 20-OCT-1999 01:42
Operator : DavidW
Cpnd Sublist: AR12480

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

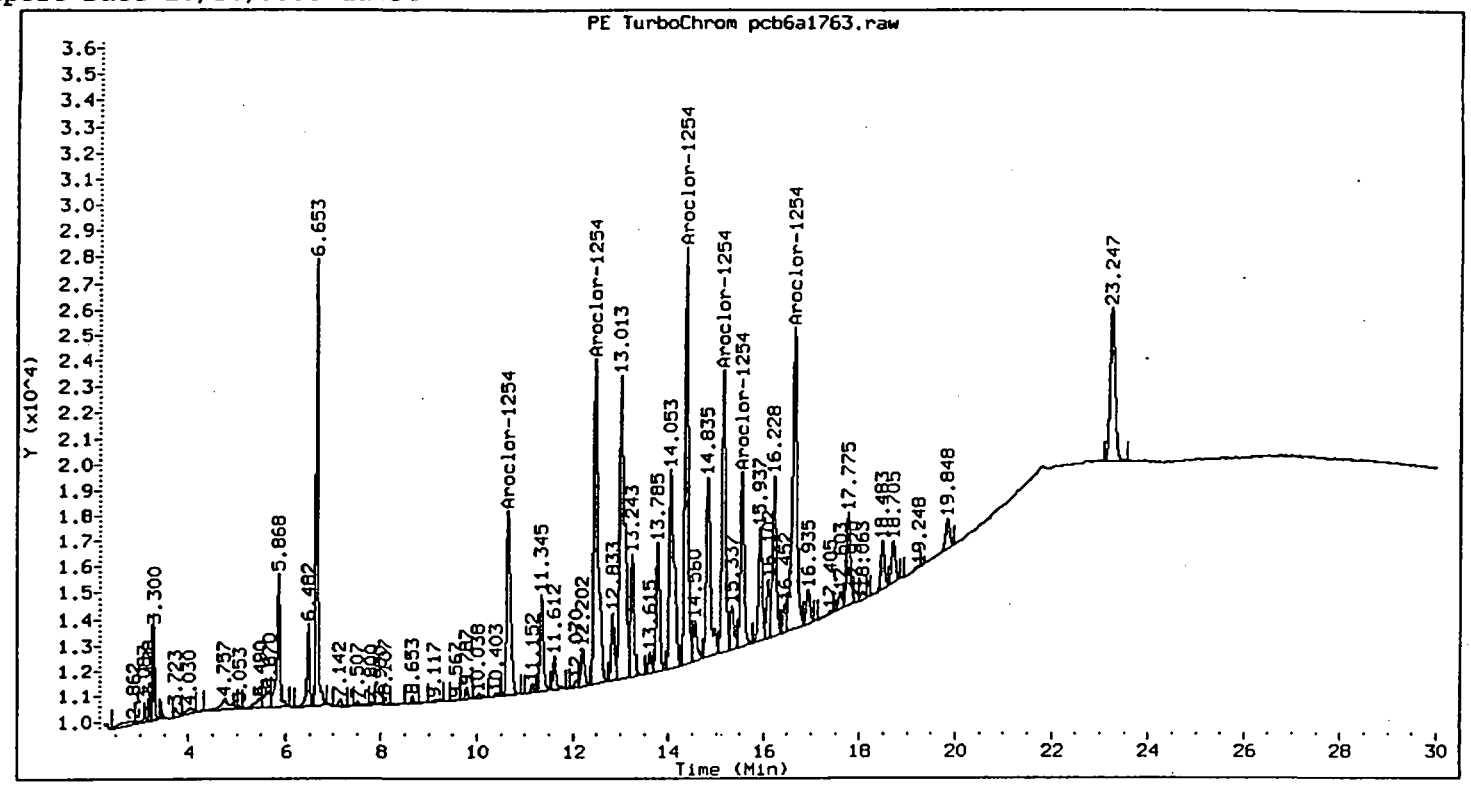
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1248	(M)	7.118	7.118	0.000	23870	500.000	500.000
(2)		7.880	7.880	0.000	56431	500.000	500.000
(3)		9.435	9.435	0.000	52639	500.000	500.000
(4)		10.125	10.125	0.000	55223	500.000	500.000
(5)		10.290	10.290	0.000	60005	500.000	500.000
(6)		11.065	11.065	0.000	44366	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1763.d Page 1
Report Date 10/20/1999 11:34



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1254-500 ppb
Lab ID : AR1254-500 ppb
Inj Date : 20-OCT-1999 02:20
Operator : DavidW
Cpnd Sublist: AR12540
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

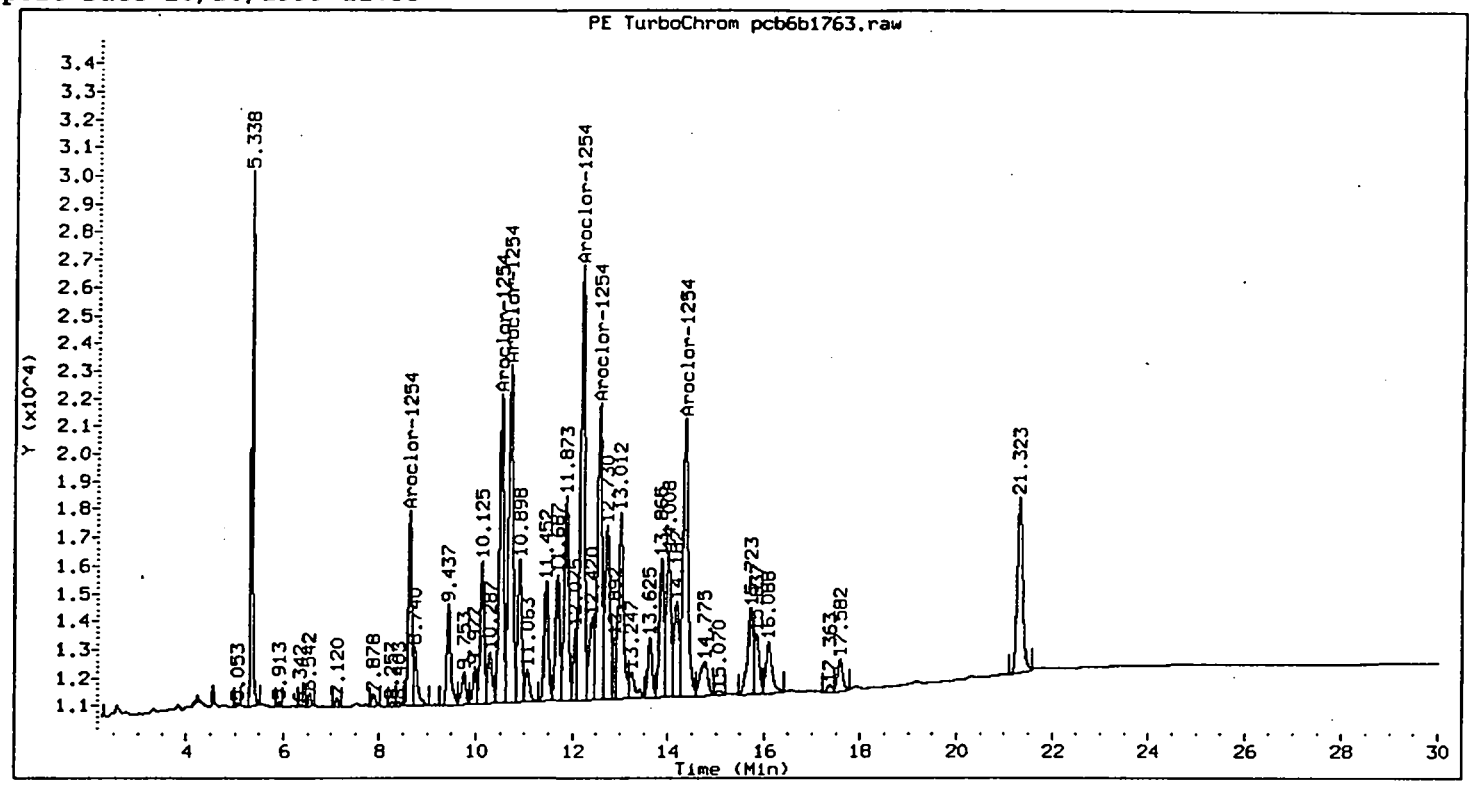
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1254	(M)	10.647	10.647	0.000	40087	500.000	500.000
(2)		12.470	12.470	0.000	81333	500.000	500.000
(3)		14.373	14.373	0.000	80566	500.000	500.000
(4)		15.158	15.158	0.000	58963	500.000	500.000
(5)		15.550	15.550	0.000	35893	500.000	500.000
(6)		16.653	16.653	0.000	76101	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1763.d Page 1
Report Date 10/20/1999 11:35



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1254-500 ppb
Lab ID : AR1254-500 ppb
Inst ID : HP68906.i
Inj Date : 20-OCT-1999 02:20
Dil Factor : 1
Operator : DavidW
Sample Matrix : SOIL
Cpnd Sublist: AR12540
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1254	(M)	8.630	8.630	0.000	35781	500.000	500.000
(2)		10.513	10.513	0.000	65080	500.000	500.000
(3)		10.700	10.700	0.000	78064	500.000	500.000
(4)		12.195	12.195	0.000	99259	500.000	500.000
(5)		12.565	12.565	0.000	70180	500.000	500.000
(6)		14.355	14.355	0.000	76105	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

NORTHERN ECOLOGICAL ASSOCIATES, INC

New York Office:
33 Park Street
Canton, New York 13617

Corporate Headquarters:
451 Presumpscot Street
Portland, Maine 04103

APPENDIX D, VOLUME III OF VI

FINAL
FORMER STEWART AIR FORCE BASE (AFB)
HTRW INVESTIGATION

NEWBURGH, NEW YORK

Contract Number: DACW51-97-D-0010
Delivery Order No. 61

Prepared for:

U.S. Army Corps of Engineers
New York District
26 Federal Plaza
New York, New York 10278-0090

Prepared by:

Ogden Environmental and Energy Services Co., Inc.
Northern Ecological Associates, Inc.

MARCH 2000

Committed To *Your* Success

Severn Trent Laboratories
628 Route 10
Whippany, NJ 07981

Tel: (973) 428-8181
Fax: (973) 428-5222

NYSDEC CATEGORY B

SAMPLING DATE OCTOBER 13, 1999

OGDEN ENVIRONMENTAL

PROJECT: STEWART AFB 770760061

PREPARED BY:

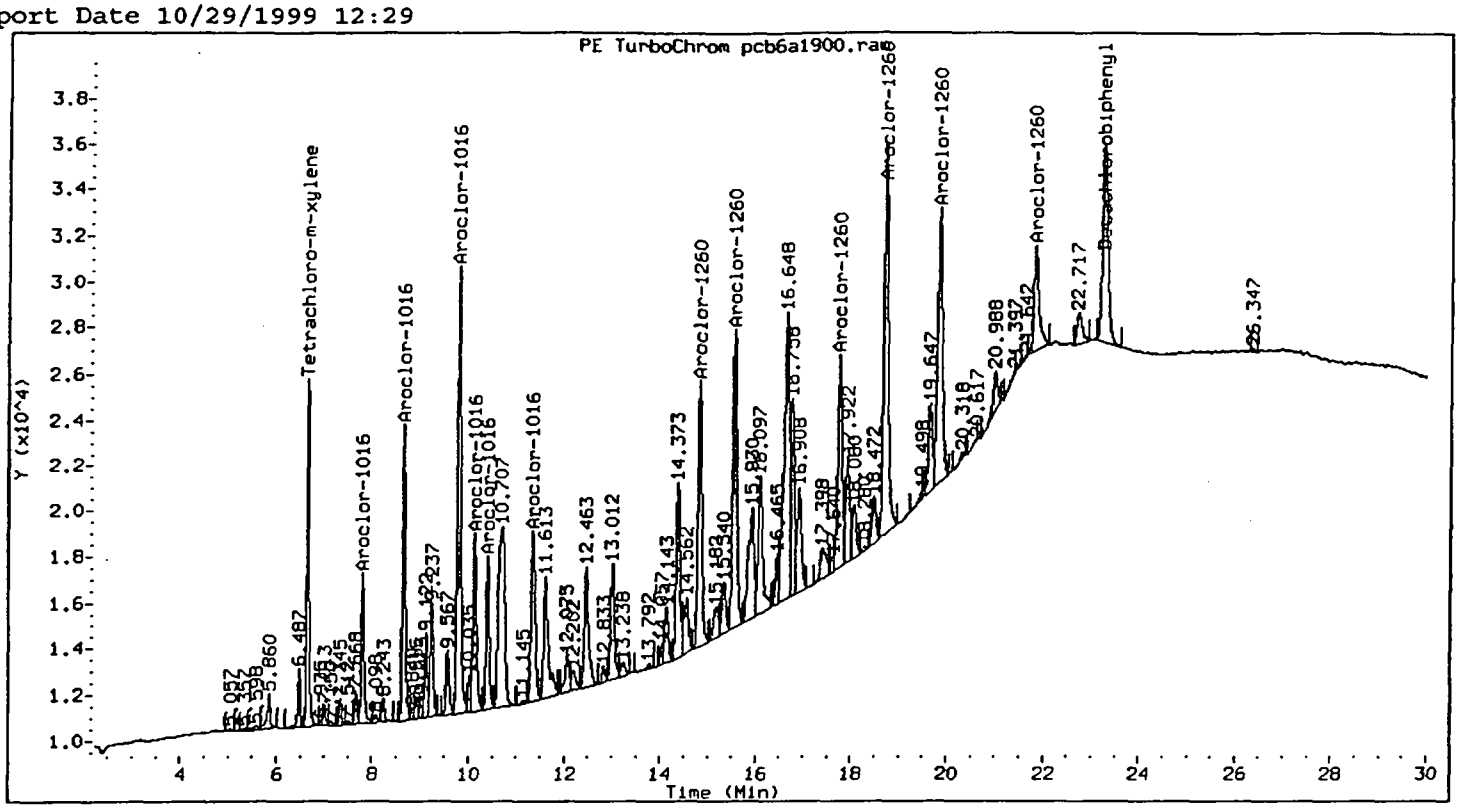
SEVERN TRENT LABORATORIES, INC.

(CERTIFICATION NUMBER 10997)

STL JOB NO: 20990-94106

VOLUME III OF III

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1900.d Page 1
Report Date 10/29/1999 12:29



Method : /chem/HP68906.i/8082/front/10-19-99/28oct99.b/Xf8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 28-OCT-1999 12:20
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	7.802	7.802	0.000	26601	521.193	521.193
(2)		8.653	8.653	0.000	55593	510.212	510.212
(3)		9.795	9.795	0.000	99314	501.309	501.309
(4)		10.128	10.128	0.000	40215	506.370	506.370
(5)		10.403	10.403	0.000	29755	495.799	495.799
(6)		11.345	11.345	0.000	44133	483.539	483.539
Aroclor-1260	(M)	14.823	14.823	0.000	65247	506.361	506.361
(2)		15.553	15.553	0.000	77153	512.212	512.212
(3)		17.758	17.758	0.000	57645	544.259	544.259
(4)		18.703	18.703	0.000	111201	510.506	510.506
(5)		19.837	19.837	0.000	84335	522.403	522.403
(6)		21.813	21.813	0.000	33104	564.179	564.179
Tetrachloro-m-xylene	(M)	6.657	6.657	0.000	47946	24.262	24.262
Decachlorobiphenyl		23.247	23.247	0.000	67174	24.630	24.630

11/8/99

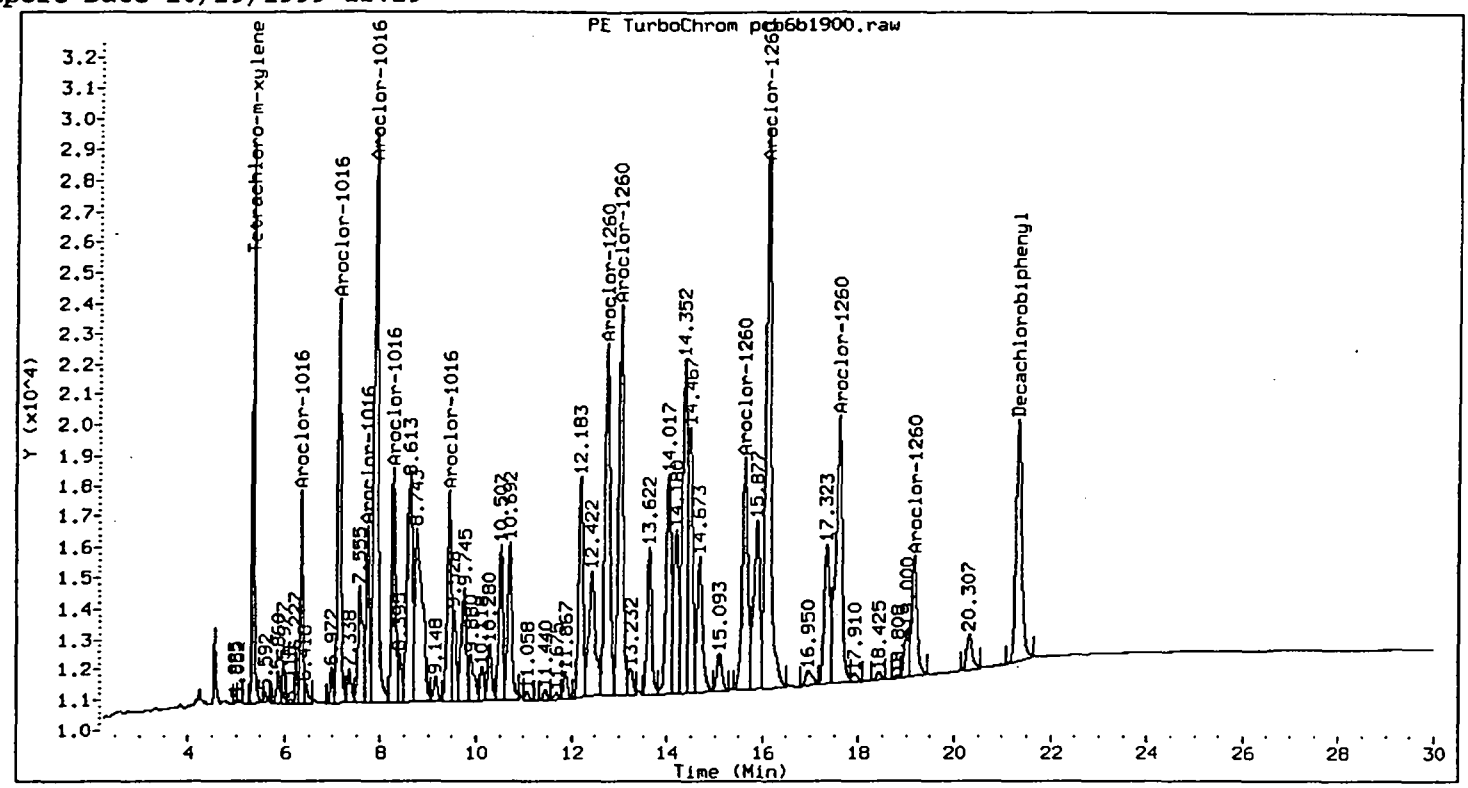
Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1900.d Page 2
Report Date 10/29/1999 12:29

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1900.d Page 1
Report Date 10/29/1999 12:29



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/Xr8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 28-OCT-1999 12:20
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.340	6.340	0.000	26696	508.344	508.344
(2)		7.117	7.117	0.000	62767	498.917	498.917
(3)		7.725	7.725	0.000	27801	503.446	503.446
(4)		7.883	7.883	0.000	114054	499.347	499.347
(5)		8.255	8.255	0.000	42631	491.373	491.373
(6)		9.427	9.427	0.000	41430	481.822	481.822
Aroclor-1260	(M)	12.728	12.728	0.000	86435	480.446	480.446
(2)		13.012	13.012	0.000	89434	474.858	474.858
(3)		15.615	15.615	0.000	60567	469.639	469.639
(4)		16.083	16.083	0.000	142187	478.825	478.825
(5)		17.580	17.580	0.000	80573	458.926	458.926
(6)		19.155	19.155	0.000	31982	449.366	449.366
Tetrachloro-m-xylene		5.338	5.338	0.000	52219	23.875	23.875
Decachlorobiphenyl	(M)	21.317	21.317	0.000	65425	21.662	21.662

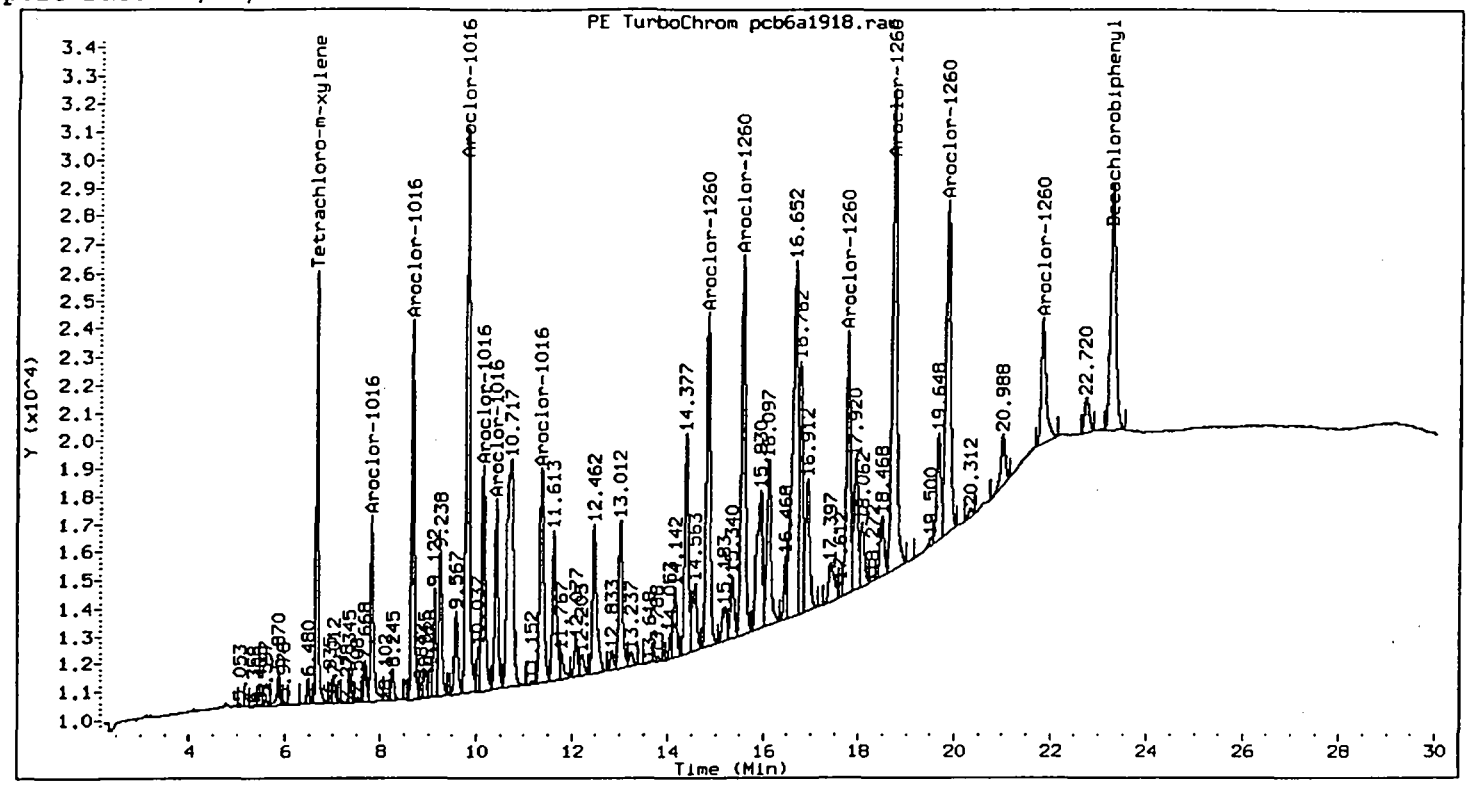
11/8/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1900.d Page 2
Report Date 10/29/1999 12:29

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:
M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/pcb6a1918.d Page 1
Report Date 11/08/1999 11:55



Method : /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/Xf8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 29-OCT-1999 00:11
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

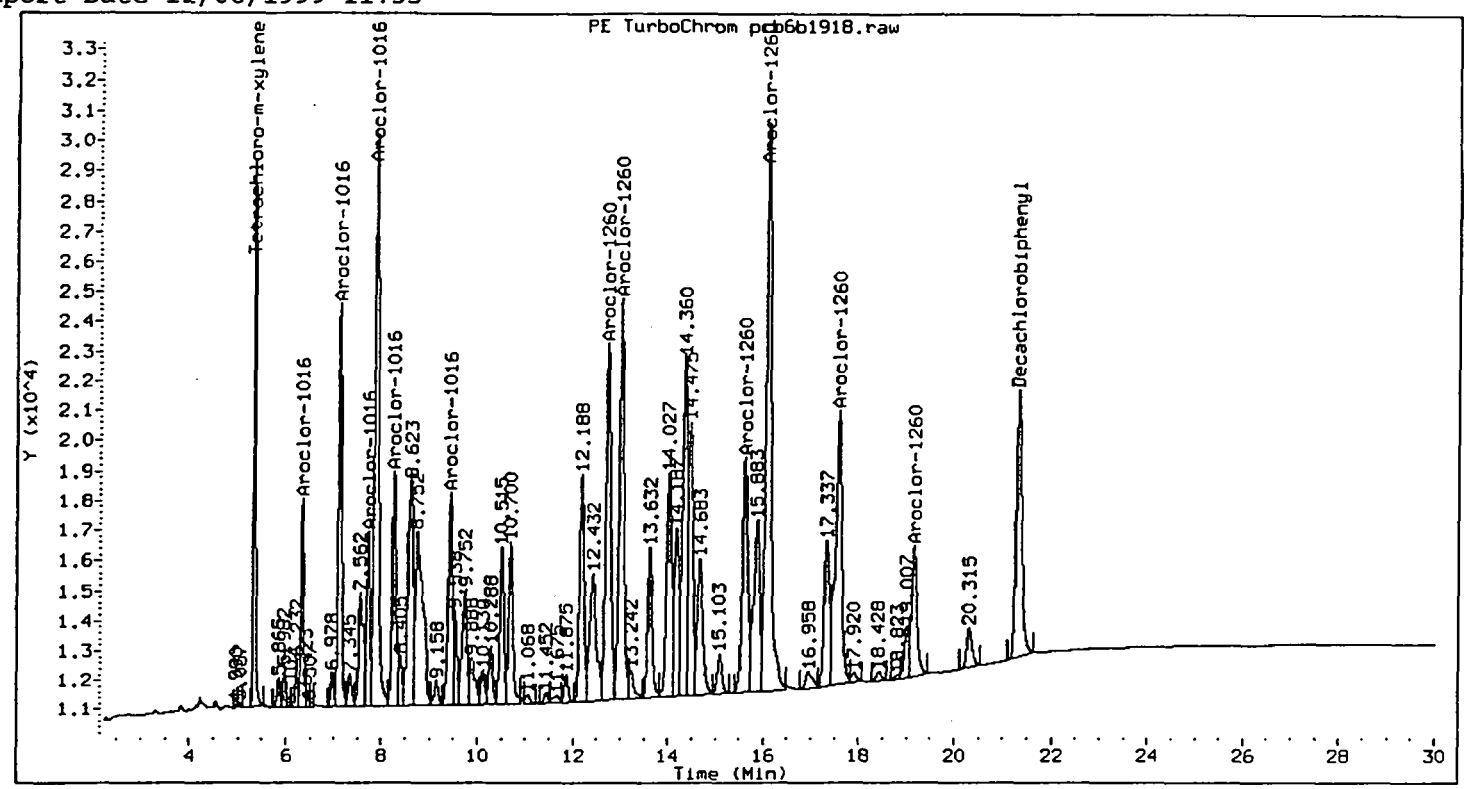
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.803	7.803	0.000	28031	549.211	549.211
(2)		8.655	8.655	0.000	57775	530.238	530.238
(3)		9.795	9.795	0.000	103940	524.660	524.660
(4)		10.128	10.128	0.000	42095	530.042	530.042
(5)		10.405	10.405	0.000	31111	518.394	518.394
(6)		11.347	11.347	0.000	46189	506.065	506.065
Aroclor-1260	(M)	14.825	14.825	0.000	67047	520.330	520.330
(2)		15.553	15.553	0.000	79061	524.879	524.879
(3)		17.757	17.757	0.000	54989	519.182	519.182
(4)		18.703	18.703	0.000	112671	517.254	517.254
(5)		19.837	19.837	0.000	83393	516.568	516.568
(6)		21.818	21.818	0.000	31354	534.355	534.355
Tetrachloro-m-xylene	(M)	6.655	6.655	0.000	48444	24.514	24.514
Decachlorobiphenyl		23.247	23.247	0.000	66788	24.488	24.488

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/pcb6a1918.d Page 2
Report Date 11/08/1999 11:55

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)

COMMENTS:
M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/pcb6b1918.d Page 1
Report Date 11/08/1999 11:55



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/Xr8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 29-OCT-1999 00:11
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	6.347	6.347	0.000	27005	514.228	514.228
(2)		7.123	7.123	0.000	63579	505.372	505.372
(3)		7.733	7.733	0.000	28622	518.314	518.314
(4)		7.893	7.893	0.000	117846	515.949	515.949
(5)		8.265	8.265	0.000	44362	511.324	511.324
(6)		9.435	9.435	0.000	43652	507.663	507.663
Aroclor-1260	(M)	12.737	12.737	0.000	90209	501.423	501.423
(2)		13.020	13.020	0.000	93747	497.759	497.759
(3)		15.623	15.623	0.000	62722	486.349	486.349
(4)		16.097	16.097	0.000	149800	504.463	504.463
(5)		17.585	17.585	0.000	86390	492.058	492.058
(6)		19.162	19.162	0.000	35092	493.063	493.063
Tetrachloro-m-xylene		5.342	5.342	0.000	53225	24.335	24.335
Decachlorobiphenyl	(M)	21.325	21.325	0.000	71998	23.838	23.838

11/8/99

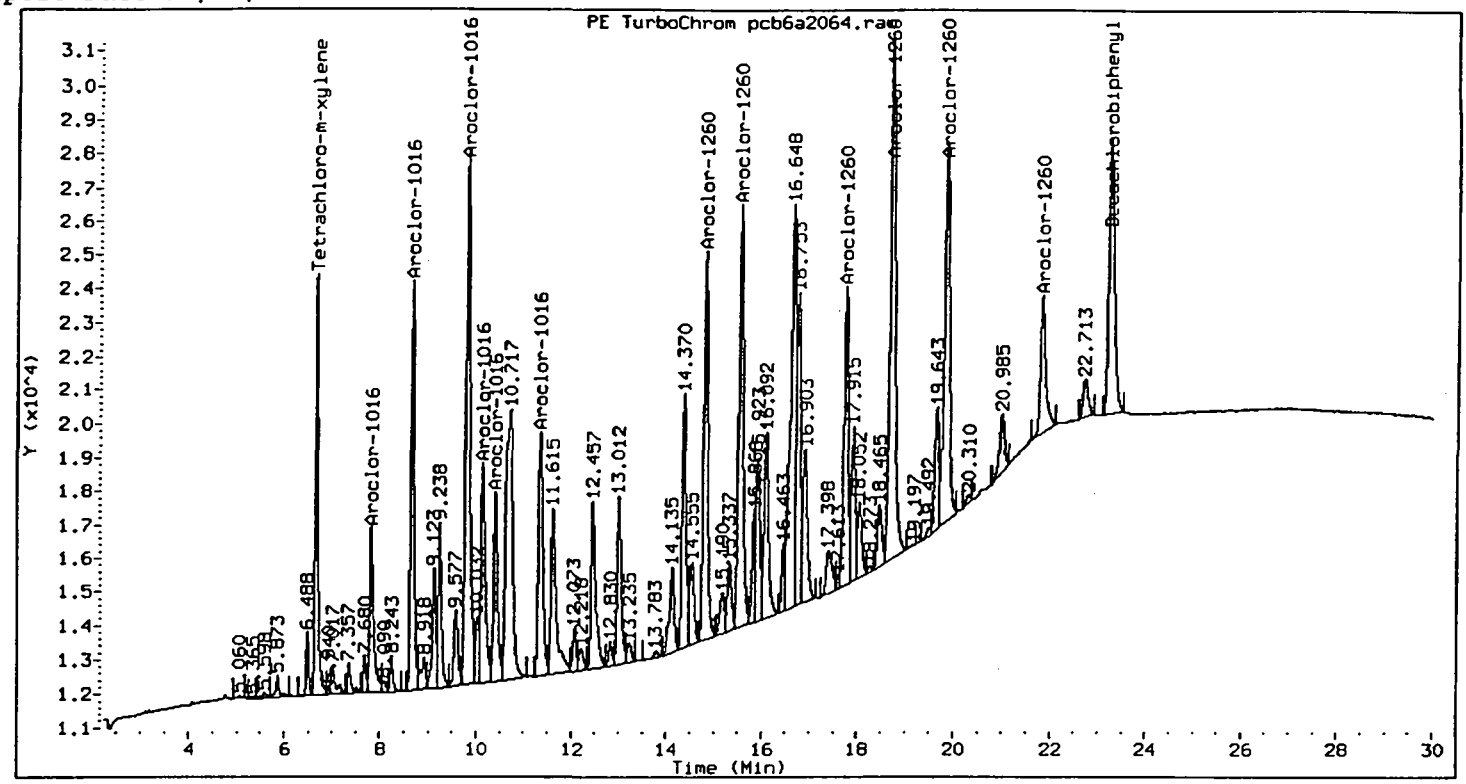
Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/pcb6b1918.d Page 2
Report Date 11/08/1999 11:55

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99.b/pcb6a2064.d Page 1
Report Date 11/09/1999 17:45



Method : /chem/HP68906.i/8082/front/10-19-99/08nov99.b/Xf8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 08-NOV-1999 12:54
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	7.817	7.817	0.000	27704	542.804	542.804
(2)		8.658	8.658	0.000	58248	534.579	534.579
(3)		9.807	9.807	0.000	101043	510.036	510.036
(4)		10.138	10.138	0.000	43350	545.845	545.845
(5)		10.410	10.410	0.000	31924	531.941	531.941
(6)		11.348	11.348	0.000	47659	522.171	522.171
Aroclor-1260	(M)	14.818	14.818	0.000	69175	536.845	536.845
(2)		15.550	15.550	0.000	81254	539.438	539.438
(3)		17.750	17.750	0.000	55302	522.138	522.138
(4)		18.700	18.700	0.000	115307	529.356	529.356
(5)		19.832	19.832	0.000	84418	522.917	522.917
(6)		21.815	21.815	0.000	29935	510.171	510.171
Tetrachloro-m-xylene		6.663	6.663	0.000	49007	24.799	24.799
Decachlorobiphenyl		23.237	23.237	0.000	66303	24.311	24.311

11/10/99

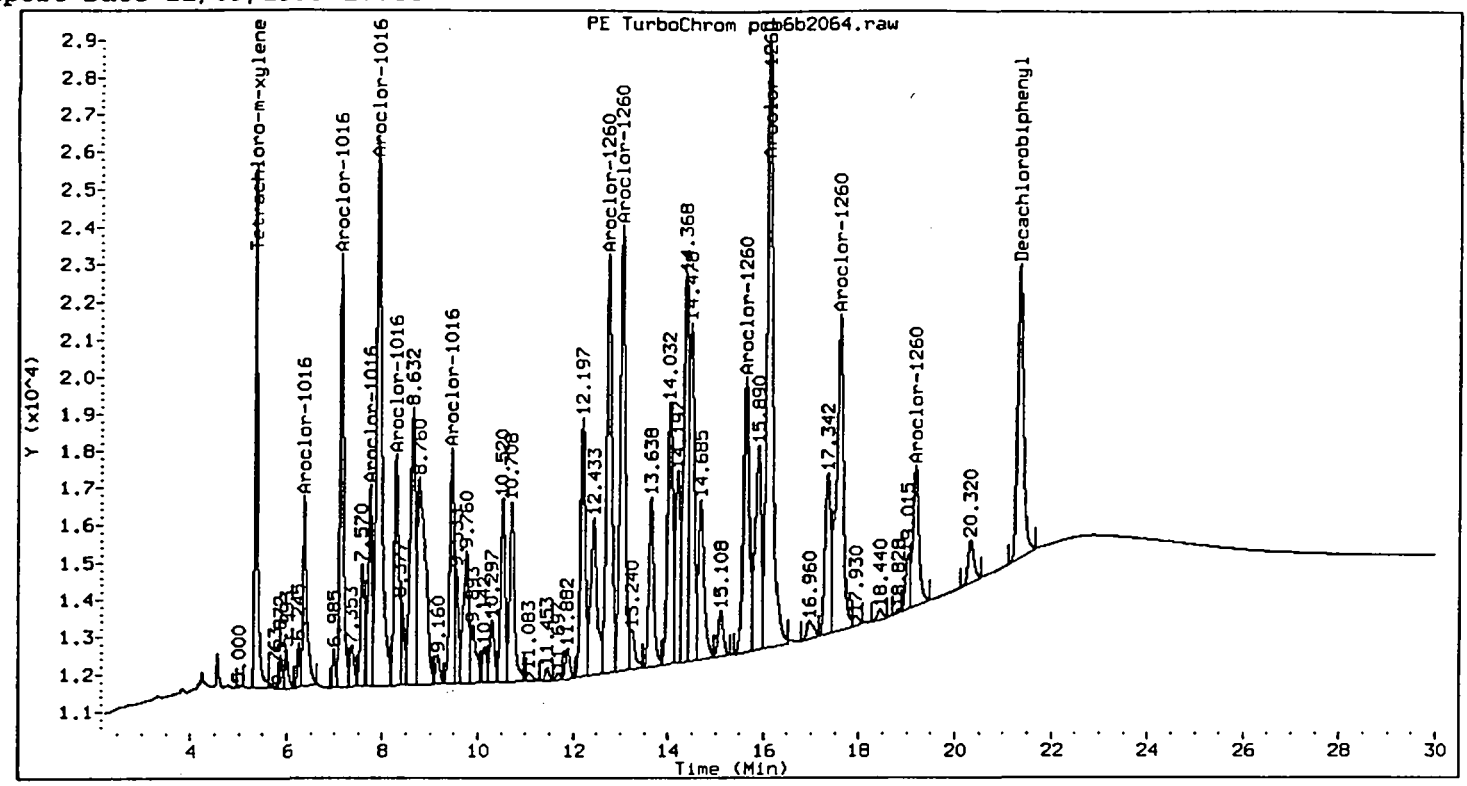
Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99.b/pcb6a2064.d Page 2
Report Date 11/09/1999 17:45

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/pcb6b2064.d Page 1
Report Date 11/09/1999 17:44



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/Xr8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 08-NOV-1999 12:54
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

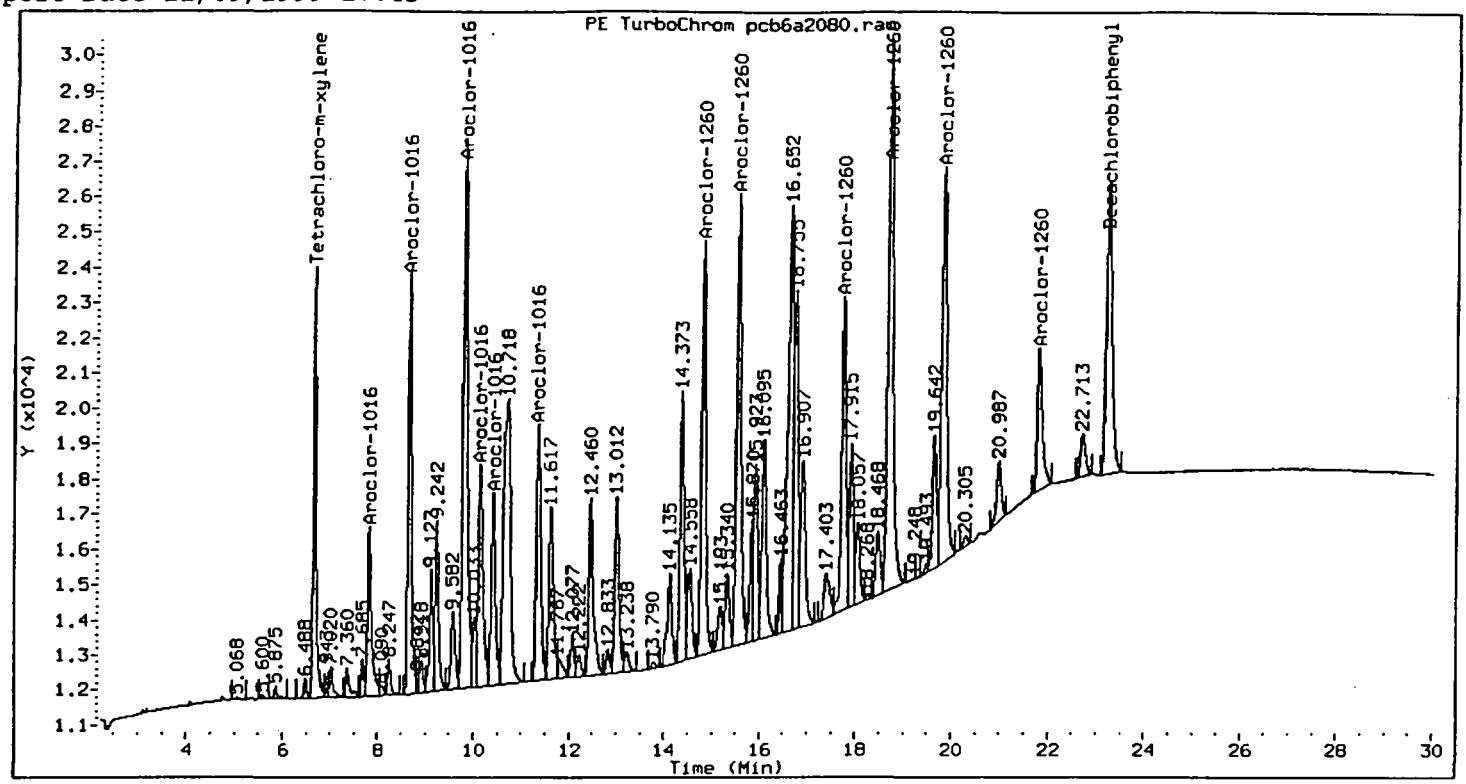
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.360	6.360	0.000	28458	541.896	541.896
(2)		7.132	7.132	0.000	62553	497.216	497.216
(3)		7.740	7.740	0.000	28082	508.535	508.535
(4)		7.910	7.910	0.000	114497	501.286	501.286
(5)		8.278	8.278	0.000	40542	467.294	467.294
(6)		9.443	9.443	0.000	39966	464.796	464.796
Aroclor-1260	(M)	12.742	12.742	0.000	89809	499.200	499.200
(2)		13.030	13.030	0.000	92434	490.787	490.787
(3)		15.630	15.630	0.000	61302	475.338	475.338
(4)		16.103	16.103	0.000	147698	497.384	497.384
(5)		17.593	17.593	0.000	84319	480.262	480.262
(6)		19.170	19.170	0.000	32593	457.951	457.951
Tetrachloro-m-xylene	(M)	5.350	5.350	0.000	53024	24.243	24.243
Decachlorobiphenyl	(M)	21.330	21.330	0.000	66015	21.857	21.857

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2080.d Page 1
Report Date 11/09/1999 17:45



Method : /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/Xf8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 08-NOV-1999 23:45
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.822	7.822	0.000	28576	559.889	559.889
(2)		8.662	8.662	0.000	59259	543.858	543.858
(3)		9.810	9.810	0.000	102216	515.957	515.957
(4)		10.142	10.142	0.000	43975	553.714	553.714
(5)		10.415	10.415	0.000	32301	538.223	538.223
(6)		11.352	11.352	0.000	47624	521.787	521.787
Aroclor-1260	(M)	14.822	14.822	0.000	71480	554.733	554.733
(2)		15.553	15.553	0.000	83642	555.292	555.292
(3)		17.755	17.755	0.000	56822	536.489	536.489
(4)		18.700	18.700	0.000	116641	535.480	535.480
(5)		19.833	19.833	0.000	86222	534.092	534.092
(6)		21.813	21.813	0.000	28742	489.839	489.839
Tetrachloro-m-xylene		6.668	6.668	0.000	49497	25.047	25.047
Decachlorobiphenyl		23.240	23.240	0.000	67491	24.746	24.746

11/10/99

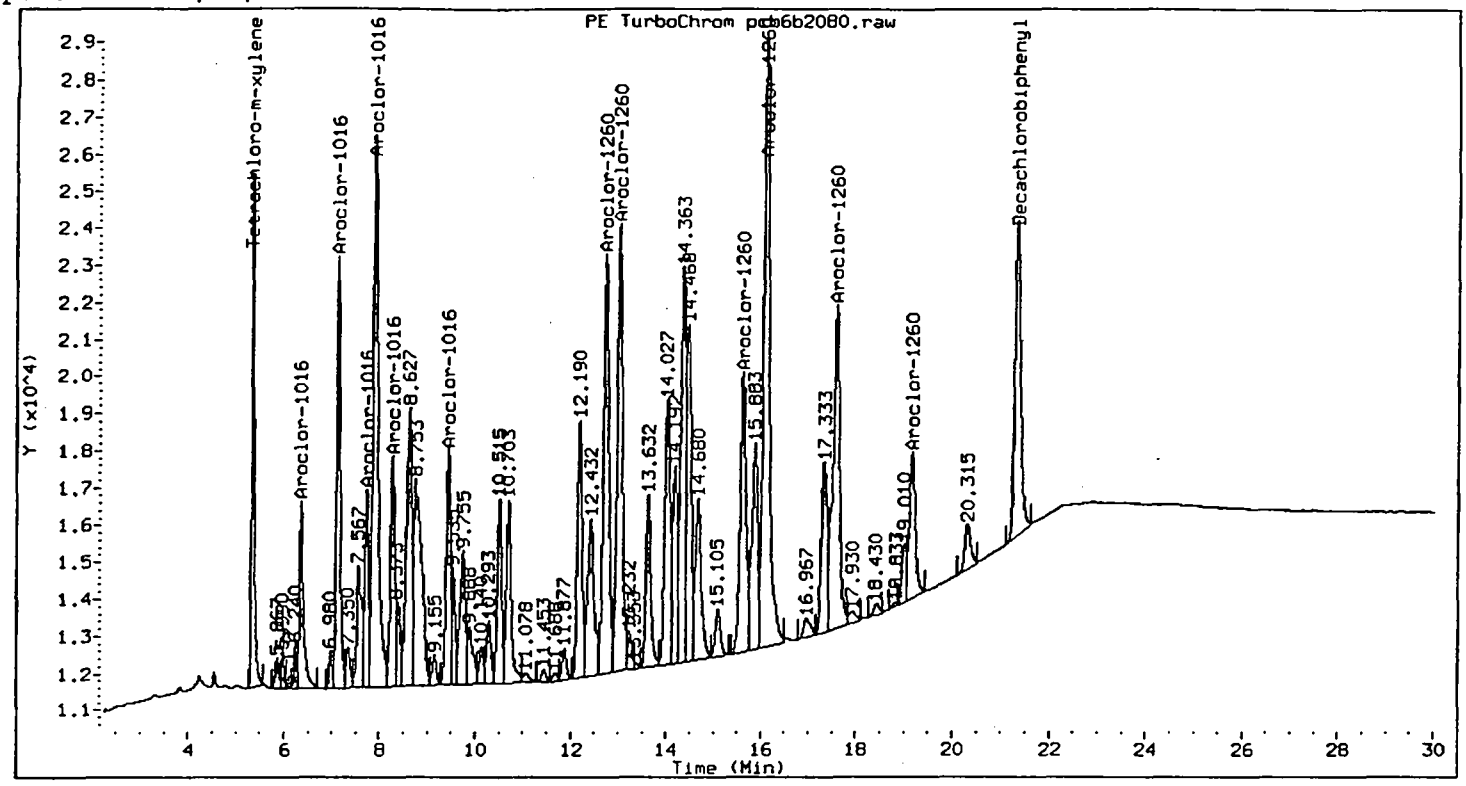
Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2080.d Page 2
Report Date 11/09/1999 17:45

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/pcb6b2080.d Page 1
Report Date 11/09/1999 17:45



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/Xr8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 08-NOV-1999 23:45
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.355	6.355	0.000	29263	557.225	557.225
(2)		7.127	7.127	0.000	62182	494.267	494.267
(3)		7.735	7.735	0.000	28260	511.758	511.758
(4)		7.902	7.902	0.000	115578	506.019	506.019
(5)		8.273	8.273	0.000	41235	475.282	475.282
(6)		9.440	9.440	0.000	40497	470.971	470.971
Aroclor-1260	(M)	12.737	12.737	0.000	90568	503.419	503.419
(2)		13.020	13.020	0.000	93534	496.628	496.628
(3)		15.627	15.627	0.000	62655	485.829	485.829
(4)		16.098	16.098	0.000	150520	506.887	506.887
(5)		17.590	17.590	0.000	87153	496.404	496.404
(6)		19.165	19.165	0.000	34039	478.268	478.268
Tetrachloro-m-xylene		5.347	5.347	0.000	50950	23.295	23.295
Decachlorobiphenyl	(M)	21.327	21.327	0.000	70975	23.500	23.500

11/10/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/pcb6b2080.d Page 2
Report Date 11/09/1999 17:45

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:
M - Compound response manually integrated.

Severn Trent Laboratories - Whippany

Client ID: **Method Blank-W**
Site:

Lab Sample ID: **WG41663-MB**
Lab Job No: 94106

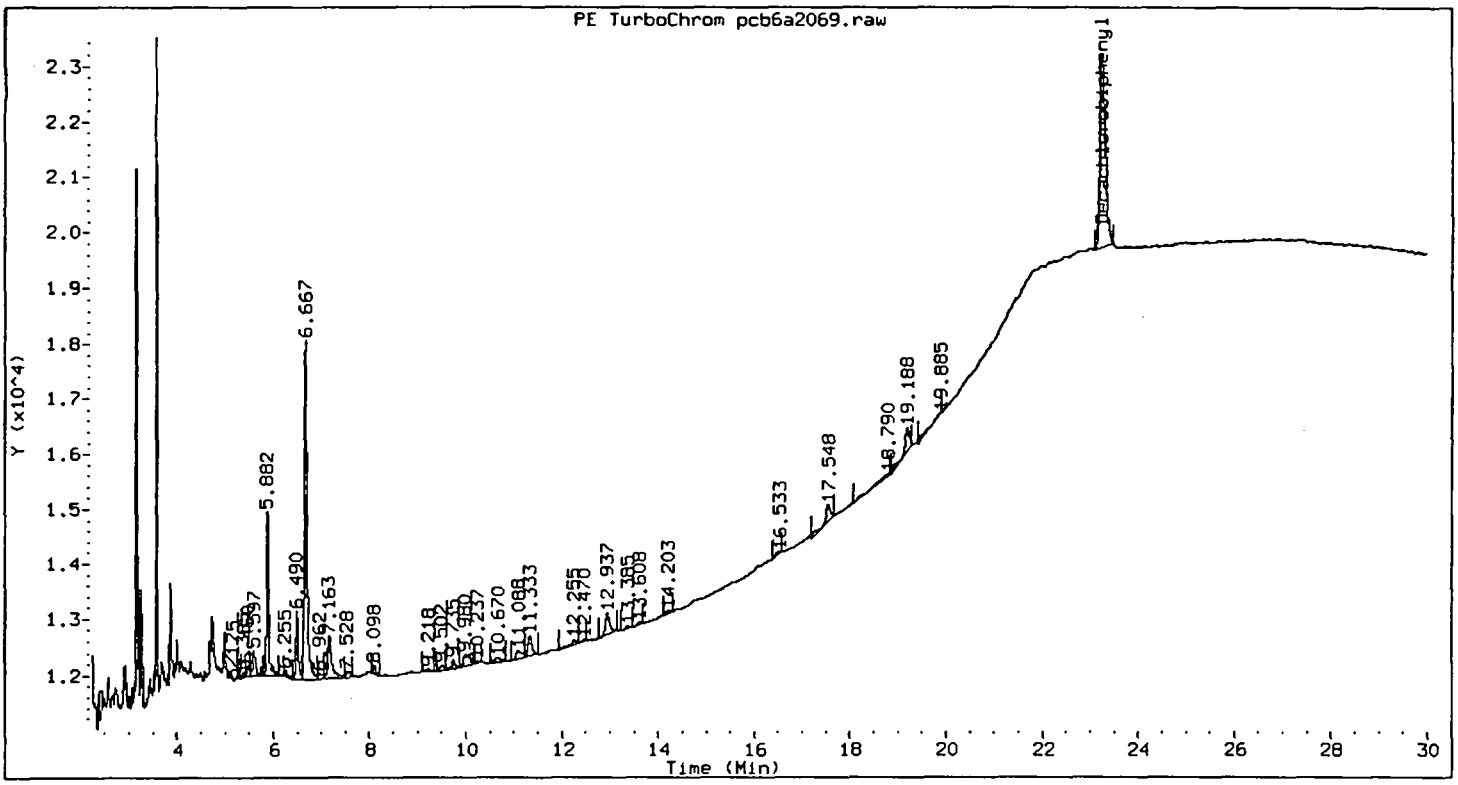
Date Sampled: _____
Date Received: _____
Date Extracted: 10/15/99
Date Analyzed: 11/08/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

Matrix: WATER
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2069.d
Rear File ID: pcb6b2069.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	ND	0.200	R
Aroclor-1221	ND	0.200	R
Aroclor-1232	ND	0.200	R
Aroclor-1242	ND	0.200	R
Aroclor-1248	ND	0.200	R
Aroclor-1254	ND	0.200	R
Aroclor-1260	ND	0.200	R

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99.b/pcb6a2069.d Page 1
Report Date 11/09/1999 17:53

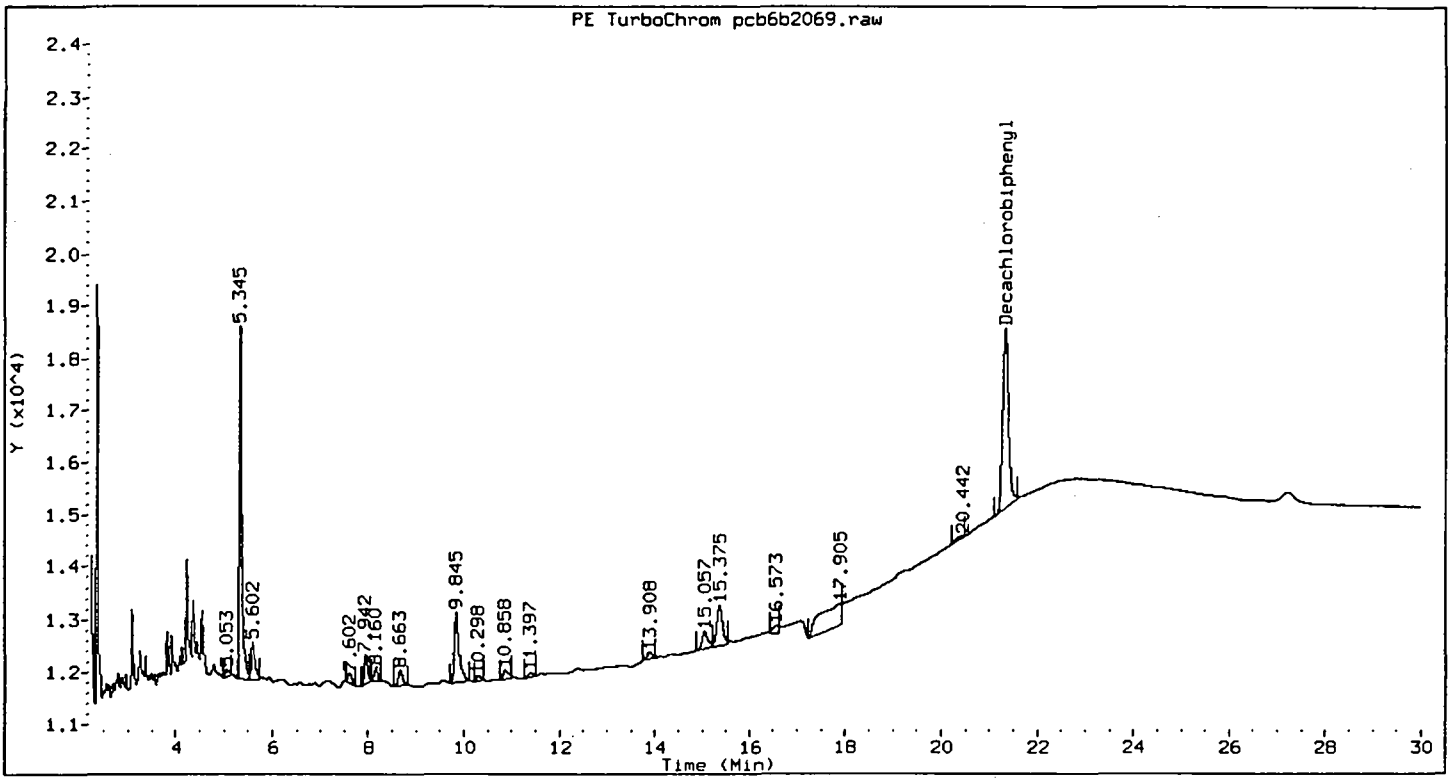


Method : /chem/HP68906.i/8082/front/10-19-99/08nov99.b/Xf8082.m
Sample Info : WG41663-MB
Lab ID : WG41663-MB
Inj Date : 08-NOV-1999 16:09
Operator : DavidW
Cpnd Sublist: PCB8082
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	23.242	23.237	0.005	27397	10.045	0.020

11/22/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/pcb6b2069.d Page 1
Report Date 11/09/1999 17:54



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/Xr8082.m
Sample Info : WG41663-MB
Lab ID : WG41663-MB
Inj Date : 08-NOV-1999 16:09
Operator : DavidW
Cpnd Sublist: PCB8082
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.330	21.330	0.000	28965	9.590	0.019

COMMENTS:

M - Compound response manually integrated.

11/22/99

Severn Trent Laboratories - Whippany

Client ID: **Method Blank**
Site:

Lab Sample ID: **WG41652-MB**
Lab Job No: 94106

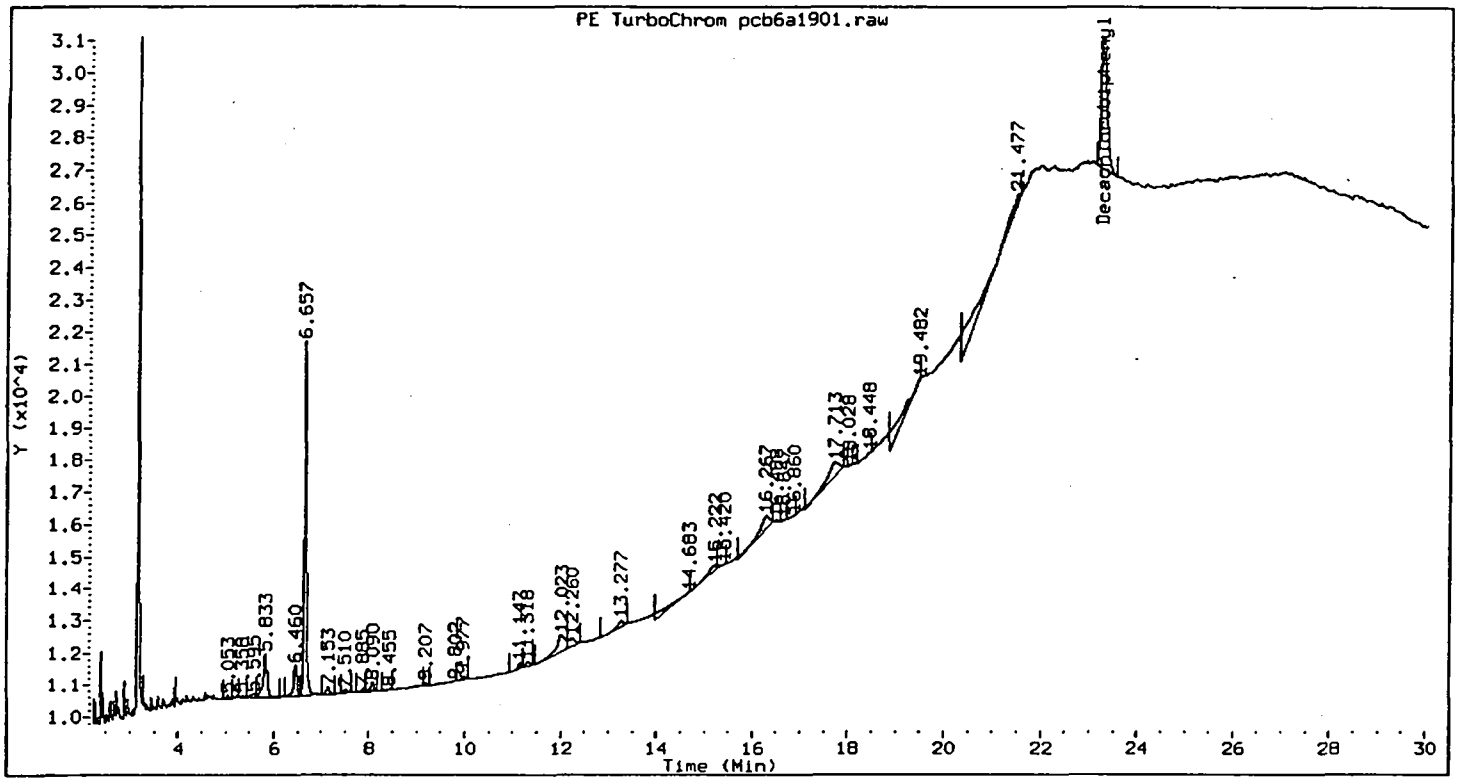
Date Sampled: _____
Date Received: _____
Date Extracted: 10/15/99
Date Analyzed: 10/28/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1901.d
Rear File ID: pcb6b1901.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 0

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	ND	33.0	R
Aroclor-1221	ND	33.0	R
Aroclor-1232	ND	33.0	R
Aroclor-1242	ND	33.0	R
Aroclor-1248	ND	33.0	R
Aroclor-1254	ND	33.0	R
Aroclor-1260	ND	33.0	R

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1901.d Page 1
Report Date 10/29/1999 12:29

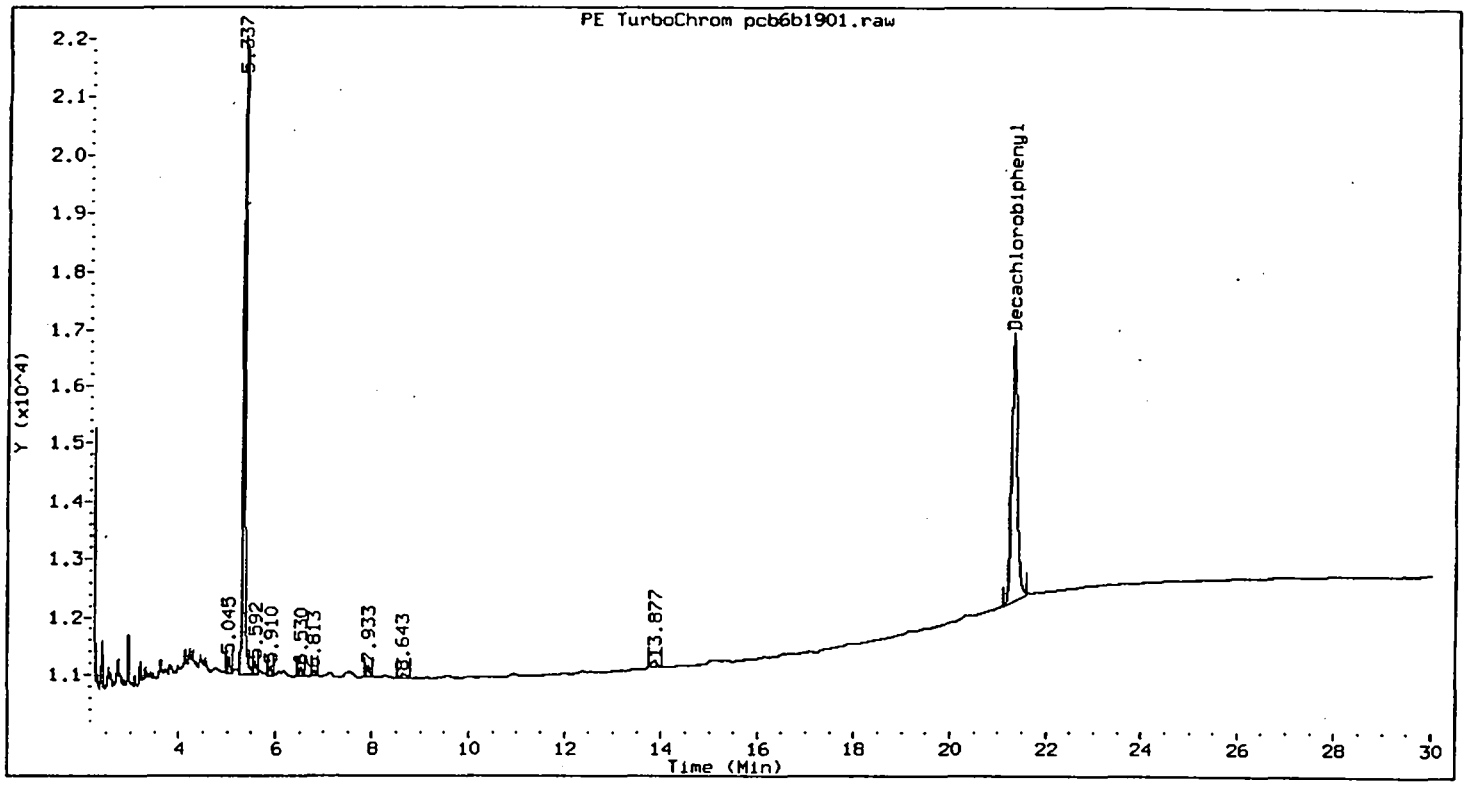


Method : /chem/HP68906.i/8082/front/10-19-99/28oct99.b/Xf8082.m
Sample Info : WG41652-MB
Lab ID : WG41652-MB
Inj Date : 28-OCT-1999 13:19
Operator : DavidW
Cpnd Sublist: PCB8082+

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	23.248	23.247	0.002	38314	14.048	4.683

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1901.d Page 1
Report Date 10/29/1999 12:31



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/Xr8082.m
Sample Info : WG41652-MB
Lab ID : WG41652-MB
Inj Date : 28-OCT-1999 13:19
Operator : DavidW
Cpnd Sublist: PCB8082+
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: BLANK

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Decachlorobiphenyl	(M)	21.315	21.317	0.002	38159	12.635	4.212

COMMENTS:

M - Compound response manually integrated.

Severn Trent Laboratories - Whippany

ient ID: **Blank Spike-W**
ite:

Lab Sample ID: **WG41663-BS**
Lab Job No: 94106

ate Sampled: _____
te Received: _____
te Extracted: 10/15/99
ate Analyzed: 11/08/99
C Front Column: DB-1701
Rear Column: DB-608
nstrument ID: HP68906.i

Matrix: WATER
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2070.d
Rear File ID: pcb6b2070.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

arameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
roclor-1016	1.56	0.200	F
roclor-1221	ND	0.200	R
roclor-1232	ND	0.200	R
roclor-1242	ND	0.200	R
roclor-1248	ND	0.200	R
roclor-1254	ND	0.200	R
roclor-1260	1.82	0.200	F

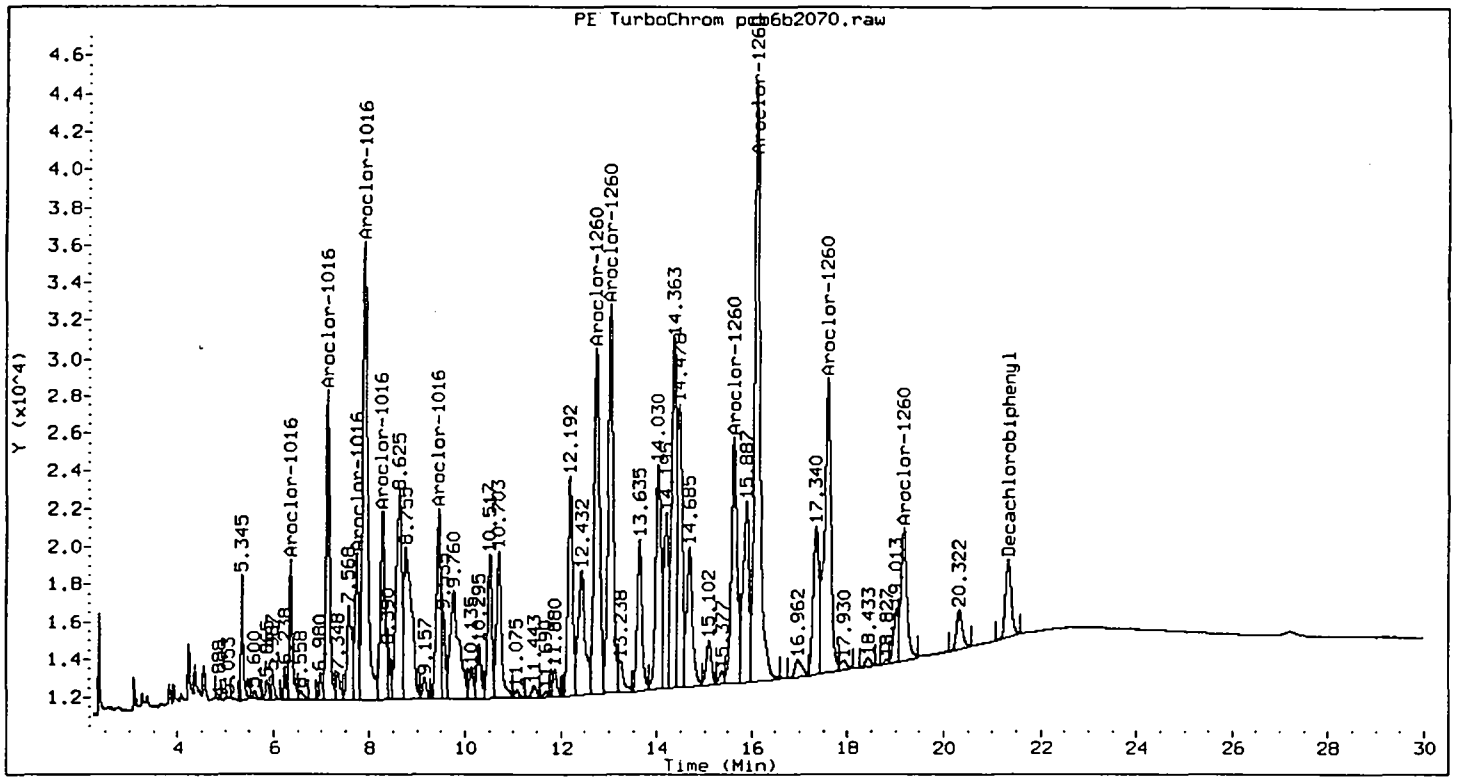
Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99.b/pcb6a2070.d Page 2
Report Date 11/09/1999 17:53

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/L)
Decachlorobiphenyl	23.245	23.237	0.008	33303	12.211	0.024

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/pcb6b2070.d Page 1
Report Date 11/09/1999 17:54



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/Xr8082.m
Sample Info : WG41663-BS
Lab ID : WG41663-BS
Inj Date : 08-NOV-1999 16:47
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BS

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Aroclor-1016	(M)	6.352	6.360	0.008	36012	685.739	1.371
(2)		7.127	7.132	0.005	84535	671.945	1.344
(3)		7.733	7.740	0.007	39315	711.952	1.424
(4)		7.902	7.910	0.008	176393	772.277	1.545
(5)		8.270	8.278	0.008	63342	730.091	1.460
(6)		9.442	9.443	0.002	62656	728.676	1.457
Average of peak concentrations:							1.43
Aroclor-1260	(M)	12.740	12.742	0.002	146498	814.303	1.629
(2)		13.027	13.030	0.003	153893	817.109	1.634
(3)		15.628	15.630	0.002	107342	832.334	1.665
(4)		16.100	16.103	0.003	260863	878.476	1.757
(5)		17.592	17.593	0.002	150636	857.988	1.716
(6)		19.170	19.170	0.000	61188	859.727	1.719
Average of peak concentrations:							1.69

11/22/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/pcb6b2070.d Page 2
Report Date 11/09/1999 17:54

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.328	21.330	0.002	34435	11.401	0.023

COMMENTS:

M - Compound response manually integrated.

Severn Trent Laboratories - Whippany

Client ID: **Blank Spike**
Site:

Lab Sample ID: **WG41652-BS**
Lab Job No: 94106

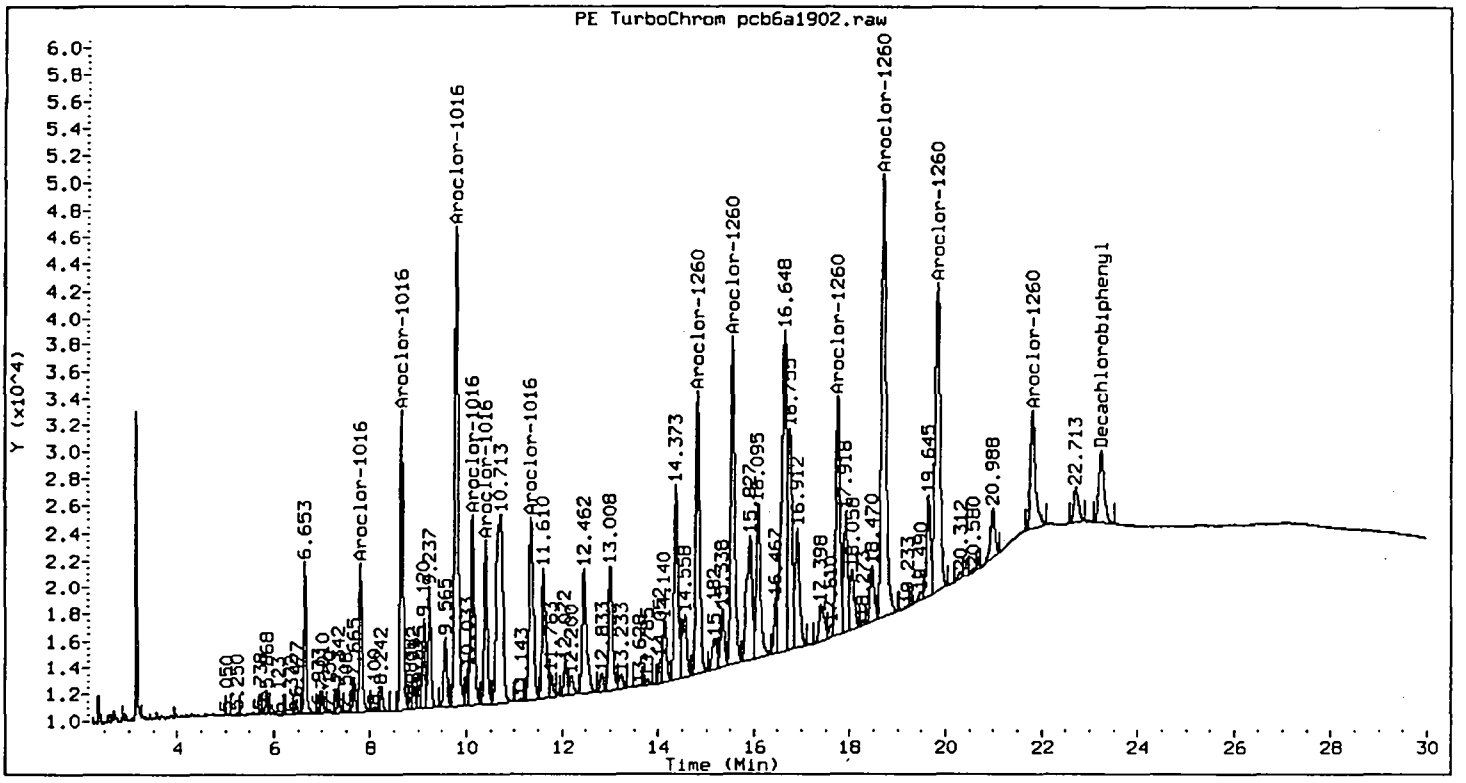
Date Sampled: _____
Date Received: _____
Date Extracted: 10/06/93
Date Analyzed: 10/28/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1902.d
Rear File ID: pcb6b1902.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 0

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	304	33.0	F
Aroclor-1221	ND	33.0	R
Aroclor-1232	ND	33.0	R
Aroclor-1242	ND	33.0	R
Aroclor-1248	ND	33.0	R
Aroclor-1254	ND	33.0	R
Aroclor-1260	332	33.0	F

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1902.d Page 1
Report Date 11/22/1999 14:39



Method : /chem/HP68906.i/8082/front/10-19-99/28oct99.b/Xf8082.m
Sample Info : WG41652-BS
Lab ID : WG41652-BS
Inj Date : 28-OCT-1999 13:57
Operator : DavidW
Cpnd Sublist: PCB8082+

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: BS

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	7.802	7.802	0.000	45607	893.577	297.859
(2)		8.653	8.653	0.000	96741	887.854	295.951
(3)		9.792	9.795	0.003	182211	919.749	306.583
(4)		10.127	10.128	0.002	74300	935.554	311.851
(5)		10.402	10.403	0.002	56082	934.479	311.493
(6)		11.345	11.345	0.000	83157	911.101	303.700
Average of peak concentrations:							304.00
Aroclor-1260	(M)	14.823	14.823	0.000	121531	943.162	314.387
(2)		15.552	15.553	0.002	145865	968.385	322.795
(3)		17.755	17.758	0.003	106229	1002.968	334.323
(4)		18.700	18.703	0.003	219060	1005.669	335.223
(5)		19.837	19.837	0.000	165525	1025.325	341.775
(6)		21.812	21.813	0.002	60115	1024.518	341.506
Average of peak concentrations:							332.00

11/22/99

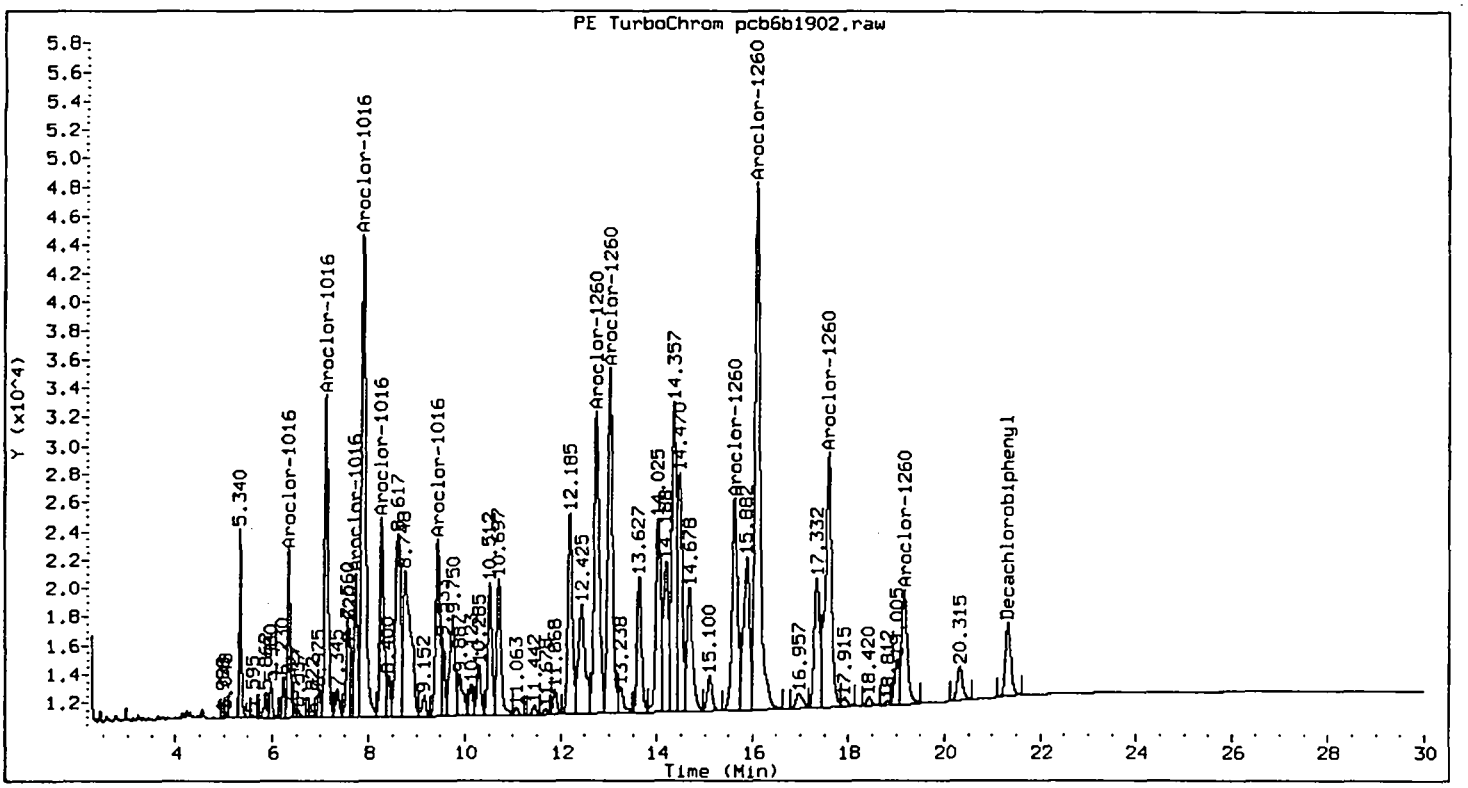
Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1902.d Page 2
Report Date 11/22/1999 14:39

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	23.243	23.247	0.003	40100	14.703	4.901

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1902.d Page 1
Report Date 11/22/1999 14:40



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/Xr8082.m
Sample Info : WG41652-BS
Lab ID : WG41652-BS
Inj Date : 28-OCT-1999 13:57
Operator : DavidW
Cpnd Sublist: PCB8082+

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: BS

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.343	6.340	0.003	45464	865.724	288.575
(2)		7.120	7.117	0.003	106447	846.118	282.039
(3)		7.730	7.725	0.005	48537	878.953	292.984
(4)		7.890	7.883	0.007	204952	897.312	299.104
(5)		8.260	8.255	0.005	76544	882.260	294.087
(6)		9.432	9.427	0.005	76956	894.982	298.327
Average of peak concentrations:							292.00
Aroclor-1260	(M)	12.730	12.728	0.002	162374	902.550	300.850
(2)		13.017	13.012	0.005	170686	906.273	302.091
(3)		15.622	15.615	0.007	119676	927.972	309.324
(4)		16.090	16.083	0.007	286851	965.992	321.997
(5)		17.583	17.580	0.003	165501	942.656	314.219
(6)		19.160	19.155	0.005	65564	921.213	307.071
Average of peak concentrations:							309.00

11/22/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1902.d Page 2
Report Date 11/22/1999 14:40

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	(M)	21.322	21.317	0.005	41630	13.784	4.595

COMMENTS:

M - Compound response manually integrated.

Severn Trent Laboratories - Whippany

Client ID: **SW-2-1-02MS**
Site:

Lab Sample ID: **94106-007MS**
Lab Job No: 94106

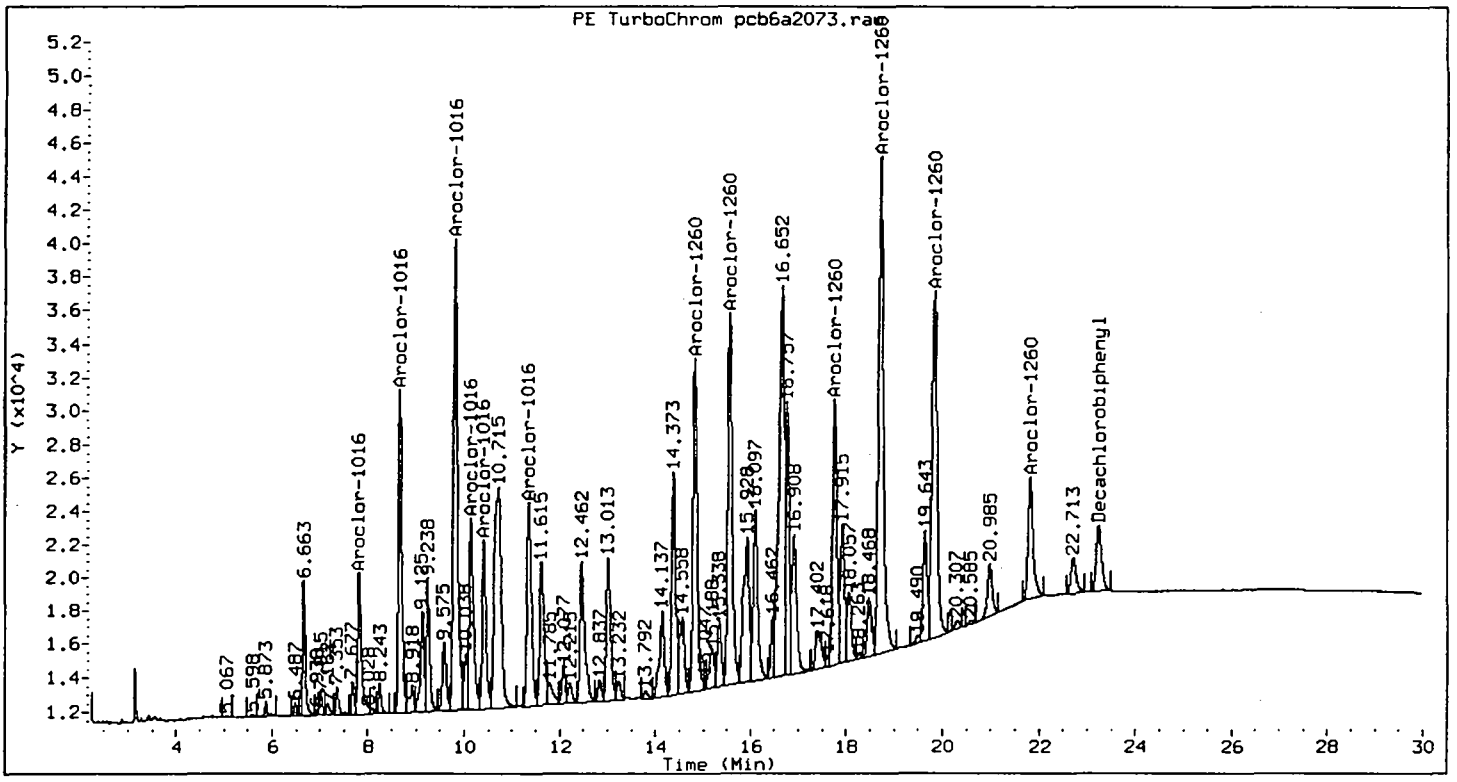
Date Sampled: 10/13/99
Date Received: 10/13/99
Date Extracted: 10/15/99
Date Analyzed: 11/08/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

Matrix: WATER
Sample Volume: 500 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2073.d
Rear File ID: pcb6b2073.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	3.53	0.400	F
Aroclor-1221	ND	0.400	R
Aroclor-1232	ND	0.400	R
Aroclor-1242	ND	0.400	R
Aroclor-1248	ND	0.400	R
Aroclor-1254	ND	0.400	R
Aroclor-1260	3.79	0.400	F

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99.b/pcb6a2073.d Page 1
Report Date 11/09/1999 17:53



Method : /chem/HP68906.i/8082/front/10-19-99/08nov99.b/Xf8082.m
Sample Info : 94106-007MS;500;2;
Lab ID : 94106-007MS
Inj Date : 08-NOV-1999 18:41
Operator : DavidW
Cpnd Sublist: PCB8082
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: MS

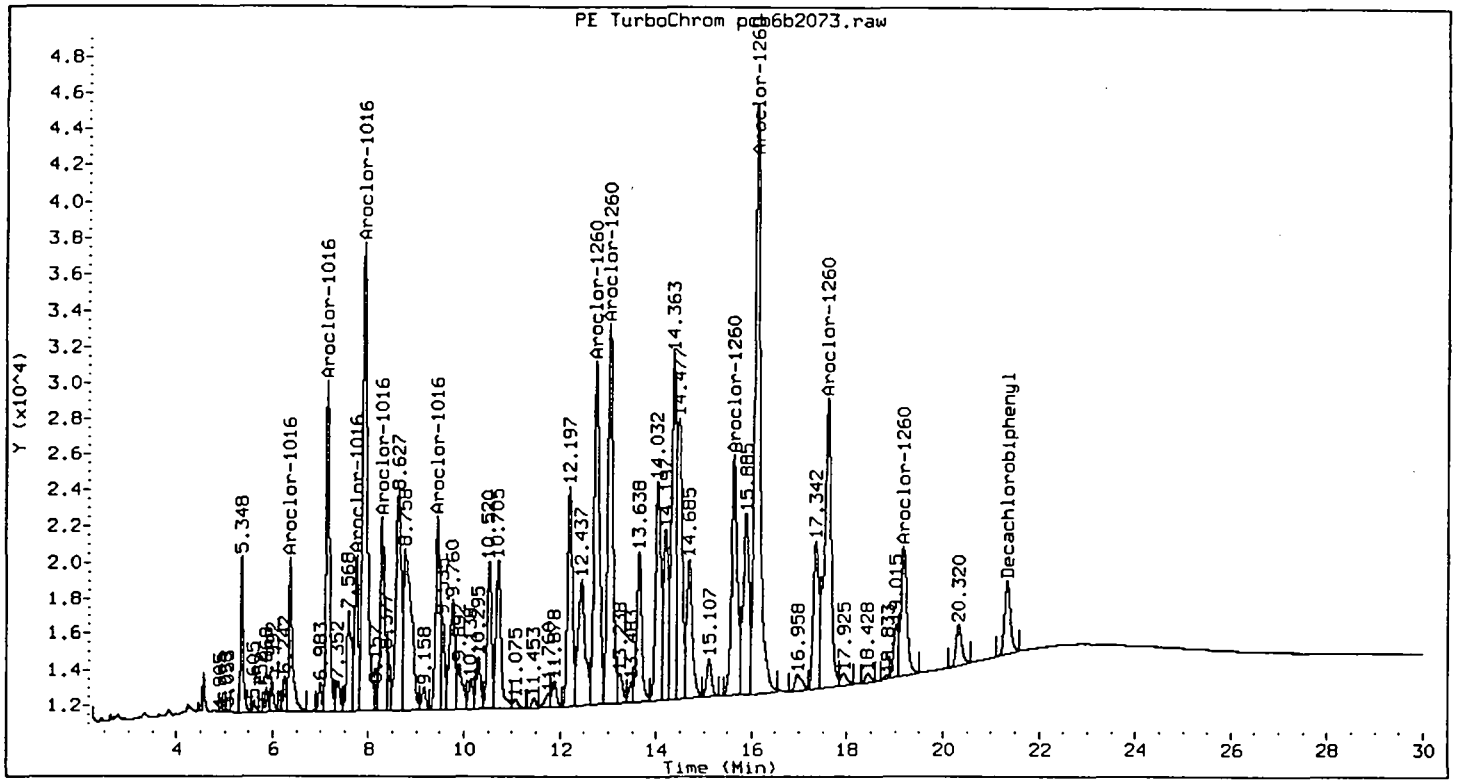
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Aroclor-1016	(M)	7.815	7.817	0.002	44353	869.007	3.476
(2)		8.657	8.658	0.002	93303	856.301	3.425
(3)		9.805	9.807	0.002	171076	863.543	3.454
(4)		10.137	10.138	0.002	73452	924.876	3.700
(5)		10.410	10.410	0.000	54638	910.418	3.642
(6)		11.350	11.348	0.002	79902	875.438	3.502
Average of peak concentrations:							3.53
Aroclor-1260	(M)	14.822	14.818	0.003	121866	945.762	3.783
(2)		15.553	15.550	0.003	144819	961.441	3.846
(3)		17.752	17.750	0.002	99688	941.211	3.765
(4)		18.702	18.700	0.002	210422	966.014	3.864
(5)		19.838	19.832	0.007	157309	974.432	3.898
(6)		21.813	21.815	0.002	52639	897.107	3.588
Average of peak concentrations:							3.79

11/22/99

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	23.238	23.237	0.002	31884	11.691	0.047

COMMENTS:

M - Compound response manually integrated.



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/Xr8082.m
Sample Info : 94106-007MS;500;2;
Lab ID : 94106-007MS
Inj Date : 08-NOV-1999 18:41
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: MS

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Aroclor-1016	(M)	6.355	6.360	0.005	46745	890.116	3.560
(2)		7.128	7.132	0.003	96930	770.470	3.082
(3)		7.738	7.740	0.002	45062	816.024	3.264
(4)		7.903	7.910	0.007	186035	814.491	3.258
(5)		8.273	8.278	0.005	68648	791.249	3.165
(6)		9.442	9.443	0.002	66691	775.602	3.102
Average of peak concentrations:							3.24
Aroclor-1260	(M)	12.740	12.742	0.002	153287	852.040	3.408
(2)		13.027	13.030	0.003	160888	854.250	3.417
(3)		15.627	15.630	0.003	110488	856.728	3.427
(4)		16.102	16.103	0.002	271680	914.903	3.660
(5)		17.593	17.593	0.000	158735	904.118	3.616
(6)		19.165	19.170	0.005	63299	889.388	3.558
Average of peak concentrations:							3.51

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Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.327	21.330	0.003	33889	11.221	0.045

COMMENTS:

M - Compound response manually integrated.

Severn Trent Laboratories - Whippany

Client ID: **SW-2-1-02MSD**
Site:

Lab Sample ID: **94106-007MSD**
Lab Job No: 94106

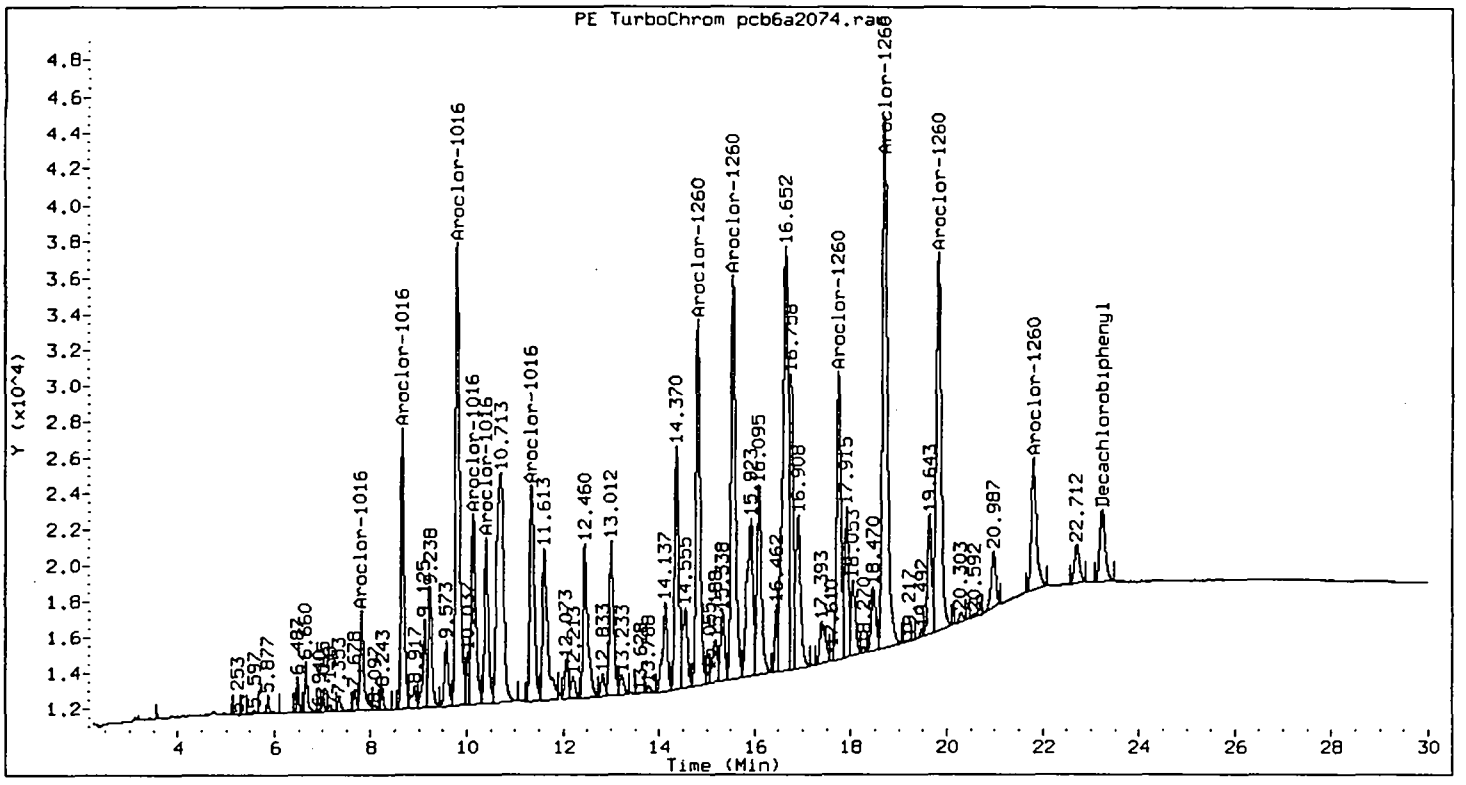
Date Sampled: 10/13/99
Date Received: 10/13/99
Date Extracted: 10/15/99
Date Analyzed: 11/08/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

Matrix: WATER
Sample Volume: 500 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2074.d
Rear File ID: pcb6b2074.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	3.09	0.400	F
Aroclor-1221	ND	0.400	R
Aroclor-1232	ND	0.400	R
Aroclor-1242	ND	0.400	R
Aroclor-1248	ND	0.400	R
Aroclor-1254	ND	0.400	R
Aroclor-1260	3.82	0.400	F

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99.b/pcb6a2074.d Page 1
Report Date 11/09/1999 17:54



Method : /chem/HP68906.i/8082/front/10-19-99/08nov99.b/Xf8082.m
Sample Info : 94106-007MSD;500;2;
Lab ID : 94106-007MSD
Inj Date : 08-NOV-1999 19:18
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: MSD

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Aroclor-1016	(M)	7.815	7.817	0.002	29891	585.654	2.343
(2)		8.657	8.658	0.002	74411	682.917	2.732
(3)		9.802	9.807	0.005	156715	791.053	3.164
(4)		10.137	10.138	0.002	68108	857.587	3.430
(5)		10.408	10.410	0.002	51011	849.982	3.400
(6)		11.348	11.348	0.000	79047	866.070	3.464
Average of peak concentrations:							3.09
Aroclor-1260	(M)	14.820	14.818	0.002	123206	956.162	3.825
(2)		15.552	15.550	0.002	146589	973.191	3.893
(3)		17.753	17.750	0.003	100017	944.317	3.777
(4)		18.702	18.700	0.002	213331	979.368	3.917
(5)		19.833	19.832	0.002	157730	977.040	3.908
(6)		21.812	21.815	0.003	52688	897.942	3.592
Average of peak concentrations:							3.82

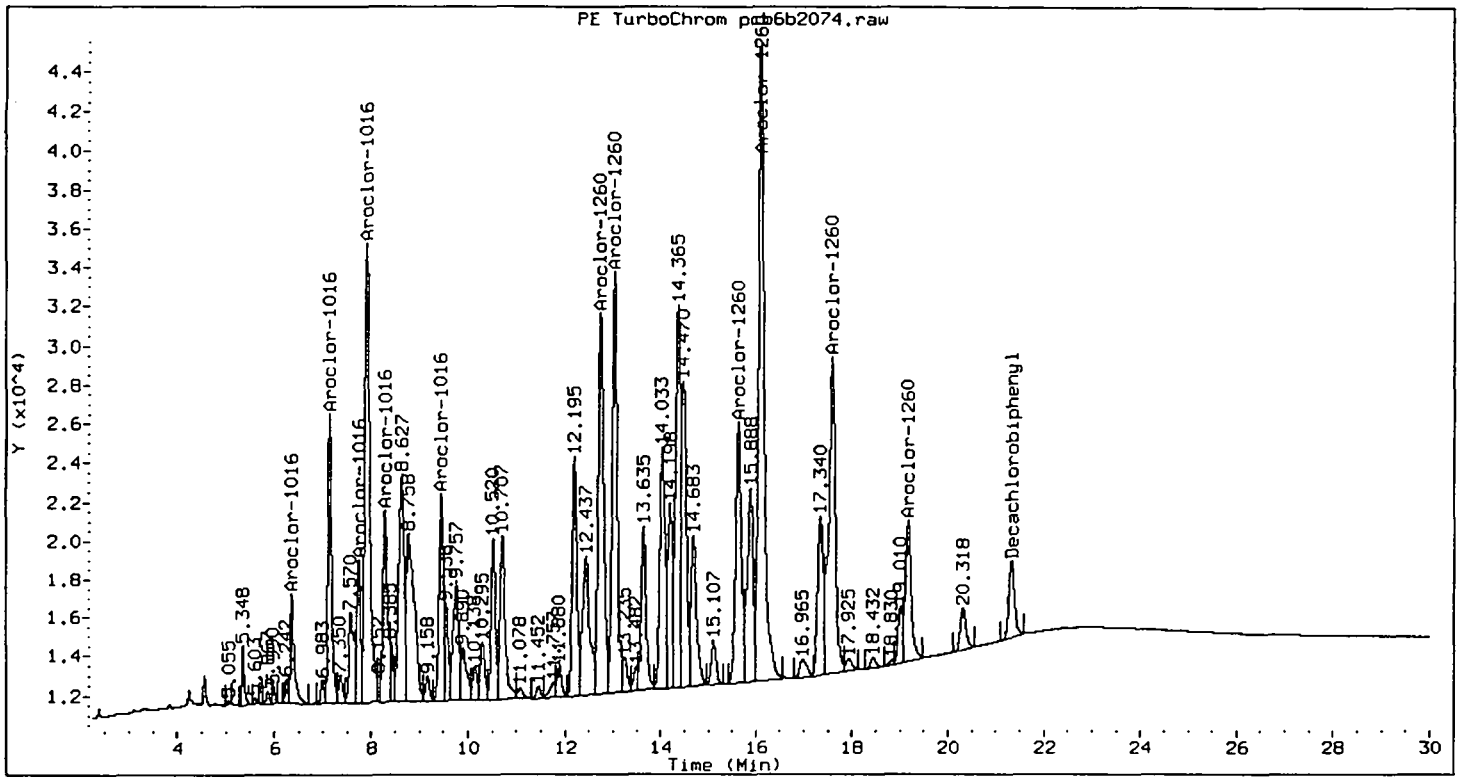
Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99.b/pcb6a2074.d Page 2
Report Date 11/09/1999 17:54

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	23.237	23.237	0.000	31748	11.641	0.047

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/pcb6b2074.d Page 1
Report Date 11/09/1999 17:55



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/Xr8082.m
Sample Info : 94106-007MSD;500;2;
Lab ID : 94106-007MSD
Inj Date : 08-NOV-1999 19:18
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: MSD

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Aroclor-1016	(M)	6.357	6.360	0.003	30161	574.325	2.297
(2)		7.130	7.132	0.002	77865	618.927	2.476
(3)		7.737	7.740	0.003	38618	699.330	2.797
(4)		7.907	7.910	0.003	170578	746.818	2.987
(5)		8.273	8.278	0.005	65954	760.198	3.041
(6)		9.443	9.443	0.000	67670	786.988	3.148
Average of peak concentrations:							2.79
Aroclor-1260	(M)	12.740	12.742	0.002	156251	868.515	3.474
(2)		13.030	13.030	0.000	163665	868.995	3.476
(3)		15.630	15.630	0.000	110868	859.674	3.439
(4)		16.103	16.103	0.000	273127	919.776	3.679
(5)		17.590	17.593	0.003	158065	900.302	3.601
(6)		19.167	19.170	0.003	63582	893.364	3.573
Average of peak concentrations:							3.54

11/22/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99.b/pcb6b2074.d Page 2
Report Date 11/09/1999 17:55

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.327	21.330	0.003	33847	11.207	0.045

COMMENTS:

M - Compound response manually integrated.

SEVERN TRENT LABORATORIES - WHIPPANY

Client ID: **MW3D-SO-44**
Site:

Lab Sample ID: **94023-001**
Lab Job No: 94106

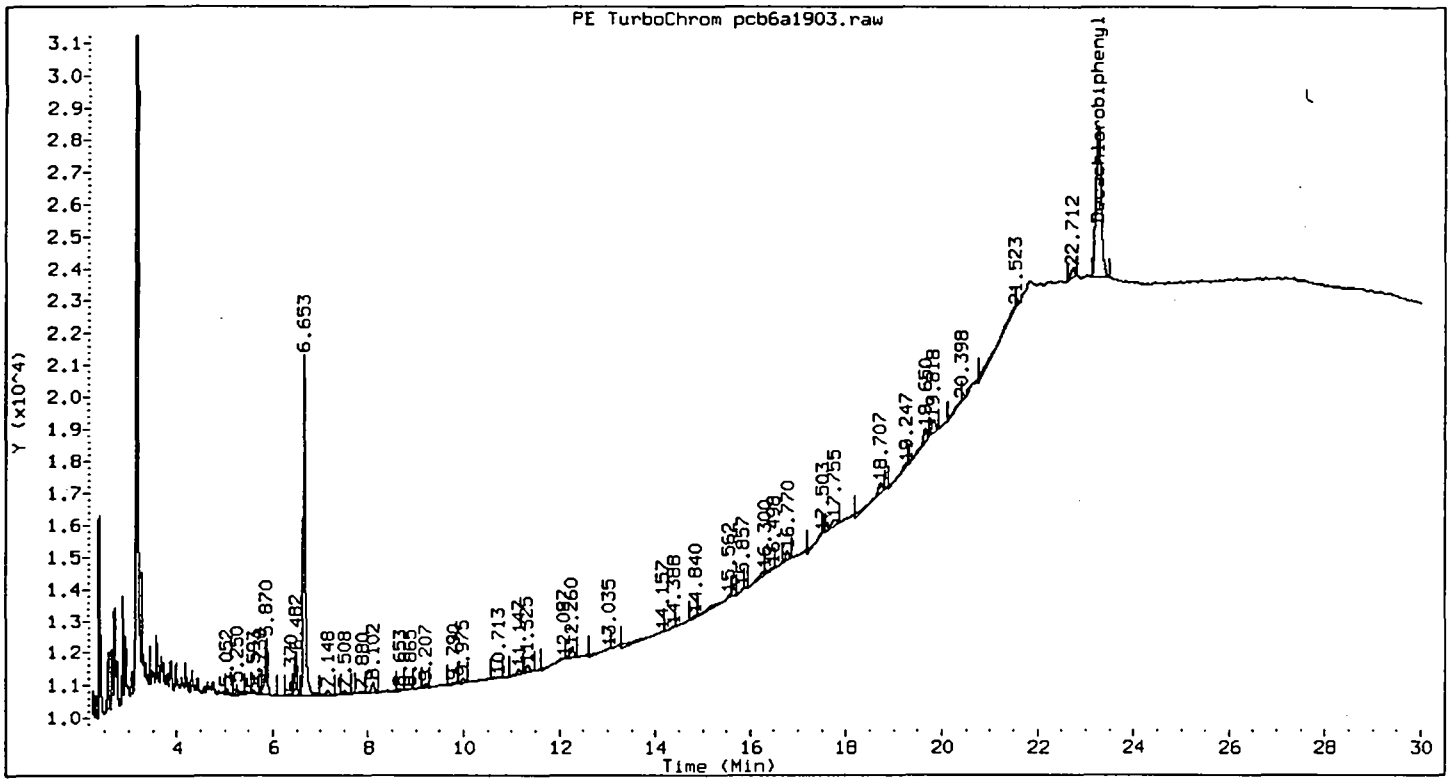
Date Sampled: 10/07/99
Date Received: 10/08/99
Date Extracted: 10/15/99
Date Analyzed: 10/28/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1903.d
Rear File ID: pcb6b1903.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 15

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	ND	39	R
Aroclor-1221	ND	39	R
Aroclor-1232	ND	39	R
Aroclor-1242	ND	39	R
Aroclor-1248	ND	39	R
Aroclor-1254	ND	39	R
Aroclor-1260	ND	39	R

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1903.d Page 1
Report Date 11/22/1999 14:39

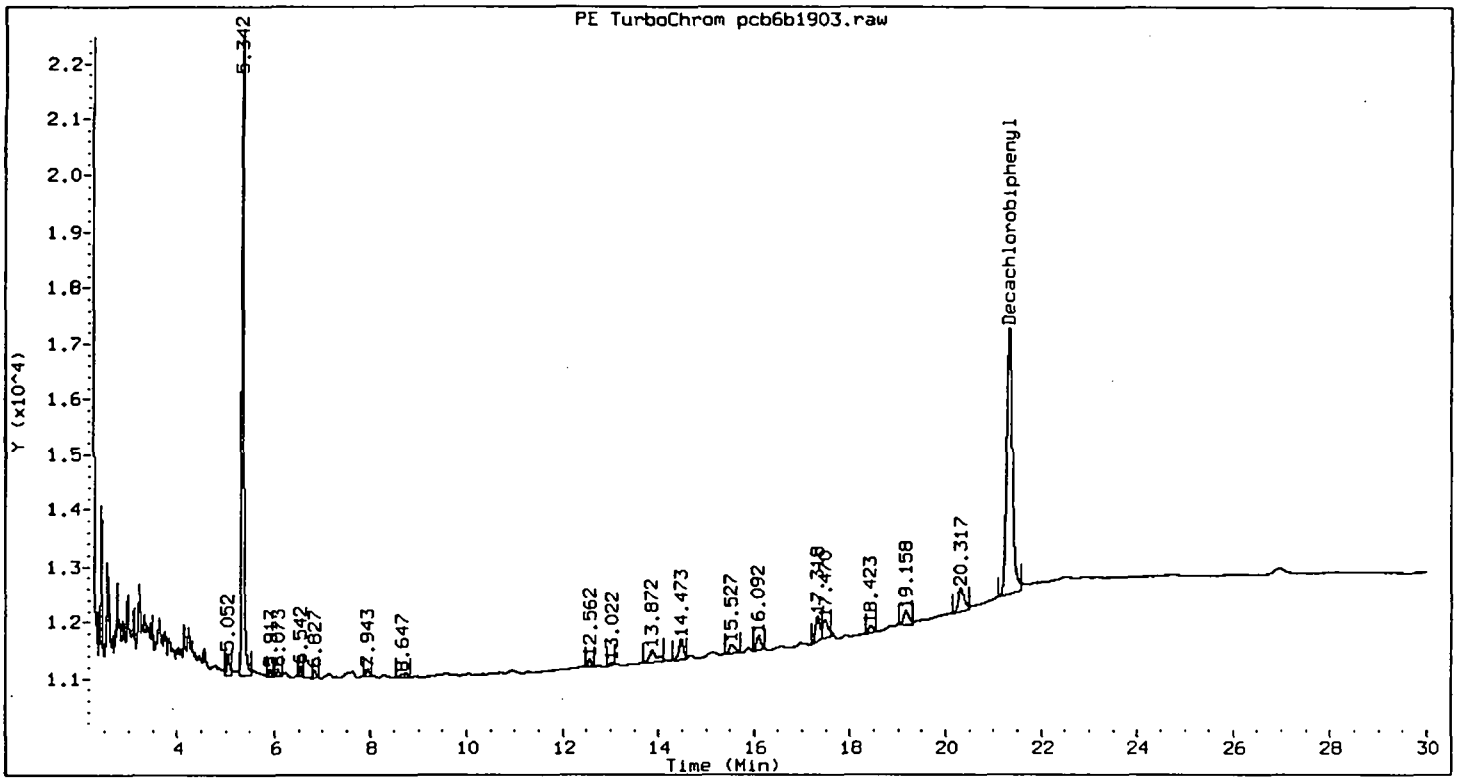


Method : /chem/HP68906.i/8082/front/10-19-99/28oct99.b/Xf8082.m
Sample Info : 94023-001;30.1;;;15.3
Lab ID : 94023-001 Inst ID : HP68906.i
Inj Date : 28-OCT-1999 14:35 Dil Factor : 1
Operator : DavidW Sample Matrix : SOIL
Cpnd Sublist: PCB8082+ Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	23.248	23.247	0.002	36117	13.243	5.194

1/22/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1903.d Page 1
Report Date 11/22/1999 14:40



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/Xr8082.m
Sample Info : 94023-001;30.1;;;15.3
Lab ID : 94023-001 Inst ID : HP68906.i
Inj Date : 28-OCT-1999 14:35 Dil Factor : 1
Operator : DavidW Sample Matrix : SOIL
Cpnd Sublist: PCB8082+ Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Decachlorobiphenyl	21.322	21.317	0.005	39322	13.019	5.107

SEVERN TRENT LABORATORIES - WHIPPANY

Client ID: **MW3DSO44MS**
Site:

Lab Sample ID: **94023-002MS**
Lab Job No: 94106

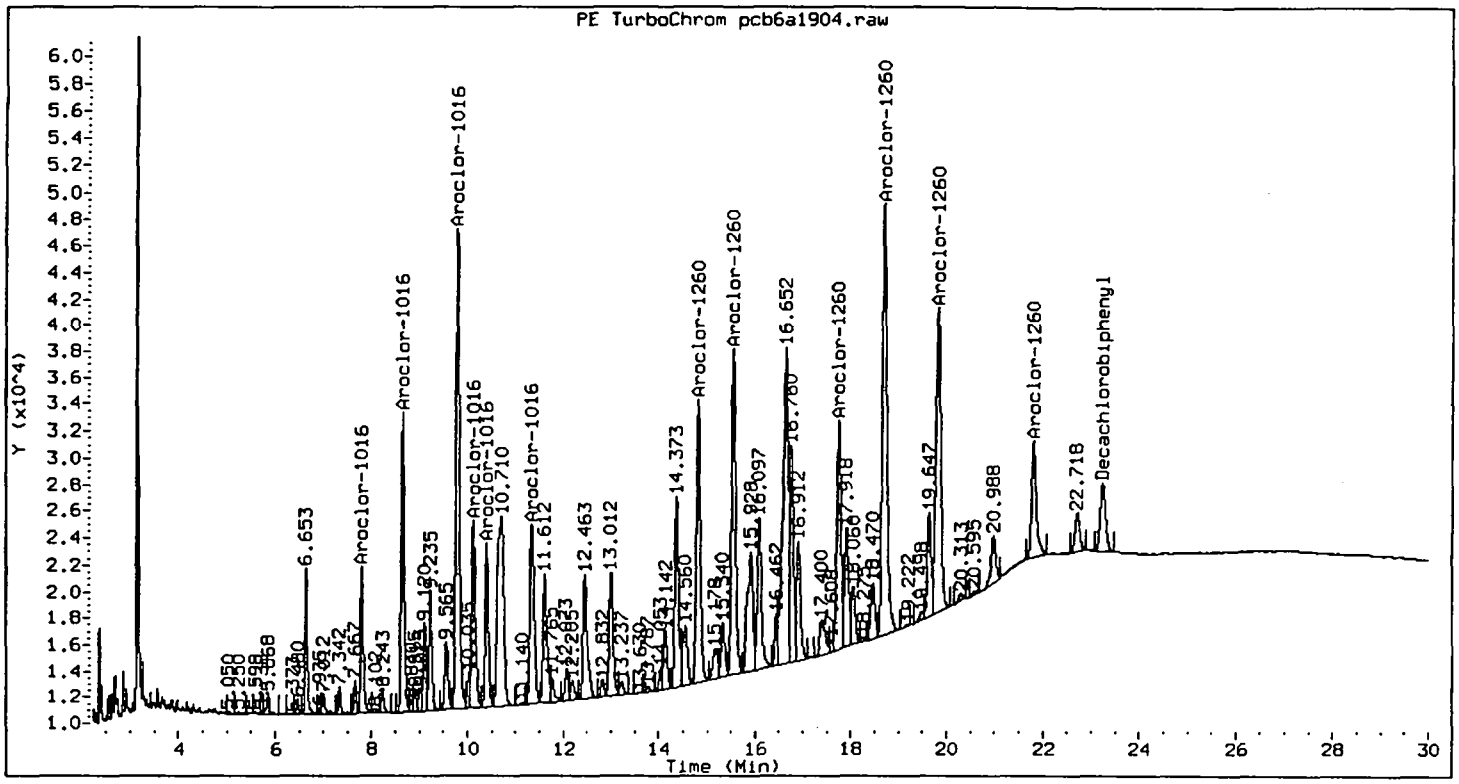
Date Sampled: 10/07/99
Date Received: 10/08/99
Date Extracted: 10/15/99
Date Analyzed: 10/28/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1904.d
Rear File ID: pcb6b1904.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 15

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	362	39	F
Aroclor-1221	ND	39	R
Aroclor-1232	ND	39	R
Aroclor-1242	ND	39	R
Aroclor-1248	ND	39	R
Aroclor-1254	ND	39	R
Aroclor-1260	384	39	F

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1904.d Page 1
Report Date 11/22/1999 14:39



Method : /chem/HP68906.i/8082/front/10-19-99/28oct99.b/Xf8082.m
Sample Info : 94023-002MS;30.1;;;15.3
Lab ID : 94023-002MS
Inj Date : 28-OCT-1999 15:13
Operator : DavidW
Cpnd Sublist: PCB8082+
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: MS

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	7.802	7.802	0.000	45887	899.063	352.647
(2)		8.653	8.653	0.000	97444	894.306	350.781
(3)		9.793	9.795	0.002	185137	934.519	366.554
(4)		10.128	10.128	0.000	75320	948.397	371.998
(5)		10.402	10.403	0.002	56800	946.443	371.231
(6)		11.347	11.345	0.002	83490	914.749	358.800
Average of peak concentrations:							362.00
Aroclor-1260	(M)	14.823	14.823	0.000	120601	935.945	367.114
(2)		15.552	15.553	0.002	143772	954.490	374.387
(3)		17.757	17.758	0.002	103776	979.808	384.318
(4)		18.702	18.703	0.002	215809	990.744	388.608
(5)		19.838	19.837	0.002	163699	1014.014	397.735
(6)		21.815	21.813	0.002	58189	991.693	388.980
Average of peak concentrations:							384.00

11/22/99

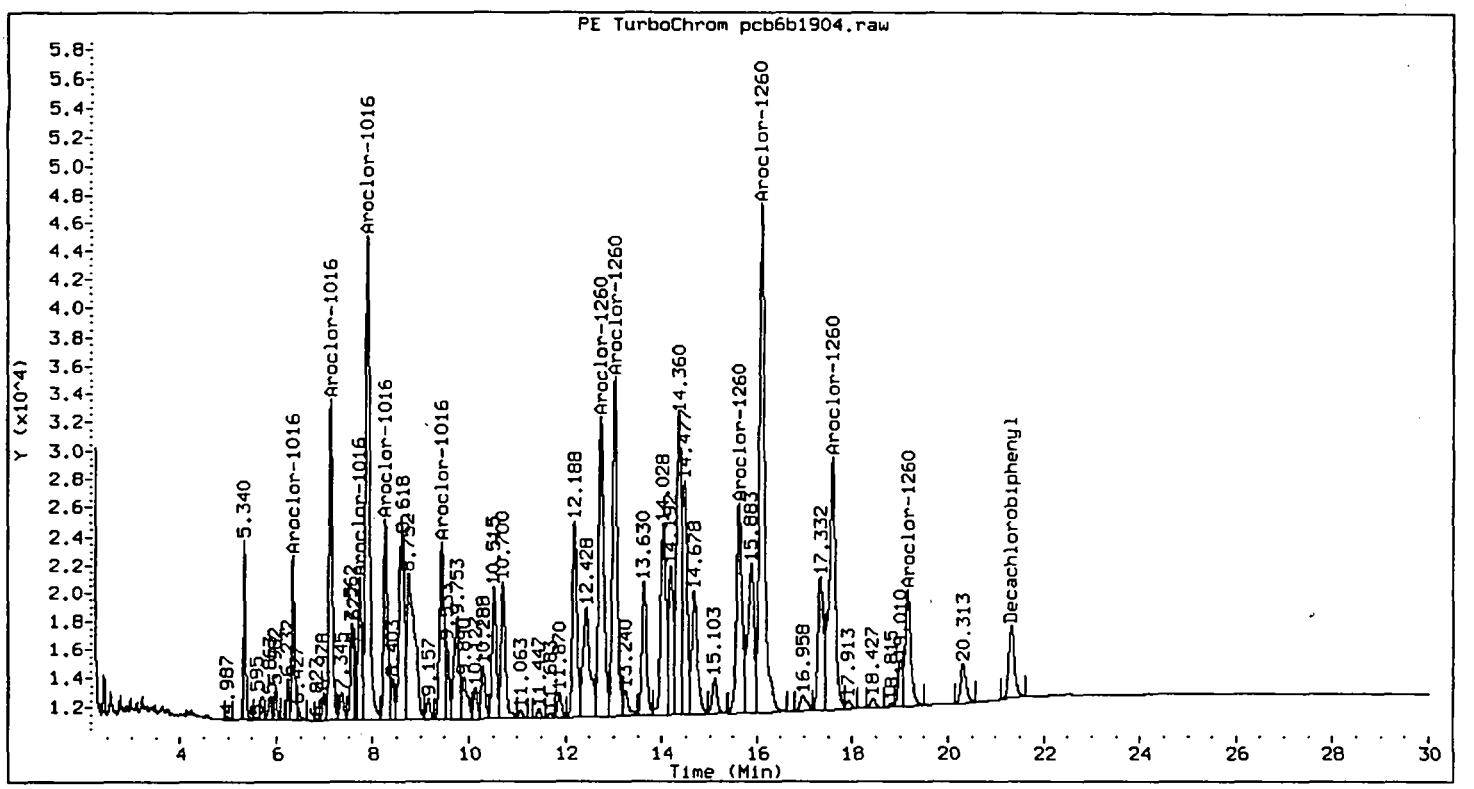
Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1904.d Page 2
Report Date 11/22/1999 14:39

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Decachlorobiphenyl	23.245	23.247	0.002	38625	14.162	5.555

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1904.d Page 1
Report Date 11/22/1999 14:40



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/Xr8082.m
Sample Info : 94023-002MS;30.1;;;15.3
Lab ID : 94023-002MS
Inj Date : 28-OCT-1999 15:13
Operator : DavidW
Cpnd Sublist: PCB8082+

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: MS

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.345	6.340	0.005	44755	852.223	334.275
(2)		7.123	7.117	0.007	106227	844.369	331.194
(3)		7.732	7.725	0.007	48512	878.500	344.581
(4)		7.890	7.883	0.007	206083	902.264	353.903
(5)		8.262	8.255	0.007	76952	886.963	347.901
(6)		9.435	9.427	0.008	76506	889.748	348.994
Average of peak concentrations:							343.00
Aroclor-1260	(M)	12.737	12.728	0.008	159688	887.620	348.158
(2)		13.022	13.012	0.010	168146	892.787	350.185
(3)		15.622	15.615	0.007	117479	910.936	357.304
(4)		16.095	16.083	0.012	281513	948.016	371.848
(5)		17.582	17.580	0.002	164128	934.836	366.678
(6)		19.158	19.155	0.003	65491	920.187	360.933
Average of peak concentrations:							359.00

11/22/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1904.d Page 2
Report Date 11/22/1999 14:40

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Decachlorobiphenyl	(M)	21.322	21.317	0.005	41162	13.629	5.346

COMMENTS:

M - Compound response manually integrated.

SEVERN TRENT LABORATORIES - WHIPPANY

Client ID: **MW3DSO44MSD**
Site:

Lab Sample ID: **94023-003MSD**
Lab Job No: 94106

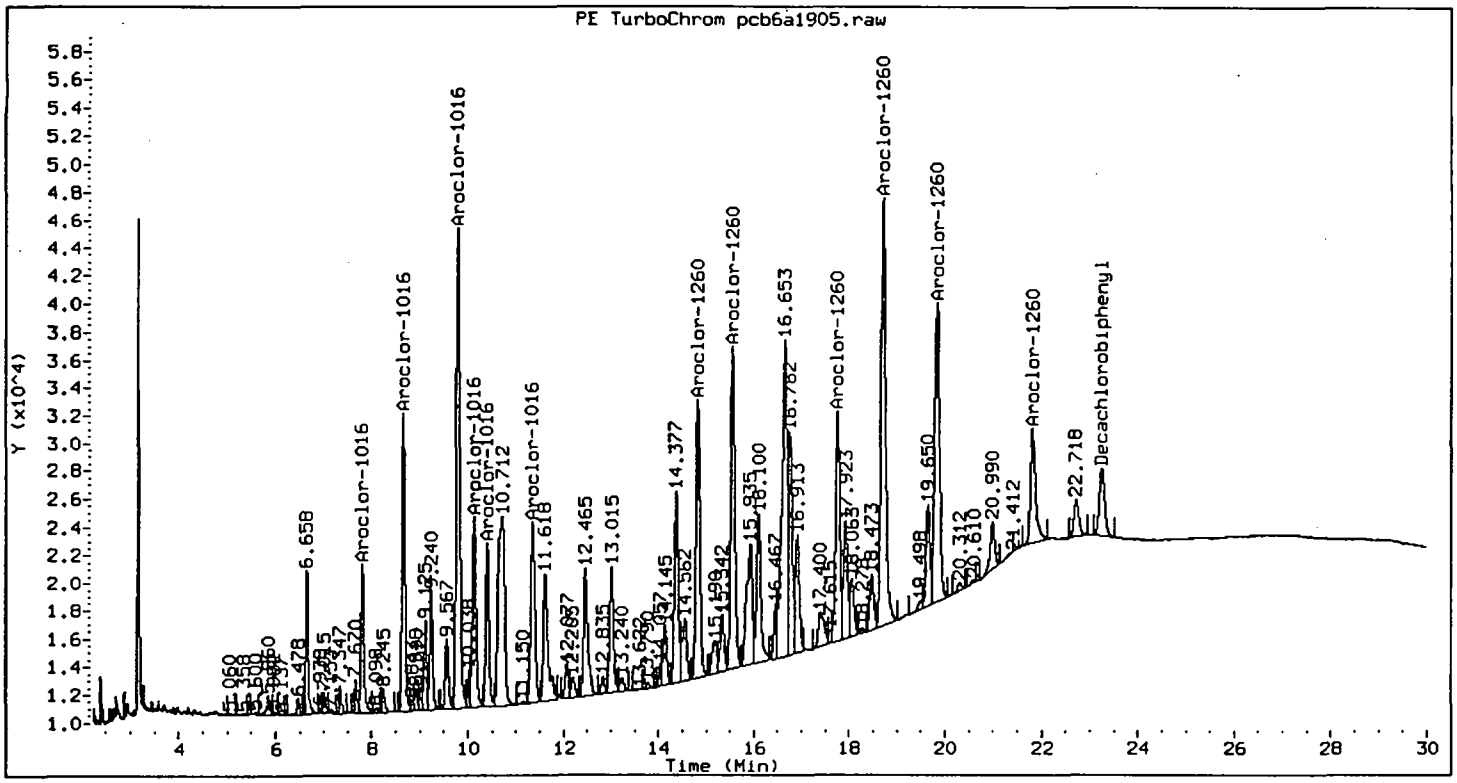
Date Sampled: 10/07/99
Date Received: 10/08/99
Date Extracted: 10/15/99
Date Analyzed: 10/28/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1905.d
Rear File ID: pcb6b1905.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 15

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	339	39	F
Aroclor-1221	ND	39	R
Aroclor-1232	ND	39	R
Aroclor-1242	ND	39	R
Aroclor-1248	ND	39	R
Aroclor-1254	ND	39	R
Aroclor-1260	366	39	F

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1905.d Page 1
Report Date 11/22/1999 14:39



Method : /chem/HP68906.i/8082/front/10-19-99/28oct99.b/Xf8082.m
Sample Info : 94023-003MSD;30.3;;;15.3
Lab ID : 94023-003MSD
Inj Date : 28-OCT-1999 15:59
Operator : DavidW
Cpnd Sublist: PCB8082+

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: MSD

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.805	7.802	0.003	43508	852.451	332.157
(2)		8.657	8.653	0.003	91967	844.040	328.880
(3)		9.797	9.795	0.002	174243	879.529	342.708
(4)		10.132	10.128	0.003	70818	891.710	347.454
(5)		10.407	10.403	0.003	53463	890.839	347.115
(6)		11.347	11.345	0.002	78967	865.194	337.122
Average of peak concentrations:							339.00
Aroclor-1260	(M)	14.827	14.823	0.003	114436	888.100	346.048
(2)		15.553	15.553	0.000	137266	911.297	355.086
(3)		17.760	17.758	0.002	99984	944.006	367.831
(4)		18.705	18.703	0.002	203935	936.233	364.803
(5)		19.842	19.837	0.005	155206	961.405	374.611
(6)		21.815	21.813	0.002	58504	997.062	388.505
Average of peak concentrations:							366.00

11/22/99

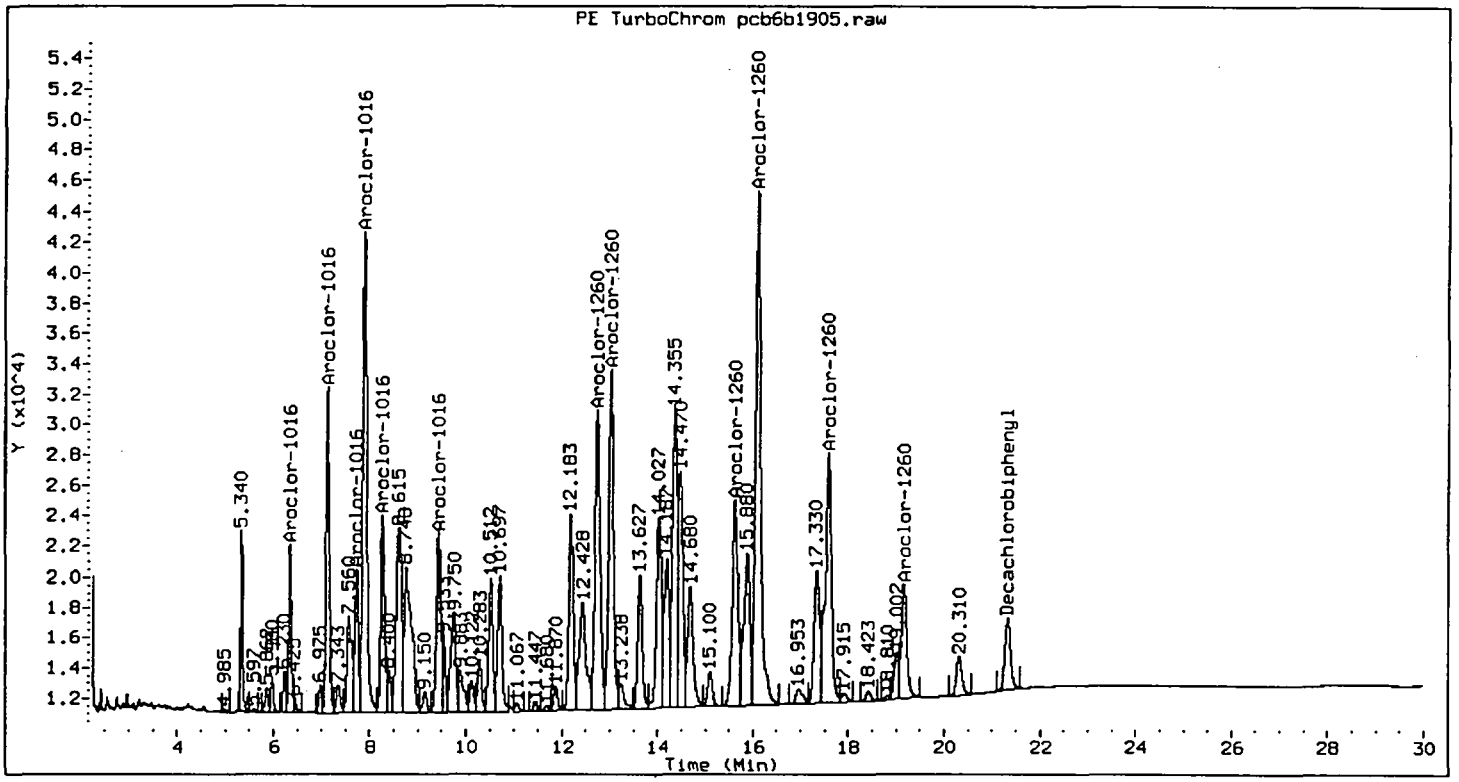
Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99.b/pcb6a1905.d Page 2
Report Date 11/22/1999 14:39

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	23.252	23.247	0.005	37075	13.594	5.297

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1905.d Page 1
Report Date 11/22/1999 14:39



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/Xr8082.m
Sample Info : 94023-003MSD;30.3;;;15.3
Lab ID : 94023-003MSD
Inj Date : 28-OCT-1999 15:59
Operator : DavidW
Cpnd Sublist: PCB8082+
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: MSD

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.343	6.340	0.003	42491	809.112	315.270
(2)		7.120	7.117	0.003	100376	797.861	310.886
(3)		7.728	7.725	0.003	46430	840.797	327.616
(4)		7.887	7.883	0.003	193328	846.421	329.807
(5)		8.258	8.255	0.003	72564	836.386	325.897
(6)		9.432	9.427	0.005	72071	838.170	326.593
Average of peak concentrations:							323.00
Aroclor-1260	(M)	12.735	12.728	0.007	150579	836.988	326.132
(2)		13.017	13.012	0.005	157899	838.380	326.674
(3)		15.622	15.615	0.007	110214	854.603	332.996
(4)		16.095	16.083	0.012	263278	886.608	345.466
(5)		17.582	17.580	0.002	153096	872.000	339.774
(6)		19.157	19.155	0.002	61192	859.784	335.014
Average of peak concentrations:							334.00

11/22/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99.b/pcb6b1905.d Page 2
Report Date 11/22/1999 14:39

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	(M)	21.323	21.317	0.007	38780	12.840	5.003

COMMENTS:

M - Compound response manually integrated.

conc'd w/ batch WG41663

AEN/NJ
Organic Extractions -AQUEOUS / Matrix

Batch: 17631 Extract File#: 1128 Extraction Method: SEP FUNNEL Date: 15-OCT-99 Analyst: John M. Kopinski

Luis Batch: WG41663 Relinquished To Storage(Init/Date): Concentration (Finish) Date: _____ Analyst:

Analysis: PCB-8082-8 Removed From Storage(Init/Date): 11/8/99

Returned To Storage(Init/Date): 11/8/99

acid/Cu+ KAM 10/27/99

BS LOT #: SS1334E MS LOT #: SS1334E MSD LOT #: SS1334E

BS LOT VOLUME: .2ml MS LOT VOLUME: .2ml MSD LOT VOLUME: .2ml Spike witnessed by: KAM 10/15

Lab ID	Client ID	Sample Vol	Int. pH	BN pH	AE pH	Initial Vol.	Split Aliquot	Final Vol.	Surr. Lot	Vol	Comments
94106006	SW-2-1-01	1000ml	6						SS1319E	.2 ml	
94106007	SW-2-1-02	1000	6						SS1319E	.2 ml	
QE-17631E	BLANK	1000	5						SS1319E	.2 ml	
QE-17631ES	BL.SP.	1000	5						SS1319E	.2 ml	
MS-106.7		500	6								
MSD-106.7		500	6								

000835

[illegible] WG41652

AEN/NJ
Organic Extractions -SOIL/SEDIMENT/SLUDGE / Matrix

Batch: 17628 Extract File#: 137 Extraction Method: SONICATION Date: 15-OCT-99 Analyst: John M. Kopinski

Luis Batch: WG41652 Relinquished To Storage(Init/Date): _____ Concentration (Finish) Date: _____ Analyst: ICAM 10/20/99

Analysis: PCB-8082-8 Removed From Storage(Init/Date): [illegible] 10/28/99 [illegible]/Cu+ acid

Returned To Storage(Init/Date): [illegible] 10/28/99

BS LOT #: SS1334E MS LOT #: SS1334E MSD LOT #: SS1334E
BS LOT VOLUME: 1ml MS LOT VOLUME: 1ml MSD LOT VOLUME: 1ml Spike witnessed by: _____

Lab ID	Client ID	Sample Wgt	pH	% Sol	% Sol Dec	Initial Vol.	Split Aliquot	Final Vol. 10ml	Surr. Lot	Vol	Comments
94023001	MW3D-SO-44	30.19		84.66					SS1319E	1 ml	
94023002MS	MW3DSO44MS	30.1		84.66					SS1319E	1 ml	
94023003MSD	MW3DSO44MS	30.3		84.66					SS1319E	1 ml	
94023004	MW5D-SO-44	30.0		84.87					SS1319E	1 ml	
94058001	MW4S-SO-04	30.1							SS1319E	1 ml	
94058002	MW4S-SO-18	30.0							SS1319E	1 ml	
94058003	MW4S-SODUP	30.1							SS1319E	1 ml	
94058004	MW6D-SO-04	30.0							SS1319E	1 ml	
94058005	MW6D-SO-28	30.4							SS1319E	1 ml	
94058006	MW6D-SO-50	30.2							SS1319E	1 ml	
94083001	SSTOCK-1	30.3							SS1319E	1 ml	
94106008	S-2-1-01	30.4							SS1319E	1 ml	
94106009	S-2-1-02	30.0							SS1319E	1 ml	
QE-17628E	BLANK	30.0							SS1319E	1 ml	
QE-17628ES	BL.SP.	30.0							SS1319E	1 ml	

938000

METALS

Metals Analysis Results

Prepared For:
Ogden Environmental

STL Sample No.: 94106006
Matrix: Water

Units: ug/l

Client ID: SW-2-1-01
Sample Date: 10/13/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	11/01/99 18:17	**77.0**	B	9.82	200	1.00	WG50021
7440-36-0	Antimony	ICP-TR	11/01/99 18:17	**2.39**	U	2.39	10.0	1.00	WG50021
7440-38-2	Arsenic	ICP-TR	11/01/99 18:17	**4.18**	U	4.18	8.00	1.00	WG50021
7440-39-3	Barium	ICP-TR	11/01/99 18:17	**58.6**		0.631	10.0	1.00	WG50021
7440-41-7	Beryllium	ICP-TR	11/01/99 18:17	**0.530**	B	0.177	4.00	1.00	WG50021
7440-43-9	Cadmium	ICP-TR	11/01/99 18:17	**0.190**	U	0.190	4.00	1.00	WG50021
7440-70-2	Calcium	ICP-TR	11/01/99 18:17	**134,000**		33.6	5,000	1.00	WG50021
7440-47-3	Chromium	ICP-TR	11/01/99 18:17	**0.239**	U	0.239	25.0	1.00	WG50021
7440-48-4	Cobalt	ICP-TR	11/01/99 18:17	**0.580**	B	0.347	50.0	1.00	WG50021
7440-50-8	Copper	ICP-TR	11/01/99 18:17	**1.18**	B	0.603	25.0	1.00	WG50021
7439-89-6	Iron	ICP-TR	11/01/99 18:17	**1,380**		52.5	100.0	1.00	WG50021
7439-92-1	Lead	ICP-TR	11/01/99 18:17	**0.957**	U	0.957	3.00	1.00	WG50021
7439-95-4	Magnesium	ICP-TR	11/01/99 18:17	**16,200**		11.9	5,000	1.00	WG50021
7439-96-5	Manganese	ICP-TR	11/01/99 18:17	**4,320**		0.373	15.0	1.00	WG50021
7439-97-6	Mercury	CV	11/02/99 15:01	**0.200**	U	0.200	0.200	1.00	WG60010
7440-02-0	Nickel	ICP-TR	11/01/99 18:17	**1.58**	B	0.443	10.0	1.00	WG50021
7440-09-7	Potassium	ICP-TR	11/01/99 18:17	**3,280**	B	40.7	5,000	1.00	WG50021
7782-49-2	Selenium	ICP-TR	11/01/99 18:17	**2.88**	B	2.04	5.00	1.00	WG50021
7440-22-4	Silver	ICP-TR	11/01/99 18:17	**0.303**	U	0.303	10.0	1.00	WG50021
7440-23-5	Sodium	ICP-TR	11/01/99 18:17	**16,200**		283	5,000	1.00	WG50021
7440-28-0	Thallium	ICP-TR	11/01/99 18:17	**2.80**	U	2.80	10.0	1.00	WG50021
7440-62-2	Vanadium	ICP-TR	11/01/99 18:17	**0.200**	B	0.189	50.0	1.00	WG50021
7440-66-6	Zinc	ICP-TR	11/01/99 18:17	**16.4**	B	8.66	30.0	1.00	WG50021

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:

Ogden Environmental

STL Sample No.: 94106007
Matrix: Water

Units: ug/l

Client ID: SW-2-1-02
Sample Date: 10/13/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	11/01/99 18:53	**78.9**	B	9.82	200	1.00	WG50021
7440-36-0	Antimony	ICP-TR	11/01/99 18:53	**2.39**	U	2.39	10.0	1.00	WG50021
7440-38-2	Arsenic	ICP-TR	11/01/99 18:53	**4.18**	U	4.18	8.00	1.00	WG50021
7440-39-3	Barium	ICP-TR	11/01/99 18:53	**60.1**		0.631	10.0	1.00	WG50021
7440-41-7	Beryllium	ICP-TR	11/01/99 18:53	**0.560**	B	0.177	4.00	1.00	WG50021
7440-43-9	Cadmium	ICP-TR	11/01/99 18:53	**0.190**	U	0.190	4.00	1.00	WG50021
7440-70-2	Calcium	ICP-TR	11/01/99 18:53	**137,000**		33.6	5,000	1.00	WG50021
7440-47-3	Chromium	ICP-TR	11/01/99 18:53	**0.480**	B	0.239	25.0	1.00	WG50021
7440-48-4	Cobalt	ICP-TR	11/01/99 18:53	**0.580**	B	0.347	50.0	1.00	WG50021
7440-50-8	Copper	ICP-TR	11/01/99 18:53	**1.19**	B	0.603	25.0	1.00	WG50021
7439-89-6	Iron	ICP-TR	11/01/99 18:53	**1,500**		52.5	100.0	1.00	WG50021
7439-92-1	Lead	ICP-TR	11/01/99 18:53	**0.957**	U	0.957	3.00	1.00	WG50021
7439-95-4	Magnesium	ICP-TR	11/01/99 18:53	**16,700**		11.9	5,000	1.00	WG50021
7439-96-5	Manganese	ICP-TR	11/01/99 18:53	**4,330**		0.373	15.0	1.00	WG50021
7439-97-6	Mercury	CV	11/02/99 15:02	**0.200**	U	0.200	0.200	1.00	WG60010
7440-02-0	Nickel	ICP-TR	11/01/99 18:53	**1.37**	B	0.443	10.0	1.00	WG50021
7440-09-7	Potassium	ICP-TR	11/01/99 18:53	**3,300**	B	40.7	5,000	1.00	WG50021
7782-49-2	Selenium	ICP-TR	11/01/99 18:53	**2.17**	B	2.04	5.00	1.00	WG50021
7440-22-4	Silver	ICP-TR	11/01/99 18:53	**0.303**	U	0.303	10.0	1.00	WG50021
7440-23-5	Sodium	ICP-TR	11/01/99 18:53	**16,700**		283	5,000	1.00	WG50021
7440-28-0	Thallium	ICP-TR	11/01/99 18:53	**2.80**	U	2.80	10.0	1.00	WG50021
7440-62-2	Vanadium	ICP-TR	11/01/99 18:53	**0.280**	B	0.189	50.0	1.00	WG50021
7440-66-6	Zinc	ICP-TR	11/01/99 18:53	**12.0**	B	8.66	30.0	1.00	WG50021

All Concentrations,RL's, and MDL's are corrected for Percent Solids

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:
Ogden Environmental

STL Sample No.: 94106008
Matrix: Soil
Percent Solids: 35.1

Units: mg/kg

Client ID: S-2-1-01
Sample Date: 10/13/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	10/29/99 14:08	**8,020**		3.10	57.0	1.00	WG50018
7440-36-0	Antimony	ICP-TR	10/29/99 14:08	**0.396**	U	0.396	2.85	1.00	WG50018
7440-38-2	Arsenic	ICP-TR	10/29/99 14:08	**12.3**		0.906	2.28	1.00	WG50018
7440-39-3	Barium	ICP-TR	10/29/99 14:08	**136**		0.204	2.85	1.00	WG50018
7440-41-7	Beryllium	ICP-TR	10/29/99 14:08	**0.0618**	U	0.0618	1.14	1.00	WG50018
7440-43-9	Cadmium	ICP-TR	10/29/99 14:08	**2.15**		0.0732	1.14	1.00	WG50018
7440-70-2	Calcium	ICP-TR	10/29/99 14:08	**13,900**		18.6	1,420	1.00	WG50018
7440-47-3	Chromium	ICP-TR	10/29/99 14:08	**13.8**		0.330	7.12	1.00	WG50018
7440-48-4	Cobalt	ICP-TR	10/29/99 14:08	**6.31**	B	0.0997	14.2	1.00	WG50018
7440-50-8	Copper	ICP-TR	10/29/99 14:08	**26.3**		0.127	7.12	1.00	WG50018
7439-89-6	Iron	ICP-TR	10/29/99 14:08	**61,000**		23.1	28.5	1.00	WG50018
7439-92-1	Lead	ICP-TR	10/29/99 14:08	**37.8**		0.348	0.855	1.00	WG50018
7439-95-4	Magnesium	ICP-TR	10/29/99 14:08	**3,340**		4.30	1,420	1.00	WG50018
7439-96-5	Manganese	ICP-TR	10/29/99 14:20	**8,490**		0.645	21.4	5.00	WG50018
7439-97-6	Mercury	CV	11/01/99 13:56	**0.122**		0.0950	0.0950	1.00	WG60007
7440-02-0	Nickel	ICP-TR	10/29/99 14:08	**17.7**		0.176	2.85	1.00	WG50018
7440-09-7	Potassium	ICP-TR	10/29/99 14:08	**931**	B	14.5	1,420	1.00	WG50018
7782-49-2	Selenium	ICP-TR	10/29/99 14:08	**2.31**		1.21	1.42	1.00	WG50018
7440-22-4	Silver	ICP-TR	10/29/99 14:08	**0.192**	U	0.192	2.85	1.00	WG50018
7440-23-5	Sodium	ICP-TR	10/29/99 14:08	**218**	B	116	1,420	1.00	WG50018
7440-28-0	Thallium	ICP-TR	10/29/99 14:08	**2.38**	B	0.721	2.85	1.00	WG50018
7440-62-2	Vanadium	ICP-TR	10/29/99 14:08	**23.1**		0.0761	14.2	1.00	WG50018
7440-66-6	Zinc	ICP-TR	10/29/99 14:08	**171**		2.36	8.55	1.00	WG50018

All Concentrations,RL's, and MDL's are corrected for Percent Solids

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:

Ogden Environmental

STL Sample No.: 94106009
Matrix: Soil
Percent Solids: 40.1

Units: mg/kg

Client ID: S-2-1-02
Sample Date: 10/13/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	10/29/99 14:14	**7,640**		2.72	49.9	1.00	WG50018
7440-36-0	Antimony	ICP-TR	10/29/99 14:14	**0.347**	U	0.347	2.49	1.00	WG50018
7440-38-2	Arsenic	ICP-TR	10/29/99 14:14	**11.7**		0.793	2.00	1.00	WG50018
7440-39-3	Barium	ICP-TR	10/29/99 14:14	**134**		0.178	2.49	1.00	WG50018
7440-41-7	Beryllium	ICP-TR	10/29/99 14:14	**0.0541**	U	0.0541	0.998	1.00	WG50018
7440-43-9	Cadmium	ICP-TR	10/29/99 14:14	**1.84**		0.0641	0.998	1.00	WG50018
7440-70-2	Calcium	ICP-TR	10/29/99 14:14	**13,000**		16.3	1,250	1.00	WG50018
7440-47-3	Chromium	ICP-TR	10/29/99 14:14	**13.4**		0.289	6.23	1.00	WG50018
7440-48-4	Cobalt	ICP-TR	10/29/99 14:14	**6.59**	B	0.0873	12.5	1.00	WG50018
7440-50-8	Copper	ICP-TR	10/29/99 14:14	**26.2**		0.111	6.23	1.00	WG50018
7439-89-6	Iron	ICP-TR	10/29/99 14:14	**61,700**		20.2	24.9	1.00	WG50018
7439-92-1	Lead	ICP-TR	10/29/99 14:14	**38.2**		0.304	0.748	1.00	WG50018
7439-95-4	Magnesium	ICP-TR	10/29/99 14:14	**3,430**		3.76	1,250	1.00	WG50018
7439-96-5	Manganese	ICP-TR	10/29/99 14:26	**8,350**		0.565	18.7	5.00	WG50018
7439-97-6	Mercury	CV	11/01/99 13:59	**0.109**		0.0831	0.0831	1.00	WG60007
7440-02-0	Nickel	ICP-TR	10/29/99 14:14	**18.2**		0.154	2.49	1.00	WG50018
7440-09-7	Potassium	ICP-TR	10/29/99 14:14	**706**	B	12.7	1,250	1.00	WG50018
7782-49-2	Selenium	ICP-TR	10/29/99 14:14	**2.79**		1.06	1.25	1.00	WG50018
7440-22-4	Silver	ICP-TR	10/29/99 14:14	**0.168**	U	0.168	2.49	1.00	WG50018
7440-23-5	Sodium	ICP-TR	10/29/99 14:14	**120**	B	101	1,250	1.00	WG50018
7440-28-0	Thallium	ICP-TR	10/29/99 14:14	**1.34**	B	0.631	2.49	1.00	WG50018
7440-62-2	Vanadium	ICP-TR	10/29/99 14:14	**22.5**		0.0666	12.5	1.00	WG50018
7440-66-6	Zinc	ICP-TR	10/29/99 14:14	**169**		2.06	7.48	1.00	WG50018

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Initial and Continuing Calibration Blank Report

STL Job: 94106

Units: ug/l

	10/29/99 11:51	10/29/99 12:26	10/29/99 13:38	10/29/99 14:50
	ICB	CCB	CCB	CCB
Aluminum	23.6 U	23.6 U	-32.9 B	23.6 U
Antimony	1.96 B	2.02 B	1.55 U	1.58 B
Arsenic	5.42 B	2.42 B	3.14 B	3.37 B
Barium	0.170 U	0.170 U	0.170 U	0.170 U
Beryllium	0.380 B	0.300 U	0.300 U	0.410 B
Cadmium	0.410 B	0.430 B	0.560 B	0.540 B
Calcium	61.7 U	61.7 U	61.7 U	61.7 U
Chromium	0.330 B	0.320 U	0.320 U	0.320 B
Cobalt	0.320 U	0.320 U	0.320 U	0.630 B
Copper	0.680 B	0.820 B	1.32 B	1.50 B
Iron	25.2 B	23.4 U	23.4 U	23.4 U
Lead	0.440 U	0.440 U	0.440 U	0.440 U
Magnesium	29.0 U	29.0 U	29.0 U	29.0 U
Manganese	0.460 B	0.410 U	0.440 B	0.580 B
Nickel	0.690 U	0.690 U	0.690 U	0.750 B
Potassium	76.4 B	78.3 B	55.6 B	72.6 B
Selenium	2.55 U	2.55 U	2.55 U	2.55 U
Silver	0.470 U	0.470 U	0.470 U	0.470 U
Sodium	388 U	388 U	388 U	388 U
Thallium	2.01 U	3.87 B	3.31 B	7.50 B
Vanadium	0.550 B	0.260 U	0.590 B	0.760 B
Zinc	1.37 B	1.24 U	1.24 U	1.24 U

Initial and Continuing Calibration Blank Report

STL Job: 94106

Units: ug/l

	11/01/99 15:18	11/01/99 15:54	11/01/99 17:05	11/01/99 17:59	11/01/99 19:11	11/01/99 20:22	11/01/99 21:28
	ICB	CCB	CCB	CCB	CCB	CCB	CCB
Aluminum	32.7 B	23.6 U	23.6 U	23.6 U	23.6 U	23.6 U	23.6 U
Antimony	1.55 U	1.74 B	1.68 B	1.55 U	1.55 U	1.55 U	1.55 U
Arsenic	2.28 B	2.79 B	2.08 B	2.11 B	1.24 U	-3.74 B	3.54 B
Barium	0.880 B	0.170 U	0.420 B	0.270 B	0.180 B	0.310 B	0.290 B
Beryllium	0.630 B	0.370 B	0.580 B	0.470 B	0.590 B	0.490 B	0.440 B
Cadmium	0.750 B	0.250 U	0.430 B	0.260 B	0.250 U	0.290 B	0.250 U
Calcium	61.7 U	61.7 U	61.7 U	61.7 U	61.7 U	61.7 U	61.7 U
Chromium	0.440 B	0.320 U	0.440 B	0.320 U	0.320 U	0.320 U	0.320 U
Cobalt	0.550 B	0.500 B	0.500 B	0.610 B	0.320 U	0.440 B	0.520 B
Copper	0.890 B	0.550 U	0.720 B	0.550 U	0.550 U	0.550 U	0.550 U
Iron	23.4 U	23.4 U	23.4 U	23.4 U	-25.0 B	23.4 U	23.4 U
Lead	1.62 B	0.440 U	0.440 U	0.440 U	0.440 U	0.610 B	0.440 U
Magnesium	29.0 U	29.0 U	29.0 U	29.0 U	29.0 U	29.0 U	29.0 U
Manganese	0.630 B	0.410 U	0.680 B	0.410 U	0.460 B	0.410 U	0.410 U
Nickel	0.880 B	0.690 U	0.690 U	0.690 U	0.690 U	0.690 U	0.690 U
Potassium	57.9 B	80.3 B	85.5 B	76.8 B	60.6 B	55.1 U	55.1 B
Selenium	2.98 B	2.55 U	2.55 U	3.53 B	2.55 U	2.55 U	2.55 U
Silver	0.470 U	0.470 U	0.470 U	0.470 U	0.470 U	0.470 U	0.470 U
Sodium	-460 B	388 U	388 U	388 U	388 U	388 U	-418 B
Thallium	2.01 U	3.08 B	2.01 U	2.01 U	2.01 U	2.01 U	2.31 B
Vanadium	0.580 B	0.320 B	0.400 B	0.310 B	0.320 B	0.460 B	0.260 U
Zinc	2.70 B	3.76 B	4.84 B	3.22 B	3.81 B	3.71 B	2.46 B

	11/02/99 14:00	11/02/99 14:26	11/02/99 14:51	11/02/99 15:14	11/02/99 15:39
	ICB	CCB	CCB	CCB	CCB
Mercury	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U

	11/01/99 13:13	11/01/99 13:39	11/01/99 14:03
	ICB	CCB	CCB
Mercury	0.200 U	0.200 U	0.200 U

Method Blank Report

STL Job No.: 94106

PBSWG60007 — Analyze Date: 11/01/99 13:17 — Instrument: CV — Units: mg/kg

Mercury	0.0333	U

PBWWG60010 — Analyze Date: 11/02/99 14:56 — Instrument: CV — Units: ug/l

Mercury	0.200	U

PBSWG50018 — Analyze Date: 10/29/99 12:32 — Instrument: ICP-TR — Units: mg/kg

Aluminum	-2.75	B	Antimony	0.139	U	Arsenic	0.318	U	Barium	0.0715	U
Beryllium	0.0217	U	Cadmium	0.0257	U	Calcium	6.54	U	Chromium	0.116	U
Cobalt	0.0350	U	Copper	0.0780	B	Iron	8.10	U	Lead	0.122	U
Magnesium	1.51	U	Manganese	0.0453	U	Nickel	0.0617	U	Potassium	5.48	B
Selenium	0.426	U	Silver	0.0673	U	Sodium	40.6	U	Thallium	0.291	B
Vanadium	0.0370	B	Zinc	0.828	U						

PBWWG50021 — Analyze Date: 11/01/99 18:05 — Instrument: ICP-TR — Units: ug/l

Aluminum	13.6	B	Antimony	2.39	U	Arsenic	4.18	U	Barium	0.631	U
Beryllium	0.360	B	Cadmium	0.190	U	Calcium	33.6	U	Chromium	0.570	B
Cobalt	0.347	U	Copper	0.603	U	Iron	52.5	U	Lead	0.957	U
Magnesium	11.9	U	Manganese	0.373	U	Nickel	0.443	U	Potassium	65.0	B
Selenium	2.04	U	Silver	0.303	U	Sodium	283	U	Thallium	2.80	U
Vanadium	0.250	B	Zinc	8.66	U						

Initial Calibration Verification Report

STL Job No.: 94106

Instrument: CV

Units = ug/l

Analyte	Concentration	True Value	% Recovery	Analyze Date
Mercury	3.60	3.50	103.0	11/01/99 13:11

Analyte	Concentration	True Value	% Recovery	Analyze Date
Mercury	3.37	3.50	96.3	11/02/99 13:57

Instrument: ICP-TR

Units = mg/l

Analyte	Concentration	True Value	% Recovery	Analyze Date
Aluminum	496	500	99.2	10/29/99 11:45
Antimony	9.93	10.0	99.3	10/29/99 11:39
Arsenic	9.75	10.0	97.5	10/29/99 11:39
Barium	9.84	10.0	98.4	10/29/99 11:39
Beryllium	10.1	10.0	101.0	10/29/99 11:39
Cadmium	10.1	10.0	101.0	10/29/99 11:39
Calcium	488	500	97.6	10/29/99 11:45
Chromium	10.0	10.0	100.0	10/29/99 11:39
Cobalt	9.99	10.0	99.9	10/29/99 11:39
Copper	9.93	10.0	99.3	10/29/99 11:39
Iron	245	250	98.0	10/29/99 11:45
Lead	9.99	10.0	99.9	10/29/99 11:39
Magnesium	496	500	99.2	10/29/99 11:45
Manganese	9.82	10.0	98.2	10/29/99 11:39
Nickel	9.92	10.0	99.2	10/29/99 11:39
Potassium	252	250	101.0	10/29/99 11:45
Selenium	10.1	10.0	101.0	10/29/99 11:39
Silver	0.994	1.00	99.4	10/29/99 11:39
Sodium	249	250	99.6	10/29/99 11:45
Thallium	10.0	10.0	100.0	10/29/99 11:39
Vanadium	10.1	10.0	101.0	10/29/99 11:39
Zinc	9.73	10.0	97.3	10/29/99 11:39

Analyte	Concentration	True Value	% Recovery	Analyze Date
Aluminum	496	500	99.2	11/01/99 15:12
Antimony	10.1	10.0	101.0	11/01/99 15:06
Arsenic	9.97	10.0	99.7	11/01/99 15:06
Barium	9.89	10.0	98.9	11/01/99 15:06
Beryllium	10.3	10.0	103.0	11/01/99 15:06

Initial Calibration Verification Report

STL Job No.: 94106

Cadmium	10.3	10.0	103.0	11/01/99 15:06
Calcium	495	500	99.0	11/01/99 15:12
Chromium	10.3	10.0	103.0	11/01/99 15:06
Cobalt	10.3	10.0	103.0	11/01/99 15:06
Copper	9.97	10.0	99.7	11/01/99 15:06
Iron	248	250	99.2	11/01/99 15:12
Lead	10.3	10.0	103.0	11/01/99 15:06
Magnesium	496	500	99.2	11/01/99 15:12
Manganese	10.1	10.0	101.0	11/01/99 15:06
Nickel	10.2	10.0	102.0	11/01/99 15:06
Potassium	249	250	99.6	11/01/99 15:12
Selenium	10.0	10.0	100.0	11/01/99 15:06
Silver	1.01	1.00	101.0	11/01/99 15:06
Sodium	249	250	99.6	11/01/99 15:12
Thallium	10.3	10.0	103.0	11/01/99 15:06
Vanadium	10.3	10.0	103.0	11/01/99 15:06
Zinc	10.2	10.0	102.0	11/01/99 15:06

Continuing Calibration Verification Report

STL Job No.: 94106

Units: mg/l

Instrument: ICP-TR

Analyte	True Value	Concentration	% Recovery
Analyze Date: 10/29/99 12:20			
Aluminum	50.00	48.3	96.6
Antimony	5.00	4.99	99.8
Arsenic	5.00	4.86	97.2
Barium	5.00	4.74	94.8
Beryllium	5.00	4.83	96.6
Cadmium	5.00	4.76	95.2
Calcium	50.00	48.4	96.8
Chromium	5.00	4.82	96.4
Cobalt	5.00	4.72	94.4
Copper	5.00	4.91	98.2
Iron	50.00	46.4	92.8
Lead	5.00	4.94	98.8
Magnesium	50.00	47.6	95.2
Manganese	5.00	4.82	96.4
Nickel	5.00	4.82	96.4
Potassium	50.00	53.3	107.0
Selenium	5.00	5.13	103.0
Silver	0.50	0.496	99.2
Sodium	50.00	48.3	96.6
Thallium	5.00	4.80	96.0
Vanadium	5.00	4.78	95.6
Zinc	5.00	4.86	97.2
Analyze Date: 10/29/99 13:32			
Aluminum	50.00	49.4	98.8
Antimony	5.00	5.10	102.0
Arsenic	5.00	4.96	99.2
Barium	5.00	4.81	96.2
Beryllium	5.00	4.95	99.0
Cadmium	5.00	4.81	96.2
Calcium	50.00	49.3	98.6
Chromium	5.00	4.90	98.0
Cobalt	5.00	4.80	96.0
Copper	5.00	5.05	101.0
Iron	50.00	47.3	94.6
Lead	5.00	5.01	100.0
Magnesium	50.00	49.0	98.0
Manganese	5.00	4.92	98.4
Nickel	5.00	4.87	97.4
Potassium	50.00	54.5	109.0
Selenium	5.00	5.24	105.0
Silver	0.50	0.506	101.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94106

Units: mg/l

Sodium	50.00	49.4	98.8
Thallium	5.00	4.94	98.8
Vanadium	5.00	4.87	97.4
Zinc	5.00	4.90	98.0
Analyze Date: 10/29/99 14:44			
Aluminum	50.00	49.4	98.8
Antimony	5.00	5.09	102.0
Arsenic	5.00	4.96	99.2
Barium	5.00	4.81	96.2
Beryllium	5.00	4.95	99.0
Cadmium	5.00	4.83	96.6
Calcium	50.00	49.4	98.8
Chromium	5.00	4.91	98.2
Cobalt	5.00	4.81	96.2
Copper	5.00	5.03	101.0
Iron	50.00	47.4	94.8
Lead	5.00	5.01	100.0
Magnesium	50.00	48.8	97.6
Manganese	5.00	4.91	98.2
Nickel	5.00	4.87	97.4
Potassium	50.00	54.3	109.0
Selenium	5.00	5.29	106.0
Silver	0.50	0.506	101.0
Sodium	50.00	49.4	98.8
Thallium	5.00	4.92	98.4
Vanadium	5.00	4.87	97.4
Zinc	5.00	4.92	98.4
Analyze Date: 11/01/99 15:48			
Aluminum	50.00	48.3	96.6
Antimony	5.00	5.04	101.0
Arsenic	5.00	4.90	98.0
Barium	5.00	4.82	96.4
Beryllium	5.00	4.86	97.2
Cadmium	5.00	4.88	97.6
Calcium	50.00	49.2	98.4
Chromium	5.00	4.91	98.2
Cobalt	5.00	4.81	96.2
Copper	5.00	4.96	99.2
Iron	50.00	47.1	94.2
Lead	5.00	5.04	101.0
Magnesium	50.00	47.7	95.4
Manganese	5.00	4.88	97.6
Nickel	5.00	4.94	98.8
Potassium	50.00	52.7	105.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94106

Units: mg/l

Selenium	5.00	5.02	100.0
Silver	0.50	0.508	102.0
Sodium	50.00	48.5	97.0
Thallium	5.00	4.93	98.6
Vanadium	5.00	4.86	97.2
Zinc	5.00	4.96	99.2
Analyze Date: 11/01/99 17:00			
Aluminum	50.00	48.3	96.6
Antimony	5.00	5.04	101.0
Arsenic	5.00	4.90	98.0
Barium	5.00	4.84	96.8
Beryllium	5.00	4.83	96.6
Cadmium	5.00	4.88	97.6
Calcium	50.00	48.9	97.8
Chromium	5.00	4.90	98.0
Cobalt	5.00	4.80	96.0
Copper	5.00	4.96	99.2
Iron	50.00	47.1	94.2
Lead	5.00	5.05	101.0
Magnesium	50.00	47.6	95.2
Manganese	5.00	4.85	97.0
Nickel	5.00	4.95	99.0
Potassium	50.00	52.7	105.0
Selenium	5.00	5.06	101.0
Silver	0.50	0.509	102.0
Sodium	50.00	48.5	97.0
Thallium	5.00	4.91	98.2
Vanadium	5.00	4.85	97.0
Zinc	5.00	4.95	99.0
Analyze Date: 11/01/99 17:53			
Aluminum	50.00	48.5	97.0
Antimony	5.00	5.10	102.0
Arsenic	5.00	5.02	100.0
Barium	5.00	4.89	97.8
Beryllium	5.00	4.91	98.2
Cadmium	5.00	5.03	101.0
Calcium	50.00	50.1	100.0
Chromium	5.00	5.01	100.0
Cobalt	5.00	4.92	98.4
Copper	5.00	4.97	99.4
Iron	50.00	48.1	96.2
Lead	5.00	5.17	103.0
Magnesium	50.00	47.7	95.4
Manganese	5.00	4.94	98.8

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94106

Units: mg/l

Nickel	5.00	5.09	102.0
Potassium	50.00	52.5	105.0
Selenium	5.00	5.12	102.0
Silver	0.50	0.517	103.0
Sodium	50.00	48.7	97.4
Thallium	5.00	4.96	99.2
Vanadium	5.00	4.94	98.8
Zinc	5.00	5.15	103.0
Analyze Date: 11/01/99 19:05			
Aluminum	50.00	48.6	97.2
Antimony	5.00	5.09	102.0
Arsenic	5.00	4.97	99.4
Barium	5.00	4.88	97.6
Beryllium	5.00	4.88	97.6
Cadmium	5.00	4.98	99.6
Calcium	50.00	49.8	99.6
Chromium	5.00	5.00	100.0
Cobalt	5.00	4.89	97.8
Copper	5.00	4.98	99.6
Iron	50.00	47.9	95.8
Lead	5.00	5.15	103.0
Magnesium	50.00	47.9	95.8
Manganese	5.00	4.92	98.4
Nickel	5.00	5.05	101.0
Potassium	50.00	52.7	105.0
Selenium	5.00	5.10	102.0
Silver	0.50	0.518	104.0
Sodium	50.00	49.0	98.0
Thallium	5.00	4.96	99.2
Vanadium	5.00	4.92	98.4
Zinc	5.00	5.08	102.0
Analyze Date: 11/01/99 20:16			
Aluminum	50.00	48.1	96.2
Antimony	5.00	5.04	101.0
Arsenic	5.00	4.93	98.6
Barium	5.00	4.85	97.0
Beryllium	5.00	4.84	96.8
Cadmium	5.00	4.96	99.2
Calcium	50.00	49.3	98.6
Chromium	5.00	4.94	98.8
Cobalt	5.00	4.84	96.8
Copper	5.00	4.92	98.4
Iron	50.00	47.5	95.0
Lead	5.00	5.10	102.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94106

Units: mg/l

Magnesium	50.00	47.3	94.6
Manganese	5.00	4.88	97.6
Nickel	5.00	5.02	100.0
Potassium	50.00	52.1	104.0
Selenium	5.00	5.07	101.0
Silver	0.50	0.511	102.0
Sodium	50.00	48.2	96.4
Thallium	5.00	4.92	98.4
Vanadium	5.00	4.86	97.2
Zinc	5.00	5.05	101.0

Analyze Date: 11/01/99 21:22

Aluminum	50.00	48.9	97.8
Antimony	5.00	5.11	102.0
Arsenic	5.00	5.01	100.0
Barium	5.00	4.91	98.2
Beryllium	5.00	4.92	98.4
Cadmium	5.00	5.02	100.0
Calcium	50.00	50.1	100.0
Chromium	5.00	5.01	100.0
Cobalt	5.00	4.91	98.2
Copper	5.00	4.99	99.8
Iron	50.00	48.1	96.2
Lead	5.00	5.18	104.0
Magnesium	50.00	48.0	96.0
Manganese	5.00	4.96	99.2
Nickel	5.00	5.09	102.0
Potassium	50.00	52.9	106.0
Selenium	5.00	5.12	102.0
Silver	0.50	0.518	104.0
Sodium	50.00	48.9	97.8
Thallium	5.00	5.00	100.0
Vanadium	5.00	4.93	98.6
Zinc	5.00	5.12	102.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94106

Units: mg/l

Instrument: CV

Analyte	True Value	Concentration	% Recovery
Analyze Date: 11/01/99 13:36			
Mercury	4.00	4.26	107.0
Analyze Date: 11/01/99 14:01			
Mercury	4.00	4.24	106.0
Analyze Date: 11/02/99 14:23			
Mercury	4.00	4.06	102.0
Analyze Date: 11/02/99 14:48			
Mercury	4.00	4.05	101.0
Analyze Date: 11/02/99 15:12			
Mercury	4.00	4.05	101.0
Analyze Date: 11/02/99 15:37			
Mercury	4.00	3.97	99.3

CCV Limits: 90-110 for all Elements

Laboratory Control Sample Report

STL Job No.: 94106

Batch: WG50018

Instrument: ICP-TR

Units: mg/kg

Analyte	True Value	Concentration	% Recovery	Analyze Date
Aluminum	1,000.00	995	99.5	10/29/99 12:38
Antimony	50.00	49.8	99.6	10/29/99 12:38
Arsenic	50.00	48.9	97.8	10/29/99 12:38
Barium	50.00	50.0	100.0	10/29/99 12:38
Beryllium	50.00	50.0	100.0	10/29/99 12:38
Cadmium	50.00	48.5	97.0	10/29/99 12:38
Calcium	1,000.00	965	96.5	10/29/99 12:38
Chromium	50.00	48.7	97.4	10/29/99 12:38
Cobalt	50.00	48.6	97.2	10/29/99 12:38
Copper	50.00	50.1	100.0	10/29/99 12:38
Iron	1,000.00	1,010	101.0	10/29/99 12:38
Lead	50.00	48.6	97.2	10/29/99 12:38
Magnesium	1,000.00	979	97.9	10/29/99 12:38
Manganese	50.00	49.4	98.8	10/29/99 12:38
Nickel	50.00	48.4	96.8	10/29/99 12:38
Potassium	1,000.00	1,030	103.0	10/29/99 12:38
Selenium	50.00	50.0	100.0	10/29/99 12:38
Silver	5.00	4.89	97.8	10/29/99 12:38
Sodium	1,000.00	972	97.2	10/29/99 12:38
Thallium	50.00	48.4	96.8	10/29/99 12:38
Vanadium	50.00	49.2	98.4	10/29/99 12:38
Zinc	50.00	49.2	98.4	10/29/99 12:38

LCS Control Limits: 80 - 120 for all Elements.

Laboratory Control Sample Report

STL Job No.: 94106

Batch: WG50021

Instrument: ICP-TR

Units: ug/l

Analyte	True Value	Concentration	% Recovery	Analyze Date
Aluminum	10,000.00	9,540	95.4	11/01/99 18:11
Antimony	500.00	493	98.6	11/01/99 18:11
Arsenic	500.00	488	97.6	11/01/99 18:11
Barium	500.00	492	98.4	11/01/99 18:11
Beryllium	500.00	507	101.0	11/01/99 18:11
Cadmium	500.00	501	100.0	11/01/99 18:11
Calcium	10,000.00	10,110	101.0	11/01/99 18:11
Chromium	500.00	494	98.8	11/01/99 18:11
Cobalt	500.00	494	98.8	11/01/99 18:11
Copper	500.00	482	96.4	11/01/99 18:11
Iron	10,000.00	10,170	102.0	11/01/99 18:11
Lead	500.00	503	101.0	11/01/99 18:11
Magnesium	10,000.00	9,460	94.6	11/01/99 18:11
Manganese	500.00	505	101.0	11/01/99 18:11
Nickel	500.00	498	99.6	11/01/99 18:11
Potassium	10,000.00	9,400	94.0	11/01/99 18:11
Selenium	500.00	500	100.0	11/01/99 18:11
Silver	50.00	48.7	97.4	11/01/99 18:11
Sodium	10,000.00	9,620	96.2	11/01/99 18:11
Thallium	500.00	491	98.2	11/01/99 18:11
Vanadium	500.00	492	98.4	11/01/99 18:11
Zinc	500.00	515	103.0	11/01/99 18:11

LCS Control Limits: 80 - 120 for all Elements.

Laboratory Control Sample Report

STL Job No.: 94106

Batch: WG60007

Instrument: CV

Units: mg/kg

Analyte	True Value	Concentration	% Recovery	Analyze Date
Mercury	0.33	0.348	105.0	11/01/99 13:19

LCS Control Limits: 80 - 120 for all Elements.

Laboratory Control Sample Report

STL Job No.: 94106

Batch: WG60010

Instrument: CV

Units: ug/l

Analyte	True Value	Concentration	% Recovery	Analyze Date
Mercury	2.00	1.99	99.5	11/02/99 14:58

LCS Control Limits: 80 - 120 for all Elements.

ICP Serial Dilution Form

STL Job No.: 94106

STL Sample No.: 94119001

Units: ug/l

Instrument: ICP-TR

Batch: WG50018

Analyte	Initial Sample Result	Serial Dilution Result	Percent Difference
Aluminum	20,612	21,301	3.4
Antimony	1.39U	6.95U	NA
Arsenic	25.5	47.8	87.4
Barium	31.9	33.3B	4.4
Beryllium	1.77B	1.90B	7.3
Cadmium	0.257U	1.29U	NA
Calcium	2,002B	2,092B	4.5
Chromium	122	123B	0.8
Cobalt	6.08B	5.85B	3.8
Copper	9.90B	11.3B	14.1
Iron	53,357	53,815	0.7
Lead	12.5	9.45B	24.4
Magnesium	4,784B	5,058B	5.8
Manganese	81.8	83.4	2.0
Nickel	12.0	11.2B	6.7
Potassium	14,307	12,900B	9.8
Selenium	4.26U	21.3U	NA
Silver	0.673U	3.37U	NA
Sodium	406U	2,030U	NA
Thallium	4.05B	17.8B	339.5
Vanadium	89.7	91.5B	2.0
Zinc	99.4	133B	33.8

Batch: WG50021

Analyte	Initial Sample Result	Serial Dilution Result	Percent Difference
Aluminum	77.0B	130B	68.8
Antimony	2.39U	12.0U	NA
Arsenic	4.18U	20.9U	NA
Barium	58.6	59.4	1.4
Beryllium	0.530B	1.80B	239.6
Cadmium	0.190U	0.950U	NA
Calcium	134,170	131,745	1.5
Chromium	0.239U	1.20U	NA
Cobalt	0.580B	1.73U	NA
Copper	1.18B	3.02U	NA
Iron	1,384	1,307	5.1

ICP Serial Dilution Form

STL Job No.: 94106

STL Sample No.: 94106006

Units: ug/l

Lead	0.957U	4.79U	NA
Magnesium	16,246	16,487B	1.8
Manganese	4,320	4,402	1.8
Nickel	1.58B	2.22U	NA
Potassium	3,282B	3,162B	3.6
Selenium	2.88B	10.9B	278.5
Silver	0.303U	1.52U	NA
Sodium	16,243	16,921B	4.3
Thallium	2.80U	14.0U	NA
Vanadium	0.200B	0.945U	NA
Zinc	16.4B	58.9B	259.1

ICAP ICSA Report

STL Job No.: 94106

Units: ug/l

	Analyze Date: 11/01/99 15:36		Analyze Date: 11/01/99 21:10	
	Amount Added	Concentration	Amount Added	Concentration
Aluminum	500,000.00	483,830.00	500,000.00	476,730.00
Antimony	0.00	-4.91	0.00	-3.54
Arsenic	0.00	4.73	0.00	-5.45
Barium	0.00	-2.86	0.00	-2.89
Beryllium	0.00	-0.55	0.00	-0.48
Cadmium	0.00	3.31	0.00	2.17
Calcium	500,000.00	481,640.00	500,000.00	475,030.00
Chromium	0.00	-0.54	0.00	-0.82
Cobalt	0.00	3.88	0.00	3.52
Copper	0.00	3.30	0.00	1.37
Iron	250,000.00	243,720.00	250,000.00	240,670.00
Lead	0.00	1.24	0.00	3.07
Magnesium	500,000.00	485,950.00	500,000.00	479,550.00
Manganese	0.00	1.81	0.00	1.75
Nickel	0.00	4.35	0.00	4.89
Potassium	250,000.00	244,940.00	250,000.00	241,640.00
Selenium	0.00	-4.84	0.00	0.95
Silver	0.00	-1.03	0.00	-0.96
Sodium	250,000.00	244,790.00	250,000.00	242,080.00
Thallium	0.00	-1.31	0.00	3.99
Vanadium	0.00	-1.76	0.00	-1.45
Zinc	0.00	8.99	0.00	9.90

ICAP ICSA Report

STL Job No.: 94106

Units: ug/l

	Analyze Date: 10/29/99 12:08		Analyze Date: 10/29/99 14:32	
	Amount Added	Concentration	Amount Added	Concentration
Aluminum	500,000.00	492,720.00	500,000.00	493,270.00
Antimony	0.00	-4.88	0.00	-1.14
Arsenic	0.00	1.16	0.00	1.42
Barium	0.00	-3.23	0.00	-3.33
Beryllium	0.00	-0.66	0.00	-0.76
Cadmium	0.00	3.04	0.00	4.33
Calcium	500,000.00	489,900.00	500,000.00	488,240.00
Chromium	0.00	-0.79	0.00	-0.93
Cobalt	0.00	3.71	0.00	3.53
Copper	0.00	3.39	0.00	3.54
Iron	250,000.00	247,270.00	250,000.00	247,040.00
Lead	0.00	-0.31	0.00	0.19
Magnesium	500,000.00	493,590.00	500,000.00	497,390.00
Manganese	0.00	1.96	0.00	3.10
Nickel	0.00	4.79	0.00	4.98
Potassium	250,000.00	249,610.00	250,000.00	249,830.00
Selenium	0.00	6.55	0.00	-3.09
Silver	0.00	-0.51	0.00	-0.94
Sodium	250,000.00	247,110.00	250,000.00	247,980.00
Thallium	0.00	7.09	0.00	3.40
Vanadium	0.00	-0.76	0.00	-1.00
Zinc	0.00	10.02	0.00	10.14

ICAP ICSAB Report

STL Job No.: 94106

Units: ug/l

	Analyze Date: 11/01/99 15:42			Analyze Date: 11/01/99 21:16		
	Concentration	Amount Added	% Recovery	Concentration	Amount Added	% Recovery
Aluminum	476,920.0	500,000.0	95.4	487,370.0	500,000.0	97.4
Antimony	94.2	100.0	94.2	98.4	100.0	98.4
Arsenic	96.1	100.0	96.1	96.8	100.0	96.8
Barium	95.5	100.0	95.5	98.1	100.0	98.1
Beryllium	96.2	100.0	96.2	95.7	100.0	95.7
Cadmium	91.3	100.0	91.3	91.4	100.0	91.4
Calcium	487,500.0	500,000.0	97.6	484,170.0	500,000.0	96.8
Chromium	91.6	100.0	91.6	91.5	100.0	91.5
Cobalt	91.4	100.0	91.4	91.6	100.0	91.6
Copper	108.1	100.0	108.0	108.2	100.0	108.0
Iron	245,050.0	250,000.0	98.0	245,100.0	250,000.0	98.0
Lead	91.5	100.0	91.5	92.8	100.0	92.8
Magnesium	476,420.0	500,000.0	95.2	485,680.0	500,000.0	97.2
Manganese	95.2	100.0	95.2	94.9	100.0	94.9
Nickel	92.7	100.0	92.7	92.8	100.0	92.8
Potassium	238,090.0	250,000.0	95.2	246,690.0	250,000.0	98.8
Selenium	99.0	100.0	99.0	92.9	100.0	92.9
Silver	10.0	10.0	99.8	10.1	10.0	101.0
Sodium	240,260.0	250,000.0	96.0	246,190.0	250,000.0	98.4
Thallium	85.8	100.0	85.8	88.0	100.0	88.0
Vanadium	93.6	100.0	93.6	93.7	100.0	93.7
Zinc	96.1	100.0	96.1	94.6	100.0	94.6

ICAP ICSAB Report

STL Job No.: 94106

Units: ug/l

	Analyze Date: 10/29/99 12:14			Analyze Date: 10/29/99 14:38		
	Concentration	Amount Added	% Recovery	Concentration	Amount Added	% Recovery
Aluminum	495,700.0	500,000.0	99.2	499,570.0	500,000.0	100.0
Antimony	99.3	100.0	99.3	100.2	100.0	100.0
Arsenic	107.4	100.0	107.0	97.6	100.0	97.6
Barium	97.8	100.0	97.8	98.5	100.0	98.5
Beryllium	99.2	100.0	99.2	100.0	100.0	100.0
Cadmium	94.2	100.0	94.2	94.4	100.0	94.4
Calcium	494,250.0	500,000.0	98.8	494,710.0	500,000.0	99.0
Chromium	94.2	100.0	94.2	93.2	100.0	93.2
Cobalt	93.9	100.0	93.9	93.9	100.0	93.9
Copper	111.9	100.0	112.0	114.0	100.0	114.0
Iron	248,670.0	250,000.0	99.6	249,650.0	250,000.0	100.0
Lead	92.7	100.0	92.7	92.9	100.0	92.9
Magnesium	493,340.0	500,000.0	98.6	499,250.0	500,000.0	99.8
Manganese	98.5	100.0	98.5	99.1	100.0	99.1
Nickel	93.5	100.0	93.5	93.2	100.0	93.2
Potassium	249,580.0	250,000.0	100.0	252,440.0	250,000.0	101.0
Selenium	98.9	100.0	98.9	102.8	100.0	103.0
Silver	10.0	10.0	100.0	9.9	10.0	99.5
Sodium	247,800.0	250,000.0	99.2	250,380.0	250,000.0	100.0
Thallium	93.8	100.0	93.8	98.1	100.0	98.1
Vanadium	96.1	100.0	96.1	96.4	100.0	96.4
Zinc	97.2	100.0	97.2	95.3	100.0	95.3

Batch QC Summary Report

STL Job No.: 94106

Client ID: FLOOR#1W

Units: mg/kg

STL Workgroup: WG50018

	MS			MSD				DUP	
Analyte	Spike Added	Sample Result	% Recovery	Spike Added	Sample Result	% Recovery	RPD	Sample Result	RPD
Aluminum	1,070	3,500	120.6	1,070	3,930	160.7	28.5	1,520	37.0
Antimony	53.7	44.4	82.7	53.7	44.5	82.9	0.2	0.149U	0.0
Arsenic	53.7	48.7	85.6	53.7	47.5	83.4	2.6	3.28	17.9
Barium	53.7	51.0	88.6	53.7	50.6	87.8	0.9	3.46	1.2
Beryllium	53.7	48.3	89.6	53.7	46.6	86.4	3.6	0.141B	29.6
Cadmium	53.7	46.1	85.8	53.7	44.8	83.4	2.8	0.0276U	0.0
Calcium	1,070	1,160	88.3	1,070	1,120	84.6	4.3	189B	12.9
Chromium	53.7	59.9	87.2	53.7	62.3	91.6	4.9	9.16	35.4
Cobalt	53.7	47.1	86.5	53.7	45.9	84.2	2.7	0.426B	42.1
Copper	53.7	48.4	88.2	53.7	47.0	85.5	3.1	1.07B	0.9
Iron	1,070	6,890	108.4	1,070	9,160	320.6	98.9	4,230	30.1
Lead	53.7	47.7	86.3	53.7	46.6	84.3	2.3	1.30	3.8
Magnesium	1,070	1,490	91.2	1,070	1,720	112.7	21.1	286B	57.0
Manganese	53.7	57.3	90.3	53.7	57.0	89.8	0.6	6.15	35.3
Nickel	53.7	47.5	86.0	53.7	46.4	84.0	2.4	0.923B	33.2
Potassium	1,070	2,490	88.8	1,070	3,400	173.8	64.7	760	67.8
Selenium	53.7	46.9	87.3	53.7	45.8	85.3	2.3	0.458U	0.0
Silver	5.37	4.59	85.5	5.37	4.48	83.4	2.5	0.0723U	0.0
Sodium	1,070	961	89.8	1,070	930	86.9	3.3	43.6U	0.0
Thallium	53.7	45.9	84.7	53.7	45.1	83.2	1.8	0.337B	25.4
Vanadium	53.7	57.0	88.2	53.7	58.0	90.1	2.1	8.42	13.4
Zinc	53.7	58.0	88.1	53.7	58.5	89.0	1.0	9.10	16.2

RPD value for MSD compares MS and MSD percent recovery.
RPD value for DUP compares original sample and Dup results.

MS/MSD Limits: 80-120% for all Elements
RPD Limit: 20% for all Elements.

Batch QC Summary Report

STL Job No.: 94106

Client ID: SW-2-1-01

Units: ug/l

STL Workgroup: WG50021

	MS			MSD				DUP	
Analyte	Spike Added	Sample Result	% Recovery	Spike Added	Sample Result	% Recovery	RPD	Sample Result	RPD
Aluminum	10,000	9,260	91.8	10,000	9,860	97.8	6.3	75.6B	1.8
Antimony	500	466	93.2	500	493	98.6	5.6	2.39U	0.0
Arsenic	500	462	92.4	500	492	98.4	6.3	4.18U	0.0
Barium	500	522	92.7	500	565	101.3	8.9	56.5	3.6
Beryllium	500	470	93.9	500	500	99.9	6.2	0.470B	12.0
Cadmium	500	457	91.4	500	482	96.4	5.3	0.190U	0.0
Calcium	10,000	137,900	40.0	10,000	152,800	190.0	130.4	129,900	3.0
Chromium	500	457	91.4	500	483	96.6	5.5	0.540B	200.0
Cobalt	500	455	90.9	500	480	95.9	5.4	0.720B	21.5
Copper	500	466	93.0	500	498	99.4	6.6	1.15B	2.6
Iron	10,000	10,800	94.2	10,000	11,400	100.2	6.2	1,380	0.0
Lead	500	467	93.4	500	489	97.8	4.6	0.957U	0.0
Magnesium	10,000	24,400	82.0	10,000	26,800	106.0	25.5	15,900	1.9
Manganese	500	4,570	50.0	500	5,060	148.0	99.0	4,180	3.3
Nickel	500	457	91.1	500	484	96.5	5.8	1.74B	9.6
Potassium	10,000	12,800	95.2	10,000	13,600	103.2	8.1	3,290B	0.3
Selenium	500	463	92.0	500	491	97.6	5.9	4.49B	43.7
Silver	50.0	46.3	92.6	50.0	49.0	98.0	5.7	0.303U	0.0
Sodium	10,000	24,400	82.0	10,000	26,800	106.0	25.5	15,900	1.9
Thallium	500	459	91.8	500	481	96.2	4.7	2.80U	0.0
Vanadium	500	463	92.6	500	491	98.2	5.9	0.189U	200.0
Zinc	500	471	90.9	500	491	94.9	4.3	16.3B	0.6

RPD value for MSD compares MS and MSD percent recovery.
RPD value for DUP compares original sample and Dup results.

MS/MSD Limits: 80-120% for all Elements
RPD Limit: 20% for all Elements.

Batch QC Summary Report

STL Job No.: 94106

Client ID: SO-11

Units: mg/kg

STL Workgroup: WG60007

	MS			MSD				DUP	
Analyte	Spike Added	Sample Result	% Recovery	Spike Added	Sample Result	% Recovery	RPD	Sample Result	RPD
Mercury	0.185	0.213	115.1	0.185	0.204	110.3	4.2	0.0370U	0.0

RPD value for MSD compares MS and MSD percent recovery.
RPD value for DUP compares original sample and Dup results.

MS/MSD Limits: 80-120% for all Elements
RPD Limit: 20% for all Elements.

Batch QC Summary Report

STL Job No.: 94106

Client ID: H0438

Units: ug/l

STL Workgroup: WG60010

Analyte	MS Spike Added	MS Sample Result	MS % Recovery	MSD Spike Added	MSD Sample Result	MSD % Recovery	MSD RPD	DUP Sample Result	DUP RPD
Mercury	1.000	0.997	99.7	1.000	0.987	98.7	1.0	0.200U	0.0

RPD value for MSD compares MS and MSD percent recovery.
RPD value for DUP compares original sample and Dup results.

MS/MSD Limits: 80-120% for all Elements
RPD Limit: 20% for all Elements.

Metals Analysis Results

Prepared For:
Ogden Environmental

STL Sample No.: 94119001
Matrix: Soil
Percent Solids: 93.1

Units: mg/kg

Client ID: FLOOR#1W
Sample Date: 10/13/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	10/29/99 12:44	**2,210**		1.17	21.5	1.00	WG50018
7440-36-0	Antimony	ICP-TR	10/29/99 12:44	**0.149**	U	0.149	1.07	1.00	WG50018
7440-38-2	Arsenic	ICP-TR	10/29/99 12:44	**2.74**		0.342	0.859	1.00	WG50018
7440-39-3	Barium	ICP-TR	10/29/99 12:44	**3.42**		0.0768	1.07	1.00	WG50018
7440-41-7	Beryllium	ICP-TR	10/29/99 12:44	**0.190**	B	0.0233	0.430	1.00	WG50018
7440-43-9	Cadmium	ICP-TR	10/29/99 12:44	**0.0276**	U	0.0276	0.430	1.00	WG50018
7440-70-2	Calcium	ICP-TR	10/29/99 12:44	**215**	B	7.02	537	1.00	WG50018
7440-47-3	Chromium	ICP-TR	10/29/99 12:44	**13.1**		0.124	2.68	1.00	WG50018
7440-48-4	Cobalt	ICP-TR	10/29/99 12:44	**0.653**	B	0.0376	5.37	1.00	WG50018
7440-50-8	Copper	ICP-TR	10/29/99 12:44	**1.06**	B	0.0479	2.68	1.00	WG50018
7439-89-6	Iron	ICP-TR	10/29/99 12:44	**5,730**		8.70	10.7	1.00	WG50018
7439-92-1	Lead	ICP-TR	10/29/99 12:44	**1.35**		0.131	0.322	1.00	WG50018
7439-95-4	Magnesium	ICP-TR	10/29/99 12:44	**514**	B	1.62	537	1.00	WG50018
7439-96-5	Manganese	ICP-TR	10/29/99 12:44	**8.79**		0.0486	1.61	1.00	WG50018
7440-02-0	Nickel	ICP-TR	10/29/99 12:44	**1.29**		0.0663	1.07	1.00	WG50018
7440-09-7	Potassium	ICP-TR	10/29/99 12:44	**1,540**		5.46	537	1.00	WG50018
7782-49-2	Selenium	ICP-TR	10/29/99 12:44	**0.458**	U	0.458	0.537	1.00	WG50018
7440-22-4	Silver	ICP-TR	10/29/99 12:44	**0.0723**	U	0.0723	1.07	1.00	WG50018
7440-23-5	Sodium	ICP-TR	10/29/99 12:44	**43.6**	U	43.6	537	1.00	WG50018
7440-28-0	Thallium	ICP-TR	10/29/99 12:44	**0.435**	B	0.272	1.07	1.00	WG50018
7440-62-2	Vanadium	ICP-TR	10/29/99 12:44	**9.63**		0.0287	5.37	1.00	WG50018
7440-66-6	Zinc	ICP-TR	10/29/99 12:44	**10.7**		0.889	3.22	1.00	WG50018

All Concentrations,RL's, and MDL's are corrected for Percent Solids

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:
Ogden Environmental

STL Sample No.: 94143011
Matrix: Soil
Percent Solids: 90.0

Units: mg/kg

Client ID: SO-11
Sample Date: 10/14/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7439-97-6	Mercury	CV	11/01/99 13:26	**0.0370**	U	0.0370	0.0370	1.00	WG60007

All Concentrations,RL's, and MDL's are corrected for Percent Solids

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:
Ogden Environmental

STL Sample No.: 94112001
Matrix: Water

Units: ug/l

Client ID: H0438
Sample Date: 10/13/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7439-97-6	Mercury	CV	11/02/99 15:08	**0.200**	U	0.200	0.200	1.00	WG60010

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Post Spike Report

STL Job No.: 94106

STL Sample No.: 94119001 *Client ID: FLOOR#1W*

Units: mg/kg

Batch: WG50018

Analyte	Original Sample Result	Spike Added	Spike Result	% Recovery
Aluminum	2,213.96	1,074.11	3,130.93	86.00
Antimony	0.04U	53.70	53.96	100.60
Arsenic	2.73	53.70	56.12	99.40
Barium	3.42	53.70	56.93	99.60
Beryllium	0.19B	53.70	53.71	99.60
Cadmium	0.00U	53.70	52.80	98.30
Calcium	215.01B	1,074.11	1,257.89	97.70
Chromium	13.08	53.70	65.41	97.40
Cobalt	0.65B	53.70	53.72	98.80
Copper	1.06B	53.70	54.93	100.30
Iron	5,731.14	1,074.11	6,545.97	76.60
Lead	1.34	53.70	54.45	99.00
Magnesium	513.86B	1,074.11	1,537.48	95.90
Manganese	8.78	53.70	61.94	98.90
Nickel	1.29	53.70	53.89	98.00
Potassium	1,536.73	1,074.11	2,592.80	98.10
Selenium	0.00U	53.70	54.81	102.00
Silver	0.00U	5.37	5.29	98.50
Sodium	0.00U	1,074.11	1,080.02	100.90
Thallium	0.43B	53.70	53.76	99.40
Vanadium	9.63	53.70	62.34	98.10
Zinc	10.67	53.70	62.50	96.50

STL Sample No.: 94106006 *Client ID: SW-2-1-01*

Units: ug/l

Batch: WG50021

Analyte	Original Sample Result	Spike Added	Spike Result	% Recovery
Aluminum	77.03B	10,000.00	10,103.00	100.20
Antimony	0.00U	500.00	509.30	101.80
Arsenic	3.75U	500.00	500.08	100.00
Barium	58.60	500.00	566.40	101.50
Beryllium	0.53B	500.00	515.02	102.90
Cadmium	0.00U	500.00	496.02	99.20
Calcium	134,170.00	10,000.00	136,030.00	20.00
Chromium	0.16U	500.00	498.54	99.80
Cobalt	0.58B	500.00	495.40	98.90
Copper	1.18B	500.00	511.34	102.00

Post Spike Report

STL Job No.: 94106

Iron	1,383.90	10,000.00	11,529.00	101.20
Lead	0.00U	500.00	504.72	101.00
Magnesium	16,246.00	10,000.00	25,038.00	88.00
Manganese	4,320.40	500.00	4,540.40	44.00
Nickel	1.58B	500.00	499.23	99.50
Potassium	3,282.20B	10,000.00	13,432.00	101.20
Selenium	2.88B	500.00	506.85	100.80
Silver	0.00U	50.00	50.03	100.00
Sodium	16,243.00	10,000.00	25,079.00	89.00
Thallium	1.17U	500.00	499.22	99.80
Vanadium	0.20B	500.00	504.13	100.80
Zinc	16.39B	500.00	499.82	96.70

Detection Limit Report

STL Job No.: 94106

Protocol: SW846

Matrix: Water
Units: ug/L

Analyte	Wavelength	MDL	RL	Instrument
Aluminum	308.2	9.82	200	ICP-TR
Antimony	206.8	2.39	10.0	ICP-TR
Arsenic	189.0	4.18	8.00	ICP-TR
Barium	493.4	0.631	10.0	ICP-TR
Beryllium	313.0	0.177	4.00	ICP-TR
Cadmium	226.5	0.190	4.00	ICP-TR
Calcium	317.9	33.6	5,000	ICP-TR
Chromium	267.7	0.239	25.0	ICP-TR
Cobalt	228.6	0.347	50.0	ICP-TR
Copper	324.7	0.603	25.0	ICP-TR
Iron	271.4	52.5	100	ICP-TR
Lead	220.3	0.957	3.00	ICP-TR
Magnesium	383.2	11.9	5,000	ICP-TR
Manganese	257.6	0.373	15.0	ICP-TR
Mercury	253.7	0.200	0.200	CV
Nickel	231.6	0.443	10.0	ICP-TR
Potassium	766.4	40.7	5,000	ICP-TR
Selenium	196.0	2.04	5.00	ICP-TR
Silver	328.0	0.303	10.0	ICP-TR
Sodium	330.2	283	5,000	ICP-TR
Thallium	190.8	2.80	10.0	ICP-TR
Vanadium	292.4	0.189	50.0	ICP-TR
Zinc	206.2	8.66	30.0	ICP-TR

Matrix: Soil
Units: ug/L

Analyte	Wavelength	MDL	RL	Instrument
Aluminum	308.2	10.9	200	ICP-TR
Antimony	206.8	1.39	10.0	ICP-TR
Arsenic	189.0	3.18	8.00	ICP-TR
Barium	493.4	0.715	10.0	ICP-TR
Beryllium	313.0	0.217	4.00	ICP-TR
Cadmium	226.5	0.257	4.00	ICP-TR
Calcium	317.9	65.4	5,000	ICP-TR
Chromium	267.7	1.16	25.0	ICP-TR
Cobalt	228.6	0.350	50.0	ICP-TR
Copper	324.7	0.446	25.0	ICP-TR
Iron	271.4	81.0	100	ICP-TR
Lead	220.3	1.22	3.00	ICP-TR
Magnesium	383.2	15.1	5,000	ICP-TR
Manganese	257.6	0.453	15.0	ICP-TR

Detection Limit Report

STL Job No.: 94106

Mercury	253.7	0.200	0.200	CV
Nickel	231.6	0.617	10.0	ICP-TR
Potassium	766.4	50.8	5,000	ICP-TR
Selenium	196.0	4.26	5.00	ICP-TR
Silver	328.0	0.673	10.0	ICP-TR
Sodium	330.2	406	5,000	ICP-TR
Thallium	190.8	2.53	10.0	ICP-TR
Vanadium	292.4	0.267	50.0	ICP-TR
Zinc	206.2	8.28	30.0	ICP-TR

Preparation Log Report

STL Job No.: 94106

Batch: WG50018 **Instrument: ICP-TR** **Digestion Method: 3050B**

STL Sample ID	Client ID	Initial Weight/Volume	Final Volume	Prep Date
94106008	S-2-1-01	1.00 g	100.00 ml	10/27/99
94106009	S-2-1-02	1.00 g	100.00 ml	10/27/99
94119001	FLOOR#1W	1.00 g	100.00 ml	10/27/99
94119001DUP	FLOOR#1W	1.00 g	100.00 ml	10/27/99
94119001MS	FLOOR#1W	1.00 g	100.00 ml	10/27/99
94119001MSD	FLOOR#1W	1.00 g	100.00 ml	10/27/99
PBS			100.00 ml	10/27/99
LCSS			100.00 ml	10/27/99

Preparation Log Report

STL Job No.: 94106

Batch: WG50021 **Instrument: ICP-TR** **Digestion Method: 3010A**

STL Sample ID	Client ID	Initial Weight/Volume	Final Volume	Prep Date
94106006	SW-2-1-01	50.00 ml	50.00 ml	10/28/99
94106006DUP	SW-2-1-01	50.00 ml	50.00 ml	10/28/99
94106006MS	SW-2-1-01	50.00 ml	50.00 ml	10/28/99
94106006MSD	SW-2-1-01	50.00 ml	50.00 ml	10/28/99
94106007	SW-2-1-02	50.00 ml	50.00 ml	10/28/99
PBW			50.00ml	10/28/99
LCSW			50.00ml	10/28/99

Preparation Log Report

STL Job No.: 94106

Batch: WG60007 **Instrument: CV** **Digestion Method: 7471A**

STL Sample ID	Client ID	Initial Weight/Volume	Final Volume	Prep Date
94106008	S-2-1-01	0.60 g	100.00 ml	11/30/99
94106009	S-2-1-02	0.60 g	100.00 ml	11/30/99
94143011	SO-11	0.60 g	100.00 ml	11/30/99
94143011DUP	SO-11	0.60 g	100.00 ml	11/30/99
94143011MS	SO-11	0.60 g	100.00 ml	11/30/99
94143011MSD	SO-11	0.60 g	100.00 ml	11/30/99
PBS			100.00 ml	11/30/99
LCSS			100.00 ml	11/30/99

Preparation Log Report

STL Job No.: 94106

Batch: WG60010 **Instrument: CV** **Digestion Method: 7470A**

STL Sample ID	Client ID	Initial Weight/Volume	Final Volume	Prep Date
94106006	SW-2-1-01	100.00 ml	100.00 ml	12/01/99
94106007	SW-2-1-02	100.00 ml	100.00 ml	12/01/99
94112001	H0438	100.00 ml	100.00 ml	12/01/99
94112001MSD	H0438	100.00 ml	100.00 ml	12/01/99
PBW			100.00ml	12/01/99
LCSW			100.00ml	12/01/99

Run Log Report

000878

STL Job No.: 94106

ICP-TR

AEN Sample No.:	Client ID:	Analyze Date:	Al	Sb	As	Ba	Be	Bd	Ca	Cd	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	Ag	Na	Sn	Tl	Ti	V	Zn
ICV 2C		10/29/99 11:39		X	X	X	X		X		X	X	X		X		X			X		X	X				X	X	X
ICV 3D		10/29/99 11:45	X							X				X		X					X			X					
ICB		10/29/99 11:51	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
ICSA		10/29/99 12:08	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
ICSAB		10/29/99 12:14	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCV		10/29/99 12:20	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCB		10/29/99 12:26	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
PBSWG50018		10/29/99 12:32	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
LCSSWG5001		10/29/99 12:38	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94119001	FLOOR#1W	10/29/99 12:44	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94119001DUP	FLOOR#1W	10/29/99 12:50	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94119001MS	FLOOR#1W	10/29/99 12:56	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94119001MSD	FLOOR#1W	10/29/99 13:02	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94119001L	FLOOR#1W	10/29/99 13:08	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94119001P	FLOOR#1W	10/29/99 13:14	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCV		10/29/99 13:32	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCB		10/29/99 13:38	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94106008	S-2-1-01	10/29/99 14:08	X	X	X	X	X		X	X	X	X	X	X	X	X				X	X	X	X	X			X	X	X
94106009	S-2-1-02	10/29/99 14:14	X	X	X	X	X		X	X	X	X	X	X	X	X				X	X	X	X	X			X	X	X
94106008	S-2-1-01	10/29/99 14:20																X											
94106009	S-2-1-02	10/29/99 14:26																X											
ICSA		10/29/99 14:32	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
ICSAB		10/29/99 14:38	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCV		10/29/99 14:44	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCB		10/29/99 14:50	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X

Run Log Report

STL Job No.: 94106
ICP-TR

AEN Sample No.:	Client ID:	Analyze Date:	Al	Sb	As	Ba	Be	Bd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	Na	Sn	Ti	Tl	V	Zn
ICV 2C		11/01/99 15:06		X	X	X	X		X		X	X	X		X			X			X	X				X	X
ICV 3D		11/01/99 15:12	X							X				X		X							X				
ICB		11/01/99 15:18	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
ICSA		11/01/99 15:36	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
ICSAB		11/01/99 15:42	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
CCV		11/01/99 15:48	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
CCB		11/01/99 15:54	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
CCV		11/01/99 17:00	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
CCB		11/01/99 17:05	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
CCV		11/01/99 17:53	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
CCB		11/01/99 17:59	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
PBWWG5002		11/01/99 18:05	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
LCSWWG500		11/01/99 18:11	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
94106006	SW-2-1-01	11/01/99 18:17	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
94106006DUP	SW-2-1-01	11/01/99 18:23	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
94106006MS	SW-2-1-01	11/01/99 18:29	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
94106006MSD	SW-2-1-01	11/01/99 18:35	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
94106006L	SW-2-1-01	11/01/99 18:41	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
94106006P	SW-2-1-01	11/01/99 18:47	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
94106007	SW-2-1-02	11/01/99 18:53	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
CCV		11/01/99 19:05	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
CCB		11/01/99 19:11	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
CCV		11/01/99 20:16	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
CCB		11/01/99 20:22	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
ICSA		11/01/99 21:10	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
ICSAB		11/01/99 21:16	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
CCV		11/01/99 21:22	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X
CCB		11/01/99 21:28	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X

Run Log Report

STL Job No.: 94106
CV

AEN Sample No.:	Client ID:	Analyze Date:	A l	S b	A s	B a	B e	B	C d	C a	C r	C o	C u	F e	P b	M g	M n	H g	M o	N i	K	S e	A g	N a	S n	T i	T l	V	Z n
Ck2		11/01/99 13:11																|X|											
Ck1		11/01/99 13:13																|X|											
PBSWG60007		11/01/99 13:17																|X|											
LCSSWG6000		11/01/99 13:19																|X|											
94143011	SO-11	11/01/99 13:26																|X|											
94143011DUP	SO-11	11/01/99 13:28																|X|											
94143011MS	SO-11	11/01/99 13:30																|X|											
94143011MSD	SO-11	11/01/99 13:32																|X|											
Ck2		11/01/99 13:36																|X|											
Ck1		11/01/99 13:39																|X|											
94106008	S-2-1-01	11/01/99 13:56																|X|											
94106009	S-2-1-02	11/01/99 13:59																|X|											
Ck2		11/01/99 14:01																|X|											
Ck1		11/01/99 14:03																|X|											

Run Log Report

STL Job No.: 94106

CV

AEN Sample No.:	Client ID:	Analyze Date:	Alb	Sbs	Aae	Bd	Bar	Cou	Cue	Cb	Cgn	Fgo	Pi	Mn	Mg	Hi	Ne	Sga	Ana	Nni	Sil	Tl	Vn	Zn
Ck2		11/02/99 13:57														X								
Ck1		11/02/99 14:00														X								
Ck2		11/02/99 14:23														X								
Ck1		11/02/99 14:26														X								
Ck2		11/02/99 14:48														X								
Ck1		11/02/99 14:51														X								
PBWWG6001		11/02/99 14:56														X								
LCSWWG600		11/02/99 14:58														X								
94106006	SW-2-1-01	11/02/99 15:01														X								
94106007	SW-2-1-02	11/02/99 15:02														X								
94112001	H0438	11/02/99 15:08														X								
94112001DUP	H0438	11/02/99 15:10														X								
Ck2		11/02/99 15:12														X								
Ck1		11/02/99 15:14														X								
94112001MS	H0438	11/02/99 15:16														X								
94112001MSD	H0438	11/02/99 15:19														X								
Ck2		11/02/99 15:37														X								
Ck1		11/02/99 15:39														X								

Paul C 000888 10/29/99

Calibration Report 10/29/99 10:54:11 AM page 1

Method: TAL Standard Name: BLANK-STD1 Operator: pdc
Run Time: 10/29/99 10:50:50
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.0122906	.0039137	-.000740	.0002581	.3753355	.1499887
SDev	.0001630	.0000537	.000179	.0002437	.0008707	.0004475
%RSD	1.325957	1.373312	24.12737	94.42735	.2319746	.2983346
#1	.0123033	.0038994	-.000672	.0001008	.3752857	.1498924
#2	.0121216	.0039732	-.000943	.0005387	.3744907	.1504764
#3	.0124468	.0038686	-.000606	.0001346	.3762300	.1495972
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

✓=CHECKED
U=USE
R= RERUN

Calibration Report 10/29/99 10:58:01 AM page 1

Method: TAL Standard Name: STD3A Operator: pdc
Run Time: 10/29/99 10:54:40
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.0932957	.0780249	.0303258	.0453693	.7599455	.1715592
SDev	.0002116	.0000632	.0000904	.0002158	.0026205	.0004098
%RSD	.2268536	.0810138	.2980512	.4756575	.3448226	.2388874
#1	.0935334	.0779672	.0302808	.0455405	.7570891	.1710918
#2	.0931277	.0780149	.0304299	.0454406	.7605092	.1718574
#3	.0932258	.0780924	.0302668	.0451269	.7622383	.1717282
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 10/29/99 11:02:06 AM page 1

Method: TAL Standard Name: STD3B Operator: pdc
Run Time: 10/29/99 10:58:45
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.8331663	.7512804	.3108612	.4560541	4.159051	.3801266
SDev	.0009873	.0019134	.0002529	.0008372	.014320	.0010956
%RSD	.1185011	.2546791	.0813556	.1835810	.3442974	.2882181
#1	.8320275	.7532361	.3110097	.4552051	4.155505	.3807399
#2	.8337818	.7494124	.3105692	.4560782	4.146837	.3788617
#3	.8336896	.7511928	.3110047	.4568790	4.174810	.3807781
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 10/29/99 11:06:08 AM page 1

Method: TAL Standard Name: STD3C Operator: pdc
Run Time: 10/29/99 11:02:47
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	8.377133	7.462425	3.069407	4.778461	31.84544	2.709758
SDev	.010996	.007941	.001797	.007218	.11792	.004094
%RSD	.1312622	.1064120	.0585598	.1510441	.3703033	.1510730
#1	8.366527	7.469081	3.070348	4.772906	31.70934	2.705793
#2	8.388481	7.464558	3.070539	4.786619	31.91710	2.713969
#3	8.376392	7.453635	3.067334	4.775859	31.90988	2.709512
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 10/29/99 11:10:14 AM

Method: TAL Standard Name: STD3D Operator: pdc
Run Time: 10/29/99 11:06:54
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	39.16904	33.99942	7.210082	24.85166	70.61591	7.312819
SDev	.00695	.05800	.009736	.00594	.05328	.011594
%RSD	.0177387	.1705864	.1350287	.0238836	.0754496	.1585410
#1	39.16137	34.04607	7.217017	24.84688	70.64554	7.308608
#2	39.17086	34.01770	7.214278	24.84979	70.64778	7.303920
#3	39.17490	33.93448	7.198952	24.85830	70.55440	7.325931
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Standardization Rpt. 10/29/99 11:21:15 AM page 1

Method: TAL Standard: STD1-BLANK
Run Time: 10/29/99 11:15:25

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.00086	-.00139	.00043	.00570	.00093	-.00011	-.00010
SDev	.00040	.00085	.00002	.00003	.00029	.00023	.00004
%RSD	46.266	61.349	4.7329	.52338	31.637	199.80	36.775
#1	.00117	-.00228	.00045	.00569	.00125	-.00038	-.00014
#2	.00101	-.00058	.00045	.00574	.00084	.00003	-.00009
#3	.00041	-.00130	.00041	.00568	.00068	.00000	-.00007

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.00117	.00007	-.00083	-.00005	-.00150	.00010	.00051
SDev	.00005	.00005	.00035	.00009	.00044	.00003	.00005
%RSD	4.0759	70.590	41.750	188.95	29.584	33.514	10.428
#1	.00115	.00002	-.00123	-.00003	-.00199	.00010	.00046
#2	.00122	.00012	-.00067	.00003	-.00137	.00014	.00057
#3	.00113	.00009	-.00060	-.00014	-.00113	.00007	.00050

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.01640	.00276	-.00041	.00009	.00310	-.00058	-.00385
SDev	.00005	.00186	.00078	.00005	.00144	.00054	.00082
%RSD	.30590	67.475	192.94	57.367	46.451	92.273	21.193
#1	.01639	.00319	.00050	.00003	.00171	-.00021	-.00381
#2	.01645	.00436	-.00082	.00014	.00299	-.00034	-.00306
#3	.01635	.00072	-.00089	.00010	.00458	-.00120	-.00469

Elem	1960/2
Avge	.00177
SDev	.00048
%RSD	27.233
#1	.00216
#2	.00192
#3	.00123

Standardization Rpt. 10/29/99 11:27:09 AM page 1

Method: TAL Standard: STD2A
Run Time: 10/29/99 11:21:24

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.04198	.02668	.04627	.15340	.34500	.05643	.02087
SDev	.00060	.00060	.00017	.00017	.00049	.00022	.00005
%RSD	1.4316	2.2365	.36161	.10843	.14338	.38804	.23493
#1	.04217	.02704	.04608	.15344	.34551	.05668	.02092
#2	.04131	.02701	.04634	.15322	.34495	.05634	.02085
#3	.04247	.02599	.04640	.15355	.34453	.05627	.02083

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.01889	.04891	.08557	.00526	.01730	.02753	.01485
SDev	.00002	.00002	.00056	.00012	.00067	.00004	.00008
%RSD	.11892	.04452	.65271	2.3540	3.8977	.15392	.55923
#1	.01887	.04893	.08587	.00539	.01736	.02757	.01492
#2	.01889	.04891	.08492	.00514	.01794	.02748	.01476
#3	.01891	.04889	.08590	.00525	.01659	.02753	.01487

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.06268	.11893	.02950	.07636	.09965	.08997	.01222
SDev	.00017	.00157	.00021	.00004	.00115	.00091	.00060
%RSD	.27350	1.3163	.70188	.04762	1.1538	1.0160	4.9443
#1	.06266	.11814	.02972	.07640	.10054	.08901	.01282
#2	.06251	.11792	.02931	.07632	.10005	.09007	.01161
#3	.06286	.12073	.02946	.07637	.09835	.09083	.01223

Elem	1960/2
Avge	.01128
SDev	.00057
%RSD	5.0356
#1	.01166
#2	.01063
#3	.01155

Standardization Rpt. 10/29/99 11:33:04 AM page 1

Method: TAL Standard: STD2B
Run Time: 10/29/99 11:27:19

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.41245	.27226	.46822	1.4901	3.4595	.57029	.21230
SDev	.00069	.00189	.00033	.0021	.0028	.00044	.00032
%RSD	.16840	.69341	.07103	.14139	.08022	.07730	.15025
#1	.41325	.27027	.46843	1.4877	3.4605	.56991	.21193
#2	.41201	.27249	.46784	1.4912	3.4617	.57078	.21245
#3	.41208	.27402	.46840	1.4915	3.4564	.57019	.21252

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.17984	.49377	.86850	.05137	.19027	.27793	.14026
SDev	.00016	.00081	.00213	.00026	.00059	.00011	.00017
%RSD	.09175	.16437	.24533	.50562	.30785	.03875	.12064
#1	.17986	.49289	.87069	.05121	.18968	.27790	.14038
#2	.17966	.49449	.86837	.05167	.19086	.27783	.14006
#3	.17999	.49392	.86643	.05124	.19026	.27804	.14032

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.48663	1.1720	.29885	.77126	.98118	.93009	.15566
SDev	.00167	.0014	.00144	.00054	.00047	.00279	.00057
%RSD	.34234	.11681	.48016	.07003	.04780	.29974	.36598
#1	.48488	1.1707	.29732	.77064	.98166	.92688	.15517
#2	.48820	1.1719	.29907	.77157	.98072	.93149	.15552
#3	.48681	1.1734	.30017	.77157	.98115	.93191	.15628

Elem	1960/2
Avge	.10497
SDev	.00040
%RSD	.38506
#1	.10474
#2	.10544
#3	.10474

Standardization Rpt. 10/29/99 11:38:59 AM page 1

Method: TAL Standard: STD2C
Run Time: 10/29/99 11:33:13

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	4.0644	2.6698	4.5893	13.974	33.095	5.6489	2.0987
SDev	.0074	.0075	.0036	.011	.015	.0036	.0007
%RSD	.18159	.27910	.07867	.07991	.04427	.06302	.03393
#1	4.0660	2.6767	4.5857	13.963	33.079	5.6451	2.0979
#2	4.0709	2.6619	4.5929	13.975	33.108	5.6492	2.0988
#3	4.0564	2.6708	4.5893	13.986	33.098	5.6522	2.0993

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	1.7747	4.7553	8.5605	.51849	1.8857	2.7782	1.3462
SDev	.0018	.0022	.0053	.00066	.0042	.0030	.0012
%RSD	.09980	.04641	.06237	.12759	.22362	.10805	.08721
#1	1.7727	4.7530	8.5544	.51815	1.8811	2.7749	1.3449
#2	1.7755	4.7556	8.5631	.51925	1.8868	2.7790	1.3465
#3	1.7759	4.7574	8.5641	.51806	1.8893	2.7808	1.3472

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	4.7336	11.512	2.9535	7.6481	9.6184	9.1395	1.5581
SDev	.0035	.002	.0019	.0092	.0208	.0168	.0023
%RSD	.07476	.02057	.06489	.11998	.21646	.18422	.14716
#1	4.7336	11.514	2.9524	7.6379	9.5945	9.1204	1.5592
#2	4.7300	11.510	2.9524	7.6508	9.6287	9.1464	1.5597
#3	4.7371	11.511	2.9557	7.6557	9.6322	9.1518	1.5555

Elem	1960/2
Avge	1.0271
SDev	.0006
%RSD	.06107
#1	1.0275
#2	1.0264
#3	1.0274

Analysis Report 10/29/99 11:44:54 AM page 1

Method: TAL Sample Name: icv 2c Operator: tjn
Run Time: 10/29/99 11:39:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04842	9.9316	9.7512	9.8403	10.060	10.073	.02668
SDev	.00177	.0139	.0185	.0155	.022	.038	.00506
%RSD	3.6559	.13999	.18925	.15802	.22244	.37646	18.960
#1	.04696	9.9317	9.7718	9.8525	10.066	10.101	.02369
#2	.05039	9.9455	9.7457	9.8456	10.080	10.087	.03252
#3	.04792	9.9177	9.7361	9.8228	10.036	10.029	.02383

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.015	9.9904	9.9282	9.6321	-.03012	9.8178	9.9164
SDev	.023	.0254	.0039	.0150	.00546	.0219	.0319
%RSD	.23234	.25377	.03937	.15530	18.129	.22310	.32169
#1	10.025	10.008	9.9262	9.6319	-.03327	9.8262	9.9404
#2	10.031	10.002	9.9327	9.6472	-.02382	9.8343	9.9285
#3	9.9881	9.9614	9.9257	9.6172	-.03329	9.7930	9.8802

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09736	.99368	9.9860	10.087	.88332	10.016	10.087
SDev	.00596	.00104	.0256	.030	.02984	.019	.016
%RSD	6.1201	.10520	.25660	.29351	3.3783	.18738	.15601
#1	.09381	.99420	10.007	10.096	.91735	10.021	10.093
#2	.10424	.99437	9.9936	10.112	.87098	10.031	10.098
#3	.09402	.99248	9.9575	10.054	.86162	9.9949	10.069

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.7338	10.026	9.8995	9.9446	10.003	9.9599	9.9990
SDev	.0378	.036	.0220	.0267	.013	.0169	.0302
%RSD	.38804	.36328	.22213	.26799	.12666	.16921	.30243
#1	9.7612	9.9842	9.9169	9.9613	10.008	9.9709	10.025
#2	9.7495	10.045	9.9067	9.9588	10.013	9.9683	10.006
#3	9.6907	10.049	9.8748	9.9139	9.9892	9.9405	9.9658

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	9.8227	10.219
SDev	.0323	.038
%RSD	.32846	.36906
#1	9.7981	10.244
#2	9.8592	10.237
#3	9.8107	10.176

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Method: TAL Sample Name: icv 3d Operator: tjn
Run Time: 10/29/99 11:45:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	495.82	-.00037	.01074	-.00240	.00042	.00394	487.53
SDev	2.21	.00294	.00185	.00001	.00013	.00017	2.36
%RSD	.44491	784.39	17.252	.33156	29.997	4.4531	.48365
#1	494.80	.00040	.00875	-.00240	.00045	.00383	487.37
#2	494.31	-.00362	.01242	-.00239	.00028	.00414	485.26
#3	498.35	.00210	.01104	-.00241	.00052	.00384	489.96

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00065	.00495	.00337	244.74	495.93	.00284	.00578
SDev	.00032	.00038	.00013	1.26	1.99	.00003	.00063
%RSD	48.815	7.6102	3.7581	.51474	.40196	.89969	10.923
#1	.00062	.00537	.00351	244.41	495.12	.00282	.00618
#2	.00035	.00463	.00326	243.68	494.47	.00283	.00505
#3	.00099	.00485	.00334	246.13	498.20	.00287	.00612

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	251.75	-.00049	.00227	-.00639	249.31	.00376	-.00011
SDev	1.15	.00045	.00099	.00806	.91	.00523	.00028
%RSD	.45714	92.098	43.817	126.14	.36436	138.84	257.08
#1	251.46	.00002	.00113	-.00392	248.55	.00920	.00006
#2	250.77	-.00085	.00299	-.01539	249.05	-.00122	-.00043
#3	253.02	-.00064	.00268	.00015	250.31	.00331	.00005

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00948	.00248	.00224	.00687	-.00261	-.00791	.00718
SDev	.00045	.00142	.00222	.00656	.00003	.00329	.00311
%RSD	4.7388	57.155	99.114	95.502	1.3421	41.570	43.249
#1	.00989	.00411	.00299	.00866	-.00257	-.00413	.00360
#2	.00900	.00157	.00400	-.00040	-.00262	-.00946	.00904
#3	.00955	.00175	-.00026	.01236	-.00264	-.01014	.00891

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00399	-.01196
SDev	.00787	.00856
%RSD	197.16	71.533
#1	.00296	-.00775
#2	-.00331	-.02181
#3	.01233	-.00633

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Method: TAL Sample Name: icb Operator: tjn
Run Time: 10/29/99 11:51:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00932	.00196	.00542	.00010	.00038	.00041	.02056
SDev	.00588	.00174	.00356	.00002	.00006	.00004	.00809
%RSD	63.089	88.906	65.682	19.318	16.163	10.484	39.338
#1	.01376	.00388	.00367	.00010	.00045	.00036	.02667
#2	.01157	.00048	.00307	.00009	.00033	.00045	.02363
#3	.00265	.00152	.00952	.00013	.00037	.00041	.01139

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00033	.00025	.00068	.02522	.02514	.00046	.00040
SDev	.00023	.00013	.00038	.00530	.00866	.00014	.00037
%RSD	67.636	51.555	56.018	20.998	34.433	29.583	91.348
#1	.00059	.00038	.00103	.02414	.03084	.00061	.00037
#2	.00020	.00022	.00027	.03097	.02941	.00043	.00079
#3	.00020	.00013	.00073	.02054	.01518	.00034	.00005

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07638	.00009	-.00019	-.00132	-.35095	.00140	.00055
SDev	.00649	.00017	.00057	.00072	.11135	.00123	.00007
%RSD	8.5001	198.04	306.56	54.775	31.727	87.770	12.492
#1	.07827	.00015	.00040	-.00076	-.38538	-.00001	.00063
#2	.06915	-.00011	-.00021	-.00105	-.44102	.00222	.00050
#3	.08172	.00022	-.00075	-.00213	-.22646	.00200	.00053

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00137	.00287	.00039	.00074	.00051	-.00044	-.00022
SDev	.00047	.00075	.00130	.00058	.00016	.00070	.00059
%RSD	34.109	26.075	335.35	78.077	30.675	160.68	274.47
#1	.00134	.00252	-.00023	.00021	.00069	-.00003	.00046
#2	.00092	.00236	-.00049	.00136	.00046	-.00003	-.00046
#3	.00185	.00373	.00188	.00065	.00039	-.00125	-.00065

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00844	-.00655
SDev	.00310	.00049
%RSD	36.735	7.4517
#1	.01112	-.00706
#2	.00916	-.00651
#3	.00505	-.00608

Analysis Report 10/29/99 12:02:48 PM page 1

Method: TAL Sample Name: qcs Operator:
Run Time: 10/29/99 11:57:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.55459	.02423	.02124	.02182	.02214	.02261	.21144
SDev	.00334	.00274	.00051	.00011	.00000	.00013	.00113
%RSD	.60181	11.295	2.3966	.51757	.01111	.58384	.53572
#1	.55518	.02634	.02140	.02191	.02214	.02276	.21196
#2	.55759	.02521	.02067	.02186	.02214	.02255	.21222
#3	.55099	.02114	.02165	.02170	.02214	.02252	.21014

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02163	.02124	.02230	.55473	.22312	.02139	.02192
SDev	.00061	.00007	.00015	.00265	.00720	.00003	.00063
%RSD	2.8444	.34442	.65577	.47785	3.2290	.11877	2.8838
#1	.02234	.02123	.02216	.55601	.21594	.02141	.02123
#2	.02128	.02117	.02229	.55650	.23035	.02136	.02246
#3	.02127	.02131	.02246	.55168	.22308	.02138	.02207

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0529	.02179	.02064	.02207	.96600	.02131	.02156
SDev	.0022	.00015	.00055	.00536	.02059	.00325	.00008
%RSD	.20544	.67213	2.6838	24.302	2.1316	15.258	.37927
#1	1.0547	.02168	.02058	.01597	.94362	.02178	.02151
#2	1.0534	.02196	.02121	.02602	.98414	.01784	.02165
#3	1.0505	.02175	.02011	.02423	.97026	.02429	.02151

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02395	.03729	.02243	.02515	.02183	.02100	.02030
SDev	.00020	.00038	.00156	.00027	.00003	.00122	.00070
%RSD	.83190	1.0120	6.9582	1.0649	.15296	5.8129	3.4543
#1	.02406	.03700	.02365	.02493	.02180	.01978	.02084
#2	.02372	.03772	.02297	.02507	.02186	.02222	.02056
#3	.02407	.03716	.02067	.02545	.02185	.02101	.01951

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.02858	.01847
SDev	.00843	.00495
%RSD	29.481	26.802
#1	.01953	.01383
#2	.03001	.02368
#3	.03620	.01789

Analysis Report 10/29/99 12:08:46 PM page 1

Method: TAL Sample Name: qcs 600 Operator:
Run Time: 10/29/99 12:03:00
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0418	1.0144	.99426	.99548	1.0651	1.0145	10.021
SDev	.0043	.0026	.00135	.00210	.0023	.0019	.035
%RSD	.40832	.25625	.13531	.21128	.21983	.18347	.34999
#1	1.0447	1.0119	.99581	.99789	1.0638	1.0132	9.9982
#2	1.0438	1.0141	.99352	.99450	1.0678	1.0166	10.062
#3	1.0369	1.0171	.99344	.99404	1.0636	1.0136	10.004

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0207	.99384	1.0332	1.0515	9.9080	1.0031	1.0147
SDev	.0029	.00312	.0029	.0056	.0265	.0021	.0014
%RSD	.28150	.31418	.27895	.52850	.26730	.20840	.14254
#1	1.0190	.99129	1.0365	1.0472	9.9377	1.0023	1.0134
#2	1.0240	.99732	1.0318	1.0578	9.8996	1.0055	1.0162
#3	1.0192	.99291	1.0313	1.0495	9.8868	1.0015	1.0144

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.8361	1.1068	1.0261	1.0038	10.215	1.0015	1.0091
SDev	.0331	.0018	.0016	.0042	.014	.0033	.0018
%RSD	.33676	.16405	.16033	.41397	.13289	.32575	.17559
#1	9.8068	1.1082	1.0278	1.0034	10.227	.99841	1.0083
#2	9.8720	1.1074	1.0246	.99989	10.217	1.0049	1.0111
#3	9.8294	1.1048	1.0259	1.0082	10.200	1.0013	1.0078

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0228	1.0569	1.0220	1.1205	1.0349	1.0271	1.0255
SDev	.0053	.0026	.0007	.0037	.0016	.0032	.0023
%RSD	.51471	.24666	.06860	.33121	.15632	.31200	.22611
#1	1.0195	1.0589	1.0212	1.1169	1.0353	1.0272	1.0281
#2	1.0289	1.0539	1.0223	1.1204	1.0362	1.0238	1.0248
#3	1.0200	1.0579	1.0226	1.1243	1.0331	1.0302	1.0236

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.98347	1.0136
SDev	.00604	.0042
%RSD	.61362	.41068
#1	.97894	1.0153
#2	.98115	1.0089
#3	.99032	1.0167

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Method: TAL Sample Name: icsa Operator:
Run Time: 10/29/99 12:08:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	492.72	-.00488	.00116	-.00323	-.00066	.00304	489.90
SDev	1.30	.00350	.00394	.00003	.00003	.00027	2.29
%RSD	.26437	71.709	339.82	.95779	3.9900	8.7769	.46646
#1	493.54	-.00514	.00104	-.00320	-.00065	.00331	490.67
#2	493.41	-.00126	-.00272	-.00322	-.00064	.00304	491.70
#3	491.22	-.00824	.00516	-.00326	-.00069	.00277	487.33

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00079	.00371	.00339	247.27	493.59	.00196	.00479
SDev	.00010	.00023	.00020	1.03	.96	.00014	.00022
%RSD	13.035	6.1791	5.9285	.41568	.19547	7.3142	4.5229
#1	-.00067	.00392	.00352	247.79	494.22	.00211	.00466
#2	-.00083	.00346	.00350	247.93	494.07	.00195	.00504
#3	-.00086	.00374	.00316	246.08	492.48	.00183	.00466

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	249.61	-.00051	-.00031	.00655	247.11	.00709	-.00076
SDev	.51	.00045	.00243	.01444	.35	.00265	.00009
%RSD	.20469	86.648	780.86	220.58	.14344	37.443	12.064
#1	250.18	-.00066	-.00274	-.00876	247.50	.00403	-.00073
#2	249.44	-.00087	.00212	H.01992	247.00	.00860	-.00069
#3	249.20	-.00001	-.00031	.00848	246.82	.00864	-.00087

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01002	-.00378	-.00387	.00490	-.00379	-.00585	.00229
SDev	.00031	.00098	.00479	.00162	.00006	.00436	.00274
%RSD	3.0797	25.774	123.55	33.122	1.5680	74.534	119.59
#1	.01015	-.00277	-.00938	.00588	-.00376	-.00685	-.00085
#2	.01024	-.00387	-.00149	.00303	-.00385	-.00107	.00355
#3	.00967	-.00471	-.00075	.00579	-.00375	-.00961	.00416

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01940	-.00026
SDev	.01203	.01566
%RSD	62.019	6041.1
#1	.00631	-.01667
#2	.02998	.01452
#3	.02192	.00138

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Method: TAL Sample Name: icsab Operator:
Run Time: 10/29/99 12:14:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	495.70	.09930	.10741	.09781	.09918	.09418	494.25
SDev	.99	.00333	.00674	.00099	.00013	.00040	.08
%RSD	.20027	3.3586	6.2790	1.0157	.12715	.42899	.01584
#1	496.85	.09987	.10150	.09896	.09926	.09452	494.17
#2	495.14	.10232	.10597	.09721	.09925	.09430	494.32
#3	495.11	.09572	.11475	.09726	.09904	.09374	494.27

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09424	.09387	.11191	248.67	493.34	.09851	.09352
SDev	.00019	.00050	.00013	.13	.95	.00006	.00038
%RSD	.20303	.53744	.11268	.05377	.19240	.06147	.40342
#1	.09438	.09334	.11202	248.75	494.41	.09847	.09346
#2	.09402	.09393	.11177	248.51	493.01	.09858	.09318
#3	.09432	.09434	.11194	248.74	492.59	.09848	.09393

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	249.58	.01004	.09269	.09888	247.80	.09376	.09608
SDev	.66	.00038	.00205	.01641	.46	.00226	.00026
%RSD	.26609	3.7876	2.2144	16.600	.18583	2.4143	.27348
#1	250.05	.01027	.09494	.08095	248.33	.09575	.09578
#2	249.87	.01025	.09091	.11315	247.50	.09422	.09620
#3	248.82	.00960	.09222	.10254	247.56	.09129	.09626

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09724	.09827	.09468	.10213	.09621	.08794	.09489
SDev	.00037	.00019	.00252	.00396	.00024	.00339	.00191
%RSD	.37600	.19303	2.6600	3.8762	.25304	3.8573	2.0149
#1	.09760	.09844	.09504	.09789	.09646	.09034	.09706
#2	.09687	.09807	.09200	.10573	.09598	.08406	.09417
#3	.09725	.09832	.09700	.10277	.09619	.08942	.09345

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.09828	.09879
SDev	.00749	.02478
%RSD	7.6198	25.080
#1	.10082	.07063
#2	.10416	.11725
#3	.08985	.10849

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Method: TAL Sample Name: ccv Operator:
Run Time: 10/29/99 12:20:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.304	4.9876	4.8564	4.7419	4.8277	4.7635	48.384
SDev	1.514	.1840	.1791	.1498	.1649	.1716	1.706
%RSD	3.1335	3.6884	3.6871	3.1592	3.4151	3.6030	3.5257
#1	49.412	5.1305	4.9957	4.8465	4.9635	4.9092	49.846
#2	46.579	4.7801	4.6544	4.5703	4.6443	4.5743	46.510
#3	48.920	5.0523	4.9190	4.8089	4.8754	4.8069	48.796

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.8184	4.7236	4.9104	46.356	47.574	4.8168	4.8170
SDev	.1709	.1684	.1506	1.638	1.495	.1676	.1759
%RSD	3.5459	3.5652	3.0664	3.5329	3.1434	3.4793	3.6511
#1	4.9630	4.8637	5.0127	47.718	48.650	4.9541	4.9607
#2	4.6299	4.5367	4.7375	L44.539	45.867	4.6300	4.6209
#3	4.8624	4.7703	4.9810	46.811	48.206	4.8662	4.8694

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	53.256	.49630	4.9448	5.1328	48.283	4.7951	4.7797
SDev	1.690	.01706	.1388	.1325	1.429	.1640	.1676
%RSD	3.1727	3.4378	2.8073	2.5814	2.9587	3.4205	3.5057
#1	54.346	.50949	5.0651	5.2189	49.340	4.9255	4.9144
#2	51.310	.47703	4.7929	4.9802	46.658	4.6110	4.5920
#3	54.114	.50238	4.9764	5.1993	48.852	4.8488	4.8327

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.8585	5.2547	4.8051	5.0049	4.9398	4.9463	4.9439
SDev	.1827	.1701	.1721	.1924	.1659	.1350	.1408
%RSD	3.7604	3.2380	3.5813	3.8451	3.3581	2.7285	2.8474
#1	5.0210	5.3773	4.9420	5.1680	5.0691	5.0604	5.0672
#2	4.6608	5.0605	4.6119	4.7926	4.7528	4.7973	4.7905
#3	4.8936	5.3264	4.8613	5.0539	4.9976	4.9811	4.9739

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	4.9980	5.1998
SDev	.1298	.1338
%RSD	2.5979	2.5739
#1	5.0797	5.2880
#2	4.8483	5.0458
#3	5.0660	5.2655

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Method: TAL Sample Name: ccb Operator:
Run Time: 10/29/99 12:26:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01781	.00202	.00242	-.00003	.00029	.00043	-.00044
SDev	.00332	.00141	.00249	.00004	.00005	.00011	.00151
%RSD	18.634	69.764	102.68	148.00	17.710	25.470	344.91
#1	-.01419	.00327	.00083	.00002	.00031	.00032	.00111
#2	-.01853	.00231	.00529	-.00005	.00032	.00054	-.00052
#3	-.02071	.00049	.00115	-.00005	.00023	.00043	-.00191

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00026	.00025	.00082	.01239	-.00024	.00040	.00054
SDev	.00024	.00005	.00016	.00568	.00430	.00003	.00025
%RSD	89.979	18.579	19.070	45.817	1810.7	8.7401	45.924
#1	.00035	.00022	.00099	.00587	.00308	.00040	.00081
#2	.00044	.00030	.00078	.01508	.00130	.00043	.00032
#3	-.00001	.00022	.00068	.01623	-.00509	.00036	.00049

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07828	.00009	-.00016	.00034	-.22725	.00387	.00025
SDev	.01179	.00006	.00045	.00111	.05239	.00251	.00012
%RSD	15.056	75.972	285.13	325.48	23.055	64.830	48.454
#1	.09037	.00002	.00008	-.00030	-.17048	.00667	.00025
#2	.07764	.00009	-.00068	.00162	-.23754	.00184	.00038
#3	.06682	.00015	.00012	-.00030	-.27374	.00309	.00013

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00110	.00416	.00304	.00033	.00071	-.00172	.00047
SDev	.00018	.00090	.00191	.00128	.00018	.00287	.00089
%RSD	16.839	21.569	62.989	382.61	25.235	166.52	188.62
#1	.00106	.00514	.00476	.00164	.00081	-.00172	.00083
#2	.00130	.00396	.00337	.00028	.00081	-.00459	.00112
#3	.00093	.00338	.00098	-.00092	.00050	.00115	-.00054

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00852	-.00410
SDev	.00295	.00116
%RSD	34.667	28.202
#1	.00927	-.00543
#2	.01102	-.00343
#3	.00526	-.00343

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Method: TAL Sample Name: pbswg Operator:
Run Time: 10/29/99 12:32:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02745	.00086	.00274	-.00005	.00005	.00019	-.00838
SDev	.00408	.00125	.00239	.00000	.00002	.00011	.00123
%RSD	14.861	145.11	87.463	1.1019	31.449	57.804	14.646
#1	-.02400	.00025	.00405	-.00005	.00007	.00031	-.00787
#2	-.02640	.00230	.00418	-.00005	.00004	.00019	-.00749
#3	-.03196	.00004	-.00003	-.00005	.00004	.00008	-.00978

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00015	.00012	.00078	.00439	-.00794	.00013	-.00011
SDev	.00023	.00018	.00019	.00069	.00044	.00002	.00024
%RSD	146.94	158.88	24.195	15.804	5.5760	15.491	209.63
#1	.00041	.00022	.00079	.00359	-.00819	.00015	-.00027
#2	.00005	-.00010	.00097	.00480	-.00743	.00012	-.00023
#3	-.00001	.00022	.00059	.00477	-.00820	.00012	.00016

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05483	.00009	-.00102	-.00088	-.15945	.00291	.00037
SDev	.00350	.00000	.00071	.00163	.00881	.00164	.00032
%RSD	6.3772	.00157	69.018	184.63	5.5238	56.343	87.074
#1	.05629	.00009	-.00073	.00085	-.15531	.00470	.00062
#2	.05084	.00009	-.00051	-.00239	-.15347	.00256	.00049
#3	.05736	.00009	-.00183	-.00111	-.16956	.00148	.00000

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00082	.00217	.00040	-.00078	.00028	-.00244	-.00047
SDev	.00024	.00039	.00064	.00260	.00012	.00236	.00072
%RSD	29.678	18.102	161.45	332.05	41.387	96.714	154.13
#1	.00082	.00249	-.00033	.00164	.00033	-.00319	.00035
#2	.00106	.00229	.00066	-.00046	.00037	.00020	-.00102
#3	.00057	.00173	.00086	-.00353	.00015	-.00434	-.00073

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00419	-.00377
SDev	.00383	.00059
%RSD	91.410	15.753
#1	.00801	-.00308
#2	.00036	-.00412
#3	.00419	-.00411

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Method: TAL Sample Name: lcsswg Operator:
Run Time: 10/29/99 12:38:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.9537	.49759	.48939	.50015	.49978	.48522	9.6461
SDev	.3910	.01741	.01948	.02074	.01992	.01989	.3687
%RSD	3.9286	3.4997	3.9796	4.1463	3.9856	4.0985	3.8221
#1	9.7403	.48791	.47756	.48870	.48828	.47463	9.4275
#2	9.7158	.48717	.47873	.48766	.48828	.47287	9.4391
#3	10.405	.51769	.51187	.52408	.52278	.50816	10.072

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48678	.48637	.50100	10.117	9.7932	.49363	.48363
SDev	.01981	.02086	.02088	.397	.3917	.01976	.01926
%RSD	4.0706	4.2888	4.1686	3.9234	4.0001	4.0020	3.9816
#1	.47536	.47459	.48990	9.8985	9.5819	.48241	.47278
#2	.47532	.47407	.48800	9.8772	9.5525	.48205	.47225
#3	.50966	.51046	.52509	10.575	10.245	.51644	.50587

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.308	.04889	.48579	.50017	9.7187	.48420	.49238
SDev	.397	.00196	.01216	.01389	.5246	.02503	.01949
%RSD	3.8515	4.0045	2.5039	2.7773	5.3979	5.1696	3.9591
#1	10.065	.04771	.47897	.49709	9.3815	.46698	.48119
#2	10.092	.04780	.47856	.48808	9.4515	.47270	.48106
#3	10.766	.05115	.49983	.51535	10.323	.51292	.51489

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49239	.49363	.48845	.50187	.49864	.48810	.48447
SDev	.01894	.02156	.01899	.02382	.02054	.01475	.01087
%RSD	3.8461	4.3669	3.8874	4.7473	4.1183	3.0225	2.2440
#1	.48145	.48011	.47725	.48606	.48656	.47938	.47861
#2	.48147	.48230	.47773	.49028	.48700	.47978	.47779
#3	.51426	.51849	.51038	.52928	.52235	.50513	.49702

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.49721	.50128
SDev	.00786	.01689
%RSD	1.5802	3.3699
#1	.49539	.49759
#2	.49043	.48655
#3	.50582	.51972

Analysis Report 10/29/99 12:50:29 PM page 1

Method: TAL Sample Name: 94119001 Operator:
Run Time: 10/29/99 12:44:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.612	.00045	.02549	.03188	.00177	-.00004	2.0018
SDev	.166	.00068	.00265	.00032	.00004	.00012	.0171
%RSD	.80419	151.33	10.416	1.0194	2.4748	297.55	.85603
#1	20.520	.00038	.02471	.03164	.00176	-.00016	1.9887
#2	20.803	.00116	.02332	.03225	.00182	.00007	2.0212
#3	20.512	-.00020	.02845	.03175	.00174	-.00003	1.9955

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12183	.00608	.00990	53.357	4.7841	.08179	.01201
SDev	.00098	.00042	.00024	.466	.0295	.00076	.00019
%RSD	.80548	6.8707	2.4209	.87425	.61658	.92700	1.5883
#1	.12145	.00624	.01015	53.019	4.7718	.08131	.01221
#2	.12295	.00639	.00967	53.889	4.8178	.08266	.01200
#3	.12110	.00560	.00988	53.162	4.7628	.08140	.01183

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.307	-.00040	.01254	-.00288	-.18336	.00405	.08969
SDev	.115	.00035	.00054	.00514	.06786	.00345	.00063
%RSD	.80322	86.741	4.3259	178.71	37.008	85.362	.70115
#1	14.255	-.00020	.01215	L-.00838	-.21582	.00442	.08906
#2	14.439	-.00080	.01232	.00181	-.10537	.00042	.09032
#3	14.227	-.00020	.01316	-.00206	-.22889	.00730	.08968

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09939	.11952	.00176	.01437	.52349	.01121	.01306
SDev	.00172	.00164	.00127	.00250	.00456	.00209	.00051
%RSD	1.7285	1.3759	72.450	17.403	.87122	18.679	3.8803
#1	.09939	.11769	.00247	.01558	.52045	.00898	.01358
#2	.10111	.12086	.00251	.01604	.52873	.01153	.01257
#3	.09767	.12002	.00029	.01150	.52128	.01313	.01303

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00300	-.00617
SDev	.00471	.00632
%RSD	156.92	102.36
#1	-.00196	-.01194
#2	.00355	.00058
#3	.00741	-.00715

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Method: TAL Sample Name: 94119001dup Operator:
Run Time: 10/29/99 12:50:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.138	.00082	.03057	.03224	.00131	.00009	1.7626
SDev	.022	.00179	.00248	.00013	.00001	.00013	.0021
%RSD	.15520	219.89	8.0984	.40471	1.0834	140.42	.11679
#1	14.121	.00091	.02980	.03211	.00131	-.00001	1.7638
#2	14.131	-.00102	.03334	.03225	.00132	.00006	1.7602
#3	14.163	.00256	.02857	.03237	.00129	.00024	1.7638

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08530	.00397	.00999	39.377	2.6605	.05725	.00859
SDev	.00026	.00017	.00008	.045	.0070	.00007	.00030
%RSD	.30244	4.3795	.77895	.11531	.26413	.12424	3.5485
#1	.08502	.00379	.00998	39.391	2.6537	.05721	.00876
#2	.08535	.00396	.00992	39.327	2.6600	.05719	.00824
#3	.08552	.00414	.01008	39.414	2.6677	.05733	.00878

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.0714	-.00071	.01213	-.00190	-.12967	.00314	.07839
SDev	.0282	.00052	.00074	.00189	.05912	.00552	.00040
%RSD	.39835	72.764	6.0762	99.692	45.594	175.82	.51261
#1	7.0498	-.00111	.01217	-.00371	-.16073	.00887	.07855
#2	7.0611	-.00091	.01138	.00007	-.16679	-.00214	.07793
#3	7.1032	-.00012	.01285	-.00205	-.06149	.00269	.07868

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08474	.05943	.00317	.01184	.35332	.00957	.01329
SDev	.00016	.00020	.00010	.00143	.00034	.00125	.00124
%RSD	.19425	.33243	3.0775	12.080	.09547	13.036	9.3181
#1	.08455	.05946	.00306	.01225	.35348	.01101	.01260
#2	.08486	.05961	.00324	.01302	.35293	.00891	.01255
#3	.08480	.05921	.00320	.01025	.35355	.00879	.01472

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00655	-.00647
SDev	.00459	.00353
%RSD	70.058	54.459
#1	.00330	-.00757
#2	.00455	-.00253
#3	.01181	-.00933

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Method: TAL Sample Name: 94119001ms Operator:
Run Time: 10/29/99 12:56:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	32.588	.41373	.45370	.47492	.44926	.42957	10.806
SDev	.052	.00248	.00553	.00130	.00111	.00134	.022
%RSD	.15811	.59940	1.2186	.27313	.24724	.31265	.20059
#1	32.578	.41521	.44821	.47399	.44877	.42841	10.806
#2	32.543	.41087	.45361	.47437	.44848	.42926	10.785
#3	32.644	.41511	.45926	.47641	.45053	.43104	10.828

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.55780	.43804	.45077	64.167	13.842	.53344	.44195
SDev	.00151	.00068	.00038	.164	.026	.00125	.00210
%RSD	.27085	.15553	.08505	.25514	.19089	.23430	.47409
#1	.55767	.43750	.45040	64.116	13.838	.53308	.44178
#2	.55636	.43781	.45117	64.035	13.818	.53241	.43995
#3	.55937	.43880	.45075	64.351	13.870	.53483	.44413

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.215	.04277	.44391	.43670	8.9486	.42694	.53042
SDev	.131	.00045	.00105	.00564	.0245	.00246	.00159
%RSD	.56479	1.0543	.23654	1.2906	.27326	.57599	.29933
#1	23.093	.04283	.44276	.43740	8.9219	.42528	.52962
#2	23.198	.04230	.44482	.44195	8.9540	.42578	.52939
#3	23.354	.04320	.44415	.43075	8.9698	.42977	.53224

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.54038	.55889	.41611	.44480	.95461	.44428	.44358
SDev	.00130	.00136	.00319	.00378	.00260	.00198	.00075
%RSD	.24014	.24344	.76728	.84951	.27222	.44582	.16883
#1	.54177	.55896	.41759	.44367	.95361	.44254	.44273
#2	.53919	.55750	.41244	.44902	.95266	.44643	.44387
#3	.54017	.56022	.41829	.44172	.95756	.44388	.44414

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.43713	.43614
SDev	.00348	.00842
%RSD	.79707	1.9315
#1	.43320	.43914
#2	.43987	.44264
#3	.43831	.42662

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Method: TAL Sample Name: 94119001msd Operator:
Run Time: 10/29/99 13:02:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	36.594	.41440	.44228	.47067	.43429	.41733	10.449
SDev	.028	.00105	.00417	.00046	.00016	.00091	.010
%RSD	.07675	.25263	.94174	.09835	.03654	.21764	.09905
#1	36.609	.41385	.44328	.47076	.43447	.41652	10.457
#2	36.611	.41374	.44584	.47108	.43421	.41831	10.437
#3	36.561	.41561	.43770	.47017	.43418	.41717	10.454

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.58042	.42707	.43756	85.280	15.996	.53091	.43192
SDev	.00072	.00053	.00029	.032	.011	.00046	.00142
%RSD	.12434	.12320	.06599	.03749	.07122	.08657	.32885
#1	.58118	.42760	.43738	85.316	16.005	.53144	.43344
#2	.58033	.42654	.43789	85.255	15.983	.53071	.43063
#3	.57975	.42708	.43741	85.268	15.999	.53058	.43168

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31.609	.04173	.43421	.42679	8.6618	.41996	.53977
SDev	.061	.00019	.00028	.00600	.0160	.00725	.00055
%RSD	.19159	.44979	.06509	1.4056	.18484	1.7257	.10093
#1	31.559	.04161	.43391	.42120	8.6451	.42833	.54029
#2	31.592	.04164	.43425	.43313	8.6632	.41573	.53920
#3	31.677	.04195	.43448	.42602	8.6770	.41582	.53982

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.54498	.63138	.40857	.43440	1.0877	.43281	.43476
SDev	.00015	.00079	.00337	.00515	.0011	.00046	.00038
%RSD	.02660	.12490	.82379	1.1863	.09768	.10552	.08727
#1	.54483	.63218	.40704	.43753	1.0889	.43278	.43433
#2	.54512	.63060	.40624	.42845	1.0869	.43236	.43504
#3	.54499	.63137	.41243	.43721	1.0872	.43328	.43493

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.41920	.43022
SDev	.00816	.00627
%RSD	1.9473	1.4574
#1	.40978	.42655
#2	.42375	.43746
#3	.42408	.42664

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Method: TAL Sample Name: 941190011 Operator:
Run Time: 10/29/99 13:08:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.2601	-.00037	.00955	.00665	.00038	.00014	.41834
SDev	.0222	.00034	.00364	.00028	.00009	.00029	.01008
%RSD	.52165	92.692	38.157	4.1614	23.589	211.44	2.4100
#1	4.2501	.00001	.00593	.00655	.00035	-.00015	.41256
#2	4.2446	-.00048	.00951	.00643	.00031	.00012	.41248
#3	4.2855	-.00065	.01322	.00696	.00048	.00044	.42999

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02458	.00117	.00225	10.763	1.0116	.01667	.00223
SDev	.00019	.00021	.00172	.022	.0425	.00016	.00016
%RSD	.77884	17.554	76.433	.20901	4.1974	.97512	7.0203
#1	.02442	.00114	.00120	10.737	.98918	.01654	.00239
#2	.02452	.00098	.00131	10.774	.98498	.01662	.00222
#3	.02479	.00139	.00423	10.777	1.0605	.01685	.00208

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.5799	-.00019	.00189	.00026	-.23218	.00356	.01830
SDev	.0030	.00038	.00049	.00361	.02108	.00438	.00029
%RSD	.11591	198.69	26.126	1367.4	9.0775	123.03	1.5967
#1	2.5765	-.00063	.00222	.00285	-.25617	.00816	.01796
#2	2.5822	.00003	.00212	.00180	-.21660	-.00055	.01851
#3	2.5811	.00003	.00132	-.00386	-.22379	.00307	.01841

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02654	.02429	.00139	.00381	.10561	.00079	.00228
SDev	.00056	.00036	.00082	.00129	.00020	.00100	.00036
%RSD	2.1075	1.4846	59.567	33.861	.18886	125.64	15.758
#1	.02680	.02445	.00116	.00509	.10547	.00101	.00268
#2	.02590	.02454	.00070	.00384	.10554	.00166	.00219
#3	.02692	.02388	.00230	.00251	.10584	-.00029	.00197

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01037	-.00514
SDev	.00546	.00340
%RSD	52.642	66.191
#1	.01112	-.00164
#2	.01541	-.00536
#3	.00457	-.00843

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Method: TAL Sample Name: 94119001p Operator:
Run Time: 10/29/99 13:14:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	29.149	.50242	.52256	.53010	.50007	.49164	11.711
SDev	.033	.00278	.00577	.00097	.00245	.00249	.058
%RSD	.11487	.55358	1.1035	.18197	.49048	.50690	.49927
#1	29.162	.50448	.52921	.52908	.50105	.49271	11.737
#2	29.174	.50352	.51887	.53100	.50188	.49343	11.753
#3	29.111	.49926	.51961	.53021	.49728	.48879	11.644

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.60903	.50016	.51143	60.943	14.314	.57671	.50175
SDev	.00258	.00237	.00062	.230	.040	.00207	.00145
%RSD	.42393	.47435	.12101	.37685	.28249	.35823	.28945
#1	.61064	.50201	.51080	61.058	14.309	.57734	.50095
#2	.61039	.50099	.51204	61.092	14.357	.57840	.50343
#3	.60605	.49748	.51145	60.678	14.276	.57441	.50088

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.139	.04929	.50698	.51036	10.055	.50053	.58042
SDev	.039	.00015	.00033	.00572	.029	.00731	.00237
%RSD	.16209	.30548	.06509	1.1207	.28352	1.4598	.40849
#1	24.096	.04912	.50730	.51392	10.025	.50491	.58128
#2	24.174	.04937	.50664	.50376	10.082	.50458	.58224
#3	24.146	.04939	.50700	.51339	10.056	.49210	.57774

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.58195	.61132	.49180	.51036	.99097	.50559	.50752
SDev	.00180	.00184	.00410	.01169	.00278	.00094	.00025
%RSD	.30915	.30035	.83330	2.2900	.28009	.18520	.04992
#1	.58247	.61106	.49566	.52292	.99146	.50667	.50746
#2	.58342	.61326	.49224	.50836	.99348	.50501	.50730
#3	.57994	.60962	.48750	.49980	.98799	.50509	.50780

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.50138	.51449
SDev	.01195	.00526
%RSD	2.3842	1.0222
#1	.51435	.51336
#2	.49079	.50988
#3	.49902	.52022

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Method: TAL Sample Name: 94058001 Operator:
Run Time: 10/29/99 13:20:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	73.706	.15062	.13862	.94746	.00001	.01167	49.713
SDev	.203	.00064	.00461	.00396	.00005	.00016	.080
%RSD	.27509	.42804	3.3251	.41744	386.66	1.3913	.16062
#1	73.864	.15098	.14138	.95043	.00006	.01185	49.725
#2	73.778	.14988	.13330	.94899	.00000	.01154	49.628
#3	73.478	.15101	.14117	.94297	-.00003	.01161	49.786

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.36289	.10396	4.7415	129.87	2.8374	2.9297	.21715
SDev	.00079	.00021	.0154	.21	.0017	.0035	.00061
%RSD	.21671	.20457	.32430	.15823	.05971	.12049	.28011
#1	.36379	.10418	4.7497	130.10	2.8359	2.9332	.21685
#2	.36234	.10375	4.7510	129.71	2.8370	2.9262	.21674
#3	.36253	.10396	4.7237	129.79	2.8392	2.9297	.21785

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.3607	.00354	3.5718	.00726	6.7437	.01055	.13446
SDev	.0034	.00040	.0111	.00418	.0166	.00191	.00022
%RSD	.10257	11.211	.31174	57.512	.24653	18.065	.16566
#1	3.3590	.00341	3.5847	.00989	6.7334	.00859	.13470
#2	3.3585	.00322	3.5651	.00245	6.7628	.01240	.13426
#3	3.3647	.00398	3.5657	.00945	6.7348	.01066	.13443

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.4693	.03406	.01823	.10512	1.1064	3.5728	3.5712
SDev	.0147	.00019	.00038	.00319	.0025	.0018	.0170
%RSD	.26966	.57286	2.1110	3.0351	.22850	.04995	.47562
#1	5.4792	.03419	.01778	.10868	1.1090	3.5720	3.5908
#2	5.4523	.03384	.01847	.10252	1.1063	3.5715	3.5618
#3	5.4763	.03417	.01842	.10415	1.1039	3.5748	3.5611

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01573	.00269
SDev	.00052	.00622
%RSD	3.3034	231.78
#1	.01628	.00635
#2	.01566	-.00450
#3	.01524	.00621

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Method: TAL Sample Name: 94058002 Operator:
Run Time: 10/29/99 13:26:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.9917	.00159	.01942	.06042	.00039	.00061	1.8585
SDev	.1996	.00072	.00118	.00107	.00005	.00013	.0422
%RSD	1.9972	44.994	6.0629	1.7727	12.596	20.970	2.2723
#1	9.9244	.00138	.01810	.05996	.00037	.00063	1.8401
#2	9.8346	.00100	.02038	.05965	.00035	.00073	1.8286
#3	10.216	.00239	.01977	.06164	.00044	.00047	1.9068

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08581	.00758	.08705	7.5696	.43411	.08973	.00896
SDev	.00181	.00006	.00346	.1518	.01109	.00193	.00038
%RSD	2.1141	.82268	3.9718	2.0050	2.5541	2.1483	4.2505
#1	.08503	.00753	.08479	7.5313	.42346	.08895	.00870
#2	.08451	.00765	.08534	7.4407	.43329	.08832	.00940
#3	.08788	.00757	.09103	7.7369	.44559	.09193	.00879

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.4362	.00077	.06100	.00011	5.0174	.00382	.08673
SDev	.0619	.00022	.00060	.00073	.2002	.00229	.00189
%RSD	2.5389	28.748	.97971	652.52	3.9898	59.988	2.1810
#1	2.4111	.00054	.06052	-.00042	4.9153	.00630	.08600
#2	2.3909	.00098	.06081	.00095	4.8888	.00178	.08530
#3	2.5067	.00081	.06167	-.00019	5.2480	.00339	.08887

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.22611	.00858	.01095	.01939	.26347	.06087	.06095
SDev	.00623	.00075	.00041	.00225	.00595	.00149	.00049
%RSD	2.7547	8.7516	3.7724	11.598	2.2593	2.4429	.80169
#1	.22343	.00875	.01059	.01750	.26156	.06046	.06040
#2	.22167	.00776	.01140	.01880	.25871	.05964	.06135
#3	.23323	.00923	.01086	.02188	.27015	.06252	.06109

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00519	-.00277
SDev	.00259	.00209
%RSD	49.778	75.373
#1	.00419	-.00307
#2	.00326	-.00055
#3	.00813	-.00470

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Method: TAL Sample Name: ccv Operator:
Run Time: 10/29/99 13:32:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.443	5.1019	4.9639	4.8100	4.9539	4.8144	49.291
SDev	.110	.0075	.0186	.0120	.0070	.0060	.057
%RSD	.22306	.14771	.37571	.24920	.14203	.12514	.11470
#1	49.333	5.0945	4.9561	4.7978	4.9462	4.8192	49.296
#2	49.442	5.1018	4.9504	4.8106	4.9601	4.8162	49.345
#3	49.554	5.1095	4.9852	4.8217	4.9554	4.8076	49.233

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.8967	4.7988	5.0453	47.272	49.015	4.9174	4.8686
SDev	.0039	.0006	.0183	.044	.128	.0043	.0031
%RSD	.08051	.01307	.36321	.09405	.26060	.08692	.06333
#1	4.8994	4.7983	5.0263	47.240	48.879	4.9132	4.8660
#2	4.8985	4.7986	5.0468	47.322	49.034	4.9218	4.8720
#3	4.8922	4.7995	5.0629	47.253	49.133	4.9173	4.8678

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	54.463	.50588	5.0110	5.2381	49.446	4.9370	4.8693
SDev	.180	.00048	.0009	.0135	.056	.0451	.0033
%RSD	.32982	.09466	.01752	.25730	.11424	.91348	.06866
#1	54.273	.50536	5.0118	5.2227	49.394	4.8850	4.8665
#2	54.631	.50631	5.0111	5.2480	49.438	4.9616	4.8730
#3	54.484	.50598	5.0100	5.2435	49.506	4.9645	4.8684

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.8997	5.3613	4.8284	5.0537	5.0419	5.0297	5.0014
SDev	.0107	.0156	.0049	.0106	.0097	.0080	.0051
%RSD	.21832	.29008	.10196	.20932	.19180	.15822	.10153
#1	4.9069	5.3440	4.8285	5.0639	5.0310	5.0205	5.0073
#2	4.9047	5.3657	4.8235	5.0543	5.0452	5.0347	4.9991
#3	4.8874	5.3742	4.8333	5.0428	5.0494	5.0340	4.9979

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.0997	5.3068
SDev	.0097	.0194
%RSD	.18955	.36471
#1	5.0983	5.2845
#2	5.1100	5.3165
#3	5.0908	5.3193

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Method: TAL Sample Name: ccb Operator:
Run Time: 10/29/99 13:38:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03293	.00140	.00314	-.00001	.00027	.00056	-.00756
SDev	.00132	.00044	.00222	.00004	.00004	.00022	.00105
%RSD	4.0049	31.656	70.890	286.63	15.538	39.012	13.914
#1	-.03429	.00179	.00347	-.00004	.00029	.00045	-.00794
#2	-.03166	.00092	.00076	-.00004	.00030	.00081	-.00637
#3	-.03284	.00150	.00517	.00003	.00023	.00041	-.00837

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00023	.00027	.00132	.00553	-.00826	.00044	.00065
SDev	.00026	.00020	.00021	.00534	.00277	.00007	.00007
%RSD	112.97	74.831	15.951	96.583	33.588	16.123	10.690
#1	-.00007	.00006	.00109	-.00030	-.00564	.00044	.00059
#2	.00036	.00030	.00149	.01019	-.00798	.00051	.00072
#3	.00042	.00046	.00138	.00671	-.01117	.00037	.00065

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05561	.00006	.00010	.00187	-.12688	.00331	.00059
SDev	.00203	.00008	.00037	.00183	.01920	.00201	.00007
%RSD	3.6588	119.73	383.07	97.826	15.135	60.710	12.144
#1	.05727	.00002	.00002	.00338	-.14585	.00356	.00063
#2	.05622	.00015	-.00023	.00238	-.12734	.00519	.00064
#3	.05334	.00002	.00050	-.00016	-.10745	.00119	.00051

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00109	.00420	.00309	.00188	.00062	-.00073	.00039
SDev	.00007	.00082	.00199	.00110	.00014	.00129	.00103
%RSD	6.0257	19.579	64.427	58.683	22.158	176.07	264.18
#1	.00113	.00487	.00411	.00303	.00074	.00065	-.00045
#2	.00102	.00446	.00437	.00176	.00065	-.00094	.00008
#3	.00113	.00328	.00080	.00084	.00047	-.00191	.00154

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00486	.00001
SDev	.00507	.00113
%RSD	104.30	12749.
#1	.01037	-.00047
#2	.00382	.00130
#3	.00039	-.00080

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Method: TAL Sample Name: 94058003 Operator:
Run Time: 10/29/99 13:44:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	47.307	3.6370	.18517	2.2747	.00041	.01807	70.879
SDev	.013	.0055	.00078	.0004	.00003	.00015	.048
%RSD	.02760	.15015	.42179	.01705	6.1793	.84658	.06830
#1	47.292	3.6431	.18427	2.2743	.00042	.01795	70.935
#2	47.317	3.6324	.18570	2.2751	.00043	.01824	70.844
#3	47.311	3.6356	.18554	2.2747	.00038	.01801	70.860

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1586	.17778	10.515	134.42	8.4957	11.978	1.1107
SDev	.0006	.00023	.002	.01	.0080	.007	.0020
%RSD	.05448	.12906	.01860	.00842	.09380	.06048	.17965
#1	1.1587	.17770	10.514	134.43	8.4956	11.986	1.1130
#2	1.1592	.17759	10.513	134.41	8.5037	11.975	1.1098
#3	1.1580	.17803	10.517	134.42	8.4877	11.973	1.1093

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.6881	.00859	4.4823	.01110	7.8267	.01025	.17144
SDev	.0055	.00031	.0058	.00359	.0406	.00086	.00032
%RSD	.20287	3.6010	.12862	32.307	.51815	8.3461	.18982
#1	2.6824	.00851	4.4890	.01471	7.8346	.00929	.17145
#2	2.6933	.00833	4.4791	.01108	7.7827	.01055	.17110
#3	2.6887	.00893	4.4788	.00753	7.8627	.01092	.17175

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.1510	.07047	.02335	.24135	1.8472	4.4935	4.4766
SDev	.0073	.00007	.00183	.00568	.0018	.0043	.0107
%RSD	.07984	.10349	7.8436	2.3554	.09536	.09533	.23908
#1	9.1593	.07053	.02544	.23480	1.8490	4.4886	4.4890
#2	9.1481	.07039	.02257	.24435	1.8469	4.4968	4.4703
#3	9.1456	.07048	.02203	.24491	1.8455	4.4950	4.4706

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01316	.00972
SDev	.00404	.00429
%RSD	30.668	44.159
#1	.01418	.01460
#2	.01658	.00797
#3	.00871	.00658

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Method: TAL Sample Name: 94058004 Operator:
Run Time: 10/29/99 13:50:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.432	.03992	.36011	.65741	.00268	.02046	538.74
SDev	.721	.00213	.00385	.00896	.00008	.00044	8.73
%RSD	1.3742	5.3219	1.0685	1.3627	2.9780	2.1325	1.6204
#1	52.999	.04220	.36287	.66483	.00275	.02057	545.75
#2	52.675	.03958	.36174	.65995	.00269	.02082	541.51
#3	51.621	.03799	.35572	.64746	.00259	.01997	528.96

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.23927	.10074	1.2375	120.72	8.8411	.62799	.31619
SDev	.00453	.00170	.0167	1.85	.1182	.00872	.00551
%RSD	1.8916	1.6887	1.3490	1.5305	1.3369	1.3882	1.7421
#1	.24306	.10220	1.2501	122.23	8.9325	.63450	.32053
#2	.24051	.10114	1.2440	121.28	8.8830	.63139	.31805
#3	.23426	.09887	1.2186	118.66	8.7076	.61808	.31000

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.9920	.00484	6.9798	.03386	.67771	.01417	.28870
SDev	.1173	.00020	.0758	.00433	.10855	.00160	.00437
%RSD	1.3048	4.2202	1.0863	12.784	16.018	11.310	1.5141
#1	9.0616	.00467	7.0410	.03827	.78264	.01509	.29249
#2	9.0578	.00478	7.0035	.02961	.68465	.01232	.28969
#3	8.8565	.00507	6.8950	.03371	.56586	.01509	.28392

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.3321	.04492	.02138	.09239	1.6359	7.0061	6.9666
SDev	.0199	.00071	.00128	.00328	.0234	.0560	.0860
%RSD	1.4962	1.5889	5.9864	3.5509	1.4324	.79862	1.2349
#1	1.3498	.04502	.02286	.09592	1.6545	7.0451	7.0388
#2	1.3360	.04558	.02076	.08943	1.6437	7.0312	6.9896
#3	1.3106	.04416	.02054	.09181	1.6096	6.9420	6.8714

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.04127	.02984
SDev	.00231	.00751
%RSD	5.6063	25.184
#1	.03860	.03777
#2	.04254	.02283
#3	.04266	.02891

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Method: TAL Sample Name: 94058005 Operator:
Run Time: 10/29/99 13:56:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.1914	-.00042	.01237	.03876	-.00004	-.00001	1.1060
SDev	.0066	.00053	.00143	.00005	.00002	.00012	.0019
%RSD	.15658	125.94	11.581	.12835	43.949	1009.3	.16819
#1	4.1977	-.00074	.01173	.03879	-.00005	.00010	1.1071
#2	4.1846	-.00071	.01401	.03871	-.00005	-.00014	1.1070
#3	4.1920	.00019	.01137	.03880	-.00002	.00001	1.1038

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03328	.00082	.01841	4.7488	.21317	.01251	.00309
SDev	.00054	.00018	.00021	.0069	.00468	.00003	.00019
%RSD	1.6331	22.252	1.1549	.14584	2.1976	.21593	6.2540
#1	.03391	.00061	.01831	4.7429	.21118	.01248	.00287
#2	.03302	.00093	.01827	4.7471	.20981	.01254	.00325
#3	.03292	.00093	.01866	4.7565	.21853	.01251	.00315

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0770	-.00003	.01513	-.00145	.86644	.00196	.04300
SDev	.0001	.00015	.00041	.00352	.02428	.00391	.00023
%RSD	.01043	550.77	2.7194	242.98	2.8027	199.61	.54546
#1	1.0769	.00006	.01466	.00255	.84100	-.00167	.04302
#2	1.0771	.00006	.01542	-.00406	.88937	.00146	.04323
#3	1.0770	-.00020	.01533	-.00284	.86895	.00609	.04276

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02271	.00586	.00269	.01687	.22481	.01738	.01386
SDev	.00014	.00006	.00055	.00107	.00030	.00081	.00084
%RSD	.59509	.97111	20.425	6.3519	.13275	4.6327	6.0533
#1	.02263	.00592	.00219	.01587	.22501	.01777	.01296
#2	.02287	.00582	.00328	.01675	.22446	.01791	.01402
#3	.02264	.00583	.00261	.01800	.22495	.01645	.01461

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00655	-.00580
SDev	.00816	.00173
%RSD	124.57	29.811
#1	.01506	-.00405
#2	-.00121	-.00583
#3	.00580	-.00750

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Method: TAL Sample Name: 94058006 Operator:
Run Time: 10/29/99 14:02:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.7367	.00022	.00686	.02209	.00013	.00006	1.2087
SDev	.0055	.00179	.00150	.00005	.00001	.00011	.0016
%RSD	.11692	808.80	21.797	.21190	5.2751	189.47	.13479
#1	4.7430	.00214	.00515	.02215	.00013	-.00007	1.2106
#2	4.7325	-.00140	.00792	.02207	.00013	.00011	1.2080
#3	4.7346	-.00007	.00751	.02206	.00012	.00013	1.2077

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05351	.00276	.01970	3.0795	.44650	.01329	.00602
SDev	.00021	.00020	.00017	.0014	.00218	.00009	.00029
%RSD	.39199	7.4041	.88222	.04422	.48930	.68036	4.8907
#1	.05330	.00291	.01952	3.0800	.44791	.01339	.00574
#2	.05371	.00283	.01970	3.0780	.44398	.01325	.00599
#3	.05352	.00252	.01987	3.0805	.44760	.01322	.00633

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.86989	.00022	.01989	-.00023	1.0027	.00096	.05804
SDev	.00303	.00015	.00076	.00066	.0279	.00355	.00019
%RSD	.34836	68.153	3.8364	287.91	2.7801	371.00	.33616
#1	.87218	.00013	.01920	.00025	.97064	.00504	.05784
#2	.86645	.00013	.01976	-.00099	1.0214	-.00142	.05806
#3	.87103	.00039	.02071	.00005	1.0160	-.00075	.05823

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03367	.00150	.00246	.01520	.20018	.02083	.01927
SDev	.00056	.00044	.00132	.00077	.00014	.00158	.00077
%RSD	1.6590	29.541	53.510	5.0983	.07070	7.5697	4.0087
#1	.03325	.00154	.00319	.01610	.20033	.02054	.01838
#2	.03431	.00104	.00094	.01476	.20005	.01941	.01978
#3	.03347	.00192	.00326	.01474	.20017	.02253	.01965

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00900	-.00519
SDev	.00034	.00096
%RSD	3.7225	18.535
#1	.00936	-.00465
#2	.00895	-.00630
#3	.00870	-.00462

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Method: TAL Sample Name: 94106008 Operator:
Run Time: 10/29/99 14:08:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	28.155	-.00111	.04316	.47669	-.00050	.00754	48.766
SDev	.020	.00151	.00286	.00057	.00003	.00015	.269
%RSD	.07260	135.81	6.6203	.12053	5.0325	1.9688	.55070
#1	28.172	-.00195	.03995	.47724	-.00047	.00758	48.503
#2	28.160	.00063	.04541	.47609	-.00052	.00738	49.040
#3	28.132	-.00202	.04413	.47674	-.00050	.00766	48.755

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04849	.02214	.09214	214.23	11.712	26.482	.06201
SDev	.00082	.00057	.00044	.92	.024	.094	.00069
%RSD	1.6965	2.5903	.47209	.42924	.20616	.35343	1.1126
#1	.04754	.02165	.09208	213.32	11.714	26.392	.06162
#2	.04899	.02277	.09259	215.16	11.736	26.579	.06281
#3	.04895	.02199	.09173	214.22	11.687	26.475	.06161

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.2666	-.00150	.13274	.00810	.76392	.00836	.08118
SDev	.0373	.00053	.00169	.00384	.02433	.00983	.00154
%RSD	1.1408	35.651	1.2725	47.348	3.1850	117.70	1.9030
#1	3.2951	-.00166	.13399	.01250	.78387	.00122	.08055
#2	3.2244	-.00090	.13082	.00545	.77107	.01957	.08294
#3	3.2802	-.00193	.13341	.00635	.73681	.00428	.08005

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.60127	.03566	-.00127	.02463	.18729	.13166	.13312
SDev	.00413	.00044	.00121	.00201	.00041	.00281	.00386
%RSD	.68720	1.2339	95.888	8.1478	.22074	2.1384	2.8975
#1	.59650	.03615	-.00266	.02545	.18709	.13077	.13544
#2	.60365	.03553	-.00048	.02609	.18776	.13481	.12867
#3	.60366	.03530	-.00065	.02234	.18701	.12939	.13526

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01887	.00236
SDev	.00541	.00617
%RSD	28.667	261.37
#1	.02006	.00836
#2	.02359	-.00396
#3	.01297	.00268

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Method: TAL Sample Name: 94106009 Operator:
Run Time: 10/29/99 14:14:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	30.650	-.00366	.04705	.53670	-.00066	.00737	52.140
SDev	.165	.00051	.00134	.00308	.00003	.00048	.241
%RSD	.53879	13.887	2.8456	.57445	4.4056	6.5614	.46187
#1	30.737	-.00423	.04678	.53817	-.00067	.00793	52.189
#2	30.753	-.00326	.04851	.53878	-.00063	.00713	52.353
#3	30.459	-.00349	.04587	.53316	-.00069	.00706	51.878

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05390	.02642	.10491	247.32	13.768	28.594	.07300
SDev	.00016	.00044	.00071	1.48	.074	.133	.00055
%RSD	.28966	1.6750	.67261	.59890	.53773	.46596	.75088
#1	.05395	.02640	.10543	247.66	13.807	28.610	.07351
#2	.05402	.02687	.10519	248.60	13.814	28.718	.07307
#3	.05372	.02599	.10411	245.70	13.683	28.453	.07242

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.8326	-.00190	.15302	.01119	.48021	.00536	.09032
SDev	.0188	.00035	.00100	.00253	.04612	.00362	.00062
%RSD	.66447	18.473	.65132	22.628	9.6052	67.474	.68522
#1	2.8421	-.00171	.15416	.01024	.44590	.00539	.09026
#2	2.8449	-.00230	.15254	.01406	.53265	.00897	.09096
#3	2.8110	-.00169	.15235	.00927	.46208	.00173	.08973

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.67679	.03030	.00085	.03039	.20061	.15124	.15378
SDev	.00427	.00034	.00065	.00242	.00084	.00120	.00088
%RSD	.63080	1.1077	76.877	7.9488	.41993	.79646	.57196
#1	.67686	.03045	.00156	.02761	.20095	.15258	.15480
#2	.68103	.03054	.00070	.03155	.20123	.15090	.15330
#3	.67249	.02992	.00028	.03201	.19965	.15025	.15325

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01123	.01082
SDev	.00093	.00423
%RSD	8.2966	39.120
#1	.01192	.00904
#2	.01017	.01565
#3	.01159	.00776

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Method: TAL Sample Name: 94106008;5x Operator:
Run Time: 10/29/99 14:20:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.6945	-.00052	.01000	.09495	-.00013	.00189	10.091
SDev	.1474	.00053	.00114	.00265	.00009	.00008	.274
%RSD	2.5885	101.49	11.372	2.7890	72.612	4.2123	2.7192
#1	5.6115	-.00000	.01097	.09338	-.00018	.00181	9.9263
#2	5.6073	-.00050	.01029	.09346	-.00018	.00197	9.9396
#3	5.8647	-.00105	.00875	.09801	-.00002	.00189	10.408

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00919	.00442	.01925	41.409	2.3807	5.9581	.01279
SDev	.00016	.00003	.00073	1.113	.0574	.1581	.00063
%RSD	1.7337	.72145	3.7708	2.6888	2.4114	2.6533	4.8953
#1	.00907	.00440	.01908	40.744	2.3477	5.8641	.01273
#2	.00914	.00440	.01862	40.788	2.3473	5.8696	.01219
#3	.00937	.00445	.02004	42.694	2.4470	6.1406	.01344

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.59218	-.00061	.02629	.00234	.14341	.00276	.01616
SDev	.03071	.00015	.00083	.00329	.16807	.00151	.00053
%RSD	5.1859	25.160	3.1709	140.29	117.19	54.765	3.3080
#1	.57301	-.00059	.02533	-.00143	.06353	.00172	.01578
#2	.57592	-.00046	.02678	.00390	.03019	.00207	.01592
#3	.62760	-.00077	.02677	.00457	.33652	.00450	.01677

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13227	.00812	.00016	.00452	.03790	.02699	.02582
SDev	.00325	.00100	.00041	.00219	.00104	.00083	.00097
%RSD	2.4598	12.277	260.46	48.401	2.7567	3.0652	3.7689
#1	.13090	.00756	-.00018	.00301	.03733	.02625	.02472
#2	.12991	.00752	.00061	.00352	.03727	.02788	.02618
#3	.13598	.00927	.00003	.00703	.03911	.02685	.02656

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00519	.00056
SDev	.00313	.00498
%RSD	60.258	884.80
#1	.00511	-.00505
#2	.00210	.00444
#3	.00835	.00231

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Method: TAL Sample Name: 94106009;5x Operator:
Run Time: 10/29/99 14:26:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.3638	.00052	.01129	.10850	-.00017	.00197	11.104
SDev	.0070	.00077	.00173	.00021	.00001	.00010	.010
%RSD	.10959	147.73	15.293	.19444	6.3079	5.2844	.09360
#1	6.3622	.00131	.01262	.10874	-.00016	.00197	11.092
#2	6.3578	-.00021	.00934	.10839	-.00018	.00207	11.110
#3	6.3715	.00045	.01189	.10837	-.00017	.00187	11.110

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm u	ppm
Avge	.01141	.00555	.02157	48.551	2.8741	6.6975	.01520
SDev	.00058	.00007	.00006	.013	.0074	.0033	.00019
%RSD	5.0959	1.3522	.27427	.02736	.25616	.04948	1.2648
#1	.01074	.00563	.02151	48.536	2.8815	6.6937	.01507
#2	.01171	.00555	.02163	48.560	2.8740	6.6997	.01542
#3	.01179	.00548	.02156	48.558	2.8668	6.6992	.01510

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.53483	-.00061	.03240	.00426	.10400	-.00024	.01838
SDev	.00163	.00021	.00215	.00165	.04385	.00323	.00012
%RSD	.30493	34.637	6.6347	38.689	42.165	1320.9	.65880
#1	.53322	-.00076	.03310	.00347	.06242	-.00383	.01838
#2	.53648	-.00070	.02999	.00616	.14982	.00065	.01851
#3	.53479	-.00037	.03412	.00315	.09977	.00244	.01827

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.15376	.00720	-.00022	.00793	.04159	.03255	.03221
SDev	.00029	.00031	.00156	.00138	.00010	.00144	.00292
%RSD	.18838	4.2841	706.58	17.376	.23543	4.4250	9.0717
#1	.15366	.00689	-.00142	.00655	.04170	.03419	.03240
#2	.15354	.00751	-.00078	.00792	.04151	.03148	.02919
#3	.15409	.00720	.00154	.00930	.04155	.03198	.03503

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01090	.00059
SDev	.00138	.00316
%RSD	12.627	533.70
#1	.01148	-.00088
#2	.00933	.00422
#3	.01189	-.00156

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Method: TAL Sample Name: icsa Operator:
Run Time: 10/29/99 14:32:07
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	493.27	-.00114	.00142	-.00333	-.00076	.00433	488.24
SDev	.60	.00278	.00191	.00007	.00002	.00003	1.00
%RSD	.12219	243.60	134.12	2.1028	3.2869	.77959	.20498
#1	493.26	.00068	.00361	-.00332	-.00074	.00429	488.43
#2	493.88	.00024	.00009	-.00340	-.00075	.00433	487.15
#3	492.67	-.00433	.00057	-.00326	-.00078	.00436	489.13

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00093	.00353	.00354	247.04	497.39	.00310	.00498
SDev	.00035	.00023	.00015	.26	.80	.00013	.00034
%RSD	38.101	6.5990	4.1275	.10338	.16094	4.0757	6.8442
#1	-.00064	.00364	.00371	247.19	497.88	.00323	.00531
#2	-.00132	.00326	.00346	246.75	497.82	.00308	.00463
#3	-.00083	.00369	.00345	247.19	496.46	.00298	.00499

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	249.83	-.00094	.00019	-.00309	247.98	.00340	-.00100
SDev	.36	.00037	.00090	.00151	.43	.00642	.00014
%RSD	.14407	39.430	467.62	48.922	.17466	188.77	14.462
#1	250.08	-.00115	.00053	-.00135	248.02	-.00206	-.00115
#2	249.42	-.00115	.00088	-.00403	248.39	.00180	-.00087
#3	249.99	-.00051	-.00083	-.00391	247.53	.01046	-.00098

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01014	-.00513	-.00468	.00065	-.00393	-.00419	.00221
SDev	.00081	.00060	.00245	.00024	.00004	.00185	.00168
%RSD	8.0281	11.608	52.469	36.272	1.1200	44.301	75.994
#1	.00931	-.00498	-.00191	.00048	-.00388	-.00625	.00375
#2	.01093	-.00579	-.00659	.00055	-.00393	-.00265	.00248
#3	.01016	-.00462	-.00553	.00092	-.00397	-.00366	.00042

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00441	-.00723
SDev	.00633	.00338
%RSD	143.43	46.804
#1	.00601	-.00541
#2	-.00256	-.00515
#3	.00979	-.01114

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Method: TAL Sample Name: icsab Operator:
Run Time: 10/29/99 14:38:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	499.57	.10016	.09759	.09848	.09999	.09442	494.71
SDev	.37	.00502	.00522	.00056	.00004	.00027	.02
%RSD	.07447	5.0165	5.3443	.57022	.04186	.28988	.00348
#1	499.64	.09672	.10344	.09871	.09997	.09474	494.71
#2	499.89	.10593	.09343	.09890	.09997	.09432	494.73
#3	499.16	.09784	.09589	.09784	.10004	.09422	494.69

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09322	.09392	.11401	249.65	499.25	.09910	.09322
SDev	.00060	.00048	.00038	.13	.39	.00023	.00067
%RSD	.63938	.50905	.33523	.05279	.07868	.23713	.71709
#1	.09323	.09441	.11426	249.65	499.47	.09916	.09354
#2	.09381	.09345	.11419	249.79	499.48	.09930	.09367
#3	.09261	.09391	.11357	249.53	498.80	.09884	.09245

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	252.44	.00995	.09288	.10277	250.38	.09812	.09636
SDev	.69	.00063	.00141	.00724	.34	.00435	.00071
%RSD	.27308	6.3293	1.5154	7.0429	.13760	4.4325	.73225
#1	252.10	.01038	.09188	.10024	250.36	.09550	.09681
#2	253.23	.01024	.09449	.11094	250.73	.09573	.09672
#3	251.98	.00923	.09227	.09714	250.05	.10314	.09554

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09530	.09845	.09219	.09717	.09647	.08643	.09597
SDev	.00214	.00034	.00203	.00296	.00015	.00466	.00036
%RSD	2.2407	.34735	2.2079	3.0474	.15289	5.3907	.37052
#1	.09696	.09867	.09445	.10059	.09661	.08257	.09636
#2	.09605	.09861	.09161	.09534	.09649	.09161	.09588
#3	.09289	.09805	.09051	.09558	.09632	.08512	.09567

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.11023	.09866
SDev	.00606	.00834
%RSD	5.5005	8.4494
#1	.10514	.09740
#2	.11694	.10755
#3	.10862	.09102

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Method: TAL Sample Name: ccv Operator:
Run Time: 10/29/99 14:44:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.366	5.0905	4.9603	4.8118	4.9457	4.8273	49.352
SDev	.059	.0049	.0217	.0104	.0075	.0159	.151
%RSD	.11888	.09573	.43760	.21575	.15184	.32882	.30694
#1	49.339	5.0950	4.9798	4.8044	4.9496	4.8440	49.466
#2	49.327	5.0853	4.9369	4.8074	4.9504	4.8257	49.410
#3	49.434	5.0913	4.9642	4.8237	4.9370	4.8124	49.180

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9103	4.8108	5.0333	47.355	48.816	4.9095	4.8745
SDev	.0135	.0118	.0130	.058	.039	.0068	.0087
%RSD	.27574	.24618	.25732	.12218	.08066	.13835	.17780
#1	4.9228	4.8217	5.0240	47.401	48.837	4.9143	4.8839
#2	4.9121	4.8124	5.0278	47.373	48.771	4.9125	4.8727
#3	4.8959	4.7982	5.0481	47.290	48.841	4.9017	4.8668

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	54.281	.50619	5.0108	5.2926	49.439	4.9246	4.8679
SDev	.222	.00061	.0171	.0160	.048	.0070	.0050
%RSD	.40896	.12032	.34117	.30325	.09712	.14124	.10298
#1	54.052	.50596	5.0277	5.2972	49.443	4.9326	4.8725
#2	54.296	.50573	5.0112	5.3058	49.389	4.9204	4.8686
#3	54.495	.50688	4.9935	5.2748	49.484	4.9207	4.8626

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9222	5.3797	4.8953	5.0876	5.0349	5.0153	5.0085
SDev	.0214	.0112	.0030	.0177	.0022	.0159	.0227
%RSD	.43525	.20771	.06134	.34797	.04378	.31720	.45285
#1	4.9403	5.3748	4.8973	5.1075	5.0335	5.0151	5.0339
#2	4.9278	5.3925	4.8966	5.0816	5.0337	5.0313	5.0012
#3	4.8985	5.3718	4.8918	5.0736	5.0374	4.9995	4.9903

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.1300	5.3734
SDev	.0236	.0145
%RSD	.46066	.26919
#1	5.1244	5.3831
#2	5.1560	5.3803
#3	5.1097	5.3568

Analysis Report 10/29/99 02:55:48 PM page 1

Method: TAL Sample Name: ccb Operator:
Run Time: 10/29/99 14:50:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01889	.00158	.00337	.00006	.00041	.00054	.00282
SDev	.00083	.00048	.00265	.00004	.00009	.00007	.00295
%RSD	4.4061	30.287	78.525	76.545	21.715	13.949	104.53
#1	-.01885	.00137	.00115	.00011	.00039	.00045	.00454
#2	-.01809	.00212	.00266	.00003	.00050	.00059	.00449
#3	-.01975	.00124	.00630	.00003	.00033	.00057	-.00058

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00032	.00063	.00150	.01099	.00598	.00058	.00075
SDev	.00014	.00029	.00011	.00707	.00150	.00006	.00035
%RSD	42.770	46.834	7.2885	64.340	24.990	10.552	46.882
#1	.00020	.00038	.00157	.01255	.00516	.00055	.00106
#2	.00048	.00095	.00137	.01714	.00771	.00065	.00083
#3	.00029	.00055	.00155	.00327	.00508	.00055	.00037

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07263	.00028	-.00021	-.00117	-.17215	.00750	.00076
SDev	.00644	.00020	.00128	.00146	.02600	.00154	.00022
%RSD	8.8690	69.733	621.73	124.63	15.105	20.588	28.845
#1	.07640	.00009	-.00037	-.00278	-.19499	.00592	.00088
#2	.07629	.00028	.00114	.00006	-.14385	.00756	.00088
#3	.06519	.00048	-.00139	-.00079	-.17761	.00901	.00051

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00112	.00361	.00450	.00084	.00075	-.00016	-.00038
SDev	.00001	.00095	.00094	.00065	.00021	.00149	.00167
%RSD	.43359	26.318	20.938	78.076	27.688	914.27	436.89
#1	.00113	.00443	.00542	.00055	.00087	.00121	-.00131
#2	.00113	.00382	.00455	.00159	.00087	.00004	.00154
#3	.00112	.00257	.00353	.00038	.00051	-.00174	-.00138

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00772	-.00597
SDev	.00439	.00179
%RSD	56.795	30.031
#1	.00561	-.00732
#2	.01276	-.00664
#3	.00479	-.00394

0009 11/4/99

Calibration Report 11/01/99 02:17:25 PM page 1

Method: TAL Standard Name: BLANK-STD1 Operator: pdc
Run Time: 11/01/99 14:14:04
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.0143543	.0047725	-.000589	.0005030	.4039195	.1666320
SDev	.0001140	.0000541	.000073	.0000556	.0011820	.0003445
%RSD	.7943078	1.133295	12.45572	11.06038	.2926268	.2067719
#1	.0144818	.0047904	-.000516	.0004422	.4052326	.1665592
#2	.0143191	.0047117	-.000663	.0005153	.4035853	.1670072
#3	.0142621	.0048153	-.000588	.0005514	.4029406	.1663297
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

✓ = CHECKED
U = USE
R = RERUN

Calibration Report 11/01/99 02:21:35 PM page 1

Method: TAL Standard Name: STD3A Operator: pdc
Run Time: 11/01/99 14:18:14
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.1005755	.0815914	.0318044	.0483957	.8123252	.1886978
SDev	.0000610	.0002137	.0003544	.0001043	.0022511	.0006477
%RSD	.0606538	.2619100	1.114419	.2154500	.2771179	.3432348
#1	.1006280	.0813495	.0314006	.0483058	.8097342	.1887688
#2	.1005900	.0817545	.0320642	.0483711	.8134413	.1893071
#3	.1005086	.0816701	.0319483	.0485100	.8138002	.1880176
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/01/99 02:25:33 PM page 1

Method: TAL Standard Name: STD3B Operator: pdc
Run Time: 11/01/99 14:22:12
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.8963159	.7700275	.3224919	.4909262	4.509289	.4110534
SDev	.0008556	.0010807	.0000857	.0003457	.008948	.0010549
%RSD	.0954528	.1403466	.0265910	.0704081	.1984434	.2566265
#1	.8953536	.7706289	.3224855	.4909871	4.503191	.4098526
#2	.8966033	.7706738	.3224095	.4912373	4.519562	.4118307
#3	.8969907	.7687799	.3225806	.4905541	4.505115	.4114770
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/01/99 02:29:18 PM page 1

Method: TAL Standard Name: STD3C Operator: pdc
Run Time: 11/01/99 14:25:57
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	9.019983	7.533678	3.148701	5.133581	35.04348	2.933174
SDev	.001776	.012733	.002578	.004215	.07589	.002827
%RSD	.0196858	.1690177	.0818728	.0821072	.2165528	.0963699
#1	9.021545	7.545085	3.151012	5.138399	34.98110	2.936168
#2	9.018052	7.536008	3.149170	5.131770	35.02139	2.930551
#3	9.020352	7.519940	3.145921	5.130575	35.12797	2.932804
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/01/99 02:33:36 PM page 1

Method: TAL Standard Name: STD3D Operator: pdc
Run Time: 11/01/99 14:30:16
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	41.68891	34.21807	7.329130	26.38297	76.91770	7.863784
SDev	.01369	.12351	.021299	.00552	.28639	.005181
%RSD	.0328364	.3609505	.2906106	.0209194	.3723352	.0658800
#1	41.67310	34.08098	7.305412	26.38187	76.64705	7.863005
#2	41.69680	34.32066	7.346623	26.37808	77.21759	7.859037
#3	41.69682	34.25257	7.335354	26.38896	76.88847	7.869310
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Standardization Rpt. 11/01/99 02:48:48 PM page 1

Method: TAL Standard: STD1-BLANK
Run Time: 11/01/99 14:42:58

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.00118	-.00080	.00032	.00628	.00119	-.00012	-.00015
SDev	.00029	.00056	.00002	.00001	.00061	.00007	.00007
%RSD	24.245	70.305	6.6403	.12359	51.858	63.838	50.094
#1	.00144	-.00073	.00029	.00628	.00071	-.00020	-.00015
#2	.00122	-.00139	.00033	.00628	.00188	-.00007	-.00022
#3	.00087	-.00027	.00033	.00627	.00097	-.00007	-.00007

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.00119	.00010	-.00092	-.00000	-.00133	.00016	.00031
SDev	.00002	.00002	.00057	.00004	.00043	.00002	.00010
%RSD	1.6597	21.572	61.368	123630.	32.710	13.423	31.166
#1	.00119	.00011	-.00033	.00000	-.00102	.00015	.00042
#2	.00121	.00007	-.00099	-.00004	-.00113	.00018	.00027
#3	.00117	.00011	-.00146	.00004	-.00182	.00015	.00024

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.01785	.00187	-.00019	.00009	.00311	-.00056	-.00381
SDev	.00030	.00094	.00059	.00002	.00052	.00162	.00011
%RSD	1.6882	50.049	311.05	24.770	16.838	289.86	2.9703
#1	.01767	.00274	.00047	.00011	.00252	-.00241	-.00372
#2	.01819	.00088	-.00064	.00007	.00351	.00062	-.00376
#3	.01768	.00200	-.00040	.00007	.00332	.00011	-.00394

Elem	1960/2
Avge	.00151
SDev	.00091
%RSD	60.569
#1	.00058
#2	.00241
#3	.00153

Standardization Rpt. 11/01/99 02:54:42 PM page 1

Method: TAL Standard: STD2A
Run Time: 11/01/99 14:48:57

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.04297	.02784	.05024	.15527	.34376	.05656	.02110
SDev	.00075	.00079	.00011	.00012	.00056	.00030	.00006
%RSD	1.7516	2.8351	.21581	.07737	.16294	.52197	.30390
#1	.04228	.02744	.05036	.15537	.34421	.05687	.02117
#2	.04377	.02875	.05023	.15514	.34314	.05653	.02104
#3	.04286	.02733	.05014	.15531	.34394	.05628	.02108

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.02030	.04915	.08566	.00546	.01704	.02826	.01410
SDev	.00003	.00008	.00026	.00033	.00065	.00006	.00001
%RSD	.12660	.15553	.30049	6.1167	3.7913	.20334	.04257
#1	.02032	.04923	.08576	.00585	.01652	.02832	.01411
#2	.02027	.04911	.08537	.00528	.01776	.02822	.01411
#3	.02031	.04909	.08585	.00526	.01684	.02823	.01410

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.06585	.12269	.02926	.07926	.09905	.09112	.01297
SDev	.00018	.00086	.00060	.00010	.00126	.00058	.00020
%RSD	.27400	.69919	2.0462	.13022	1.2675	.63502	1.5705
#1	.06599	.12330	.02994	.07916	.09766	.09056	.01280
#2	.06564	.12307	.02899	.07926	.09940	.09107	.01292
#3	.06591	.12171	.02884	.07936	.10010	.09171	.01320

Elem	1960/2
Avge	.01203
SDev	.00033
%RSD	2.7732
#1	.01192
#2	.01240
#3	.01176

Standardization Rpt. 11/01/99 03:00:36 PM page 1

Method: TAL Standard: STD2B
Run Time: 11/01/99 14:54:52

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.42956	.27788	.50904	1.5302	3.5087	.58443	.21815
SDev	.00130	.00424	.00134	.0038	.0034	.00134	.00027
%RSD	.30167	1.5271	.26237	.24913	.09576	.22999	.12575
#1	.42845	.27510	.50847	1.5262	3.5052	.58296	.21791
#2	.42926	.27578	.50809	1.5337	3.5119	.58560	.21845
#3	.43099	.28277	.51057	1.5308	3.5091	.58472	.21809

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.19543	.50476	.88858	.05455	.19138	.29014	.13871
SDev	.00039	.00106	.00032	.00014	.00211	.00044	.00055
%RSD	.19907	.21064	.03643	.24706	1.1035	.15293	.39309
#1	.19517	.50363	.88822	.05446	.18931	.28964	.13809
#2	.19524	.50574	.88866	.05470	.19132	.29031	.13891
#3	.19588	.50491	.88885	.05449	.19353	.29048	.13912

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.50839	1.2311	.30951	.80936	.99674	.95307	.15634
SDev	.00169	.0032	.00259	.00109	.00236	.00264	.00075
%RSD	.33259	.25837	.83625	.13508	.23671	.27642	.47864
#1	.50692	1.2335	.31219	.80810	.99523	.95424	.15594
#2	.50801	1.2275	.30703	.80985	.99946	.95006	.15588
#3	.51024	1.2322	.30931	.81011	.99554	.95493	.15721

Elem	1960/2
Avge	.10729
SDev	.00089
%RSD	.82889
#1	.10629
#2	.10800
#3	.10757

Standardization Rpt. 11/01/99 03:06:31 PM page 1

Method: TAL Standard: STD2C
Run Time: 11/01/99 15:00:46

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	4.3024	2.7811	4.9851	14.691	34.663	5.9293	2.2134
SDev	.0032	.0037	.0050	.005	.013	.0021	.0018
%RSD	.07418	.13195	.10066	.03430	.03734	.03576	.08076
#1	4.2993	2.7788	4.9903	14.686	34.672	5.9300	2.2153
#2	4.3057	2.7791	4.9803	14.696	34.648	5.9270	2.2133
#3	4.3023	2.7853	4.9847	14.691	34.669	5.9310	2.2117

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	1.9289	4.9654	8.9897	.55402	1.9571	2.9479	1.3926
SDev	.0025	.0008	.0050	.00047	.0015	.0014	.0013
%RSD	.12749	.01584	.05552	.08495	.07780	.04673	.09229
#1	1.9315	4.9650	8.9948	.55456	1.9554	2.9487	1.3921
#2	1.9267	4.9649	8.9848	.55382	1.9574	2.9463	1.3941
#3	1.9286	4.9663	8.9895	.55368	1.9584	2.9487	1.3916

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	5.0018	12.366	3.1511	8.1165	10.065	9.6523	1.6114
SDev	.0033	.027	.0046	.0043	.011	.0181	.0020
%RSD	.06597	.21585	.14558	.05340	.10441	.18714	.12519
#1	4.9994	12.395	3.1554	8.1158	10.077	9.6333	1.6121
#2	5.0005	12.342	3.1463	8.1126	10.058	9.6692	1.6129
#3	5.0056	12.363	3.1517	8.1211	10.060	9.6543	1.6091

Elem	1960/2
Avge	1.0624
SDev	.0016
%RSD	.14759
#1	1.0609
#2	1.0640
#3	1.0624

Analysis Report 11/01/99 03:12:26 PM page 1

Method: TAL Sample Name: icv 2c Operator: tjn
Run Time: 11/01/99 15:06:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06466	10.145	9.9712	9.8947	10.292	10.342	.03362
SDev	.00262	.010	.0160	.0151	.034	.045	.00161
%RSD	4.0579	.09883	.16074	.15262	.32802	.43864	4.7864
#1	.06204	10.148	9.9702	9.9079	10.328	10.393	.03327
#2	.06729	10.153	9.9878	9.8980	10.288	10.327	.03538
#3	.06464	10.134	9.9558	9.8782	10.260	10.306	.03222

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.294	10.255	9.9670	9.8544	-.02993	10.050	10.244
SDev	.030	.030	.0090	.0299	.00135	.026	.041
%RSD	.29356	.29384	.09077	.30377	4.4978	.26211	.39629
#1	10.327	10.288	9.9683	9.8867	-.02917	10.078	10.291
#2	10.286	10.248	9.9754	9.8489	-.02913	10.045	10.226
#3	10.269	10.229	9.9574	9.8276	-.03148	10.026	10.217

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07971	1.0125	10.281	10.037	.71995	10.342	10.298
SDev	.00185	.0025	.019	.012	.01341	.042	.020
%RSD	2.3174	.24712	.18258	.11592	1.8626	.40409	.19287
#1	.08082	1.0153	10.303	10.044	.73401	10.390	10.318
#2	.07758	1.0108	10.271	10.043	.71852	10.317	10.297
#3	.08074	1.0113	10.270	10.023	.70730	10.319	10.278

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.204	10.222	10.155	10.357	10.160	10.254	10.295
SDev	.052	.012	.028	.050	.015	.010	.027
%RSD	.50629	.11653	.27671	.48345	.14936	.09727	.26222
#1	10.262	10.232	10.187	10.415	10.175	10.258	10.325
#2	10.184	10.224	10.134	10.324	10.161	10.243	10.286
#3	10.164	10.209	10.143	10.333	10.144	10.261	10.274

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	9.9283	10.091
SDev	.0293	.011
%RSD	.29522	.10528
#1	9.9598	10.085
#2	9.9231	10.103
#3	9.9019	10.084

Analysis Report 11/01/99 03:18:25 PM page 1

Method: TAL Sample Name: icv 3d Operator: tjn
Run Time: 11/01/99 15:12:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	495.79	-.00133	-.00146	-.00180	.00075	.00478	494.53
SDev	2.08	.00564	.00528	.00097	.00074	.00074	1.91
%RSD	.41939	422.17	360.92	54.014	99.227	15.543	.38721
#1	494.31	-.00622	.00444	-.00237	.00020	.00419	494.42
#2	494.89	-.00261	-.00306	-.00235	.00045	.00454	492.68
#3	498.17	.00483	-.00577	-.00068	.00159	.00561	496.50

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00027	.00490	.00403	248.20	495.84	.00311	.00605
SDev	.00113	.00074	.00061	.99	1.51	.00074	.00107
%RSD	413.93	15.189	15.198	.39705	.30446	23.850	17.761
#1	-.00047	.00450	.00396	247.99	494.74	.00259	.00531
#2	-.00029	.00443	.00345	247.34	495.22	.00279	.00556
#3	.00158	.00575	.00467	249.27	497.56	.00396	.00728

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	248.76	-.00117	.00391	.00297	249.35	.00104	-.00030
SDev	1.60	.00012	.00352	.00649	.79	.00527	.00076
%RSD	.64430	10.552	90.068	218.78	.31565	507.17	255.66
#1	247.65	-.00124	.00495	.00059	248.70	-.00382	-.00053
#2	248.03	-.00124	-.00001	-.00200	249.12	.00029	-.00091
#3	250.60	-.00103	.00679	.01031	250.23	.00664	.00055

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01086	.00015	.00226	.00329	-.00248	-.00719	.00931
SDev	.00016	.00007	.00175	.00293	.00073	.00522	.00331
%RSD	1.4430	47.756	77.282	89.220	29.648	72.607	35.561
#1	.01077	.00024	.00357	.00190	-.00304	-.00288	.00880
#2	.01077	.00010	.00028	.00131	-.00275	-.01299	.00628
#3	.01104	.00013	.00293	.00666	-.00165	-.00569	.01284

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00722	.00763
SDev	.00308	.00942
%RSD	42.639	123.47
#1	-.00429	.00260
#2	-.01043	.00179
#3	-.00693	.01849

Analysis Report 11/01/99 03:24:22 PM page 1

Method: TAL Sample Name: icb Operator: tjn
Run Time: 11/01/99 15:18:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03270	.00085	.00228	.00088	.00063	.00075	.04412
SDev	.01610	.00131	.00212	.00059	.00033	.00049	.01517
%RSD	49.227	154.81	93.184	66.727	52.738	65.219	34.388
#1	.04851	.00086	.00021	.00142	.00100	.00132	.05944
#2	.03326	.00215	.00445	.00098	.00056	.00040	.04383
#3	.01633	-.00047	.00217	.00025	.00034	.00055	.02910

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00044	.00055	.00089	-.00503	.02702	.00063	.00088
SDev	.00076	.00026	.00032	.00716	.02055	.00037	.00085
%RSD	172.43	46.552	36.458	142.39	76.064	59.548	96.448
#1	.00129	.00078	.00127	.00279	.04947	.00103	.00181
#2	-.00019	.00027	.00070	-.00660	.02246	.00055	.00067
#3	.00022	.00061	.00070	-.01127	.00913	.00030	.00015

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05794	-.00013	.00162	.00298	-.46045	.00109	.00058
SDev	.00524	.00042	.00101	.00381	.01709	.00206	.00027
%RSD	9.0434	313.45	62.017	128.14	3.7116	188.98	46.081
#1	.05827	-.00060	.00055	.00413	-.44849	.00219	.00087
#2	.06301	.00020	.00178	-.00128	-.45284	.00238	.00049
#3	.05255	.00000	.00254	H.00608	-.48003	-.00129	.00036

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00270	.00220	.00087	.00099	.00076	.00025	.00214
SDev	.00122	.00077	.00089	.00236	.00034	.00111	.00103
%RSD	45.093	34.836	103.14	238.53	44.137	437.56	48.214
#1	.00411	.00307	.00070	.00089	.00114	-.00103	.00117
#2	.00200	.00161	.00184	.00340	.00064	.00095	.00202
#3	.00200	.00193	.00007	-.00132	.00050	.00084	.00322

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00781	.00018
SDev	.00586	.00291
%RSD	74.970	1623.8
#1	.00827	.00168
#2	.00174	-.00317
#3	.01342	.00204

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Method: TAL Sample Name: qcs Operator:
Run Time: 11/01/99 15:24:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.58066	.02300	.02023	.02262	.02251	.02293	.22452
SDev	.00185	.00039	.00278	.00004	.00011	.00019	.00244
%RSD	.31855	1.7107	13.719	.17503	.47396	.83425	1.0868
#1	.58141	.02255	.02336	.02266	.02255	.02313	.22415
#2	.58202	.02313	.01931	.02259	.02259	.02291	.22713
#3	.57855	.02331	.01804	.02260	.02239	.02275	.22229

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02141	.02189	.02297	.53450	.22111	.02175	.02297
SDev	.00002	.00030	.00006	.00528	.00977	.00013	.00019
%RSD	.09250	1.3752	.25039	.98797	4.4178	.59293	.82002
#1	.02140	.02191	.02293	.53401	.21946	.02187	.02317
#2	.02143	.02217	.02304	.54000	.23160	.02176	.02294
#3	.02140	.02157	.02294	.52948	.21227	.02161	.02280

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0783	.02191	.02211	.02093	.89210	.02346	.02178
SDev	.0013	.00095	.00058	.00212	.01382	.00108	.00034
%RSD	.12010	4.3485	2.6154	10.148	1.5491	4.6137	1.5723
#1	1.0794	.02286	.02228	.02280	.89004	.02294	.02191
#2	1.0786	.02191	.02146	.02137	.90684	.02274	.02204
#3	1.0769	.02096	.02258	.01862	.87943	.02471	.02139

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02647	.03641	.02331	.02460	.02206	.02239	.02180
SDev	.00054	.00027	.00079	.00030	.00014	.00173	.00079
%RSD	2.0245	.73065	3.4027	1.2336	.62878	7.7090	3.6343
#1	.02700	.03638	.02406	.02492	.02221	.02426	.02112
#2	.02647	.03670	.02339	.02456	.02203	.02085	.02160
#3	.02593	.03617	.02248	.02431	.02194	.02207	.02267

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.02438	.01881
SDev	.00529	.00408
%RSD	21.680	21.678
#1	.02056	.02352
#2	.03042	.01646
#3	.02217	.01646

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Method: TAL Sample Name: qcs 600 Operator:
Run Time: 11/01/99 15:30:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0111	.98470	.95487	.96093	1.0349	.99735	9.6712
SDev	.0047	.00345	.01000	.00271	.0017	.00365	.0286
%RSD	.46844	.35029	1.0474	.28165	.16109	.36614	.29549
#1	1.0098	.98801	.95697	.96387	1.0348	.99806	9.6554
#2	1.0163	.98495	.96365	.96038	1.0367	1.0006	9.7042
#3	1.0071	.98113	.94398	.95854	1.0334	.99340	9.6540

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99830	.96945	.99454	.99005	9.4546	.97857	.99792
SDev	.00262	.00254	.00258	.00897	.0079	.00156	.00379
%RSD	.26204	.26197	.25972	.90607	.08311	.15981	.37990
#1	.99763	.97036	.99629	.99987	9.4603	.97863	.99943
#2	1.0012	.97140	.99577	.98796	9.4579	.98011	1.0007
#3	.99608	.96658	.99157	.98230	9.4456	.97698	.99361

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.3125	1.0801	1.0050	.95297	9.7435	.98189	.98352
SDev	.0238	.0011	.0027	.01320	.0205	.00259	.00175
%RSD	.25584	.09758	.26966	1.3849	.21089	.26403	.17771
#1	9.3087	1.0801	1.0044	.94399	9.7213	.98411	.98480
#2	9.2909	1.0812	1.0080	.96812	9.7618	.98251	.98422
#3	9.3381	1.0791	1.0027	.94680	9.7475	.97904	.98153

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0103	1.0246	.99852	1.1061	1.0055	1.0024	1.0062
SDev	.0040	.0014	.00293	.0075	.0014	.0044	.0053
%RSD	.39261	.13484	.29292	.68219	.13847	.44319	.52613
#1	1.0093	1.0262	1.0010	1.0975	1.0069	1.0075	1.0028
#2	1.0146	1.0243	.99924	1.1112	1.0056	.99907	1.0123
#3	1.0069	1.0235	.99530	1.1098	1.0041	1.0007	1.0035

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.94823	.95495
SDev	.01141	.01994
%RSD	1.2037	2.0878
#1	.95789	.93667
#2	.95115	.97621
#3	.93563	.95198

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Method: TAL Sample Name: icsa Operator:
Run Time: 11/01/99 15:36:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	483.83	-.00491	.00473	-.00286	-.00055	.00331	481.64
SDev	4.88	.00307	.00437	.00002	.00004	.00031	4.90
%RSD	1.0093	62.501	92.393	.59031	6.9147	9.4279	1.0173
#1	486.73	-.00269	-.00011	-.00285	-.00059	.00315	484.17
#2	486.57	-.00841	.00591	-.00286	-.00052	.00367	484.76
#3	478.19	-.00363	.00840	-.00288	-.00053	.00311	475.99

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00054	.00388	.00330	243.72	485.95	.00181	.00435
SDev	.00009	.00033	.00051	2.40	4.70	.00005	.00043
%RSD	15.934	8.5408	15.476	.98377	.96630	2.5137	9.9766
#1	-.00062	.00350	.00277	244.98	489.06	.00184	.00453
#2	-.00045	.00403	.00378	245.23	488.25	.00176	.00386
#3	-.00054	.00410	.00336	240.95	480.55	.00183	.00466

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	244.94	-.00103	.00124	-.00484	244.79	-.00131	-.00176
SDev	2.10	.00017	.00025	.01131	1.92	.00473	.00004
%RSD	.85559	16.944	19.901	233.68	.78503	360.07	2.2028
#1	245.67	-.00093	.00117	.00383	246.13	-.00147	-.00177
#2	246.57	-.00123	.00152	L-.01763	245.65	-.00597	-.00172
#3	242.58	-.00092	.00104	-.00072	242.59	.00349	-.00180

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00899	-.00552	.00063	.00260	-.00372	-.01108	.00722
SDev	.00246	.00050	.00148	.00445	.00008	.00256	.00098
%RSD	27.343	9.1207	236.90	171.12	2.0886	23.110	13.644
#1	.00615	-.00504	-.00020	-.00253	-.00379	-.01024	.00668
#2	.01032	-.00604	-.00026	.00539	-.00364	-.00904	.00661
#3	.01049	-.00549	.00234	.00495	-.00372	-.01395	.00835

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00158	-.00846
SDev	.01630	.01440
%RSD	1029.2	170.13
#1	.02014	-.00473
#2	-.00499	-.02436
#3	-.01040	.00370

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Method: TAL Sample Name: icsab Operator:
Run Time: 11/01/99 15:42:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	476.92	.09417	.09605	.09550	.09621	.09134	487.50
SDev	13.77	.00524	.00283	.00235	.00241	.00257	13.27
%RSD	2.8869	5.5675	2.9483	2.4644	2.5011	2.8158	2.7229
#1	485.00	.09709	.09901	.09729	.09743	.09265	493.52
#2	484.73	.09731	.09337	.09639	.09775	.09300	496.70
#3	461.02	.08812	.09576	.09284	.09344	.08838	472.28

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09156	.09144	.10812	245.05	476.42	.09520	.09272
SDev	.00174	.00238	.00339	6.96	12.28	.00231	.00226
%RSD	1.9008	2.6044	3.1384	2.8387	2.5774	2.4307	2.4318
#1	.09263	.09259	.11018	248.36	483.75	.09625	.09349
#2	.09249	.09302	.10997	249.73	483.26	.09680	.09449
#3	.08955	.08870	.10420	237.05	462.24	.09255	.09019

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	238.09	.00998	.09146	.09904	240.26	.08578	.09362
SDev	6.07	.00036	.00344	.00191	5.25	.00407	.00280
%RSD	2.5482	3.5597	3.7643	1.9284	2.1846	4.7394	2.9912
#1	241.78	.01023	.09354	.10081	243.79	.08805	.09510
#2	241.41	.01014	.09335	.09702	242.76	.08820	.09536
#3	231.09	.00957	.08748	.09930	234.23	.08108	.09039

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09610	.09362	.09028	.09832	.09334	.08709	.09347
SDev	.00276	.00226	.00451	.00134	.00237	.00134	.00451
%RSD	2.8704	2.4176	4.9980	1.3672	2.5376	1.5382	4.8295
#1	.09819	.09533	.09114	.09734	.09479	.08821	.09602
#2	.09713	.09448	.09431	.09777	.09462	.08746	.09612
#3	.09297	.09106	.08540	.09986	.09061	.08561	.08825

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.10063	.09784
SDev	.01425	.00469
%RSD	14.162	4.7979
#1	.10826	.09668
#2	.08419	.10301
#3	.10945	.09384

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/01/99 15:48:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.328	5.0361	4.9027	4.8248	4.8607	4.8798	49.202
SDev	.124	.0069	.0227	.0084	.0009	.0088	.049
%RSD	.25686	.13702	.46289	.17497	.01789	.18098	.10002
#1	48.186	5.0299	4.8774	4.8151	4.8613	4.8900	49.259
#2	48.382	5.0435	4.9096	4.8288	4.8611	4.8751	49.176
#3	48.416	5.0349	4.9212	4.8305	4.8597	4.8744	49.171

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9072	4.8072	4.9639	47.105	47.663	4.8839	4.9426
SDev	.0059	.0008	.0152	.025	.105	.0004	.0070
%RSD	.11928	.01682	.30606	.05387	.22070	.00804	.14094
#1	4.9126	4.8079	4.9464	47.075	47.542	4.8837	4.9476
#2	4.9010	4.8074	4.9719	47.119	47.708	4.8837	4.9455
#3	4.9080	4.8063	4.9734	47.119	47.737	4.8844	4.9346

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.695	.50754	5.0432	5.0203	48.515	4.9318	4.8634
SDev	.291	.00077	.0029	.0058	.182	.0258	.0014
%RSD	.55311	.15096	.05768	.11495	.37519	.52281	.02858
#1	52.359	.50669	5.0452	5.0141	48.307	4.9415	4.8618
#2	52.848	.50818	5.0399	5.0256	48.648	4.9026	4.8640
#3	52.878	.50775	5.0446	5.0212	48.589	4.9514	4.8643

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9630	5.3118	4.9194	5.1971	5.0033	5.0016	5.0639
SDev	.0146	.0107	.0037	.0157	.0060	.0078	.0009
%RSD	.29353	.20056	.07429	.30256	.11991	.15499	.01830
#1	4.9798	5.3001	4.9233	5.2126	4.9966	5.0081	5.0635
#2	4.9553	5.3142	4.9161	5.1976	5.0053	4.9930	5.0631
#3	4.9538	5.3210	4.9189	5.1812	5.0081	5.0037	5.0649

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	4.9772	5.0415
SDev	.0026	.0089
%RSD	.05254	.17679
#1	4.9787	5.0315
#2	4.9787	5.0486
#3	4.9741	5.0443

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/01/99 15:54:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00925	.00174	.00279	.00003	.00037	.00023	.02129
SDev	.00204	.00036	.00236	.00000	.00003	.00017	.00227
%RSD	21.999	20.998	84.625	5.0530	7.5491	71.230	10.666
#1	.01103	.00205	.00549	.00003	.00038	.00037	.02364
#2	.00970	.00182	.00184	.00003	.00040	.00029	.02112
#3	.00703	.00134	.00106	.00003	.00034	.00005	.01911

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00028	.00050	.00016	-.01552	.00799	.00031	.00021
SDev	.00008	.00026	.00010	.00986	.00194	.00002	.00044
%RSD	28.754	51.820	60.826	63.510	24.320	6.5398	212.78
#1	.00035	.00078	.00021	-.00547	.00905	.00033	.00069
#2	.00019	.00044	.00005	-.01592	.00917	.00030	.00011
#3	.00029	.00027	.00023	-.02517	.00575	.00030	-.00018

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08027	.00009	-.00035	.00248	-.14162	.00308	.00032
SDev	.00340	.00010	.00120	.00096	.03075	.00079	.00020
%RSD	4.2310	113.74	345.06	38.630	21.714	25.589	61.256
#1	.07709	.00020	.00068	.00347	-.13960	.00392	.00049
#2	.08385	.00000	-.00167	.00156	-.17333	.00236	.00036
#3	.07986	.00007	-.00006	.00240	-.11193	.00295	.00011

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00376	.00416	.00297	.00133	.00056	.00048	-.00093
SDev	.00041	.00083	.00042	.00105	.00026	.00165	.00098
%RSD	10.805	20.030	14.131	78.614	47.233	341.79	105.70
#1	.00383	.00502	.00329	.00029	.00086	.00195	-.00011
#2	.00413	.00409	.00313	.00131	.00046	-.00131	-.00202
#3	.00332	.00336	.00250	.00239	.00036	.00081	-.00066

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00353	.00156
SDev	.00789	.00355
%RSD	223.42	226.79
#1	.00359	.00303
#2	-.00439	.00415
#3	.01140	-.00248

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Method: TAL Sample Name: pbswg Operator:
Run Time: 11/01/99 16:00:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00143	.00041	.00361	.00002	.00018	.00006	.01289
SDev	.00322	.00115	.00309	.00000	.00001	.00004	.00157
%RSD	225.48	280.07	85.698	4.5334	3.2137	68.104	12.207
#1	.00243	.00164	.00090	.00002	.00018	.00008	.01406
#2	.00402	.00024	.00697	.00002	.00018	.00009	.01351
#3	-.00217	-.00065	.00295	.00002	.00017	.00001	.01110

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00021	.00034	-.00021	-.02053	-.00081	.00013	.00008
SDev	.00005	.00021	.00011	.00283	.00982	.00006	.00043
%RSD	22.155	61.700	54.033	13.799	1207.7	42.831	555.33
#1	.00025	.00053	-.00008	-.02019	.00529	.00018	.00027
#2	.00022	.00036	-.00027	-.01788	.00442	.00014	-.00042
#3	.00016	.00012	-.00028	-.02351	-.01214	.00007	.00038

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06023	.00000	-.00035	-.00007	-.29805	.00152	.00005
SDev	.00199	.00000	.00106	.00578	.03346	.00104	.00019
%RSD	3.2970	4.2927	304.05	7975.6	11.227	68.497	365.29
#1	.05864	.00000	-.00123	.00043	-.25943	.00246	.00022
#2	.05960	.00000	.00083	L-.00608	-.31637	.00171	.00009
#3	.06246	.00000	-.00065	H.00544	-.31835	.00040	-.00016

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00317	.00154	.00049	.00032	.00018	-.00183	.00023
SDev	.00060	.00025	.00099	.00070	.00008	.00074	.00125
%RSD	18.895	16.015	202.40	218.75	43.713	40.203	545.65
#1	.00283	.00149	-.00055	-.00046	.00013	-.00222	-.00090
#2	.00386	.00180	.00142	.00054	.00027	-.00098	.00157
#3	.00282	.00132	.00059	.00089	.00013	-.00229	.00001

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00312	-.00204
SDev	.00605	.00858
%RSD	193.66	419.59
#1	-.00359	.00206
#2	.00482	-.01190
#3	.00814	.00371

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Method: TAL Sample Name: lcsswg Operator:
Run Time: 11/01/99 16:06:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.6683	.49590	.49624	.49803	.51329	.50116	9.9774
SDev	.0187	.00245	.00347	.00029	.00090	.00138	.0142
%RSD	.19303	.49480	.69827	.05772	.17531	.27534	.14193
#1	9.6471	.49310	.49224	.49783	.51230	.50236	9.9614
#2	9.6756	.49693	.49826	.49836	.51352	.50146	9.9824
#3	9.6822	.49768	.49821	.49791	.51405	.49965	9.9884

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49565	.49405	.48982	10.216	9.5815	.49759	.49907
SDev	.00070	.00073	.00186	.014	.0234	.00067	.00241
%RSD	.14110	.14880	.37946	.13577	.24379	.13500	.48309
#1	.49549	.49490	.48773	10.200	9.5620	.49682	.50185
#2	.49642	.49366	.49044	10.223	9.5750	.49806	.49777
#3	.49505	.49359	.49128	10.225	9.6074	.49789	.49759

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.5143	.04921	.50388	.49424	9.6620	.49955	.49606
SDev	.0097	.00010	.00158	.00211	.0233	.00292	.00020
%RSD	.10176	.20802	.31443	.42772	.24109	.58465	.04004
#1	9.5049	.04928	.50258	.49627	9.6592	.50065	.49583
#2	9.5137	.04927	.50564	.49440	9.6402	.50176	.49616
#3	9.5242	.04910	.50340	.49205	9.6865	.49624	.49618

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.53082	.50465	.50055	.50949	.49703	.49607	.50761
SDev	.00186	.00114	.00097	.00707	.00031	.00074	.00258
%RSD	.35108	.22659	.19278	1.3878	.06263	.15001	.50769
#1	.52956	.50565	.49992	.50180	.49667	.49583	.50579
#2	.53296	.50491	.50166	.51098	.49721	.49547	.51056
#3	.52993	.50340	.50008	.51570	.49721	.49690	.50648

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.48797	.49698
SDev	.00228	.00409
%RSD	.46711	.82252
#1	.48537	.50132
#2	.48960	.49641
#3	.48895	.49321

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Method: TAL Sample Name: 94050001 Operator:
Run Time: 11/01/99 16:12:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02308	-.00039	-.00103	.02699	.00033	.00058	58.570
SDev	.00229	.00132	.00156	.00003	.00002	.00010	.073
%RSD	9.9349	340.20	150.98	.11085	7.1024	16.422	.12405
#1	.02466	.00105	-.00006	.02696	.00036	.00047	58.643
#2	.02045	-.00154	-.00020	.02701	.00032	.00062	58.571
#3	.02413	-.00067	-.00283	.02701	.00032	.00065	58.497

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00067	.00474	.00636	.02823	33.052	7.3719	.01344
SDev	.00006	.00005	.00072	.00720	.038	.0083	.00023
%RSD	9.4438	1.1244	11.340	25.488	.11387	.11208	1.7153
#1	.00073	.00468	.00666	.03498	33.038	7.3807	.01365
#2	.00060	.00477	.00687	.02066	33.023	7.3707	.01319
#3	.00067	.00477	.00553	.02905	33.094	7.3643	.01348

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1859	-.00112	.00045	.00272	41.253	.00171	.00093
SDev	.0017	.00057	.00008	.00492	.092	.00243	.00020
%RSD	.14086	51.016	17.436	181.01	.22236	141.96	20.955
#1	1.1860	-.00047	.00039	.00828	41.358	.00403	.00115
#2	1.1875	-.00154	.00043	-.00106	41.215	-.00081	.00076
#3	1.1842	-.00134	.00054	.00093	41.186	.00191	.00089

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01912	.18270	.00314	.00119	.00037	-.00137	.00120
SDev	.00125	.00024	.00164	.00341	.00010	.00053	.00038
%RSD	6.5366	.12944	52.093	285.53	25.439	38.328	31.726
#1	.01825	.18244	.00134	.00197	.00040	-.00091	.00087
#2	.01856	.18278	.00355	.00415	.00027	-.00127	.00111
#3	.02055	.18289	.00454	-.00254	.00045	-.00194	.00162

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00868	-.00065
SDev	.00816	.00422
%RSD	94.010	653.89
#1	.01773	.00318
#2	.00641	-.00518
#3	.00189	.00007

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Method: TAL Sample Name: 94050001dup Operator:
Run Time: 11/01/99 16:18:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02622	.00035	.00011	.02635	.00034	.00050	54.998
SDev	.00578	.00155	.00306	.00006	.00003	.00009	.147
%RSD	22.059	439.41	2764.6	.21315	10.303	17.639	.26677
#1	.03188	-.00071	.00363	.02635	.00034	.00058	54.958
#2	.02647	.00213	-.00135	.02640	.00038	.00052	55.161
#3	.02032	-.00037	-.00194	.02629	.00031	.00040	54.876

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00078	.00426	.00588	.02535	31.843	6.9999	.01297
SDev	.00027	.00041	.00013	.00073	.073	.0146	.00044
%RSD	34.392	9.5691	2.1807	2.8896	.22949	.20811	3.3976
#1	.00071	.00461	.00584	.02619	31.911	7.0002	.01327
#2	.00107	.00435	.00602	.02496	31.851	7.0143	.01317
#3	.00055	.00381	.00578	.02489	31.766	6.9851	.01246

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1415	-.00062	-.00141	.00547	39.839	-.00018	.00071
SDev	.0018	.00012	.00055	.00154	.070	.00244	.00007
%RSD	.15989	18.947	38.802	28.104	.17528	1353.4	10.197
#1	1.1432	-.00076	-.00151	.00370	39.911	-.00198	.00067
#2	1.1416	-.00056	-.00082	.00627	39.833	.00259	.00066
#3	1.1396	-.00055	-.00189	.00645	39.772	-.00115	.00079

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01747	.17091	.00354	-.00085	.00019	-.00192	-.00128
SDev	.00125	.00045	.00036	.00185	.00007	.00169	.00039
%RSD	7.1464	.26348	10.169	217.84	39.064	87.928	30.190
#1	.01687	.17142	.00322	-.00250	.00020	-.00142	-.00173
#2	.01890	.17069	.00349	.00115	.00025	-.00054	-.00113
#3	.01663	.17060	.00393	-.00119	.00011	-.00380	-.00100

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00817	.00373
SDev	.00360	.00071
%RSD	44.089	18.951
#1	.00420	.00306
#2	.00908	.00447
#3	.01122	.00368

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Method: TAL Sample Name: 94050001ms Operator:
Run Time: 11/01/99 16:24:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.6962	.49667	.48804	.52078	.51003	.49124	66.136
SDev	.0113	.00095	.00247	.00189	.00078	.00004	.181
%RSD	.11669	.19062	.50687	.36293	.15260	.00900	.27342
#1	9.7053	.49758	.48963	.52258	.50952	.49129	66.013
#2	9.6996	.49569	.48519	.52093	.50965	.49120	66.051
#3	9.6835	.49675	.48930	.51881	.51093	.49124	66.343

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48875	.48966	.49707	10.110	41.200	7.5498	.50166
SDev	.00126	.00059	.00080	.010	.039	.0111	.00089
%RSD	.25732	.12005	.16005	.10341	.09486	.14671	.17666
#1	.48802	.48975	.49747	10.106	41.233	7.5418	.50214
#2	.48802	.48903	.49759	10.102	41.210	7.5453	.50220
#3	.49020	.49019	.49615	10.122	41.157	7.5625	.50064

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.998	.04879	.49097	.49548	49.042	.48265	.49374
SDev	.048	.00025	.00151	.00716	.015	.00705	.00024
%RSD	.43664	.52081	.30809	1.4443	.03025	1.4608	.04787
#1	11.052	.04850	.48958	.48869	49.055	.47709	.49357
#2	10.961	.04889	.49258	.49481	49.045	.48027	.49401
#3	10.981	.04897	.49076	.50295	49.025	.49058	.49363

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50467	.66495	.49737	.50413	.49455	.48661	.49299
SDev	.00213	.00189	.00146	.00520	.00042	.00056	.00229
%RSD	.42207	.28446	.29448	1.0318	.08443	.11432	.46347
#1	.50253	.66713	.49861	.50279	.49488	.48700	.49070
#2	.50470	.66394	.49775	.50987	.49469	.48686	.49527
#3	.50679	.66378	.49576	.49973	.49408	.48598	.49299

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.49508	.49531
SDev	.00703	.01110
%RSD	1.4197	2.2400
#1	.49009	.48761
#2	.50312	.49028
#3	.49204	.50802

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Method: TAL Sample Name: 94050001msd Operator:
Run Time: 11/01/99 16:30:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.9215	.51062	.50355	.52779	.52372	.50190	65.106
SDev	.0071	.00100	.00222	.00187	.00069	.00114	.120
%RSD	.07203	.19604	.44070	.35444	.13094	.22660	.18391
#1	9.9278	.51042	.50249	.52987	.52303	.50190	64.974
#2	9.9229	.50973	.50610	.52727	.52440	.50303	65.206
#3	9.9137	.51170	.50205	.52624	.52373	.50076	65.140

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50112	.50330	.50900	10.362	40.689	7.4041	.51107
SDev	.00079	.00050	.00068	.024	.016	.0086	.00053
%RSD	.15812	.10006	.13407	.23426	.03952	.11601	.10469
#1	.50024	.50303	.50975	10.339	40.676	7.3953	.51046
#2	.50176	.50388	.50842	10.360	40.707	7.4124	.51147
#3	.50136	.50298	.50882	10.388	40.685	7.4047	.51128

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.120	.04952	.50390	.50649	48.343	.49844	.50513
SDev	.033	.00030	.00147	.00103	.066	.00515	.00026
%RSD	.29241	.59691	.29141	.20374	.13674	1.0338	.05102
#1	11.124	.04963	.50535	.50630	48.324	.49250	.50486
#2	11.085	.04918	.50394	.50557	48.288	.50111	.50516
#3	11.150	.04974	.50242	.50761	48.416	.50171	.50537

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51975	.67353	.50907	.51303	.50664	.49898	.50619
SDev	.00208	.00060	.00241	.00286	.00028	.00167	.00168
%RSD	.39999	.08942	.47286	.55733	.05442	.33528	.33104
#1	.51736	.67386	.51154	.51624	.50673	.50088	.50742
#2	.52085	.67390	.50895	.51211	.50685	.49773	.50688
#3	.52106	.67284	.50673	.51076	.50633	.49834	.50428

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.50455	.50708
SDev	.00946	.00323
%RSD	1.8745	.63718
#1	.50517	.50648
#2	.49480	.51057
#3	.51369	.50419

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Method: TAL Sample Name: 940500011 Operator:
Run Time: 11/01/99 16:36:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00846	.00124	.00286	.00579	.00017	.00016	11.286
SDev	.00109	.00092	.00462	.00008	.00002	.00019	.007
%RSD	12.917	74.145	161.47	1.4001	10.020	118.70	.06400
#1	.00907	.00071	-.00243	.00580	.00019	.00007	11.278
#2	.00912	.00071	.00492	.00587	.00017	.00038	11.287
#3	.00720	.00230	.00609	.00571	.00016	.00003	11.293

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00022	.00095	-.00098	-.00668	6.6266	1.4805	.00272
SDev	.00056	.00030	.00010	.00404	.0041	.0016	.00038
%RSD	251.44	32.187	9.8089	60.515	.06260	.10857	14.131
#1	-.00079	.00069	-.00108	-.00432	6.6220	1.4786	.00315
#2	-.00019	.00086	-.00088	-.01134	6.6302	1.4810	.00263
#3	.00032	.00129	-.00099	-.00436	6.6275	1.4817	.00239

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24733	-.00013	-.00071	.00334	8.1729	-.00669	.00016
SDev	.00211	.00033	.00147	.00442	.0385	.01033	.00007
%RSD	.85185	262.70	206.34	132.65	.47134	154.53	46.919
#1	.24772	-.00028	.00058	-.00177	8.1718	.00137	.00012
#2	.24922	-.00035	-.00232	.00568	8.1350	-.00309	.00011
#3	.24506	.00025	-.00041	.00609	8.2120	L-.01834	.00024

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01175	.03507	.00165	.00185	.00021	-.00196	-.00026
SDev	.00036	.00033	.00073	.00084	.00016	.00238	.00105
%RSD	3.0390	.94869	44.115	45.340	75.845	121.64	406.12
#1	.01215	.03529	.00180	.00089	.00030	-.00017	.00079
#2	.01149	.03523	.00086	.00222	.00003	-.00466	-.00131
#3	.01159	.03469	.00230	.00245	.00030	-.00104	-.00026

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00254	.00335
SDev	.00198	.00616
%RSD	77.977	184.06
#1	.00140	-.00374
#2	.00139	.00743
#3	.00483	.00634

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Method: TAL Sample Name: 94050001p Operator:
Run Time: 11/01/99 16:42:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.9271	.50725	.50667	.53137	.51918	.50083	64.389
SDev	.0063	.00364	.00196	.00052	.00064	.00049	.108
%RSD	.06311	.71740	.38724	.09767	.12337	.09813	.16735
#1	9.9339	.50965	.50452	.53165	.51944	.50050	64.399
#2	9.9217	.50306	.50837	.53077	.51845	.50060	64.277
#3	9.9255	.50903	.50711	.53168	.51964	.50140	64.492

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49934	.50178	.51011	10.308	40.529	7.3332	.51014
SDev	.00033	.00098	.00085	.017	.037	.0085	.00179
%RSD	.06583	.19639	.16766	.16614	.09179	.11591	.35157
#1	.49972	.50291	.51093	10.322	40.562	7.3355	.51124
#2	.49917	.50135	.51017	10.289	40.489	7.3238	.50807
#3	.49914	.50109	.50922	10.314	40.537	7.3403	.51110

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.203	.04906	.50237	.50282	48.257	.50129	.50257
SDev	.025	.00051	.00219	.00283	.052	.00631	.00084
%RSD	.22605	1.0320	.43597	.56295	.10857	1.2579	.16782
#1	11.189	.04856	.50014	.49963	48.312	.49773	.50264
#2	11.232	.04958	.50247	.50380	48.207	.49757	.50169
#3	11.188	.04903	.50451	.50503	48.253	.50857	.50338

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50999	.67574	.50755	.51387	.50457	.49808	.50436
SDev	.00076	.00165	.00307	.00144	.00058	.00156	.00363
%RSD	.14864	.24437	.60487	.28014	.11427	.31423	.72032
#1	.51084	.67618	.50968	.51553	.50517	.49943	.50033
#2	.50975	.67391	.50403	.51312	.50402	.49636	.50536
#3	.50939	.67712	.50893	.51297	.50451	.49844	.50738

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.50300	.50234
SDev	.00355	.00514
%RSD	.70546	1.0240
#1	.50524	.49644
#2	.49891	.50586
#3	.50484	.50474

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Method: TAL Sample Name: 94050014 Operator:
Run Time: 11/01/99 16:48:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00458	-.00036	.00128	.00889	.00020	-.00023	38.653
SDev	.00224	.00051	.00203	.00000	.00002	.00015	.064
%RSD	48.828	140.84	158.58	.01320	11.756	65.478	.16572
#1	.00630	-.00095	.00282	.00889	.00023	-.00012	38.615
#2	.00205	-.00001	-.00102	.00889	.00021	-.00040	38.727
#3	.00540	-.00013	.00204	.00889	.00018	-.00017	38.616

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00035	.00019	.00011	.00123	16.341	.00213	.00086
SDev	.00006	.00022	.00019	.00184	.007	.00004	.00036
%RSD	18.029	117.66	166.98	150.24	.04194	1.9803	42.187
#1	.00029	.00002	-.00008	-.00077	16.338	.00218	.00084
#2	.00041	.00044	.00011	.00160	16.349	.00210	.00123
#3	.00035	.00010	.00030	.00285	16.336	.00210	.00051

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1587	-.00018	-.00129	.00503	14.828	-.00196	.00028
SDev	.0004	.00062	.00005	.00172	.029	.00375	.00026
%RSD	.03774	346.48	3.5215	34.149	.19594	190.68	94.298
#1	1.1582	-.00053	-.00128	.00693	14.834	.00066	-.00002
#2	1.1591	.00053	-.00133	.00358	14.797	-.00626	.00049
#3	1.1588	-.00053	-.00125	.00459	14.854	-.00030	.00037

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01997	.01747	.00122	-.00098	.00022	-.00156	-.00131
SDev	.00060	.00026	.00089	.00103	.00003	.00113	.00060
%RSD	3.0185	1.4974	72.851	105.03	12.233	72.349	45.713
#1	.02062	.01731	.00075	-.00132	.00020	-.00277	-.00069
#2	.01983	.01777	.00225	-.00179	.00020	-.00054	-.00189
#3	.01944	.01733	.00066	.00018	.00025	-.00136	-.00135

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00219	.00607
SDev	.00579	.00280
%RSD	263.74	46.086
#1	.00698	.00653
#2	.00384	.00307
#3	-.00424	.00861

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Method: TAL Sample Name: 94050017 Operator:
Run Time: 11/01/99 16:54:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01676	.00127	-.00286	.06525	.00027	.00033	55.607
SDev	.00058	.00053	.00110	.00016	.00002	.00011	.248
%RSD	3.4759	41.726	38.654	.24350	6.1683	32.992	.44585
#1	.01734	.00079	-.00387	.06543	.00029	.00021	55.860
#2	.01618	.00118	-.00168	.06515	.00026	.00041	55.364
#3	.01674	.00183	-.00301	.06517	.00026	.00039	55.596

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00074	.00526	.00709	.03131	31.344	5.5763	.01510
SDev	.00015	.00010	.00010	.00070	.031	.0191	.00019
%RSD	19.984	1.9157	1.4248	2.2453	.09915	.34178	1.2877
#1	.00090	.00532	.00719	.03172	31.379	5.5962	.01530
#2	.00070	.00514	.00708	.03049	31.318	5.5583	.01508
#3	.00061	.00532	.00699	.03170	31.336	5.5744	.01491

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1897	.00247	-.00190	.00252	43.693	.00267	.00091
SDev	.0027	.00043	.00054	.00627	.035	.00371	.00013
%RSD	.23070	17.528	28.221	248.35	.07971	139.19	14.294
#1	1.1928	.00221	-.00190	-.00391	43.733	.00631	.00104
#2	1.1888	.00222	-.00136	.00288	43.669	.00281	.00090
#3	1.1876	.00296	-.00243	.00861	43.677	-.00111	.00078

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02808	.18489	.00253	.00033	.00024	-.00272	-.00165
SDev	.00023	.00108	.00148	.00091	.00009	.00153	.00100
%RSD	.82727	.58369	58.414	277.49	38.029	56.264	60.747
#1	.02796	.18613	.00296	-.00020	.00034	-.00446	-.00079
#2	.02794	.18415	.00088	.00138	.00024	-.00159	-.00142
#3	.02835	.18440	.00374	-.00020	.00015	-.00212	-.00276

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00754	-.00037
SDev	.00729	.00776
%RSD	96.802	2104.5
#1	.00608	-.00929
#2	.00108	.00339
#3	.01545	.00480

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/01/99 17:00:00
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.273	5.0376	4.9047	4.8383	4.8311	4.8797	48.878
SDev	.219	.0225	.0216	.0149	.0329	.0345	.395
%RSD	.45346	.44755	.44127	.30714	.68063	.70799	.80897
#1	48.525	5.0627	4.9279	4.8553	4.8663	4.9177	49.292
#2	48.173	5.0311	4.9012	4.8316	4.8257	4.8713	48.840
#3	48.123	5.0190	4.8851	4.8280	4.8012	4.8501	48.504

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9007	4.8006	4.9627	47.118	47.559	4.8499	4.9455
SDev	.0380	.0318	.0166	.355	.231	.0320	.0304
%RSD	.77627	.66182	.33361	.75292	.48529	.66046	.61422
#1	4.9416	4.8336	4.9818	47.499	47.823	4.8839	4.9776
#2	4.8943	4.7980	4.9543	47.060	47.458	4.8454	4.9418
#3	4.8663	4.7702	4.9521	46.796	47.396	4.8203	4.9172

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.700	.50925	5.0495	5.0582	48.549	4.9125	4.8535
SDev	.127	.00374	.0414	.0456	.301	.0325	.0292
%RSD	.24029	.73380	.82053	.90115	.62081	.66217	.60136
#1	52.825	.51316	5.0955	5.1105	48.881	4.9449	4.8862
#2	52.572	.50888	5.0379	5.0375	48.471	4.8799	4.8445
#3	52.704	.50572	5.0151	5.0267	48.294	4.9128	4.8299

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9511	5.3145	4.9466	5.2151	5.0033	4.9799	5.0841
SDev	.0549	.0300	.0331	.0493	.0252	.0378	.0448
%RSD	1.1090	.56366	.66900	.94507	.50425	.75899	.88037
#1	5.0049	5.3487	4.9814	5.2675	5.0316	5.0235	5.1313
#2	4.9533	5.3018	4.9426	5.2079	4.9952	4.9559	5.0787
#3	4.8951	5.2929	4.9156	5.1698	4.9832	4.9604	5.0423

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	4.9761	5.0989
SDev	.0416	.0506
%RSD	.83579	.99263
#1	5.0213	5.1546
#2	4.9395	5.0860
#3	4.9676	5.0559

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/01/99 17:05:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01015	.00168	.00208	.00042	.00058	.00043	.02492
SDev	.00257	.00115	.00148	.00042	.00006	.00015	.00176
%RSD	25.277	68.736	71.264	98.443	9.5228	34.554	7.0723
#1	.01229	.00293	.00065	.00018	.00057	.00032	.02295
#2	.00730	.00144	.00197	.00090	.00064	.00060	.02633
#3	.01085	.00066	.00360	.00018	.00053	.00038	.02549

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00044	.00050	.00072	-.02017	.00407	.00068	.00067
SDev	.00010	.00021	.00004	.00749	.00100	.00005	.00013
%RSD	21.513	42.860	5.9955	37.131	24.450	7.5147	19.570
#1	.00054	.00069	.00075	-.02070	.00506	.00063	.00063
#2	.00044	.00053	.00067	-.02738	.00307	.00073	.00082
#3	.00035	.00027	.00072	-.01243	.00410	.00067	.00057

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08553	.00018	.00040	.00135	-.21755	.00139	.00040
SDev	.00615	.00031	.00011	.00275	.02750	.00391	.00007
%RSD	7.1896	172.74	28.117	203.92	12.643	281.94	16.294
#1	.07847	.00000	.00029	.00050	-.19465	-.00310	.00037
#2	.08839	.00000	.00039	.00442	-.24806	.00316	.00048
#3	.08972	.00054	.00051	-.00088	-.20994	.00410	.00037

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00484	.00284	.00279	.00257	.00058	-.00021	.00061
SDev	.00035	.00055	.00055	.00153	.00005	.00020	.00014
%RSD	7.2740	19.207	19.739	59.568	8.4162	92.833	22.348
#1	.00443	.00334	.00343	.00101	.00055	-.00017	.00047
#2	.00501	.00293	.00251	.00262	.00063	-.00043	.00074
#3	.00507	.00226	.00245	.00407	.00055	-.00004	.00062

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00289	.00019
SDev	.00331	.00247
%RSD	114.59	1274.4
#1	.00203	-.00065
#2	.00654	.00298
#3	.00009	-.00175

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Method: TAL Sample Name: 94050018 Operator:
Run Time: 11/01/99 17:11:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02277	-.00013	.00168	.05455	.00042	-.00010	75.330
SDev	.00425	.00144	.00225	.00025	.00006	.00007	.204
%RSD	18.667	1109.1	133.45	.46071	13.229	73.648	.27033
#1	.02601	.00149	.00357	.05475	.00044	-.00017	75.462
#2	.02435	-.00060	-.00080	.05463	.00046	-.00010	75.433
#3	.01796	-.00127	.00229	.05427	.00036	-.00002	75.095

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00107	.00359	.00043	11.741	18.394	6.9584	.00319
SDev	.00054	.00000	.00011	.035	.046	.0160	.00033
%RSD	50.719	.07070	24.996	.30104	.24827	.22998	10.494
#1	.00169	.00359	.00037	11.761	18.447	6.9705	.00293
#2	.00084	.00359	.00036	11.761	18.368	6.9644	.00356
#3	.00068	.00359	.00055	11.700	18.367	6.9402	.00307

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.3108	-.00111	-.00187	.00460	43.697	-.00024	.00038
SDev	.0209	.00044	.00085	.00187	.093	.00444	.00046
%RSD	.48579	39.931	45.245	40.541	.21294	1835.8	120.72
#1	4.3332	-.00060	-.00239	.00350	43.804	.00366	.00012
#2	4.3072	-.00143	-.00233	.00676	43.634	-.00507	.00091
#3	4.2918	-.00129	-.00089	.00355	43.654	.00069	.00011

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01899	.18357	.00418	-.00091	.00038	-.00107	-.00240
SDev	.00024	.00042	.00103	.00241	.00005	.00048	.00127
%RSD	1.2566	.22645	24.630	264.52	12.208	45.053	52.657
#1	.01887	.18384	.00513	.00102	.00034	-.00074	-.00338
#2	.01926	.18379	.00309	-.00360	.00038	-.00162	-.00286
#3	.01883	.18309	.00431	-.00015	.00043	-.00085	-.00097

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00854	.00224
SDev	.00497	.00449
%RSD	58.153	200.76
#1	.00544	.00214
#2	.00592	.00678
#3	.01428	-.00220

Analysis Report 11/01/99 05:23:38 PM

Method: TAL Sample Name: 94050021 Operator:
Run Time: 11/01/99 17:17:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01919	.00077	-.00150	.03381	.00036	-.00016	55.705
SDev	.00101	.00088	.00149	.00003	.00003	.00005	.039
%RSD	5.2746	113.92	99.466	.07672	8.8733	33.192	.06996
#1	.02012	-.00009	-.00013	.03383	.00040	-.00022	55.667
#2	.01811	.00075	-.00308	.03381	.00034	-.00011	55.745
#3	.01933	.00167	-.00127	.03378	.00034	-.00016	55.702

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00146	-.00000	.00119	-.00429	12.564	.00127	.00135
SDev	.00027	.00023	.00020	.00601	.007	.00009	.00028
%RSD	18.294	460850.	16.740	140.11	.05488	6.9699	20.527
#1	.00168	-.00026	.00119	-.00431	12.566	.00132	.00106
#2	.00152	.00017	.00139	.00173	12.569	.00132	.00162
#3	.00116	.00009	.00099	-.01030	12.556	.00117	.00138

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.4701	-.00016	-.00112	-.00291	16.317	-.00079	.00109
SDev	.0053	.00014	.00132	.00332	.039	.00219	.00007
%RSD	.35863	89.382	117.50	114.03	.23681	277.01	6.6872
#1	1.4666	-.00028	-.00097	L-.00627	16.296	-.00053	.00104
#2	1.4762	-.00021	-.00250	-.00282	16.293	.00126	.00105
#3	1.4675	.00000	.00012	.00036	16.362	-.00309	.00117

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01637	.02356	.00191	-.00029	.00017	-.00087	-.00142
SDev	.00017	.00060	.00065	.00362	.00007	.00008	.00197
%RSD	1.0246	2.5397	34.065	1252.1	41.163	9.0000	139.11
#1	.01656	.02399	.00172	.00385	.00011	-.00096	-.00115
#2	.01628	.02288	.00138	-.00285	.00025	-.00084	-.00350
#3	.01626	.02382	.00264	-.00187	.00016	-.00081	.00041

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00039	-.00495
SDev	.00203	.00432
%RSD	521.48	87.148
#1	-.00186	-.00887
#2	.00208	-.00566
#3	.00095	-.00033

Analysis Report 11/01/99 05:29:36 PM

Method: TAL Sample Name: 94306001;;;as Operator:
Run Time: 11/01/99 17:23:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm u	ppm	ppm	ppm	ppm
Avge	.02382	-.00137	.09413	-.00031	.00023	-.00005	.23616
SDev	.00139	.00071	.00510	.00004	.00002	.00011	.00260
%RSD	5.8177	51.334	5.4177	13.859	9.5152	240.01	1.0996
#1	.02518	-.00209	.09547	-.00026	.00024	-.00014	.23825
#2	.02241	-.00135	.08850	-.00033	.00020	.00008	.23697
#3	.02387	-.00068	.09843	-.00033	.00024	-.00008	.23325

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00012	.00021	.00113	-.02878	.06519	.00018	.00069
SDev	.00027	.00022	.00011	.00277	.00197	.00009	.00023
%RSD	234.84	104.87	9.4111	9.6122	3.0237	52.473	33.760
#1	-.00019	.00044	.00102	-.02559	.06720	.00027	.00096
#2	.00032	.00001	.00123	-.03034	.06326	.00019	.00058
#3	.00022	.00018	.00115	-.03042	.06510	.00008	.00054

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.046	-.00020	.00033	.00559	123.62	.00353	.00068
SDev	.174	.00035	.00124	.00146	.15	.00186	.00015
%RSD	.66983	173.75	378.88	26.216	.12413	52.687	21.801
#1	25.845	-.00061	-.00076	.00726	123.48	.00170	.00076
#2	26.127	.00000	.00168	.00456	123.79	.00346	.00076
#3	26.165	.00000	.00007	.00494	123.60	.00542	.00051

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00145	.14480	.00132	.00372	.00014	.00018	.00023
SDev	.00063	.00026	.00069	.00092	.00005	.00145	.00117
%RSD	43.656	.17997	51.947	24.667	33.431	792.09	503.11
#1	.00072	.14489	.00150	.00418	.00009	-.00082	-.00090
#2	.00181	.14501	.00190	.00267	.00014	.00184	.00143
#3	.00182	.14451	.00056	.00432	.00019	-.00047	.00016

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01383	.00108
SDev	.00145	.00184
%RSD	10.518	170.40
#1	.01469	.00317
#2	.01215	.00037
#3	.01465	-.00030

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Method: TAL Sample Name: 94306002;;;as Operator:
Run Time: 11/01/99 17:29:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02241	-.00155	.06631	-.00019	.00020	.00001	.29381
SDev	.00191	.00045	.00441	.00007	.00002	.00007	.00044
%RSD	8.5186	29.338	6.6466	37.944	9.7799	529.36	.14955
#1	.02300	-.00198	.07092	-.00012	.00018	.00010	.29330
#2	.02027	-.00107	.06586	-.00026	.00021	-.00003	.29407
#3	.02395	-.00159	.06214	-.00019	.00021	-.00003	.29406

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00020	.00027	.00291	-.02591	.08421	.00010	.00069
SDev	.00029	.00022	.00022	.00358	.00552	.00009	.00034
%RSD	141.20	81.304	7.7475	13.807	6.5532	87.135	49.773
#1	-.00006	.00002	.00277	-.02277	.08728	.00015	.00059
#2	.00016	.00044	.00279	-.02981	.08751	-.00000	.00040
#3	.00051	.00036	.00317	-.02516	.07784	.00015	.00106

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.879	-.00047	.00022	.00615	65.245	.00045	.00070
SDev	.066	.00041	.00037	.00124	.037	.00468	.00007
%RSD	.27539	86.997	165.63	20.146	.05597	1032.4	10.559
#1	23.803	-.00073	-.00012	.00667	65.208	.00354	.00074
#2	23.916	-.00067	.00017	.00473	65.281	.00276	.00061
#3	23.918	.00000	.00062	.00704	65.246	-.00494	.00074

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00331	.11759	.00093	.00272	.00012	-.00017	.00033
SDev	.00068	.00070	.00047	.00087	.00003	.00102	.00100
%RSD	20.677	.59771	50.581	31.830	21.677	615.11	306.31
#1	.00256	.11716	.00129	.00274	.00014	.00066	-.00056
#2	.00349	.11721	.00040	.00185	.00014	.00015	.00013
#3	.00389	.11840	.00112	.00358	.00009	-.00130	.00141

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01272	.00248
SDev	.00564	.00260
%RSD	44.302	104.82
#1	.00833	.00546
#2	.01077	.00134
#3	.01908	.00065

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Method: TAL Sample Name: 94306003;;;as Operator:
Run Time: 11/01/99 17:35:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02733	-.00239	.07248	-.00021	.00022	-.00018	.25440
SDev	.00272	.00115	.00262	.00004	.00004	.00005	.00057
%RSD	9.9445	48.041	3.6152	21.087	18.288	29.606	.22478
#1	.02461	-.00162	.07398	-.00026	.00017	-.00013	.25479
#2	.02733	-.00371	.06945	-.00018	.00025	-.00024	.25466
#3	.03004	-.00183	.07400	-.00018	.00023	-.00019	.25374

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00033	.00021	.00103	-.02696	.06040	.00005	.00053
SDev	.00016	.00021	.00025	.01104	.00550	.00006	.00054
%RSD	47.853	100.66	24.145	40.938	9.1088	110.52	102.78
#1	.00022	.00002	.00075	-.03814	.05405	.00004	-.00008
#2	.00025	.00044	.00117	-.01607	.06351	.00011	.00096
#3	.00051	.00018	.00119	-.02667	.06365	.00000	.00071

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.175	.00007	.00074	.00306	125.50	.00168	.00054
SDev	.143	.00018	.00085	.00185	.28	.00276	.00015
%RSD	.59202	261.92	115.05	60.472	.21986	164.75	28.712
#1	24.024	.00000	.00020	.00405	125.18	.00118	.00036
#2	24.192	-.00007	.00030	.00093	125.67	-.00080	.00063
#3	24.309	.00027	.00173	.00421	125.64	.00465	.00063

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00221	.10322	.00118	.00264	.00017	.00172	.00009
SDev	.00165	.00019	.00033	.00166	.00014	.00196	.00031
%RSD	74.829	.18717	27.753	62.876	83.479	113.97	345.51
#1	.00076	.10329	.00104	.00420	.00014	.00040	-.00007
#2	.00185	.10336	.00094	.00283	.00005	.00079	-.00011
#3	.00401	.10300	.00155	.00090	.00032	.00397	.00044

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01358	-.00257
SDev	.00388	.00156
%RSD	28.588	60.575
#1	.01317	-.00088
#2	.00992	-.00395
#3	.01765	-.00288

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Method: TAL Sample Name: icsa Operator:
Run Time: 11/01/99 17:41:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	480.88	-.00140	-.00196	-.00317	-.00052	.00153	490.51
SDev	.70	.00323	.00572	.00004	.00001	.00018	.51
%RSD	.14519	230.37	291.80	1.3162	2.5945	11.646	.10465
#1	481.52	.00063	-.00266	-.00319	-.00050	.00166	489.96
#2	480.98	-.00513	.00408	-.00313	-.00052	.00133	490.98
#3	480.13	.00029	-.00729	-.00320	-.00053	.00161	490.59

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00073	.00348	.00216	248.11	483.44	.00185	.00472
SDev	.00019	.00039	.00031	.21	1.06	.00004	.00038
%RSD	26.830	11.135	14.343	.08296	.22002	2.1421	8.1453
#1	-.00095	.00311	.00205	247.90	484.40	.00185	.00515
#2	-.00061	.00345	.00193	248.32	483.64	.00189	.00442
#3	-.00061	.00388	.00251	248.10	482.30	.00181	.00458

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	238.96	-.00098	.00208	H.01262	242.73	.00198	-.00027
SDev	.72	.00034	.00096	.00286	.37	.00677	.00011
%RSD	.30218	34.602	46.295	22.667	.15235	340.93	40.326
#1	239.51	-.00060	.00097	H.01378	243.12	-.00387	-.00039
#2	239.23	-.00124	.00264	H.01472	242.68	.00939	-.00026
#3	238.15	-.00110	.00264	.00936	242.39	.00043	-.00017

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01067	-.00497	-.00012	.00339	-.00378	-.00184	.00386
SDev	.00096	.00029	.00132	.00241	.00003	.00185	.00219
%RSD	9.0060	5.8444	1117.3	70.981	.92124	100.80	56.770
#1	.01150	-.00518	-.00138	.00607	-.00382	-.00035	.00145
#2	.01090	-.00510	.00125	.00142	-.00376	-.00125	.00440
#3	.00962	-.00464	-.00022	.00269	-.00375	-.00391	.00573

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00669	.01517
SDev	.00331	.00265
%RSD	49.512	17.438
#1	.00836	.01607
#2	.00884	.01724
#3	.00288	.01219

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Method: TAL Sample Name: icsab Operator:
Run Time: 11/01/99 17:47:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	484.78	.09969	.09438	.09777	.09627	.09171	488.51
SDev	.49	.00680	.00984	.00017	.00012	.00026	1.32
%RSD	.10092	6.8209	10.423	.17862	.12190	.28733	.26953
#1	484.79	.09203	.10438	.09758	.09641	.09182	490.03
#2	485.26	.10201	.09404	.09792	.09623	.09141	487.73
#3	484.29	.10502	.08471	.09782	.09618	.09191	487.77

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09252	.09254	.10938	247.03	483.39	.09527	.09349
SDev	.00026	.00060	.00048	.36	.58	.00008	.00020
%RSD	.28073	.65229	.44294	.14388	.11915	.08580	.21316
#1	.09281	.09323	.10887	247.44	483.64	.09533	.09367
#2	.09245	.09211	.10943	246.79	483.81	.09517	.09327
#3	.09230	.09229	.10983	246.87	482.74	.09529	.09352

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	243.96	.01006	.09388	.09804	244.91	.09306	.09442
SDev	.49	.00002	.00199	.00850	.47	.00405	.00025
%RSD	.20081	.17132	2.1226	8.6737	.19316	4.3474	.26171
#1	244.10	.01008	.09501	.09479	244.60	.08951	.09425
#2	244.36	.01006	.09158	.10768	245.46	.09746	.09470
#3	243.41	.01005	.09504	.09163	244.68	.09220	.09429

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09736	.09489	.09602	.10082	.09418	.08606	.09761
SDev	.00094	.00059	.00180	.00390	.00019	.00304	.00417
%RSD	.96606	.62600	1.8703	3.8707	.20101	3.5390	4.2701
#1	.09819	.09454	.09395	.09636	.09433	.08714	.09877
#2	.09634	.09557	.09697	.10359	.09425	.08841	.09298
#3	.09756	.09455	.09714	.10252	.09397	.08262	.10107

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.11059	.09135
SDev	.00984	.01257
%RSD	8.8979	13.759
#1	.09929	.09213
#2	.11520	.10351
#3	.11728	.07841

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/01/99 17:53:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.461	5.1009	5.0154	4.8912	4.9105	5.0328	50.080
SDev	.032	.0075	.0205	.0075	.0067	.0064	.077
%RSD	.06558	.14620	.40909	.15394	.13560	.12809	.15355
#1	48.427	5.0940	5.0174	4.8840	4.9061	5.0342	50.088
#2	48.466	5.1088	5.0349	4.8905	4.9181	5.0385	50.153
#3	48.490	5.1000	4.9940	4.8990	4.9073	5.0258	50.000

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0148	4.9155	4.9664	48.076	47.720	4.9420	5.0896
SDev	.0022	.0025	.0091	.081	.018	.0051	.0034
%RSD	.04394	.05091	.18306	.16794	.03713	.10349	.06736
#1	5.0162	4.9169	4.9572	48.018	47.700	4.9392	5.0925
#2	5.0160	4.9169	4.9666	48.168	47.725	4.9479	5.0905
#3	5.0123	4.9126	4.9753	48.042	47.735	4.9389	5.0858

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.478	.51663	5.1701	5.1218	48.717	4.9644	4.9373
SDev	.186	.00022	.0098	.0282	.032	.0096	.0016
%RSD	.35416	.04178	.18920	.55085	.06540	.19351	.03161
#1	52.355	.51677	5.1760	5.0985	48.742	4.9534	4.9358
#2	52.692	.51674	5.1588	5.1138	48.681	4.9712	4.9389
#3	52.388	.51638	5.1756	5.1532	48.728	4.9686	4.9370

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1520	5.3829	5.0757	5.3532	5.0638	5.0892	5.2104
SDev	.0130	.0078	.0075	.0184	.0043	.0199	.0047
%RSD	.25318	.14522	.14709	.34313	.08491	.39163	.09055
#1	5.1599	5.3742	5.0689	5.3697	5.0590	5.1009	5.2133
#2	5.1592	5.3853	5.0746	5.3334	5.0650	5.0662	5.2049
#3	5.1370	5.3894	5.0837	5.3565	5.0673	5.1005	5.2129

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.0735	5.1456
SDev	.0183	.0347
%RSD	.36108	.67476
#1	5.0679	5.1134
#2	5.0586	5.1409
#3	5.0940	5.1824

Analysis Report 11/01/99 06:05:25 PM

Method: TAL Sample Name: ccb Operator:
Run Time: 11/01/99 17:59:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01784	.00129	.00211	.00027	.00047	.00026	.02010
SDev	.00290	.00205	.00314	.00042	.00007	.00014	.00186
%RSD	16.257	158.58	148.89	156.98	14.120	51.335	9.2253
#1	.02100	.00039	.00398	.00002	.00053	.00035	.02157
#2	.01720	-.00015	.00385	.00075	.00049	.00034	.02072
#3	.01531	.00364	-.00151	.00003	.00040	.00011	.01802

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.00061	-.00009	-.01845	.00464	.00036	.00027
SDev	.00011	.00017	.00005	.00674	.00524	.00010	.00010
%RSD	48.516	27.355	60.642	36.550	113.01	26.398	35.620
#1	.00029	.00078	-.00013	-.01576	.00880	.00040	.00037
#2	.00029	.00061	-.00003	-.01347	-.00125	.00044	.00018
#3	.00010	.00044	-.00011	-.02613	.00637	.00025	.00024

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07679	.00000	-.00033	.00353	-.21534	.00083	.00031
SDev	.00270	.00000	.00187	.00293	.03130	.00236	.00029
%RSD	3.5112	10.749	573.41	83.056	14.535	284.81	94.027
#1	.07368	.00000	.00163	H.00690	-.24328	.00148	.00048
#2	.07823	.00000	-.00051	.00217	-.18151	.00280	.00048
#3	.07845	.00000	-.00210	.00152	-.22122	-.00179	-.00003

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00322	.00325	.00306	-.00039	.00038	.00070	-.00100
SDev	.00081	.00067	.00119	.00272	.00003	.00359	.00108
%RSD	25.038	20.655	38.665	690.46	6.7651	511.91	107.81
#1	.00234	.00368	.00405	.00207	.00040	.00469	-.00006
#2	.00392	.00359	.00340	-.00331	.00036	-.00034	-.00076
#3	.00341	.00248	.00175	.00006	.00036	-.00225	-.00218

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00567	.00208
SDev	.00189	.00396
%RSD	33.389	189.88
#1	.00666	.00664
#2	.00686	-.00054
#3	.00348	.00016

Analysis Report 11/01/99 06:11:23 PM

Method: TAL Sample Name: pbwwg Operator:
Run Time: 11/01/99 18:05:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01363	.00012	-.00124	.00022	.00036	.00009	.01232
SDev	.00215	.00050	.00050	.00004	.00007	.00026	.00057
%RSD	15.815	435.63	40.378	18.230	18.981	285.94	4.6388
#1	.01609	.00042	-.00079	.00020	.00042	-.00021	.01236
#2	.01271	-.00047	-.00178	.00019	.00036	.00029	.01173
#3	.01208	.00040	-.00116	.00026	.00029	.00020	.01287

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00057	.00024	-.00000	-.02483	-.00317	.00027	.00037
SDev	.00018	.00030	.00027	.00068	.00076	.00000	.00016
%RSD	31.077	128.81	8869.5	2.7529	24.049	.65385	44.133
#1	.00038	.00026	-.00031	-.02452	-.00313	.00027	.00022
#2	.00058	-.00008	.00007	-.02562	-.00396	.00027	.00035
#3	.00074	.00052	.00023	-.02437	-.00243	.00027	.00054

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06501	.00009	-.00058	.00111	-.24619	.00077	.00025
SDev	.00329	.00024	.00030	.00137	.00575	.00339	.00013
%RSD	5.0674	262.57	52.078	122.95	2.3371	439.52	51.229
#1	.06738	-.00014	-.00054	.00074	-.24298	-.00286	.00012
#2	.06639	.00034	-.00091	.00263	-.25284	.00385	.00025
#3	.06125	.00007	-.00030	-.00008	-.24277	.00132	.00037

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00208	.00110	.00158	.00051	.00002	.00115	-.00162
SDev	.00094	.00040	.00014	.00228	.00003	.00286	.00121
%RSD	45.260	36.525	8.8258	445.51	155.24	247.40	74.822
#1	.00115	.00105	.00167	.00261	.00000	.00402	-.00299
#2	.00304	.00073	.00142	-.00191	.00005	-.00169	-.00068
#3	.00207	.00152	.00165	.00084	.00000	.00113	-.00119

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00376	-.00060
SDev	.00187	.00167
%RSD	49.780	277.90
#1	.00515	-.00186
#2	.00450	.00130
#3	.00163	-.00125

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Method: TAL Sample Name: lcswwg Operator:
Run Time: 11/01/99 18:11:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.5421	.49320	.48773	.49169	.50651	.50085	10.110
SDev	.0083	.00121	.00331	.00088	.00025	.00077	.008
%RSD	.08684	.24489	.67800	.17879	.04851	.15455	.07941
#1	9.5484	.49206	.48767	.49156	.50638	.50155	10.104
#2	9.5327	.49447	.49106	.49088	.50679	.50002	10.119
#3	9.5452	.49306	.48445	.49262	.50635	.50099	10.107

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49413	.49411	.48249	10.168	9.4623	.50541	.49783
SDev	.00088	.00017	.00093	.021	.0072	.00029	.00067
%RSD	.17745	.03524	.19352	.21101	.07580	.05699	.13448
#1	.49506	.49431	.48307	10.182	9.4705	.50538	.49707
#2	.49400	.49398	.48141	10.179	9.4572	.50572	.49830
#3	.49332	.49404	.48299	10.143	9.4592	.50515	.49813

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.3997	.04870	.50345	.49965	9.6239	.49070	.49171
SDev	.0150	.00023	.00138	.00853	.0290	.00216	.00074
%RSD	.15987	.47095	.27401	1.7065	.30154	.44059	.14981
#1	9.4167	.04845	.50504	.49081	9.5960	.49292	.49256
#2	9.3884	.04876	.50254	.50031	9.6217	.49057	.49131
#3	9.3940	.04889	.50277	.50782	9.6539	.48860	.49126

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51460	.49972	.49682	.51005	.49135	.49785	.50608
SDev	.00233	.00202	.00133	.00387	.00033	.00273	.00072
%RSD	.45384	.40341	.26758	.75896	.06679	.54899	.14324
#1	.51600	.50139	.49659	.50804	.49110	.50101	.50688
#2	.51589	.49748	.49825	.51451	.49172	.49633	.50548
#3	.51190	.50029	.49562	.50759	.49122	.49622	.50588

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.48949	.50434
SDev	.00575	.00992
%RSD	1.1748	1.9666
#1	.48337	.49414
#2	.49029	.50492
#3	.49479	.51395

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Method: TAL Sample Name: 94106006 Operator:
Run Time: 11/01/99 18:17:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07703	-.00007	.00375	.05860	.00053	-.00005	134.17
SDev	.00114	.00082	.00457	.00015	.00001	.00011	.34
%RSD	1.4866	1252.0	121.64	.24936	.91916	224.69	.25261
#1	.07602	-.00011	-.00074	.05876	.00053	-.00004	133.92
#2	.07827	-.00086	.00839	.05847	.00054	.00006	134.56
#3	.07681	.00077	.00362	.05858	.00053	-.00016	134.04

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00016	.00058	.00118	1.3839	16.246	4.3204	.00158
SDev	.00037	.00038	.00001	.0081	.002	.0073	.00015
%RSD	232.56	65.199	.64564	.58725	.01262	.16834	9.4152
#1	.00042	.00075	.00118	1.3759	16.248	4.3172	.00143
#2	.00032	.00084	.00119	1.3921	16.245	4.3288	.00158
#3	-.00026	.00015	.00118	1.3835	16.244	4.3154	.00172

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.2822	-.00094	-.00065	.00288	16.243	.00117	.00020
SDev	.0044	.00016	.00047	.00161	.075	.00278	.00015
%RSD	.13495	17.050	72.143	56.105	.46025	237.50	77.469
#1	3.2842	-.00103	-.00106	.00196	16.171	.00388	.00002
#2	3.2854	-.00103	-.00014	.00193	16.321	-.00168	.00029
#3	3.2772	-.00075	-.00076	.00474	16.237	.00131	.00028

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01639	.12217	.00049	-.00109	.00047	-.00138	-.00046
SDev	.00061	.00028	.00058	.00250	.00010	.00101	.00035
%RSD	3.7467	.22599	119.77	229.17	21.105	72.661	75.845
#1	.01611	.12191	.00094	.00059	.00050	-.00180	-.00086
#2	.01709	.12246	.00069	.00010	.00054	-.00024	-.00026
#3	.01596	.12214	-.00017	-.00396	.00036	-.00211	-.00026

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00243	.00270
SDev	.00621	.00545
%RSD	255.13	201.61
#1	.00375	.00067
#2	.00788	-.00144
#3	-.00433	.00887

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Method: TAL Sample Name: 94106006dup Operator:
Run Time: 11/01/99 18:23:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07559	-.00054	.00214	.05646	.00047	.00001	129.89
SDev	.00072	.00098	.00084	.00014	.00002	.00022	.36
%RSD	.94603	182.41	39.267	.24559	3.9237	1579.6	.27780
#1	.07586	.00059	.00295	.05641	.00049	-.00016	129.98
#2	.07477	-.00117	.00127	.05636	.00046	-.00007	129.49
#3	.07613	-.00103	.00221	.05662	.00047	.00027	130.20

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00054	.00072	.00115	1.3780	15.885	4.1786	.00174
SDev	.00021	.00018	.00014	.0051	.045	.0100	.00036
%RSD	39.313	24.939	11.729	.37261	.28504	.23986	20.397
#1	.00055	.00058	.00116	1.3833	15.848	4.1787	.00215
#2	.00074	.00093	.00128	1.3731	15.871	4.1686	.00155
#3	.00032	.00067	.00101	1.3776	15.935	4.1886	.00151

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.2947	-.00035	-.00026	.00449	15.894	-.00035	.00007
SDev	.0158	.00024	.00039	.00425	.014	.00196	.00020
%RSD	.47815	68.783	150.98	94.751	.08995	553.83	304.72
#1	3.2784	-.00058	-.00065	.00316	15.889	-.00238	-.00011
#2	3.2958	-.00037	.00012	.00925	15.883	-.00022	.00002
#3	3.3098	-.00010	-.00024	.00106	15.910	.00154	.00028

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01625	.13035	.00142	-.00001	.00064	-.00113	.00001
SDev	.00006	.00098	.00072	.00120	.00013	.00194	.00056
%RSD	.34581	.75139	50.705	22825.	19.591	171.98	8897.8
#1	.01620	.12939	.00198	.00133	.00050	-.00227	-.00002
#2	.01625	.13033	.00168	-.00101	.00073	.00111	-.00054
#3	.01631	.13135	.00061	-.00033	.00069	-.00222	.00058

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00745	.00261
SDev	.00710	.00287
%RSD	95.278	109.70
#1	.00450	.00209
#2	.01555	.00571
#3	.00230	.00004

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Method: TAL Sample Name: 94106006ms Operator:
Run Time: 11/01/99 18:29:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.2554	.46571	.46176	.52184	.46951	.45722	137.88
SDev	.4032	.02066	.02020	.02334	.01930	.01777	5.58
%RSD	4.3560	4.4364	4.3746	4.4727	4.1104	3.8874	4.0502
#1	9.5207	.47717	.47312	.53728	.47748	.46368	139.84
#2	9.4540	.47810	.47372	.53325	.48356	.47086	142.22
#3	8.7915	.44186	.43843	.49499	.44751	.43712	131.58

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.45671	.45502	.46607	10.765	24.416	4.5702	.45737
SDev	.01804	.01726	.02063	.448	1.084	.1848	.01935
%RSD	3.9490	3.7930	4.4252	4.1593	4.4409	4.0430	4.2296
#1	.46408	.46199	.48052	10.979	25.117	4.6516	.46546
#2	.46989	.46770	.47524	11.066	24.964	4.7004	.47134
#3	.43615	.43536	.44245	10.251	23.167	4.3587	.43529

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.792	.04626	.46720	.46330	24.370	.45941	.46308
SDev	.529	.00210	.01452	.01299	1.138	.02232	.01912
%RSD	4.1347	4.5466	3.1083	2.8027	4.6713	4.8584	4.1295
#1	13.184	.04745	.47152	.46909	25.037	.47254	.47228
#2	13.001	.04749	.47907	.47239	25.018	.47206	.47587
#3	12.190	.04383	.45101	.44843	23.056	.43364	.44110

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47056	.59353	.46611	.47261	.46530	.46161	.46982
SDev	.01865	.02343	.01685	.01803	.01965	.01081	.01641
%RSD	3.9628	3.9476	3.6150	3.8157	4.2232	2.3411	3.4921
#1	.47604	.60592	.47596	.47974	.47607	.46360	.47530
#2	.48585	.60816	.47573	.48599	.47721	.47129	.48279
#3	.44978	.56651	.44666	.45210	.44262	.44995	.45138

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.46839	.46038
SDev	.01009	.01442
%RSD	2.1534	3.1316
#1	.47282	.46683
#2	.47550	.47045
#3	.45684	.44386

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Method: TAL Sample Name: 94106006msd Operator:
Run Time: 11/01/99 18:35:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.8562	.49269	.49180	.56458	.50024	.48234	152.83
SDev	.0282	.00259	.00249	.00113	.00111	.00058	.33
%RSD	.28593	.52653	.50710	.19975	.22117	.11978	.21647
#1	9.8880	.49552	.49134	.56588	.50062	.48173	152.71
#2	9.8461	.49042	.48957	.56392	.50110	.48241	153.20
#3	9.8344	.49214	.49449	.56393	.49899	.48288	152.57

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48271	.48045	.49836	11.438	26.771	5.0614	.48412
SDev	.00109	.00104	.00142	.036	.060	.0094	.00103
%RSD	.22671	.21584	.28439	.31366	.22451	.18475	.21269
#1	.48171	.48014	.49996	11.431	26.829	5.0614	.48381
#2	.48388	.48160	.49785	11.477	26.777	5.0708	.48328
#3	.48253	.47960	.49727	11.406	26.709	5.0521	.48527

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.637	.04898	.48887	.49099	26.783	.48084	.49084
SDev	.029	.00026	.00136	.00403	.083	.00336	.00096
%RSD	.21224	.52757	.27893	.82143	.31134	.69932	.19485
#1	13.620	.04923	.49007	.49223	26.878	.47706	.49152
#2	13.671	.04900	.48916	.49426	26.748	.48351	.49126
#3	13.621	.04871	.48739	.48648	26.723	.48194	.48975

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49141	.62672	.49545	.49875	.49469	.48321	.49153
SDev	.00047	.00185	.00275	.00133	.00087	.00047	.00225
%RSD	.09672	.29552	.55406	.26689	.17645	.09774	.45820
#1	.49098	.62860	.49825	.49892	.49548	.48267	.49360
#2	.49192	.62668	.49276	.49735	.49483	.48339	.49187
#3	.49133	.62489	.49535	.50000	.49375	.48356	.48913

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.48841	.49203
SDev	.00300	.00619
%RSD	.61388	1.2586
#1	.49147	.49221
#2	.48571	.49813
#3	.48716	.48575

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Method: TAL Sample Name: 941060061 Operator:
Run Time: 11/01/99 18:41:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02597	.00118	.00007	.01187	.00036	.00001	26.349
SDev	.00047	.00166	.00359	.00042	.00003	.00001	.006
%RSD	1.8166	140.04	5219.5	3.5636	7.3652	89.634	.02136
#1	.02614	.00233	-.00404	.01211	.00039	.00003	26.342
#2	.02632	-.00072	.00255	.01212	.00034	.00001	26.352
#3	.02543	.00194	.00170	.01138	.00034	.00001	26.352

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00011	.00001	-.00037	.26145	3.2973	.88032	.00018
SDev	.00030	.00017	.00010	.00130	.0076	.00016	.00026
%RSD	285.98	2920.2	25.709	.49873	.22926	.01804	146.83
#1	.00041	.00001	-.00038	.26209	3.3033	.88035	.00048
#2	-.00019	-.00016	-.00028	.25995	3.2998	.88046	.00002
#3	.00010	.00018	-.00047	.26231	3.2888	.88014	.00004

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.63235	-.00014	-.00062	.00217	3.3841	-.00631	.00003
SDev	.00308	.00036	.00023	.00105	.0287	.01223	.00030
%RSD	.48636	252.93	36.454	48.454	.84714	193.88	1091.5
#1	.62900	.00026	-.00065	.00143	3.4102	.00006	.00020
#2	.63297	-.00041	-.00038	.00171	3.3534	.00142	.00020
#3	.63506	-.00028	-.00083	.00337	3.3886	L-.02041	-.00032

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01178	.02442	.00138	-.00183	.00020	.00056	-.00138
SDev	.00047	.00021	.00067	.00183	.00021	.00160	.00063
%RSD	3.9501	.87222	48.392	100.20	106.26	286.57	45.803
#1	.01222	.02466	.00085	-.00127	.00043	.00180	-.00204
#2	.01129	.02433	.00115	-.00389	.00015	.00112	-.00130
#3	.01183	.02426	.00212	-.00038	.00001	-.00125	-.00079

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00553	.00010
SDev	.00306	.00154
%RSD	55.330	1475.2
#1	.00682	-.00166
#2	.00203	.00116
#3	.00772	.00081

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Method: TAL Sample Name: 94106006p Operator:
Run Time: 11/01/99 18:47:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.103	.50930	.50008	.56640	.51502	.49602	136.03
SDev	.009	.00143	.00528	.00092	.00014	.00033	.05
%RSD	.08895	.28074	1.0569	.16275	.02754	.06601	.03499
#1	10.113	.51091	.50450	.56696	.51494	.49599	136.06
#2	10.098	.50818	.50151	.56691	.51494	.49636	136.04
#3	10.097	.50881	.49422	.56534	.51518	.49570	135.97

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49854	.49540	.51134	11.529	25.038	4.5404	.49923
SDev	.00062	.00060	.00073	.013	.021	.0018	.00150
%RSD	.12463	.12055	.14311	.10982	.08193	.03964	.30029
#1	.49910	.49515	.51165	11.543	25.057	4.5418	.50041
#2	.49866	.49609	.51051	11.524	25.042	4.5410	.49974
#3	.49787	.49498	.51187	11.519	25.016	4.5384	.49754

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.432	.05003	.50472	.50685	25.079	.49922	.50413
SDev	.049	.00055	.00163	.00601	.022	.00083	.00075
%RSD	.36133	1.1032	.32230	1.1861	.08636	.16563	.14942
#1	13.480	.05065	.50482	.50433	25.073	.49887	.50484
#2	13.432	.04983	.50629	.51372	25.062	.49863	.50420
#3	13.383	.04960	.50304	.50252	25.104	.50017	.50334

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49982	.62349	.50881	.51002	.50719	.49642	.50869
SDev	.00075	.00040	.00428	.00420	.00024	.00119	.00247
%RSD	.15080	.06366	.84010	.82392	.04653	.23979	.48619
#1	.50053	.62306	.51181	.51475	.50709	.49779	.50816
#2	.49990	.62385	.51070	.50671	.50701	.49574	.51139
#3	.49903	.62356	.50392	.50861	.50746	.49572	.50653

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.50285	.50846
SDev	.00269	.00869
%RSD	.53507	1.7101
#1	.49975	.50621
#2	.50424	.51805
#3	.50456	.50110

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Method: TAL Sample Name: 94106007 Operator:
Run Time: 11/01/99 18:53:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07891	.00055	.00061	.06014	.00056	-.00003	136.74
SDev	.00197	.00047	.00140	.00010	.00004	.00014	.01
%RSD	2.4905	84.970	229.65	.16667	7.0098	461.31	.01040
#1	.08107	.00011	.00077	.06019	.00060	.00006	136.75
#2	.07841	.00105	.00193	.06020	.00057	.00004	136.75
#3	.07724	.00051	-.00086	.06002	.00052	-.00019	136.73

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00048	.00058	.00119	1.4978	16.661	4.3330	.00137
SDev	.00010	.00038	.00010	.0156	.026	.0015	.00008
%RSD	20.010	66.594	8.4527	1.0395	.15607	.03426	5.5579
#1	.00058	.00102	.00129	1.4973	16.691	4.3340	.00145
#2	.00042	.00031	.00118	1.4825	16.649	4.3313	.00137
#3	.00042	.00040	.00109	1.5136	16.644	4.3337	.00130

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.3029	-.00061	-.00050	.00217	16.663	-.00022	.00028
SDev	.0077	.00055	.00019	.00368	.026	.00117	.00015
%RSD	.23182	88.792	37.640	169.89	.15619	539.36	53.120
#1	3.2962	-.00089	-.00053	-.00206	16.657	.00065	.00019
#2	3.3012	.00001	-.00067	.00391	16.640	-.00155	.00045
#3	3.3113	-.00096	-.00030	.00466	16.691	.00025	.00020

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01204	.12491	.00154	-.00313	.00047	-.00064	-.00060
SDev	.00022	.00083	.00131	.00066	.00020	.00156	.00103
%RSD	1.8270	.66493	85.504	20.909	41.920	245.91	171.39
#1	.01210	.12462	.00301	-.00247	.00041	.00054	-.00123
#2	.01180	.12585	.00047	-.00315	.00069	-.00004	-.00115
#3	.01223	.12426	.00113	-.00378	.00031	-.00241	.00059

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00596	-.00012
SDev	.00726	.00202
%RSD	121.84	1618.5
#1	-.00241	-.00229
#2	.01050	.00022
#3	.00979	.00170

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Method: TAL Sample Name: 94112001 Operator:
Run Time: 11/01/99 18:59:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.6620	.02236	.01076	1.1558	.00117	.00285	199.61
SDev	.0442	.00092	.00100	.0029	.00000	.00008	.46
%RSD	1.2065	4.1257	9.2653	.25437	.11980	2.8899	.23213
#1	3.7111	.02233	.01119	1.1589	.00117	.00275	199.99
#2	3.6497	.02330	.01146	1.1553	.00116	.00289	199.75
#3	3.6253	.02146	.00962	1.1531	.00117	.00290	199.09

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01495	.01445	.89214	20.480	66.190	4.3020	.07771
SDev	.00051	.00013	.00313	.062	.116	.0099	.00052
%RSD	3.4240	.91439	.35054	.30270	.17582	.22965	.66850
#1	.01492	.01434	.89510	20.535	66.265	4.3090	.07780
#2	.01445	.01460	.89244	20.492	66.249	4.3063	.07817
#3	.01547	.01442	.88887	20.413	66.056	4.2907	.07715

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31.318	.00038	.11050	.00225	663.74	-.00352	.01716
SDev	.130	.00065	.00134	.00236	.40	.00313	.00016
%RSD	.41622	173.22	1.2155	104.86	.06082	88.931	.91488
#1	31.442	.00112	.10947	.00123	663.96	-.00035	.01709
#2	31.329	-.00007	.11202	.00495	663.98	-.00661	.01734
#3	31.182	.00007	.11000	.00057	663.27	-.00359	.01705

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.7389	3.3627	.13291	.01983	.14402	.10853	.11131
SDev	.0049	.0034	.00075	.00211	.00323	.00151	.00276
%RSD	.17967	.10082	.56359	10.616	2.2442	1.3913	2.4790
#1	2.7444	3.3652	.13239	.01821	.14622	.10943	.10932
#2	2.7373	3.3640	.13377	.02221	.14553	.10678	.11446
#3	2.7350	3.3588	.13256	.01907	.14031	.10937	.11014

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00704	-.00054
SDev	.00129	.00347
%RSD	18.358	640.43
#1	.00829	-.00269
#2	.00712	.00346
#3	.00571	-.00240

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/01/99 19:05:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.612	5.0924	4.9650	4.8846	4.8782	4.9832	49.762
SDev	.057	.0227	.0226	.0080	.0332	.0394	.367
%RSD	.11630	.44503	.45439	.16402	.67985	.79045	.73700
#1	48.677	5.0665	4.9450	4.8939	4.8402	4.9384	49.347
#2	48.585	5.1025	4.9605	4.8807	4.9010	5.0126	50.040
#3	48.573	5.1083	4.9895	4.8794	4.8935	4.9984	49.900

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9953	4.8899	4.9811	47.871	47.945	4.9185	5.0505
SDev	.0269	.0291	.0101	.286	.025	.0248	.0360
%RSD	.53858	.59434	.20282	.59845	.05118	.50515	.71181
#1	4.9650	4.8570	4.9928	47.544	47.973	4.8903	5.0094
#2	5.0165	4.9119	4.9747	48.077	47.936	4.9371	5.0760
#3	5.0042	4.9009	4.9760	47.992	47.927	4.9282	5.0662

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.700	.51758	5.1460	5.1031	49.041	4.9649	4.9226
SDev	.372	.00179	.0259	.0317	.072	.0381	.0158
%RSD	.70499	.34659	.50261	.62212	.14607	.76694	.32186
#1	53.104	.51639	5.1204	5.0665	49.123	4.9226	4.9048
#2	52.374	.51964	5.1721	5.1216	49.006	4.9965	4.9353
#3	52.621	.51671	5.1455	5.1213	48.994	4.9755	4.9276

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0770	5.3724	5.0388	5.3156	5.0515	5.0793	5.1791
SDev	.0590	.0149	.0244	.0202	.0099	.0359	.0227
%RSD	1.1615	.27733	.48505	.38062	.19632	.70669	.43799
#1	5.0102	5.3552	5.0107	5.2926	5.0403	5.0387	5.1610
#2	5.1216	5.3807	5.0512	5.3307	5.0589	5.1068	5.2045
#3	5.0994	5.3812	5.0546	5.3235	5.0554	5.0925	5.1718

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.0384	5.1351
SDev	.0341	.0321
%RSD	.67700	.62606
#1	5.0014	5.0985
#2	5.0687	5.1476
#3	5.0449	5.1590

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/01/99 19:11:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01388	-.00002	.00109	.00018	.00059	.00021	.01549
SDev	.00106	.00079	.00066	.00000	.00005	.00009	.00114
%RSD	7.6759	4292.4	60.945	.95893	7.9315	44.670	7.3399
#1	.01511	.00042	.00104	.00019	.00063	.00021	.01637
#2	.01320	-.00093	.00045	.00019	.00058	.00030	.01588
#3	.01334	.00045	.00177	.00018	.00054	.00011	.01420

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00023	.00018	-.00001	-.02496	.00170	.00046	.00019
SDev	.00007	.00015	.00026	.00600	.00443	.00006	.00030
%RSD	28.329	79.291	3747.2	24.016	260.56	12.560	154.86
#1	.00016	.00027	.00029	-.01836	.00511	.00052	.00031
#2	.00025	.00027	-.00019	-.03007	-.00331	.00045	-.00015
#3	.00029	.00002	-.00012	-.02645	.00330	.00041	.00042

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06058	.00023	.00042	.00149	-.20431	.00097	.00032
SDev	.00571	.00033	.00099	.00386	.05650	.00085	.00015
%RSD	9.4298	147.56	236.96	258.90	27.654	87.837	46.497
#1	.05996	.00000	-.00017	H.00548	-.17273	.00136	.00050
#2	.06657	.00007	-.00014	-.00223	-.17067	-.00001	.00024
#3	.05520	.00061	.00157	.00123	-.26955	.00157	.00024

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00381	.00393	.00331	.00164	.00051	.00025	.00034
SDev	.00006	.00072	.00077	.00034	.00009	.00260	.00125
%RSD	1.7039	18.323	23.368	20.937	18.368	1033.6	370.17
#1	.00377	.00464	.00405	.00192	.00060	.00137	-.00110
#2	.00377	.00395	.00250	.00126	.00051	-.00272	.00098
#3	.00389	.00320	.00339	.00174	.00041	.00210	.00113

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00496	-.00017
SDev	.00605	.00434
%RSD	149.21	2481.0
#1	.01061	.00254
#2	.00289	-.00518
#3	-.00133	.00212

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Method: TAL Sample Name: 94112002 Operator:
Run Time: 11/01/99 19:17:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9149	.00404	.02757	.52807	.00169	.00076	168.15
SDev	.0104	.00255	.00613	.00183	.00004	.00013	.13
%RSD	.21231	63.188	22.227	.34660	2.5257	17.713	.07805
#1	4.9208	.00342	.02162	.52969	.00174	.00060	168.30
#2	4.9210	.00684	.03386	.52844	.00166	.00082	168.05
#3	4.9028	.00185	.02723	.52608	.00168	.00085	168.10

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02382	.01379	.12115	22.869	358.86	1.8995	.01677
SDev	.00051	.00031	.00010	.021	.62	.0022	.00002
%RSD	2.1483	2.2608	.08143	.09201	.17206	.11712	.09551
#1	.02416	.01414	.12115	22.888	359.32	1.9019	.01677
#2	.02323	.01366	.12106	22.873	359.09	1.8988	.01675
#3	.02407	.01355	.12125	22.846	358.15	1.8977	.01678

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	177.30	.00002	.14005	.00544	1954.0	.00273	.04769
SDev	.27	.00055	.00143	.00030	3.3	.00253	.00015
%RSD	.15057	2803.5	1.0188	5.5779	.17114	92.725	.32279
#1	177.01	-.00026	.14070	.00526	1957.4	.00127	.04780
#2	177.53	-.00034	.14104	.00579	1953.9	.00127	.04751
#3	177.37	.00065	.13842	.00527	1950.7	.00565	.04775

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.35873	1.3874	.00364	.00262	.06773	.13605	.14186
SDev	.00115	.0018	.00173	.00333	.00060	.00057	.00225
%RSD	.32159	.12903	47.612	127.01	.89308	.42275	1.5849
#1	.36006	1.3886	.00460	-.00078	.06826	.13539	.14317
#2	.35816	1.3882	.00467	.00276	.06786	.13642	.14315
#3	.35797	1.3853	.00164	.00589	.06708	.13633	.13927

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01032	.00257
SDev	.00421	.00183
%RSD	40.788	71.484
#1	.00554	.00468
#2	.01347	.00152
#3	.01195	.00150

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Method: TAL Sample Name: 94112003 Operator:
Run Time: 11/01/99 19:23:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94340	.00329	.01453	.39417	.00128	.00022	191.79
SDev	.00690	.00227	.00072	.00232	.00009	.00006	1.01
%RSD	.73143	68.948	4.9556	.58828	6.8130	28.377	.52593
#1	.93877	.00553	.01373	.39264	.00131	.00015	191.19
#2	.94009	.00099	.01514	.39305	.00118	.00025	191.23
#3	.95133	.00335	.01470	.39684	.00134	.00027	192.96

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00721	.00910	.03250	2.6567	509.11	2.0629	.04125
SDev	.00029	.00004	.00012	.0033	3.72	.0108	.00011
%RSD	3.9820	.40576	.37483	.12569	.73080	.52462	.25765
#1	.00688	.00910	.03245	2.6544	505.38	2.0556	.04113
#2	.00738	.00907	.03242	2.6553	509.15	2.0576	.04129
#3	.00737	.00914	.03264	2.6605	512.82	2.0753	.04134

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	238.31	-.00008	.46578	.00763	2002.9	.00067	.10113
SDev	1.99	.00057	.00305	.00526	9.2	.00381	.00036
%RSD	.83408	729.92	.65477	69.040	.45932	571.12	.36076
#1	236.12	-.00018	.46446	.01258	1993.8	.00421	.10115
#2	238.81	.00054	.46361	.00820	2002.5	-.00337	.10076
#3	240.00	-.00059	.46927	.00210	2012.2	.00116	.10149

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06096	3.3836	.03252	.00242	.04253	.45580	.47057
SDev	.00062	.0305	.00058	.00621	.00014	.00271	.00377
%RSD	1.0197	.90156	1.7954	256.57	.31757	.59417	.80136
#1	.06168	3.3583	.03297	-.00379	.04262	.45288	.47004
#2	.06065	3.3751	.03186	.00243	.04237	.45626	.46709
#3	.06056	3.4175	.03272	.00862	.04259	.45824	.47457

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00792	.00747
SDev	.00512	.00732
%RSD	72.915	97.980
#1	.01202	.01240
#2	.00179	.01095
#3	.00725	-.00094

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Method: TAL Sample Name: 94112004 Operator:
Run Time: 11/01/99 19:29:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.6014	.00357	.01254	.15457	.00086	.00017	70.747
SDev	.0088	.00116	.00232	.00038	.00001	.00004	.107
%RSD	.24501	32.591	18.503	.24895	.65083	21.299	.15185
#1	3.5934	.00223	.01454	.15413	.00086	.00018	70.757
#2	3.6000	.00409	.01000	.15471	.00086	.00013	70.635
#3	3.6108	.00437	.01309	.15486	.00087	.00021	70.849

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01652	.00393	.06783	22.748	127.16	.92102	.02001
SDev	.00019	.00018	.00019	.050	.26	.00143	.00047
%RSD	1.1328	4.7251	.28077	.22096	.20790	.15545	2.3521
#1	.01633	.00413	.06768	22.740	126.92	.92053	.02055
#2	.01652	.00378	.06777	22.702	127.11	.91991	.01971
#3	.01670	.00387	.06805	22.801	127.45	.92264	.01977

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	65.061	-.00072	.21064	.00626	1004.1	-.00270	.02633
SDev	.351	.00052	.00006	.00081	2.2	.00208	.00028
%RSD	.53908	72.851	.02773	12.970	.22021	77.112	1.0763
#1	64.709	-.00105	.21062	.00720	1001.8	-.00069	.02649
#2	65.065	-.00011	.21071	.00574	1004.2	-.00257	.02650
#3	65.410	-.00098	.21060	.00586	1006.3	-.00485	.02600

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13065	2.3934	.01318	.01651	.16563	.20658	.21249
SDev	.00148	.0032	.00158	.00210	.00033	.00112	.00055
%RSD	1.1353	.13346	11.976	12.702	.20193	.54358	.25876
#1	.13236	2.3901	.01392	.01748	.16541	.20531	.21309
#2	.12967	2.3935	.01137	.01795	.16546	.20700	.21238
#3	.12993	2.3965	.01425	.01411	.16601	.20744	.21201

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01828	-.00015
SDev	.00272	.00257
%RSD	14.894	1761.0
#1	.01514	.00282
#2	.01973	-.00166
#3	.01997	-.00160

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Method: TAL Sample Name: 94112005 Operator:
Run Time: 11/01/99 19:35:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0255	.00258	.00467	.25582	.00061	.00009	71.925
SDev	.0029	.00163	.00123	.00020	.00002	.00014	.150
%RSD	.28171	63.273	26.277	.07711	3.0676	154.96	.20902
#1	1.0268	.00443	.00608	.25567	.00062	-.00002	71.973
#2	1.0276	.00132	.00403	.25576	.00061	.00005	72.046
#3	1.0222	.00200	.00389	.25605	.00059	.00025	71.757

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00376	.00142	.01306	4.8979	50.156	1.0451	.00732
SDev	.00010	.00027	.00038	.0234	.050	.0020	.00039
%RSD	2.7770	18.938	2.8853	.47763	.09972	.19600	5.3885
#1	.00367	.00166	.01272	4.9103	50.212	1.0457	.00689
#2	.00387	.00148	.01347	4.9124	50.138	1.0467	.00739
#3	.00374	.00113	.01298	4.8709	50.117	1.0428	.00767

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.881	-.00022	.06639	.00517	500.76	-.00019	.00607
SDev	.078	.00008	.00088	.00320	.21	.00159	.00015
%RSD	.37279	36.098	1.3219	61.870	.04225	833.61	2.4489
#1	20.809	-.00013	.06678	.00832	501.00	.00084	.00616
#2	20.964	-.00027	.06700	.00525	500.64	.00062	.00590
#3	20.870	-.00027	.06538	.00193	500.63	-.00203	.00616

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	220371	220372
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08502	1.5062	.03042	.00422	.02718	.06610	.06636
SDev	.00102	.0018	.00083	.00242	.00013	.00346	.00122
%RSD	1.1971	.12264	2.7350	57.440	.47423	5.2381	1.8319
#1	.08584	1.5078	.03132	.00694	.02729	.06978	.06511
#2	.08535	1.5042	.03026	.00229	.02721	.06559	.06753
#3	.08388	1.5066	.02968	.00343	.02704	.06291	.06644

Elem	196071	196072
Units	ppm	ppm
Avge	.00725	.00372
SDev	.00441	.00475
%RSD	60.832	127.54
#1	.01090	.00663
#2	.00235	.00630
#3	.00849	-.00176

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Method: TAL Sample Name: 94112006 Operator:
Run Time: 11/01/99 19:41:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.29640	.00548	.01709	.37876	.00056	-.00011	95.655
SDev	.00215	.00076	.00089	.00086	.00003	.00009	.081
%RSD	.72490	13.809	5.2070	.22590	4.4366	80.735	.08419
#1	.29842	.00502	.01689	.37975	.00058	-.00019	95.645
#2	.29662	.00636	.01806	.37828	.00054	-.00002	95.740
#3	.29414	.00507	.01631	.37826	.00054	-.00011	95.580

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00212	.00048	.00553	6.4563	37.230	.77785	.00771
SDev	.00051	.00026	.00010	.0143	.016	.00052	.00064
%RSD	24.144	54.292	1.7295	.22111	.04214	.06623	8.3582
#1	.00271	.00022	.00552	6.4563	37.218	.77807	.00800
#2	.00184	.00048	.00545	6.4705	37.224	.77822	.00697
#3	.00181	.00074	.00564	6.4419	37.247	.77726	.00816

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	29.122	.00033	.01109	.00102	374.50	-.00094	.01271
SDev	.046	.00048	.00029	.00095	.27	.00355	.00027
%RSD	.15955	144.15	2.5901	92.614	.07206	377.81	2.1089
#1	29.160	-.00015	.01077	.00174	374.61	-.00442	.01261
#2	29.135	.00033	.01120	-.00005	374.19	-.00108	.01251
#3	29.070	.00082	.01131	.00139	374.70	.00268	.01302

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	220371	220372
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02675	1.4596	.01278	.00968	.01023	.01074	.01110
SDev	.00026	.0005	.00089	.00132	.00002	.00182	.00105
%RSD	.96355	.03325	6.9710	13.640	.20696	16.949	9.4981
#1	.02658	1.4598	.01381	.01114	.01024	.01058	.01069
#2	.02705	1.4599	.01227	.00931	.01021	.01263	.01031
#3	.02663	1.4590	.01226	.00857	.01025	.00900	.01230

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00736	-.00253
SDev	.00232	.00160
%RSD	31.569	63.103
#1	.00976	-.00266
#2	.00719	-.00406
#3	.00512	-.00087

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Method: TAL Sample Name: 94112007 Operator:
Run Time: 11/01/99 19:47:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02193	.00050	.00095	.00026	.00026	-.00020	.10406
SDev	.00176	.00145	.00215	.00000	.00001	.00013	.00204
%RSD	8.0160	286.98	226.33	.54492	3.2136	63.820	1.9604
#1	.02366	.00157	.00315	.00026	.00026	-.00014	.10510
#2	.02197	.00108	.00084	.00026	.00025	-.00035	.10538
#3	.02015	-.00114	-.00114	.00026	.00027	-.00012	.10171

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.00010	-.00017	-.01291	.02046	.00030	.00004
SDev	.00025	.00043	.00019	.00358	.00663	.00007	.00039
%RSD	2267.5	443.61	110.40	27.691	32.397	24.992	878.68
#1	.00019	.00009	-.00036	-.01607	.02472	.00038	.00029
#2	.00006	.00052	.00002	-.00903	.02383	.00030	.00025
#3	-.00029	-.00033	-.00018	-.01364	.01282	.00023	-.00040

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05841	-.00045	-.00012	-.00038	-.13363	-.00126	-.00005
SDev	.00274	.00056	.00152	.00295	.03586	.00108	.00008
%RSD	4.6938	124.93	1265.2	782.94	26.836	85.609	138.25
#1	.06154	-.00027	-.00030	.00296	-.10367	-.00121	-.00001
#2	.05728	.00000	-.00154	-.00143	-.12385	-.00237	-.00001
#3	.05642	-.00108	.00148	-.00266	-.17336	-.00021	-.00014

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01485	.00586	.00099	.00104	.00020	.00013	-.00041
SDev	.00111	.00053	.00024	.00357	.00014	.00116	.00181
%RSD	7.4682	8.9725	24.764	344.21	70.190	914.73	441.26
#1	.01550	.00635	.00125	.00357	.00023	-.00069	-.00028
#2	.01547	.00592	.00076	-.00305	.00032	-.00039	-.00228
#3	.01357	.00531	.00097	.00259	.00005	.00145	.00133

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00298	-.00244
SDev	.00484	.00202
%RSD	162.56	82.615
#1	.00849	-.00020
#2	.00099	-.00302
#3	-.00056	-.00410

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Method: TAL Sample Name: 94113001 Operator:
Run Time: 11/01/99 19:53:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09008	.00213	.00620	.52386	.00032	.00034	78.352
SDev	.00150	.00154	.00353	.00038	.00002	.00014	.215
%RSD	1.6627	72.216	57.015	.07158	4.9402	41.075	.27501
#1	.09157	.00344	.00423	.52352	.00033	.00031	78.578
#2	.09011	.00044	.01028	.52426	.00033	.00022	78.331
#3	.08857	.00250	.00409	.52378	.00030	.00050	78.148

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01860	.00005	.00302	17.535	14.740	.56962	.01046
SDev	.00007	.00020	.00080	.046	.010	.00117	.00004
%RSD	.38658	404.28	26.450	.26390	.07037	.20525	.34331
#1	.01867	.00017	.00289	17.579	14.730	.57065	.01047
#2	.01860	.00017	.00229	17.540	14.750	.56985	.01049
#3	.01852	-.00018	.00388	17.486	14.740	.56835	.01042

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.117	-.00011	.00204	-.00173	333.62	-.00034	.00076
SDev	.022	.00015	.00123	.00346	.42	.00294	.00013
%RSD	.21403	137.33	60.456	200.49	.12732	862.15	16.457
#1	10.099	-.00015	.00075	L-.00524	333.14	-.00081	.00078
#2	10.111	.00006	.00217	.00168	333.96	-.00302	.00063
#3	10.141	-.00022	.00321	-.00162	333.75	.00280	.00088

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02313	.88314	.00232	.00115	.00211	.00160	.00213
SDev	.00001	.00141	.00066	.00424	.00007	.00276	.00054
%RSD	.04500	.16006	28.275	367.91	3.4167	172.55	25.268
#1	.02314	.88403	.00232	.00539	.00209	-.00117	.00154
#2	.02314	.88151	.00298	.00115	.00204	.00162	.00227
#3	.02312	.88389	.00166	-.00309	.00218	.00434	.00259

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00742	-.00669
SDev	.00365	.00344
%RSD	49.119	51.453
#1	.00335	-.00993
#2	.01039	-.00307
#3	.00852	-.00708

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Method: TAL Sample Name: 94113002 Operator:
Run Time: 11/01/99 19:59:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01769	.00037	-.00068	.00026	.00023	.00000	.15534
SDev	.00206	.00059	.00403	.00000	.00002	.00005	.00126
%RSD	11.645	159.32	591.47	.45217	8.6771	1866.2	.81071
#1	.01982	.00016	-.00530	.00026	.00025	-.00002	.15482
#2	.01755	-.00009	.00209	.00026	.00021	-.00003	.15678
#3	.01570	.00104	.00117	.00026	.00022	.00006	.15443

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.00007	-.00024	-.01290	.04047	.00021	-.00034
SDev	.00035	.00013	.00012	.01128	.00513	.00002	.00031
%RSD	3215.2	192.57	49.369	87.445	12.689	9.8227	91.880
#1	-.00042	.00010	-.00037	-.02308	.04620	.00023	-.00057
#2	.00022	.00018	-.00016	-.00077	.03890	.00019	-.00047
#3	.00016	-.00007	-.00017	-.01485	.03630	.00023	.00002

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04752	-.00009	-.00029	-.00025	-.22069	.00017	.00007
SDev	.00536	.00016	.00064	.00298	.05214	.00517	.00015
%RSD	11.282	174.23	221.20	1176.8	23.627	3005.2	205.28
#1	.04163	.00000	-.00047	-.00045	-.27880	-.00548	-.00002
#2	.04879	.00000	-.00081	-.00314	-.17797	.00465	.00025
#3	.05212	-.00027	.00042	.00282	-.20532	.00134	-.00001

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02098	.00292	-.00049	-.00109	.00012	-.00072	-.00020
SDev	.00045	.00019	.00169	.00219	.00007	.00076	.00122
%RSD	2.1595	6.6552	346.97	201.77	57.040	105.52	607.93
#1	.02136	.00306	-.00064	.00083	.00014	-.00129	-.00012
#2	.02048	.00300	-.00209	-.00347	.00019	.00014	-.00146
#3	.02110	.00270	.00127	-.00062	.00005	-.00103	.00098

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00342	-.00233
SDev	.00274	.00321
%RSD	87.869	137.81
#1	.00398	-.00305
#2	.00005	-.00512
#3	.00534	.00118

Analysis Report 11/01/99 08:10:47 PM

Method: TAL Sample Name: 94105001 Operator:
Run Time: 11/01/99 20:05:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05893	.00042	-.00091	.00121	.00023	.00000	.41601
SDev	.00051	.00137	.00340	.00000	.00001	.00012	.00083
%RSD	.86214	327.54	372.56	.16483	2.1364	3779.3	.19850
#1	.05939	.00010	-.00120	.00121	.00023	.00013	.41688
#2	.05902	-.00077	-.00415	.00121	.00023	-.00009	.41524
#3	.05839	.00192	.00262	.00121	.00022	-.00004	.41589

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00094	.00043	.00038	.29776	.03912	.00507	.00067
SDev	.00058	.00022	.00017	.00740	.00530	.00004	.00012
%RSD	61.384	52.006	46.046	2.4849	13.548	.74199	17.441
#1	.00105	.00060	.00058	.30280	.04524	.00503	.00069
#2	.00032	.00018	.00028	.30122	.03607	.00509	.00054
#3	.00146	.00052	.00027	.28927	.03604	.00509	.00077

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09834	-.00025	.00171	.00024	.02696	.00089	-.00001
SDev	.00250	.00068	.00073	.00284	.03939	.00310	.00019
%RSD	2.5468	271.02	42.859	1205.4	146.08	348.84	3108.2
#1	.10090	.00027	.00133	.00265	.04743	.00004	-.00018
#2	.09822	-.00102	.00124	.00096	-.01844	.00432	-.00005
#3	.09590	-.00000	.00255	-.00290	.05190	-.00170	.00020

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02893	.00533	.00115	-.00007	.00121	.00079	.00200
SDev	.00018	.00023	.00030	.00154	.00013	.00137	.00069
%RSD	.62218	4.4016	26.187	2151.1	10.980	172.57	34.788
#1	.02906	.00558	.00139	-.00001	.00129	-.00063	.00214
#2	.02901	.00529	.00124	-.00164	.00106	.00091	.00124
#3	.02873	.00511	.00081	.00144	.00129	.00210	.00261

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00155	-.00081
SDev	.00712	.00195
%RSD	460.36	242.21
#1	.00946	-.00114
#2	-.00049	.00129
#3	-.00433	-.00257

Analysis Report 11/01/99 08:16:45 PM 000984

Method: TAL Sample Name: 94105002 Operator:
Run Time: 11/01/99 20:10:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.21309	.00002	.00214	.01387	.00026	-.00020	20.224
SDev	.00615	.00132	.00161	.00011	.00004	.00008	.183
%RSD	2.8871	7075.9	75.062	.76848	16.585	38.490	.90243
#1	.21775	.00120	.00188	.01394	.00030	-.00026	20.381
#2	.21541	.00027	.00068	.01392	.00027	-.00011	20.268
#3	.20612	-.00141	.00386	.01375	.00021	-.00022	20.024

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00556	.00018	.00139	1.4895	5.7290	.01046	.00117
SDev	.00024	.00026	.00024	.0177	.0514	.00008	.00040
%RSD	4.3244	149.24	17.317	1.1865	.89764	.74914	34.566
#1	.00554	.00023	.00113	1.5034	5.7671	.01051	.00070
#2	.00534	-.00011	.00142	1.4955	5.7494	.01050	.00144
#3	.00582	.00041	.00161	1.4696	5.6705	.01037	.00136

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.4592	-.00042	-.00026	.00167	10.952	.00171	.00182
SDev	.0242	.00036	.00062	.00340	.143	.00277	.00041
%RSD	.98351	86.220	240.87	203.43	1.3092	161.49	22.324
#1	2.4770	-.00056	.00027	.00369	11.033	-.00027	.00201
#2	2.4690	-.00069	-.00010	.00359	11.036	.00053	.00135
#3	2.4317	-.00001	-.00094	-.00226	10.786	.00488	.00210

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02172	.01657	.00088	.00221	.00222	-.00061	-.00025
SDev	.00046	.00032	.00055	.00324	.00017	.00202	.00064
%RSD	2.1066	1.9362	62.626	146.57	7.4962	330.42	255.14
#1	.02125	.01686	.00144	.00456	.00237	.00171	-.00062
#2	.02217	.01663	.00034	-.00148	.00204	-.00160	.00048
#3	.02174	.01622	.00086	.00355	.00224	-.00195	-.00061

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00749	-.00162
SDev	.00595	.00307
%RSD	79.526	189.43
#1	.01366	-.00168
#2	.00702	.00148
#3	.00178	-.00466

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/01/99 20:16:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.091	5.0353	4.9297	4.8489	4.8425	4.9554	49.301
SDev	.110	.0066	.0181	.0108	.0075	.0122	.123
%RSD	.22788	.13156	.36774	.22305	.15530	.24560	.24989
#1	47.965	5.0289	4.9497	4.8367	4.8390	4.9652	49.370
#2	48.147	5.0421	4.9143	4.8529	4.8512	4.9593	49.374
#3	48.161	5.0349	4.9251	4.8572	4.8375	4.9418	49.159

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9430	4.8380	4.9236	47.454	47.277	4.8843	5.0173
SDev	.0102	.0093	.0143	.094	.107	.0068	.0099
%RSD	.20552	.19259	.29068	.19847	.22669	.13883	.19819
#1	4.9481	4.8445	4.9075	47.490	47.155	4.8849	5.0226
#2	4.9496	4.8421	4.9280	47.525	47.353	4.8907	5.0235
#3	4.9313	4.8273	4.9351	47.347	47.324	4.8772	5.0058

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.134	.51070	5.1016	5.0655	48.206	4.9249	4.8610
SDev	.257	.00105	.0106	.0140	.034	.0139	.0087
%RSD	.49251	.20536	.20875	.27551	.07083	.28147	.17850
#1	51.838	.51177	5.1079	5.0519	48.170	4.9133	4.8650
#2	52.293	.51065	5.1076	5.0648	48.237	4.9212	4.8670
#3	52.272	.50967	5.0893	5.0798	48.211	4.9402	4.8511

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0519	5.3230	4.9660	5.2219	4.9977	5.0357	5.1343
SDev	.0204	.0137	.0191	.0222	.0055	.0062	.0141
%RSD	.40356	.25694	.38392	.42491	.11031	.12355	.27546
#1	5.0670	5.3200	4.9877	5.2464	4.9920	5.0335	5.1449
#2	5.0599	5.3379	4.9578	5.2158	5.0030	5.0427	5.1398
#3	5.0287	5.3110	4.9523	5.2033	4.9982	5.0309	5.1183

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.0215	5.0871
SDev	.0109	.0157
%RSD	.21663	.30776
#1	5.0097	5.0726
#2	5.0236	5.0851
#3	5.0311	5.1037

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/01/99 20:22:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00988	.00116	-.00374	.00031	.00049	.00029	.01205
SDev	.00073	.00165	.00237	.00004	.00008	.00014	.00033
%RSD	7.3446	143.13	63.278	13.956	16.176	47.281	2.7131
#1	.00984	-.00075	-.00411	.00026	.00052	.00044	.01167
#2	.01062	.00222	-.00590	.00034	.00055	.00017	.01224
#3	.00917	.00200	-.00121	.00034	.00040	.00025	.01223

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00023	.00044	.00011	-.01959	-.00156	.00029	.00014
SDev	.00062	.00023	.00026	.00535	.00434	.00008	.00022
%RSD	266.65	51.492	224.74	27.316	278.22	26.945	165.27
#1	-.00041	.00018	.00001	-.02543	-.00407	.00026	-.00000
#2	.00083	.00052	.00041	-.01844	-.00405	.00038	.00002
#3	.00029	.00061	-.00008	-.01491	.00345	.00023	.00039

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04572	-.00013	.00061	.00148	-.38389	.00076	.00046
SDev	.00341	.00082	.00100	.00460	.01724	.00428	.00027
%RSD	7.4649	609.98	162.55	310.86	4.4914	566.28	58.553
#1	.04189	-.00061	.00170	-.00382	-.40062	-.00021	.00037
#2	.04843	.00082	.00040	.00446	-.36617	.00543	.00076
#3	.04685	-.00061	-.00026	.00380	-.38487	-.00295	.00025

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00371	.00293	.00261	.00043	.00048	.00141	.00005
SDev	.00074	.00048	.00026	.00073	.00011	.00156	.00074
%RSD	20.067	16.234	9.8249	168.76	22.361	110.65	1577.6
#1	.00298	.00335	.00284	-.00032	.00042	.00296	.00090
#2	.00366	.00303	.00234	.00114	.00060	.00143	-.00028
#3	.00447	.00241	.00264	.00047	.00042	-.00016	-.00048

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00693	-.00163
SDev	.00240	.00626
%RSD	34.656	383.55
#1	.00512	-.00867
#2	.00601	.00330
#3	.00966	.00048

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Method: TAL Sample Name: 94121018 Operator:
Run Time: 11/01/99 20:28:54
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01767	.00001	.00120	.00034	.00028	.00016	.14801
SDev	.00152	.00105	.00269	.00008	.00003	.00012	.00078
%RSD	8.6219	17973.	224.60	22.752	12.550	75.349	.52640
#1	.01892	.00103	-.00185	.00034	.00032	.00029	.14877
#2	.01597	-.00106	.00223	.00026	.00026	.00014	.14804
#3	.01813	.00004	.00322	.00041	.00026	.00005	.14721

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00009	.00021	.00062	-.00944	.04782	.00029	.00003
SDev	.00027	.00025	.00018	.00498	.00163	.00005	.00005
%RSD	313.27	118.47	28.948	52.791	3.4086	15.973	181.33
#1	.00022	.00035	.00067	-.01502	.04689	.00034	.00001
#2	-.00022	.00035	.00077	-.00782	.04686	.00026	.00008
#3	-.00026	-.00008	.00042	-.00546	.04970	.00026	-.00001

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04499	.00000	-.00063	.00159	-.36226	-.00056	.00025
SDev	.00625	.00000	.00098	.00448	.04944	.00177	.00000
%RSD	13.889	2.9322	154.47	281.97	13.648	314.89	1.6791
#1	.04972	.00000	-.00107	.00355	-.33472	.00148	.00025
#2	.03791	.00000	.00049	.00476	-.41934	-.00156	.00024
#3	.04735	.00000	-.00132	-.00354	-.33272	-.00160	.00025

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01382	.00209	.00139	.00170	.00026	-.00042	-.00091
SDev	.00018	.00042	.00109	.00170	.00007	.00381	.00043
%RSD	1.3204	19.982	78.216	100.24	27.305	911.73	47.717
#1	.01402	.00257	.00262	.00035	.00033	-.00226	-.00064
#2	.01367	.00190	.00057	.00361	.00028	.00396	-.00141
#3	.01376	.00181	.00098	.00114	.00019	-.00295	-.00067

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00479	-.00040
SDev	.00741	.00555
%RSD	154.65	1389.2
#1	.00009	.00489
#2	.01333	.00008
#3	.00095	-.00617

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Method: TAL Sample Name: 94127019 Operator:
Run Time: 11/01/99 20:34:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.45722	.00033	.00155	.11488	.00036	.00048	139.64
SDev	.00281	.00189	.00188	.00017	.00002	.00004	.15
%RSD	.61543	579.78	121.62	.14876	4.5480	7.4644	.11038
#1	.45814	-.00156	-.00060	.11507	.00035	.00051	139.60
#2	.45946	.00223	.00292	.11483	.00038	.00049	139.81
#3	.45406	.00031	.00231	.11474	.00034	.00044	139.51

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00123	.00221	.00482	20.337	15.155	9.3687	.00576
SDev	.00003	.00035	.00005	.025	.022	.0101	.00016
%RSD	2.7342	15.892	.94738	.12244	.14541	.10756	2.8620
#1	.00127	.00256	.00480	20.350	15.175	9.3678	.00574
#2	.00123	.00221	.00479	20.353	15.158	9.3792	.00593
#3	.00120	.00186	.00487	20.308	15.131	9.3591	.00560

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.5160	-.00086	.00131	.00410	12.662	.00085	.00089
SDev	.0076	.00042	.00050	.00178	.071	.00352	.00008
%RSD	.21545	48.596	38.415	43.426	.56384	414.12	8.5244
#1	3.5160	-.00114	.00104	.00205	12.635	.00371	.00097
#2	3.5236	-.00038	.00099	.00501	12.743	-.00308	.00085
#3	3.5084	-.00107	.00189	.00523	12.608	.00192	.00084

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06261	.12450	.00066	.00016	.00421	.00064	.00151
SDev	.00051	.00027	.00222	.00186	.00014	.00136	.00133
%RSD	.81769	.21550	335.86	1175.1	3.3400	213.30	87.829
#1	.06300	.12420	.00160	.00016	.00429	-.00012	.00146
#2	.06281	.12469	.00225	.00202	.00429	.00222	.00021
#3	.06203	.12462	-.00187	-.00170	.00405	-.00017	.00286

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00680	.00260
SDev	.00446	.00245
%RSD	70.713	94.403
#1	.00396	.00069
#2	.00851	.00536
#3	.01144	.00173

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Method: TAL Sample Name: 94127020 Operator:
Run Time: 11/01/99 20:40:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.19059	-.00067	.00115	.10328	.00037	.00008	136.18
SDev	.00223	.00214	.00184	.00037	.00003	.00013	.19
%RSD	1.1680	319.26	160.24	.35529	9.1204	169.84	.13851
#1	.19168	.00078	.00315	.10350	.00039	-.00002	136.02
#2	.19206	.00033	.00079	.10350	.00039	.00023	136.13
#3	.18803	-.00313	-.00049	.10286	.00033	.00002	136.39

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00090	.00205	.00298	15.050	14.695	9.1719	.00478
SDev	.00027	.00026	.00022	.030	.023	.0065	.00034
%RSD	29.707	12.845	7.2770	.20152	.15475	.07092	7.0590
#1	.00120	.00231	.00273	15.043	14.703	9.1646	.00517
#2	.00078	.00179	.00311	15.083	14.714	9.1740	.00459
#3	.00071	.00205	.00310	15.023	14.670	9.1771	.00459

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.3235	-.00105	-.00041	-.00001	12.513	.00073	.00036
SDev	.0105	.00010	.00050	.00137	.057	.00189	.00026
%RSD	.31724	9.9400	119.65	18173.	.45328	260.28	72.883
#1	3.3344	-.00107	-.00064	-.00121	12.465	.00066	.00057
#2	3.3133	-.00114	.00015	-.00030	12.576	.00265	.00007
#3	3.3228	-.00094	-.00076	.00149	12.497	-.00113	.00045

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03681	.12303	.00123	-.00038	.00196	-.00034	-.00059
SDev	.00026	.00012	.00068	.00039	.00005	.00127	.00135
%RSD	.69850	.09668	55.646	103.85	2.6752	377.25	231.09
#1	.03709	.12305	.00188	-.00015	.00193	.00029	-.00116
#2	.03676	.12290	.00052	-.00015	.00193	-.00180	.00096
#3	.03659	.12313	.00129	-.00083	.00202	.00050	-.00156

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00898	-.00489
SDev	.00563	.00137
%RSD	62.709	28.077
#1	.00656	-.00549
#2	.00496	-.00332
#3	.01541	-.00586

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Method: TAL Sample Name: 94127021 Operator:
Run Time: 11/01/99 20:46:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01360	.00003	-.00087	.00034	.00023	-.00002	.13066
SDev	.00036	.00142	.00348	.00000	.00001	.00006	.00137
%RSD	2.6773	4130.3	399.22	.16073	6.2018	259.93	1.0507
#1	.01355	-.00055	-.00172	.00034	.00024	-.00007	.13111
#2	.01326	.00165	.00295	.00034	.00022	-.00005	.13175
#3	.01398	-.00099	-.00385	.00034	.00022	.00005	.12912

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.00026	.00073	.01895	.03487	.00137	.00073
SDev	.00000	.00023	.00025	.00532	.00178	.00012	.00050
%RSD	.00038	86.983	34.126	28.066	5.0944	8.4375	69.479
#1	.00022	.00000	.00076	.01285	.03430	.00140	.00015
#2	.00022	.00043	.00096	.02262	.03687	.00148	.00111
#3	.00022	.00035	.00047	.02139	.03345	.00125	.00092

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04748	.00000	-.00053	-.00243	-.33523	-.00002	.00018
SDev	.00106	.00007	.00057	.00125	.02157	.00554	.00020
%RSD	2.2401	57887.	109.44	51.634	6.4338	23891.	113.16
#1	.04867	-.00007	-.00118	-.00293	-.36007	-.00521	.00013
#2	.04715	.00007	-.00009	-.00100	-.32126	.00582	.00039
#3	.04663	.00000	-.00031	-.00335	-.32435	-.00068	.00000

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03082	.00171	.00058	.00224	.00014	-.00112	-.00040
SDev	.00054	.00025	.00057	.00241	.00000	.00118	.00029
%RSD	1.7447	14.669	98.881	107.33	.08318	105.35	72.435
#1	.03027	.00155	.00118	.00445	.00014	-.00242	-.00073
#2	.03084	.00158	.00051	-.00033	.00014	-.00009	-.00025
#3	.03135	.00200	.00004	.00261	.00014	-.00086	-.00021

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00036	-.00385
SDev	.00211	.00218
%RSD	579.25	56.511
#1	.00194	-.00575
#2	-.00084	-.00148
#3	-.00219	-.00433

Analysis Report 11/01/99 08:58:33 PM

Method: TAL Sample Name: 94127026 Operator:
Run Time: 11/01/99 20:52:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.65499	.00028	.00374	.19801	.00010	.00103	149.18
SDev	.01863	.00097	.00142	.00443	.00006	.00023	3.64
%RSD	2.8451	338.79	37.898	2.2385	68.201	22.477	2.4428
#1	.63348	.00018	.00368	.19289	.00002	.00080	144.98
#2	.66605	-.00062	.00519	.20048	.00014	.00102	151.40
#3	.66545	.00130	.00236	.20066	.00012	.00127	151.17

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00174	.00141	.00513	37.537	17.242	9.6259	.00475
SDev	.00011	.00007	.00114	.884	.428	.2286	.00056
%RSD	6.2263	5.3254	22.255	2.3544	2.4829	2.3750	11.876
#1	.00164	.00148	.00413	36.518	16.748	9.3620	.00491
#2	.00172	.00142	.00489	38.078	17.467	9.7615	.00413
#3	.00185	.00133	.00638	38.017	17.511	9.7542	.00522

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.7278	-.00081	.00384	.00035	16.381	-.00030	.00263
SDev	.0943	.00047	.00061	.00072	.467	.00376	.00019
%RSD	2.5293	57.877	15.874	204.16	2.8528	1254.0	7.4218
#1	3.6194	-.00032	.00344	.00096	15.842	.00357	.00256
#2	3.7734	-.00126	.00354	.00054	16.624	-.00053	.00249
#3	3.7906	-.00084	.00454	-.00044	16.676	-.00393	.00285

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08215	.13395	.00048	.02323	.00775	.00472	.00323
SDev	.00150	.00312	.00072	.00205	.00011	.00131	.00043
%RSD	1.8299	2.3272	149.93	8.8412	1.4597	27.845	13.361
#1	.08059	.13035	.00128	.02242	.00763	.00450	.00275
#2	.08228	.13567	.00030	.02170	.00785	.00353	.00337
#3	.08359	.13583	-.00013	.02557	.00776	.00613	.00358

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00039	-.00006
SDev	.01016	.00515
%RSD	2624.6	8497.7
#1	.00866	-.00327
#2	-.01096	.00587
#3	.00346	-.00278

Analysis Report 11/01/99 09:04:32 PM

Method: TAL Sample Name: 94043001 Operator:
Run Time: 11/01/99 20:58:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.22408	.00052	.02147	.25589	.00036	-.00009	37.271
SDev	.00383	.00086	.00437	.00026	.00002	.00011	.107
%RSD	1.7098	163.82	20.351	.10304	5.8732	111.62	.28700
#1	.22843	-.00030	.02406	.25606	.00035	.00000	37.296
#2	.22261	.00141	.01643	.25602	.00038	-.00008	37.363
#3	.22121	.00046	.02393	.25559	.00034	-.00021	37.153

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02350	.00123	.03795	21.867	50.080	.17014	.03257
SDev	.00028	.00023	.00028	.035	.047	.00052	.00015
%RSD	1.2011	19.122	.72940	.16052	.09470	.30536	.45484
#1	.02364	.00114	.03792	21.902	50.126	.17054	.03242
#2	.02368	.00149	.03824	21.868	50.083	.17034	.03272
#3	.02317	.00105	.03768	21.831	50.031	.16955	.03258

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31.004	-.00015	.01498	.00033	472.46	-.00080	.05038
SDev	.041	.00000	.00072	.00193	.44	.00472	.00064
%RSD	.13104	.19799	4.8206	580.21	.09276	592.45	1.2745
#1	31.047	-.00015	.01581	-.00188	472.93	.00040	.05016
#2	31.000	-.00015	.01456	.00165	472.41	.00321	.05110
#3	30.966	-.00015	.01455	.00122	472.05	-.00601	.04988

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10113	1.1107	.00445	.01710	.00403	.01396	.01531
SDev	.00053	.0023	.00106	.00356	.00004	.00156	.00082
%RSD	.52198	.20821	23.934	20.802	.99156	11.145	5.3861
#1	.10154	1.1127	.00431	.01579	.00403	.01514	.01597
#2	.10132	1.1113	.00557	.02112	.00399	.01220	.01557
#3	.10054	1.1081	.00345	.01438	.00407	.01454	.01439

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00325	-.00153
SDev	.00235	.00253
%RSD	72.291	165.48
#1	.00167	-.00405
#2	.00213	.00101
#3	.00596	-.00155

Analysis Report 11/01/99 09:10:30 PM

Method: TAL Sample Name: 94285033 Operator:
Run Time: 11/01/99 21:04:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01561	-.00049	.00208	.00112	.00020	-.00008	.20649
SDev	.00171	.00061	.00195	.00007	.00003	.00020	.00091
%RSD	10.984	122.86	93.764	6.4860	13.335	232.45	.43959
#1	.01726	-.00061	.00126	.00112	.00022	-.00031	.20709
#2	.01574	.00016	.00431	.00104	.00020	.00002	.20693
#3	.01383	-.00104	.00068	.00119	.00017	.00004	.20544

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00179	.00002	.00007	.03425	.03785	.01915	.00048
SDev	.00006	.00017	.00014	.00344	.00423	.00012	.00036
%RSD	3.4759	791.60	198.05	10.041	11.171	.62357	75.598
#1	.00173	-.00015	-.00008	.03625	.03543	.01928	.00028
#2	.00186	.00002	.00020	.03621	.04273	.01905	.00090
#3	.00179	.00019	.00010	.03028	.03539	.01912	.00026

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08337	.00011	-.00110	.00022	-.09046	-.00214	.00008
SDev	.00304	.00010	.00026	.00155	.00624	.00116	.00007
%RSD	3.6505	95.226	23.288	699.52	6.8964	54.056	95.148
#1	.07985	.00020	-.00124	-.00066	-.09323	-.00336	.00012
#2	.08516	.00013	-.00080	-.00069	-.09483	-.00201	.00012
#3	.08509	-.00000	-.00125	.00201	-.08331	-.00106	-.00001

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02308	.00323	.00060	-.00185	.00035	-.00113	-.00125
SDev	.00047	.00015	.00030	.00144	.00020	.00056	.00034
%RSD	2.0204	4.5289	50.280	78.143	58.939	49.009	27.111
#1	.02257	.00340	.00027	-.00108	.00036	-.00081	-.00162
#2	.02348	.00315	.00087	-.00096	.00054	-.00081	-.00096
#3	.02321	.00314	.00066	-.00351	.00014	-.00178	-.00116

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00354	-.00182
SDev	.00136	.00249
%RSD	38.220	136.57
#1	.00227	-.00250
#2	.00496	-.00389
#3	.00340	.00094

Analysis Report 11/01/99 09:16:29 PM

Method: TAL Sample Name: icsa Operator:
Run Time: 11/01/99 21:10:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	476.73	-.00354	-.00545	-.00289	-.00048	.00217	475.03
SDev	.37	.00255	.01156	.00005	.00002	.00010	.51
%RSD	.07676	71.968	212.23	1.6715	4.9172	4.6497	.10763
#1	476.95	-.00484	-.01402	-.00286	-.00046	.00209	474.45
#2	476.92	-.00061	-.01002	-.00295	-.00049	.00229	475.41
#3	476.30	-.00519	.00770	-.00287	-.00050	.00214	475.24

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00082	.00352	.00137	240.67	479.55	.00175	.00489
SDev	.00007	.00035	.00041	.16	.81	.00006	.00070
%RSD	8.7136	10.059	29.775	.06456	.16902	3.4282	14.269
#1	-.00087	.00314	.00094	240.52	480.16	.00174	.00554
#2	-.00084	.00358	.00174	240.83	479.86	.00170	.00498
#3	-.00074	.00384	.00142	240.65	478.63	.00182	.00415

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	241.64	-.00096	.00307	.00095	242.08	.00399	-.00145
SDev	.65	.00035	.00040	.00398	.22	.00824	.00011
%RSD	.26878	36.775	12.839	420.03	.09072	206.71	7.8092
#1	241.25	-.00113	.00263	.00553	242.26	.00289	-.00145
#2	242.39	-.00120	.00338	-.00171	242.15	-.00365	-.00157
#3	241.28	-.00056	.00322	-.00097	241.84	.01273	-.00134

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00990	-.00644	-.00193	.00515	-.00378	-.00654	.00770
SDev	.00044	.00028	.00157	.00368	.00016	.00271	.00083
%RSD	4.4753	4.2719	81.467	71.491	4.1278	41.532	10.727
#1	.00958	-.00673	-.00011	.00702	-.00391	-.00920	.00835
#2	.00971	-.00618	-.00287	.00753	-.00381	-.00377	.00677
#3	.01041	-.00642	-.00280	.00091	-.00361	-.00664	.00796

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00082	.00060
SDev	.01283	.01106
%RSD	1563.2	1847.0
#1	-.00686	.01130
#2	.01563	-.01078
#3	-.00631	.00128

Analysis Report 11/01/99 09:22:27 PM

Method: TAL Sample Name: icsab Operator:
Run Time: 11/01/99 21:16:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	487.37	.09836	.09680	.09814	.09566	.09141	484.17
SDev	.19	.00241	.00519	.00014	.00004	.00049	.49
%RSD	.03910	2.4458	5.3648	.14596	.04596	.53859	.10065
#1	487.39	.09642	.10048	.09822	.09562	.09136	483.73
#2	487.56	.09760	.09907	.09822	.09570	.09095	484.70
#3	487.18	.10105	.09086	.09797	.09566	.09193	484.08

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09146	.09164	.10818	245.10	485.68	.09487	.09281
SDev	.00013	.00067	.00181	.14	.60	.00014	.00053
%RSD	.13672	.72829	1.6760	.05684	.12403	.15082	.56808
#1	.09133	.09152	.10704	244.95	485.93	.09470	.09303
#2	.09158	.09236	.11027	245.22	486.11	.09495	.09221
#3	.09146	.09104	.10723	245.13	484.99	.09495	.09319

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	246.69	.01014	.09276	.09286	246.19	.08799	.09367
SDev	.15	.00033	.00256	.00224	.24	.00713	.00035
%RSD	.06000	3.2165	2.7617	2.4107	.09674	8.1069	.36992
#1	246.53	.01045	.09522	.09123	246.35	L.07976	.09390
#2	246.83	.01016	.09011	.09541	246.31	.09242	.09385
#3	246.70	.00980	.09294	.09194	245.91	.09180	.09327

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09461	.09427	.09223	.10001	.09388	.08240	.09779
SDev	.00038	.00091	.00190	.00345	.00016	.00179	.00313
%RSD	.40591	.96594	2.0572	3.4451	.17413	2.1788	3.2042
#1	.09457	.09322	.09276	.10042	.09402	.08446	.10054
#2	.09501	.09475	.09012	.09638	.09393	.08121	.09438
#3	.09425	.09484	.09381	.10323	.09370	.08153	.09845

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.08887	.09443
SDev	.00723	.00466
%RSD	8.1319	4.9329
#1	.09474	.08905
#2	.09106	.09716
#3	.08080	.09708

Analysis Report 11/01/99 09:28:26 PM page 1

Method: TAL Sample Name: ccv Operator:
Run Time: 11/01/99 21:22:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.864	5.1126	5.0136	4.9083	4.9155	5.0248	50.084
SDev	.061	.0107	.0086	.0092	.0047	.0062	.027
%RSD	.12505	.20849	.17070	.18761	.09614	.12249	.05379
#1	48.804	5.1026	5.0038	4.8985	4.9101	5.0290	50.099
#2	48.926	5.1113	5.0196	4.9168	4.9188	5.0277	50.100
#3	48.861	5.1238	5.0174	4.9096	4.9175	5.0177	50.053

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0100	4.9061	4.9924	48.077	48.009	4.9560	5.0857
SDev	.0043	.0039	.0090	.050	.027	.0035	.0071
%RSD	.08609	.08015	.18043	.10472	.05580	.07013	.14051
#1	5.0116	4.9096	4.9824	48.048	47.978	4.9522	5.0910
#2	5.0133	4.9070	4.9998	48.135	48.030	4.9591	5.0885
#3	5.0051	4.9018	4.9952	48.048	48.017	4.9567	5.0776

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.893	.51786	5.1830	5.1182	48.907	4.9960	4.9262
SDev	.108	.00014	.0056	.0164	.115	.0057	.0038
%RSD	.20410	.02634	.10874	.32061	.23519	.11458	.07739
#1	52.772	.51800	5.1866	5.1081	48.775	4.9987	4.9269
#2	52.927	.51786	5.1860	5.1372	48.963	4.9895	4.9296
#3	52.980	.51773	5.1765	5.1094	48.984	4.9999	4.9221

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1246	5.4101	5.0077	5.2808	5.0651	5.1117	5.2185
SDev	.0106	.0139	.0085	.0217	.0044	.0117	.0067
%RSD	.20629	.25699	.17044	.41002	.08590	.22838	.12813
#1	5.1344	5.3944	5.0106	5.2986	5.0602	5.1073	5.2260
#2	5.1259	5.4206	5.0144	5.2870	5.0685	5.1249	5.2164
#3	5.1134	5.4155	4.9981	5.2567	5.0664	5.1029	5.2132

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.0573	5.1483
SDev	.0114	.0203
%RSD	.22445	.39512
#1	5.0583	5.1326
#2	5.0681	5.1713
#3	5.0455	5.1410

Analysis Report 11/01/99 09:34:24 PM page 1

Method: TAL Sample Name: ccb Operator:
Run Time: 11/01/99 21:28:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01954	.00081	.00354	.00029	.00044	.00018	.01995
SDev	.00398	.00027	.00366	.00004	.00005	.00007	.00149
%RSD	20.362	33.832	103.45	14.266	10.240	39.380	7.4893
#1	.02408	.00053	.00123	.00027	.00047	.00014	.02020
#2	.01784	.00082	.00163	.00026	.00047	.00014	.02130
#3	.01669	.00107	.00776	.00033	.00039	.00026	.01835

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.00052	.00008	-.01412	.00342	.00030	-.00013
SDev	.00000	.00017	.00011	.00180	.00534	.00000	.00034
%RSD	.00410	32.803	125.22	12.761	156.17	.53279	260.11
#1	.00022	.00035	.00004	-.01376	-.00083	.00030	-.00041
#2	.00022	.00069	.00020	-.01608	.00167	.00030	.00025
#3	.00022	.00052	.00001	-.01253	.00941	.00030	-.00023

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05510	-.00034	-.00040	.00130	-.41790	.00231	.00020
SDev	.00397	.00059	.00034	.00142	.05003	.00170	.00020
%RSD	7.2080	173.47	85.320	109.00	11.972	73.423	96.984
#1	.05948	-.00102	-.00001	.00284	-.36018	.00132	.00025
#2	.05407	.00000	-.00058	.00006	-.44470	.00134	.00037
#3	.05174	.00000	-.00061	.00100	-.44883	.00427	-.00001

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00246	.00201	.00253	.00120	.00040	-.00074	-.00040
SDev	.00160	.00083	.00059	.00061	.00011	.00057	.00035
%RSD	64.955	41.219	23.341	51.331	26.792	77.227	88.826
#1	.00422	.00293	.00308	.00053	.00047	-.00026	-.00004
#2	.00111	.00176	.00191	.00174	.00046	-.00058	-.00075
#3	.00204	.00134	.00260	.00132	.00028	-.00137	-.00039

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00192	.00060
SDev	.00292	.00103
%RSD	151.83	172.15
#1	.00526	.00124
#2	.00058	-.00059
#3	-.00008	.00115

*** Standard: 1 Rep: 1 Seq: 0 12:57:18 01 Nov 1999 HG

Hg .000 ppb 687

Ave. Int. = 687 S. D. = 0

*** Standard: 2 Rep: 1 Seq: 1 12:59:19 01 Nov 1999 HG

Hg .200 ppb 2732

Ave. Int. = 2732 S. D. = 0

*** Standard: 3 Rep: 1 Seq: 2 13:01:30 01 Nov 1999 HG

Hg .500 ppb 6310

Ave. Int. = 6310 S. D. = 0

Folder: 110199d
13:03:45 01 Nov 1999 Protocol: hgclp

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 4 Rep: 1 Seq: 3 13:03:45 01 Nov 1999 HG

Hg 1.00 ppb 12941
Ave. Int. = 12941 S. D. = 0

*** Standard: 5 Rep: 1 Seq: 4 13:06:07 01 Nov 1999 HG

Hg 5.00 ppb 63832
Ave. Int. = 63832 S. D. = 0

*** Standard: 6 Rep: 1 Seq: 5 13:08:37 01 Nov 1999 HG

Hg 10.0 ppb 123351
Ave. Int. = 123351 S. D. = 0

Protocol: hgclp

Rev: 3.001 Time: 13:08:45 01 Nov 1999

Folder: 110199d Seq: 6 Print: On

User: Batch: Id: Std6Rep1 Cup: Gas: 0.30 LPM

State: Idle Macro HGCLP 79: F3 Print Xmit: Off Autosampler: On

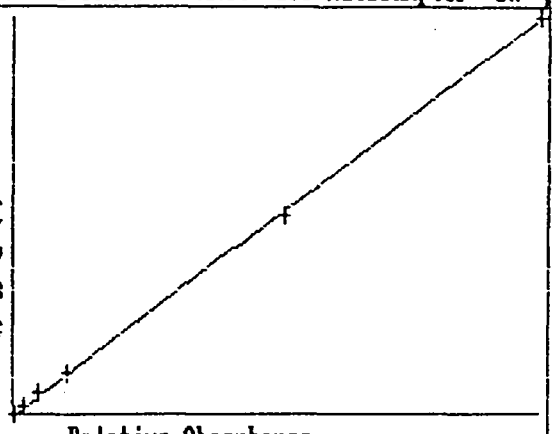
CALIBRATION: Line Calibration

Line: Hg

	Conc.	Calc.	Dev.	Accepted LiNear	
S1	.000	.006	.006	Quadratic	
S2	.200	.172	-.028	WtdLinear	
S3	.500	.462	-.038		C
S4	1.00	.999	-.001	Accept	o
S5	5.00	5.12	.120		n
S6	10.0	9.94	-.060	StdAdd	c

A .0000000 r .999873

B 8.09849e-5 C -4.91530e-2



Relative Absorbance

	Mean	%RSD	
S1	687	0	687
S2	2732	0	2732
S3	6310	0	6310
S4	12941	0	12941
S5	63832	0	63832
S6	123351	0	123351

New calibration coefficients stored

Folder: 110199d Page 3
13:11:09 01 Nov 1999 Protocol: hgclp

Line Conc. Units SD/RSD 1 2 3 4 5

*** Check Standard: 2 Ck2 Seq: 6 13:11:09 01 Nov 1999 HG
Line Flag %Rcv. Found True Units SD/RSD
Hg 90.0 3.60 4.00 ppb .000
102.86 3.50

*** Check Standard: 1 Ck1 Seq: 7 13:13:34 01 Nov 1999 HG
Line Flag Found Range(+/-) Units SD/RSD
Hg -.072 .200 ppb .000

*** Sample ID: cra Seq: 8 13:15:33 01 Nov 1999 HG

Hg .142 ppb .000 .142

*** Sample ID: pbs Seq: 9 13:17:32 01 Nov 1999 HG

Hg -.078 ppb .000 -.078

*** Sample ID: lcss Seq: 10 13:19:29 01 Nov 1999 HG

Hg 2.09 ppb .000 2.09

*** Sample ID: 94143009 Seq: 11 13:21:47 01 Nov 1999 HG

Hg .208 ppb .000 .208

*** Sample ID: 94143010 Seq: 12 13:23:54 01 Nov 1999 HG

Hg .125 ppb .000 .125

*** Sample ID: 94143011 Seq: 13 13:26:02 01 Nov 1999 HG
UNSPIKED
Hg .015 ppb .000 .015

*** Sample ID: 94143011 Seq: 14 13:28:00 01 Nov 1999 HG
UNSPIKED DUP dup
Hg .013 ppb .000 .013

*** DUP ID: 94143011 Seq: 15 13:28:00 01 Nov 1999 HG
RPD Orig. Dup.
Hg 19.6 % .015 .013

*** Sample ID: 94143011 Seq: 16 13:30:00 01 Nov 1999 HG
SPIKED ms
Hg 1.15 ppb .000 1.15

*** %Rec. ID: 94143011 Seq: 17 13:30:00 01 Nov 1999 HG
Spikes =1 Unspiked =2
Spike %Rcv. Avg(U) SD(U) Avg(S) SD(S)
Hg 1.00 ppb 114. .014 .002 1.15 .000

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Sample ID: 94143011                Seq:  18     13:32:19 01 Nov 1999 HG
                              msd
Hg    1.10    ppb       .000      1.10

*** Sample ID: 94143012                Seq:  19     13:34:36 01 Nov 1999 HG

Hg    .047    ppb       .000      .047

*** Check Standard: 2  Ck2             Seq:  20     13:36:40 01 Nov 1999 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          107.     4.26    4.00  ppb        .000

*** Check Standard: 1  Ck1             Seq:  21     13:39:05 01 Nov 1999 HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.068     .200    ppb        .000

*** Sample ID: 94143013                Seq:  22     13:41:03 01 Nov 1999 HG

Hg   -.008    ppb       .000     -.008

*** Sample ID: 94143014                Seq:  23     13:43:00 01 Nov 1999 HG

Hg    .008    ppb       .000      .008

*** Sample ID: 94143015                Seq:  24     13:44:56 01 Nov 1999 HG

Hg   -.050    ppb       .000     -.050

*** Sample ID: 94143016                Seq:  25     13:46:51 01 Nov 1999 HG

Hg    .001    ppb       .000      .001

*** Sample ID: 94143017                Seq:  26     13:48:46 01 Nov 1999 HG

Hg    .123    ppb       .000      .123

*** Sample ID: 94143018                Seq:  27     13:50:52 01 Nov 1999 HG

Hg    .341    ppb       .000      .341

*** Sample ID: 94143019                Seq:  28     13:53:01 01 Nov 1999 HG

Hg    .003    ppb       .000      .003

*** Sample ID: 94143020                Seq:  29     13:54:57 01 Nov 1999 HG

Hg   -.007    ppb       .000     -.007
```

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Sample ID: 94106008                Seq:  30     13:56:53 01 Nov 1999 HG

Hg    .256    ppb       .000      .256

*** Sample ID: 94106009                Seq:  31     13:59:00 01 Nov 1999 HG

Hg    .263    ppb       .000      .263

*** Check Standard: 2  Ck2             Seq:  32     14:01:11 01 Nov 1999 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          106.     4.24    4.00   ppb        .000

*** Check Standard: 1  Ck1             Seq:  33     14:03:40 01 Nov 1999 HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.085     .200     ppb        .000

*** Sample ID: pbs                     Seq:  34     14:05:37 01 Nov 1999 HG

Hg   -.063    ppb       .000     -.063

*** Sample ID: lcss                    Seq:  35     14:07:32 01 Nov 1999 HG

Hg    2.07    ppb       .000      2.07

*** Sample ID: 94131001                Seq:  36     14:09:49 01 Nov 1999 HG
 UNSPIKED
Hg    .034    ppb       .000      .034

*** Sample ID: 94131001                Seq:  37     14:11:43 01 Nov 1999 HG
 UNSPIKED DUP              dup
Hg    .060    ppb       .000      .060

*** DUP  ID: 94131001                  Seq:  38     14:11:43 01 Nov 1999 HG
      RPD                Orig.     Dup.
Hg    56.8    %          .034     .060

*** Sample ID: 94131001                Seq:  39     14:13:45 01 Nov 1999 HG
 SPIKED                    ms
Hg    1.13    ppb       .000      1.13

*** %Rec.  ID: 94131001                Seq:  40     14:13:45 01 Nov 1999 HG
                        Spikes =1  Unspiked =2
      Spike              %Rcv.    Avg(U)   SD(U)    Avg(S)   SD(S)
Hg    1.00    ppb        108.     .047    .019      1.13    .000

*** Sample ID: 94131001                Seq:  41     14:16:04 01 Nov 1999 HG
                           msd
Hg    1.11    ppb       .000      1.11
```

Folder: 110199d
14:18:20 01 Nov 1999 Protocol: hgclp

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 94058001 Seq: 42 14:18:20 01 Nov 1999 HG

Hg 59.3 H ppb .000 59.3

*** Sample ID: 94058002 Seq: 43 14:21:05 01 Nov 1999 HG

Hg -.135 ppb .000 -.135

*** Sample ID: 94058003 Seq: 44 14:22:59 01 Nov 1999 HG

Hg 90.9 H ppb .000 90.9

*** Sample ID: 94058004 Seq: 45 14:25:34 01 Nov 1999 HG

Hg 8.46 ppb .000 8.46

*** Check Standard: 2 Ck2 Seq: 46 14:27:53 01 Nov 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.	4.21	4.00	ppb	.000

*** Check Standard: 1 Ck1 Seq: 47 14:30:18 01 Nov 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.062	.200	ppb	.000

*** Sample ID: 94058005 Seq: 48 14:32:15 01 Nov 1999 HG

Hg -.059 ppb .000 -.059

*** Sample ID: 94058006 Seq: 49 14:34:10 01 Nov 1999 HG

Hg -.020 ppb .000 -.020

11/1/99 *** Sample ID: 94058001 Seq: 50 14:36:10 01 Nov 1999 HG

10X Hg 6.31 ppb .000 6.31

11/1/99 *** Sample ID: 94058003 Seq: 51 14:38:38 01 Nov 1999 HG

50X Hg 1.58 ppb .000 1.58

*** Check Standard: 2 Ck2 Seq: 52 14:41:05 01 Nov 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.	4.08	4.00	ppb	.000

*** Check Standard: 1 Ck1 Seq: 53 14:43:34 01 Nov 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.032	.200	ppb	.000

11/1/99

11/1/99

11/2/99

Folder: 110299 Page 1

13:43:48 02 Nov 1999 Protocol: hgclp

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 0 13:43:48 02 Nov 1999 HG

Hg .000 ppb 297
Ave. Int. = 297 S. D. = 0

*** Standard: 2 Rep: 1 Seq: 1 13:45:49 02 Nov 1999 HG

Hg .200 ppb 3076
Ave. Int. = 3076 S. D. = 0

*** Standard: 3 Rep: 1 Seq: 2 13:48:00 02 Nov 1999 HG

Hg .500 ppb 7264
Ave. Int. = 7264 S. D. = 0

*** Standard: 4 Rep: 1 Seq: 3 13:50:21 02 Nov 1999 HG

Hg 1.00 ppb 15059
Ave. Int. = 15059 S. D. = 0

*** Standard: 5 Rep: 1 Seq: 4 13:52:45 02 Nov 1999 HG

Hg 5.00 ppb 73742
Ave. Int. = 73742 S. D. = 0

*** Standard: 6 Rep: 1 Seq: 5 13:55:18 02 Nov 1999 HG

Hg 10.0 ppb 144944
Ave. Int. = 144944 S. D. = 0

Protocol: hgclp

Rev: 3.001 Time: 13:55:26 02 Nov 1999

Folder: 110299 Seq: 6 Print: On

User: Batch: Id: Std6Repl Cup: Gas: 0.30 LPM

State: Idle Macro HGCLP 79: F3 Print Xmit: Off Autosampler: On

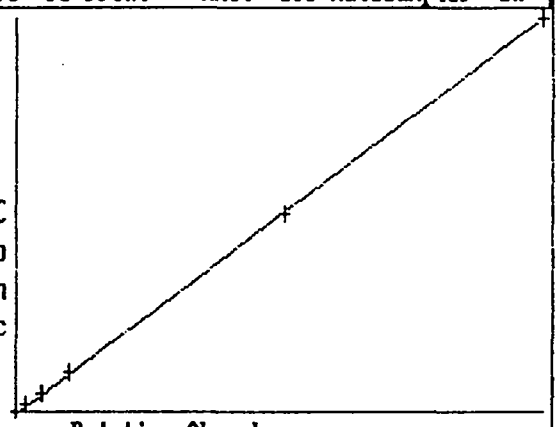
CALIBRATION: Line Calibration

Line: Hg

	Conc.	Calc.	Dev.	Accepted LiNear	
S1	.000	-.005	-.005	Quadratic	
S2	.200	.187	-.013	WtdLinear	
S3	.500	.476	-.024		C
S4	1.00	1.01	.013	Accept	o
S5	5.00	5.06	.060		n
S6	10.0	9.97	-.030	StdAdd	c

A .0000000 r .999966

B 6.89585e-5 C -2.53690e-2



Relative Absorbance

	Mean	%RSD	
S1	297	0	297
S2	3076	0	3076
S3	7264	0	7264
S4	15059	0	15059
S5	73742	0	73742
S6	144944	0	144944

New calibration coefficients stored

13:57:49 02 Nov 1999 Folder: 110299 Protocol: hgclp Page 2

Line Conc. Units SD/RSD 1 2 3 4 5

*** Check Standard: 2 Ck2 Seq: 6 13:57:49 02 Nov 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		~~84.3~~ 96.39	3.37	~~4.00~~ 3.50	ppb	.000

*** Check Standard: 1 Ck1 Seq: 7 14:00:14 02 Nov 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.063	.200	ppb	.000

*** Sample ID: cra Seq: 8 14:02:13 02 Nov 1999 HG

Hg .163 ppb .000 .163

*** Sample ID: pbw Seq: 9 14:04:21 02 Nov 1999 HG

Hg -.037 ppb .000 -.037

*** Sample ID: lcsw Seq: 10 14:06:18 02 Nov 1999 HG

Hg 2.03 ppb .000 2.03

*** Sample ID: 94116001 Seq: 11 14:08:37 02 Nov 1999 HG
UNSPIKED

Hg -.054 ppb .000 -.054

*** Sample ID: 94116001 Seq: 12 14:10:34 02 Nov 1999 HG
UNSPIKED DUP dup

Hg -.034 ppb .000 -.034

*** DUP ID: 94116001 Seq: 13 14:10:34 02 Nov 1999 HG

	RPD		Orig.	Dup.
Hg	46.3	%	-.054	-.034

*** Sample ID: 94116001 Seq: 14 14:12:33 02 Nov 1999 HG
SPIKED ms

Hg .982 ppb .000 .982

*** %Rec. ID: 94116001 Seq: 15 14:12:33 02 Nov 1999 HG

Spikes =1 Unspiked =2

	Spike		%Rcv.	Avg(U)	SD(U)	Avg(S)	SD(S)
Hg	1.00	ppb	103.	-.044	.014	.982	.000

*** Sample ID: 94116001 Seq: 16 14:14:53 02 Nov 1999 HG
msd

Hg .946 ppb .000 .946

*** Sample ID: 94116002 Seq: 17 14:17:10 02 Nov 1999 HG

Hg .971 ppb .000 .971

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 94116003 Seq: 18 14:19:31 02 Nov 1999 HG

Hg	.118	ppb	.000	.118

*** Sample ID: 94116004 Seq: 19 14:21:38 02 Nov 1999 HG

Hg	.073	ppb	.000	.073

*** Check Standard: 2 Ck2 Seq: 20 14:23:38 02 Nov 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.	4.06	4.00	ppb	.000

*** Check Standard: 1 Ck1 Seq: 21 14:26:03 02 Nov 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.064	.200	ppb	.000

*** Sample ID: 94116005 Seq: 22 14:28:01 02 Nov 1999 HG

Hg	.128	ppb	.000	.128

*** Sample ID: 94116006 Seq: 23 14:30:01 02 Nov 1999 HG

Hg	.477	ppb	.000	.477

*** Sample ID: 94116007 Seq: 24 14:32:11 02 Nov 1999 HG

Hg	-.036	ppb	.000	-.036

*** Sample ID: 94116008 Seq: 25 14:34:06 02 Nov 1999 HG

Hg	.114	ppb	.000	.114

*** Sample ID: 94116009 Seq: 26 14:36:11 02 Nov 1999 HG

Hg	-.038	ppb	.000	-.038

*** Sample ID: 94116012 Seq: 27 14:38:06 02 Nov 1999 HG

Hg	1.55	ppb	.000	1.55

*** Sample ID: 94116013 Seq: 28 14:40:35 02 Nov 1999 HG

Hg	.175	ppb	.000	.175

*** Sample ID: 94116016 Seq: 29 14:42:44 02 Nov 1999 HG

Hg	-.026	ppb	.000	-.026

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 94116017 Seq: 30 14:44:39 02 Nov 1999 HG

Hg	-.028	ppb	.000	-.028

*** Sample ID: 94145001 Seq: 31 14:46:35 02 Nov 1999 HG

Hg	-.009	ppb	.000	-.009

*** Check Standard: 2 Ck2 Seq: 32 14:48:32 02 Nov 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.	4.05	4.00	ppb	.000

*** Check Standard: 1 Ck1 Seq: 33 14:51:01 02 Nov 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.050	.200	ppb	.000

*** Sample ID: 94145002 Seq: 34 14:52:58 02 Nov 1999 HG

Hg	.015	ppb	.000	.015

*** Sample ID: 94145003 Seq: 35 14:54:54 02 Nov 1999 HG

Hg	-.045	ppb	.000	-.045

*** Sample ID: pbw Seq: 36 14:56:49 02 Nov 1999 HG

Hg	-.034	ppb	.000	-.034

*** Sample ID: lcsw Seq: 37 14:58:42 02 Nov 1999 HG

Hg	1.99	ppb	.000	1.99

*** Sample ID: 94106006 Seq: 38 15:01:01 02 Nov 1999 HG

Hg	-.045	ppb	.000	-.045

*** Sample ID: 94106007 Seq: 39 15:02:55 02 Nov 1999 HG

Hg	-.036	ppb	.000	-.036

*** Sample ID: 94105001 Seq: 40 15:04:49 02 Nov 1999 HG

Hg	-.037	ppb	.000	-.037

*** Sample ID: 94105002 Seq: 41 15:06:43 02 Nov 1999 HG

Hg	-.035	ppb	.000	-.035

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Sample ID: 94112001                Seq:  42     15:08:37 02 Nov 1999 HG
 UNSPIKED
Hg    .016    ppb       .000      .016

*** Sample ID: 94112001                Seq:  43     15:10:32 02 Nov 1999 HG
 UNSPIKED DUP                dup
Hg    .015    ppb       .000      .015

*** DUP  ID: 94112001                  Seq:  44     15:10:32 02 Nov 1999 HG
      RPD                 Orig.     Dup.
Hg    6.95    %           .016      .015

*** Check Standard: 2  Ck2             Seq:  45     15:12:30 02 Nov 1999 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          101.     4.05    4.00   ppb        .000

*** Check Standard: 1  Ck1             Seq:  46     15:14:55 02 Nov 1999 HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.062     .200     ppb        .000

*** Sample ID: 94112001                Seq:  47     15:16:53 02 Nov 1999 HG
 SPIKED                      ms
Hg    .997    ppb       .000      .997

*** %Rec.  ID: 94112001                Seq:  48     15:16:53 02 Nov 1999 HG
                        Spikes =1  Unspiked =2
      Spike               %Rcv.    Avg(U)   SD(U)    Avg(S)   SD(S)
Hg    1.00    ppb         98.2     .016    .001      .997    .000

*** Sample ID: 94112001                Seq:  49     15:19:10 02 Nov 1999 HG
                             msd
Hg    .987    ppb       .000      .987

*** Sample ID: 94112002                Seq:  50     15:21:26 02 Nov 1999 HG

Hg    .071    ppb       .000      .071

*** Sample ID: 94112003                Seq:  51     15:23:31 02 Nov 1999 HG

Hg    .186    ppb       .000      .186

*** Sample ID: 94112004                Seq:  52     15:25:38 02 Nov 1999 HG

Hg   -.023    ppb       .000     -.023

*** Sample ID: 94112005                Seq:  53     15:27:33 02 Nov 1999 HG

Hg   -.022    ppb       .000     -.022
```

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 94112006 Seq: 54 15:29:28 02 Nov 1999 HG

Hg	-.000	ppb	.000	-.000

*** Sample ID: 94112007 Seq: 55 15:31:23 02 Nov 1999 HG

Hg	-.039	ppb	.000	-.039

*** Sample ID: 94113001 Seq: 56 15:33:18 02 Nov 1999 HG

Hg	-.025	ppb	.000	-.025

*** Sample ID: 94113002 Seq: 57 15:35:13 02 Nov 1999 HG

Hg	-.031	ppb	.000	-.031

*** Check Standard: 2 Ck2 Seq: 58 15:37:10 02 Nov 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.3	3.97	4.00	ppb	.000

*** Check Standard: 1 Ck1 Seq: 59 15:39:35 02 Nov 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.054	.200	ppb	.000

*** Sample ID: 94115002 Seq: 60 15:41:32 02 Nov 1999 HG

Hg	.012	ppb	.000	.012

*** Sample ID: 94115004 Seq: 61 15:43:29 02 Nov 1999 HG

Hg	-.028	ppb	.000	-.028

*** Sample ID: 94115010 Seq: 62 15:45:25 02 Nov 1999 HG

Hg	-.014	ppb	.000	-.014

*** Sample ID: 94115011 Seq: 63 15:47:21 02 Nov 1999 HG

Hg	.004	ppb	.000	.004

*** Sample ID: 94115012 Seq: 64 15:49:18 02 Nov 1999 HG

Hg	.027	ppb	.000	.027

*** Check Standard: 2 Ck2 Seq: 65 15:51:17 02 Nov 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.6	3.95	4.00	ppb	.000

Folder: 110299 Page 7

15:53:42 02 Nov 1999 Protocol: hgclp

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 1 Ck1 Seq: 66 15:53:42 02 Nov 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.062	.200	ppb	.000

11/2/99

STL LABS

DATE: 11/1/99
ANALYST: [illegible]
PAGE: 1 of 1

MERCURY PREPARATION LOG

STL SAMPLE #	MATRIX	AMT. SAMPLE	FINAL VOL	COMMENTS	STD. USED
0			100 ml	[illegible]	
0.2		0.2 ml		~~std~~ Lot # M498	std B 100 ppb
0.5		0.5 ml			
1		1.0 ml			
5		5.0 ml			
10		10.0 ml			
ICV		3.5 ml		Lot # M440	std D 100 ppb
ICB					
CCV		4.0 ml		Lot # M440	std D 100 ppb
CCB					
CRA		0.2 ml		Lot # M440	std D 100 ppb
PBSWG60007					
LCSSWG60007				2.0 ppb std D	
94143009	SO	0.60g			
010					
011					
011 Dup					
011 MS				1.0 ppb std D	
011 MSD				1.0 ppb std D	
012					
013					
014					
015					
016					
017					
018					
019					
020					
94106008					
009					
PBS					
LCSS				2.0 ppb std D	
94131001	SO	0.60g			
001 Dup					
001 MS				1.0 ppb std D	
001 MSD				1.0 ppb std D	
94058001					
002					
003					
004					
005					
006					

Water Bath Temp = 95°C
[illegible] 0900 Acid lot # HNO3A144

DATE: 11/2/99
ANALYST: [illegible]
PAGE: 1 of 2

MERCURY PREPARATION LOG

SOIL SAMPLE #	MATRIX	AMT. SAMPLE	FINAL VOL	COMMENTS	STD. USED
0		—	100 ml		
0.2		0.2 ml		Lot # M498	std B 100 ppb
0.5		0.5 ml			
1		1.0 ml			
5		5.0 ml			
10		10.0 ml			
ICV		3.5 ml		Lot # M440	std D 100 ppb
ICB		—			
CCV		4.0 ml		Lot # M440	std D 100 ppb
CCB					
CRA		0.2 ml		Lot # M440	std D 100 ppb
PBW					
LCSW WG60009				2.0 ppb std D	
94116001	AQ	100 ml			
001 Dup					
001 MS				1.0 ppb std D	
001 MSD				1.0 ppb std D	
002					
003					
004					
005					
006					
007					
008					
009					
012					
013					
016					
017					
94145001					
002					
003					
PBW WG60010					
LCSW WG60010				2.0 ppb std D	
94106006	AQ	100 ml			
007					
94105001					
002					
94112001					
001 Dup					
001 MS				1.0 ppb std D	

STD. SAMPLE #	MATRIX	AMT. SAMPLE	FINAL VOL	COMMENTS	STD. USED
L1112 [illegible] MSD	AQ	100 ml	100 ml	1.0 ppb std D	
002					
003					
004					
005					
006					
007					
L1113-001					
002					
L1113-002					
004					
010					
011					
012					
		Water Bath Temp = 95°C			
		In at 0930			
		out at 1130			
		[illegible]	11/2/99		
			11/2/99		

STL-NJ

Metals Digestion Log

Run ID: RA8756

Batch ID: WG50021 Method: SW-846 EPA 600 CLP Method Number: 3010A Date: 10-28-99

Tape Color: White Instrument: ICP GFAA Analyst: Lori Hesper

IEA Sample Number	Matrix	Initial Vo./Wt.	Final Volume	Furnace Analysis Sb	As	Pb	Se	Tl	ICP Analysis	Due Date	Comments
PBW WG50021			50.0 ml								micro wt. micro wt.
LCSW WG50021											initial final
94106 006	AQ	50.0ml							TAL	11/1	
006 DUP											
006 MS											
006 MSD											
007											
94112 001									SKINNER	11/1	
002											
003											
004											
005											
006											
007											
94113 001									TAL	11/1	
002											
94105 001									TAL	11/2	
002											
94121 018									As		
94127 019									TAL		
020											
021		LH 10/28/99									
026											
94043 001									SKINNER	10/27	
94285 033									As	11/3	

MS/ LCS Lot# L-LCS-MS-59 ml added to LCS: 2.5ml ml added to matrix spike: 2.5ml

Hot plate temp: #1: 95 #2 95 #3 #4 #5

10/28/99 Lori Hesper

ACID LOT #
HCL A142
HNO3

REAGENT LOT #
H2O2 N/A

Metals Digestion Log

Batch ID: WLS0018 Method: SW-846 EPA 600 CLP Method Number: 3050B Run ID: KH8732

Date: 10-27-99

Tape Color: White Instrument: ICP GFAA Analyst: Lori Harper

IEA Sample Number	Matrix	Initial Vo./Wt.	Final Volume	Furnace Analysis Sb	As	Pb	Se	Tl	ICP Analysis	Due Date	Comments
PBS			100.0ml								micro wt. micro wt.
LCSS											initial final
94058 001	SO	1.0g							TAL	10/29	
002											
003											
004											
005											
006											
94062 001									Pb	10/29	
002											
94106 008									TAL	11/1	
009											
94119 001									PP METALS	10/28	
001 DUP											
001 MS											
001 MSD											
002											
003											
004											
005											
006											

MS/ LCS Lot# L-LCS-MS-59 ml added to LCS: 5.0ml ml added to matrix spike: 5.0ml

Hot plate temp: #1: 95 #2: 95 #3 #4 #5

10/27/99 Lori Harper

ACID LOT #
HCL A142
HNO3 A144

REAGENT LOT #
H2O2 N/A

10/27/99

000132

001017

SUBCONTRACTING

TABLE SV-1.0
7099-2732A
SEVERN TRENT LABS-WHIPPANY
TCL SEMI-VOLATILE ORGANICS

Soil

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	S-2-1-01	S-2-1-02	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKJQ	992732A-01	992732A-02	
Method Blank I.D.	SBLKJQ	SBLKJQ	SBLKJQ	
Quant. Factor	1.00	2.86	2.70	
Phenol	U	U	U	330
bis(2-Chloroethyl)ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
Benzyl alcohol	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
Benzoic acid	U	120J	130J	1600
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	1600
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	1600
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	16J	20J	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	1600
Acenaphthene	U	24J	34J	330
Date Received		10/15/99	10/15/99	
Date Extracted	10/22/99	10/22/99	10/22/99	
Date Analyzed	10/28/99	10/29/99	10/29/99	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.0
7099-2732A
SEVERN TRENT LABS-WHIPPANY
TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	S-2-1-01	S-2-1-02	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKJQ	992732A-01	992732A-02	
Method Blank I.D.	SBLKJQ	SBLKJQ	SBLKJQ	
Quant. Factor	1.00	2.86	2.70	
2,4-Dinitrophenol	U	U	U	1600
4-Nitrophenol	U	U	U	1600
Dibenzofuran	U	16J	17J	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	6J	18JB	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	38J	51J	330
4-Nitroaniline	U	U	U	1600
4,6-Dinitro-2-methylphenol	U	U	U	1600
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	1600
Phenanthrene	U	290J	300J	330
Anthracene	U	50J	64J	330
Carbazole	U	57J	53J	330
Di-n-butylphthalate	20J	120JB	350JB	330
Fluoranthene	U	630J	790J	330
Pyrene	U	570J	830J	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	660
Benzo(a)anthracene	U	250J	340J	330
Chrysene	U	420J	590J	330
bis(2-Ethylhexyl)phthalate	21J	84JB	160JB	330
Di-n-octylphthalate	32J	20JB	19JB	330
Benzo(b)fluoranthene	U	250J	380J	330
Benzo(k)fluoranthene	U	400J	480J	330
Benzo(a)pyrene	U	300J	400J	330
Indeno(1,2,3-cd)pyrene	U	190J	220J	330
Dibenzo(a,h)anthracene	U	60J	63J	330
Benzo(g,h,i)perylene	U	150J	170J	330
Date Received		10/15/99	10/15/99	
Date Extracted	10/22/99	10/22/99	10/22/99	
Date Analyzed	10/28/99	10/29/99	10/29/99	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

0001

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical Requirements					
		*VOA GC/MS Method #	*BNA GC/MS Method #	*VOA GC Method #	*Pest PCBs Method #	*Metals	*Other
S-2-1-01	992732A-01		X				
S-2-1-02	992732A-02		X				
~~S3-2-01~~	992732A-03		X				
~~S3-3-01~~	992732A-04		X				

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES

0002

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
992732A-01	SOIL	10/13/99	10/15/99	10-22-99	10-29-99
992732A-02	SOIL	10/13/99	10/15/99	↓	↓
~~992732A-03~~	SOIL	10/14/99	10/16/99		
~~992732A-04~~	SOIL	10/14/99	10/16/99	↓	↓

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES

~~0003~~

LABORATORY SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILIARY CLEANUP	DIL/CONC FACTOR
992732A-01	SOIL	SW846	SONC	NA	1.0
992732A-02	SOIL	↓	↓	↓	1.0
~~992732A-03~~	SOIL	↓	↓	↓	1.0
~~992732A-04~~	SOIL	↓	↓	↓	2.0

SDG NARRATIVE

Client:	STL/NJ
PROJ ID:	94106
P.O.	94106
SDG#	A2732
STL ID	7099-2732A

Committed To *Your* Success

Severn Trent Laboratories
200 Monroe Turnpike
Monroe, Connecticut 06468

Tel: (203) 261-4458
Fax: (203) 261-5346
www.stl-inc.com

7099-2732A
STL/NJ

Case Narrative

Sample Receipt - All samples were received in good condition and at the proper temperature.

Semi-Volatile Organics - Semi-volatile organic samples were extracted and analyzed by capillary GC/MS using guidance provided in Methods 3550C/8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

~~Sample S2-3-01 would not concentrate to a final volume of 1 ml and was brought to a final volume of 2 mls. The sample was also analyzed at a 1:2 dilution due to the presence of high target compounds.~~

The spike recovery for hexachlorocyclopentadiene was ouside recovery limits in SBLKJQFMS.

Sample Calculation:

Sample ID - S2-2-01
Compound - acenaphthylene

$$\frac{6328(40)1000(1)}{444223(1.720)2(30).78} = 7 \text{ ug/kg}$$

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Chyl Cr Cascina for NOV 11, 1999

Jeffrey C. Curran Date
Laboratory Manager

CLIENT CHAINS OF CUSTODY

Client:	STL/NJ
PROJ ID:	94106
P.O.	94106
SDG#	A2732
STL ID	7099-2732A

FIELD BOOK: _____ Pg ___ of ___

(1) Client: STL-Whippany

(2) Project Name/no.: 94106

(3) Client Contact: D. Glenn

(4) STL Contact:

(5) TAT: 1wk, 2wk, 3wk, OTHER Rush 11/1/99

(6) Proj. Type: NJPDES, NPDES, ISRA, CLP, CERCLA, RCRA, UST, ACO, MOA, OTHER

(7) Protocol: CLP, SW846, EPA 600, DW, OTHER SW846

(8) Reporting Type: NJ Reg Format, NJ Reduced Format, CLP, Level II, Level I (Data Sum), Other AspB

(14) Bill To

PO#

(15) ANALYSIS REQUIRED

(9) Client ID (10 CHAR)	(10) Date	(11) Time	(12) Mtx	# OF CONTAINERS (13)	BNA-TCL 8270
S-2-1-01	10/13/99	1425	SOIL	1	X
S-2-1-02	10/13/99	1425	SOIL	1	X

For Lab Use Only

Job No.
Quote No.
# of Coolers
Cooler Temp.(s)
Custody Seal #(s)
Date Due

PM NON-CONFORMANCE

Preserved: Temp:
Contains: Volume:
Broken: Initials:
Holding Time:
Other:

Logged By:

DESCRIPTION

(16) COMMENTS: (Please include hazards on site.)

(17)

	Print Name and Company	Signature	Custody Seal # (s)	Date/Time
Sampled By:				
Received By:				
Relinquished By:	Rachel Malamuth STL	R. Malamuth		10/14/99 1700
Received By:	Rick Chandler STL			10/14/99 1700
Relinquished By:				
Received By:				

Mtx = Matrix of Sample. (AI=Air, AQ=Aqueous, LE=Leachate, ML=Misc Liquid, MS=Misc Solids, OIL, SE=Sediment, SL=Sludge, SO=Soil)

(Copies: White and yellow copies should accompany samples to STL. The pink copy should be retained by the client.) See reverse for directions.

001027

LABORATORY CHAINS OF CUSTODY

Client:	STL/NJ
PROJ ID:	94106
P.O.	94106
SDG#	A2732
STL ID	7099-2732A

Sev[illegible] Connecticut
Internal Chain-of-Custody

Client: STLNJ

STL Job #: 7092-27324

Custody Seal: present / absent
Tamper Evident / Non Tamper Evident
intact / not intact

Date Received: 10/18/99

Airbill# FE

Sample #s: 01-02

Field C-O-C: present / absent

Locations: A4

Laboratory Sample #	Relinquished by	Accepted by	Date	Time	Reason	Relinquished by	Accepted by	Date	T
1-2 A	[illegible]	LAM	10/22	6:45	BNA	[illegible]			

STL Form# SMF00504.CT

0009

001029

STL GC-GC/MS Extract Chain of Custody

Fraction: BNA Pesticide-PCB / Herbicide / O/P Pesticide / DRO / Other (Circle one)

CLIENT: STL

JOB NO: 2732A

SAMPLE IN (Extractions)					SAMPLE IN (Extractions)				
Sample(s)	Date	Time	Sign.	Location	Sample(s)	Date	Time	Sign.	Location
1-4	10.24.99	1350	DA	29					

SAMPLE OUT					SAMPLE IN			
Sample(s)	Date	Time	Code	Sign.	Date	Time	Location	Sign.
1-4	10/29/99	PA	AN	[illegible]	10/29/99	2:10P	29	[illegible]

Codes: SC = Screening AN = Analysis

Verified By: [signature]

Dat

Lab Form: SMF01201.CT

SEMI-VOLATILE DATA

Client:	STL/NJ
PROJ ID:	94106
P.O.	94106
SDG#	A2732
STL ID	7099-2732A

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 (2CP)#	S8 (DCB)#	TOT OUT
01	SBLKJQ	66	77	62	73	56	63			0
02	SBLKJQFMS	78	71	83	77	67	84			0
03	S-2-1-01	53	66	70	65	49	70			0
04	S-2-1-02	68	78	74	87	65	72			0
05										
06										
07										
08										
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26										
27										
28										
29										
30										

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5 (23-120)
S2 (FBP) = 2-Fluorobiphenyl (30-115)
S3 (TPH) = Terphenyl-d14 (18-137)
S4 (PHL) = Phenol-d5 (24-113)
S5 (2FP) = 2-Fluorophenol (25-121)
S6 (TBP) = 2,4,6-Tribromophenol (19-122)
S7 (2CP) = 2-Chlorophenol-d4 (-) (advisory)
S8 (DCB) = 1,2-Dichlorobenzene-d4 (-) (advisory)

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

FORM II SV-2

3D
SOIL SEMIVOLATILE SPIKE/SPIKE DUPLICATE RECOVERY SUMMARY

0014

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix Spike - EPA Sample No.: SBLKJQ Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	SPIKE CONCENTRATION (ug/Kg)	SPIKE % REC #	QC. LIMITS REC.
Phenol	1300	0	1200	92	48-146
bis(2-Chloroethyl)ether	1300	0	1100	85	60-119
2-Chlorophenol	1300	0	1300	100	58-139
1,3-Dichlorobenzene	1300	0	1100	85	55-113
1,4-Dichlorobenzene	1300	0	1100	85	54-114
Benzyl alcohol	1300	0	1300	100	58-137
1,2-Dichlorobenzene	1300	0	1200	92	59-116
2-Methylphenol	1300	0	1100	85	50-126
bis(2-Chloroisopropyl)ether	1300	0	1400	108	64-120
4-Methylphenol	1300	0	1300	100	51-147
N-Nitroso-di-n-propylamine	1300	0	1300	100	61-121
Hexachloroethane	1300	0	1000	77	54-108
Nitrobenzene	1300	0	1100	85	62-119
Isophorone	1300	0	1100	85	63-123
2-Nitrophenol	1300	0	1200	92	64-119
2,4-Dimethylphenol	1300	0	1100	85	57-130
Benzoic acid	4000	0	440	11	0-88
bis(2-Chloroethoxy)methane	1300	0	1200	92	64-123
2,4-Dichlorophenol	1300	0	1400	108	67-129
1,2,4-Trichlorobenzene	1300	0	1200	92	59-115
Naphthalene	1300	0	1200	92	63-124
4-Chloroaniline	1300	0	940	72	0-139
Hexachlorobutadiene	1300	0	1100	85	54-124
4-Chloro-3-methylphenol	1300	0	1400	108	62-136
2-Methylnaphthalene	1300	0	1200	92	56-120
Hexachlorocyclopentadiene	1300	0	240	18*	20-114
2,4,6-Trichlorophenol	1300	0	1100	85	64-129
2,4,5-Trichlorophenol	1300	0	1200	92	52-119
2-Chloronaphthalene	1300	0	1300	100	70-138
2-Nitroaniline	1300	0	1200	92	59-140

Column to be used to flag recovery with an asterisk

* Values outside of QC limits.

Spike Recovery: ~~0~~ 1 out of 65 outside limits JW 11-4-99

COMMENTS: _____

FORM III SV-2

3D

SOIL SEMIVOLATILE SPIKE/SPIKE DUPLICATE RECOVERY SUMMARY

0015

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix Spike - EPA Sample No.: SBLKJQ Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	SPIKE CONCENTRATION (ug/Kg)	SPIKE % REC #	QC. LIMITS REC.
Dimethylphthalate	1300	0	1200	92	62-139
Acenaphthylene	1300	0	990	76	57-127
2,6-Dinitrotoluene	1300	0	1200	92	58-146
3-Nitroaniline	1300	0	1200	92	24-172
Acenaphthene	1300	0	1000	77	63-131
2,4-Dinitrophenol	1300	0	860	66	8-220
4-Nitrophenol	1300	0	1300	100	37-164
Dibenzofuran	1300	0	1200	92	58-131
2,4-Dinitrotoluene	1300	0	1200	92	46-146
Diethylphthalate	1300	6	1100	84	56-142
4-Chlorophenyl-phenylether	1300	0	1100	85	58-133
Fluorene	1300	0	1100	85	56-133
4-Nitroaniline	1300	0	1400	108	35-174
4,6-Dinitro-2-methylphenol	1300	0	1100	85	49-186
N-Nitrosodiphenylamine (1)	1300	0	1300	100	69-142
4-Bromophenyl-phenylether	1300	0	1300	100	63-139
Hexachlorobenzene	1300	0	1300	100	63-134
Pentachlorophenol	1300	0	970	75	68-124
Phenanthrene	1300	0	1300	100	64-140
Anthracene	1300	0	1100	85	67-134
Di-n-butylphthalate	1300	20	1400	106	70-139
Fluoranthene	1300	0	1400	108	63-145
Pyrene	1300	0	1300	100	55-146
Butylbenzylphthalate	1300	0	1800	138	65-149
3,3'-Dichlorobenzidine	1300	0	810	62	23-124
Benzo(a)anthracene	1300	0	1200	92	58-148
Chrysene	1300	0	1200	92	60-151
bis(2-Ethylhexyl)phthalate	1300	21	1300	98	60-146
Di-n-octylphthalate	1300	32	1300	98	66-154
Benzo(b)fluoranthene	1300	0	1200	92	37-191

Column to be used to flag recovery with an asterisk

* Values outside of QC limits.

Spike Recovery: ~~0~~ 1 out of 65 outside limits

COMMENTS: _____

FORM III SV-2

3D
SOIL SEMIVOLATILE SPIKE/SPIKE DUPLICATE RECOVERY SUMMARY

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix Spike - EPA Sample No.: SBLKJQ Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	SPIKE CONCENTRATION (ug/Kg)	SPIKE % REC #	QC. LIMITS REC.
Benzo(k)fluoranthene	1300	0	1300	100	53-130
Benzo(a)pyrene	1300	0	1200	92	60-148
Indeno(1,2,3-cd)pyrene	1300	0	1600	123	44-160
Dibenzo(a,h)anthracene	1300	0	1600	123	30-154
Benzo(g,h,i)perylene	1300	0	1600	123	39-173
					-
					-
					-
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					-
					-
					-
					-

Column to be used to flag recovery with an asterisk

* Values outside of QC limits.

Spike Recovery: 01 out of 65 outside limits

COMMENTS: _____

FORM III SV-2

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKJQ

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: >Q5964 Lab Sample ID: SBLKJQ

Instrument ID: HP5971Q Date Extracted: 10/22/99

Matrix: (soil/water) SOIL Date Analyzed: 10/28/99

Level: (low/med) LOW Time Analyzed: 1508

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLKJQFMS	SBLKJQFMS	>Q5965	10/28/99
02	S-2-1-01	992732A-01	>Q5988	10/29/99
03	S-2-1-02	992732A-02	>Q5989	10/29/99
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
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23				
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25				
26				
27				
28				
29				
30				

COMMENTS: _____

FORM IV SV

5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: Q5862 DFTPP Injection Date:10/22/99

Instrument ID: HP5971Q DFTPP Injection Time:1500

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	45.2
68	Less than 2.0% of mass 69	0.3 (0.5)1
69	Mass 69 relative abundance	60.0
70	Less than 2.0% of mass 69	0.4 (0.7)1
127	40.0 - 60.0% of mass 198	58.1
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	22.3
365	Greater than 1.0% of mass 198	2.11
441	Present, but less than mass 443	8.4
442	40.0 - 100.0% of mass 198	54.0
443	17.0 - 23.0% of mass 442	11.1 (20.5)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD020N8	SSTD020N8	>Q5863	10/22/99	1543
02	SSTD050N9	SSTD050N9	>Q5864	10/22/99	1626
03	SSTD080O1	SSTD080O1	>Q5865	10/22/99	1713
04	SSTD120O2	SSTD120O2	>Q5866	10/22/99	1756
05	SSTD160O3	SSTD160O3	>Q5867	10/22/99	1838
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V SV

5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: Q5955 DFTPP Injection Date:10/28/99

Instrument ID: HP5971Q DFTPP Injection Time:0852

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	40.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	54.1
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	40.0 - 60.0% of mass 198	51.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	22.2
365	Greater than 1.0% of mass 198	2.29
441	Present, but less than mass 443	9.8
442	40.0 - 100.0% of mass 198	62.6
443	17.0 - 23.0% of mass 442	11.9 (18.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050P1	SSTD050P1	>Q5955	10/28/99	0852
02	SBLKJQ	SBLKJQ	>Q5964	10/28/99	1508
03	SBLKJQFMS	SBLKJQFMS	>Q5965	10/28/99	1550
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V SV

5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: Q5974 DFTPP Injection Date:10/29/99

Instrument ID: HP5971Q DFTPP Injection Time:0838

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.3
68	Less than 2.0% of mass 69	0.2 (0.4)1
69	Mass 69 relative abundance	57.6
70	Less than 2.0% of mass 69	0.4 (0.6)1
127	40.0 - 60.0% of mass 198	56.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	21.3
365	Greater than 1.0% of mass 198	2.20
441	Present, but less than mass 443	7.9
442	40.0 - 100.0% of mass 198	53.9
443	17.0 - 23.0% of mass 442	11.2 (20.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050P3	SSTD050P3	>Q5974	10/29/99	0838
02	S-2-1-01	992732A-01	>Q5988	10/29/99	1824
03	S-2-1-02	992732A-02	>Q5989	10/29/99	1905
04					
05					
06					
07					
08					
09					
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FORM V SV

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: (Standard): >Q5955 Date Analyzed:10/28/99

Instrument ID: HP5971Q Time Analyzed:0852

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	178926	8.84	640844	11.80	378893	15.74
	UPPER LIMIT	357852	9.34	1281688	12.30	757786	16.24
	LOWER LIMIT	89463	8.34	320422	11.30	189446	15.24
	EPA SAMPLE NO.						
01	SBLKJQ	183954	8.86	761041	11.81	444755	15.76
02	SBLKJQFMS	163664	8.86	590840	11.82	388127	15.76
03							
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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.

FORM VIII SV-1

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: (Standard): >Q5955 Date Analyzed:10/28/99

Instrument ID: HP5971Q Time Analyzed:0852

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	637030	18.81	499553	24.22	471295	26.96
	UPPER LIMIT	1274060	19.31	999106	24.72	942590	27.46
	LOWER LIMIT	318515	18.31	249776	23.72	235648	26.46
	EPA SAMPLE NO.						
01	SBLKJQ	728491	18.81	736889	24.22	587955	26.97
02	SBLKJQFMS	596659	18.83	518611	24.23	476220	26.98
03							
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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.

FORM VIII SV-2

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: (Standard): >Q5974 Date Analyzed:10/29/99

Instrument ID: HP5971Q Time Analyzed:0838

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	189009	8.79	698034	11.75	421448	15.69
	UPPER LIMIT	378018	9.29	1396068	12.25	842896	16.19
	LOWER LIMIT	94504	8.29	349017	11.25	210724	15.19
	EPA SAMPLE NO.						
01	S-2-1-01	205277	8.79	832542	11.75	455995	15.69
02	S-2-1-02	178075	8.79	841103	11.75	466073	15.70
03							
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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.

page 1 of 1

FORM VIII SV-1

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: (Standard): >Q5974 Date Analyzed:10/29/99

Instrument ID: HP5971Q Time Analyzed:0838

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	705158	18.76	538605	24.17	538662	26.91
	UPPER LIMIT	1410316	19.26	1077210	24.67	1077324	27.41
	LOWER LIMIT	352579	18.26	269302	23.67	269331	26.41
	EPA SAMPLE NO.						
01	S-2-1-01	596915	18.76	458000	24.17	484953	26.92
02	S-2-1-02	634551	18.76	411907	24.18	436667	26.92
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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.

FORM VIII SV-2

Instrument:HP5971Q Units: ug/L

	IDL
Pyridine	5
N-Nitrosodimethylamine	2
Cyclohexanone	2
Phenol	2
Aniline	2
bis(2-Chloroethyl)ether	1
2-Chlorophenol	2
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	2
Benzyl alcohol	2
1,2-Dichlorobenzene	1
bis(2-Chloroisopropyl)ether	1
2-Methylphenol	1
Hexachloroethane	2
N-Nitroso-di-n-propylamine	2
4-Methylphenol	2
Nitrobenzene	2
Isophorone	2
2-Nitrophenol	2
2,4-Dimethylphenol	1
Benzoic acid	1
bis(2-Chloroethoxy)methane	2
2,4-Dichlorophenol	2
1,2,4-Trichlorobenzene	2
Naphthalene	2
4-Chloroaniline	2
Hexachlorobutadiene	2
4-Chloro-3-methylphenol	1
2-Methylnaphthalene	2
2,4,5-Trichlorotoluene	1
Hexachlorocyclopentadiene	1
2,4,6-Trichlorophenol	1
2,4,5-Trichlorophenol	3
2-Chloronaphthalene	1
2-Nitroaniline	2
Acenaphthylene	2
Dimethylphthalate	2
2,6-Dinitrotoluene	1
Acenaphthene	1
3-Nitroaniline	1
2,4-Dinitrophenol	1
Dibenzofuran	2
2,4-Dinitrotoluene	1
4-Nitrophenol	1
Fluorene	1
4-Chlorophenyl-phenylether	1
Diethylphthalate	1
4-Nitroaniline	2
4,6-Dinitro-2-methylphenol	1
N-Nitrosodiphenylamine (1)	2
1,2-Diphenylhydrazine	1
4-Bromophenyl-phenylether	2
Hexachlorobenzene	1

Pentachlorophenol	-
Phenanthrene	1
Carbazole	2
Anthracene	2
Di-n-butylphthalate	1
Fluoranthene	1
Benzidine	1
Pyrene	1
Butylbenzylphthalate	1
3,3'-Dichlorobenzidine	2
Benzo(a)anthracene	1
Chrysene	1
bis(2-Ethylhexyl)phthalate	2
Di-n-octylphthalate	1
Benzo(b)fluoranthene	4
Benzo(k)fluoranthene	7
Benzo(a)pyrene	1
Indeno(1,2,3-cd)pyrene	1
Dibenzo(a,h)anthracene	1

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

S-2-1-01

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: 992732A-01

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5988

Level: (low/med) LOW Date Received: 10/15/99

% Moisture: 65 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4600	U
83-32-9	Acenaphthene	24	J
51-28-5	2,4-Dinitrophenol	4600	U
100-02-7	4-Nitrophenol	4600	U
132-64-9	Dibenzofuran	16	J
121-14-2	2,4-Dinitrotoluene	940	U
84-66-2	Diethylphthalate	18	JB
7005-72-3	4-Chlorophenyl-phenylether	940	U
86-73-7	Fluorene	38	J
100-01-6	4-Nitroaniline	4600	U
534-52-1	4,6-Dinitro-2-methylphenol	4600	U
86-30-6	N-Nitrosodiphenylamine (1)	940	U
101-55-3	4-Bromophenyl-phenylether	940	U
118-74-1	Hexachlorobenzene	940	U
87-86-5	Pentachlorophenol	4600	U
85-01-8	Phenanthrene	290	J
120-12-7	Anthracene	50	J
86-74-8	Carbazole	57	J
84-74-2	Di-n-butylphthalate	120	JB
206-44-0	Fluoranthene	630	J
129-00-0	Pyrene	570	J
85-68-7	Butylbenzylphthalate	940	U
91-94-1	3,3'-Dichlorobenzidine	1900	U
56-55-3	Benzo(a)anthracene	250	J
218-01-9	Chrysene	420	J
117-81-7	bis(2-Ethylhexyl)phthalate	84	JB
117-84-0	Di-n-octylphthalate	20	JB
205-99-2	Benzo(b)fluoranthene	250	J
207-08-9	Benzo(k)fluoranthene	400	J
50-32-8	Benzo(a)pyrene	300	J
193-39-5	Indeno(1,2,3-cd)pyrene	190	J
53-70-3	Dibenzo(a,h)anthracene	60	J
191-24-2	Benzo(g,h,i)perylene	150	J

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-2-1-01

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: 992732A-01

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5988

Level: (low/med) LOW Date Received: 10/15/99

% Moisture: 65 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	940	U
111-44-4	bis(2-Chloroethyl)ether	940	U
95-57-8	2-Chlorophenol	940	U
541-73-1	1,3-Dichlorobenzene	940	U
106-46-7	1,4-Dichlorobenzene	940	U
100-51-6	Benzyl alcohol	940	U
95-50-1	1,2-Dichlorobenzene	940	U
95-48-7	2-Methylphenol	940	U
108-60-1	2,2'-oxybis(1-Chloropropane)	940	U
106-44-5	4-Methylphenol	940	U
621-64-7	N-Nitroso-di-n-propylamine	940	U
67-72-1	Hexachloroethane	940	U
98-95-3	Nitrobenzene	940	U
78-59-1	Isophorone	940	U
88-75-5	2-Nitrophenol	940	U
105-67-9	2,4-Dimethylphenol	940	U
65-85-0	Benzoic acid	120	J
111-91-1	bis(2-Chloroethoxy)methane	940	U
120-83-2	2,4-Dichlorophenol	940	U
120-82-1	1,2,4-Trichlorobenzene	940	U
91-20-3	Naphthalene	940	U
106-47-8	4-Chloroaniline	940	U
87-68-3	Hexachlorobutadiene	940	U
59-50-7	4-Chloro-3-methylphenol	940	U
91-57-6	2-Methylnaphthalene	940	U
77-47-4	Hexachlorocyclopentadiene	940	U
88-06-2	2,4,6-Trichlorophenol	940	U
95-95-4	2,4,5-Trichlorophenol	4600	U
91-58-7	2-Chloronaphthalene	940	U
88-74-4	2-Nitroaniline	4600	U
131-11-3	Dimethylphthalate	940	U
208-96-8	Acenaphthylene	16	J
606-20-2	2,6-Dinitrotoluene	940	U

Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5988.D
Acq On : 29 Oct 99 18:24 hrs
Sample : 992732A-01
Misc : S-2-1-01 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:00 1999

Vial: 14
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 47.62

All spectra and manual integrations for this sample have been revie and approved.

By: JW Date: 11/3/99
Secondary review: KH Date: 11/03/99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.79	152	205277	40.00	ug	0.00
20) Naphthalene-d8	11.75	136	832542	40.00	ug	0.00
35) Acenaphthene-d10	15.69	164	455995	40.00	ug	0.00
57) Phenanthrene-d10	18.76	188	596915	40.00	ug	0.00
70) Chrysene-d12	24.17	240	458000	40.00	ug	0.00
79) Perylene-d12	26.92	264	484953	40.00	ug	0.00

System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	6.17	112	717025	97.47	ug	48.73%
3) Phenol-d5	8.24	99	1079969	130.06	ug	65.03%
21) Nitrobenzene-d5	10.15	82	481254	53.47	ug	53.47%
40) 2-Fluorobiphenyl	14.25	172	770487	66.21	ug	66.21%
56) 2,4,6-Tribromophenol	17.40	330	311320	139.56	ug	69.78%
73) Terphenyl-d14	22.03	244	844350	69.55	ug	69.55%

Target Compounds							Qvalue
26) Benzoic acid	11.34	122	13329	125.51	ug	m	88
43) Acenaphthylene	15.37	152	6430	15.62	ug		94
46) Acenaphthene	15.76	153	5599	24.07	ug		82
49) Dibenzofuran	16.09	168	5383	15.54	ug		98
52) Fluorene	16.81	166	9363	37.84	ug		99
54) Diethylphthalate	16.71	149	6436	18.22	ug		97
64) Phenanthrene	18.80	178	78258	294.88	ug		98
65) Carbazole	19.27	167	17396	56.88	ug		97
66) Anthracene	18.89	178	13294	49.64	ug		92
67) Di-n-butylphthalate	20.04	149	55673	122.21	ug		96
68) Fluoranthene	21.25	202	208038	632.84	ug		84
72) Pyrene	21.71	202	174673	568.95	ug		88
76) Benzo(a)anthracene	24.13	228	67124	247.70	ug		95
77) Chrysene	24.22	228	90638	417.89	ug		99
78) bis(2-Ethylhexyl)phthalate	24.21	149	17584	83.90	ug		91
80) Di-n-octylphthalate	25.38	149	10048	20.45	ug		87
81) Benzo(b)fluoranthene	26.21	252	89403	252.74	ug	m	88
82) Benzo(k)fluoranthene	26.24	252	82155	403.86	ug	m	89
83) Benzo(a)pyrene	26.80	252	82774	298.34	ug		92
84) Indeno(1,2,3-cd)pyrene	29.30	276	61244	189.48	ug	#	59
85) Dibenzo(a,h)anthracene	29.29	278	16284	59.63	ug		91
86) Benzo(g,h,i)perylene	30.03	276	48434	152.95	ug		81

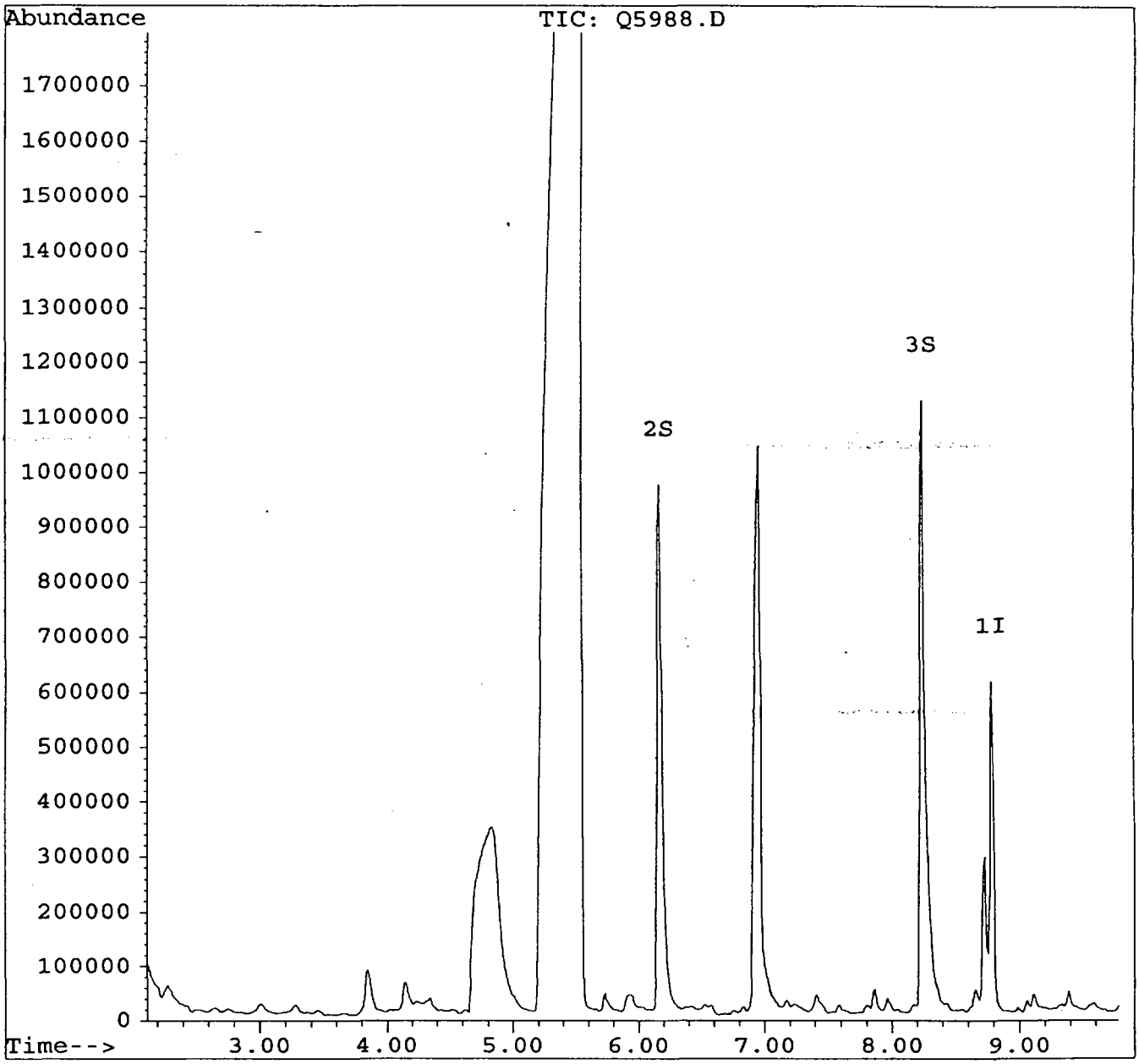
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5988.D
Acq On : 29 Oct 99 18:24 hrs
Sample : 992732A-01
Misc : S-2-1-01 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:00 1999

Vial: 14
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 47.62

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

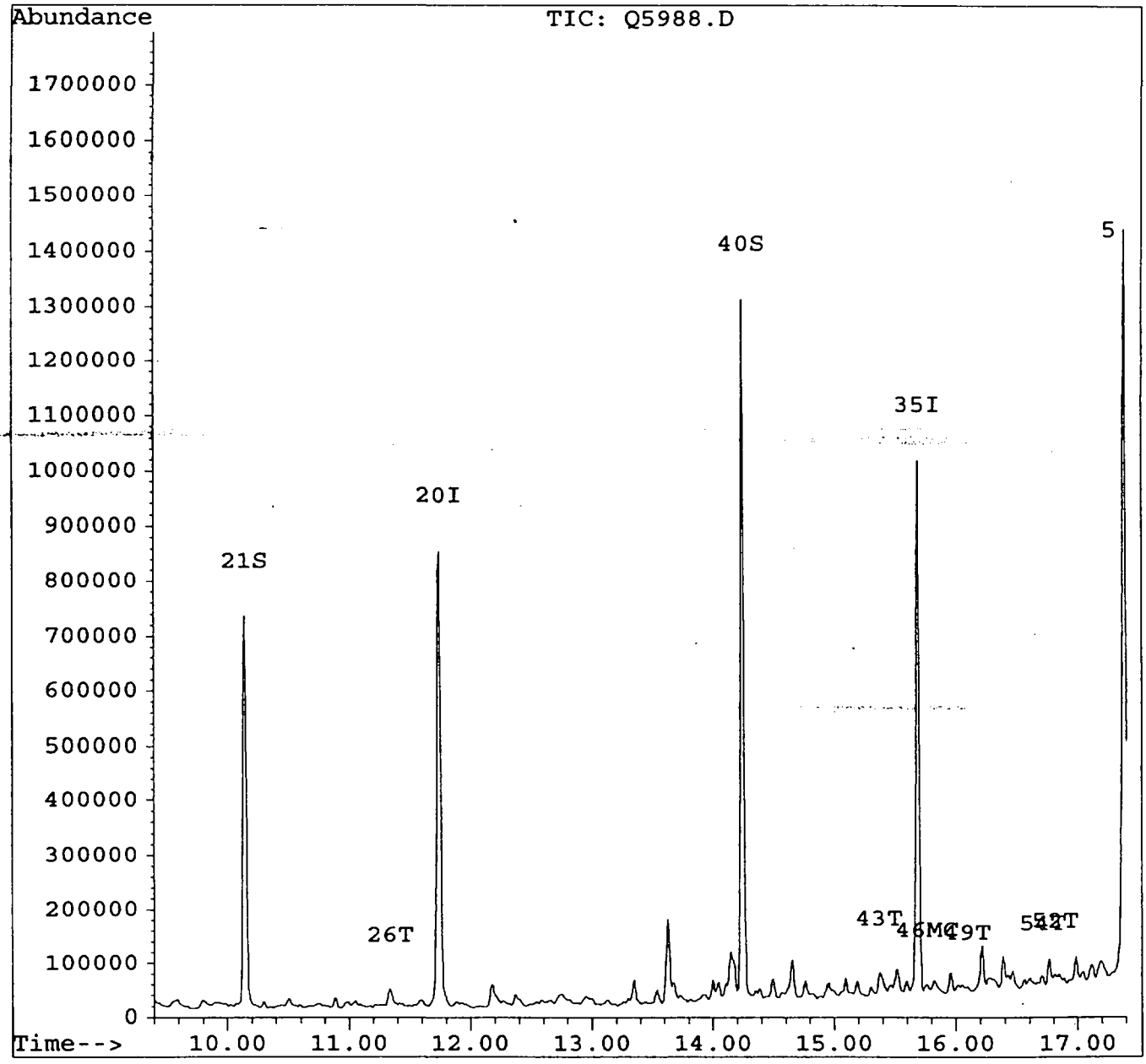


Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5988.D
Acq On : 29 Oct 99 18:24 hrs
Sample : 992732A-01
Misc : S-2-1-01 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:00 1999

Vial: 14
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 47.62

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

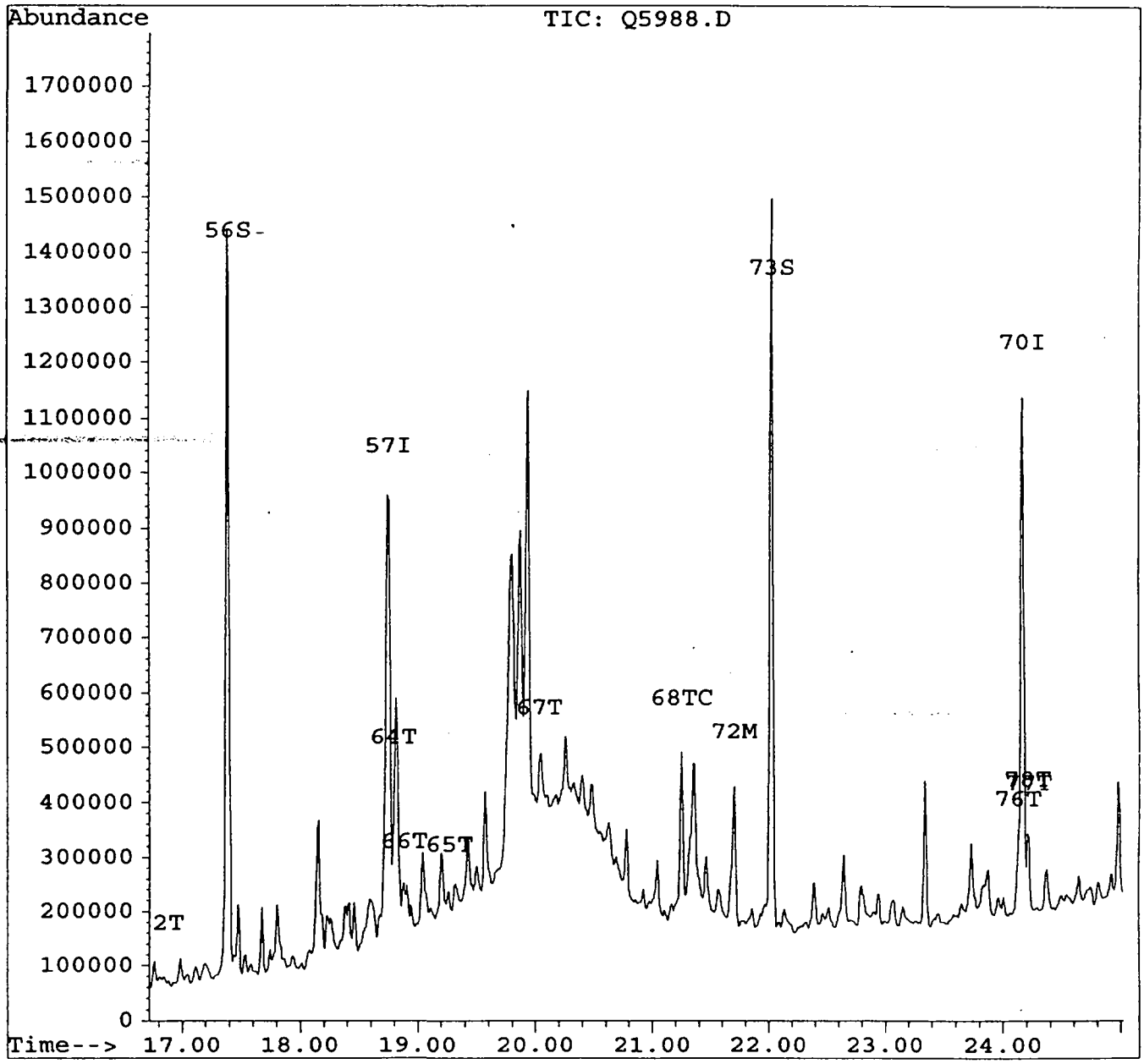


Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5988.D
Acq On : 29 Oct 99 18:24 hrs
Sample : 992732A-01
Misc : S-2-1-01 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:00 1999

Vial: 14
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 47.62

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration



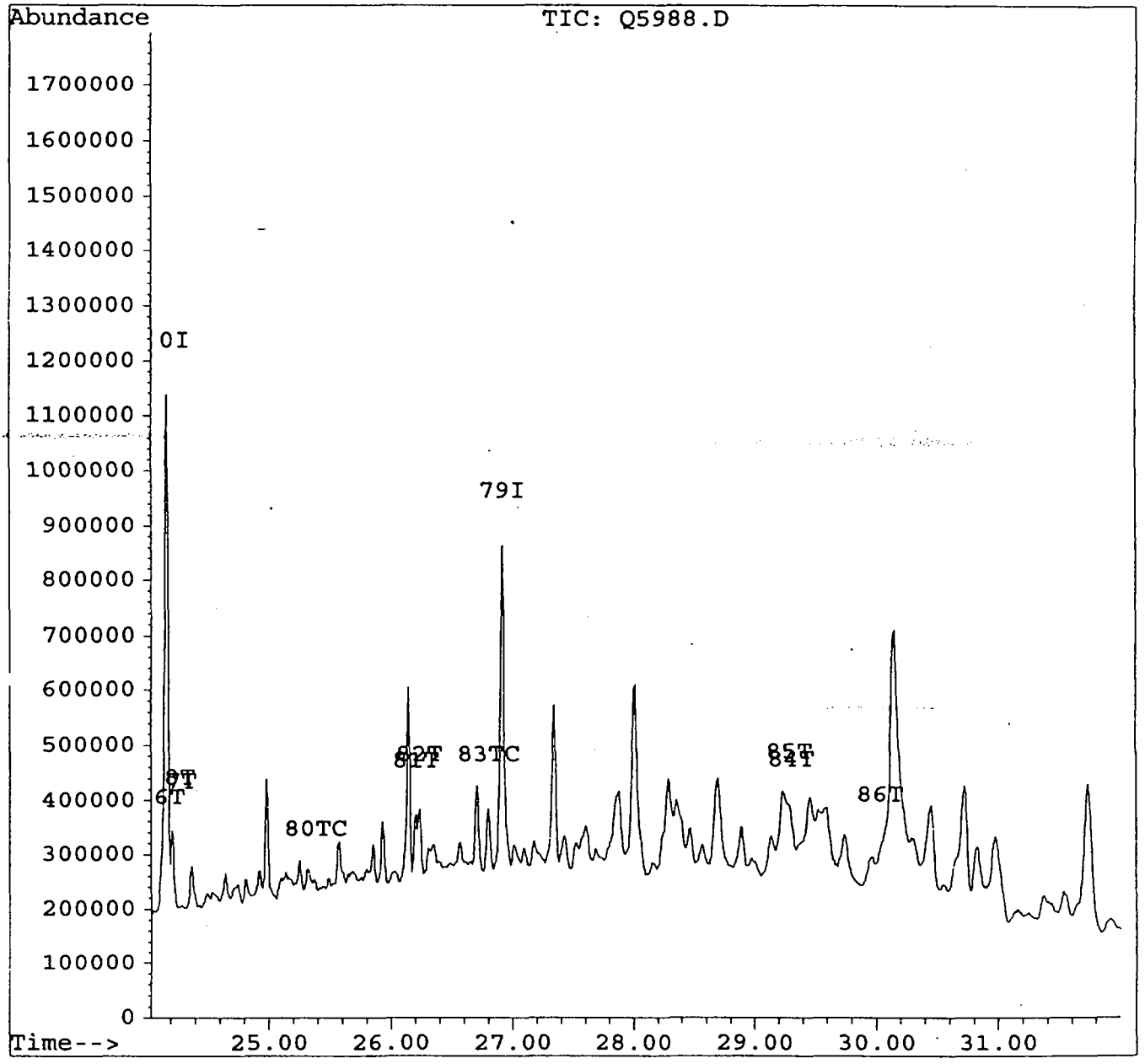
Quantitation Report

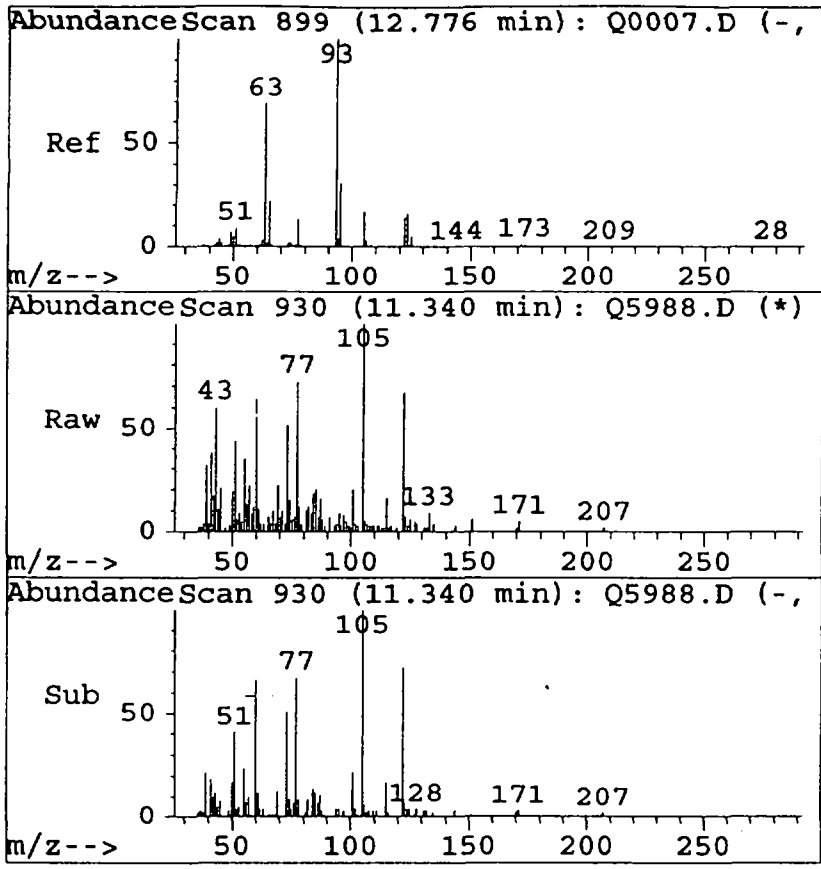
Data File : H:\HPCHEM\MSQ\Q5988.D
Acq On : 29 Oct 99 18:24 hrs
Sample : 992732A-01
Misc : S-2-1-01 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:00 1999

Vial: 14
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 47.62

0033

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

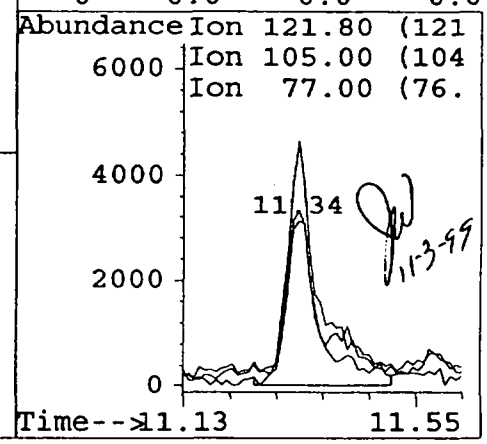


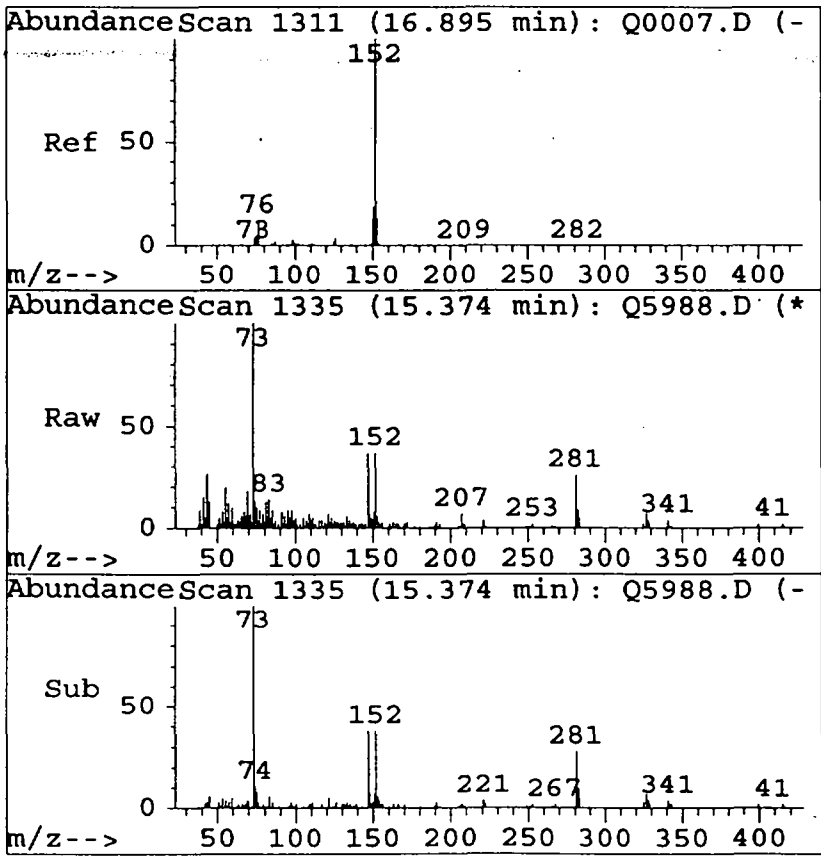


#26 0034
Benzoic acid
Concen: 125.51 ug m
RT: 11.34 min Scan# 930
Delta R.T. -0.08 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:121.8 Resp: 13329

Ion	Ratio	Lower	Upper
122	100		
105	149.2	100.5	150.8
77	107.1	71.0	106.5#
0	0.0	0.0	0.0

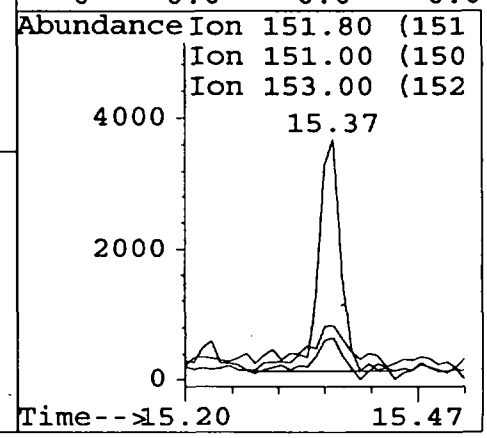


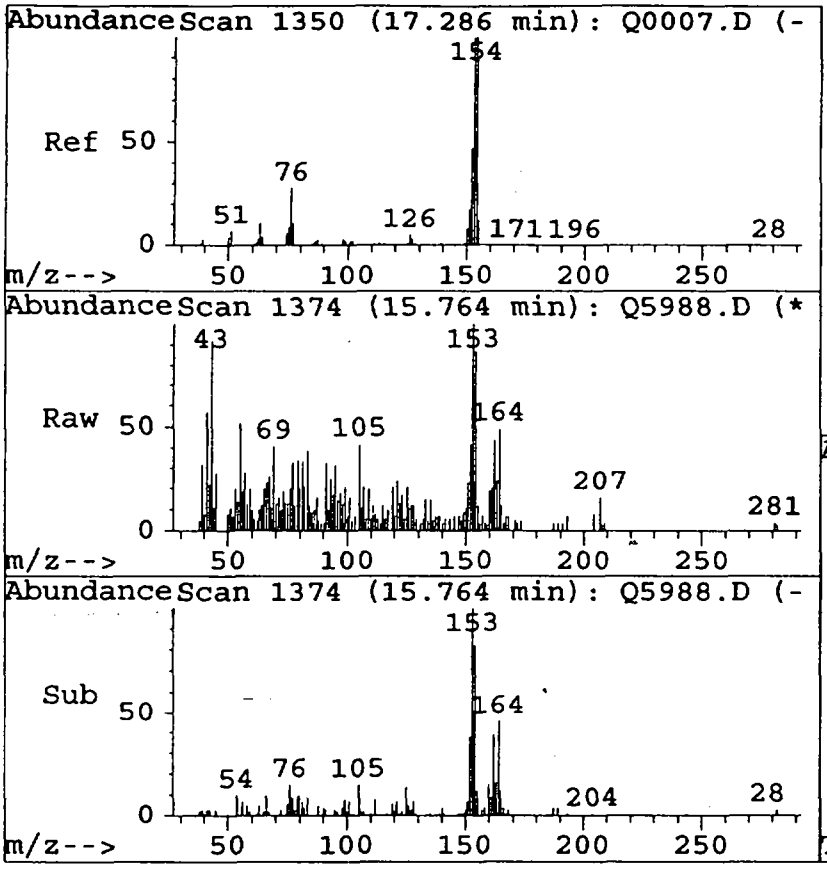


#43
Acenaphthylene
Concen: 15.62 ug
RT: 15.37 min Scan# 1335
Delta R.T. 0.01 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:151.8 Resp: 6430

Ion	Ratio	Lower	Upper
152	100		
151	16.4	0.0	39.1
153	18.1	0.0	35.5
0	0.0	0.0	0.0

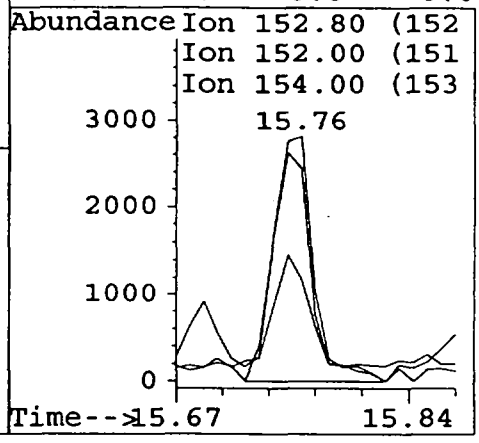


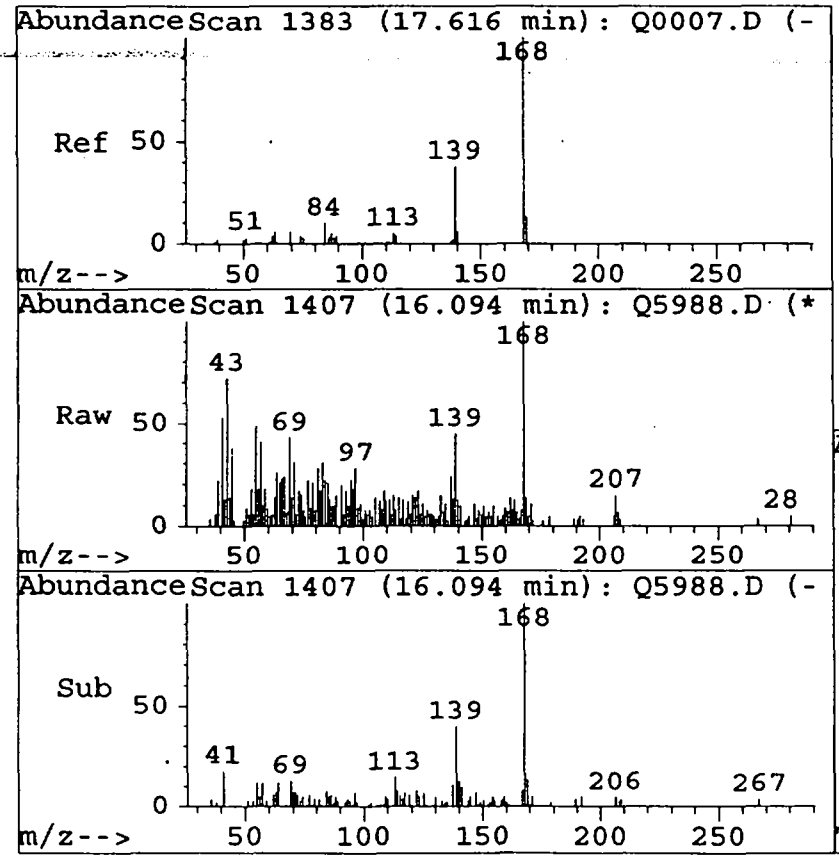


#46
Acenaphthene 0035
Concen: 24.07 ug
RT: 15.76 min Scan# 1374
Delta R.T. 0.00 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:152.8 Resp: 5599

Ion	Ratio	Lower	Upper
153	100		
152	35.4	25.4	65.4
154	86.7	86.4	126.4
0	0.0	0.0	0.0

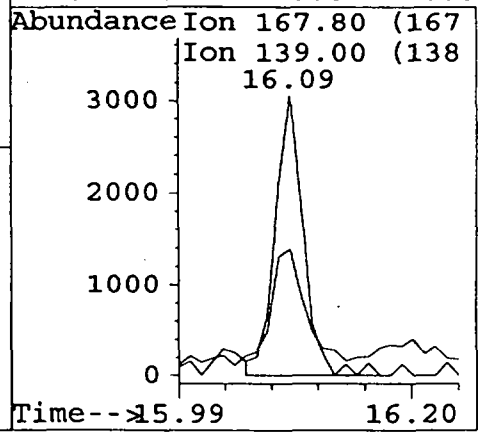


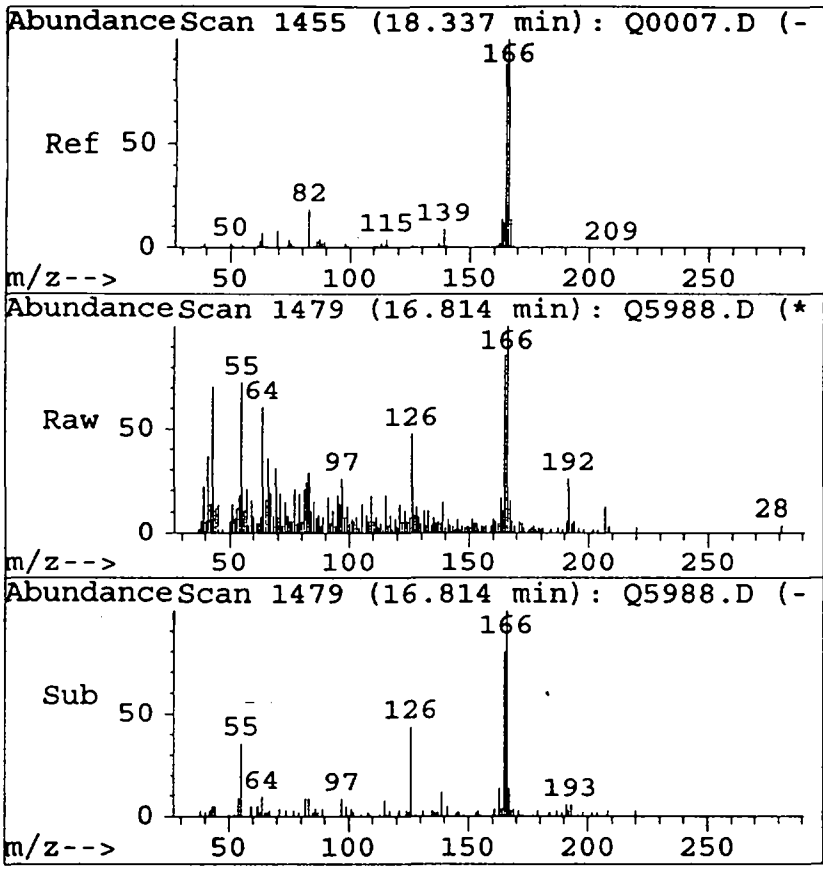


#49
Dibenzofuran
Concen: 15.54 ug
RT: 16.09 min Scan# 1407
Delta R.T. -0.01 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:167.8 Resp: 5383

Ion	Ratio	Lower	Upper
168	100		
139	38.3	16.8	56.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

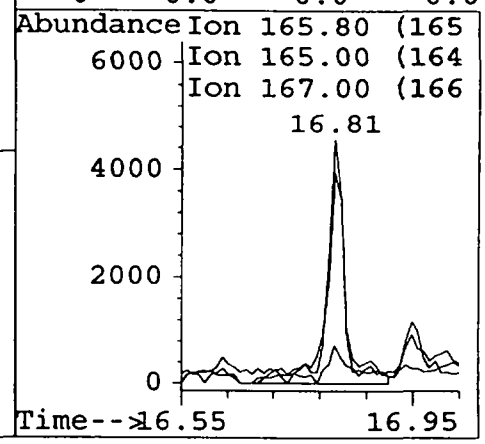


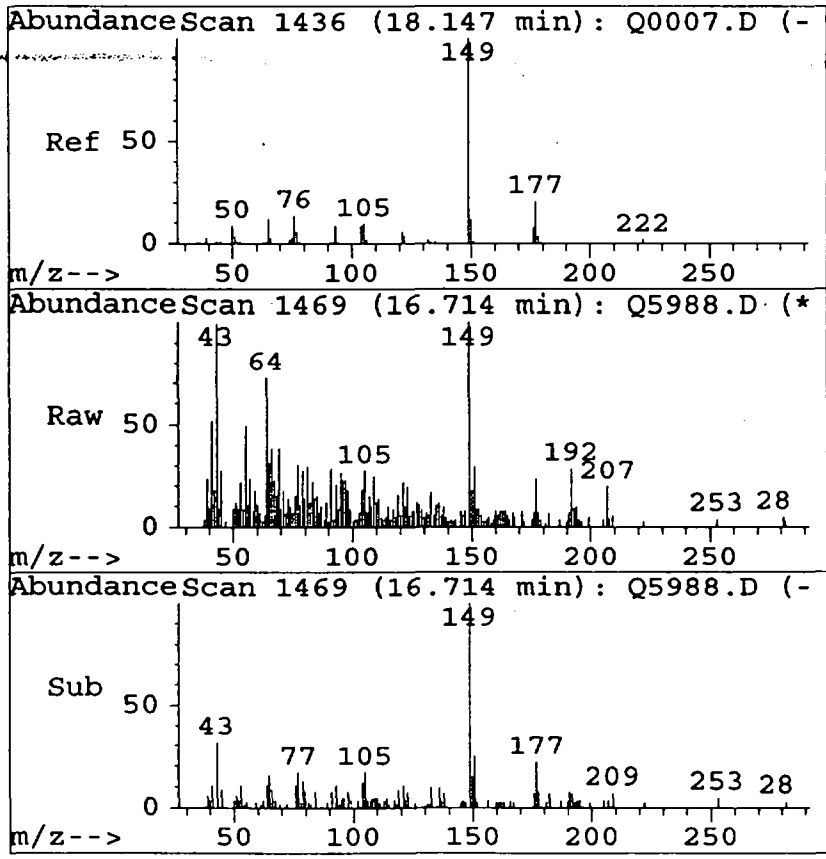


#52
Fluorene
Concen: 37.84 ug
RT: 16.81 min Scan# 1479
Delta R.T. -0.01 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:165.8 Resp: 9363

Ion	Ratio	Lower	Upper
166	100		
165	82.7	63.4	103.4
167	16.1	0.0	35.0
0	0.0	0.0	0.0

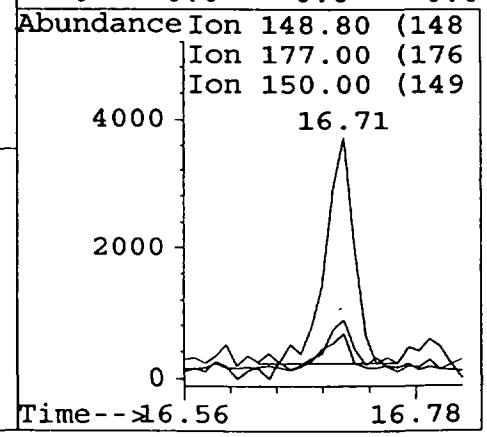


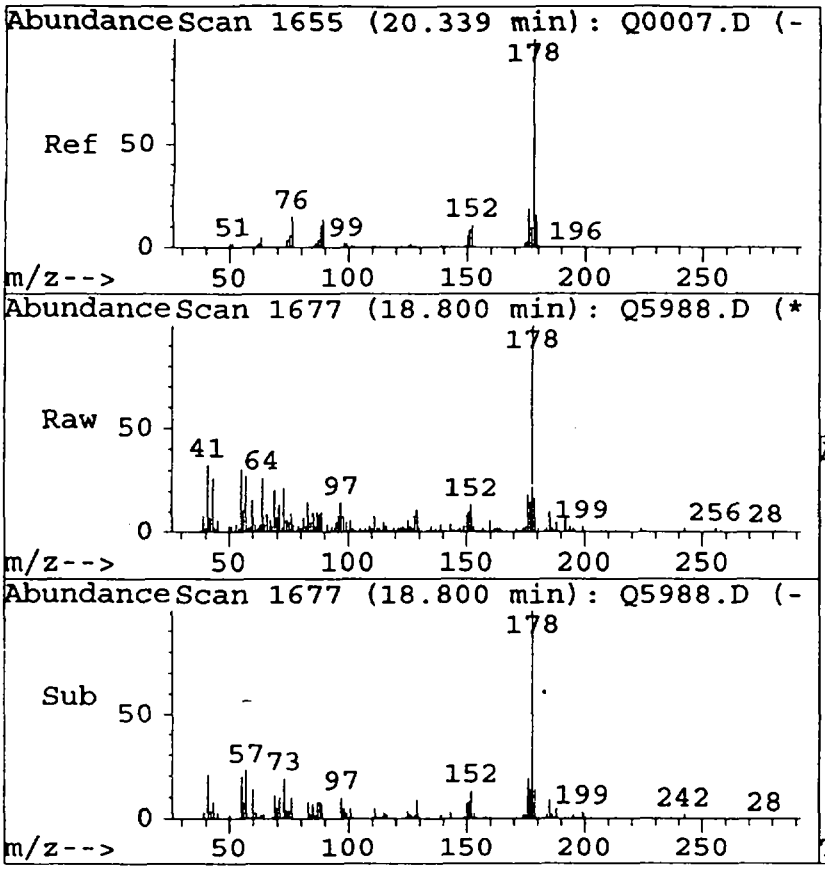


#54
Diethylphthalate
Concen: 18.22 ug
RT: 16.71 min Scan# 1469
Delta R.T. -0.00 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:148.8 Resp: 6436

Ion	Ratio	Lower	Upper
149	100		
177	22.4	1.5	41.5
150	14.7	0.0	32.9
0	0.0	0.0	0.0

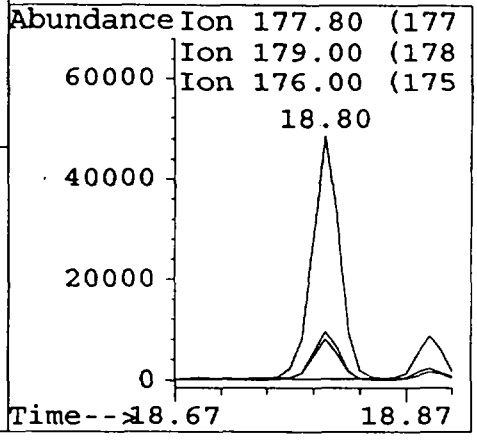


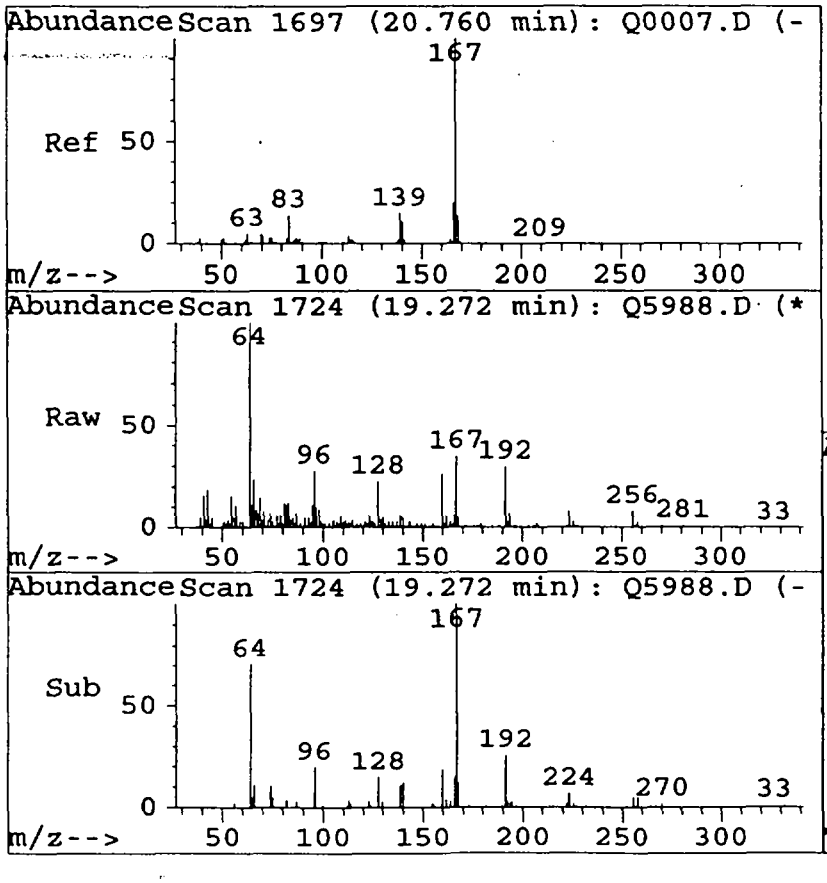


#64
Phenanthrene
Concen: 294.88 ug
RT: 18.80 min Scan# 1677
Delta R.T. -0.01 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:177.8 Resp: 78258

Ion	Ratio	Lower	Upper
178	100		
179	15.9	0.0	37.1
176	19.4	0.0	38.4
0	0.0	0.0	0.0

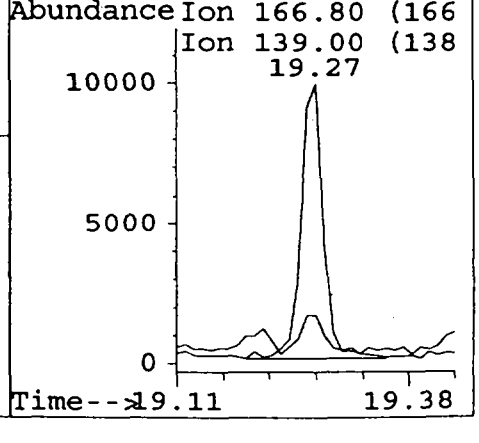


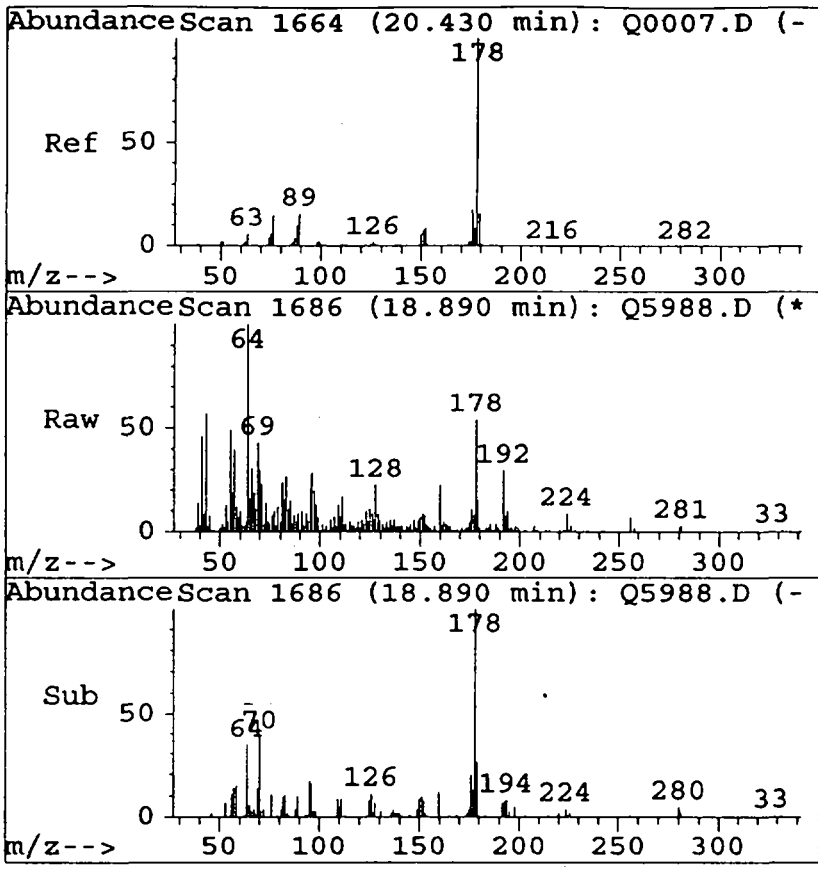


#65
Carbazole
Concen: 56.88 ug
RT: 19.27 min Scan# 1724
Delta R.T. 0.01 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:166.8 Resp: 17396

Ion	Ratio	Lower	Upper
167	100		
139	12.1	10.6	15.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

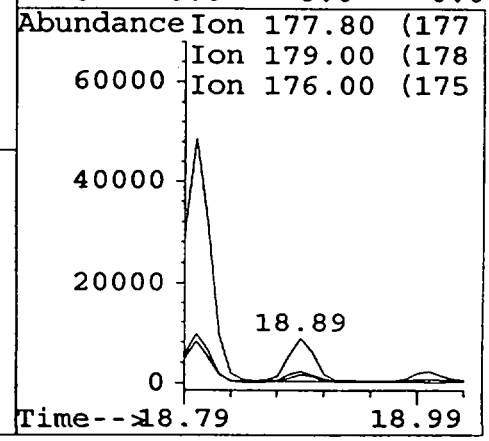


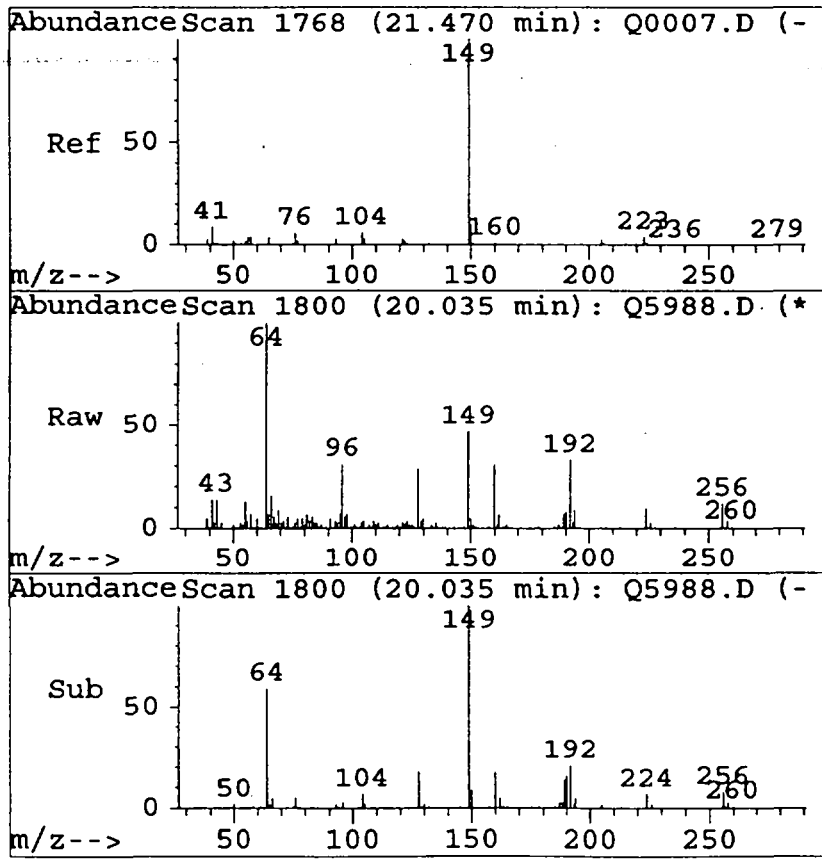


#66
Anthracene
Concen: 49.64 ug
RT: 18.89 min Scan# 1686
Delta R.T. -0.01 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:177.8 Resp: 13294

Ion	Ratio	Lower	Upper
178	100		
179	23.7	0.0	37.5
176	19.1	0.0	38.0
0	0.0	0.0	0.0

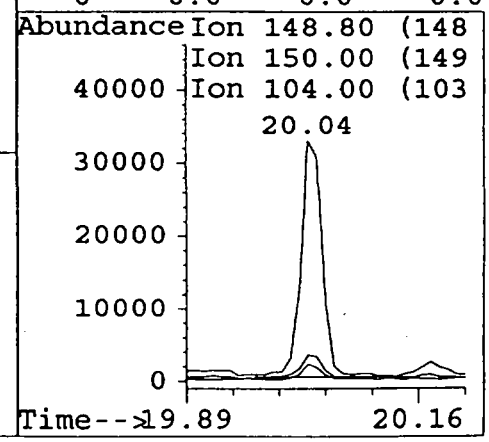


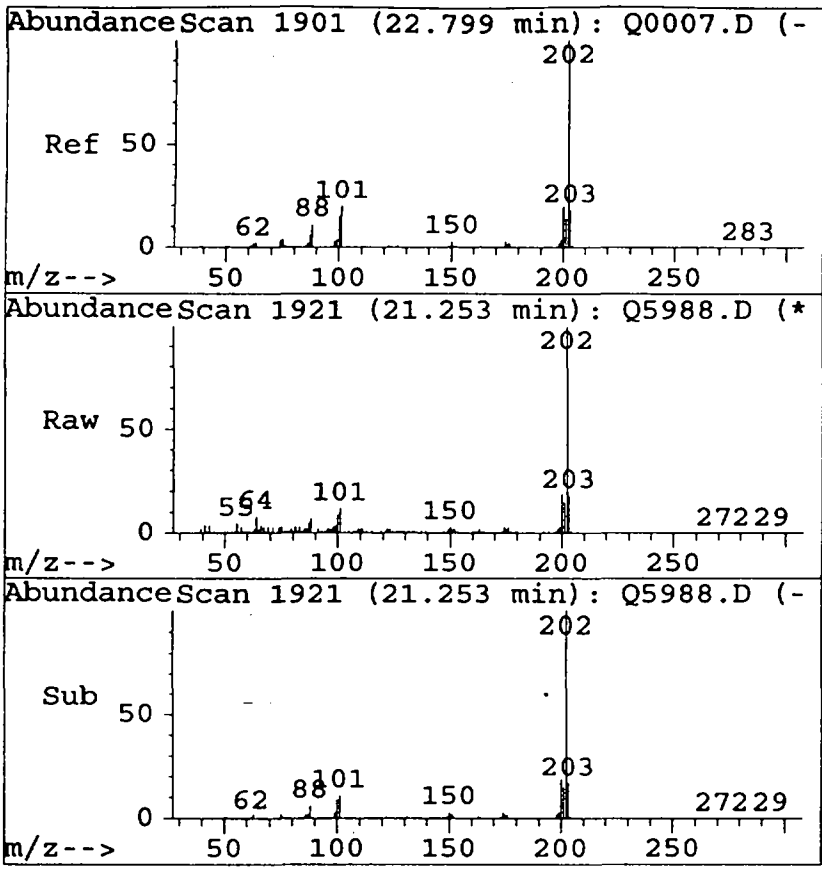


#67
Di-n-butylphthalate
Concen: 122.21 ug
RT: 20.04 min Scan# 1800
Delta R.T. 0.01 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:148.8 Resp: 55673

Ion	Ratio	Lower	Upper
149	100		
150	9.7	0.0	31.5
104	6.3	0.0	25.2
0	0.0	0.0	0.0

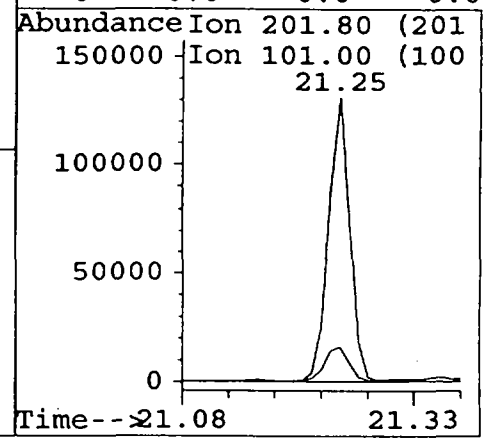


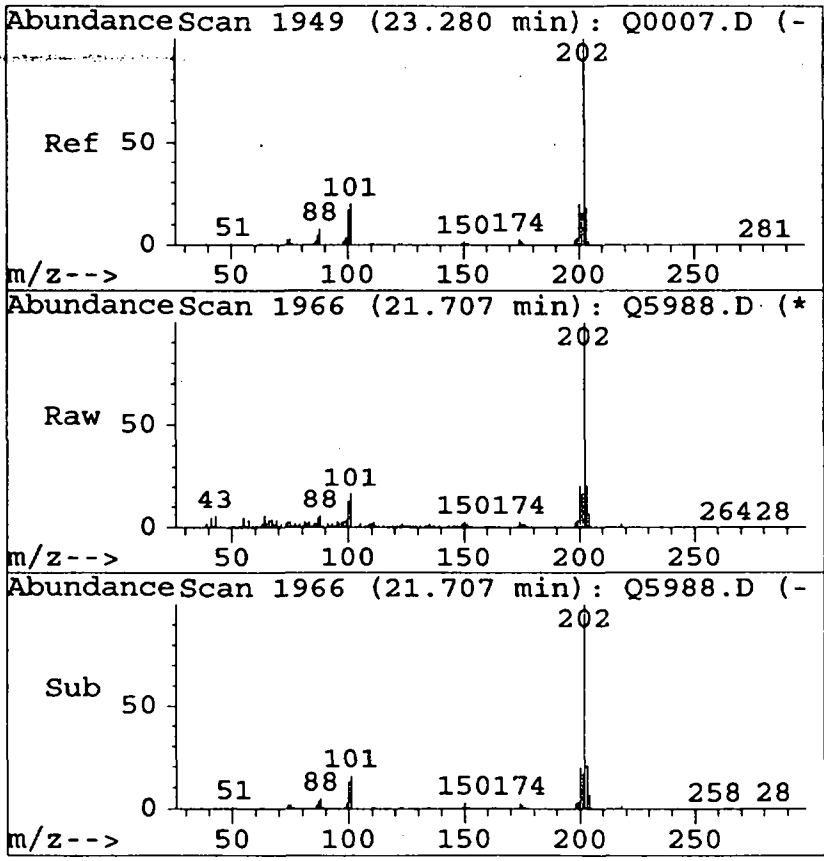


#68 0039
Fluoranthene
Concen: 632.84 ug
RT: 21.25 min Scan# 1921
Delta R.T. 0.01 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:201.8 Resp: 208038

Ion	Ratio	Lower	Upper
202	100		
101	11.3	0.0	38.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

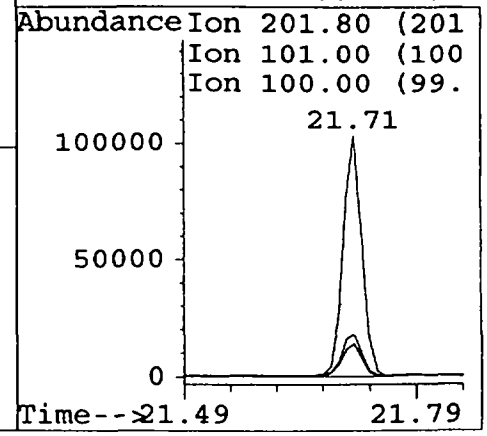


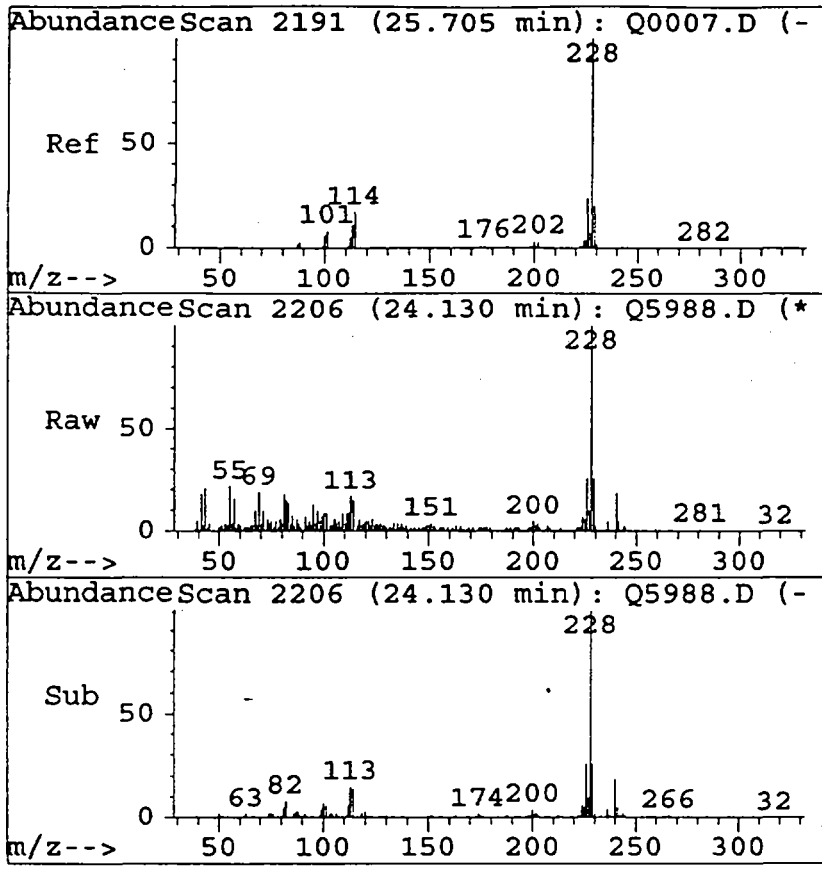


#72
Pyrene
Concen: 568.95 ug
RT: 21.71 min Scan# 1966
Delta R.T. -0.00 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:201.8 Resp: 174673

Ion	Ratio	Lower	Upper
202	100		
101	16.4	2.7	42.7
100	12.9	0.0	37.5
0	0.0	0.0	0.0

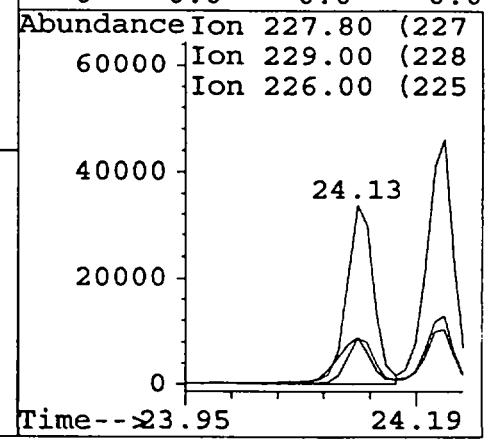


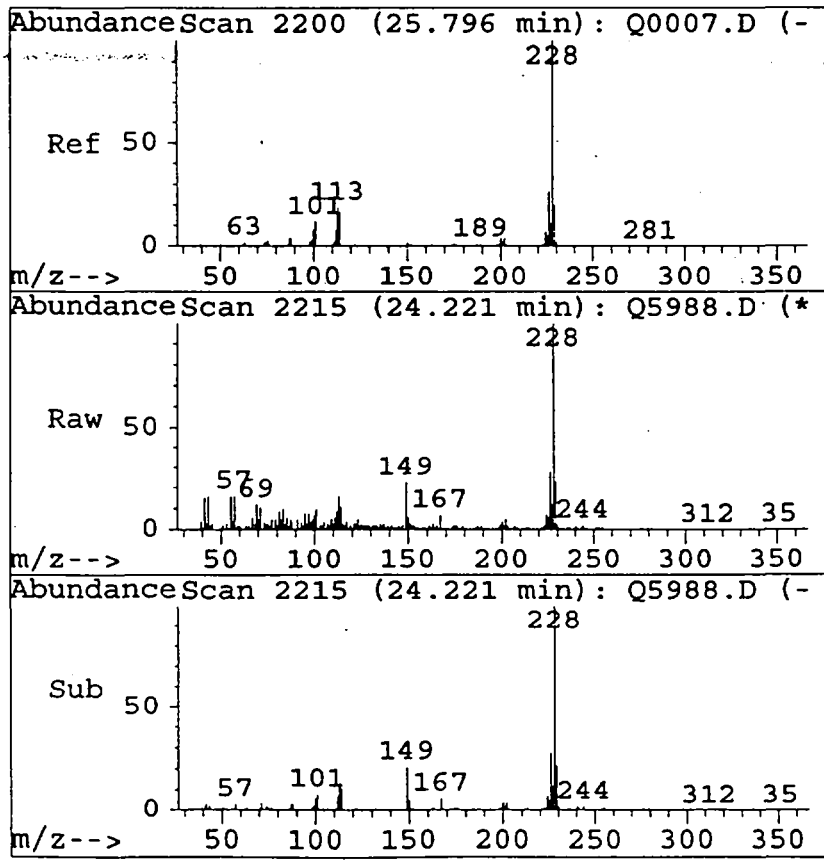


#76
Benzo(a)anthracene
Concen: 247.70 ug
RT: 24.13 min Scan# 2206
Delta R.T. -0.00 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:227.8 Resp: 67124

Ion	Ratio	Lower	Upper
228	100		
229	25.6	1.7	41.7
226	25.7	4.8	44.8
0	0.0	0.0	0.0

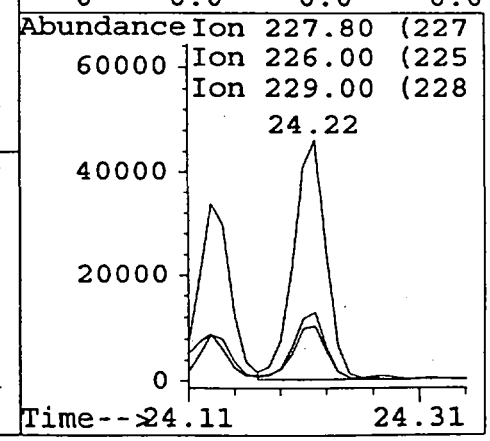


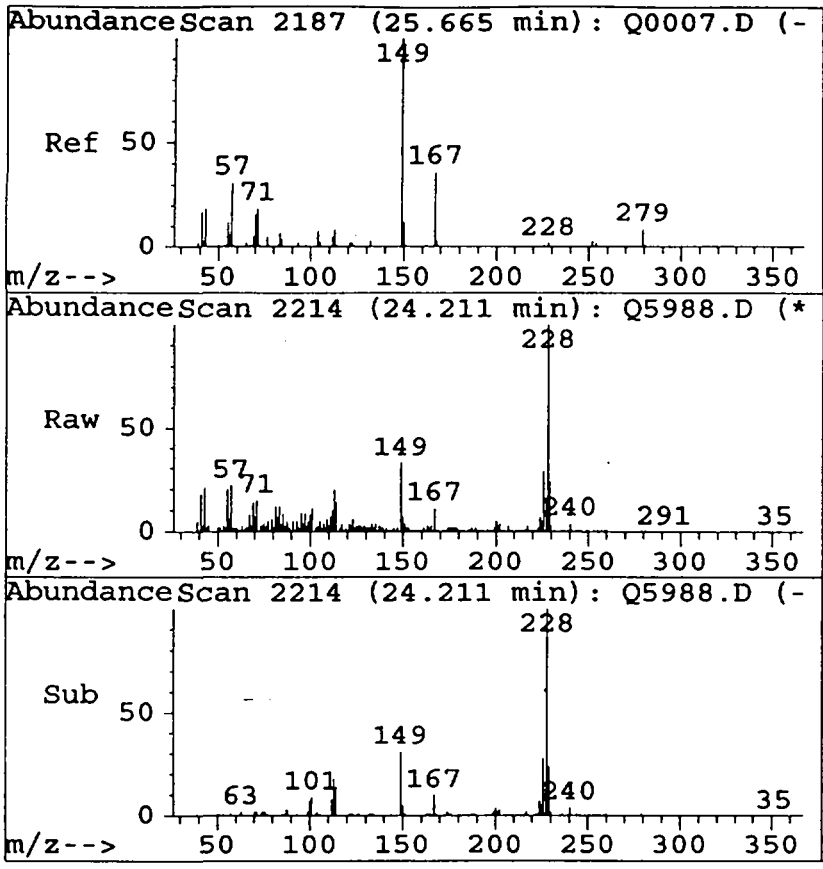


#77
Chrysene
Concen: 417.89 ug
RT: 24.22 min Scan# 2215
Delta R.T. -0.01 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:227.8 Resp: 90638

Ion	Ratio	Lower	Upper
228	100		
226	27.7	7.6	47.6
229	21.1	2.2	42.2
0	0.0	0.0	0.0

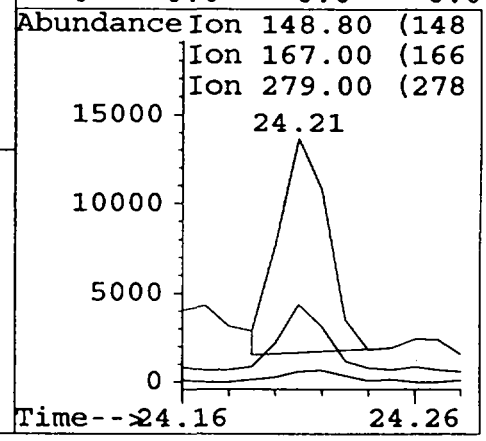


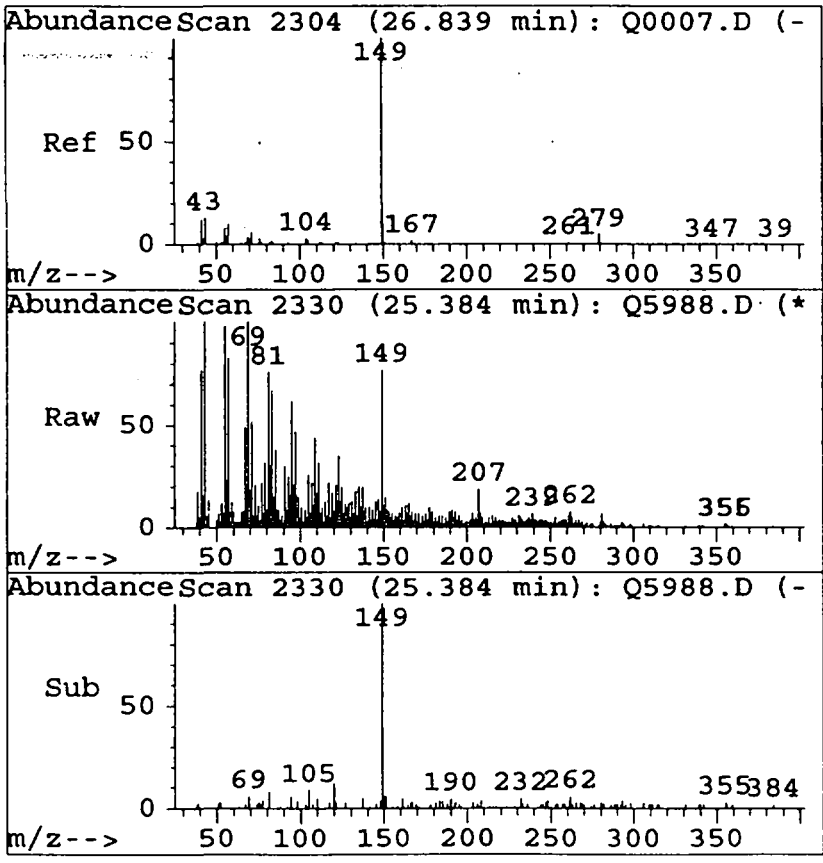


#78
bis(2-Ethylhexyl)phthalate
Concen: 83.90 ug
RT: 24.21 min Scan# 2214
Delta R.T. 0.00 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:148.8 Resp: 17584

Ion	Ratio	Lower	Upper
149	100		
167	31.7	16.4	56.4
279	3.8	0.0	28.7
0	0.0	0.0	0.0

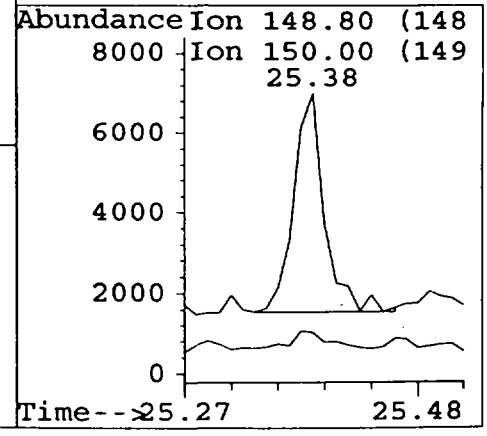




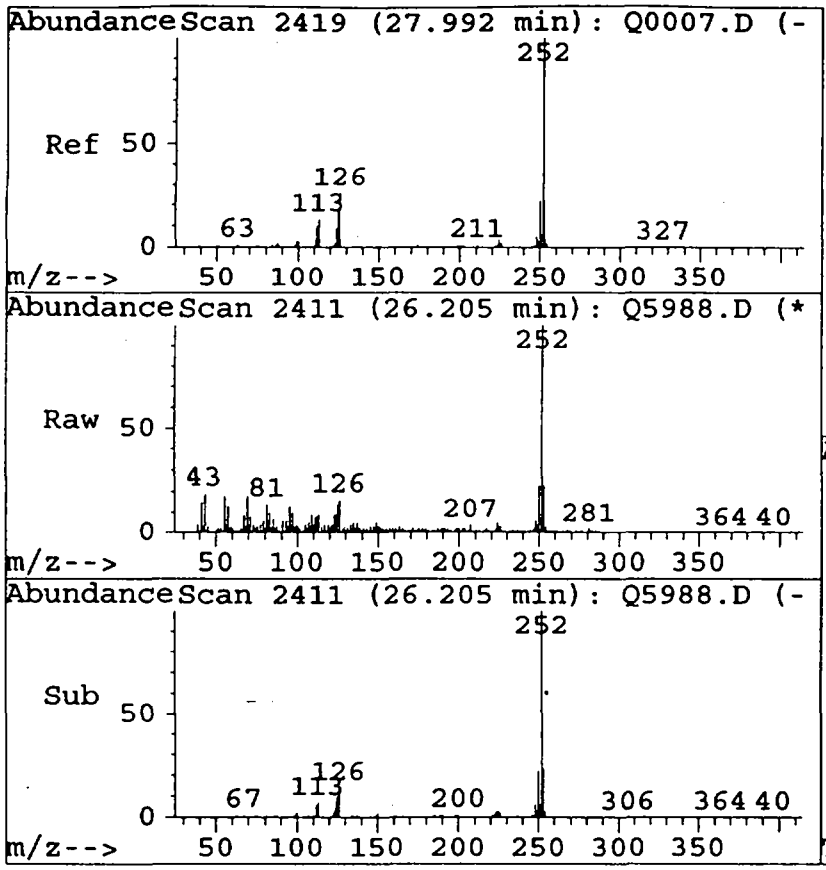
#80
Di-n-octylphthalate
Concen: 20.45 ug
RT: 25.38 min Scan# 2330
Delta R.T. 0.01 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:148.8 Resp: 10048

Ion	Ratio	Lower	Upper
149	100		
150	7.3	0.0	32.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0



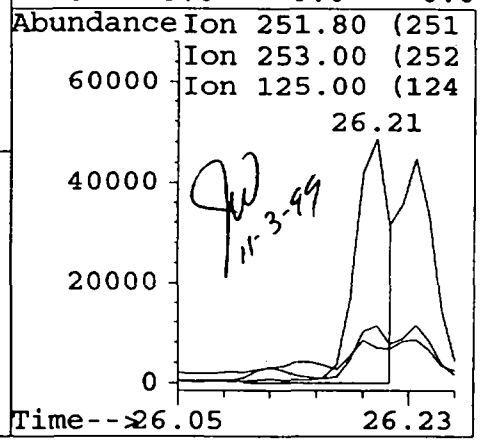
0042

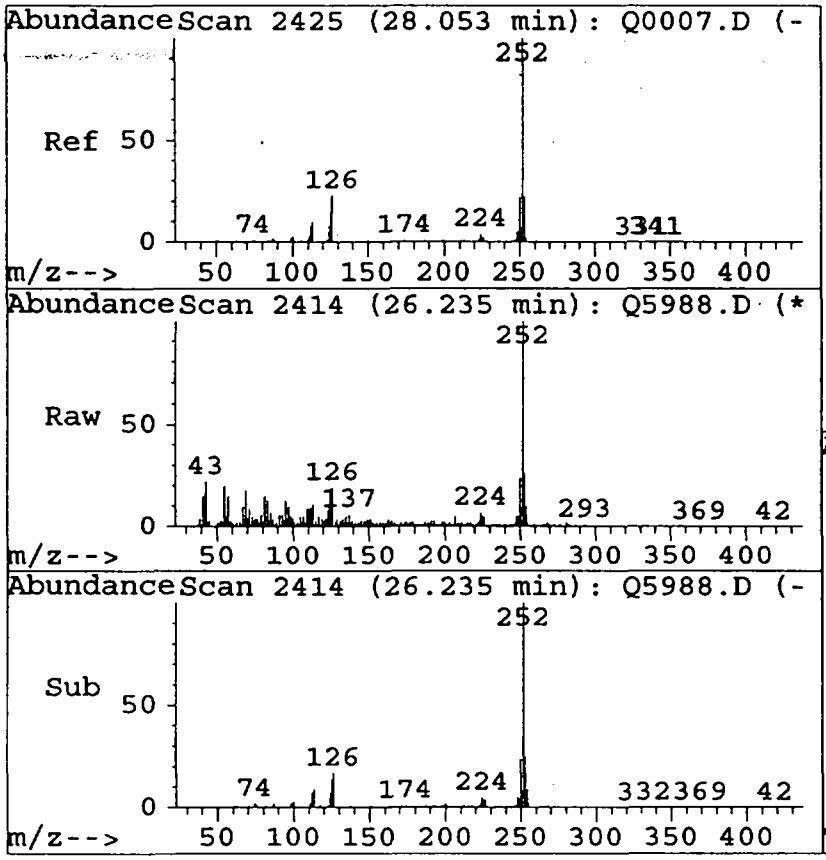


#81
Benzo(b)fluoranthene
Concen: 252.74 ug m
RT: 26.21 min Scan# 2411
Delta R.T. -0.00 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:251.8 Resp: 89403

Ion	Ratio	Lower	Upper
252	100		
253	23.3	4.4	44.4
125	14.3	0.0	38.4
0	0.0	0.0	0.0

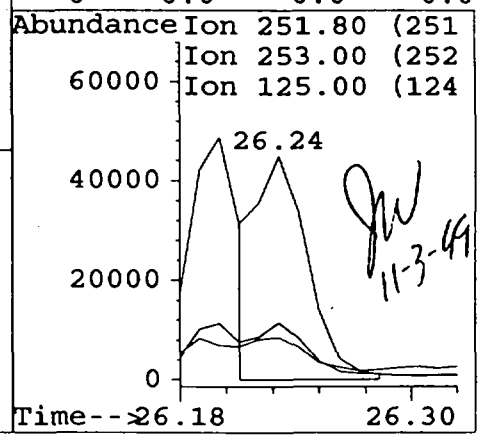


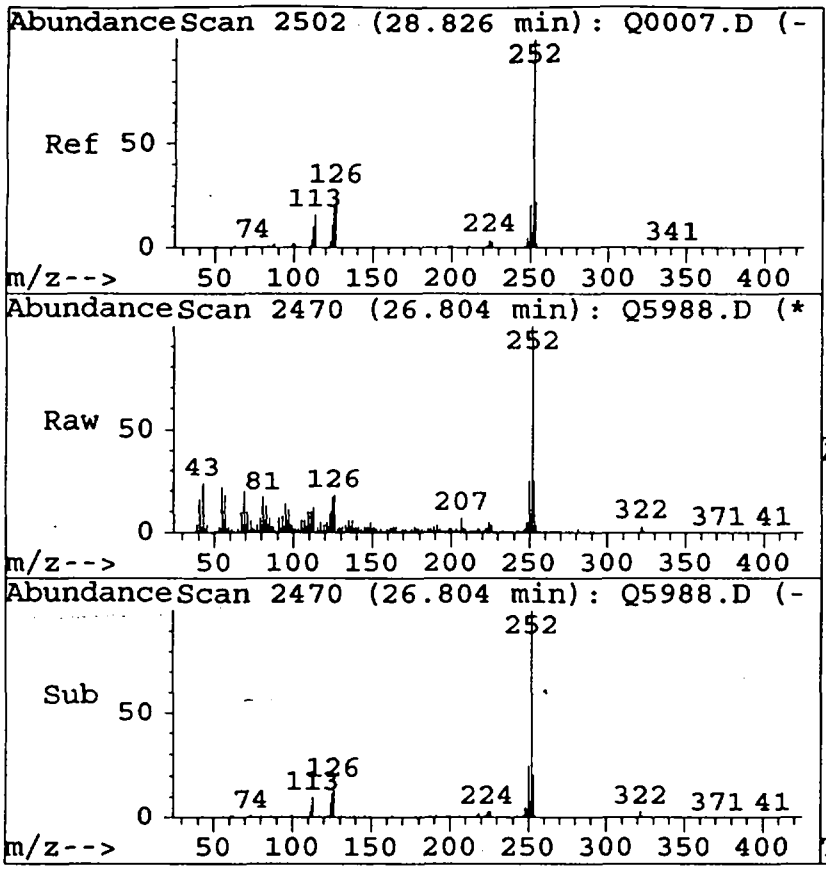


#82
Benzo(k)fluoranthene
Concen: 403.86 ug m
RT: 26.24 min Scan# 2414
Delta R.T. -0.01 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:251.8 Resp: 82155

Ion	Ratio	Lower	Upper
252	100		
253	25.6	4.5	44.5
125	19.0	0.0	37.6
0	0.0	0.0	0.0

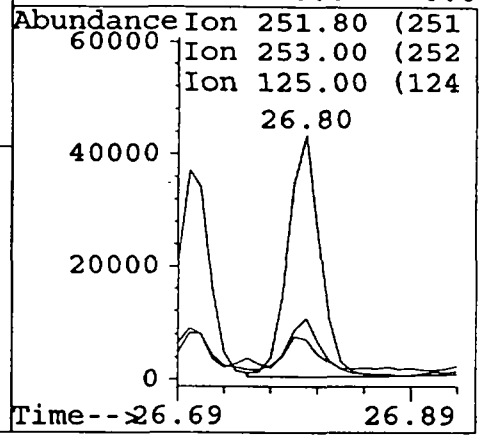


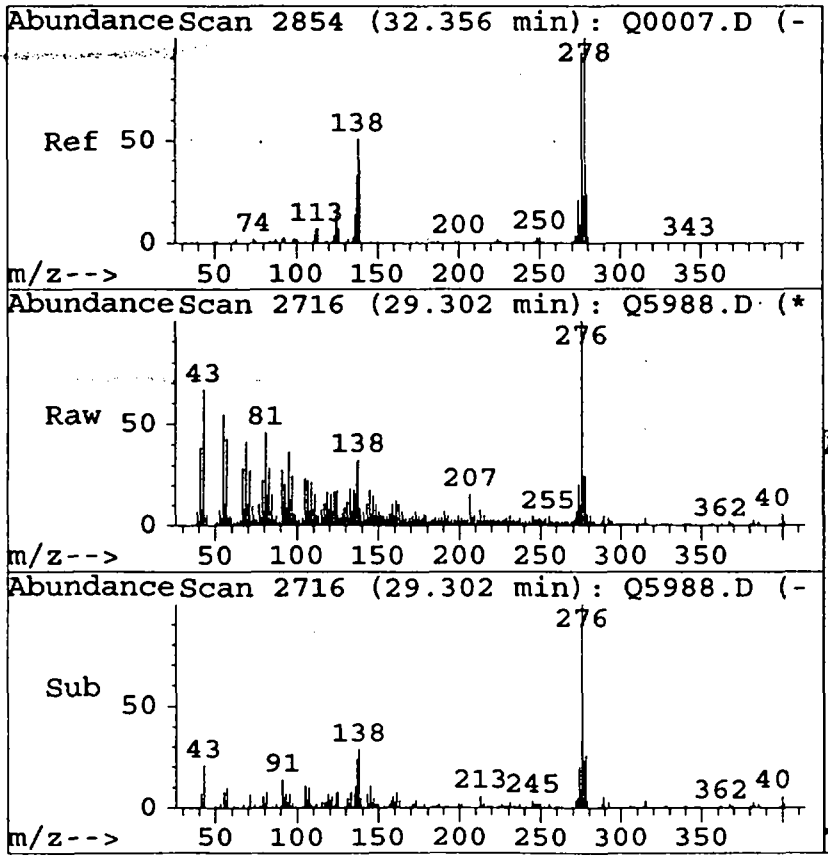


#83
Benzo(a)pyrene
Concen: 298.34 ug
RT: 26.80 min Scan# 2470
Delta R.T. 0.00 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:251.8 Resp: 82774

Ion	Ratio	Lower	Upper
252	100		
253	22.8	3.9	43.9
125	12.4	0.0	39.6
0	0.0	0.0	0.0

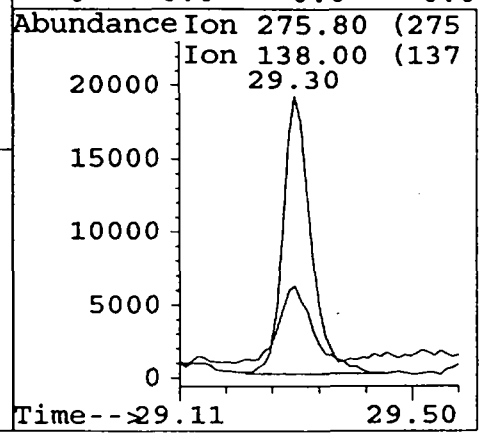


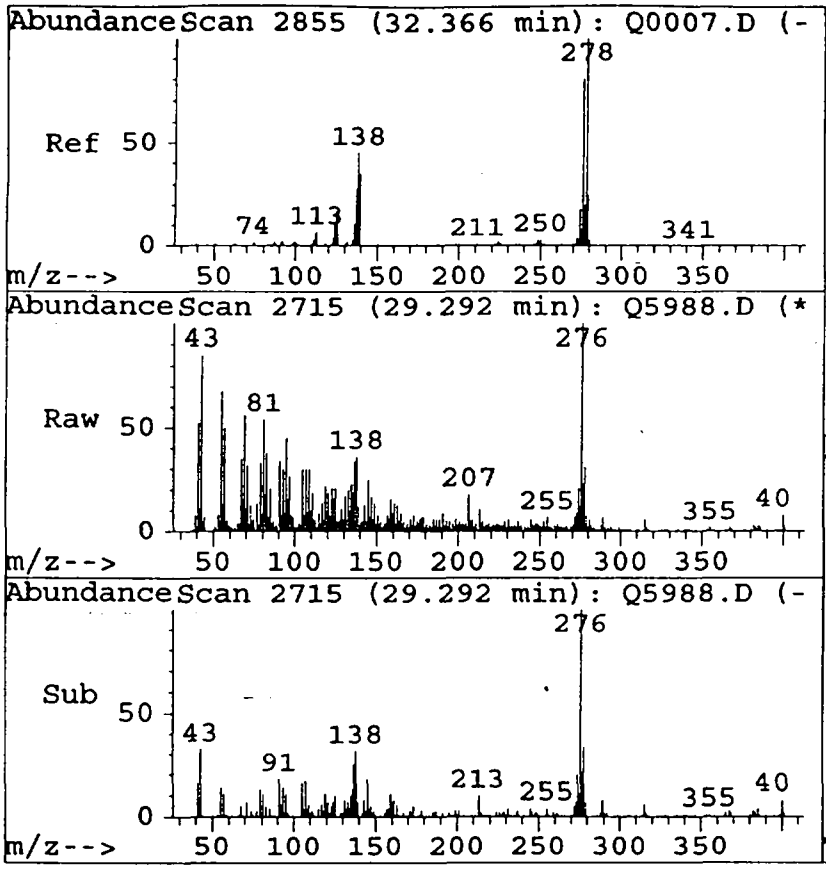


#84
Indeno(1,2,3-cd)pyrene
Concen: 189.48 ug
RT: 29.30 min Scan# 2716
Delta R.T. 0.01 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:275.8 Resp: 61244

Ion	Ratio	Lower	Upper
276	100		
138	26.7	36.8	76.8#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

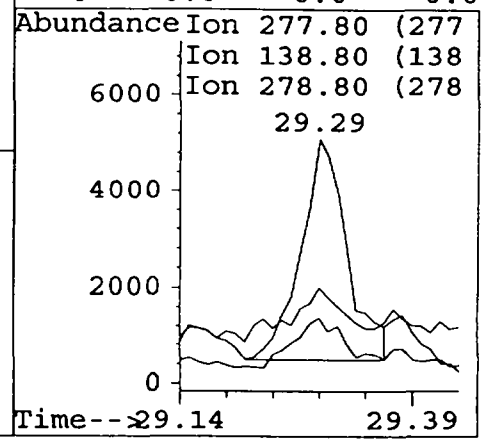


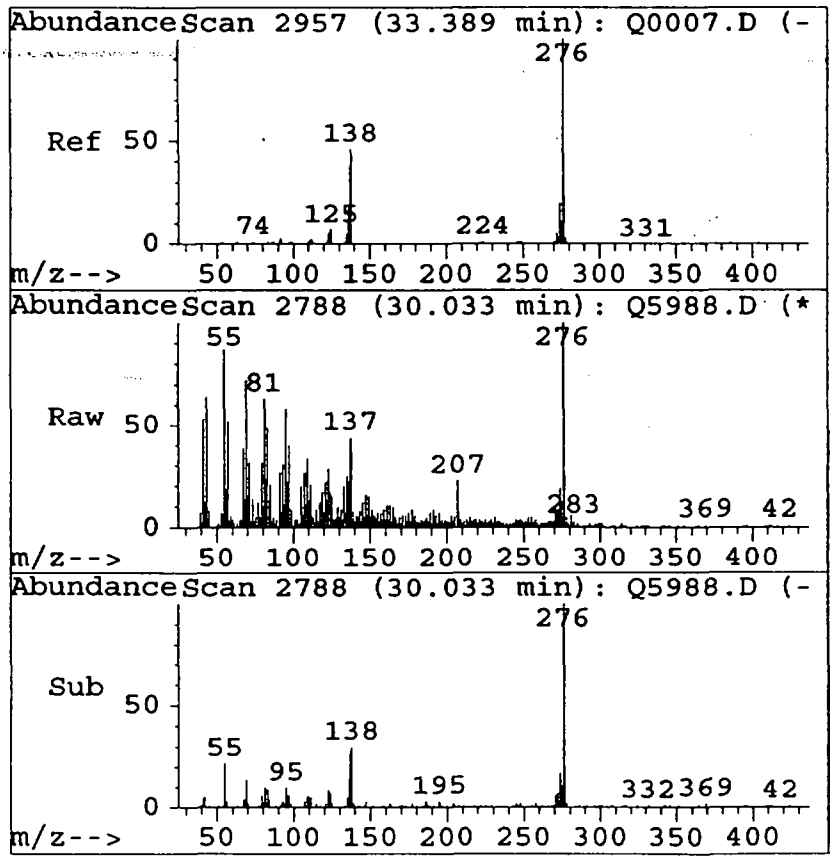


#85
Dibenzo(a,h)anthracene
Concen: 59.63 ug
RT: 29.29 min Scan# 2715
Delta R.T. -0.00 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:277.8 Resp: 16284

Ion	Ratio	Lower	Upper
278	100		
139	25.0	12.0	52.0
279	22.5	4.7	44.7
0	0.0	0.0	0.0

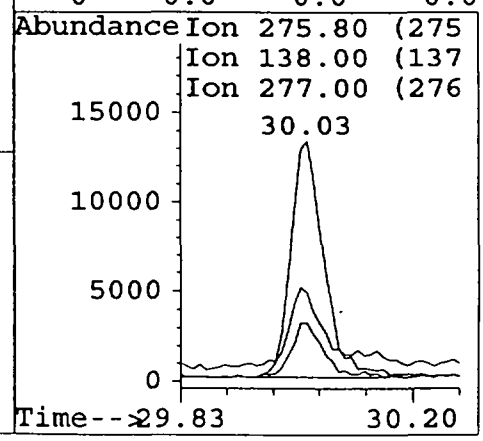




#86
Benzo(g,h,i)perylene
Concen: 152.95 ug
RT: 30.03 min Scan# 2788
Delta R.T. 0.03 min
Lab File: Q5988.D
Acq: 29 Oct 99 18:24 hrs

Tgt Ion:275.8 Resp: 48434

Ion	Ratio	Lower	Upper
276	100		
138	29.5	27.8	67.8
277	23.1	5.1	45.1
0	0.0	0.0	0.0



1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
S-2-1-02

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: 992732A-02

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5989

Level: (low/med) LOW Date Received: 10/15/99

% Moisture: 63 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	890	U
111-44-4	bis(2-Chloroethyl)ether	890	U
95-57-8	2-Chlorophenol	890	U
541-73-1	1,3-Dichlorobenzene	890	U
106-46-7	1,4-Dichlorobenzene	890	U
100-51-6	Benzyl alcohol	890	U
95-50-1	1,2-Dichlorobenzene	890	U
95-48-7	2-Methylphenol	890	U
108-60-1	2,2'-oxybis(1-Chloropropane)	890	U
106-44-5	4-Methylphenol	890	U
621-64-7	N-Nitroso-di-n-propylamine	890	U
67-72-1	Hexachloroethane	890	U
98-95-3	Nitrobenzene	890	U
78-59-1	Isophorone	890	U
88-75-5	2-Nitrophenol	890	U
105-67-9	2,4-Dimethylphenol	890	U
65-85-0	Benzoic acid	130	J
111-91-1	bis(2-Chloroethoxy)methane	890	U
120-83-2	2,4-Dichlorophenol	890	U
120-82-1	1,2,4-Trichlorobenzene	890	U
91-20-3	Naphthalene	890	U
106-47-8	4-Chloroaniline	890	U
87-68-3	Hexachlorobutadiene	890	U
59-50-7	4-Chloro-3-methylphenol	890	U
91-57-6	2-Methylnaphthalene	890	U
77-47-4	Hexachlorocyclopentadiene	890	U
88-06-2	2,4,6-Trichlorophenol	890	U
95-95-4	2,4,5-Trichlorophenol	4300	U
91-58-7	2-Chloronaphthalene	890	U
88-74-4	2-Nitroaniline	4300	U
131-11-3	Dimethylphthalate	890	U
208-96-8	Acenaphthylene	20	J
606-20-2	2,6-Dinitrotoluene	890	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-2-1-02

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: 992732A-02

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5989

Level: (low/med) LOW Date Received: 10/15/99

% Moisture: 63 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4300	U
83-32-9	Acenaphthene	34	J
51-28-5	2,4-Dinitrophenol	4300	U
100-02-7	4-Nitrophenol	4300	U
132-64-9	Dibenzofuran	17	J
121-14-2	2,4-Dinitrotoluene	890	U
84-66-2	Diethylphthalate	890	U
7005-72-3	4-Chlorophenyl-phenylether	890	U
86-73-7	Fluorene	51	J
100-01-6	4-Nitroaniline	4300	U
534-52-1	4,6-Dinitro-2-methylphenol	4300	U
86-30-6	N-Nitrosodiphenylamine (1)	890	U
101-55-3	4-Bromophenyl-phenylether	890	U
118-74-1	Hexachlorobenzene	890	U
87-86-5	Pentachlorophenol	4300	U
85-01-8	Phenanthrene	300	J
120-12-7	Anthracene	64	J
86-74-8	Carbazole	53	J
84-74-2	Di-n-butylphthalate	350	JB
206-44-0	Fluoranthene	790	J
129-00-0	Pyrene	830	J
85-68-7	Butylbenzylphthalate	890	U
91-94-1	3,3'-Dichlorobenzidine	1800	U
56-55-3	Benzo(a)anthracene	340	J
218-01-9	Chrysene	590	J
117-81-7	bis(2-Ethylhexyl)phthalate	160	JB
117-84-0	Di-n-octylphthalate	19	JB
205-99-2	Benzo(b)fluoranthene	380	J
207-08-9	Benzo(k)fluoranthene	480	J
50-32-8	Benzo(a)pyrene	400	J
193-39-5	Indeno(1,2,3-cd)pyrene	220	J
53-70-3	Dibenzo(a,h)anthracene	63	J
191-24-2	Benzo(g,h,i)perylene	170	J

(1) - Cannot be separated from Diphenylamine

Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5989.D
Acq On : 29 Oct 99 19:05 hrs
Sample : 992732A-02
Misc : S-2-1-02 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:06 1999

Vial: 15 0047
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 45.04

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.79	152	178075	40.00 ug	0.00
20) Naphthalene-d8	11.75	136	841103	40.00 ug	0.00
35) Acenaphthene-d10	15.70	164	466073	40.00 ug	0.00
57) Phenanthrene-d10	18.77	188	634551	40.00 ug	0.00
70) Chrysene-d12	24.18	240	411907	40.00 ug	0.00
79) Perylene-d12	26.93	264	436667	40.00 ug	0.01

System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	6.20	112	827567	129.68 ug	64.84%
3) Phenol-d5	8.27	99	1248754	173.36 ug	86.68%
21) Nitrobenzene-d5	10.15	82	615129	67.65 ug	67.65%
40) 2-Fluorobiphenyl	14.25	172	925954	77.85 ug	77.85%
56) 2,4,6-Tribromophenol	17.39	330	330835	145.10 ug	72.55%
73) Terphenyl-d14	22.03	244	804175	73.66 ug	73.66%

Target Compounds						Qvalue
26) Benzoic acid	11.35	122	15013	132.35 ug	m	88
43) Acenaphthylene	15.37	152	9106	20.47 ug		90
46) Acenaphthene	15.76	153	8588	34.17 ug		87
49) Dibenzofuran	16.10	168	6479	17.31 ug		93
52) Fluorene	16.82	166	13588	50.82 ug	#	77
64) Phenanthrene	18.81	178	90751	304.24 ug		97
65) Carbazole	19.27	167	18369	53.44 ug		94
66) Anthracene	18.90	178	19319	64.19 ug		87
67) Di-n-butylphthalate	20.04	149	179451	350.49 ug		95
68) Fluoranthene	21.26	202	290760	786.94 ug		83
72) Pyrene	21.71	202	242900	832.05 ug		85
76) Benzo(a)anthracene	24.14	228	87474	339.47 ug		98
77) Chrysene	24.22	228	121406	588.67 ug		98
78) bis(2-Ethylhexyl)phthalate	24.22	149	32768	164.43 ug	m	83
80) Di-n-octylphthalate	25.38	149	8771	18.75 ug		96
81) Benzo(b)fluoranthene	26.20	252	126422	375.41 ug		92
82) Benzo(k)fluoranthene	26.24	252	93077	480.62 ug		92
83) Benzo(a)pyrene	26.80	252	106661	403.81 ug		94
84) Indeno(1,2,3-cd)pyrene	29.30	276	68889	223.87 ug	#	65
85) Dibenzo(a,h)anthracene	29.30	278	16421	63.17 ug		98
86) Benzo(g,h,i)perylene	30.04	276	50723	168.25 ug		81

All spectra and manual integrations for this sample have been reviewed and approved.

By: JW Date: 11, 3, 99

Secondary review: MM Date: 11, 03, 99

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal

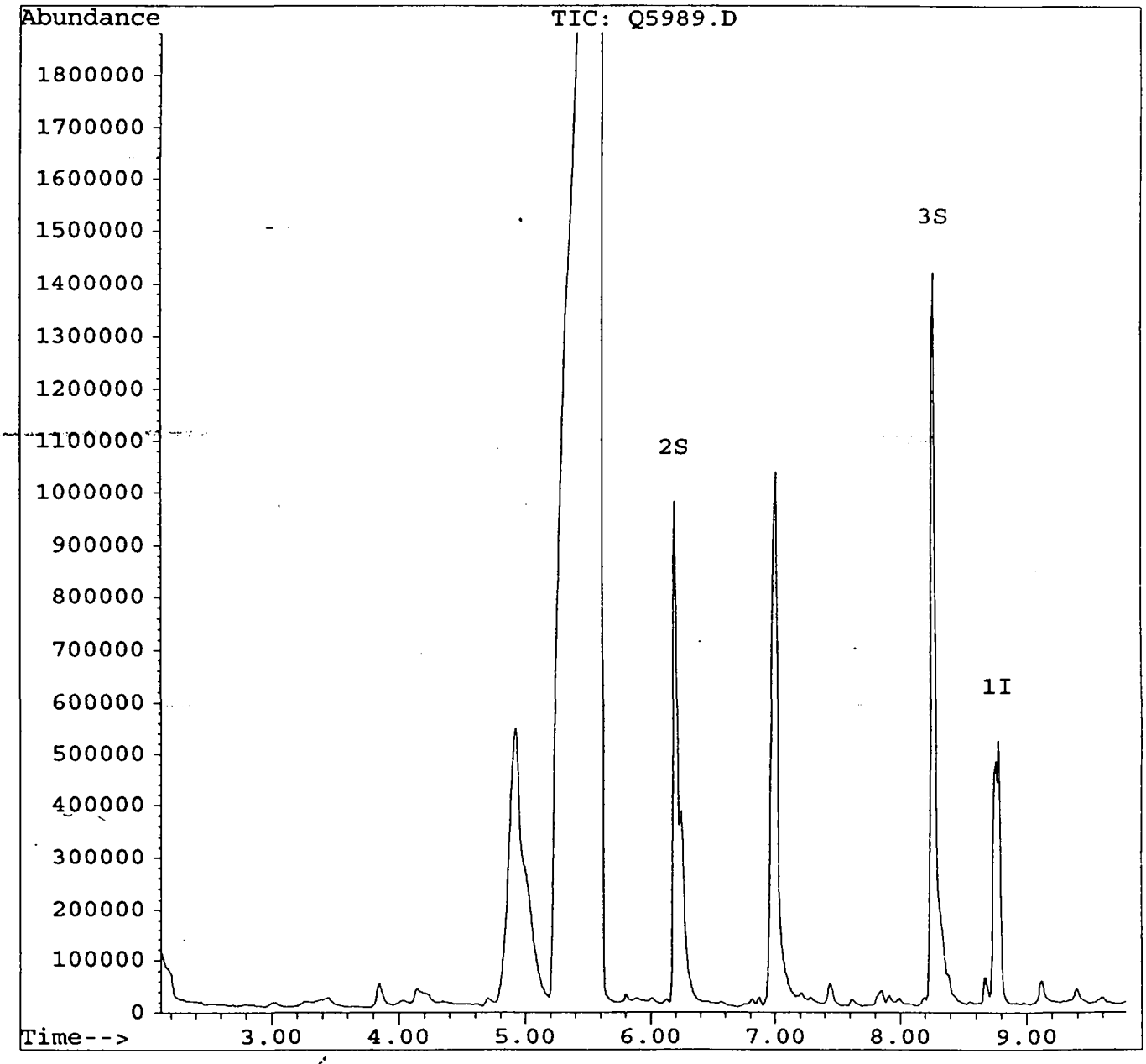
Quantitation Report

001067
~~0048~~ a

Data File : H:\HPCHEM\MSQ\Q5989.D
Acq On : 29 Oct 99 19:05 hrs
Sample : 992732A-02
Misc : S-2-1-02 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:06 1999

Vial: 15
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 45.04

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

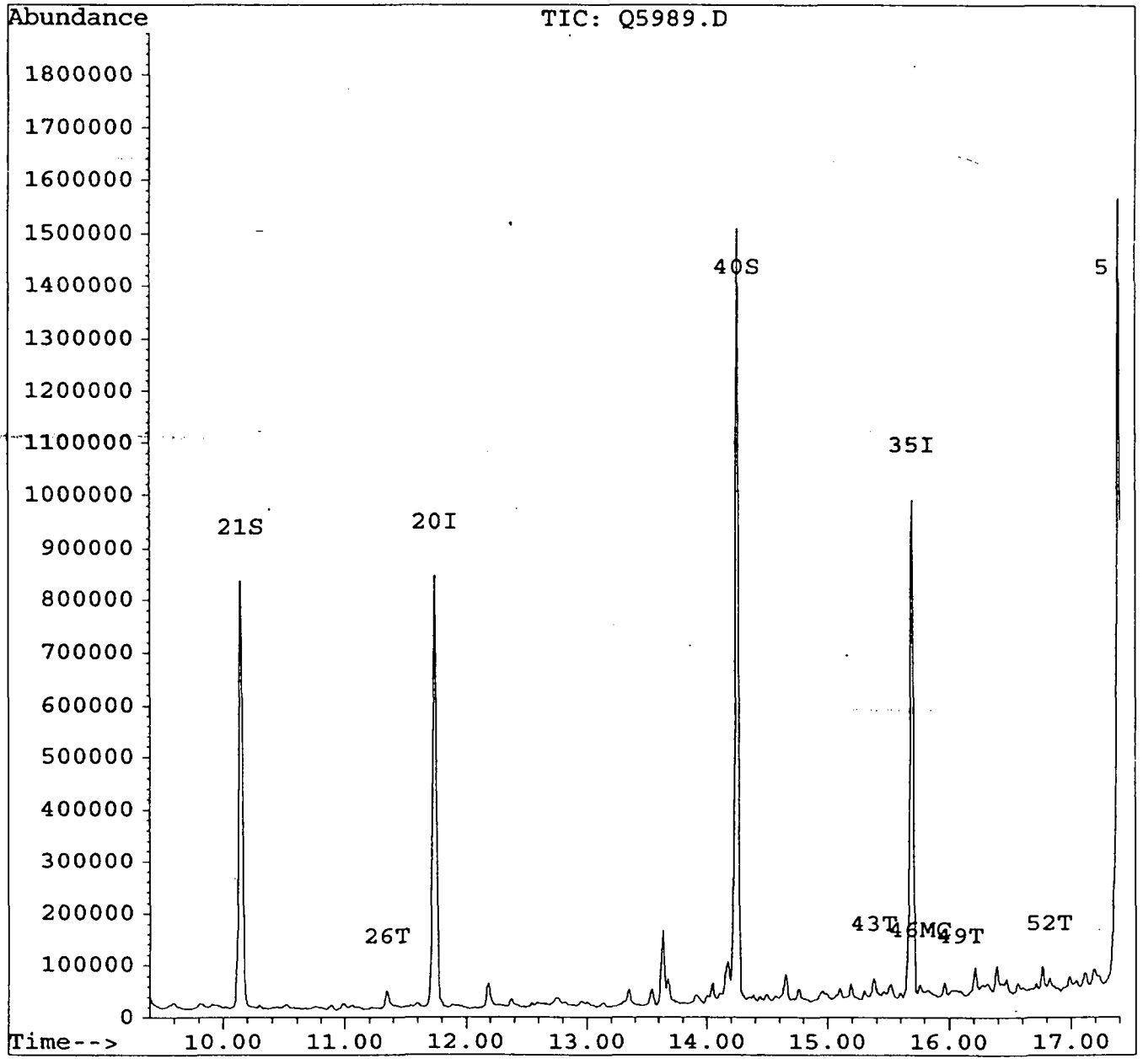


Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5989.D
Acq On : 29 Oct 99 19:05 hrs
Sample : 992732A-02
Misc : S-2-1-02 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:06 1999

Vial: 15
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 45.04

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

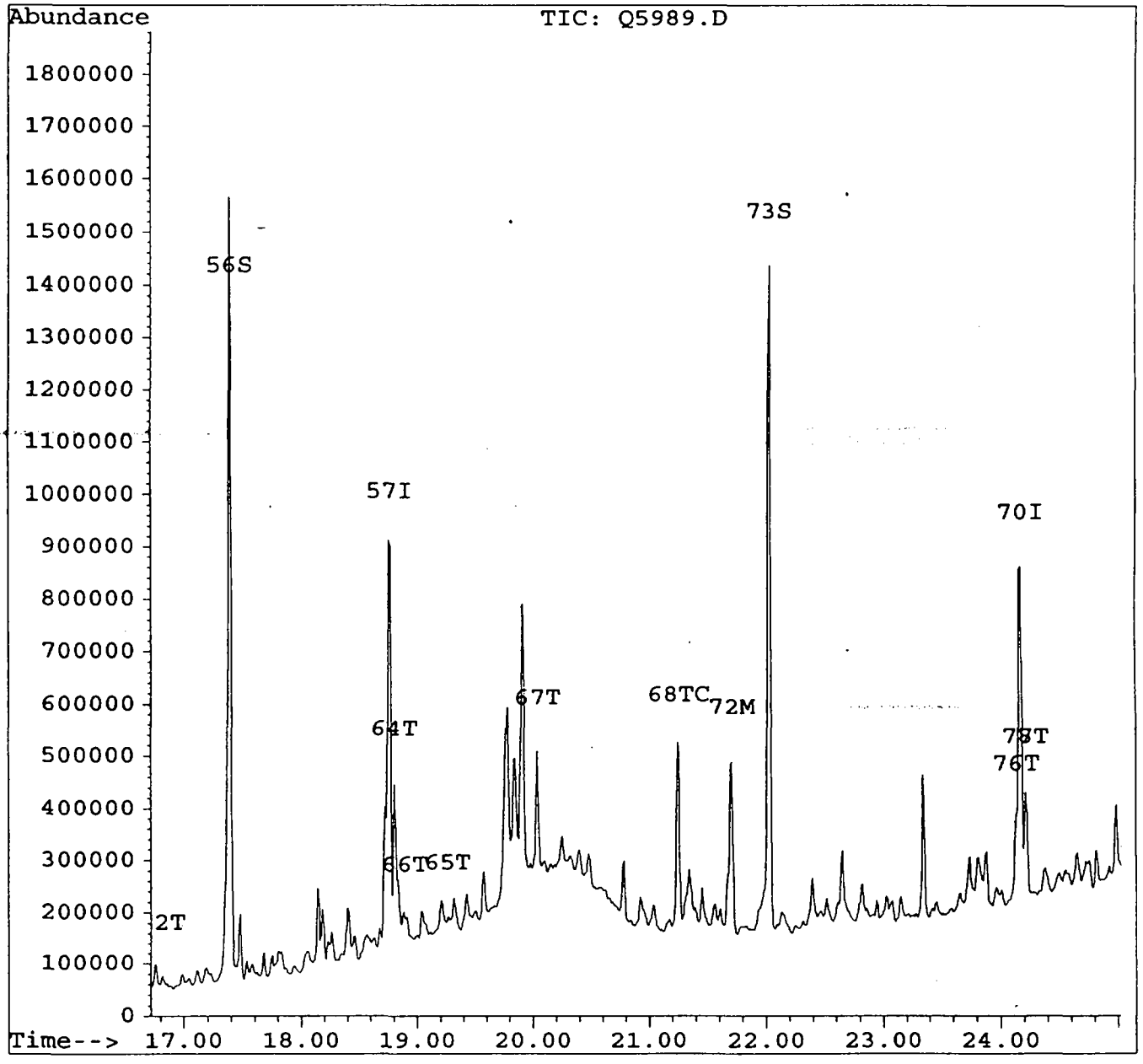


Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5989.D
Acq On : 29 Oct 99 19:05 hrs
Sample : 992732A-02
Misc : S-2-1-02 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:06 1999

Vial: 15 ~~0050~~
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 45.04

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

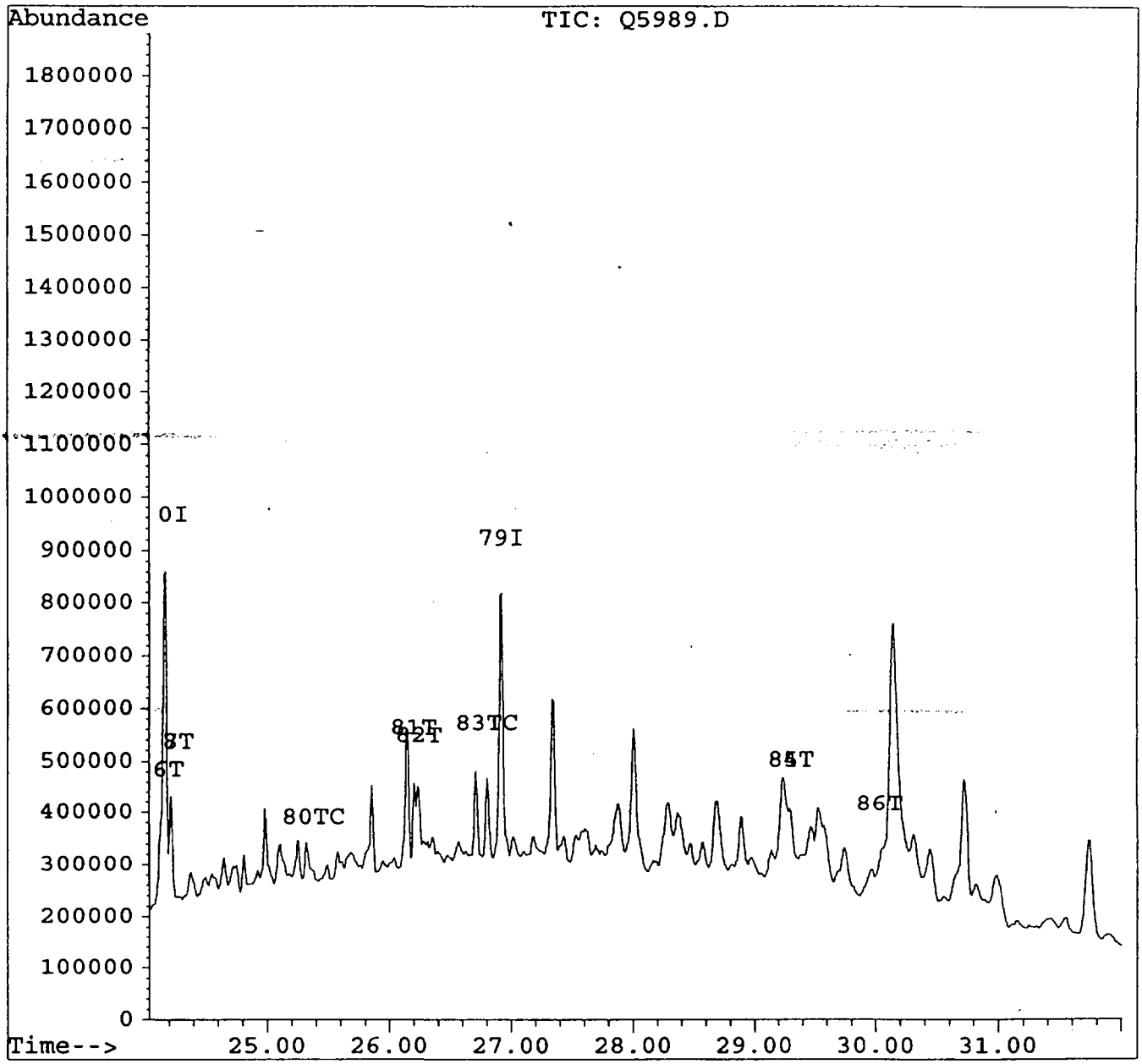


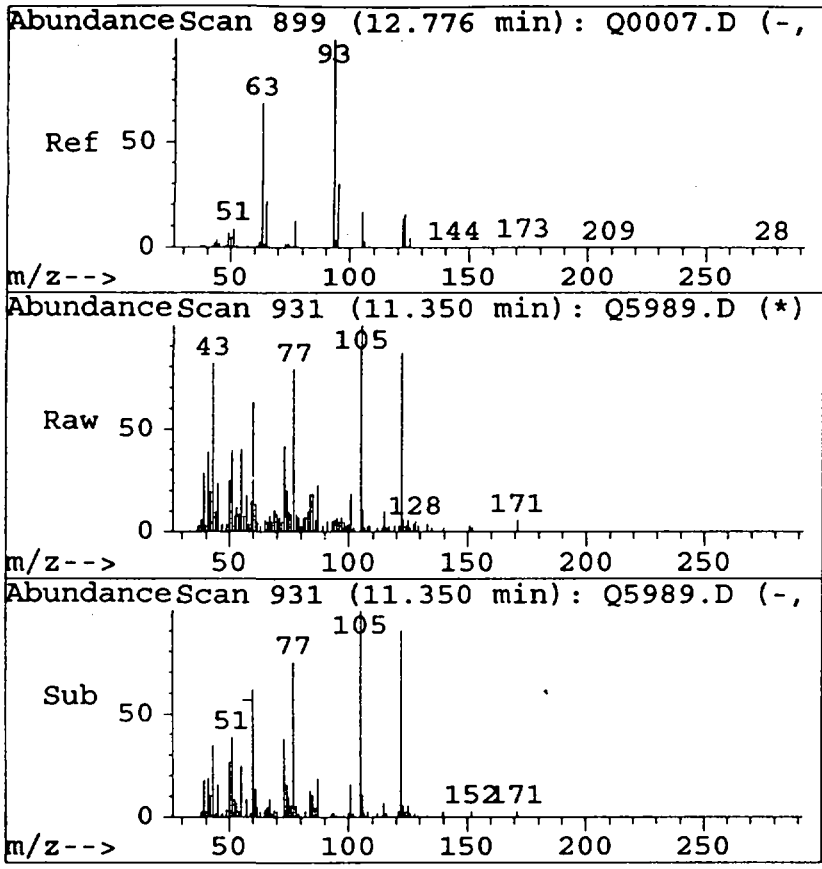
Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5989.D
Acq On : 29 Oct 99 19:05 hrs
Sample : 992732A-02
Misc : S-2-1-02 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:06 1999

Vial: 15
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 45.04

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

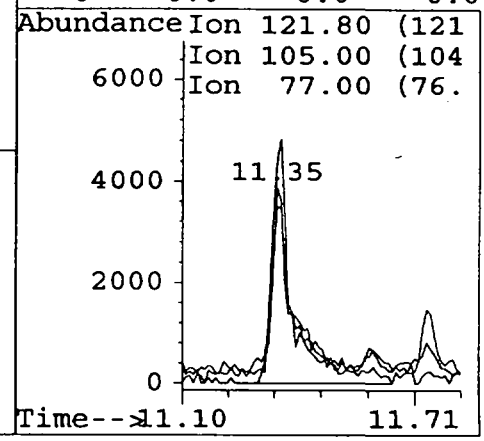


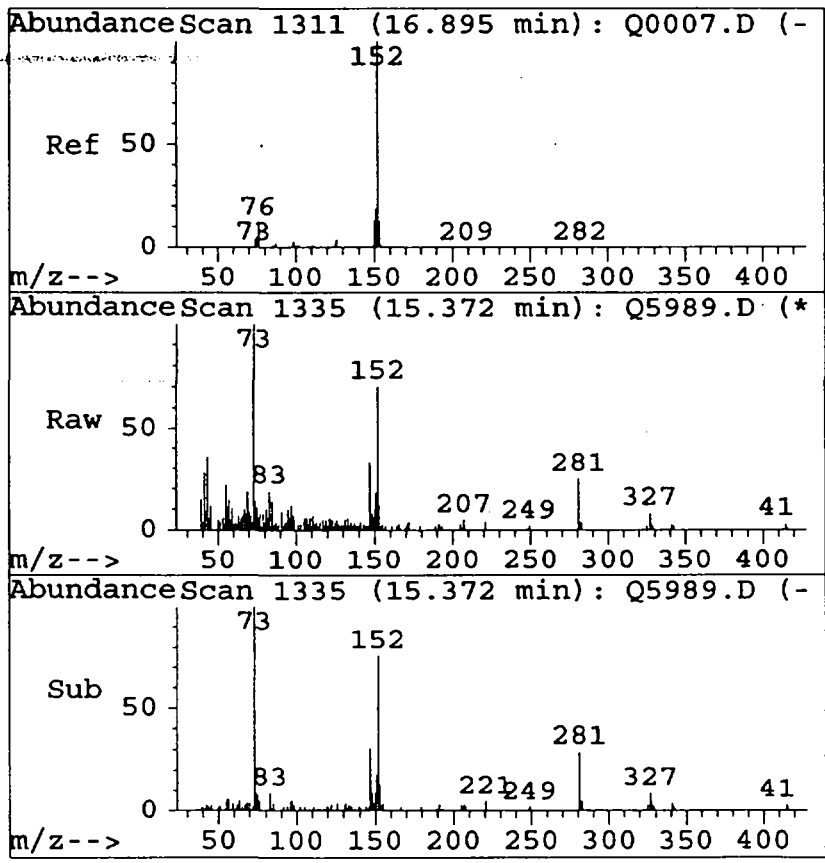


#26
Benzoic acid
Concen: 132.35 ug m
RT: 11.35 min Scan# 931
Delta R.T. -0.07 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:121.8 Resp: 15013

Ion	Ratio	Lower	Upper
122	100		
105	114.8	100.5	150.8
77	90.6	71.0	106.5
0	0.0	0.0	0.0

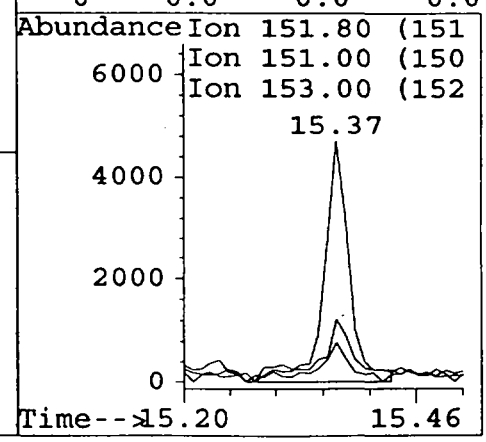


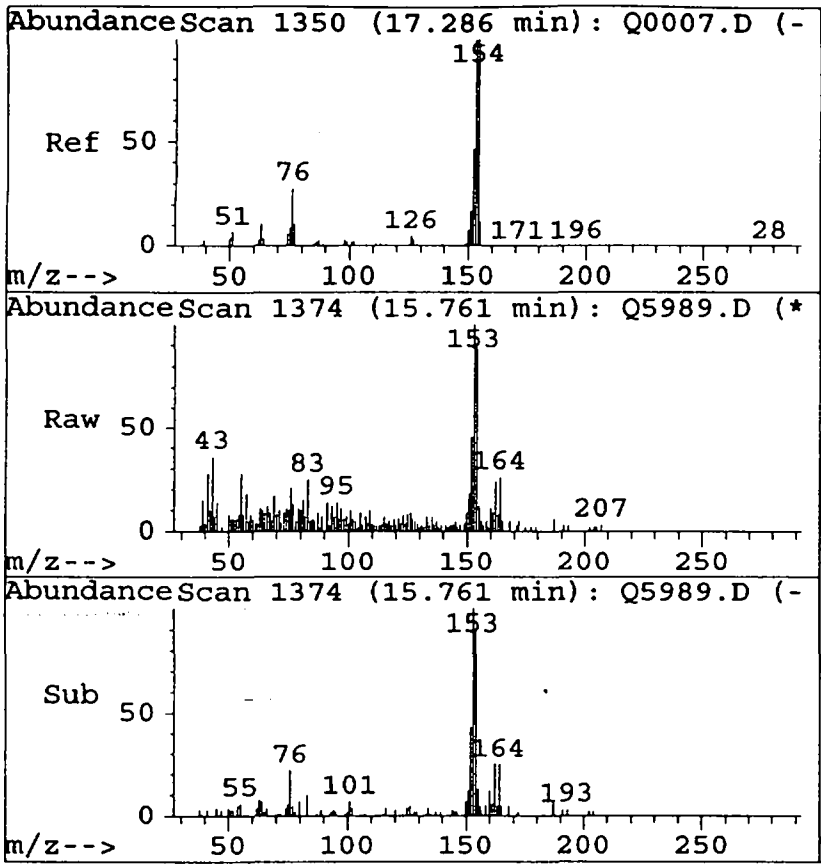


#43
Acenaphthylene
Concen: 20.47 ug
RT: 15.37 min Scan# 1335
Delta R.T. 0.01 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:151.8 Resp: 9106

Ion	Ratio	Lower	Upper
152	100		
151	26.0	0.0	39.1
153	13.9	0.0	35.5
0	0.0	0.0	0.0

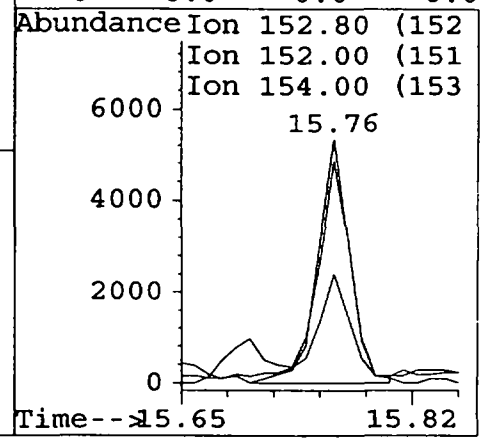


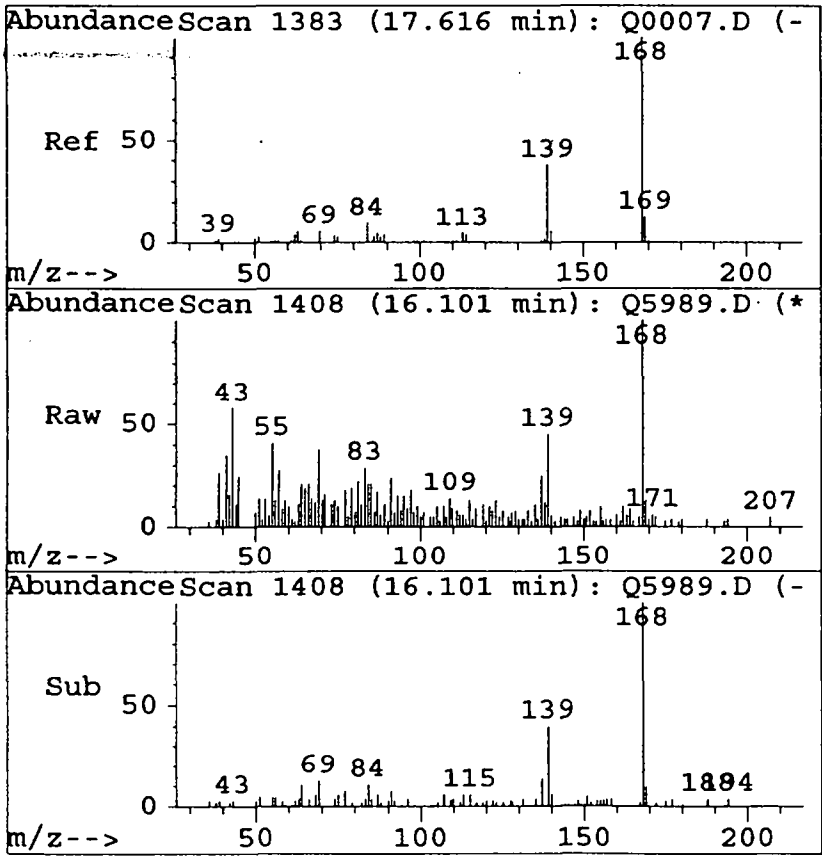


#46
Acenaphthene
Concen: 34.17 ug
RT: 15.76 min Scan# 1374
Delta R.T. -0.00 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:152.8 Resp: 8588

Ion	Ratio	Lower	Upper
153	100		
152	42.2	25.4	65.4
154	88.7	86.4	126.4
0	0.0	0.0	0.0

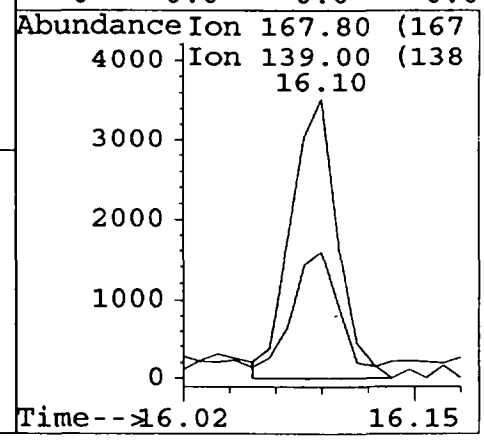


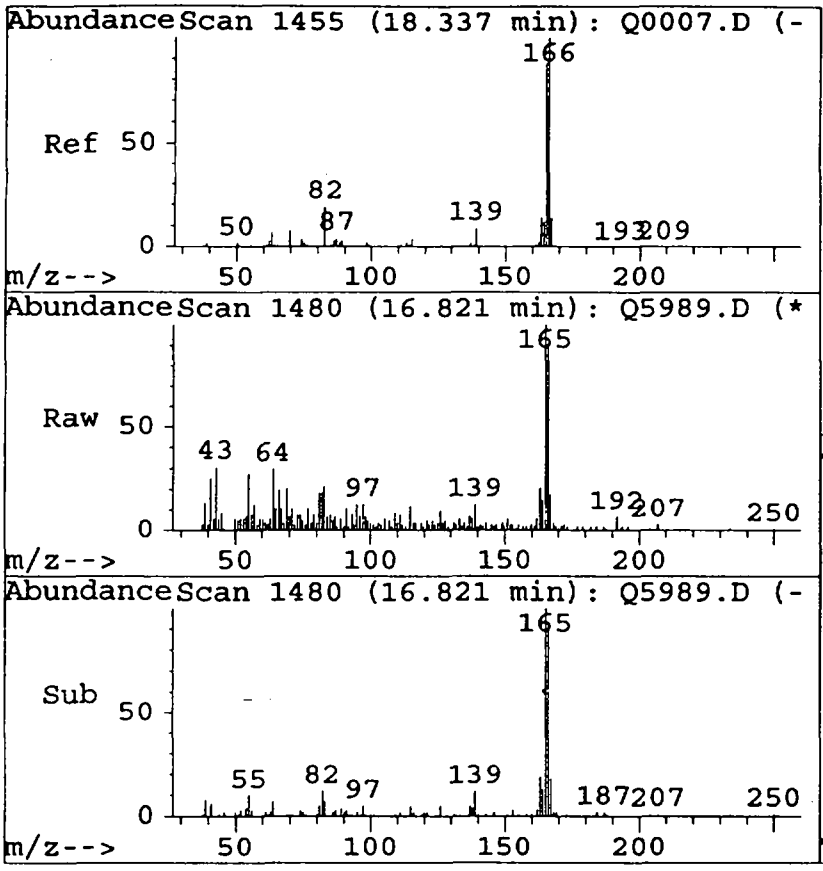


#49
Dibenzofuran
Concen: 17.31 ug
RT: 16.10 min Scan# 1408
Delta R.T. -0.00 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:167.8 Resp: 6479

Ion	Ratio	Lower	Upper
168	100		
139	40.9	16.8	56.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

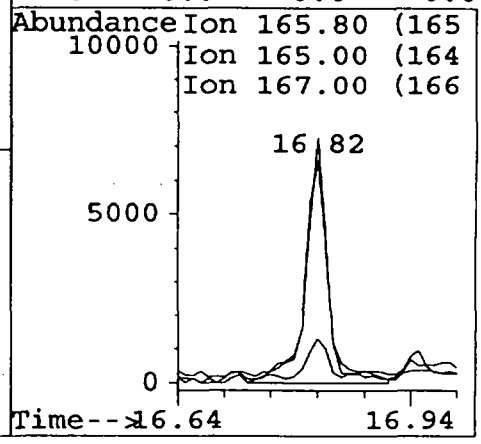


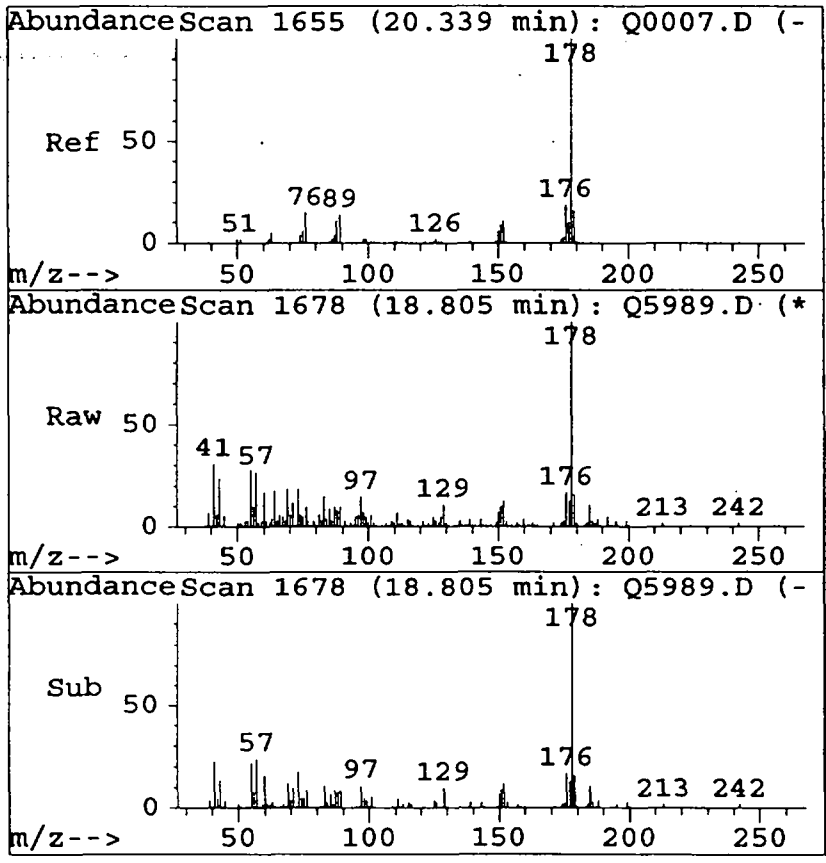


#52
Fluorene
Concen: 50.82 ug 0054
RT: 16.82 min Scan# 1480
Delta R.T. -0.01 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:165.8 Resp: 13588

Ion	Ratio	Lower	Upper
166	100		
165	106.2	63.4	103.4#
167	18.0	0.0	35.0
0	0.0	0.0	0.0

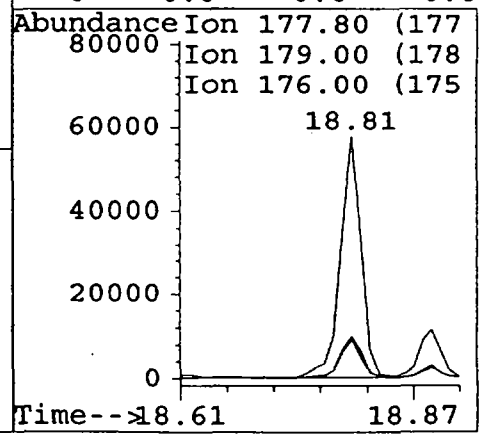


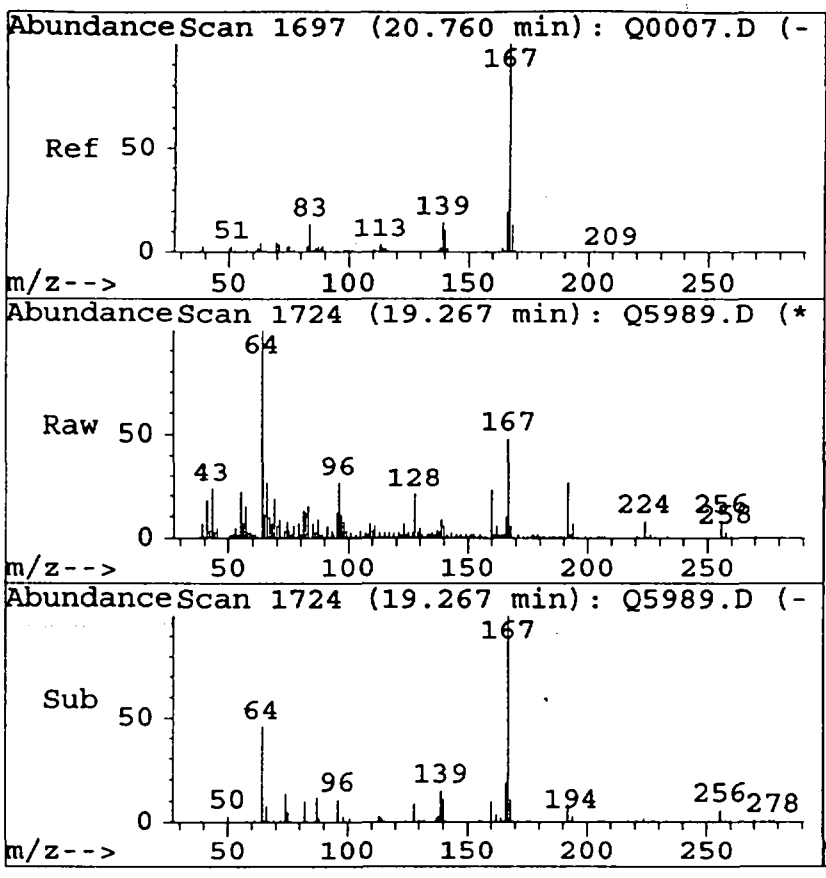


#64
Phenanthrene
Concen: 304.24 ug
RT: 18.81 min Scan# 1678
Delta R.T. -0.00 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:177.8 Resp: 90751

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	37.1
176	17.1	0.0	38.4
0	0.0	0.0	0.0

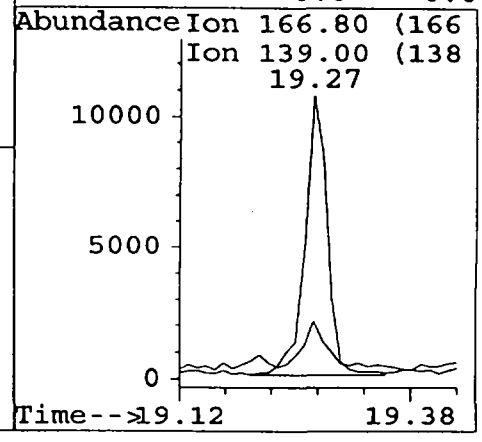


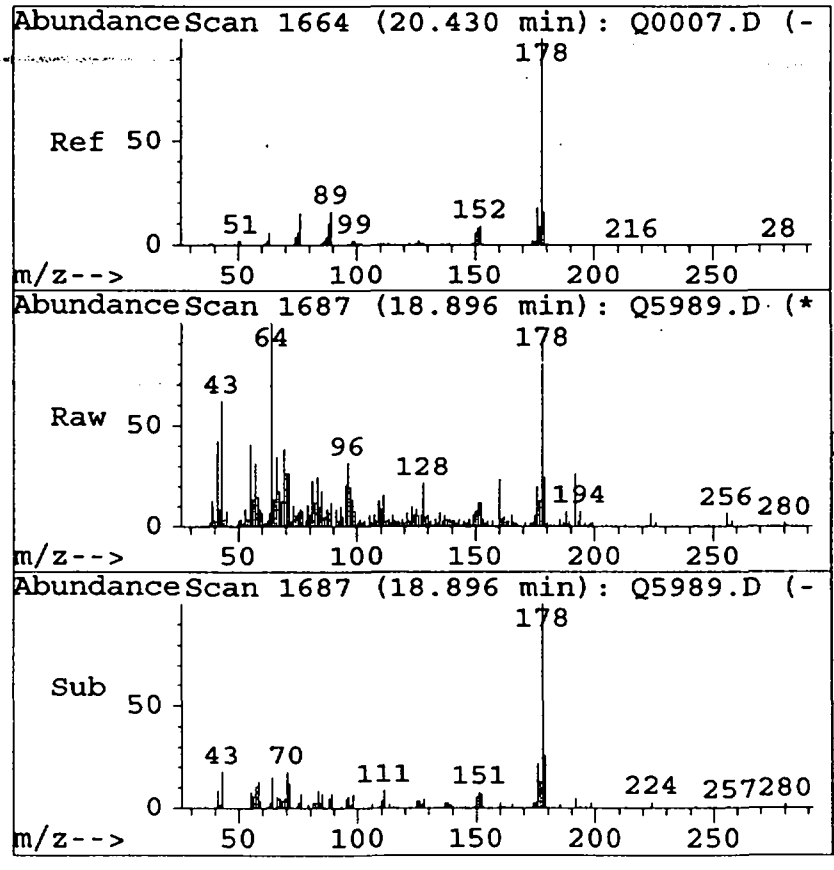


#65
Carbazole
Concen: 53.44 ug
RT: 19.27 min Scan# 1724
Delta R.T. 0.00 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:166.8 Resp: 18369

Ion	Ratio	Lower	Upper
167	100		
139	15.5	10.6	15.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

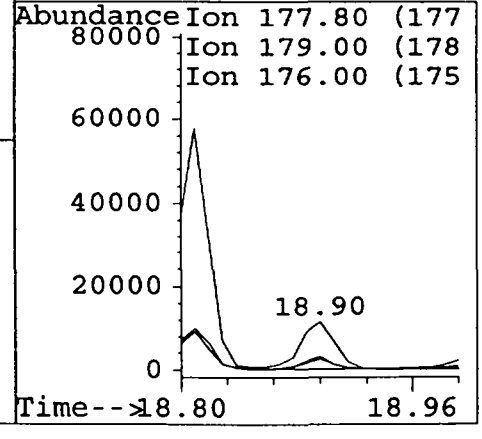


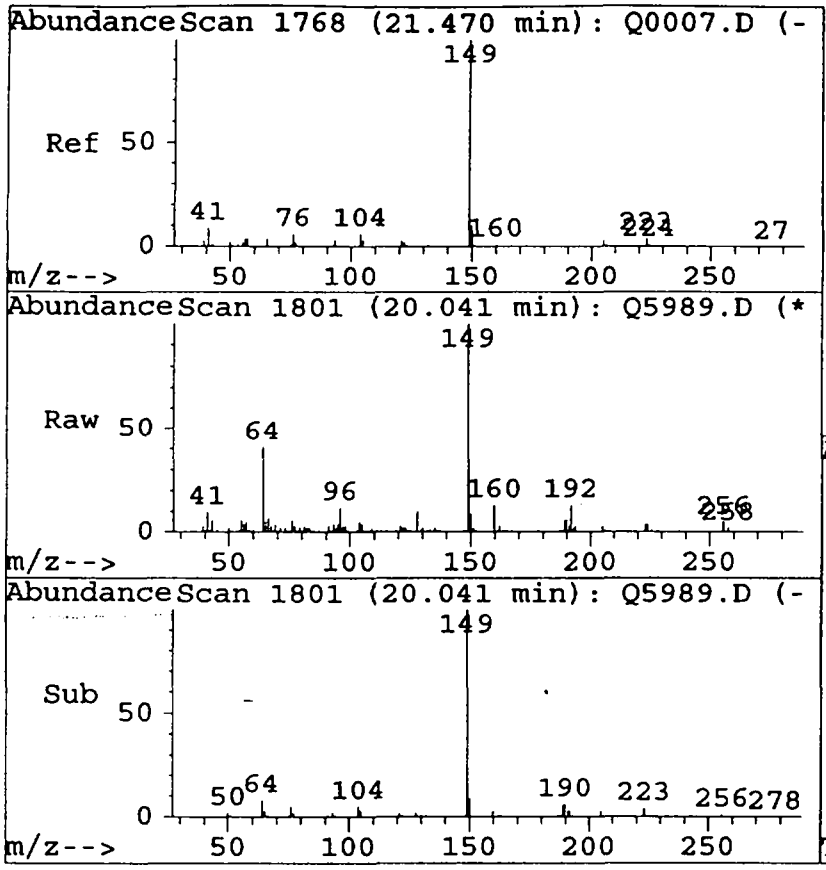


#66
Anthracene
Concen: 64.19 ug
RT: 18.90 min Scan# 1687
Delta R.T. -0.00 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:177.8 Resp: 19319

Ion	Ratio	Lower	Upper
178	100		
179	25.3	0.0	37.5
176	22.1	0.0	38.0
0	0.0	0.0	0.0

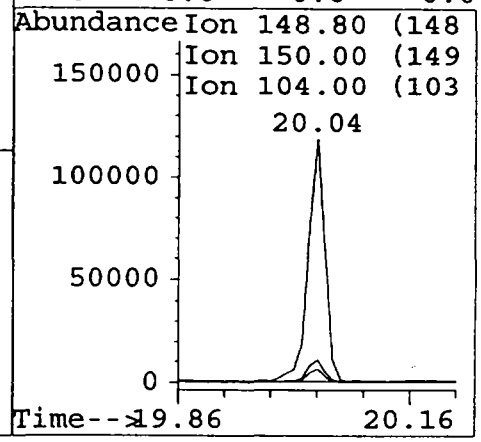


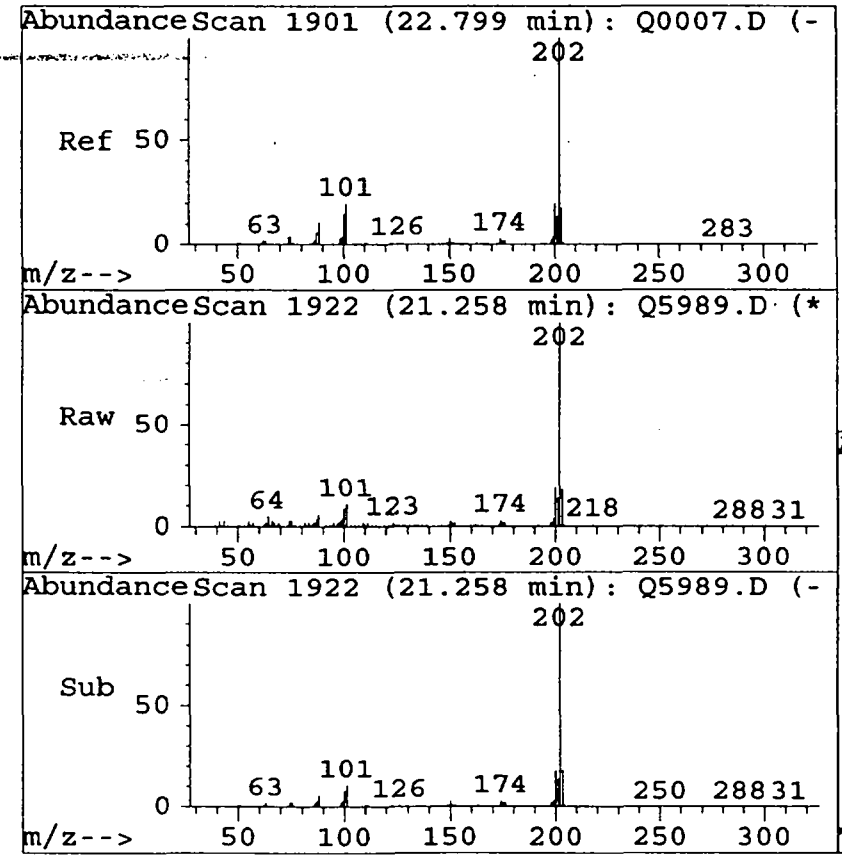


#67
Di-n-butylphthalate
Concen: 350.49 ug
RT: 20.04 min Scan# 1801
Delta R.T. 0.01 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:148.8 Resp: 179451

Ion	Ratio	Lower	Upper
149	100		
150	9.0	0.0	31.5
104	5.4	0.0	25.2
0	0.0	0.0	0.0

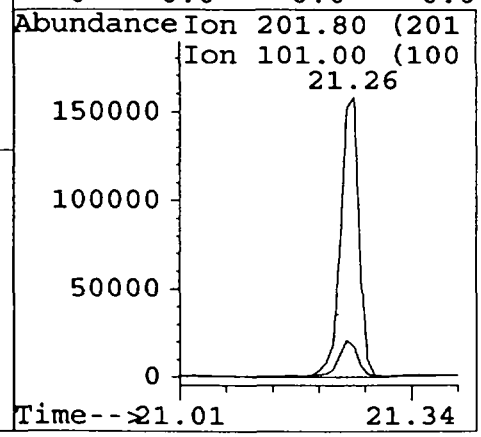


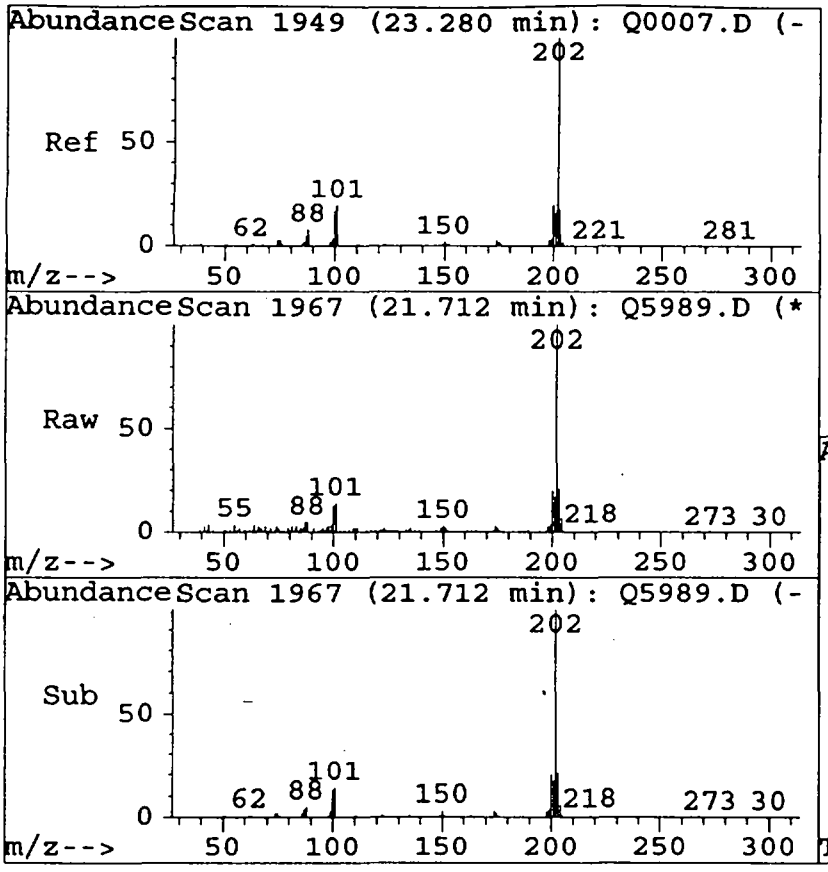


#68
Fluoranthene
Concen: 786.94 ug
RT: 21.26 min Scan# 1922
Delta R.T. 0.02 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:201.8 Resp: 290760

Ion	Ratio	Lower	Upper
202	100		
101	10.7	0.0	38.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

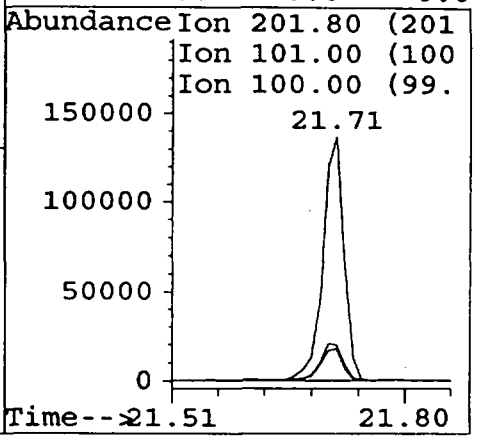


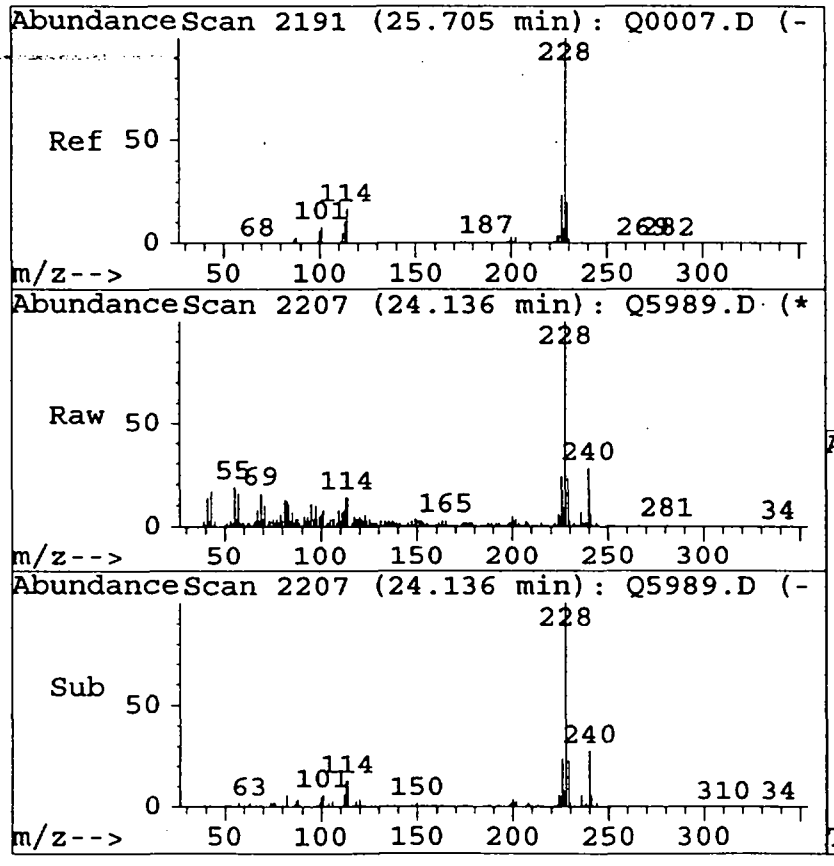


#72
Pyrene
Concen: 832.05 ug
RT: 21.71 min Scan# 1967
Delta R.T. 0.00 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:201.8 Resp: 242900

Ion	Ratio	Lower	Upper
202	100		
101	13.9	2.7	42.7
100	12.6	0.0	37.5
0	0.0	0.0	0.0

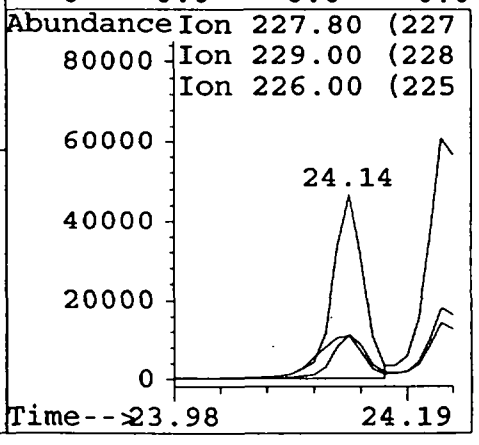


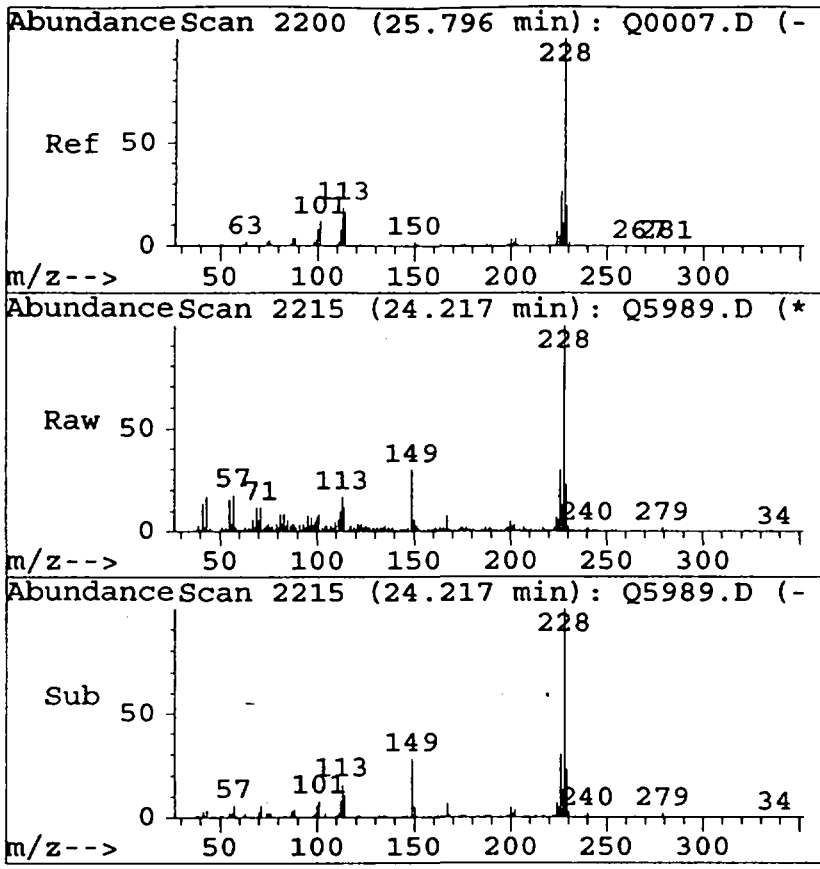


#76
Benzo(a)anthracene
Concen: 339.47 ug
RT: 24.14 min Scan# 2207
Delta R.T. 0.01 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:227.8 Resp: 87474

Ion	Ratio	Lower	Upper
228	100		
229	22.7	1.7	41.7
226	23.8	4.8	44.8
0	0.0	0.0	0.0

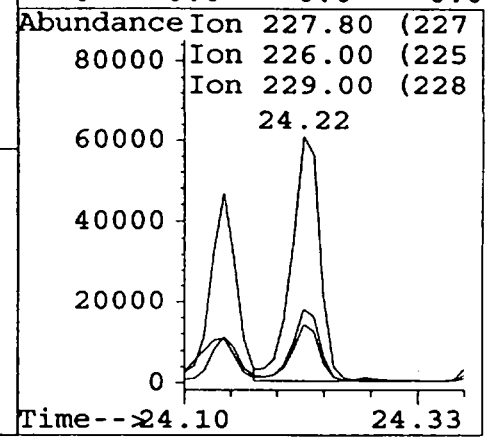


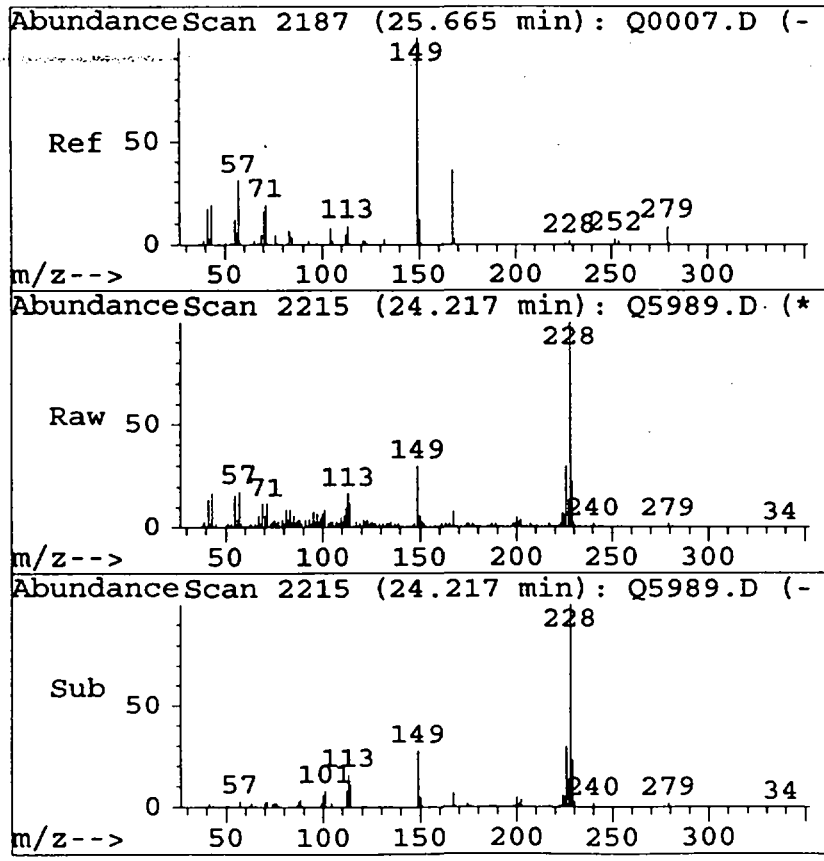


#77
Chrysene
Concen: 588.67 ug
RT: 24.22 min Scan# 2215
Delta R.T. -0.01 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:227.8 Resp: 121406

Ion	Ratio	Lower	Upper
228	100		
226	29.3	7.6	47.6
229	22.8	2.2	42.2
0	0.0	0.0	0.0

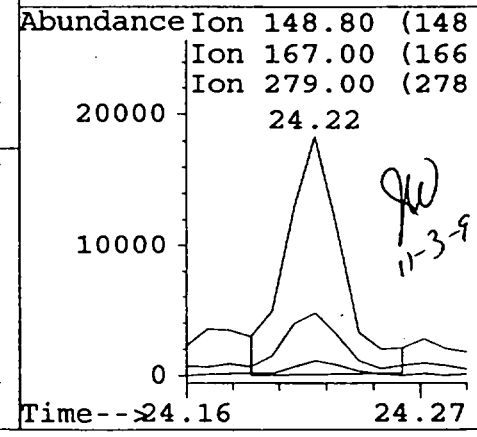




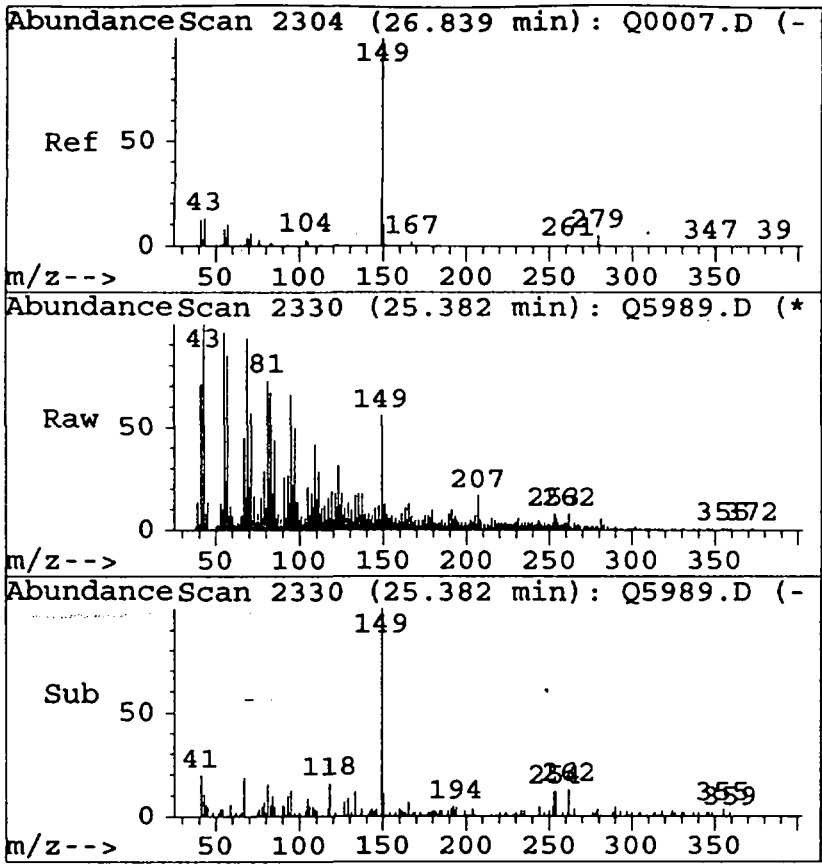
#78
bis(2-Ethylhexyl)phthalate
Concen: 164.43 ug m
RT: 24.22 min Scan# 2215
Delta R.T. 0.01 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:148.8 Resp: 32768

Ion	Ratio	Lower	Upper
149	100		
167	25.9	16.4	56.4
279	6.0	0.0	28.7
0	0.0	0.0	0.0



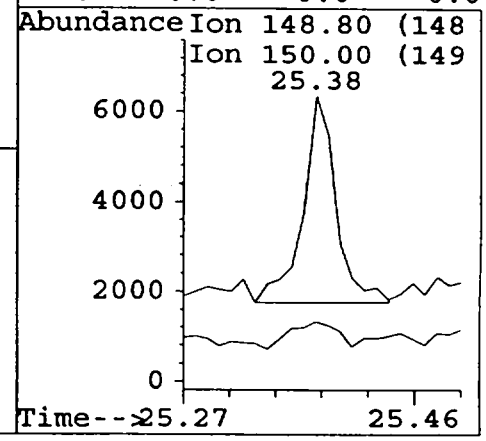
11-3-99

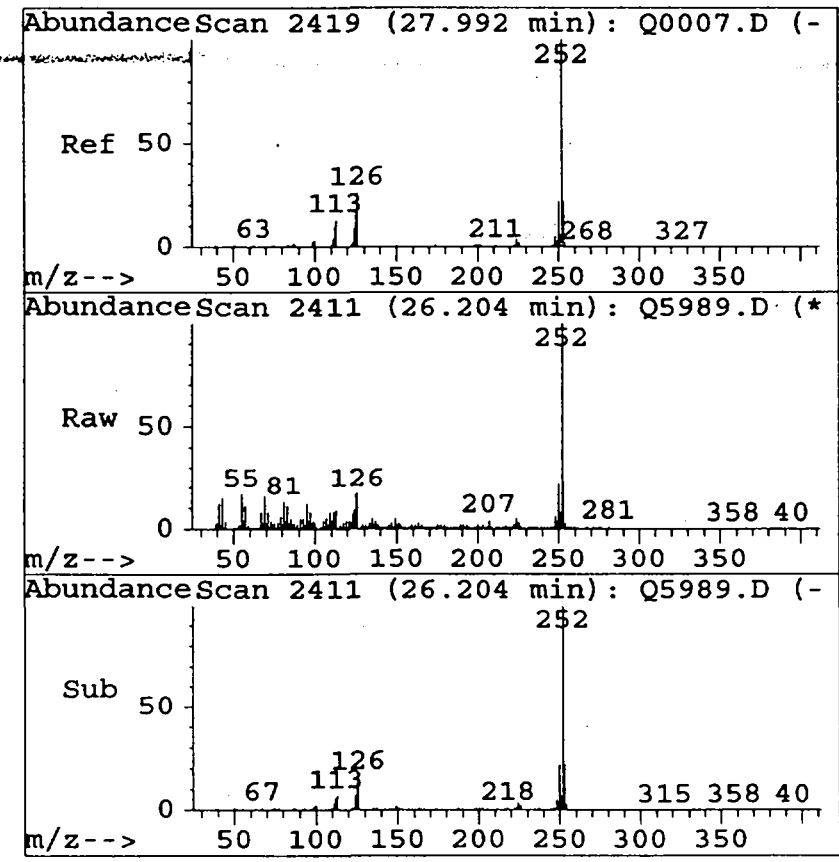


#80
Di-n-octylphthalate
Concen: 18.75 ug
RT: 25.38 min Scan# 2330
Delta R.T. 0.01 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:148.8 Resp: 8771

Ion	Ratio	Lower	Upper
149	100		
150	10.6	0.0	32.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

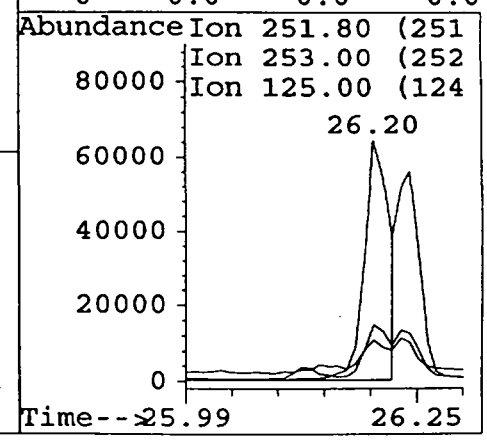


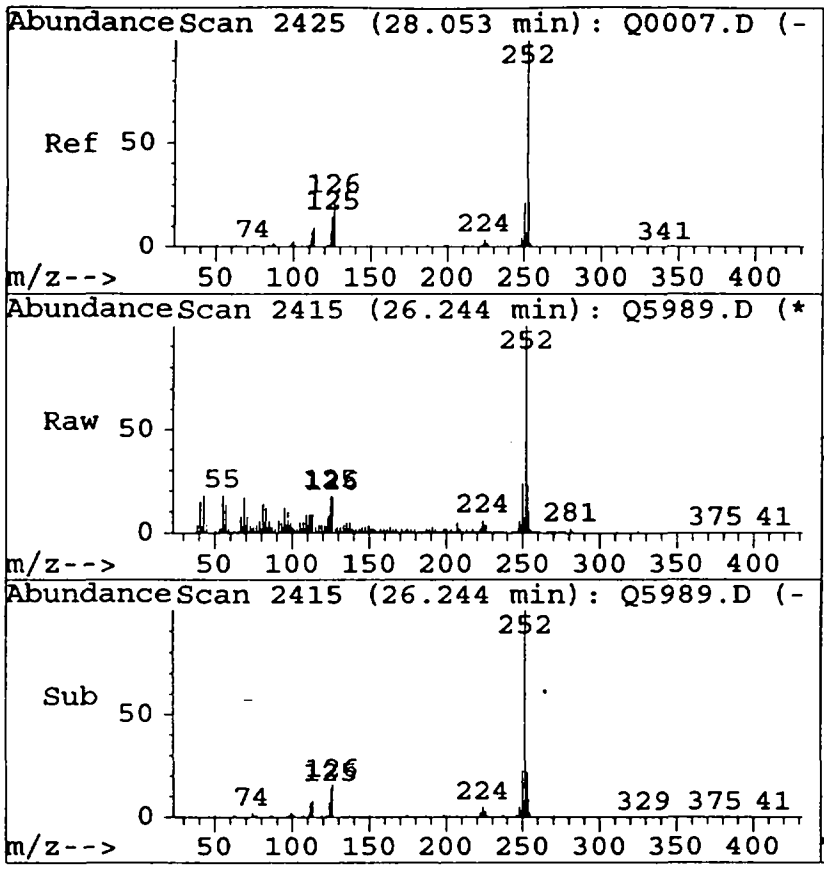


#81
Benzo(b)fluoranthene
Concen: 375.41 ug
RT: 26.20 min Scan# 2411
Delta R.T. -0.01 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:251.8 Resp: 126422

Ion	Ratio	Lower	Upper
252	100		
253	22.0	4.4	44.4
125	13.0	0.0	38.4
0	0.0	0.0	0.0

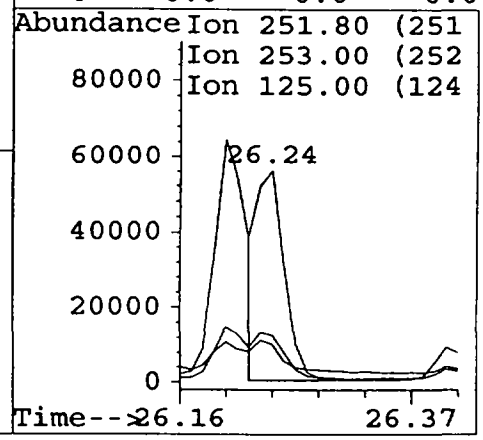


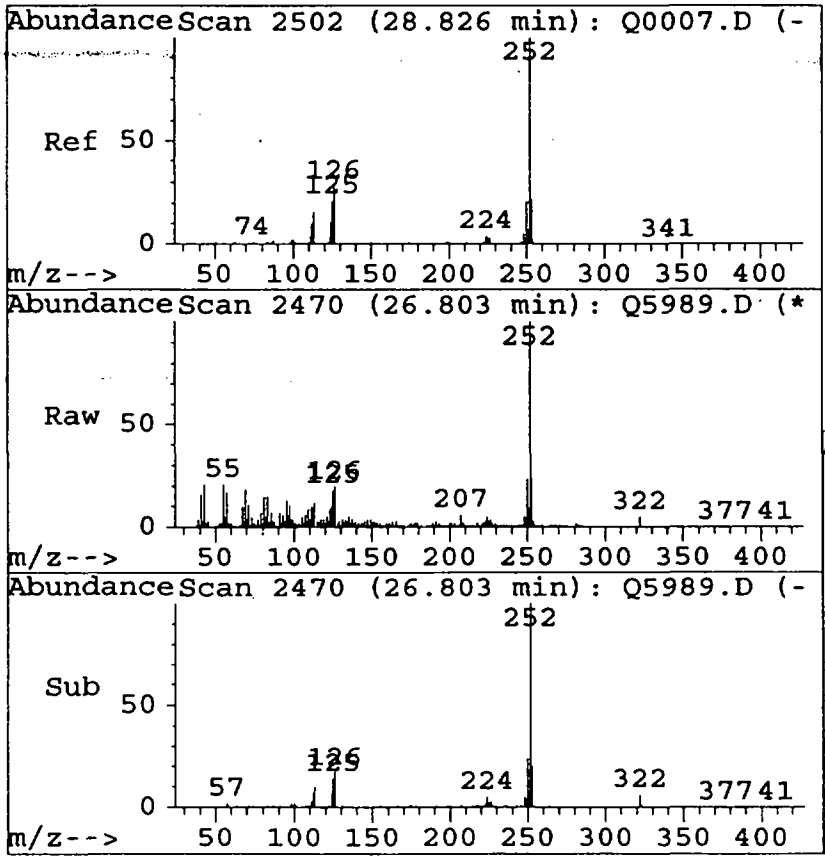


#82
Benzo(k)fluoranthene
Concen: 480.62 ug
RT: 26.24 min Scan# 2415
Delta R.T. -0.01 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:251.8 Resp: 93077

Ion	Ratio	Lower	Upper
252	100		
253	20.9	4.5	44.5
125	13.5	0.0	37.6
0	0.0	0.0	0.0

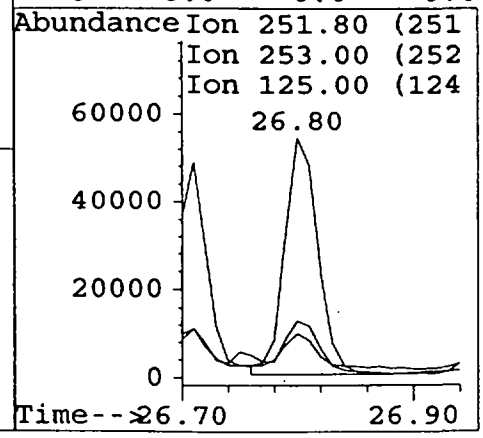


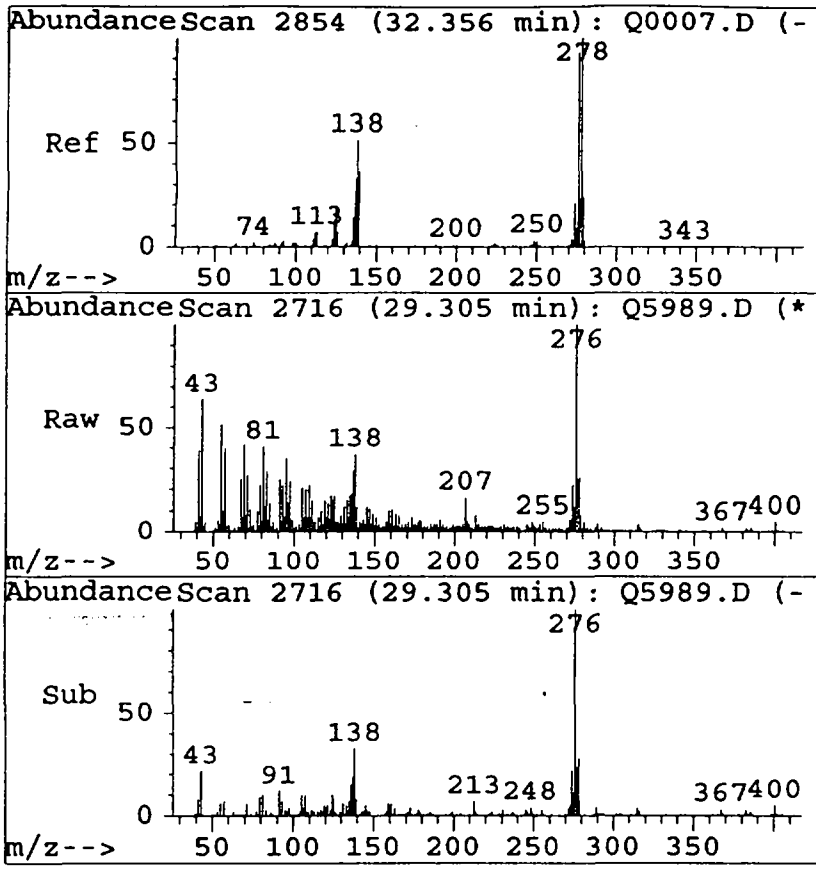


#83
Benzo(a)pyrene
Concen: 403.81 ug
RT: 26.80 min Scan# 2470
Delta R.T. 0.00 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:251.8 Resp: 106661

Ion	Ratio	Lower	Upper
252	100		
253	22.7	3.9	43.9
125	14.8	0.0	39.6
0	0.0	0.0	0.0

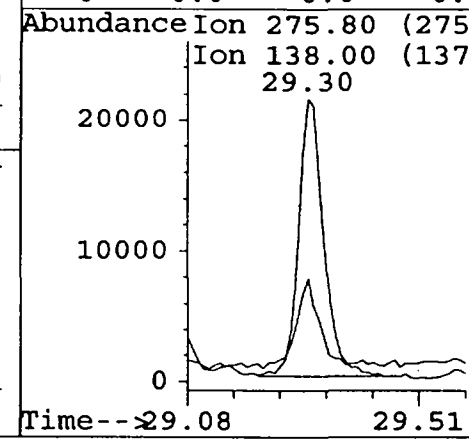


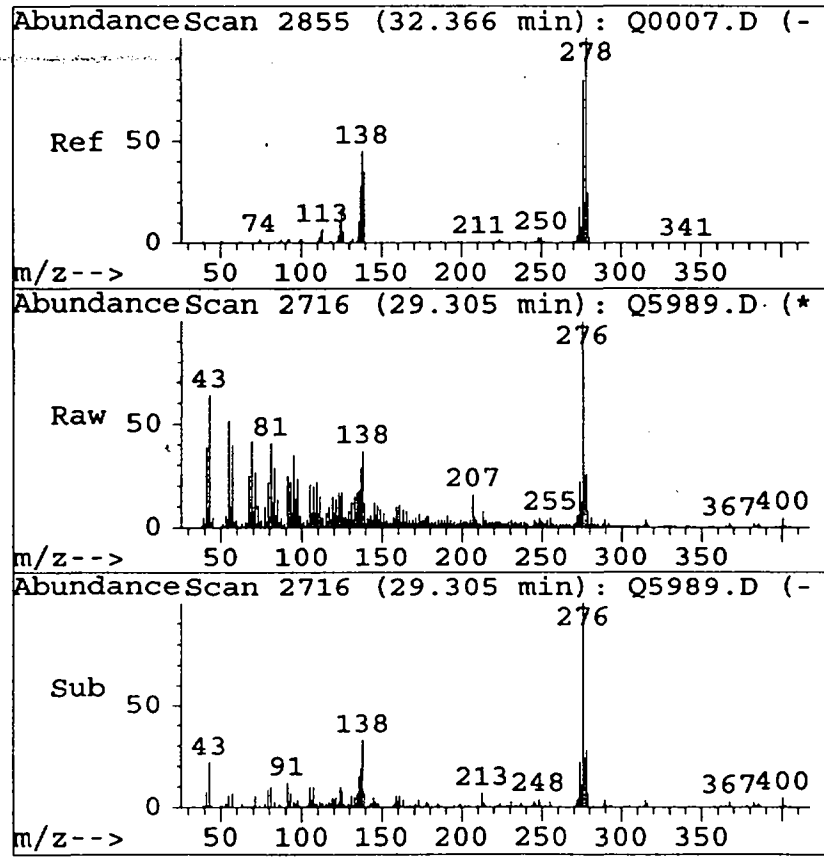


#84
Indeno(1,2,3-cd)pyrene
Concen: 223.87 ug
RT: 29.30 min Scan# 2716
Delta R.T. 0.01 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:275.8 Resp: 68889

Ion	Ratio	Lower	Upper
276	100		
138	30.8	36.8	76.8#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

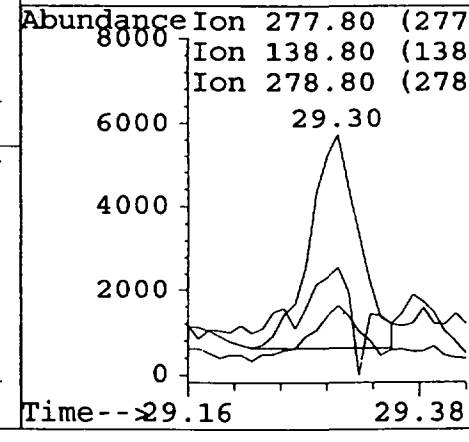


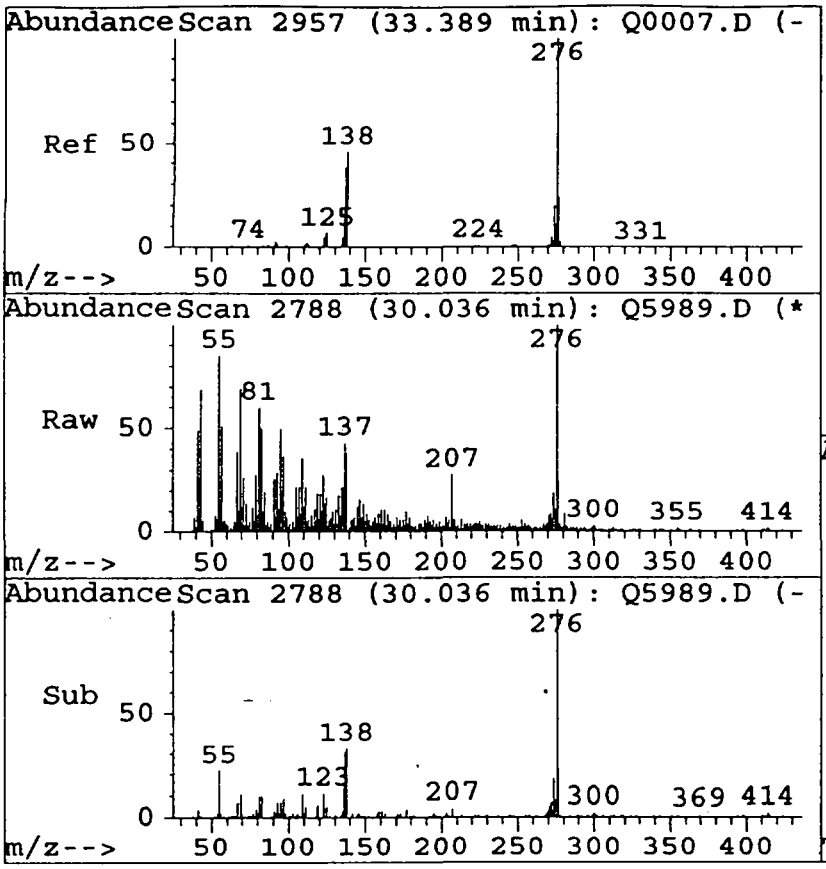


#85
Dibenzo(a,h)anthracene
Concen: 63.17 ug
RT: 29.30 min Scan# 2716
Delta R.T. 0.01 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:277.8 Resp: 16421

Ion	Ratio	Lower	Upper
278	100		
139	30.9	12.0	52.0
279	25.6	4.7	44.7
0	0.0	0.0	0.0

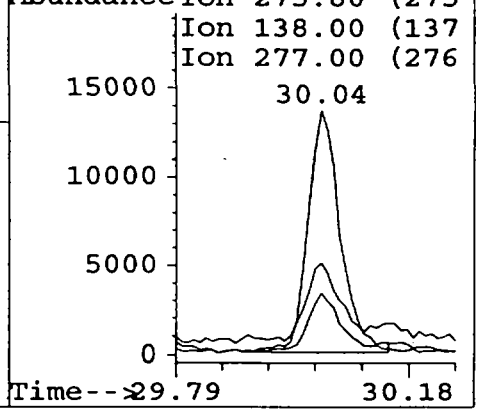




#86
Benzo(g,h,i)perylene ~~0062~~
Concen: 168.25 ug
RT: 30.04 min Scan# 2788
Delta R.T. 0.03 min
Lab File: Q5989.D
Acq: 29 Oct 99 19:05 hrs

Tgt Ion:275.8 Resp: 50723

Ion	Ratio	Lower	Upper
276	100		
138	30.1	27.8	67.8
277	23.3	5.1	45.1
0	0.0	0.0	0.0



6B
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Instrument ID: HP5971Q Calibration Date(s): 10/22/99 _____

Calibration Times: 1543 1838

LAB FILE ID: RRF20 = >Q5863 RRF50 = >Q5864
RRF80 = >Q5865 RRF120= >Q5866 RRF160= >Q5867

COMPOUND		RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
Phenol	*	1.971	1.696	1.596	1.333	1.071	1.533	22.5	*
bis(2-Chloroethyl)ether	*	0.903	0.793	0.741	0.657	0.571	0.733	17.3	*
2-Chlorophenol	*	1.376	1.240	1.182	1.087	0.948	1.167	13.8	*
1,3-Dichlorobenzene	*	1.631	1.516	1.388	1.244	1.159	1.388	13.9	*
1,4-Dichlorobenzene	*	1.390	1.323	1.290	1.159	1.036	1.240	11.4	*
Benzyl alcohol	*	0.966	0.900	0.822	0.679	0.582	0.790	20.0	*
1,2-Dichlorobenzene	*	1.420	1.206	1.128	1.002	0.864	1.124	18.7	*
2-Methylphenol	*	1.273	1.136	1.059	0.963	0.836	1.053	15.8	*
2,2'-oxybis(1-Chloropropane)	*	1.230	1.064	0.987	0.844	0.730	0.971	20.0	*
4-Methylphenol	*	1.295	1.092	1.028	0.922	0.796	1.027	18.2	*
N-Nitroso-di-n-propylamine	*	0.927	0.762	0.703	0.625	0.539	0.711	20.6	*
Hexachloroethane	*	0.573	0.539	0.516	0.458	0.403	0.498	13.6	*
Nitrobenzene	*	0.425	0.383	0.362	0.332	0.293	0.359	13.9	*
Isophorone	*	0.956	0.854	0.804	0.767	0.684	0.813	12.4	*
2-Nitrophenol	*	0.283	0.275	0.266	0.257	0.230	0.262	7.8	*
2,4-Dimethylphenol	*	0.382	0.349	0.344	0.332	0.284	0.338	10.5	*
Benzoic acid	*	0.214	0.246	0.265	0.267	0.222	0.243	10.0	*
bis(2-Chloroethoxy)methane	*	0.556	0.504	0.473	0.444	0.388	0.473	13.3	*
2,4-Dichlorophenol	*	0.359	0.322	0.311	0.297	0.263	0.310	11.3	*
1,2,4-Trichlorobenzene	*	0.326	0.303	0.292	0.271	0.246	0.288	10.6	*
Naphthalene	*	0.988	0.893	0.869	0.800	0.698	0.850	12.7	*
4-Chloroaniline	*	0.498	0.456	0.422	0.391	0.365	0.426	12.3	*
Hexachlorobutadiene	*	0.177	0.172	0.167	0.159	0.143	0.164	8.1	*
4-Chloro-3-methylphenol	*	0.398	0.363	0.352	0.328	0.286	0.345	12.1	*
2-Methylnaphthalene	*	0.714	0.578	0.541	0.498	0.435	0.553	18.9	*
Hexachlorocyclopentadiene	*	0.044	0.118	0.151	0.191	0.214	0.144	46.4	*
2,4,6-Trichlorophenol	*	0.408	0.390	0.381	0.369	0.320	0.374	8.9	*
2,4,5-Trichlorophenol	*	0.412	0.375	0.366	0.344	0.307	0.361	10.8	*
2-Chloronaphthalene	*	1.112	0.986	0.941	0.889	0.771	0.940	13.3	*
2-Nitroaniline	*	0.405	0.377	0.363	0.360	0.307	0.362	9.9	*
Dimethylphthalate	*	1.642	1.501	1.421	1.328	1.180	1.414	12.3	*
Acenaphthylene	*	2.089	1.846	1.725	1.580	1.360	1.720	16.0	*
2,6-Dinitrotoluene	*	0.332	0.315	0.306	0.296	0.271	0.304	7.5	*
3-Nitroaniline	*	0.379	0.366	0.376	0.354	0.319	0.359	6.8	*
Acenaphthene	*	1.098	1.020	0.996	0.935	0.807	0.971	11.2	*
2,4-Dinitrophenol	*	0.101	0.149	0.182	0.199	0.192	0.165	24.5	*
4-Nitrophenol	*	0.204	0.202	0.196	0.196	0.181	0.196	4.6	*

* Compounds with required minimum RRF and maximum %RSD values.

6C
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Instrument ID: HP5971Q Calibration Date(s): 10/22/99 _____

Calibration Times: 1543 1838

LAB FILE ID: RRF20 = >Q5863 RRF50 = >Q5864
RRF80 = >Q5865 RRF120= >Q5866 RRF160= >Q5867

COMPOUND		RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
Dibenzofuran	*	1.724	1.541	1.444	1.342	1.184	1.447	14.1	*
2,4-Dinitrotoluene	*	0.489	0.455	0.451	0.435	0.398	0.446	7.4	*
Diethylphthalate	*	1.786	1.557	1.485	1.359	1.190	1.475	15.1	*
4-Chlorophenyl-phenyl Ether	*	0.552	0.495	0.454	0.428	0.377	0.461	14.4	*
Fluorene	*	1.282	1.085	1.019	0.948	0.832	1.033	16.2	*
4-Nitroaniline	*	0.463	0.394	0.418	0.382	0.355	0.402	10.1	*
4,6-Dinitro-2-methylphenol	*	0.135	0.147	0.149	0.144	0.127	0.140	6.6	*
N-Nitrosodiphenylamine	*	0.535	0.473	0.438	0.407	0.361	0.443	14.9	*
4-Bromophenyl-phenylether	*	0.225	0.226	0.211	0.204	0.183	0.210	8.4	*
Hexachlorobenzene	*	0.259	0.245	0.238	0.231	0.207	0.236	8.2	*
Pentachlorophenol	*	0.132	0.141	0.140	0.139	0.131	0.137	3.5	*
Phenanthrene	*	0.937	0.891	0.879	0.828	0.698	0.847	10.8	*
Anthracene	*	1.010	0.917	0.840	0.799	0.706	0.854	13.5	*
Carbazole	*	1.169	1.054	0.988	0.904	0.765	0.976	15.6	*
Di-n-butylphthalate	*	1.812	1.574	1.470	1.328	1.083	1.453	18.7	*
Fluoranthene	*	1.243	1.118	1.079	0.985	0.820	1.049	15.1	*
Pyrene	*	1.361	1.303	1.250	1.224	1.246	1.277	4.3	*
Butylbenzylphthalate	*	0.738	0.643	0.650	0.618	0.538	0.637	11.2	*
3,3'-Dichlorobenzidine	*	0.545	0.512	0.521	0.479	0.435	0.498	8.6	*
Benzo(a)anthracene	*	1.198	1.143	1.162	1.108	1.024	1.127	5.9	*
Chrysene	*	0.937	0.920	0.886	0.888	0.879	0.902	2.8	*
bis(2-Ethylhexyl)phthalate	*	0.910	0.900	0.876	0.842	0.830	0.872	4.0	*
Di-n-octylphthalate	*	2.171	2.094	1.939	1.740	1.704	1.930	10.8	*
Benzo(b)fluoranthene	*	1.229	1.378	1.418	1.525	1.396	1.389	7.6	*
Benzo(k)fluoranthene	*	1.154	0.962	0.822	0.548	0.508	0.799	34.3	*
Benzo(a)pyrene	*	1.149	1.155	1.120	1.043	0.982	1.090	6.9	*
Indeno(1,2,3-cd)pyrene	*	1.174	1.214	1.277	1.325	1.356	1.269	6.0	*
Dibenz(a,h)anthracene	*	1.010	1.029	1.070	1.113	1.141	1.073	5.1	*
Benzo(g,h,i)perylene	*	1.059	1.180	1.265	1.348	1.367	1.244	10.2	*
Nitrobenzene-D5	*	0.487	0.450	0.439	0.412	0.375	0.433	9.7	*
2-Fluorobiphenyl	*	1.215	1.097	1.027	0.959	0.806	1.021	15.0	*
Terphenyl-D14	*	1.098	1.082	1.048	1.022	1.051	1.060	2.8	*
Phenol-D5	*	1.948	1.767	1.642	1.474	1.258	1.618	16.4	*
2-Fluorophenol	*	1.452	1.502	1.498	1.402	1.314	1.434	5.4	*
2,4,6-Tribromophenol	*	0.200	0.196	0.202	0.193	0.188	0.196	2.8	*

(1) Cannot be separated from Diphenylamine
* Compounds with required minimum RRF and maximum %RSD values.

Quantitation Report

001684

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 27 0100
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

All spectra and manual integrations for this sample have been reviewed and approved.
By: _____ Date: 10/25/99
Secondary review: _____ Date: 10/27/99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.12	152	208189	40.00 ug	0.00
20) Naphthalene-d8	12.09	136	754419	40.00 ug	0.00
35) Acenaphthene-d10	16.02	164	424057	40.00 ug	0.00
57) Phenanthrene-d10	19.08	188	732834	40.00 ug	0.00
70) Chrysene-d12	24.50	240	625943	40.00 ug	0.00
79) Perylene-d12	27.29	264	638693	40.00 ug	0.00

System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	6.42	112	151123	20.97 ug	10.48%
3) Phenol-d5	8.51	99	202791	20.56 ug	10.28%
21) Nitrobenzene-d5	10.48	82	183583	24.41 ug	24.41%
40) 2-Fluorobiphenyl	14.57	172	257566	24.85 ug	24.85%
56) 2,4,6-Tribromophenol	17.70	330	42348	21.53 ug	10.76%
73) Terphenyl-d14	22.33	244	343623	23.75 ug	23.75%

Target Compounds						Qvalue
4) Pyridine	2.96	52	110746	19.01 ug		85
5) N-Nitrosodimethylamine	2.97	42	83033	22.60 ug	#	77
6) Cyclohexanone	6.79	42	73371	25.69 ug		94
7) Phenol	8.54	94	205147	22.41 ug	m	84
8) Aniline	8.51	93	264565	28.11 ug	#	57
9) bis(2-Chloroethyl)ether	8.63	63	93998	22.42 ug		100
10) 2-Chlorophenol	8.75	128	143270	23.90 ug		89
11) 1,3-Dichlorobenzene	9.03	146	169762	24.79 ug		95
12) 1,4-Dichlorobenzene	9.16	146	144709	23.52 ug		99
13) Benzyl alcohol	9.53	108	100566	21.82 ug		99
14) 1,2-Dichlorobenzene	9.59	146	147804	26.10 ug		96
15) bis(2-Chloroisopropyl)ethe	9.84	45	128012	22.31 ug		63
16) 2-Methylphenol	9.85	108	132492	22.32 ug		95
17) Hexachloroethane	10.27	117	59618	22.90 ug		87
18) N-Nitroso-di-n-propylamine	10.17	70	96523	23.62 ug		97
19) 4-Methylphenol	10.18	108	134783	23.76 ug		97
22) Nitrobenzene	10.52	77	160365	25.36 ug		98
23) Isophorone	11.04	82	360504	24.13 ug		96
24) 2-Nitrophenol	11.27	139	106835	23.65 ug		92
25) 2,4-Dimethylphenol	11.39	107	144160	23.98 ug		95
26) Benzoic acid	11.66	122	80695	22.99 ug		97
27) bis(2-Chloroethoxy)methane	11.59	93	209757	24.18 ug		94
28) 2,4-Dichlorophenol	11.83	162	135561	24.11 ug		95
29) 1,2,4-Trichlorobenzene	12.00	180	123123	24.55 ug		100
30) Naphthalene	12.13	128	372616	25.05 ug		99
31) 4-Chloroaniline	12.35	127	187858	24.06 ug		97
32) Hexachlorobutadiene	12.54	225	66790	25.04 ug		97

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 27 0101
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33) 4-Chloro-3-methylphenol	13.50	107	150271	23.59 ug		99
34) 2-Methylnaphthalene	13.71	142	269195	27.36 ug		97
36) 2,4,5-Trichlorotoluene	13.70	159	123737	25.40 ug		96
37) Hexachlorocyclopentadiene	14.20	237	9351	4.39 ug		87
38) 2,4,6-Trichlorophenol	14.43	196	86438	23.28 ug		99
39) 2,4,5-Trichlorophenol	14.52	196	87279	23.47 ug		98
41) 2-Chloronaphthalene	14.78	162	235724	24.62 ug		96
42) 2-Nitroaniline	15.11	65	85923	22.21 ug		99
43) Acenaphthylene	15.69	152	442958	26.78 ug		98
44) Dimethylphthalate	15.54	163	348051	23.50 ug		98
45) 2,6-Dinitrotoluene	15.72	165	70357	21.36 ug		91
46) Acenaphthene	16.08	153	232826	23.43 ug		94
47) 3-Nitroaniline	16.02	138	80280	18.07 ug		94
48) 2,4-Dinitrophenol	16.23	184	21447	11.14 ug		90
49) Dibenzofuran	16.41	168	365515	25.74 ug		87
50) 2,4-Dinitrotoluene	16.54	165	103636	21.78 ug		98
51) 4-Nitrophenol	16.42	109	43169	18.18 ug	#	23
52) Fluorene	17.14	166	271895	24.76 ug		95
53) 4-Chlorophenyl-phenylether	17.14	204	117042	23.39 ug		97
54) Diethylphthalate	17.02	149	378649	24.59 ug		96
55) 4-Nitroaniline	17.31	138	98162	21.44 ug	#	82
58) 4,6-Dinitro-2-methylphenol	17.38	198	49413	20.49 ug		100
59) N-Nitrosodiphenylamine (1)	17.41	169	196008	26.15 ug		97
60) 1,2-Diphenylhydrazine	17.45	77	298761	25.90 ug		100
61) 4-Bromophenyl-phenylether	18.14	248	82322	24.51 ug		95
62) Hexachlorobenzene	18.44	284	94886	25.07 ug		97
63) Pentachlorophenol	18.84	266	48325	21.58 ug		96
64) Phenanthrene	19.12	178	343436	24.69 ug		98
65) Carbazole	19.58	167	428332	25.49 ug		99
66) Anthracene	19.21	178	370192	25.64 ug		99
67) Di-n-butylphthalate	20.33	149	664165	27.79 ug		97
68) Fluoranthene	21.57	202	455587	25.93 ug		89
69) Kepone	23.37	272	193502	18.59 ug		95
71) Benzidine	21.88	184	212145	23.10 ug		100
72) Pyrene	22.03	202	425988	23.65 ug		85
74) Butylbenzylphthalate	23.37	149	230832	19.14 ug		92
75) 3,3'-Dichlorobenzidine	24.44	252	170507	23.08 ug		98
76) Benzo(a)anthracene	24.46	228	374974	25.90 ug		98
77) Chrysene	24.55	228	293187	21.13 ug		98
78) bis(2-Ethylhexyl)phthalate	24.52	149	284678	23.77 ug		92
80) Di-n-octylphthalate	25.68	149	693369	26.65 ug		95
81) Benzo(b)fluoranthene	26.53	252	392527	20.55 ug		94
82) Benzo(k)fluoranthene	26.58	252	368586	31.73 ug		92

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 2[illegible] 0102
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
83)	Benzo(a)pyrene	27.17	252	367004	23.12 ug	94
84)	Indeno(1,2,3-cd)pyrene	29.84	276	374953	20.08 ug	73
85)	Dibenzo(a,h)anthracene	29.84	278	322557	20.86 ug	90
86)	Benzo(g,h,i)perylene	30.60	276	338201	18.65 ug	87

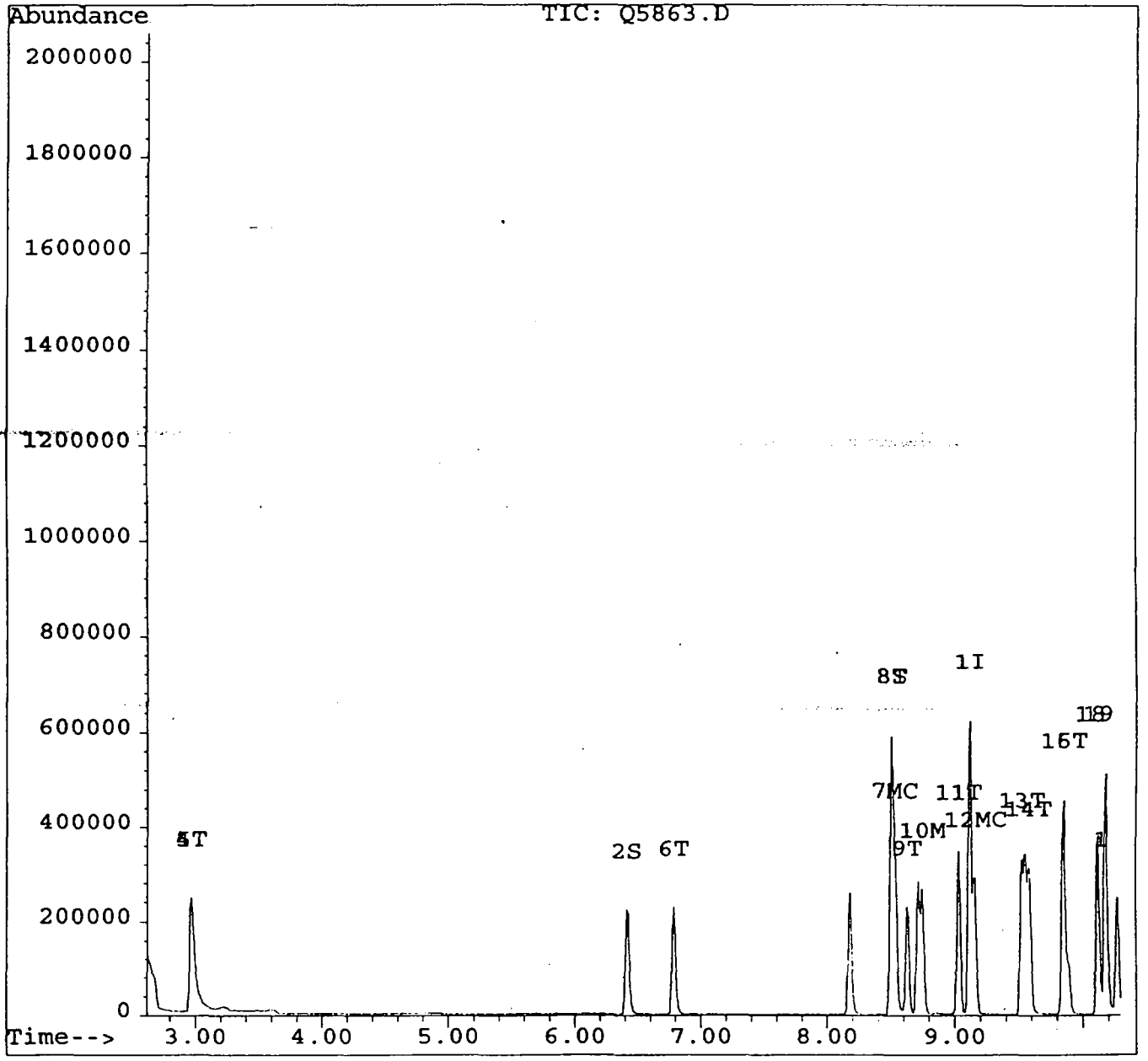
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 27 0103
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

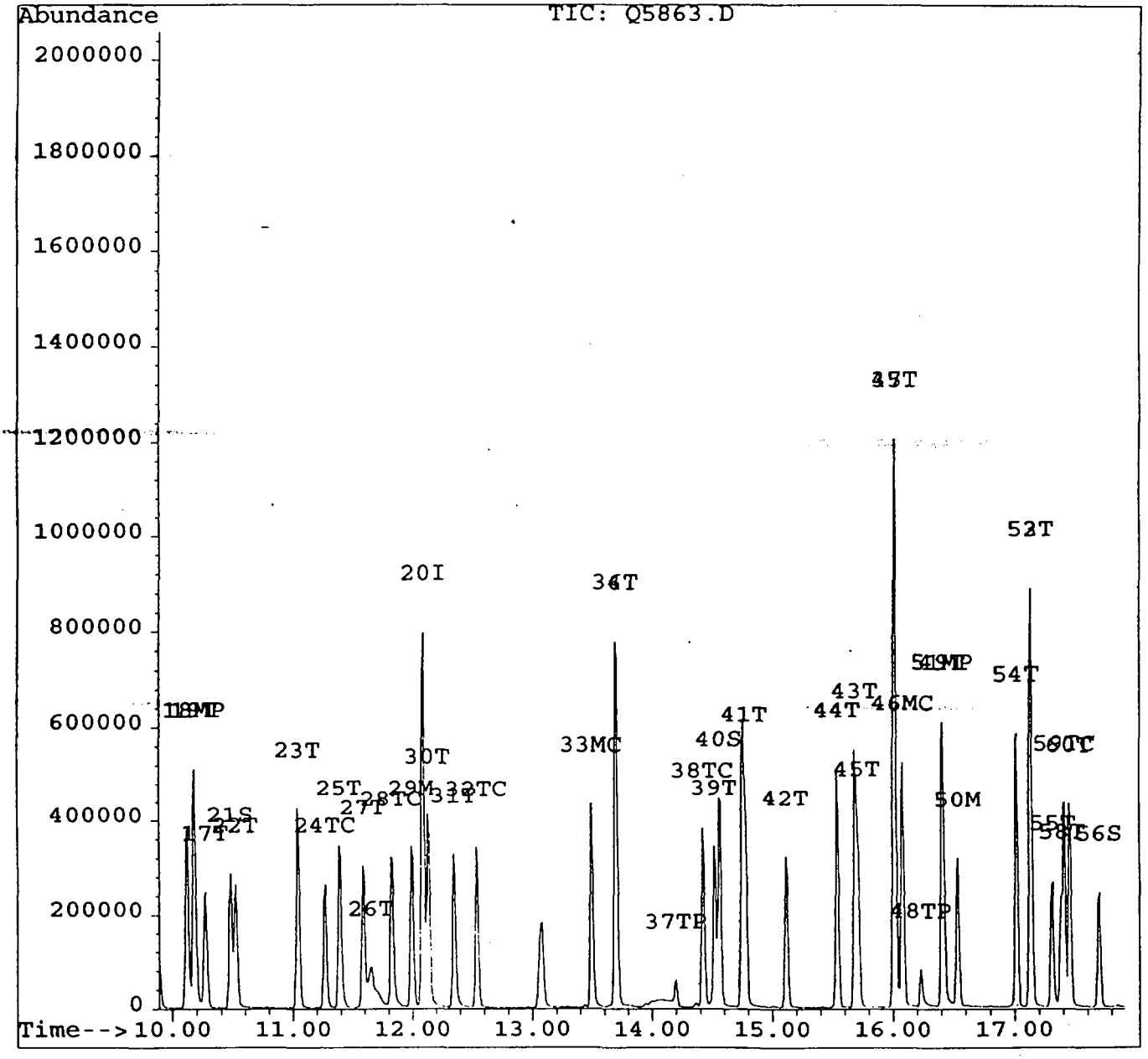


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 27 0104
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

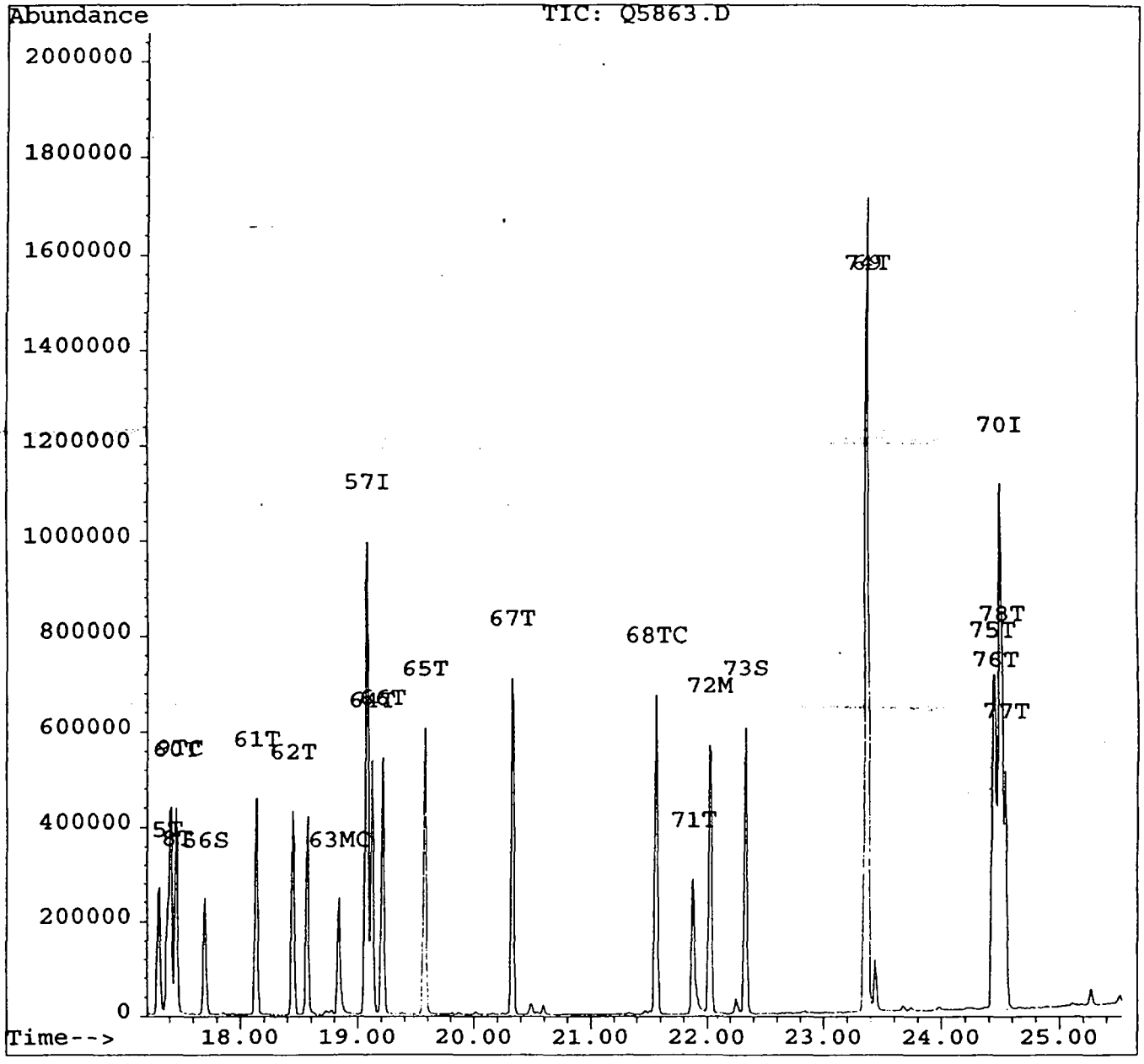


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 27
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



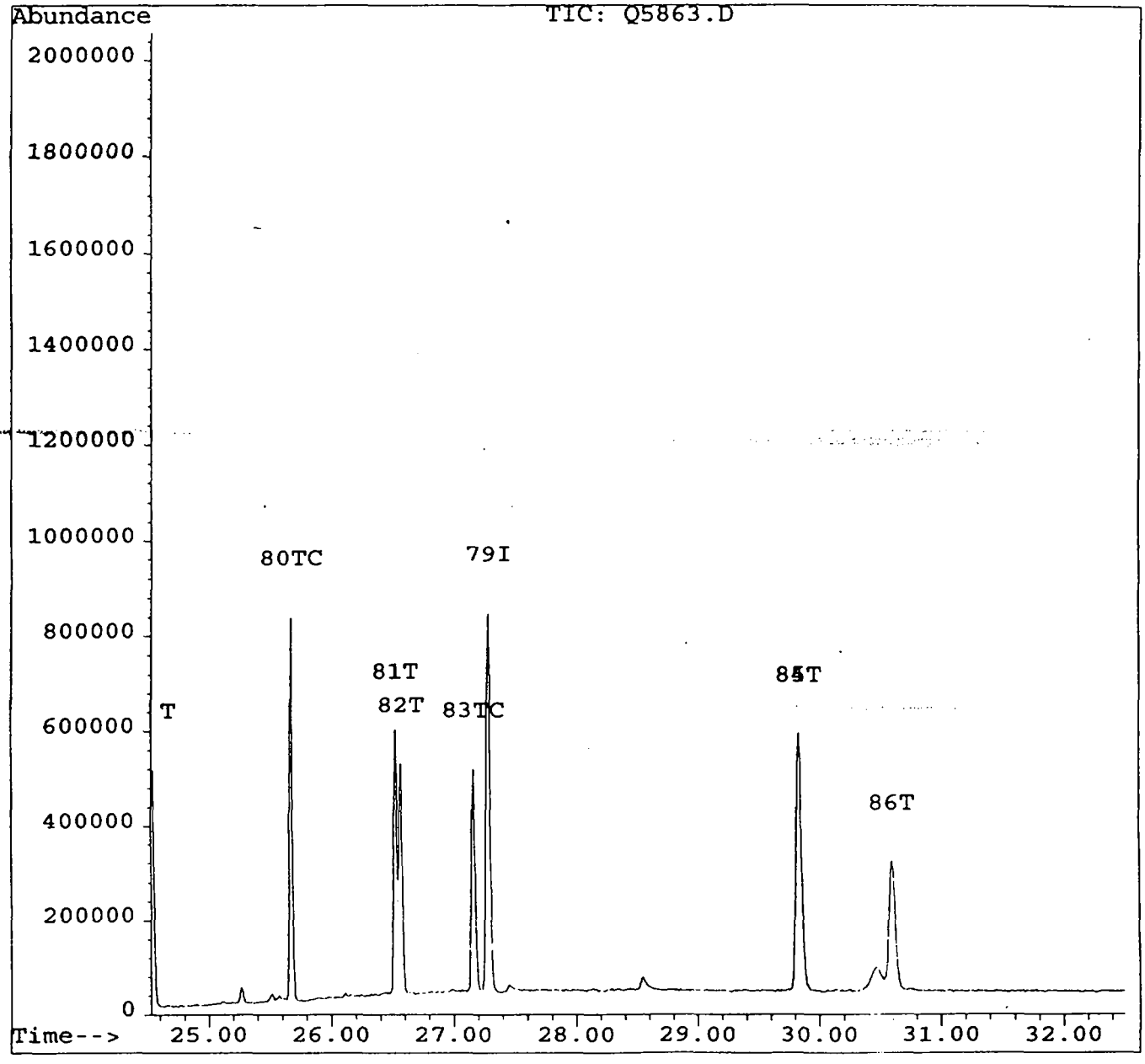
Quantitation Report

0106

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 27
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

All spectra and manual integrations in this sample have been reviewed and approved.
By: [signature] Date: 10/25/99
Secondary review: [signature] Date: 10/27/99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.12	152	202114	40.00 ug		0.00
20) Naphthalene-d8	12.09	136	731974	40.00 ug		0.00
35) Acenaphthene-d10	16.02	164	397449	40.00 ug		0.00
57) Phenanthrene-d10	19.08	188	657434	40.00 ug		0.00
70) Chrysene-d12	24.51	240	509102	40.00 ug		0.00
79) Perylene-d12	27.29	264	505599	40.00 ug		0.00
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	6.42	112	379471	54.23 ug		27.11%
3) Phenol-d5	8.52	99	446536	46.63 ug		23.32%
21) Nitrobenzene-d5	10.49	82	411439	56.39 ug		56.39%
40) 2-Fluorobiphenyl	14.58	172	545082	56.10 ug		56.10%
56) 2,4,6-Tribromophenol	17.71	330	97449	52.85 ug		26.43%
73) Terphenyl-d14	22.34	244	688550	58.50 ug		58.50%
Target Compounds						**Qvalue**
4) Pyridine	2.94	52	281988	49.85 ug		80
5) N-Nitrosodimethylamine	2.98	42	184529	51.73 ug	#	75
6) Cyclohexanone	6.79	42	170766	61.58 ug		89
7) Phenol	8.55	94	428567	48.22 ug	m	84
8) Aniline	8.51	93	570888	62.48 ug		98
9) bis(2-Chloroethyl)ether	8.64	63	200345	49.22 ug		100
10) 2-Chlorophenol	8.75	128	313159	53.80 ug		88
11) 1,3-Dichlorobenzene	9.04	146	383131	57.62 ug		99
12) 1,4-Dichlorobenzene	9.16	146	334291	55.96 ug		99
13) Benzyl alcohol	9.53	108	227342	50.81 ug		100
14) 1,2-Dichlorobenzene	9.59	146	304665	55.41 ug		96
15) bis(2-Chloroisopropyl)ethe	9.84	45	268799	48.26 ug		63
16) 2-Methylphenol	9.86	108	286889	49.78 ug		96
17) Hexachloroethane	10.27	117	136163	53.87 ug		91
18) N-Nitroso-di-n-propylamine	10.19	70	192475	48.51 ug		92
19) 4-Methylphenol	10.19	108	276000	50.12 ug		94
22) Nitrobenzene	10.53	77	350503	57.12 ug		93
23) Isophorone	11.05	82	781091	53.88 ug		94
24) 2-Nitrophenol	11.27	139	251254	57.32 ug		91
25) 2,4-Dimethylphenol	11.40	107	319701	54.80 ug		95
26) Benzoic acid	11.73	122	225533	66.21 ug	m	95
27) bis(2-Chloroethoxy)methane	11.60	93	460708	54.73 ug		98
28) 2,4-Dichlorophenol	11.84	162	294819	54.04 ug		97
29) 1,2,4-Trichlorobenzene	12.00	180	276964	56.91 ug		96
30) Naphthalene	12.14	128	817221	56.62 ug		99
31) 4-Chloroaniline	12.35	127	417090	55.06 ug		100
32) Hexachlorobutadiene	12.54	225	157381	60.81 ug		97

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33) 4-Chloro-3-methylphenol	13.51	107	332857	53.78 ug		97
34) 2-Methylnaphthalene	13.71	142	528474	55.36 ug		98
36) 2,4,5-Trichlorotoluene	13.70	159	260619	57.08 ug		97
37) Hexachlorocyclopentadiene	14.21	237	58847	29.47 ug		98
38) 2,4,6-Trichlorophenol	14.43	196	193794	55.68 ug		97
39) 2,4,5-Trichlorophenol	14.53	196	186194	53.43 ug		99
41) 2-Chloronaphthalene	14.78	162	489993	54.60 ug		99
42) 2-Nitroaniline	15.12	65	187187	51.63 ug		93
43) Acenaphthylene	15.70	152	917076	59.15 ug		99
44) Dimethylphthalate	15.55	163	745712	53.73 ug		99
45) 2,6-Dinitrotoluene	15.73	165	156686	50.76 ug		93
46) Acenaphthene	16.09	153	507022	54.45 ug		96
47) 3-Nitroaniline	16.03	138	181984	43.71 ug		95
48) 2,4-Dinitrophenol	16.23	184	73822	40.93 ug		78
49) Dibenzofuran	16.42	168	765739	57.53 ug		77
50) 2,4-Dinitrotoluene	16.54	165	226198	50.72 ug		94
51) 4-Nitrophenol	16.43	109	100198	45.03 ug	#	64
52) Fluorene	17.15	166	539192	52.38 ug		97
53) 4-Chlorophenyl-phenylether	17.14	204	246094	52.47 ug		97
54) Diethylphthalate	17.03	149	773412	53.59 ug		99
55) 4-Nitroaniline	17.33	138	195572	45.57 ug	#	81
58) 4,6-Dinitro-2-methylphenol	17.40	198	120679	55.79 ug		100
59) N-Nitrosodiphenylamine (1)	17.42	169	388634	57.80 ug		97
60) 1,2-Diphenylhydrazine	17.47	77	564222	54.52 ug	m	100
61) 4-Bromophenyl-phenylether	18.14	248	185286	61.50 ug		93
62) Hexachlorobenzene	18.45	284	201332	59.28 ug		97
63) Pentachlorophenol	18.85	266	116040	57.77 ug		99
64) Phenanthrene	19.13	178	732199	58.67 ug		99
65) Carbazole	19.59	167	866008	57.44 ug		99
66) Anthracene	19.22	178	753559	58.19 ug		99
67) Di-n-butylphthalate	20.34	149	1293940	60.35 ug		98
68) Fluoranthene	21.57	202	918885	58.29 ug		83
69) Kepone	23.39	272	424467	45.45 ug		98
71) Benzidine	21.90	184	423587	56.72 ug		100
72) Pyrene	22.03	202	829243	56.61 ug		83
74) Butylbenzylphthalate	23.38	149	409465	41.75 ug		94
75) 3,3'-Dichlorobenzidine	24.45	252	325758	54.22 ug		98
76) Benzo(a)anthracene	24.47	228	727526	61.77 ug		99
77) Chrysene	24.56	228	585497	51.89 ug		99
78) bis(2-Ethylhexyl)phthalate	24.52	149	573033	58.84 ug		93
80) Di-n-octylphthalate	25.68	149	1323674	64.27 ug		98
81) Benzo(b)fluoranthene	26.54	252	871180	57.60 ug		91
82) Benzo(k)fluoranthene	26.58	252	608226	66.15 ug		93

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83)	Benzo(a)pyrene	27.17	252	730183	58.10 ug		93
84)	Indeno(1,2,3-cd)pyrene	29.85	276	767498	51.92 ug	#	68
85)	Dibenzo(a,h)anthracene	29.85	278	650421	53.13 ug		88
86)	Benzo(g,h,i)perylene	30.63	276	745697	51.95 ug		82

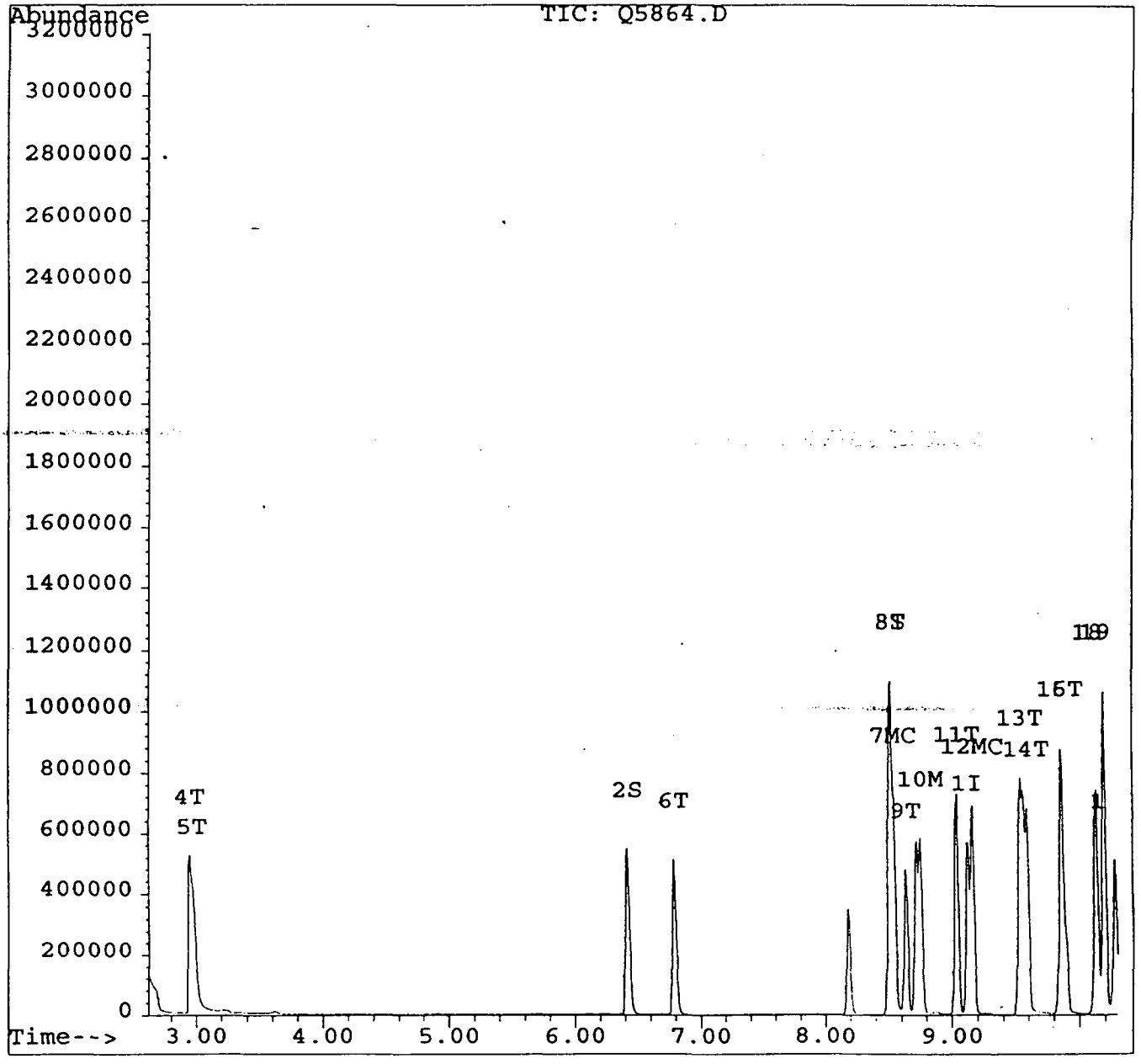
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

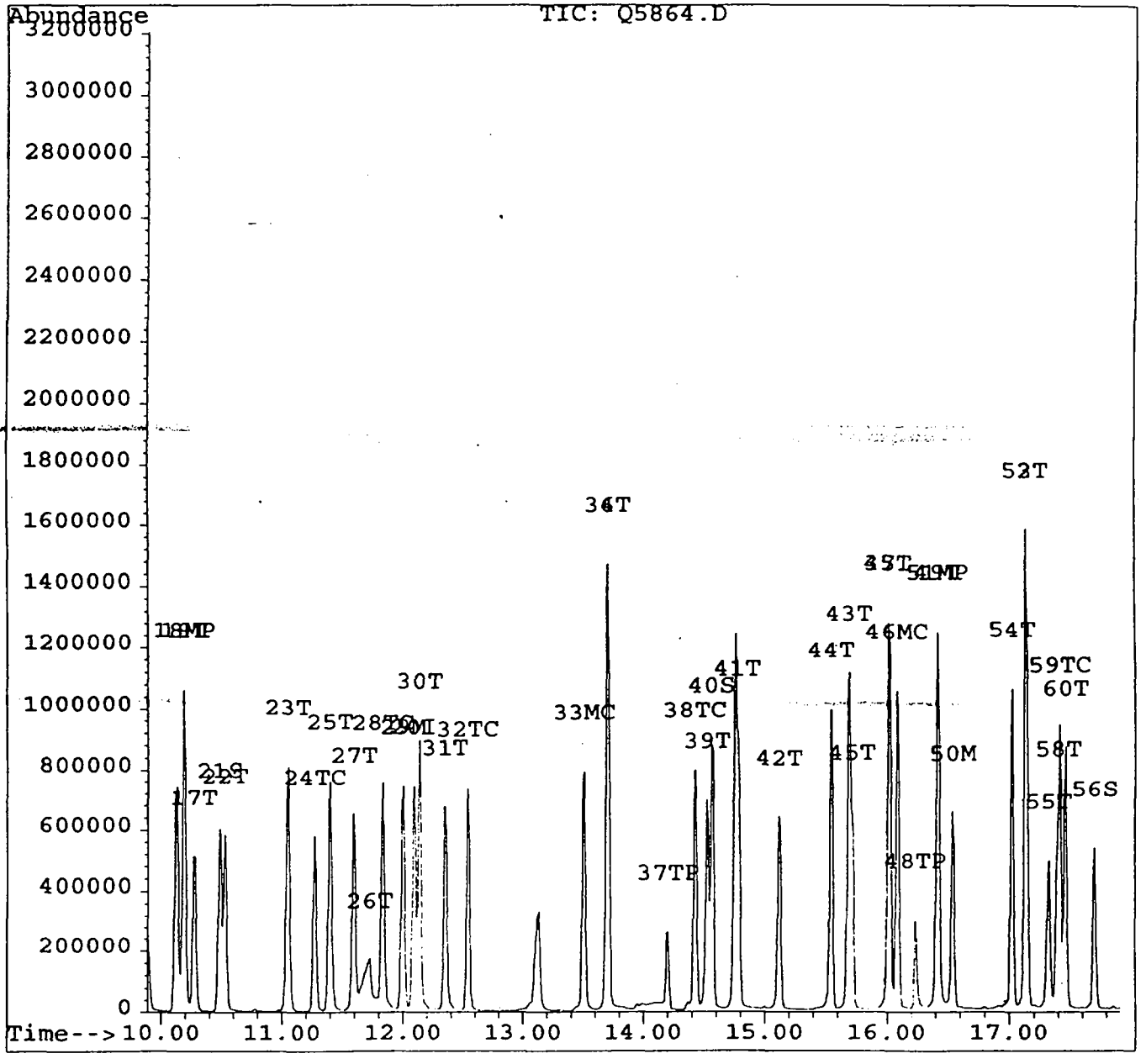


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



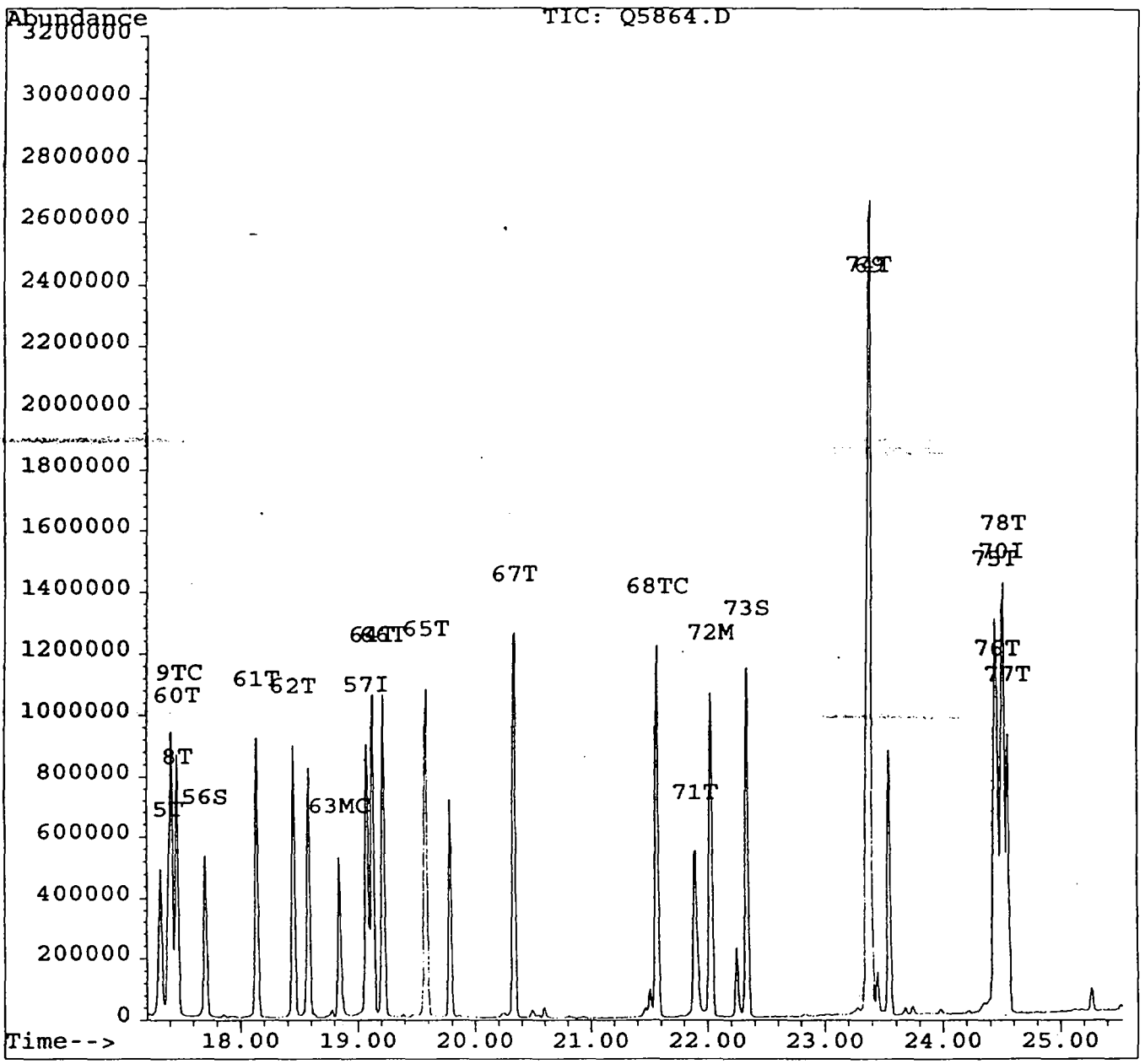
Quantitation Report

0112

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

All spectra and manual integrations for this sample have been reviewed and approved.
By: Date: 10,25,99
Secondary review: Date: 10,27,99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.12	152	171837	40.00	ug		0.00
20) Naphthalene-d8	12.10	136	615574	40.00	ug		0.00
35) Acenaphthene-d10	16.01	164	333015	40.00	ug		0.00
57) Phenanthrene-d10	19.08	188	565091	40.00	ug		0.00
70) Chrysene-d12	24.51	240	443657	40.00	ug		0.00
79) Perylene-d12	27.29	264	461651	40.00	ug		0.00
System Monitoring Compounds							**%Recovery**
2) 2-Fluorophenol	6.41	112	514765	86.52	ug		43.26%
3) Phenol-d5	8.52	99	564353	69.32	ug		34.66%
21) Nitrobenzene-d5	10.49	82	539952	88.00	ug		88.00%
40) 2-Fluorobiphenyl	14.57	172	683778	83.99	ug		83.99%
56) 2,4,6-Tribromophenol	17.71	330	134246	86.90	ug		43.45%
73) Terphenyl-d14	22.34	244	930251	90.70	ug		90.70%
Target Compounds							**Qvalue**
4) Pyridine	2.93	52	373062	77.57	ug		77
5) N-Nitrosodimethylamine	2.98	42	244011	80.46	ug	#	71
6) Cyclohexanone	6.79	42	146518	62.15	ug		91
7) Phenol	8.55	94	548662	72.61	ug	m	84
8) Aniline	8.51	93	640723	82.48	ug		99
9) bis(2-Chloroethyl)ether	8.64	63	254585	73.57	ug		100
10) 2-Chlorophenol	8.76	128	406154	82.08	ug		86
11) 1,3-Dichlorobenzene	9.03	146	477186	84.41	ug		99
12) 1,4-Dichlorobenzene	9.16	146	443538	87.33	ug		99
13) Benzyl alcohol	9.53	108	282368	74.23	ug		100
14) 1,2-Dichlorobenzene	9.59	146	387850	82.97	ug		100
15) bis(2-Chloroisopropyl)ethe	9.85	45	339086	71.60	ug	#	53
16) 2-Methylphenol	9.86	108	363995	74.28	ug		98
17) Hexachloroethane	10.27	117	177364	82.53	ug		82
18) N-Nitroso-di-n-propylamine	10.19	70	241668	71.64	ug		87
19) 4-Methylphenol	10.19	108	353145	75.42	ug		99
22) Nitrobenzene	10.53	77	445310	86.29	ug		94
23) Isophorone	11.06	82	990513	81.25	ug		93
24) 2-Nitrophenol	11.27	139	327367	88.81	ug		89
25) 2,4-Dimethylphenol	11.40	107	423311	86.28	ug		96
26) Benzoic acid	11.75	122	326533	113.99	ug	m	96
27) bis(2-Chloroethoxy)methane	11.60	93	582365	82.27	ug		99
28) 2,4-Dichlorophenol	11.84	162	382785	83.43	ug		96
29) 1,2,4-Trichlorobenzene	12.00	180	359860	87.92	ug		97
30) Naphthalene	12.14	128	1069875	88.14	ug		99
31) 4-Chloroaniline	12.36	127	518908	81.45	ug		100
32) Hexachlorobutadiene	12.55	225	205475	94.40	ug		99

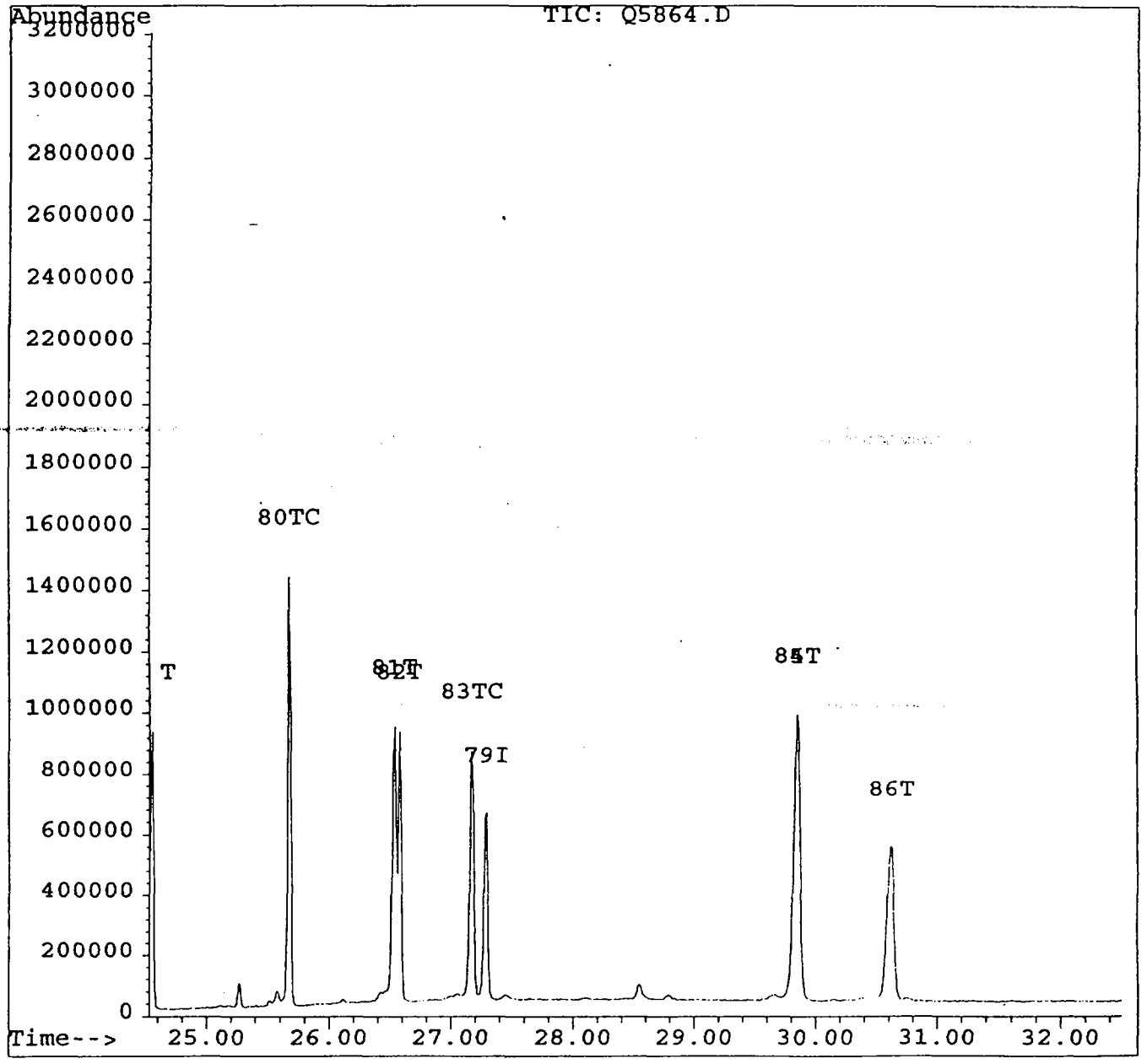
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29 0115
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	4-Chloro-3-methylphenol	13.51	107	433673	83.45 ug		99
34)	2-Methylnaphthalene	13.72	142	666436	83.02 ug		97
36)	2,4,5-Trichlorotoluene	13.71	159	332367	86.87 ug		98
37)	Hexachlorocyclopentadiene	14.20	237	100814	60.26 ug		98
38)	2,4,6-Trichlorophenol	14.43	196	253851	87.04 ug		97
39)	2,4,5-Trichlorophenol	14.53	196	243482	83.39 ug		99
41)	2-Chloronaphthalene	14.79	162	626509	83.32 ug		98
42)	2-Nitroaniline	15.13	65	241572	79.52 ug	#	85
43)	Acenaphthylene	15.70	152	1148679	88.42 ug		98
44)	Dimethylphthalate	15.56	163	946623	81.40 ug		99
45)	2,6-Dinitrotoluene	15.73	165	203514	78.69 ug		87
46)	Acenaphthene	16.09	153	663717	85.07 ug		97
47)	3-Nitroaniline	16.02	138	250419	71.78 ug		96
48)	2,4-Dinitrophenol	16.24	184	121109	80.13 ug		86
49)	Dibenzofuran	16.42	168	962071	86.27 ug		80
50)	2,4-Dinitrotoluene	16.55	165	300088	80.31 ug		99
51)	4-Nitrophenol	16.43	109	130608	70.05 ug	#	48
52)	Fluorene	17.15	166	678906	78.72 ug		96
53)	4-Chlorophenyl-phenylether	17.14	204	302320	76.93 ug		97
54)	Diethylphthalate	17.03	149	989004	81.78 ug		99
55)	4-Nitroaniline	17.34	138	278129	77.35 ug	#	80
58)	4,6-Dinitro-2-methylphenol	17.40	198	168051	90.39 ug		100
59)	N-Nitrosodiphenylamine (1)	17.43	169	495600	85.76 ug		97
60)	1,2-Diphenylhydrazine	17.47	77	676781	76.08 ug	m	100
61)	4-Bromophenyl-phenylether	18.14	248	238018	91.92 ug		93
62)	Hexachlorobenzene	18.45	284	269179	92.21 ug		95
63)	Pentachlorophenol	18.85	266	158504	91.81 ug		99
64)	Phenanthrene	19.13	178	993804	92.65 ug		99
65)	Carbazole	19.59	167	1116659	86.17 ug		98
66)	Anthracene	19.22	178	949112	85.26 ug		99
67)	Di-n-butylphthalate	20.34	149	1661524	90.16 ug		99
68)	Fluoranthene	21.58	202	1219192	89.97 ug		80
69)	Kepone	23.39	272	585832	72.97 ug		97
71)	Benzidine	21.91	184	362947	55.76 ug		100
72)	Pyrene	22.04	202	1109014	86.88 ug		80
74)	Butylbenzylphthalate	23.37	149	577083	67.52 ug		96
75)	3,3'-Dichlorobenzidine	24.45	252	461965	88.23 ug		98
76)	Benzo(a)anthracene	24.47	228	1030661	100.42 ug		99
77)	Chrysene	24.56	228	786517	79.99 ug		100
78)	bis(2-Ethylhexyl)phthalate	24.52	149	777650	91.63 ug		94
80)	Di-n-octylphthalate	25.68	149	1790180	95.20 ug		99
81)	Benzo(b)fluoranthene	26.54	252	1309455	94.82 ug		92
82)	Benzo(k)fluoranthene	26.59	252	759219	90.43 ug		92

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83)	Benzo(a)pyrene	27.18	252	1033963	90.11 ug		92
84)	Indeno(1,2,3-cd)pyrene	29.88	276	1179445	87.39 ug	#	63
85)	Dibenzo(a,h)anthracene	29.88	278	987580	88.34 ug		84
86)	Benzo(g,h,i)perylene	30.64	276	1167610	89.09 ug	#	80

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

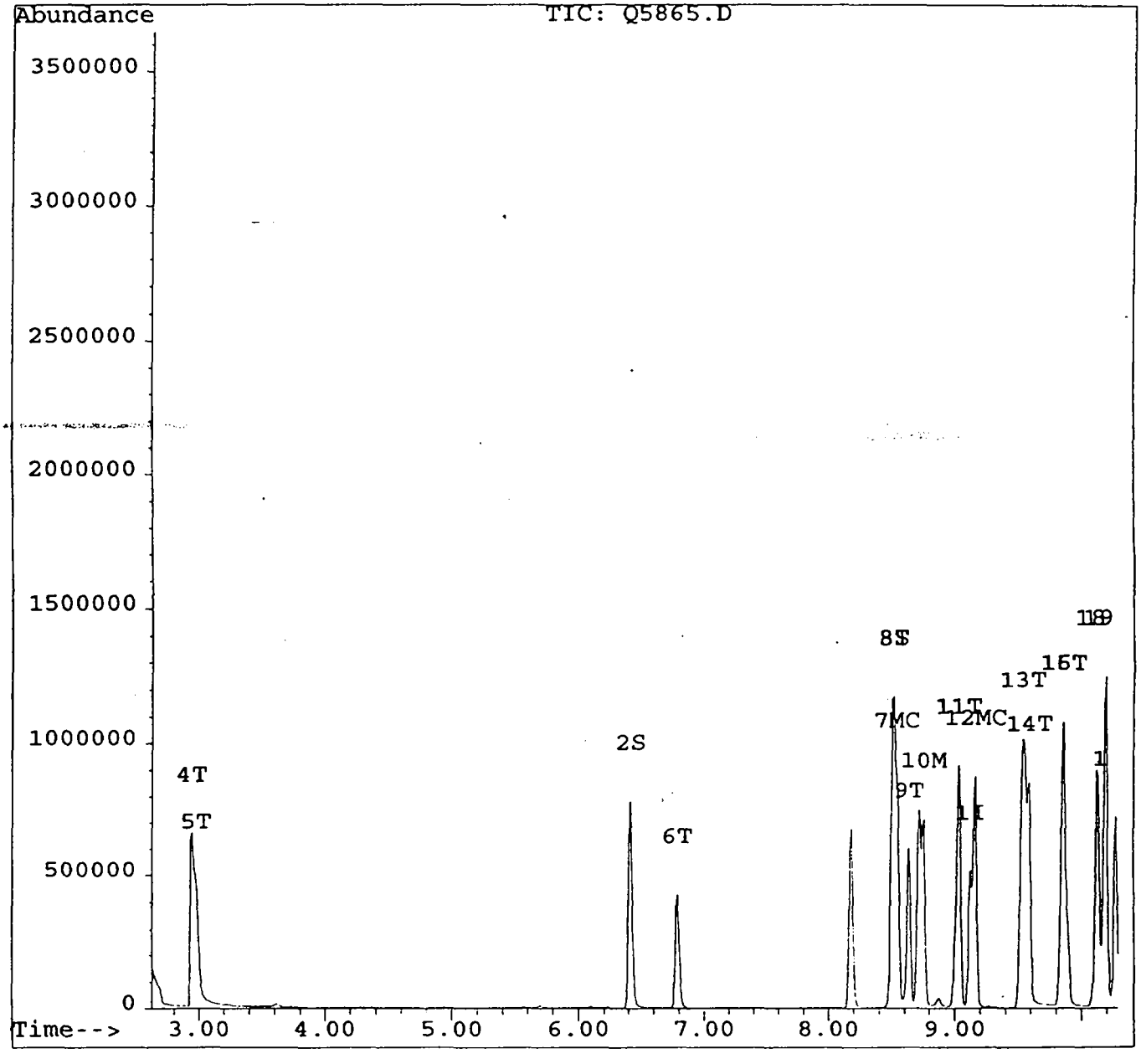
Quantitation Report

0117

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

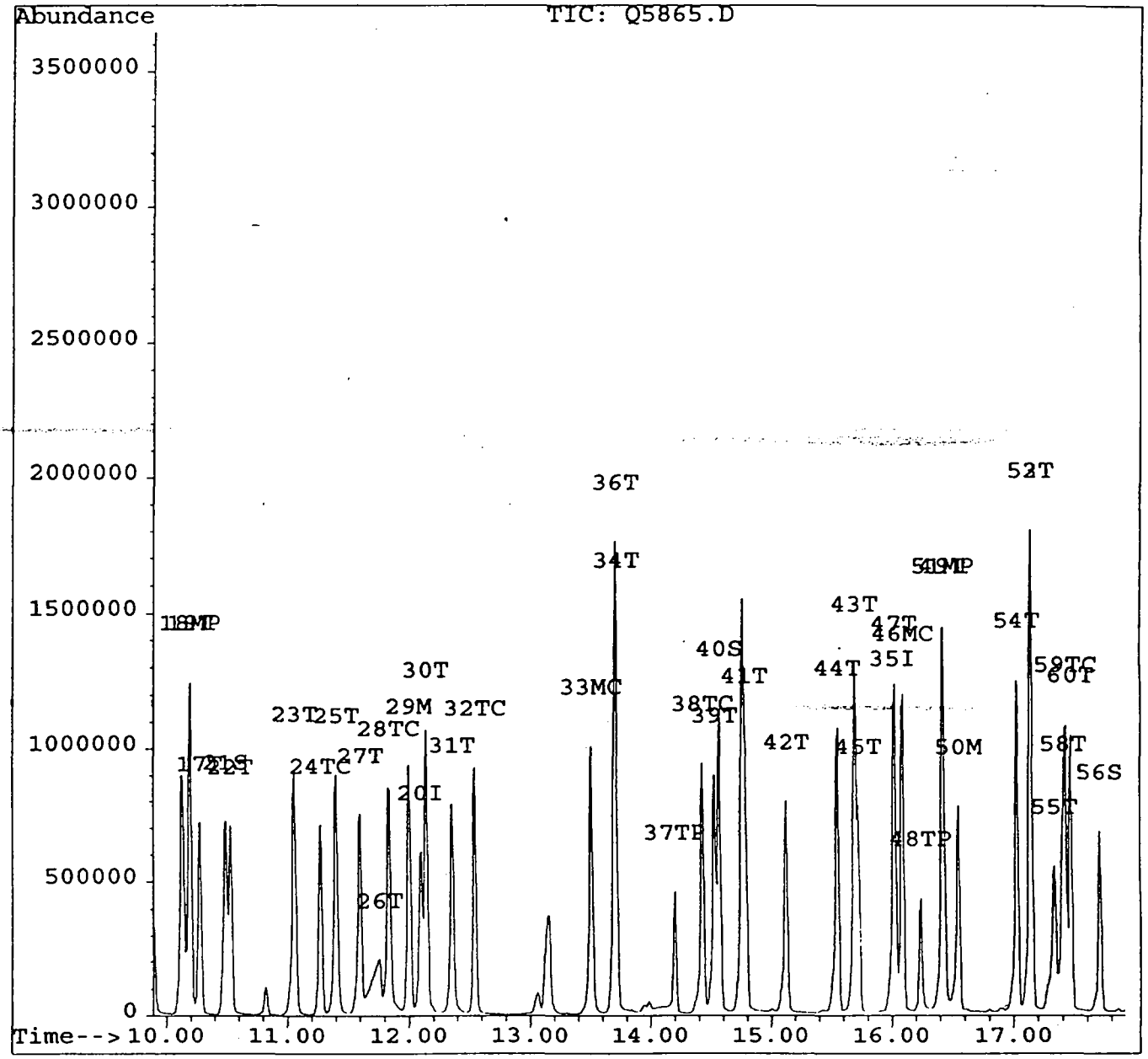


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

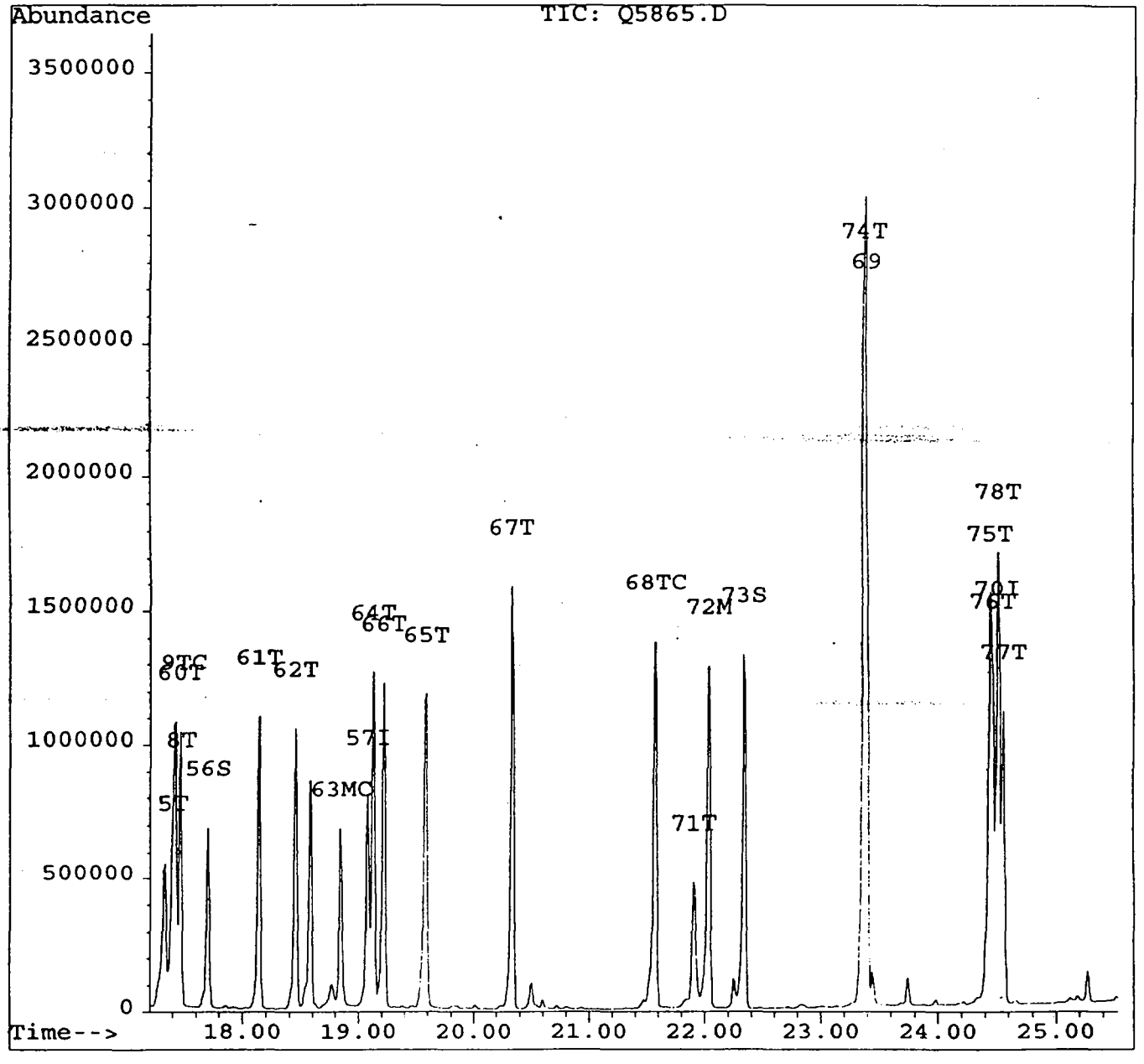


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29 0119
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

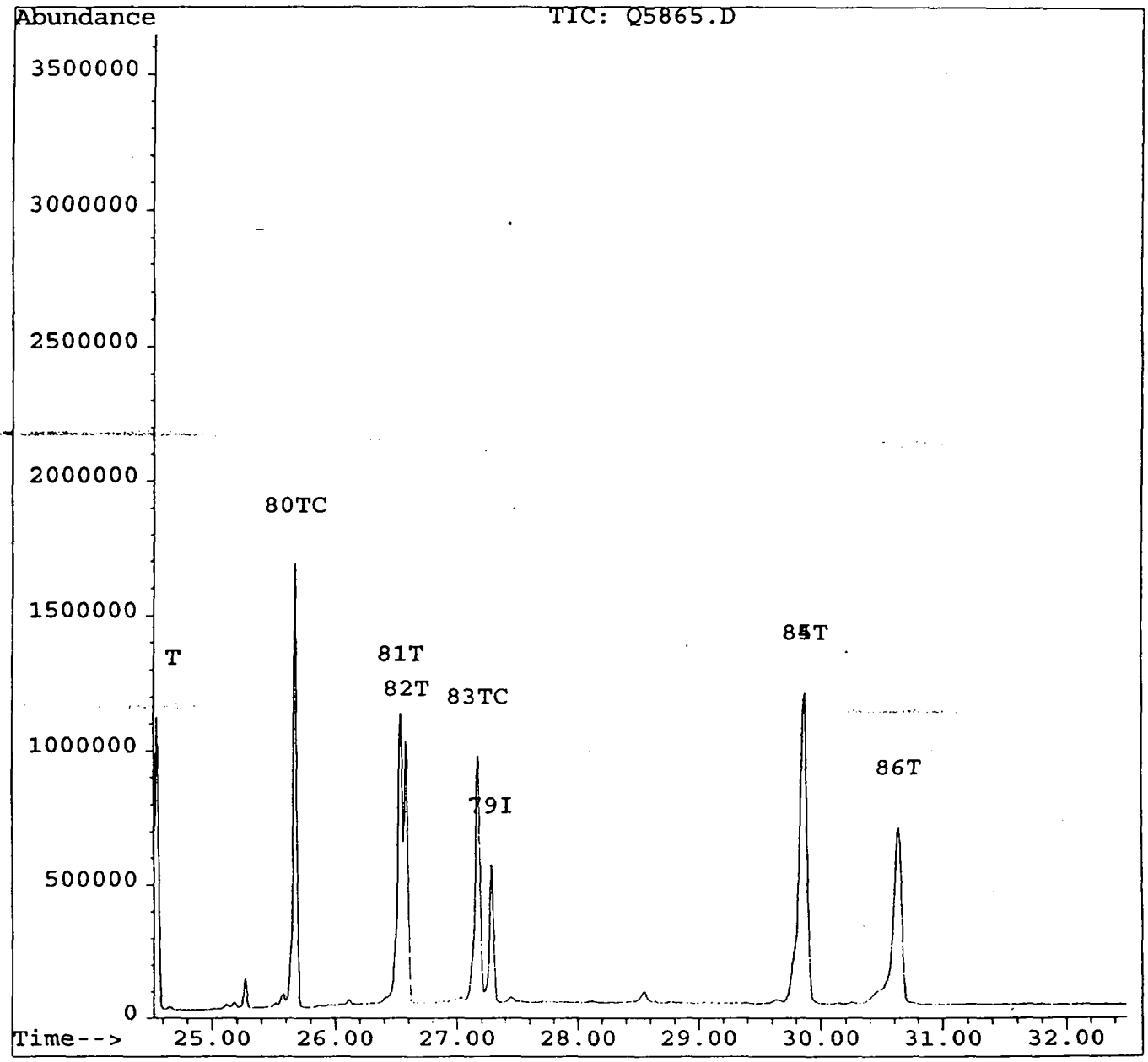


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29 0120a
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP59710
Multiplr: 1.00

All spectra and manual integrations for this sample have been reviewed and approved.
By: [signature] Date: 10, 25, 99
Secondary review: [signature] Date: 10,27,99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.13	152	180766	40.00 ug	0.00
20) Naphthalene-d8	12.10	136	631731	40.00 ug	0.01
35) Acenaphthene-d10	16.02	164	338124	40.00 ug	0.00
57) Phenanthrene-d10	19.09	188	568984	40.00 ug	0.01
70) Chrysene-d12	24.51	240	426593	40.00 ug	0.00
79) Perylene-d12	27.29	264	464057	40.00 ug	0.00

System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	6.41	112	760453	121.51 ug	60.75%
3) Phenol-d5	8.53	99	799272	93.33 ug	46.66%
21) Nitrobenzene-d5	10.50	82	780924	124.02 ug	124.02%
40) 2-Fluorobiphenyl	14.58	172	973127	117.73 ug	117.73%
56) 2,4,6-Tribromophenol	17.71	330	196197	125.08 ug	62.54%
73) Terphenyl-d14	22.35	244	1308051	132.63 ug	132.63%

Target Compounds						Qvalue
4) Pyridine	2.94	52	533376	105.42 ug	#	67
5) N-Nitrosodimethylamine	3.00	42	347181	108.83 ug	#	71
6) Cyclohexanone	6.79	42	175406	70.73 ug		86
7) Phenol	8.56	94	722730	90.93 ug	m	80
8) Aniline	8.52	93	852455	104.31 ug		93
9) bis(2-Chloroethyl)ether	8.65	63	356470	97.93 ug		100
10) 2-Chlorophenol	8.77	128	589290	113.20 ug		86
11) 1,3-Dichlorobenzene	9.05	146	674506	113.42 ug		97
12) 1,4-Dichlorobenzene	9.17	146	628520	117.64 ug		98
13) Benzyl alcohol	9.54	108	368414	92.06 ug		98
14) 1,2-Dichlorobenzene	9.59	146	543300	110.48 ug		100
15) bis(2-Chloroisopropyl)ethe	9.85	45	457836	91.90 ug	#	51
16) 2-Methylphenol	9.87	108	522390	101.34 ug		96
17) Hexachloroethane	10.28	117	248361	109.86 ug		79
18) N-Nitroso-di-n-propylamine	10.22	70	338754	95.46 ug		84
19) 4-Methylphenol	10.21	108	499975	101.51 ug		98
22) Nitrobenzene	10.54	77	629182	118.80 ug		91
23) Isophorone	11.07	82	1452879	116.13 ug		92
24) 2-Nitrophenol	11.28	139	486409	128.58 ug		89
25) 2,4-Dimethylphenol	11.41	107	628459	124.82 ug		94
26) Benzoic acid	11.81	122	506546	172.31 ug	m E	95
27) bis(2-Chloroethoxy)methane	11.61	93	842264	115.94 ug		99
28) 2,4-Dichlorophenol	11.84	162	562340	119.44 ug		96
29) 1,2,4-Trichlorobenzene	12.00	180	513879	122.34 ug		95
30) Naphthalene	12.15	128	1516908	121.77 ug		99
31) 4-Chloroaniline	12.36	127	741130	113.36 ug		100
32) Hexachlorobutadiene	12.55	225	301774	135.10 ug		99

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	4-Chloro-3-methylphenol	13.52	107	620773	116.40 ug		96
34)	2-Methylnaphthalene	13.72	142	944485	114.64 ug		97
36)	2,4,5-Trichlorotoluene	13.71	159	473596	121.92 ug		97
37)	Hexachlorocyclopentadiene	14.20	237	193315	113.81 ug		99
38)	2,4,6-Trichlorophenol	14.44	196	374622	126.51 ug		100
39)	2,4,5-Trichlorophenol	14.54	196	349015	117.72 ug		99
41)	2-Chloronaphthalene	14.80	162	902194	118.18 ug		98
42)	2-Nitroaniline	15.14	65	365382	118.46 ug	#	83
43)	Acenaphthylene	15.71	152	1602548	121.49 ug		97
44)	Dimethylphthalate	15.57	163	1347603	114.13 ug		99
45)	2,6-Dinitrotoluene	15.74	165	300255	114.34 ug		92
46)	Acenaphthene	16.09	153	948761	119.77 ug		97
47)	3-Nitroaniline	16.03	138	359377	101.46 ug		99
48)	2,4-Dinitrophenol	16.25	184	201886	131.56 ug		92
49)	Dibenzofuran	16.43	168	1360816	120.18 ug		80
50)	2,4-Dinitrotoluene	16.56	165	441068	116.26 ug		97
51)	4-Nitrophenol	16.44	109	199029	105.14 ug	#	72
52)	Fluorene	17.15	166	961899	109.85 ug		95
53)	4-Chlorophenyl-phenylether	17.14	204	434043	108.78 ug		99
54)	Diethylphthalate	17.04	149	1378656	112.28 ug		99
55)	4-Nitroaniline	17.35	138	387311	106.09 ug	#	78
58)	4,6-Dinitro-2-methylphenol	17.41	198	244941	130.84 ug		100
59)	N-Nitrosodiphenylamine (1)	17.43	169	694870	119.41 ug		96
60)	1,2-Diphenylhydrazine	17.47	77	897965	100.25 ug	m	100
61)	4-Bromophenyl-phenylether	18.15	248	348027	133.48 ug		93
62)	Hexachlorobenzene	18.46	284	394046	134.07 ug		92
63)	Pentachlorophenol	18.86	266	236658	136.14 ug		98
64)	Phenanthrene	19.14	178	1414265	130.95 ug		98
65)	Carbazole	19.59	167	1543038	118.25 ug		98
66)	Anthracene	19.23	178	1364029	121.70 ug		98
67)	Di-n-butylphthalate	20.35	149	2266866	122.16 ug		98
68)	Fluoranthene	21.58	202	1680853	123.19 ug		79
69)	Kepone	23.40	272	885390	109.53 ug		99
71)	Benzidine	21.93	184	512629	81.91 ug	m	100
72)	Pyrene	22.04	202	1566923	127.66 ug		79
74)	Butylbenzylphthalate	23.38	149	790391	96.18 ug		95
75)	3,3'-Dichlorobenzidine	24.46	252	612558	121.67 ug		98
76)	Benzo(a)anthracene	24.48	228	1418556	143.75 ug		98
77)	Chrysene	24.57	228	1136561	120.21 ug		99
78)	bis(2-Ethylhexyl)phthalate	24.53	149	1077036	131.98 ug		99
80)	Di-n-octylphthalate	25.68	149	2422666	128.16 ug		99
81)	Benzo(b)fluoranthene	26.55	252	2123251	152.95 ug		90
82)	Benzo(k)fluoranthene	26.60	252	762689	90.37 ug		91

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83)	Benzo(a)pyrene	27.18	252	1451731	125.86 ug		91
84)	Indeno(1,2,3-cd)pyrene	29.89	276	1845292	136.01 ug	#	61
85)	Dibenzo(a,h)anthracene	29.91	278	1549527	137.89 ug		82
86)	Benzo(g,h,i)perylene	30.67	276	1877192	142.49 ug	#	78

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

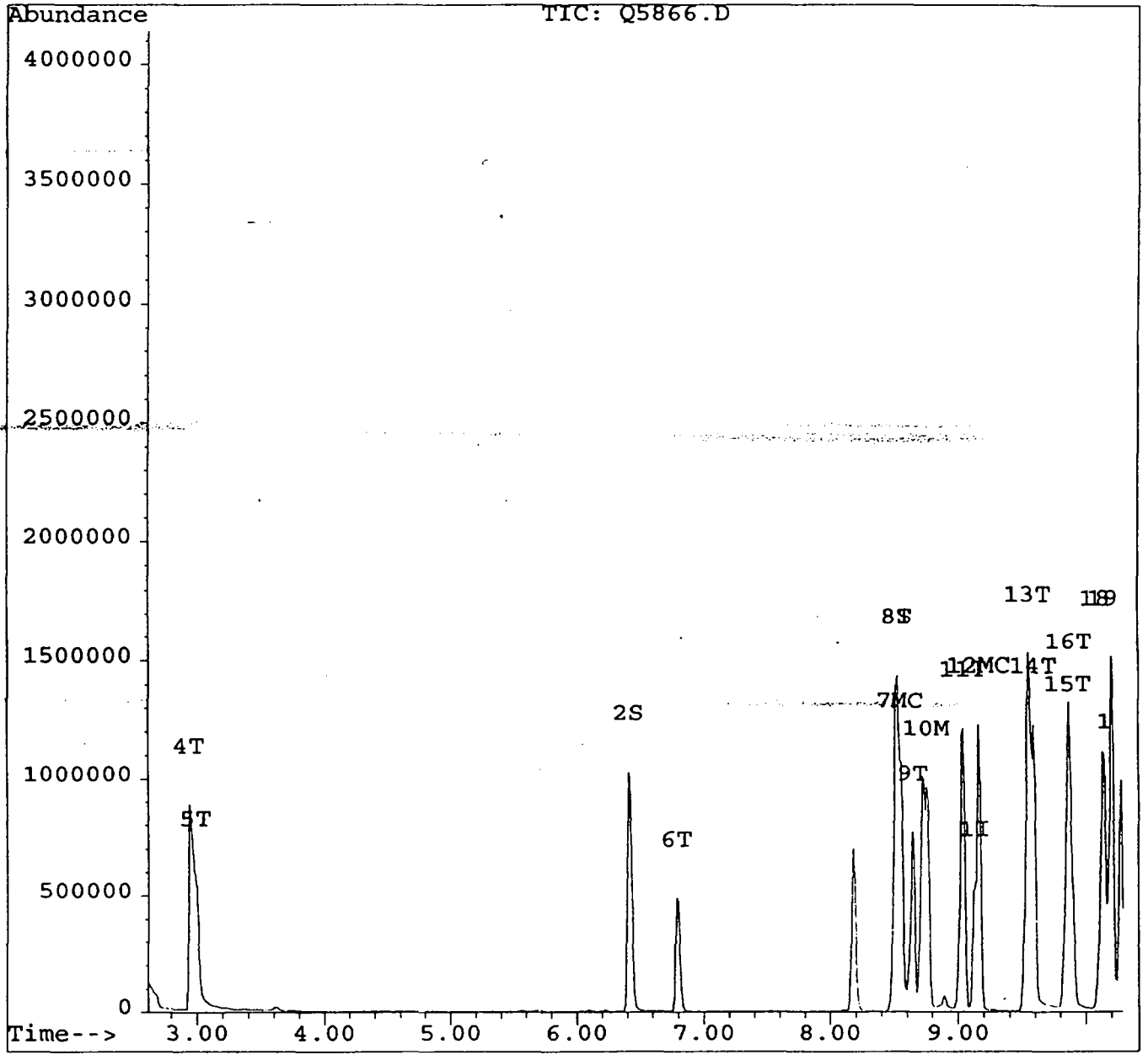
Quantitation Report

001108
0124

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

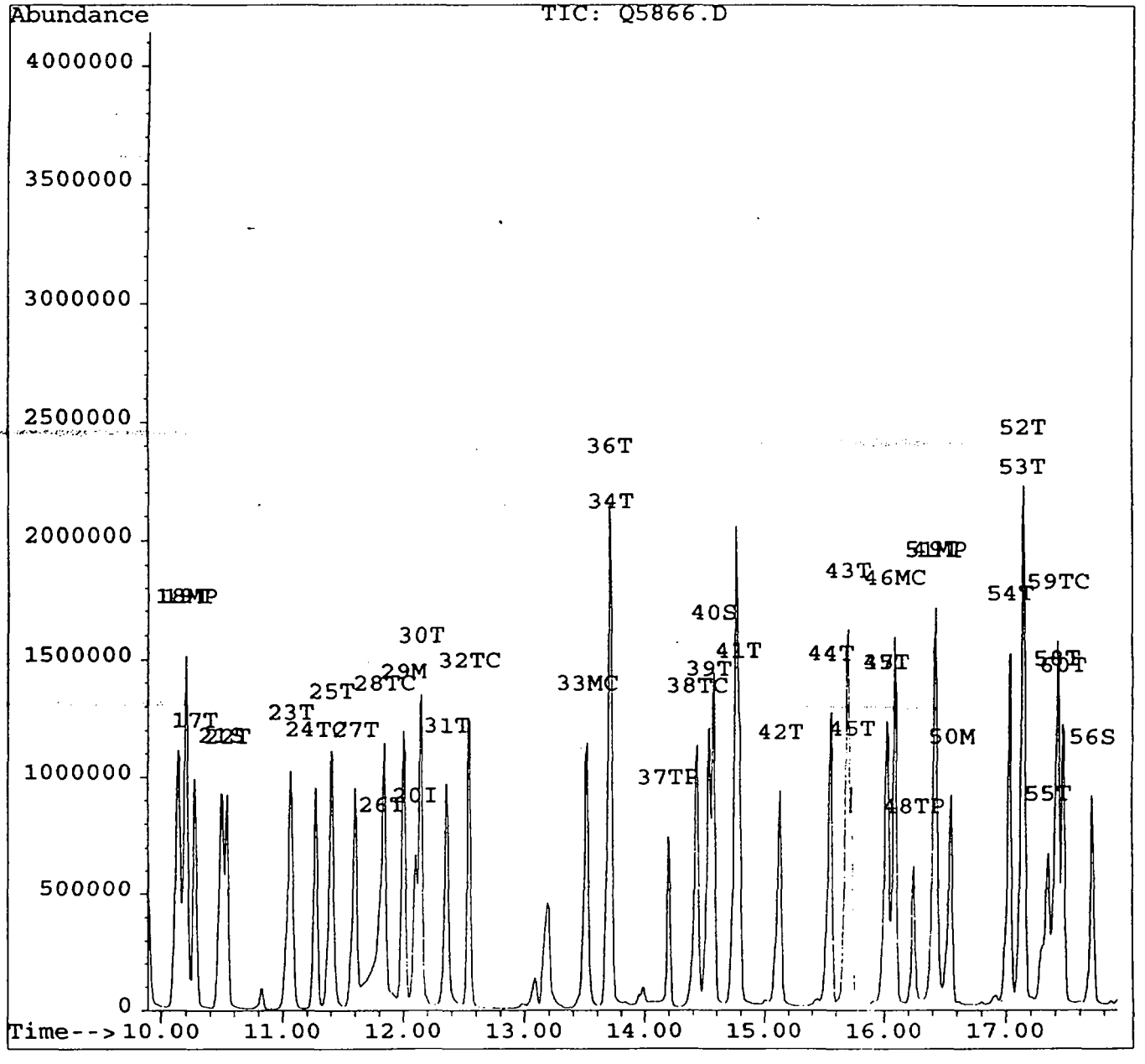


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



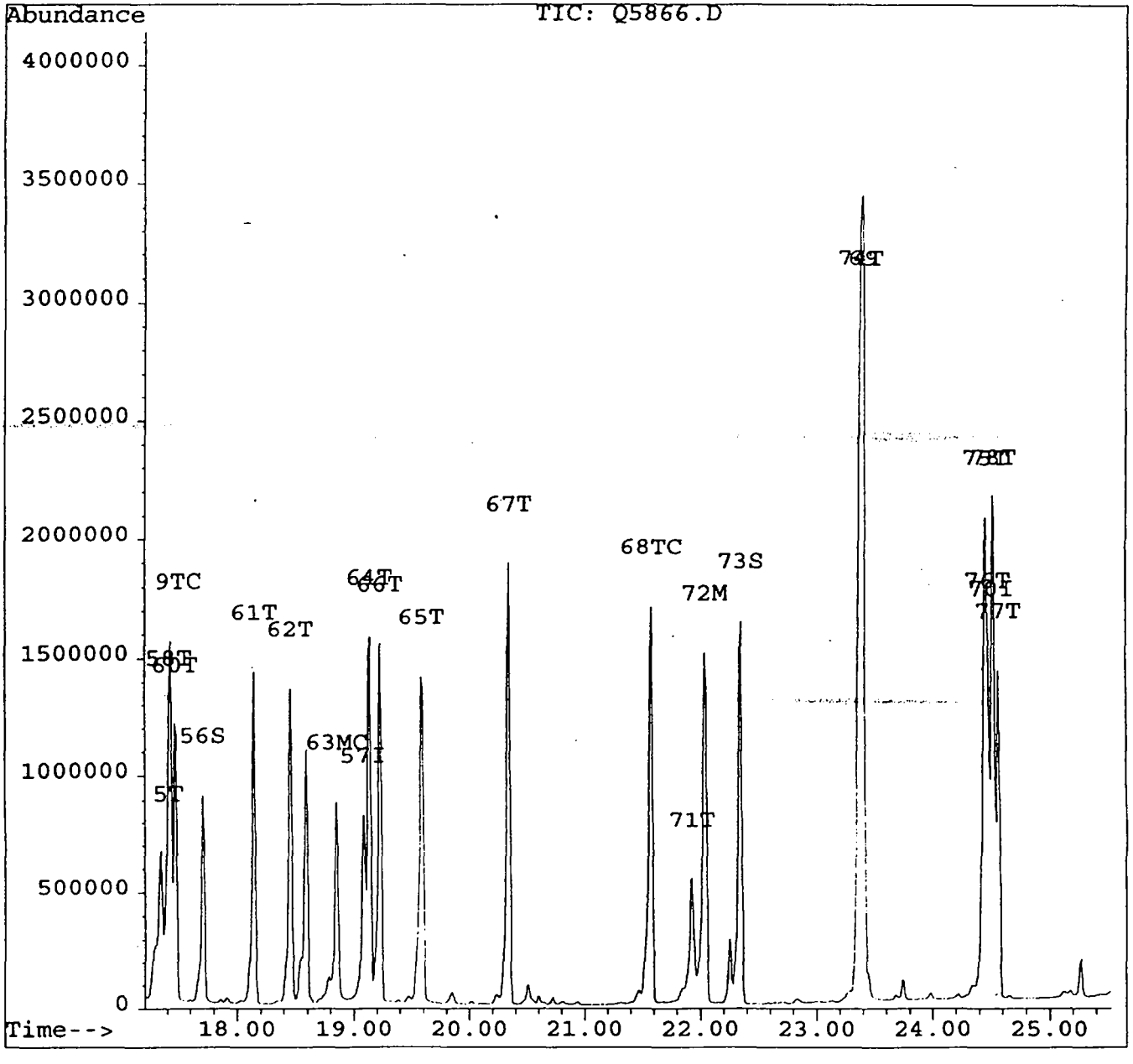
Quantitation Report

0126

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



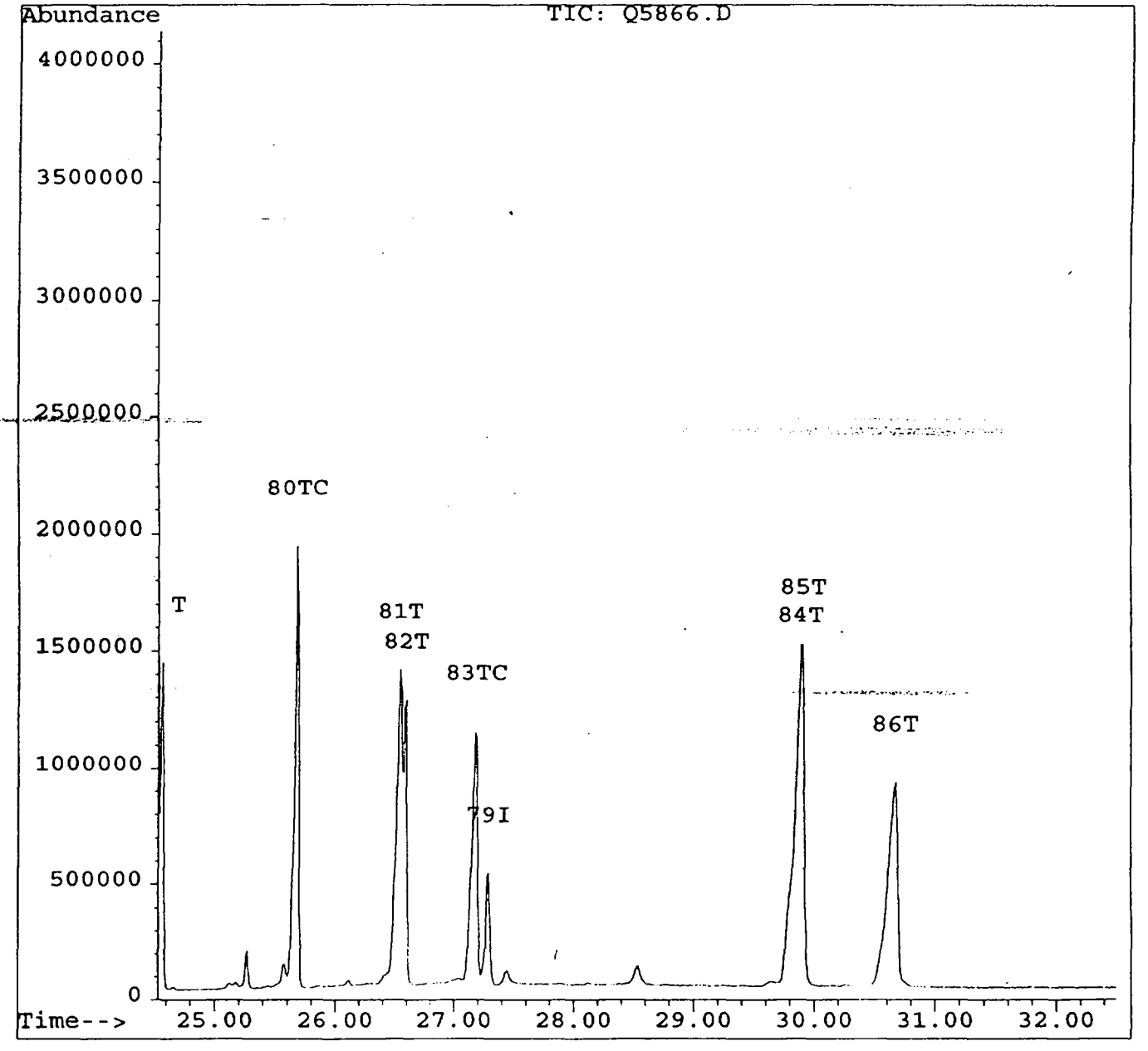
Quantitation Report

0127a

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



Quantitation Report

001112

Data File : C:\HPCHEM\MSQ\Q5867.D
Acq On : 22 Oct 99 18:38 hrs
Sample : SSTD16003
Misc : SSTD16003 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:53 1999

Vial: 31 0128
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

All spectral and manual integrations for this sample have been reviewed and approved.
By: Date: 10,25,99
Secondary review: Date: 10,27,99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.14	152	202231	40.00 ug	0.00
20) Naphthalene-d8	12.11	136	703459	40.00 ug	0.01
35) Acenaphthene-d10	16.03	164	392470	40.00 ug	0.01
57) Phenanthrene-d10	19.09	188	669882	40.00 ug	0.00
70) Chrysene-d12	24.51	240	398789	40.00 ug	0.00
79) Perylene-d12	27.29	264	397473	40.00 ug	0.00

System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	6.42	112	1062595	151.76 ug	75.88%
3) Phenol-d5	8.54	99	1018015	106.25 ug	53.13%
21) Nitrobenzene-d5	10.51	82	1055717	150.57 ug	150.57%
40) 2-Fluorobiphenyl	14.58	172	1265506	131.90 ug	131.90%
56) 2,4,6-Tribromophenol	17.73	330	294383	161.69 ug	80.85%
73) Terphenyl-d14	22.35	244	1676067	181.80 ug	181.80%

Target Compounds						Qvalue
4) Pyridine	2.95	52	726495	128.35 ug	m	78
5) N-Nitrosodimethylamine	3.03	42	462830	129.68 ug	#	66
6) Cyclohexanone	6.80	42	395166	142.43 ug		82
7) Phenol	8.58	94	866707	97.47 ug	m	79
8) Aniline	8.53	93	1210468	132.40 ug		97
9) bis(2-Chloroethyl)ether	8.66	63	461692	113.37 ug		100
10) 2-Chlorophenol	8.78	128	767064	131.71 ug		85
11) 1,3-Dichlorobenzene	9.05	146	937393	140.90 ug		97
12) 1,4-Dichlorobenzene	9.18	146	838383	140.27 ug		94
13) Benzyl alcohol	9.56	108	470914	105.19 ug		100
14) 1,2-Dichlorobenzene	9.60	146	699039	127.06 ug		97
15) bis(2-Chloroisopropyl)ethe	9.85	45	590098	105.88 ug	#	49
16) 2-Methylphenol	9.88	108	676355	117.28 ug		97
17) Hexachloroethane	10.28	117	326242	128.99 ug	#	77
18) N-Nitroso-di-n-propylamine	10.24	70	436122	109.85 ug		88
19) 4-Methylphenol	10.22	108	643642	116.80 ug		100
22) Nitrobenzene	10.56	77	824204	139.76 ug		87
23) Isophorone	11.09	82	1925592	138.22 ug		88
24) 2-Nitrophenol	11.29	139	646684	153.52 ug		88
25) 2,4-Dimethylphenol	11.42	107	799545	142.61 ug		96
26) Benzoic acid	11.83	122	624487	190.77 ug	m E	95
27) bis(2-Chloroethoxy)methane	11.62	93	1093049	135.12 ug		99
28) 2,4-Dichlorophenol	11.86	162	739825	141.11 ug		94
29) 1,2,4-Trichlorobenzene	12.02	180	693334	148.23 ug		96
30) Naphthalene	12.16	128	1962767	141.49 ug		97
31) 4-Chloroaniline	12.37	127	1026620	141.01 ug		97
32) Hexachlorobutadiene	12.55	225	403141	162.08 ug	E	98

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

001113
0129

Data File : C:\HPCHEM\MSQ\Q5867.D
Acq On : 22 Oct 99 18:38 hrs
Sample : SSTD16003
Misc : SSTD16003 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:53 1999

Vial: 3
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	4-Chloro-3-methylphenol	13.54	107	805565	135.65 ug		94
34)	2-Methylnaphthalene	13.74	142	1224016	133.42 ug		100
36)	2,4,5-Trichlorotoluene	13.73	159	635051	140.85 ug		98
37)	Hexachlorocyclopentadiene	14.20	237	335807	170.33 ug	E	99
38)	2,4,6-Trichlorophenol	14.44	196	502644	146.24 ug		99
39)	2,4,5-Trichlorophenol	14.55	196	482443	140.19 ug		99
41)	2-Chloronaphthalene	14.80	162	1210019	136.55 ug		97
42)	2-Nitroaniline	15.14	65	482354	134.73 ug	#	89
43)	Acenaphthylene	15.71	152	2135246	139.46 ug		95
44)	Dimethylphthalate	15.57	163	1852283	135.15 ug		99
45)	2,6-Dinitrotoluene	15.75	165	425037	139.44 ug		94
46)	Acenaphthene	16.11	153	1267594	137.86 ug		98
47)	3-Nitroaniline	16.05	138	500252	121.67 ug		95
48)	2,4-Dinitrophenol	16.26	184	302004	169.55 ug	E	83
49)	Dibenzofuran	16.44	168	1858871	141.43 ug		87
50)	2,4-Dinitrotoluene	16.58	165	624001	141.71 ug		97
51)	4-Nitrophenol	16.47	109	284584	129.52 ug	#	48
52)	Fluorene	17.17	166	1306653	128.55 ug		97
53)	4-Chlorophenyl-phenylether	17.15	204	591755	127.77 ug		96
54)	Diethylphthalate	17.05	149	1868312	131.09 ug		97
55)	4-Nitroaniline	17.38	138	556979	131.44 ug	#	77
58)	4,6-Dinitro-2-methylphenol	17.44	198	339196	153.90 ug		100
59)	N-Nitrosodiphenylamine (1)	17.45	169	968010	141.30 ug		93
60)	1,2-Diphenylhydrazine	17.49	77	1427737	135.39 ug		100
61)	4-Bromophenyl-phenylether	18.16	248	491073	159.97 ug	#	88
62)	Hexachlorobenzene	18.47	284	553572	159.97 ug		92
63)	Pentachlorophenol	18.87	266	351022	171.52 ug	E	98
64)	Phenanthrene	19.15	178	1871156	147.16 ug		95
65)	Carbazole	19.61	167	2048914	133.37 ug		98
66)	Anthracene	19.24	178	1893151	143.47 ug		97
67)	Di-n-butylphthalate	20.34	149	2902204	132.85 ug		96
68)	Fluoranthene	21.59	202	2197508	136.80 ug		79
69)	Kepone	23.41	272	1285486	135.08 ug		99
71)	Benzidine	21.94	184	799182	136.60 ug	m	100
72)	Pyrene	22.05	202	1987281	173.19 ug	E	78
74)	Butylbenzylphthalate	23.38	149	858793	111.79 ug		90
75)	3,3'-Dichlorobenzidine	24.46	252	694590	147.58 ug		97
76)	Benzo(a)anthracene	24.48	228	1633270	177.04 ug	E	97
77)	Chrysene	24.57	228	1402018	158.62 ug		98
78)	bis(2-Ethylhexyl)phthalate	24.52	149	1324091	173.57 ug	E	98
80)	Di-n-octylphthalate	25.69	149	2709564	167.35 ug	E	97
81)	Benzo(b)fluoranthene	26.55	252	2219337	186.66 ug	E	90
82)	Benzo(k)fluoranthene	26.60	252	808151	111.80 ug	m	91

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

0150

Data File : C:\HPCHEM\MSQ\Q5867.D
Acq On : 22 Oct 99 18:38 hrs
Sample : SSTD16003
Misc : SSTD16003 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:53 1999

Vial: 31
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83) Benzo(a)pyrene	27.19	252	1560610	157.97 ug		89
84) Indeno(1,2,3-cd)pyrene	29.91	276	2156609	185.58 ug	E	62
85) Dibenzo(a,h)anthracene	29.92	278	1813811	188.45 ug	E	83
86) Benzo(g,h,i)perylene	30.69	276	2173745	192.64 ug	E	76

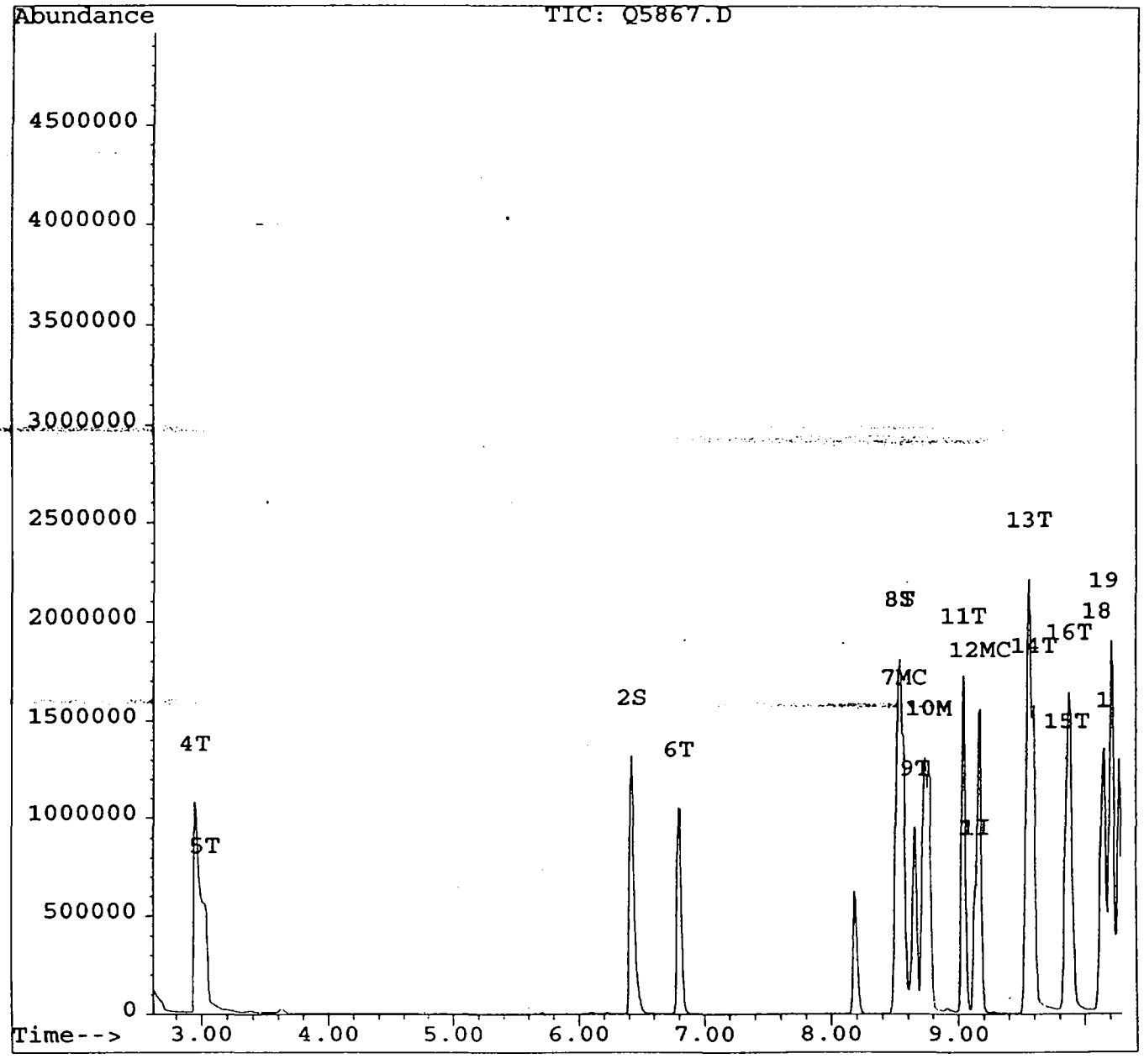
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5867.D
Acq On : 22 Oct 99 18:38 hrs
Sample : SSTD16003
Misc : SSTD16003 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:53 1999

Vial: 31
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

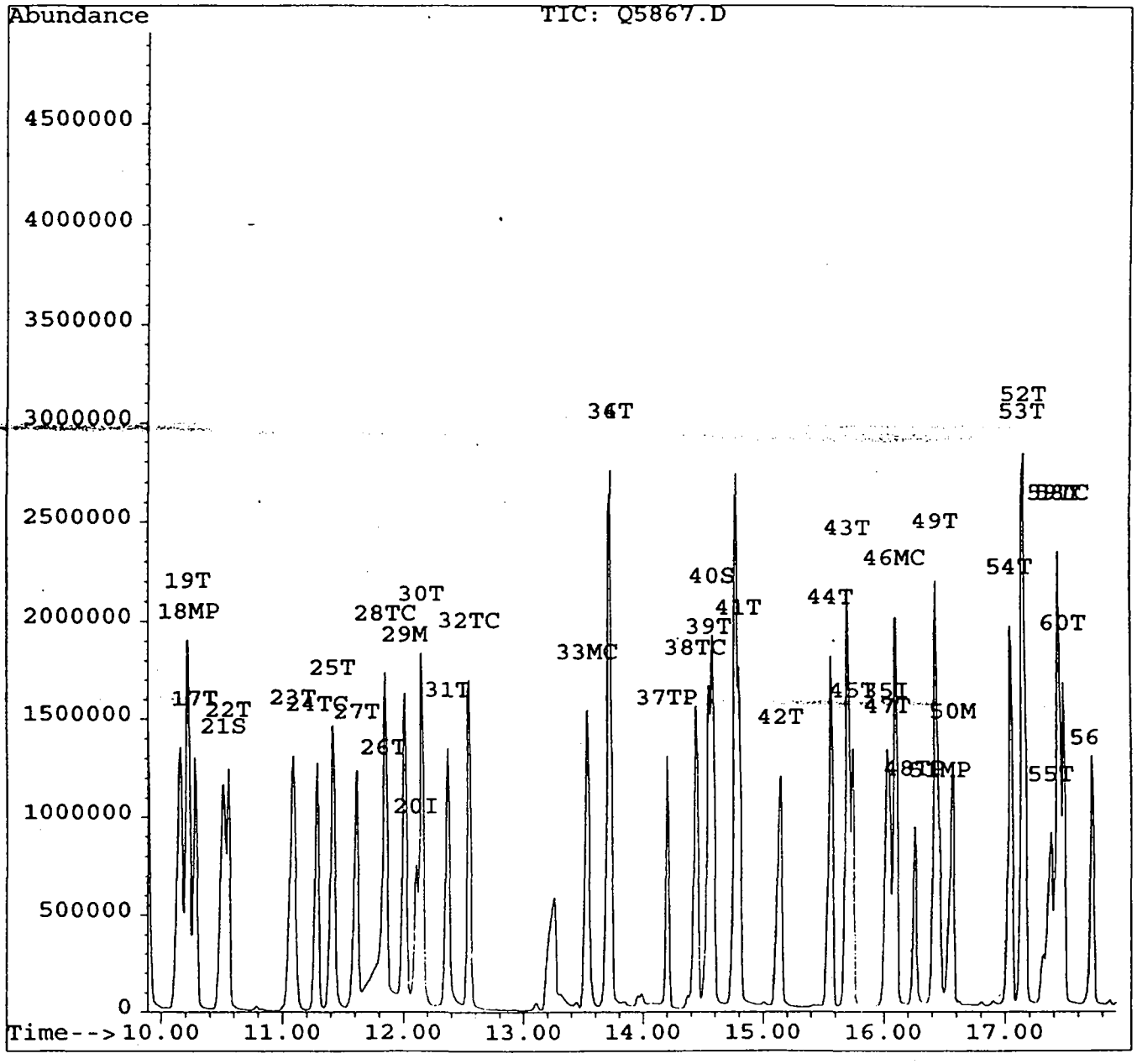


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5867.D
Acq On : 22 Oct 99 18:38 hrs
Sample : SSTD16003
Misc : SSTD16003 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:53 1999

Vial: 31 0132
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

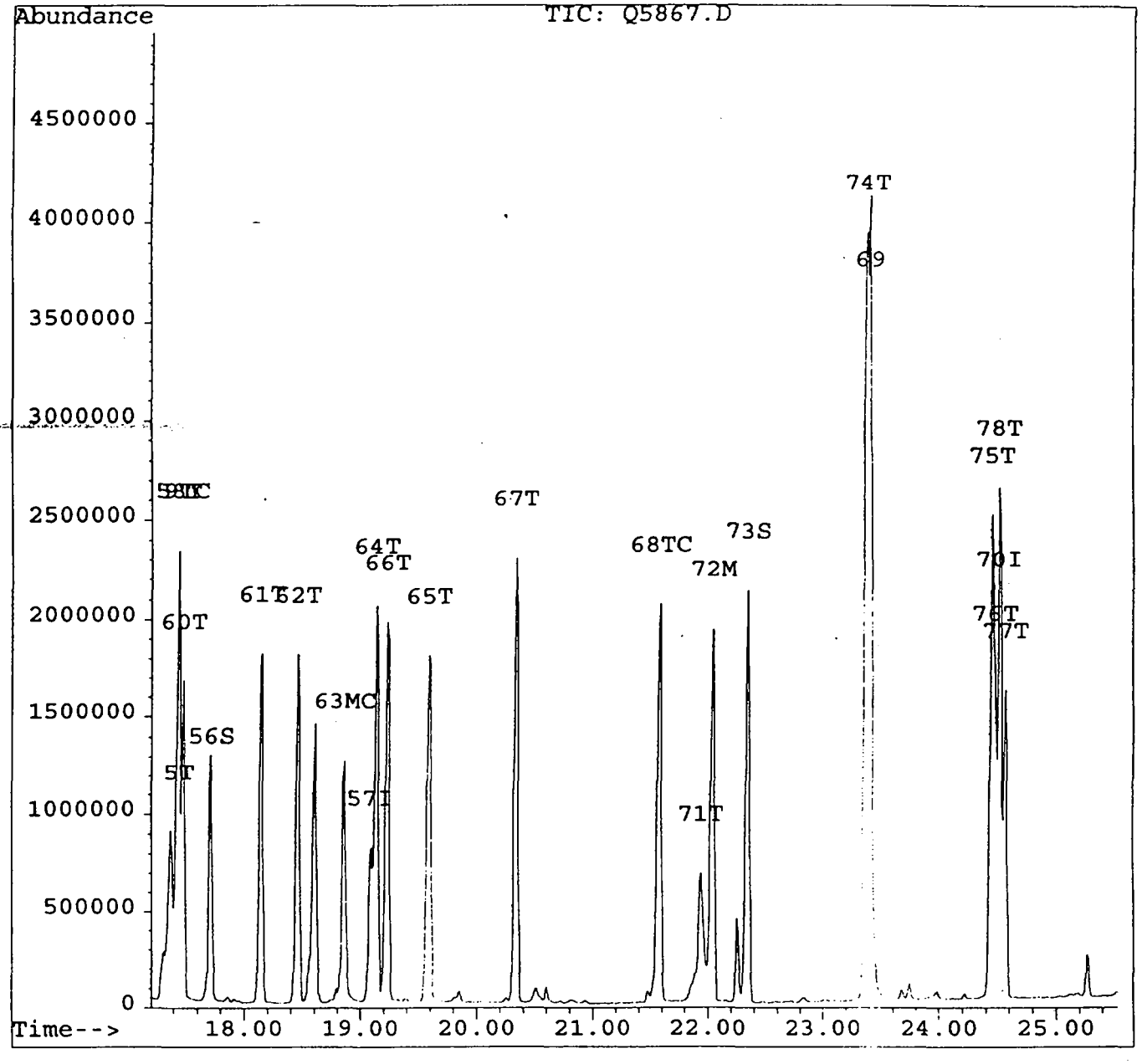


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5867.D
Acq On : 22 Oct 99 18:38 hrs
Sample : SSTD16003
Misc : SSTD16003 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:53 1999

Vial: 31 ~~0133~~
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Instrument ID: HP5971Q Calibration Date: 10/28/99 Time: 0852

Lab File ID: >Q5955 Init. Calib. Date(s): 10/22/99 _____

Init. Calib. Times: 1543 1838

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.533	1.698		10.8	20.0
bis(2-Chloroethyl)ether	0.733	0.826		12.7	
2-Chlorophenol	1.167	1.220		4.5	
1,3-Dichlorobenzene	1.388	1.469		5.8	
1,4-Dichlorobenzene	1.240	1.282		3.4	20.0
Benzyl alcohol	0.790	0.618		-21.8	
1,2-Dichlorobenzene	1.124	1.204		7.1	
2-Methylphenol	1.053	1.084		2.9	
2,2'-oxybis(1-Chloropropane)	0.971	1.089		12.2	
4-Methylphenol	1.027	1.087		5.8	
N-Nitroso-di-n-propylamine	0.711	0.865	0.050	21.6	
Hexachloroethane	0.498	0.492		-1.2	
Nitrobenzene	0.359	0.369		2.8	
Isophorone	0.813	0.841		3.4	
2-Nitrophenol	0.262	0.256		-2.3	20.0
2,4-Dimethylphenol	0.338	0.357		5.6	
Benzoic acid	0.243	0.220		-9.5	
bis(2-Chloroethoxy)methane	0.473	0.471		-0.4	
2,4-Dichlorophenol	0.310	0.315		1.6	20.0
1,2,4-Trichlorobenzene	0.288	0.286		-0.7	
Naphthalene	0.850	0.873		2.7	
4-Chloroaniline	0.426	0.368		-13.6	
Hexachlorobutadiene	0.164	0.165		0.6	20.0
4-Chloro-3-methylphenol	0.345	0.369		7.0	20.0
2-Methylnaphthalene	0.553	0.567		2.5	
Hexachlorocyclopentadiene	0.144	0.075	0.050	-47.9	
2,4,6-Trichlorophenol	0.374	0.351		-6.2	20.0
2,4,5-Trichlorophenol	0.361	0.342		-5.3	
2-Chloronaphthalene	0.940	0.886		-5.7	
2-Nitroaniline	0.362	0.356		-1.7	
Dimethylphthalate	1.414	1.396		-1.3	
Acenaphthylene	1.720	1.673		-2.7	
2,6-Dinitrotoluene	0.304	0.295		-3.0	
3-Nitroaniline	0.359	0.313		-12.8	
Acenaphthene	0.971	0.928		-4.4	20.0
2,4-Dinitrophenol	0.165	0.163	0.050	-1.2	
4-Nitrophenol	0.196	0.207	0.050	5.6	

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Instrument ID: HP5971Q Calibration Date: 10/28/99 Time: 0852

Lab File ID: >Q5955 Init. Calib. Date(s): 10/22/99 _____

Init. Calib. Times: 1543 1838

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Dibenzofuran	1.447	1.417		-2.1	
2,4-Dinitrotoluene	0.446	0.420		-5.8	
Diethylphthalate	1.475	1.480		0.3	
4-Chlorophenyl-Phenyl Ether	0.461	0.437		-5.2	
Fluorene	1.033	1.009		-2.3	
4-Nitroaniline	0.402	0.380		-5.5	
4,6-Dinitro-2-methylphenol	0.140	0.139		-0.7	
N-Nitrosodiphenylamine	0.443	0.432		-2.5	20.0
4-Bromophenyl-phenylether	0.210	0.207		-1.4	
Hexachlorobenzene	0.236	0.233		-1.3	
Pentachlorophenol	0.137	0.112		-18.2	20.0
Phenanthrene	0.847	0.829		-2.1	
Anthracene	0.854	0.848		-0.7	
Carbazole	0.976	0.988		1.2	
Di-n-butylphthalate	1.453	1.492		2.7	
Fluoranthene	1.049	1.042		-0.7	20.0
Pyrene	1.277	1.210		-5.2	
Butylbenzylphthalate	0.637	0.546		-14.3	
3,3'-Dichlorobenzidine	0.498	0.462		-7.2	
Benzo(a)anthracene	1.127	1.060		-5.9	
Chrysene	0.902	0.788		-12.6	
bis(2-Ethylhexyl)phthalate	0.872	0.822		-5.7	
Di-n-octylphthalate	1.930	2.045		6.0	20.0
Benzo(b)fluoranthene	1.389	1.336		-3.8	
Benzo(k)fluoranthene	0.799	0.888		11.1	
Benzo(a)pyrene	1.090	1.093		0.3	20.0
Indeno(1,2,3-cd)pyrene	1.269	1.225		-3.5	
Dibenz(a,h)anthracene	1.073	1.048		-2.3	
Benzo(g,h,i)perylene	1.244	1.206		-3.0	
Nitrobenzene-D5	0.433	0.446		3.0	
2-Fluorobiphenyl	1.021	0.966		-5.4	
Terphenyl-D14	1.060	1.016		-4.2	
Phenol-D5	1.618	1.703		5.2	
2-Fluorophenol	1.434	1.388		-3.2	
2,4,6-Tribromophenol	0.196	0.176		-10.2	

(1) Cannot be separated from Diphenylamine

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26 0137
Operator: J.Bennett
~~Inst : HP5971Q~~
Multiplr: 1.00

All spectra and manual integrations for this sample have been reviewed and approved.
By: _____ Date: 10/29/99
Secondary review: _____ Date: 10/29/99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.84	152	178926	40.00 ug	-0.07
20) Naphthalene-d8	11.80	136	640844	40.00 ug	-0.07
35) Acenaphthene-d10	15.74	164	378893	40.00 ug	-0.07
57) Phenanthrene-d10	18.81	188	637030	40.00 ug	-0.07
70) Chrysene-d12	24.22	240	499553	40.00 ug	-0.09
79) Perylene-d12	26.96	264	471295	40.00 ug	-0.09
System Monitoring Compounds					**%Recovery**
2) 2-Fluorophenol	6.18	112	310368	48.40 ug	24.20%
3) Phenol-d5	8.28	99	380956	52.64 ug	26.32%
21) Nitrobenzene-d5	10.20	82	357546	51.61 ug	51.61%
40) 2-Fluorobiphenyl	14.30	172	457414	47.31 ug	47.31%
56) 2,4,6-Tribromophenol	17.44	330	83282	44.93 ug	22.47%
73) Terphenyl-d14	22.07	244	634626	47.93 ug	47.93%
Target Compounds					**Qvalue**
4) Pyridine	2.63	52	198109	43.02 ug #	75
5) N-Nitrosodimethylamine	2.67	42	143858	46.60 ug #	71
6) Cyclohexanone	6.50	42	143243	61.13 ug	88
7) Phenol	8.31	94	379851	55.37 ug	96
8) Aniline	8.23	93	448710	51.53 ug	96
9) bis(2-Chloroethyl)ether	8.36	63	184797	56.36 ug	100
10) 2-Chlorophenol	8.48	128	272922	52.30 ug	88
11) 1,3-Dichlorobenzene	8.75	146	328606	52.94 ug	99
12) 1,4-Dichlorobenzene	8.88	146	286805	51.71 ug	98
13) Benzyl alcohol	9.26	108	138202	39.12 ug	99
14) 1,2-Dichlorobenzene	9.30	146	269302	53.56 ug	96
15) bis(2-Chloroisopropyl)ethe	9.57	45	243653	56.11 ug	65
16) 2-Methylphenol	9.61	108	242477	51.46 ug	89
17) Hexachloroethane	9.98	117	110138	49.46 ug	94
18) N-Nitroso-di-n-propylamine	9.91	70	193489	60.82 ug	92
19) 4-Methylphenol	9.94	108	243092	52.94 ug	93
22) Nitrobenzene	10.25	77	295428	51.37 ug	95
23) Isophorone	10.76	82	673572	51.71 ug	95
24) 2-Nitrophenol	10.99	139	205395	48.92 ug	92
25) 2,4-Dimethylphenol	11.14	107	285689	52.72 ug	93
26) Benzoic acid	11.48	122	175940	45.20 ug m	97
27) bis(2-Chloroethoxy)methane	11.32	93	377464	49.80 ug	99
28) 2,4-Dichlorophenol	11.56	162	252398	50.75 ug	96
29) 1,2,4-Trichlorobenzene	11.71	180	229346	49.74 ug	97
30) Naphthalene	11.85	128	699121	51.36 ug	99
31) 4-Chloroaniline	12.08	127	294712	43.16 ug	98
32) Hexachlorobutadiene	12.26	225	132499	50.52 ug	99

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26 0138
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	4-Chloro-3-methylphenol	13.26	107	295658	53.41 ug		99
34)	2-Methylnaphthalene	13.44	142	454107	51.24 ug		98
36)	2,4,5-Trichlorotoluene	13.43	159	217336	46.28 ug		96
37)	Hexachlorocyclopentadiene	13.93	237	35516	26.10 ug		96
38)	2,4,6-Trichlorophenol	14.16	196	166163	46.94 ug		99
39)	2,4,5-Trichlorophenol	14.27	196	162182	47.47 ug		98
41)	2-Chloronaphthalene	14.51	162	419480	47.12 ug		97
42)	2-Nitroaniline	14.86	65	168520	49.09 ug		93
43)	Acenaphthylene	15.42	152	792367	48.64 ug		98
44)	Dimethylphthalate	15.29	163	661340	49.36 ug		98
45)	2,6-Dinitrotoluene	15.47	165	139778	48.56 ug		92
46)	Acenaphthene	15.81	153	439769	47.78 ug		95
47)	3-Nitroaniline	15.76	138	148119	43.58 ug		95
48)	2,4-Dinitrophenol	15.98	184	77212	49.52 ug		87
49)	Dibenzofuran	16.15	168	671121	48.96 ug		94
50)	2,4-Dinitrotoluene	16.28	165	198770	47.11 ug		90
51)	4-Nitrophenol	16.21	109	98170	52.94 ug	#	51
52)	Fluorene	16.87	166	477995	48.83 ug		95
53)	4-Chlorophenyl-phenylether	16.87	204	207119	47.41 ug		99
54)	Diethylphthalate	16.77	149	701104	50.17 ug		98
55)	4-Nitroaniline	17.07	138	179786	47.19 ug	#	75
58)	4,6-Dinitro-2-methylphenol	17.14	198	110725	49.63 ug		100
59)	N-Nitrosodiphenylamine (1)	17.16	169	344412	48.82 ug		95
60)	1,2-Diphenylhydrazine	17.20	77	507588	50.44 ug	m	100
61)	4-Bromophenyl-phenylether	17.87	248	164868	49.40 ug		96
62)	Hexachlorobenzene	18.18	284	185738	49.44 ug		93
63)	Pentachlorophenol	18.58	266	89516	41.15 ug		97
64)	Phenanthrene	18.86	178	660187	48.95 ug		99
65)	Carbazole	19.32	167	786930	50.63 ug		97
66)	Anthracene	18.95	178	675213	49.61 ug		98
67)	Di-n-butylphthalate	20.08	149	1187782	51.31 ug		98
68)	Fluoranthene	21.29	202	829746	49.67 ug		82
69)	Kepone	23.09	272	450198	55.18 ug		97
71)	Benzidine	21.63	184	309732	46.72 ug		100
72)	Pyrene	21.75	202	755848	47.40 ug		81
74)	Butylbenzylphthalate	23.11	149	340993	42.83 ug		91
75)	3,3'-Dichlorobenzidine	24.17	252	288554	46.37 ug		99
76)	Benzo(a)anthracene	24.18	228	662277	47.05 ug		99
77)	Chrysene	24.27	228	492191	43.69 ug		98
78)	bis(2-Ethylhexyl)phthalate	24.26	149	513529	47.18 ug		93
80)	Di-n-octylphthalate	25.41	149	1204767	52.99 ug		97
81)	Benzo(b)fluoranthene	26.25	252	787072	48.08 ug		91
82)	Benzo(k)fluoranthene	26.29	252	523113	55.57 ug		92

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 2d 0139
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83)	Benzo(a)pyrene	26.85	252	643947	50.15 ug		92
84)	Indeno(1,2,3-cd)pyrene	29.36	276	721492	48.23 ug	#	63
85)	Dibenzo(a,h)anthracene	29.36	278	617689	48.88 ug		86
86)	Benzo(g,h,i)perylene	30.08	276	710682	48.49 ug		81

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

001123

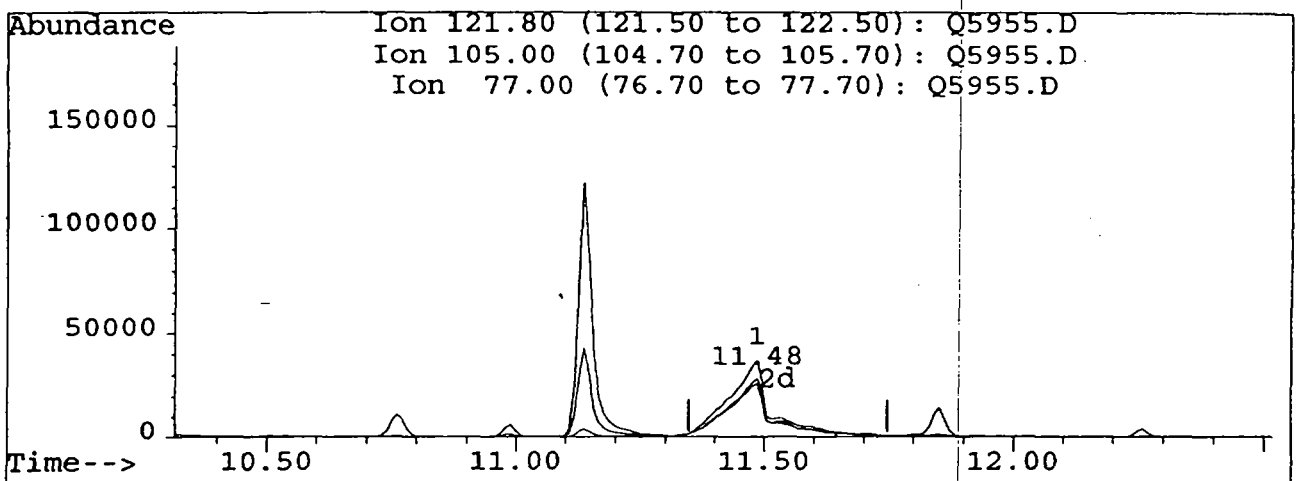
0140

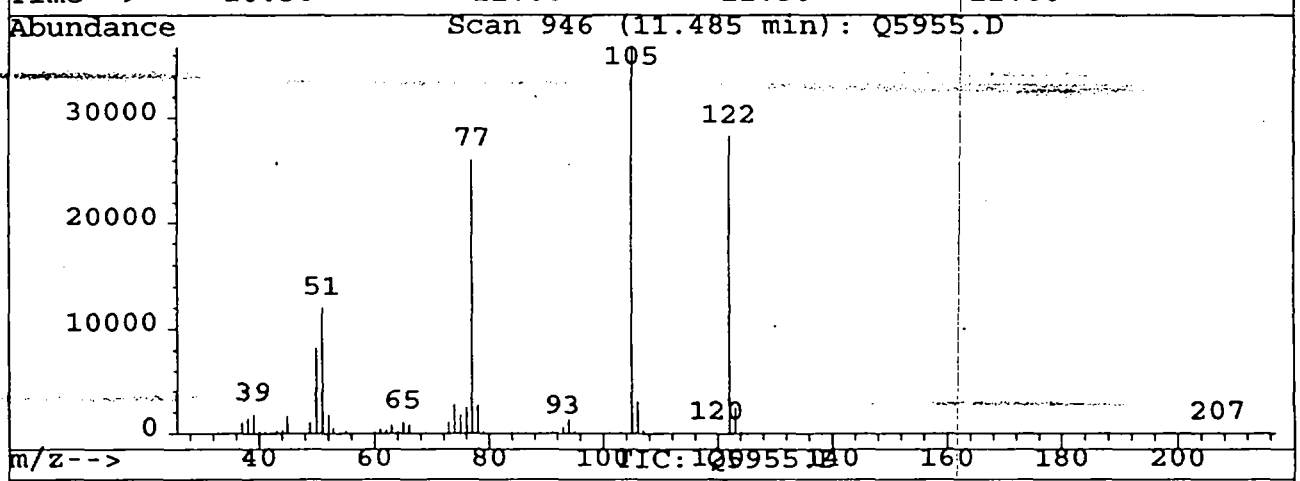
Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:45 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Wed Oct 27 10:04:02 1999
Response via : Multiple Level Calibration





(26) Benzoic acid (T)
11.48min 45.20ug m
response 175940

Ion	Exp%	Act%
121.80	100	100
105.00	125.60	130.20
77.00	88.70	92.14
0.00	0.00	0.00

JB 10/28/99

Q5955.D MSQSOC.M Thu Oct 28 12:45:38 1999 RPT1

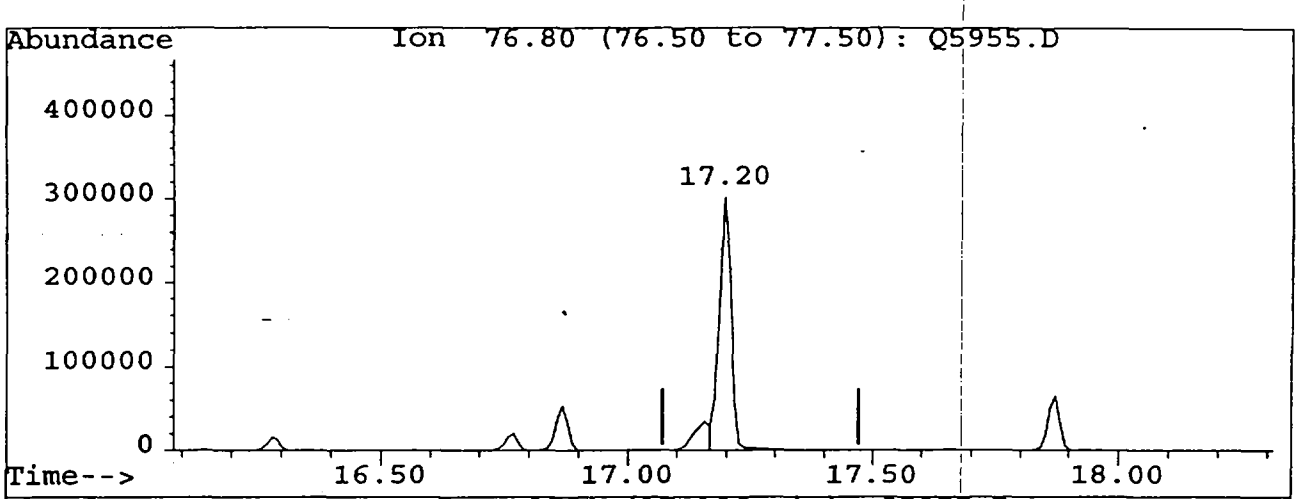
Quantitation Report

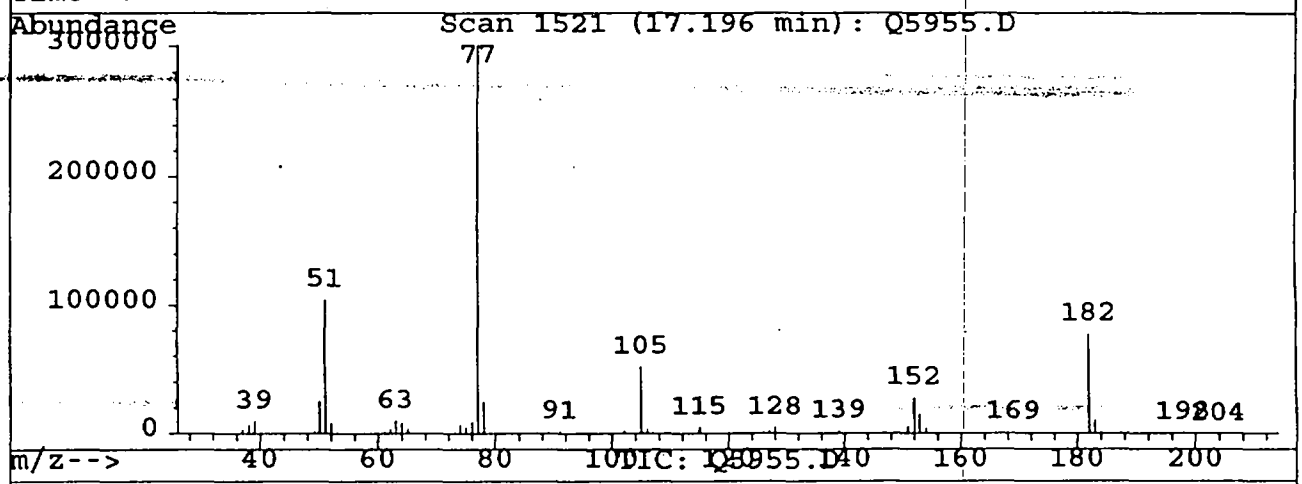
001124-
0141

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Wed Oct 27 10:04:02 1999
Response via : Multiple Level Calibration





(60) 1,2-Diphenylhydrazine (T)
17.20min 50.44ug m
response 507588

Ion	Exp%	Act%
76.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

JB 10/28/99

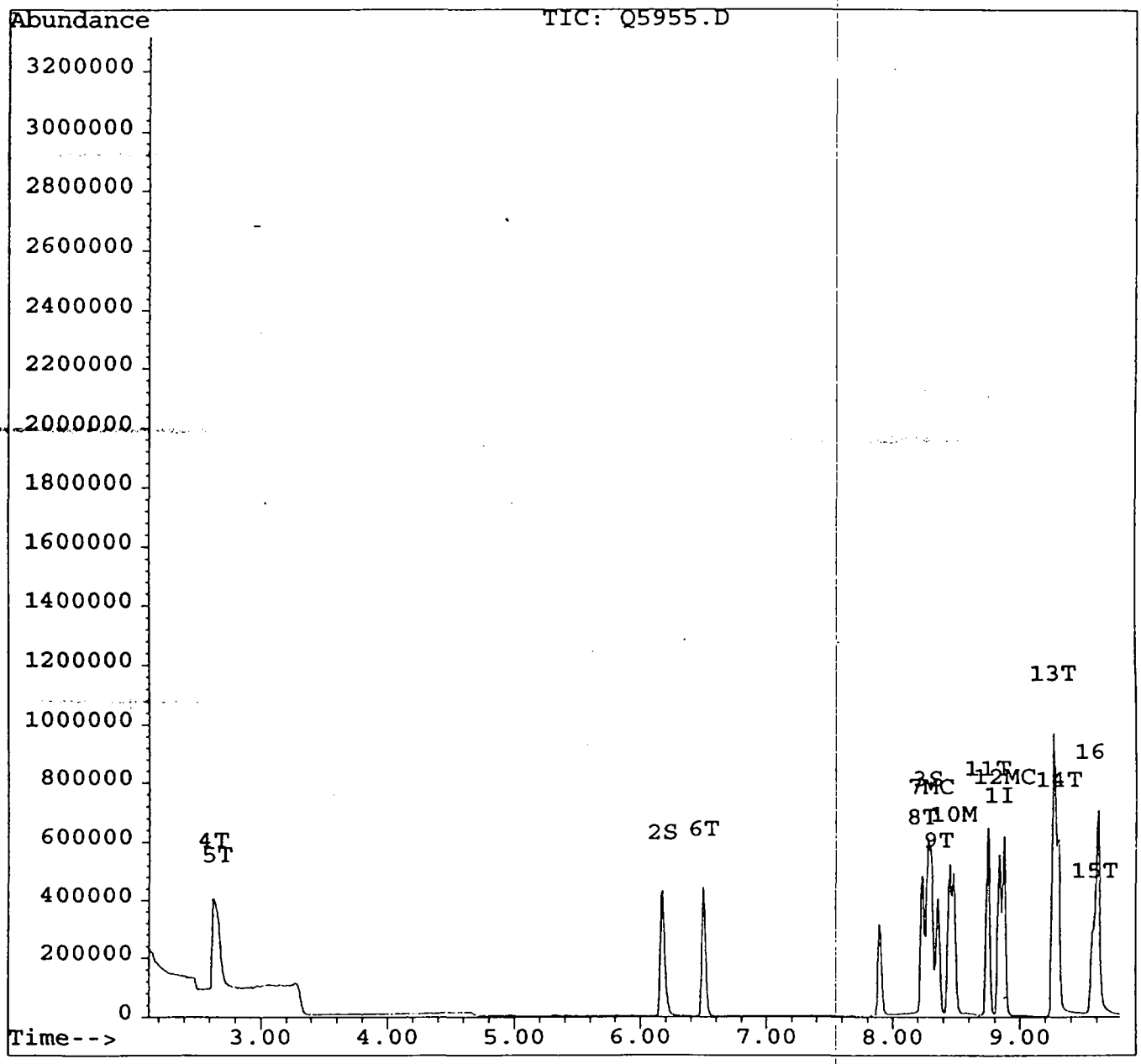
Q5955.D MSQSOC.M Thu Oct 28 12:46:26 1999 RPT1

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

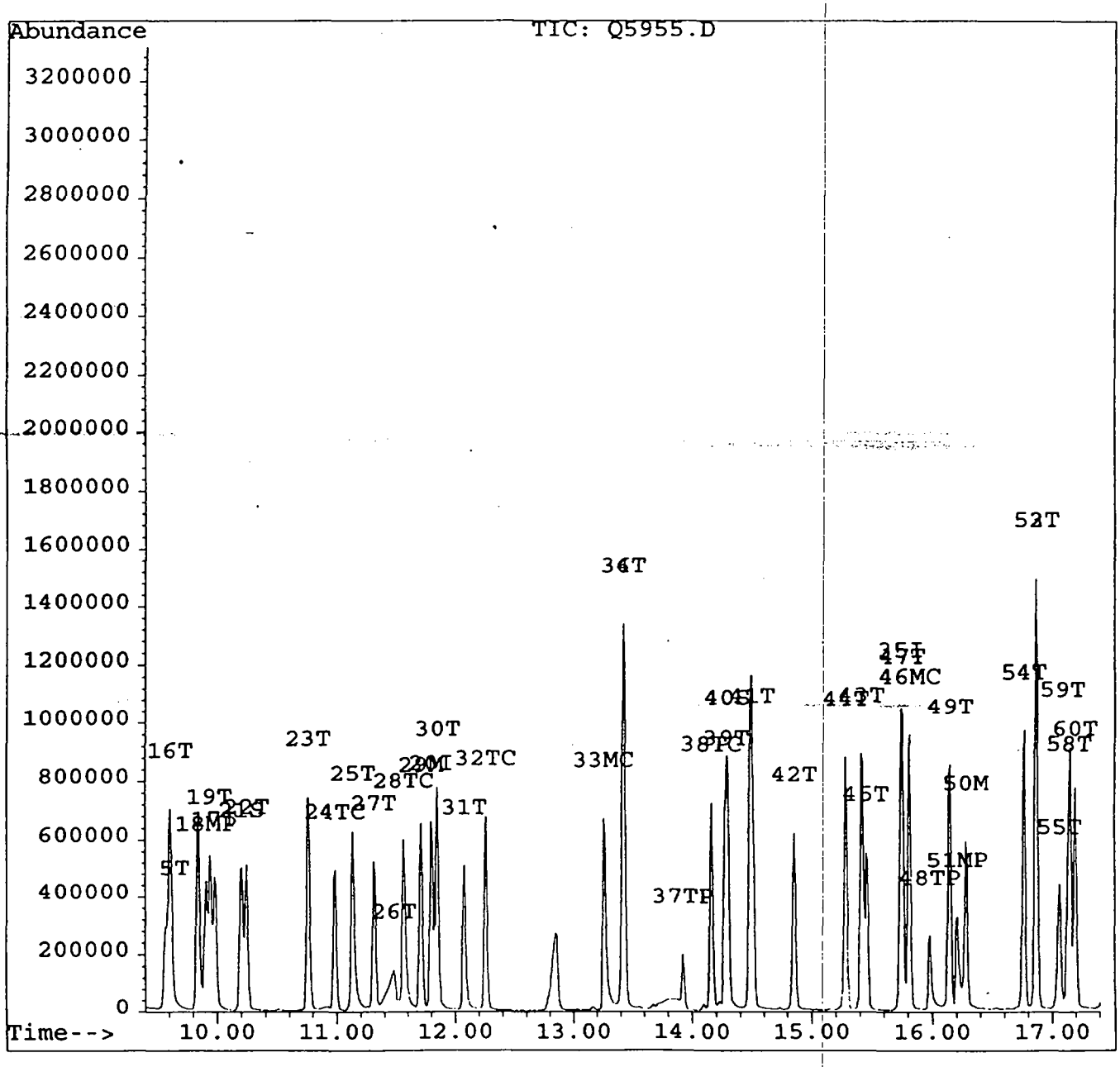


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

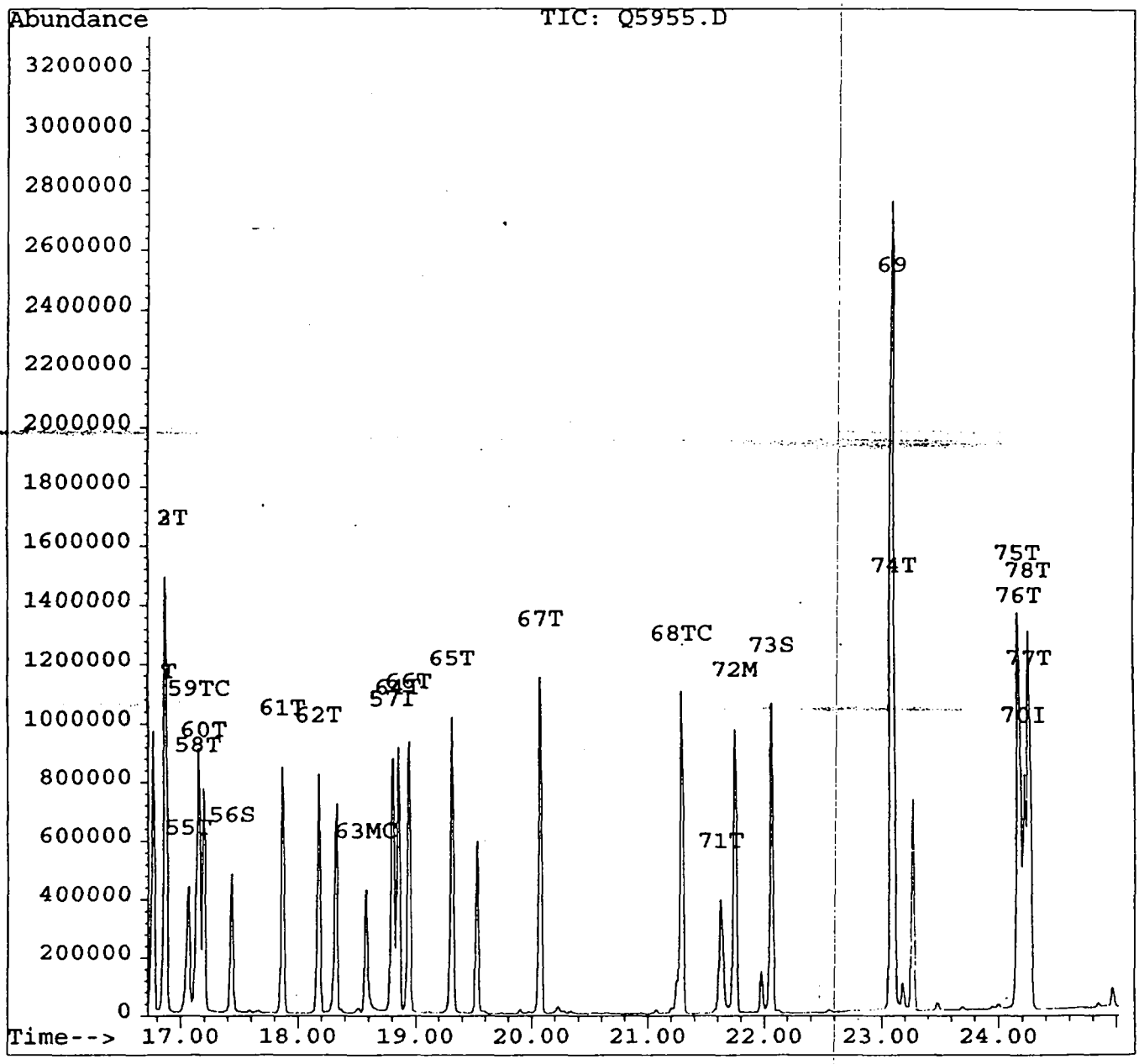


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration



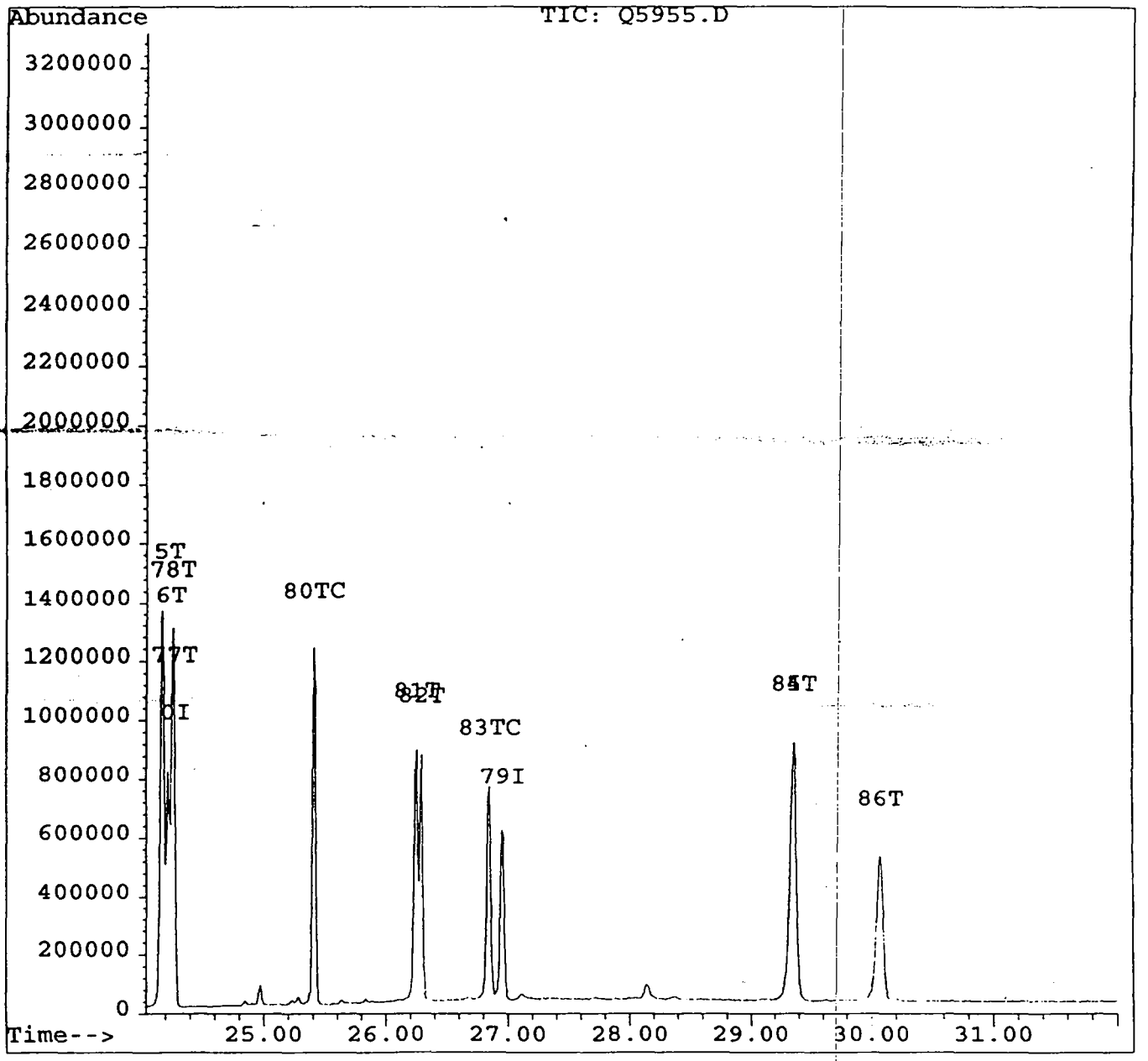
Quantitation Report

001128
0145

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration



7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Instrument ID: HP5971Q Calibration Date: 10/29/99 Time: 0838

Lab File ID: >Q5974 Init. Calib. Date(s): 10/22/99 _____

Init. Calib. Times: 1543 1838

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.533	1.737		13.3	20.0
bis(2-Chloroethyl)ether	0.733	0.726		-1.0	
2-Chlorophenol	1.167	1.192		2.1	
1,3-Dichlorobenzene	1.388	1.442		3.9	
1,4-Dichlorobenzene	1.240	1.270		2.4	20.0
Benzyl alcohol	0.790	0.641		-18.9	
1,2-Dichlorobenzene	1.124	1.191		6.0	
2-Methylphenol	1.053	1.068		1.4	
2,2'-oxybis(1-Chloropropane)	0.971	1.100		13.3	
4-Methylphenol	1.027	1.098		6.9	
N-Nitroso-di-n-propylamine	0.711	0.850	0.050	19.5	
Hexachloroethane	0.498	0.488		-2.0	
Nitrobenzene	0.359	0.356		-0.8	
Isophorone	0.813	0.825		1.5	
2-Nitrophenol	0.262	0.259		-1.1	20.0
2,4-Dimethylphenol	0.338	0.352		4.1	
Benzoic acid	0.243	0.206		-15.2	
bis(2-Chloroethoxy)methane	0.473	0.465		-1.7	
2,4-Dichlorophenol	0.310	0.310		0.0	20.0
1,2,4-Trichlorobenzene	0.288	0.279		-3.1	
Naphthalene	0.850	0.840		-1.2	
4-Chloroaniline	0.426	0.398		-6.6	
Hexachlorobutadiene	0.164	0.159		-3.0	20.0
4-Chloro-3-methylphenol	0.345	0.363		5.2	20.0
2-Methylnaphthalene	0.553	0.564		2.0	
Hexachlorocyclopentadiene	0.144	0.087	0.050	-39.6	
2,4,6-Trichlorophenol	0.374	0.334		-10.7	20.0
2,4,5-Trichlorophenol	0.361	0.334		-7.5	
2-Chloronaphthalene	0.940	0.862		-8.3	
2-Nitroaniline	0.362	0.342		-5.5	
Dimethylphthalate	1.414	1.355		-4.2	
Acenaphthylene	1.720	1.617		-6.0	
2,6-Dinitrotoluene	0.304	0.287		-5.6	
3-Nitroaniline	0.359	0.303		-15.6	
Acenaphthene	0.971	0.889		-8.4	20.0
2,4-Dinitrophenol	0.165	0.115	0.050	-30.3	
4-Nitrophenol	0.196	0.198	0.050	1.0	

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Instrument ID: HP5971Q Calibration Date: 10/29/99 Time: 0838

Lab File ID: >Q5974 Init. Calib. Date(s): 10/22/99 _____

Init. Calib. Times: 1543 1838

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Dibenzofuran	1.447	1.391		-3.9	
2,4-Dinitrotoluene	0.446	0.411		-7.8	
Diethylphthalate	1.475	1.435		-2.7	
4-Chlorophenyl-Phenyl Ether	0.461	0.422		-8.5	
Fluorene	1.033	0.986		-4.6	
4-Nitroaniline	0.402	0.364		-9.4	
4,6-Dinitro-2-methylphenol	0.140	0.122		-12.8	
N-Nitrosodiphenylamine	0.443	0.432		-2.5	20.0
4-Bromophenyl-phenylether	0.210	0.204		-2.9	
Hexachlorobenzene	0.236	0.226		-4.2	
Pentachlorophenol	0.137	0.110		-19.7	20.0
Phenanthrene	0.847	0.794		-6.3	
Anthracene	0.854	0.822		-3.8	
Carbazole	0.976	0.936		-4.1	
Di-n-butylphthalate	1.453	1.412		-2.8	
Fluoranthene	1.049	0.984		-6.2	20.0
Pyrene	1.277	1.186		-7.1	
Butylbenzylphthalate	0.637	0.531		-16.6	
3,3'-Dichlorobenzidine	0.498	0.464		-6.8	
Benzo(a)anthracene	1.127	1.017		-9.8	
Chrysene	0.902	0.751		-16.7	
bis(2-Ethylhexyl)phthalate	0.872	0.798		-8.5	
Di-n-octylphthalate	1.930	1.876		-2.8	20.0
Benzo(b)fluoranthene	1.389	1.274		-8.3	
Benzo(k)fluoranthene	0.799	0.812		1.6	
Benzo(a)pyrene	1.090	1.051		-3.6	20.0
Indeno(1,2,3-cd)pyrene	1.269	1.237		-2.5	
Dibenz(a,h)anthracene	1.073	1.056		-1.6	
Benzo(g,h,i)perylene	1.244	1.215		-2.3	
Nitrobenzene-D5	0.433	0.435		0.5	
2-Fluorobiphenyl	1.021	0.926		-9.3	
Terphenyl-D14	1.060	0.990		-6.6	
Phenol-D5	1.618	1.702		5.2	
2-Fluorophenol	1.434	1.426		-0.6	
2,4,6-Tribromophenol	0.196	0.179		-8.7	

(1) Cannot be separated from Diphenylamine

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS
Quant Time: Oct 29 12:59 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

All spectra and manual integrations for this sample have been reviewed and approved.
By: [signature] Date: 10/8/99
Secondary review: [signature] Date: 11/2/99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.79	152	189009	40.00	ug	-0.05
20) Naphthalene-d8	11.75	136	698034	40.00	ug	-0.05
35) Acenaphthene-d10	15.69	164	421448	40.00	ug	-0.05
57) Phenanthrene-d10	18.76	188	705158	40.00	ug	-0.05
70) Chrysene-d12	24.17	240	538605	40.00	ug	-0.05
79) Perylene-d12	26.91	264	538662	40.00	ug	-0.05

System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	6.10	112	337015	49.75	ug	24.88%
3) Phenol-d5	8.22	99	402052	52.59	ug	26.29%
21) Nitrobenzene-d5	10.14	82	379214	50.25	ug	50.25%
40) 2-Fluorobiphenyl	14.25	172	487826	45.36	ug	45.36%
56) 2,4,6-Tribromophenol	17.38	330	94176	45.68	ug	22.84%
73) Terphenyl-d14	22.02	244	666339	46.68	ug	46.68%

Target Compounds						Qvalue
4) Pyridine	2.55	52	235368	48.39	ug	78
5) N-Nitrosodimethylamine	2.59	42	166636	51.10	ug	# 70
6) Cyclohexanone	6.44	42	149972	60.59	ug	89
7) Phenol	8.24	94	410466	56.64	ug	89
8) Aniline	8.18	93	517933	56.30	ug	93
9) bis(2-Chloroethyl)ether	8.30	63	171436	49.50	ug	100
10) 2-Chlorophenol	8.42	128	281525	51.07	ug	88
11) 1,3-Dichlorobenzene	8.69	146	340799	51.97	ug	97
12) 1,4-Dichlorobenzene	8.82	146	300101	51.22	ug	99
13) Benzyl alcohol	9.21	108	151527	40.60	ug	98
14) 1,2-Dichlorobenzene	9.25	146	281442	52.99	ug	97
15) bis(2-Chloroisopropyl)ethe	9.52	45	259806	56.64	ug	66
16) 2-Methylphenol	9.55	108	252213	50.67	ug	92
17) Hexachloroethane	9.93	117	115412	49.06	ug	88
18) N-Nitroso-di-n-propylamine	9.86	70	200751	59.74	ug	94
19) 4-Methylphenol	9.89	108	259306	53.46	ug	96
22) Nitrobenzene	10.19	77	310872	49.63	ug	92
23) Isophorone	10.70	82	719502	50.72	ug	96
24) 2-Nitrophenol	10.93	139	225722	49.36	ug	91
25) 2,4-Dimethylphenol	11.08	107	307142	52.04	ug	92
26) Benzoic acid	11.42	122	179565	42.35	ug	98
27) bis(2-Chloroethoxy)methane	11.27	93	405654	49.13	ug	98
28) 2,4-Dichlorophenol	11.51	162	270505	49.93	ug	96
29) 1,2,4-Trichlorobenzene	11.66	180	243155	48.42	ug	98
30) Naphthalene	11.79	128	732858	49.43	ug	99
31) 4-Chloroaniline	12.03	127	347208	46.68	ug	96
32) Hexachlorobutadiene	12.21	225	138959	48.64	ug	99

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	4-Chloro-3-methylphenol	13.22	107	316554	52.50 ug		97
34)	2-Methylnaphthalene	13.39	142	492061	50.97 ug		97
36)	2,4,5-Trichlorotoluene	13.38	159	233068	44.62 ug		96
37)	Hexachlorocyclopentadiene	13.88	237	46032	30.41 ug		98
38)	2,4,6-Trichlorophenol	14.12	196	176092	44.73 ug		99
39)	2,4,5-Trichlorophenol	14.23	196	175815	46.27 ug		98
41)	2-Chloronaphthalene	14.46	162	453920	45.84 ug		97
42)	2-Nitroaniline	14.81	65	180176	47.18 ug		93
43)	Acenaphthylene	15.37	152	851868	47.01 ug		98
44)	Dimethylphthalate	15.25	163	713876	47.90 ug		99
45)	2,6-Dinitrotoluene	15.42	165	151304	47.25 ug		88
46)	Acenaphthene	15.76	153	468214	45.74 ug		94
47)	3-Nitroaniline	15.71	138	159780	42.27 ug		96
48)	2,4-Dinitrophenol	15.93	184	60807	35.06 ug		78
49)	Dibenzofuran	16.10	168	732975	48.07 ug		94
50)	2,4-Dinitrotoluene	16.24	165	216538	46.14 ug		98
51)	4-Nitrophenol	16.15	109	104400	50.61 ug	#	49
52)	Fluorene	16.83	166	519265	47.69 ug		96
53)	4-Chlorophenyl-phenylether	16.82	204	222116	45.71 ug		99
54)	Diethylphthalate	16.72	149	756071	48.64 ug		97
55)	4-Nitroaniline	17.02	138	191778	45.26 ug	#	75
58)	4,6-Dinitro-2-methylphenol	17.09	198	107764	43.63 ug		100
59)	N-Nitrosodiphenylamine (1)	17.11	169	380991	48.79 ug		97
60)	1,2-Diphenylhydrazine	17.15	77	544217	48.85 ug	m	100
61)	4-Bromophenyl-phenylether	17.82	248	179707	48.64 ug		98
62)	Hexachlorobenzene	18.13	284	198920	47.83 ug		97
63)	Pentachlorophenol	18.53	266	97145	40.34 ug		97
64)	Phenanthrene	18.81	178	700051	46.89 ug		99
65)	Carbazole	19.26	167	825163	47.96 ug		98
66)	Anthracene	18.90	178	724597	48.10 ug		99
67)	Di-n-butylphthalate	20.03	149	1244926	48.58 ug		98
68)	Fluoranthene	21.24	202	867132	46.89 ug		84
69)	Kepone	23.05	272	503902	55.80 ug		98
71)	Benzidine	21.59	184	355499	49.74 ug		100
72)	Pyrene	21.71	202	798394	46.44 ug		79
74)	Butylbenzylphthalate	23.06	149	357207	41.62 ug		97
75)	3,3'-Dichlorobenzidine	24.12	252	312594	46.59 ug		98
76)	Benzo(a)anthracene	24.13	228	684509	45.11 ug		99
77)	Chrysene	24.23	228	505754	41.64 ug		98
78)	bis(2-Ethylhexyl)phthalate	24.21	149	537426	45.79 ug		92
80)	Di-n-octylphthalate	25.37	149	1262988	48.60 ug		98
81)	Benzo(b)fluoranthene	26.21	252	857961	45.86 ug		91
82)	Benzo(k)fluoranthene	26.25	252	546750	50.81 ug		92

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 26 150a
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83)	Benzo(a)pyrene	26.80	252	707948	48.24 ug		92
84)	Indeno(1,2,3-cd)pyrene	29.29	276	832897	48.72 ug	#	63
85)	Dibenzo(a,h)anthracene	29.29	278	710709	49.21 ug		85
86)	Benzo(g,h,i)perylene	30.00	276	817825	48.82 ug	#	79

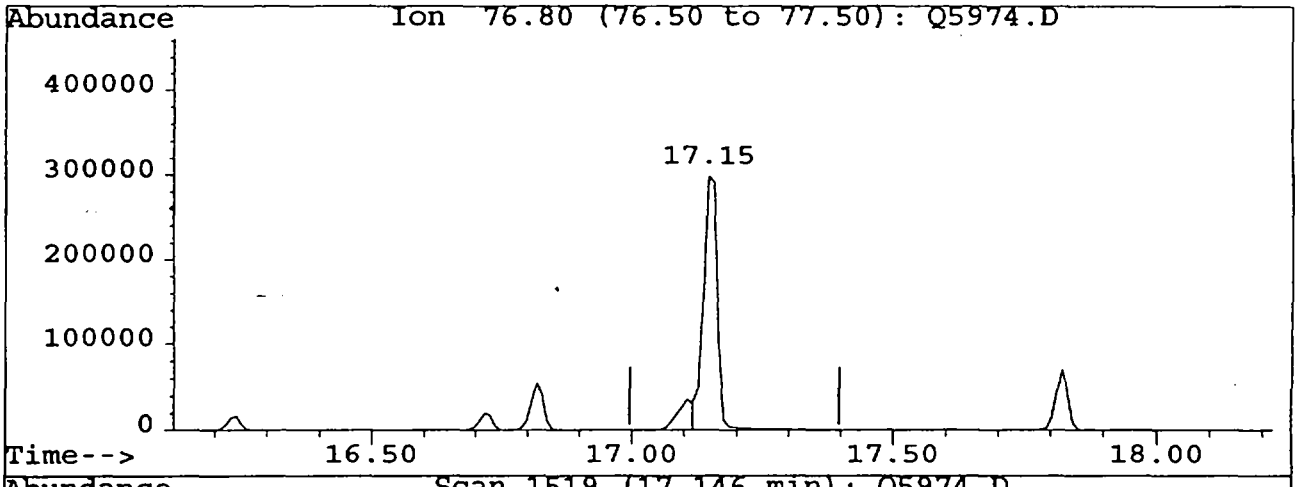
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

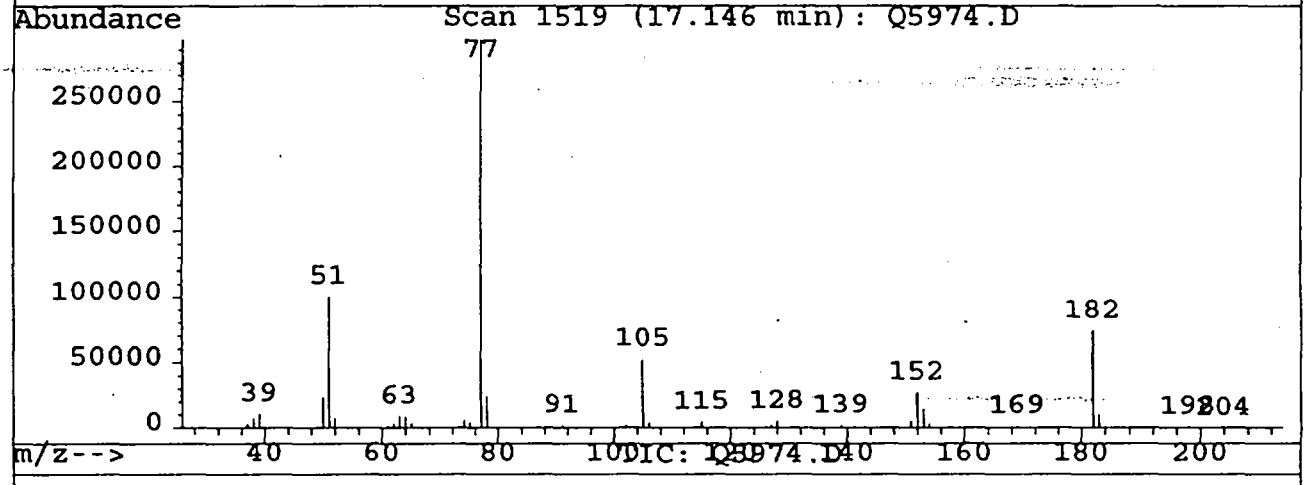
Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 20 0151
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration





(60) 1,2-Diphenylhydrazine (T)
17.15min 48.85ug m
response 544217

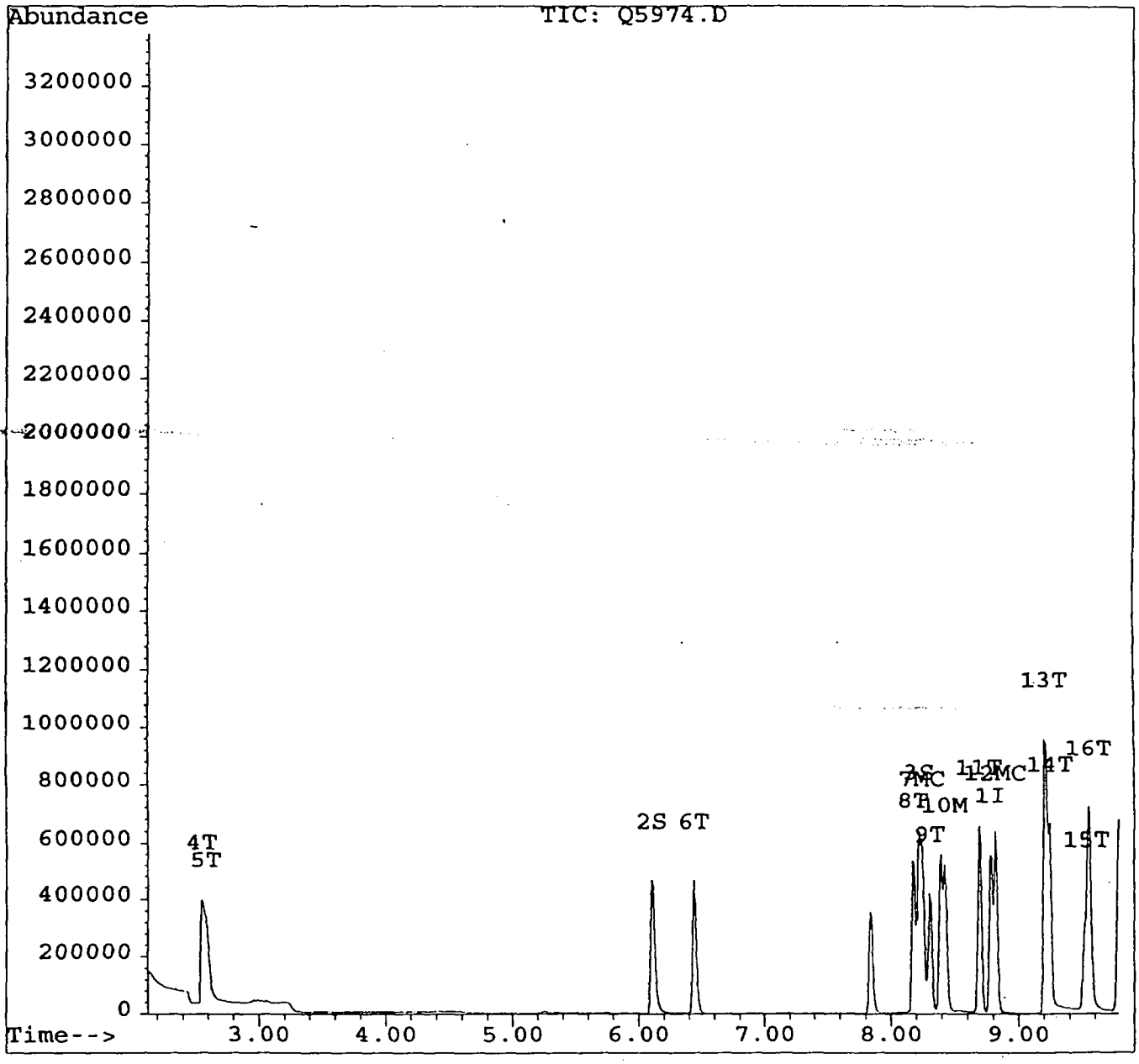
Ion	Exp%	Act%
76.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

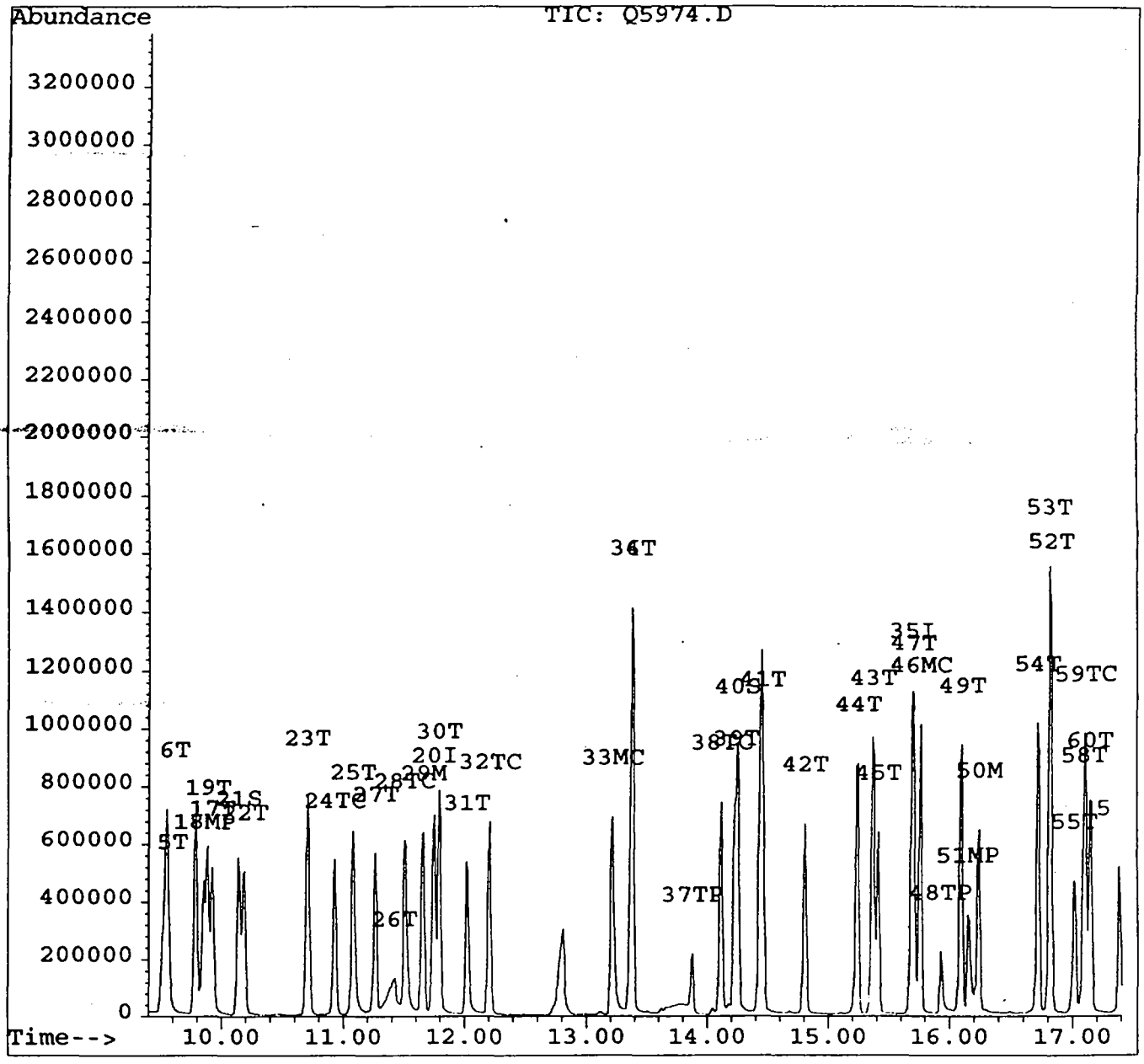


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

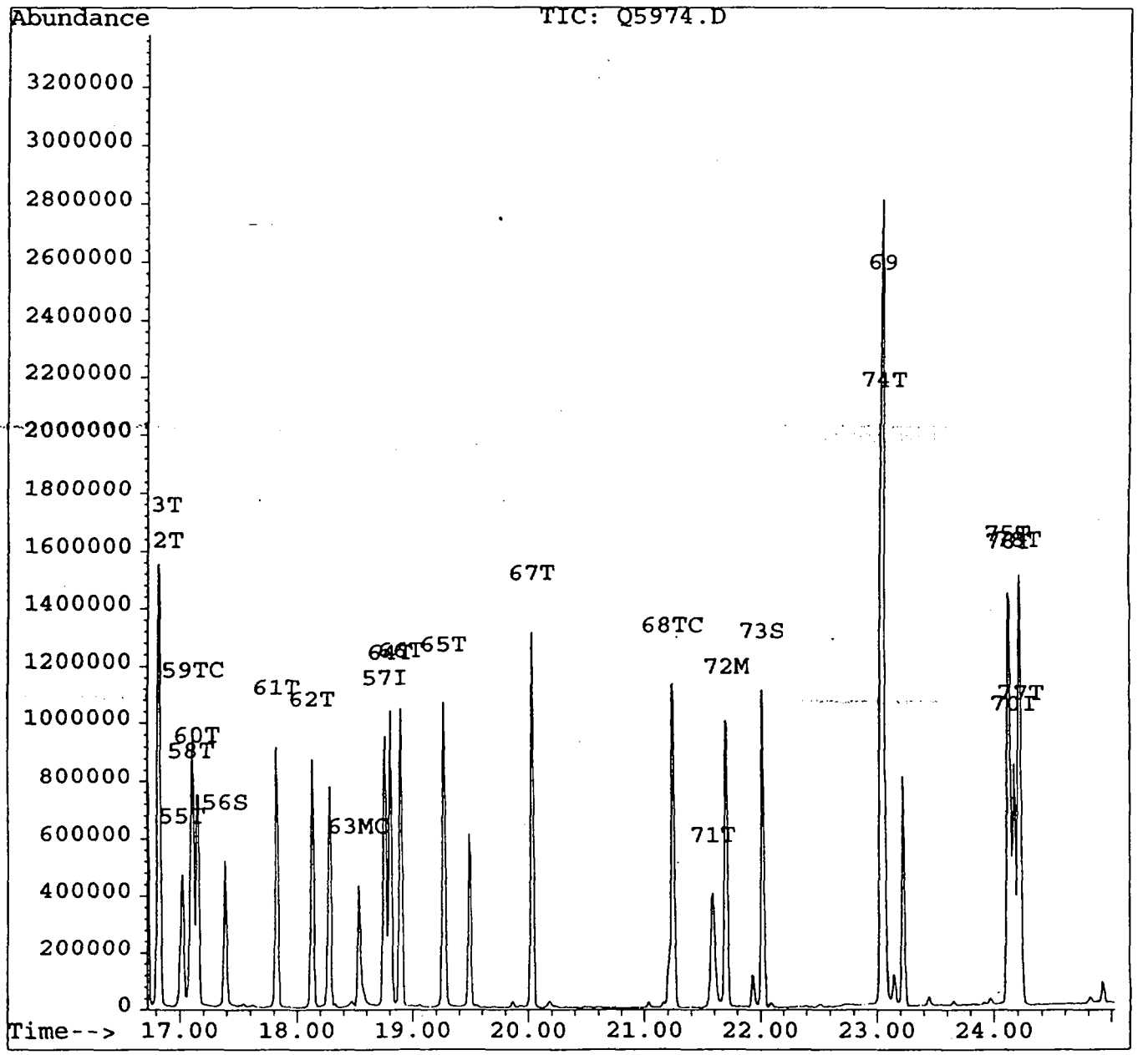


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

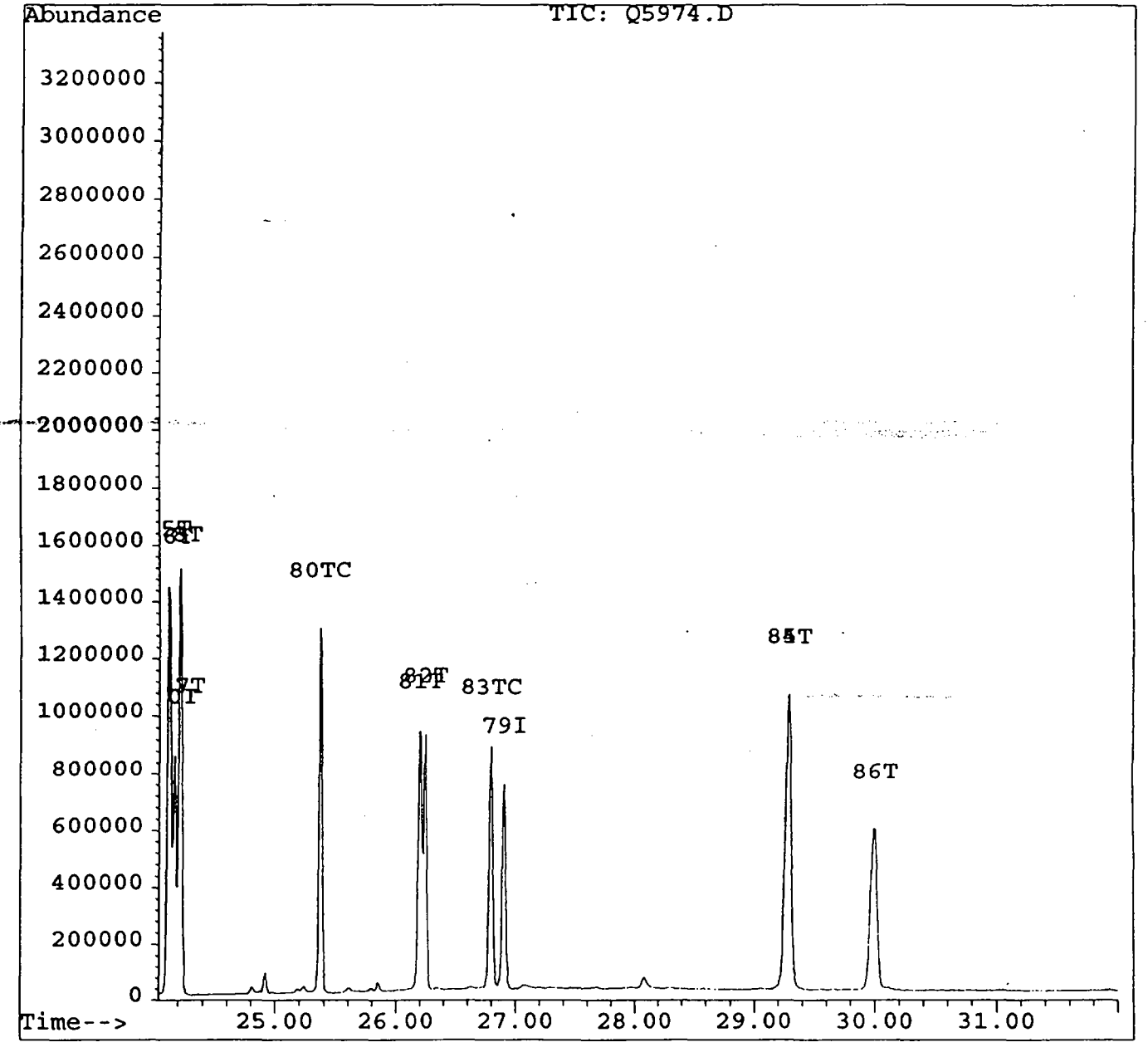


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

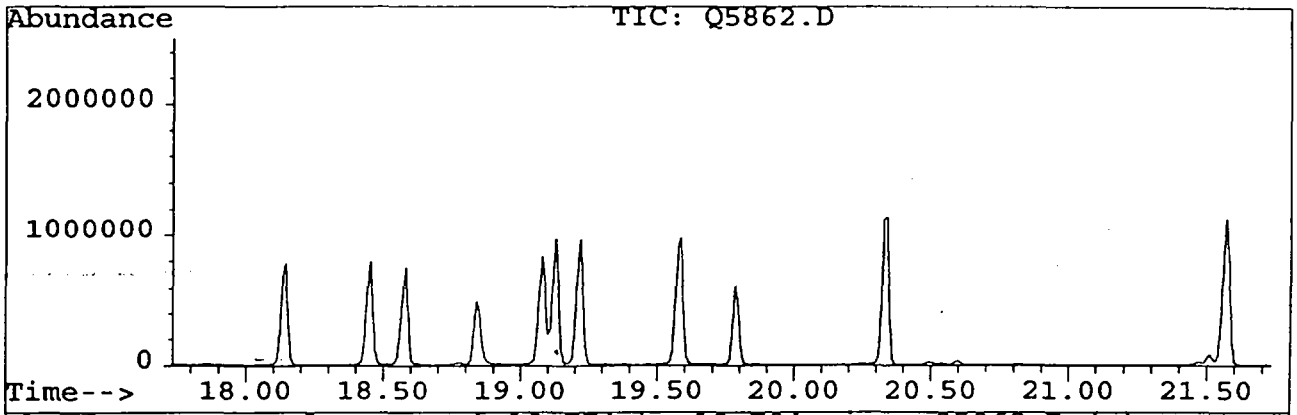


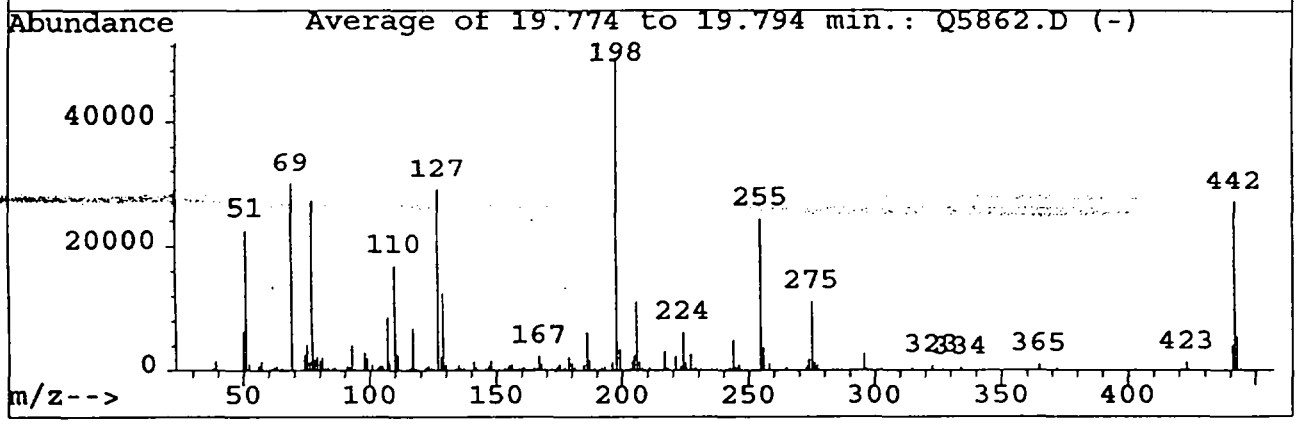
DFTPP NYSDEC '91 ASP

Data File : C:\HPCHEM\MSQ\Q5862.D
Acq On : 22 Oct 99 15:00 hrs
Sample : SSTD050N7
Misc : SSTD050N7 ; SWC ; 1 ; LLW ; Q0382

Vial: 26
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration





Peak Apex is scan: 1725

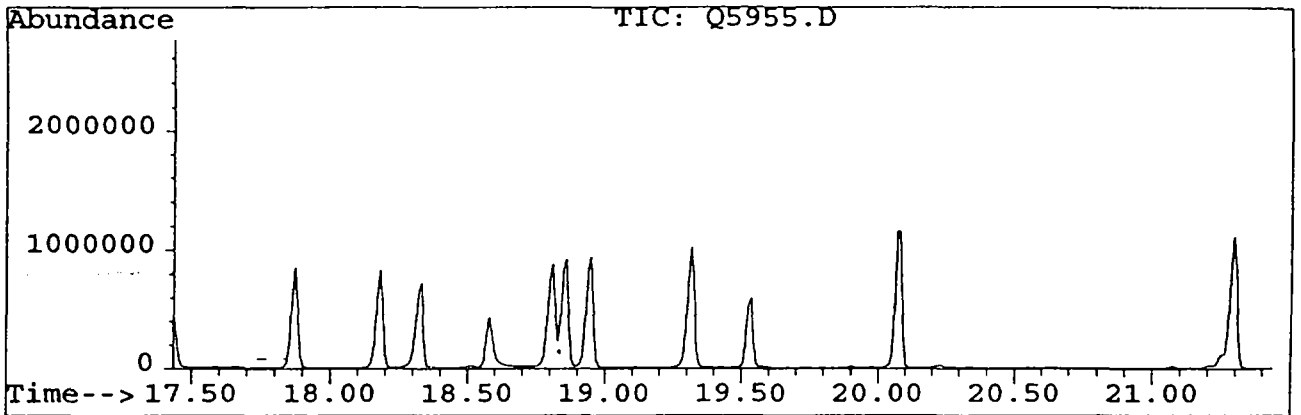
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.2	22603	PASS
68	69	0	2	0.5	153	PASS
69	198	0	100	60.1	30059	PASS
70	69	0	2	0.7	208	PASS
127	198	40	60	58.1	29081	PASS
197	198	0	1	0.3	142	PASS
198	198	100	100	100.0	50054	PASS
199	198	5	9	6.9	3472	PASS
275	198	10	30	22.3	11175	PASS
365	198	1	100	2.1	1057	PASS
441	443	0	100	75.6	4187	PASS
442	198	40	110	54.0	27005	PASS
443	442	17	23	20.5	5538	PASS

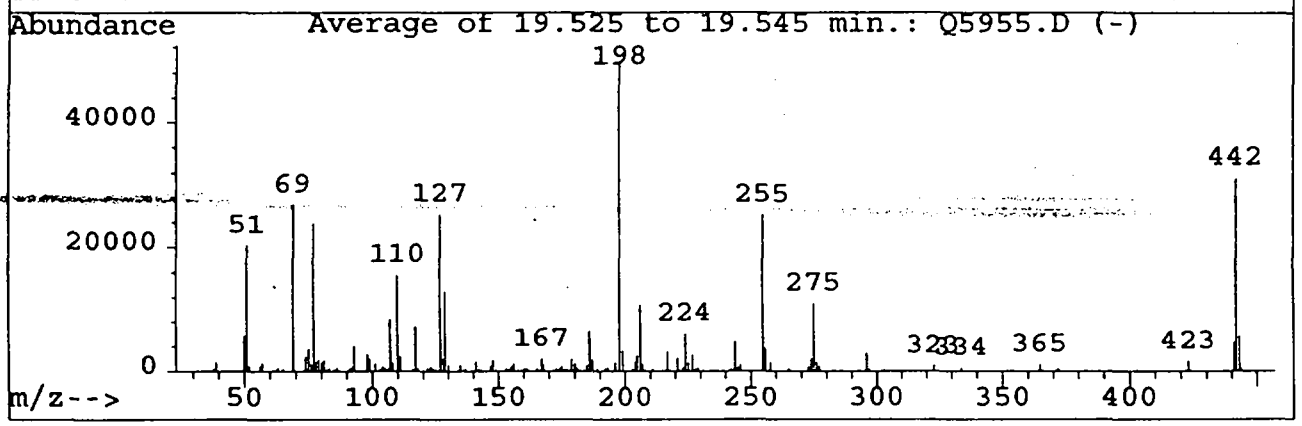
DFTPP NYSDEC '91 ASP

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration





Peak Apex is scan: 1746

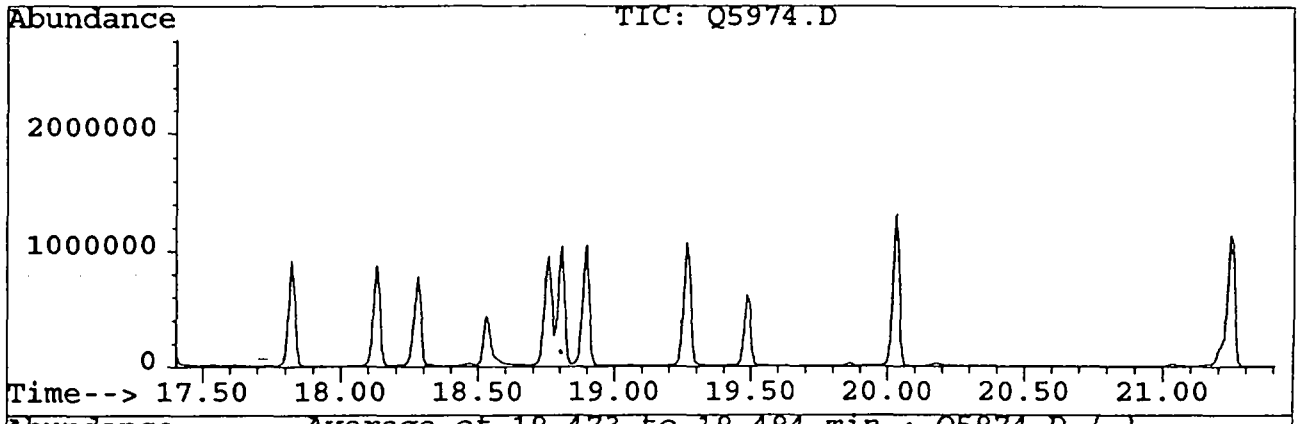
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.8	20325	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	54.1	26927	PASS
70	69	0	2	0.6	172	PASS
127	198	40	60	51.2	25464	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	49768	PASS
199	198	5	9	6.9	3427	PASS
275	198	10	30	22.2	11070	PASS
365	198	1	100	2.3	1138	PASS
441	443	0	100	82.5	4870	PASS
442	198	40	110	62.7	31181	PASS
443	442	17	23	18.9	5903	PASS

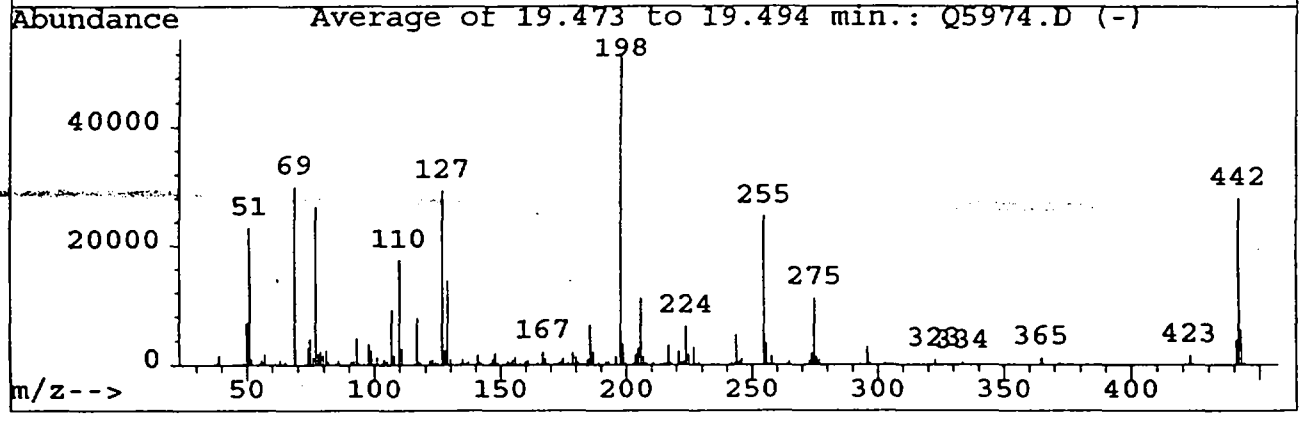
DFTPP NYSDEC '91 ASP

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration





Peak Apex is scan: 1746

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.3	23098	PASS
68	69	0	2	0.4	122	PASS
69	198	0	100	57.6	30015	PASS
70	69	0	2	0.6	189	PASS
127	198	40	60	56.2	29298	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	52101	PASS
199	198	5	9	6.8	3565	PASS
275	198	10	30	21.3	11080	PASS
365	198	1	100	2.2	1148	PASS
441	443	0	100	70.6	4103	PASS
442	198	40	110	53.9	28076	PASS
443	442	17	23	20.7	5813	PASS

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKJQ

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: SBLKJQ

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5964

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKJQ

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: SBLKJQ

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5964

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	6	J
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	20	J
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	21	J
117-84-0	Di-n-octylphthalate	32	J
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5964.D
Acq On : 28 Oct 99 15:08 hrs
Sample : 102299-B01
Misc : SBLKJQ ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 15:40 1999

Vial: 9
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.86	152	183954	40.00 ug	0.02
20) Naphthalene-d8	11.81	136	761041	40.00 ug	0.00
35) Acenaphthene-d10	15.76	164	444755	40.00 ug	0.01
57) Phenanthrene-d10	18.81	188	728491	40.00 ug	0.00
70) Chrysene-d12	24.22	240	736889	40.00 ug	0.00
79) Perylene-d12	26.97	264	587955	40.00 ug	0.00

System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	6.21	112	732858	111.17 ug	55.58%
3) Phenol-d5	8.29	99	1090667	146.58 ug	73.29%
21) Nitrobenzene-d5	10.21	82	544907	66.23 ug	66.23%
40) 2-Fluorobiphenyl	14.31	172	870480	76.69 ug	76.69%
56) 2,4,6-Tribromophenol	17.45	330	272925	125.44 ug	62.72%
73) Terphenyl-d14	22.08	244	1202539	61.57 ug	61.57%

Target Compounds					Qvalue
54) Diethylphthalate	16.77	149	5786	5.88 ug	100
67) Di-n-butylphthalate	20.08	149	32342	20.36 ug	94
78) bis(2-Ethylhexyl)phthalate	24.26	149	20564	21.35 ug	90
80) Di-n-octylphthalate	25.42	149	54505	32.03 ug	93

All spectra and manual integrations for this sample have been reviewed and approved.

By: _____ Date: 10/29/99

Secondary review: M. Cabe Date: 10/29/99

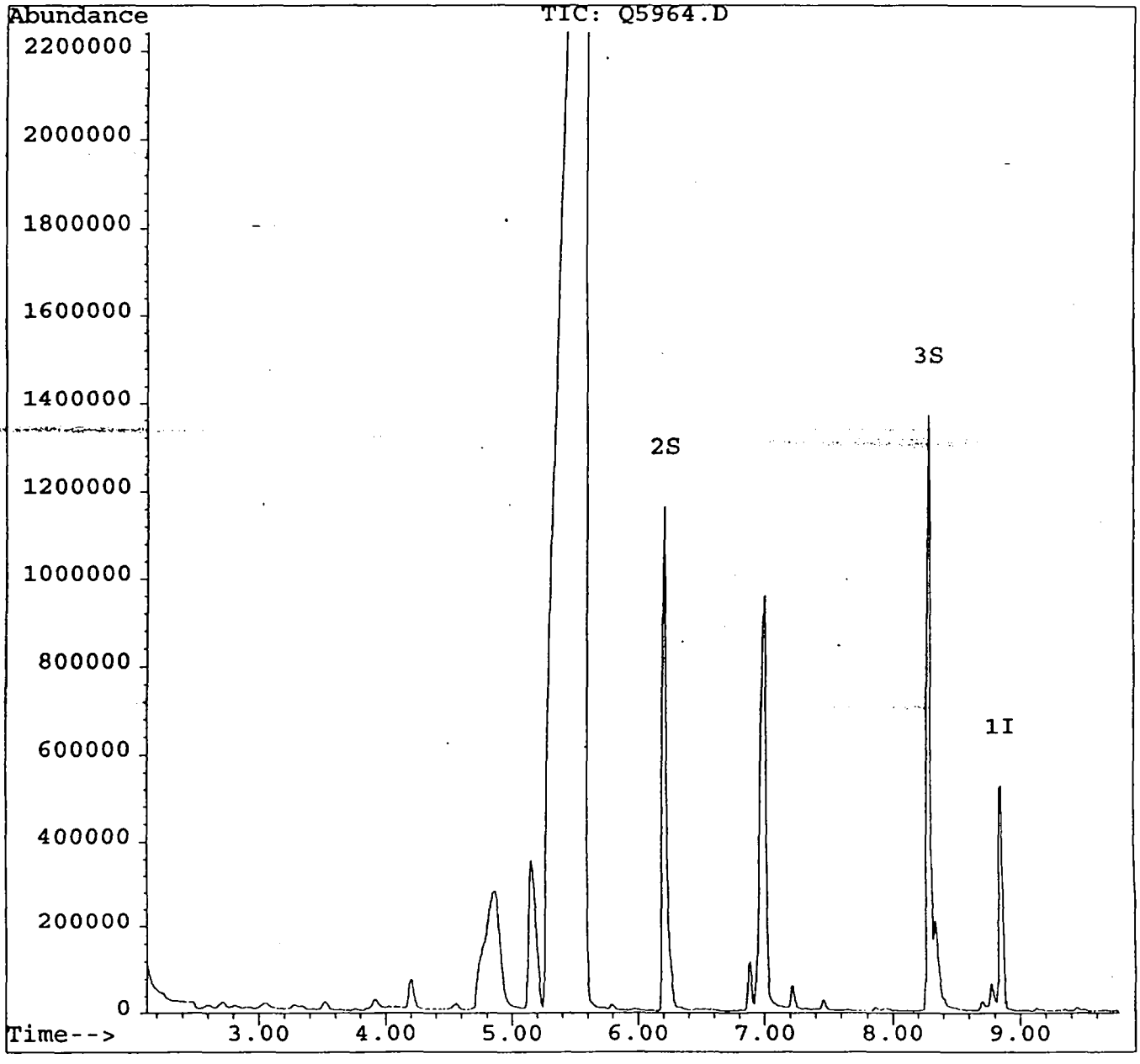
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5964.D
Acq On : 28 Oct 99 15:08 hrs
Sample : 102299-B01
Misc : SBLKJQ ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 15:40 1999

Vial: 9
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

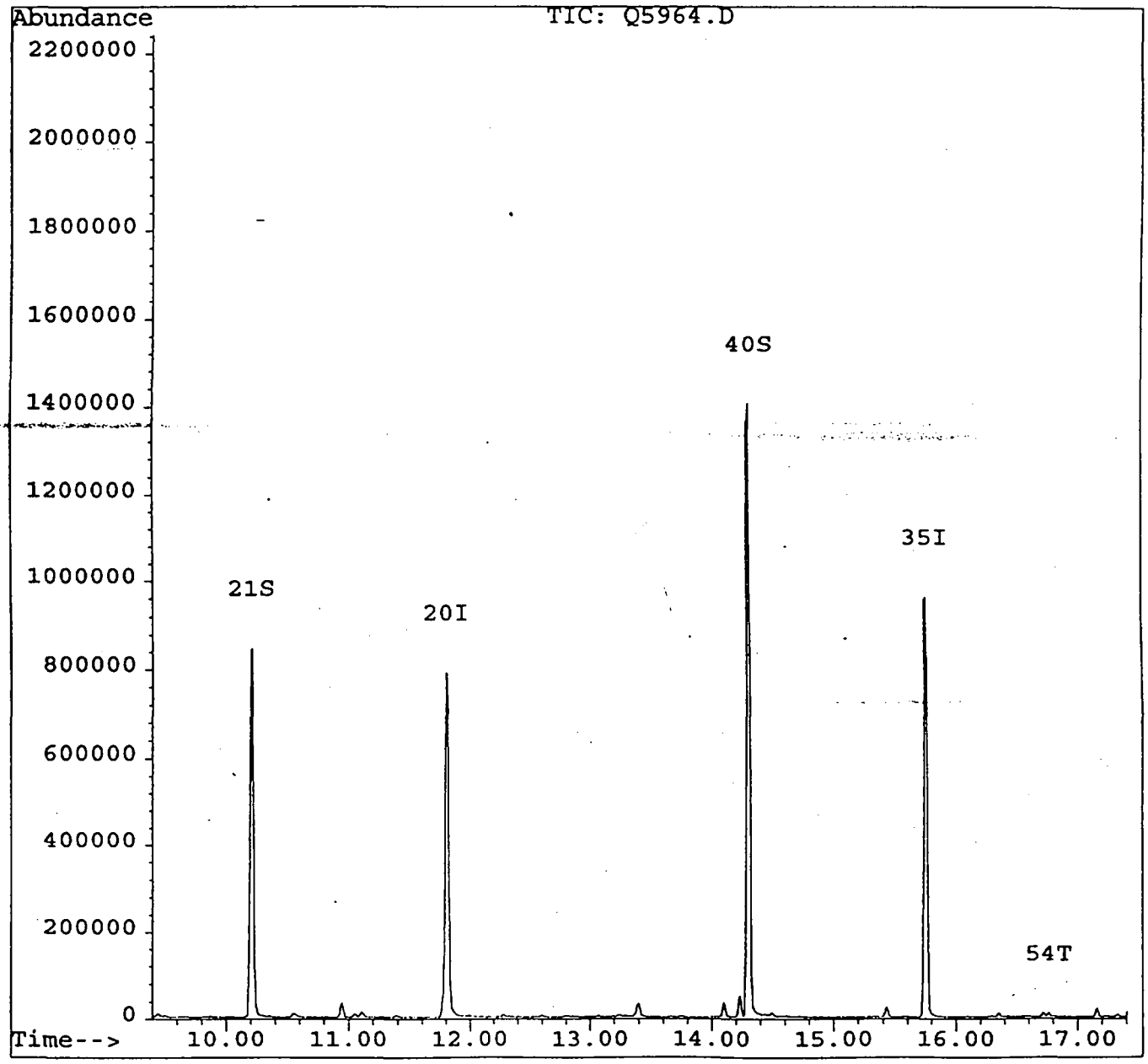


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5964.D
Acq On : 28 Oct 99 15:08 hrs
Sample : 102299-B01
Misc : SBLKJQ ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 15:40 1999

Vial: 9
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

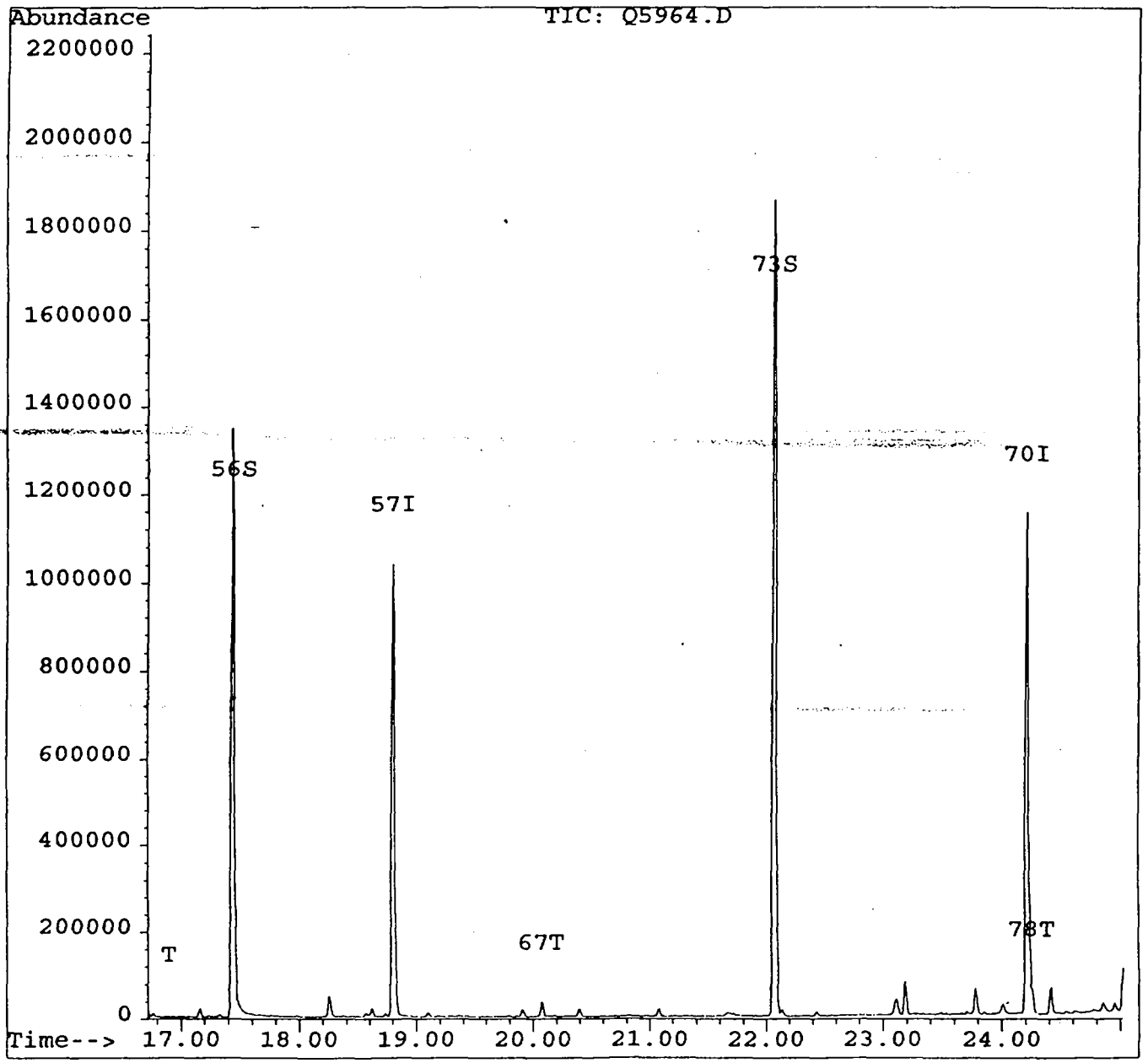


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5964.D
Acq On : 28 Oct 99 15:08 hrs
Sample : 102299-B01
Misc : SBLKJQ ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 15:40 1999

Vial: 9
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

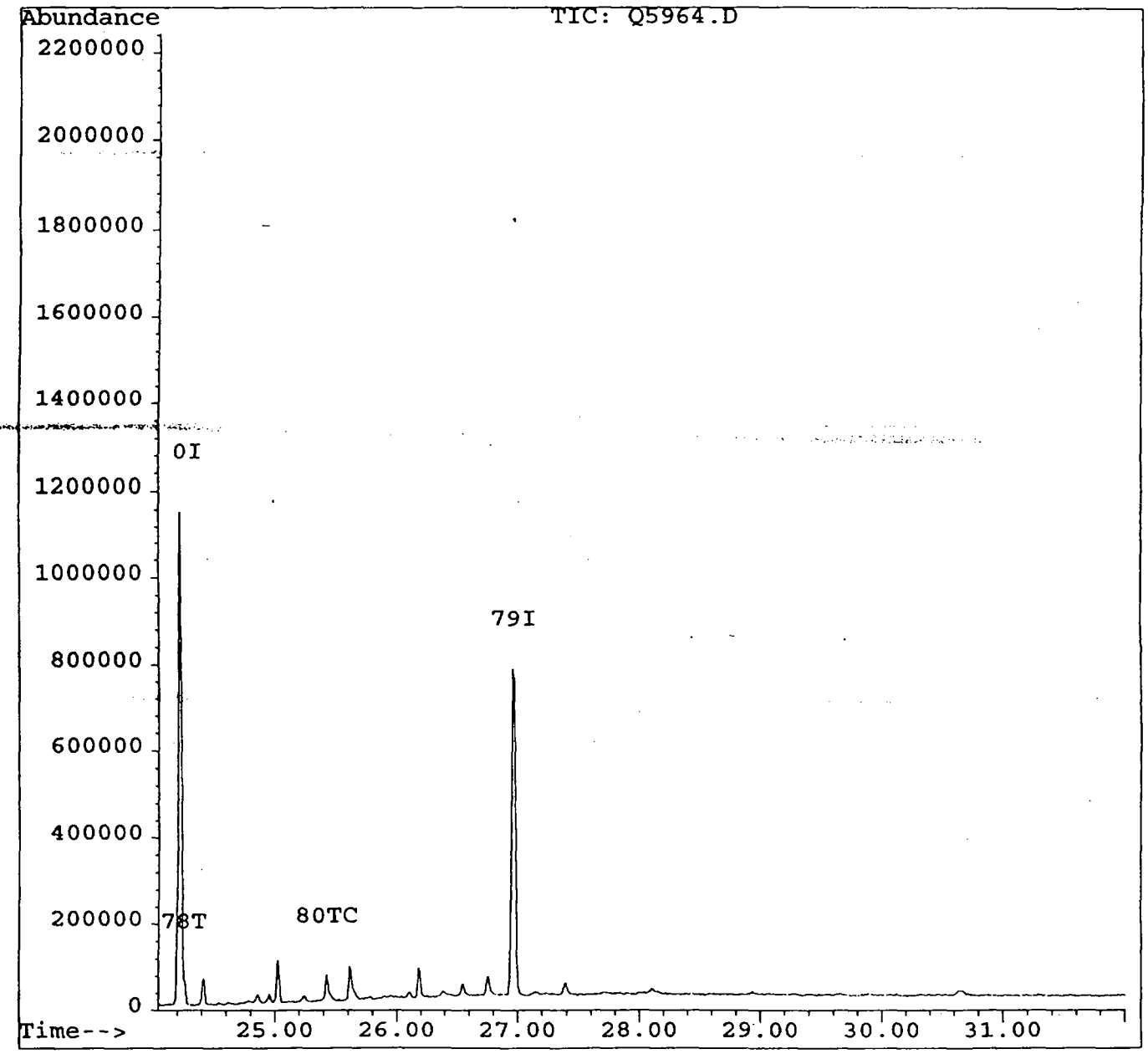


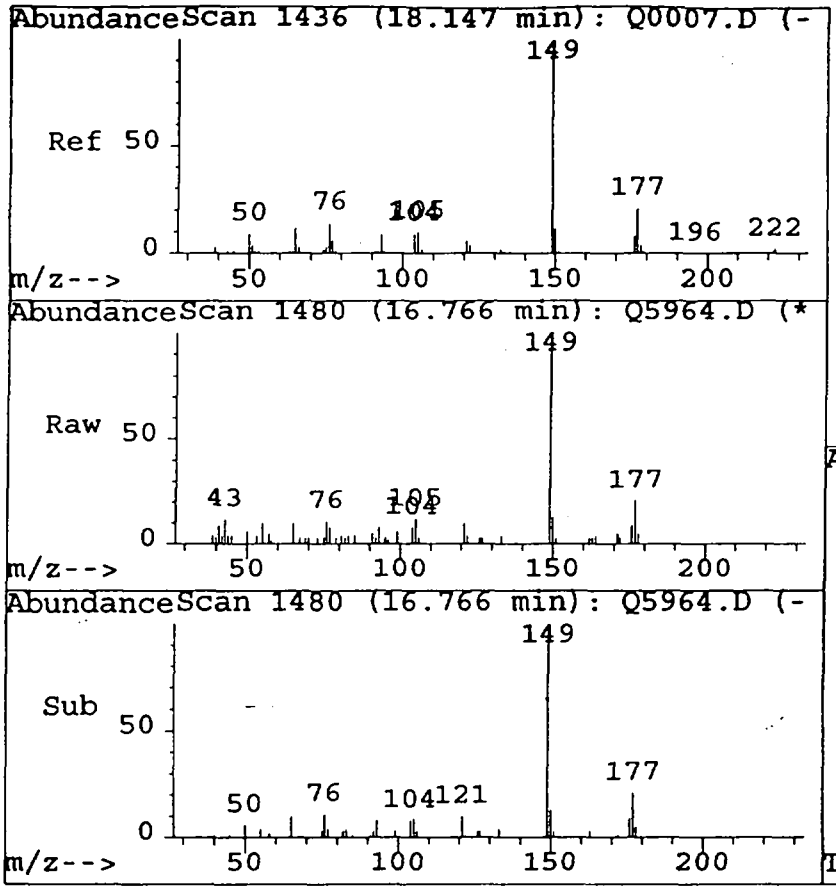
Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5964.D
Acq On : 28 Oct 99 15:08 hrs
Sample : 102299-B01
Misc : SBLKJQ ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 15:40 1999

Vial: 9
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

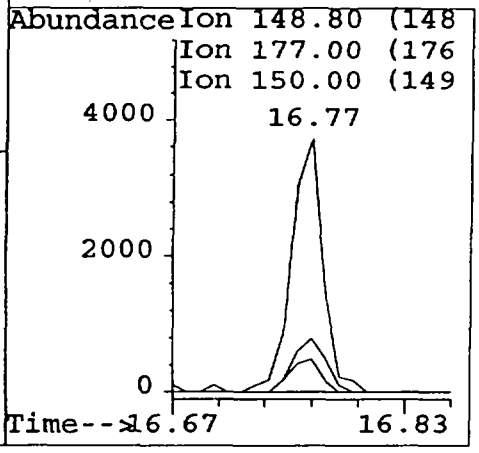


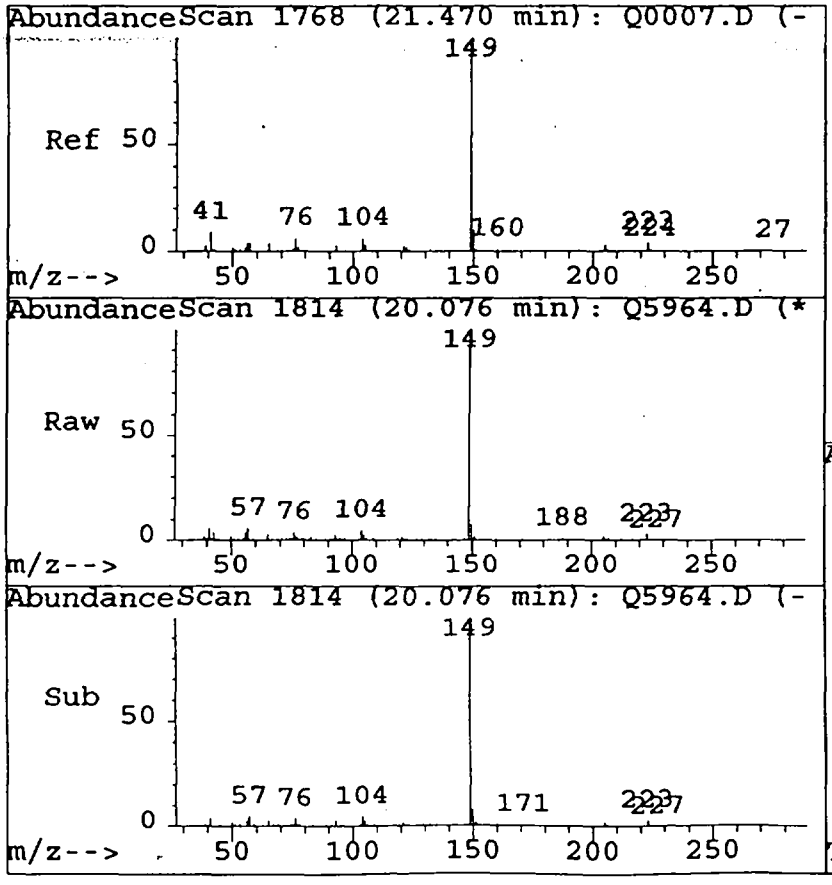


#54
Diethylphthalate
Concen: 5.88 ug
RT: 16.77 min Scan# 1480
Delta R.T. -0.00 min
Lab File: Q5964.D
Acq: 28 Oct 99 15:08 hrs

Tgt Ion:148.8 Resp: 5786

Ion	Ratio	Lower	Upper
149	100		
177	21.4	1.5	41.5
150	13.1	0.0	32.9
0	0.0	0.0	0.0

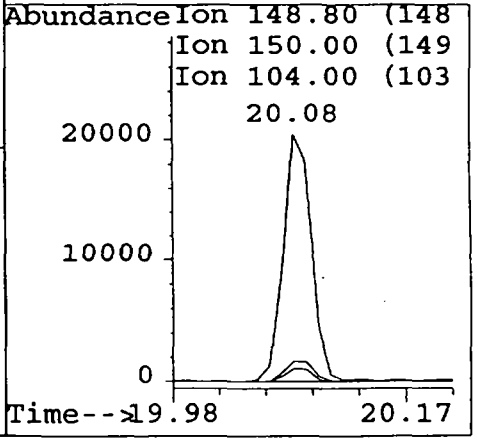


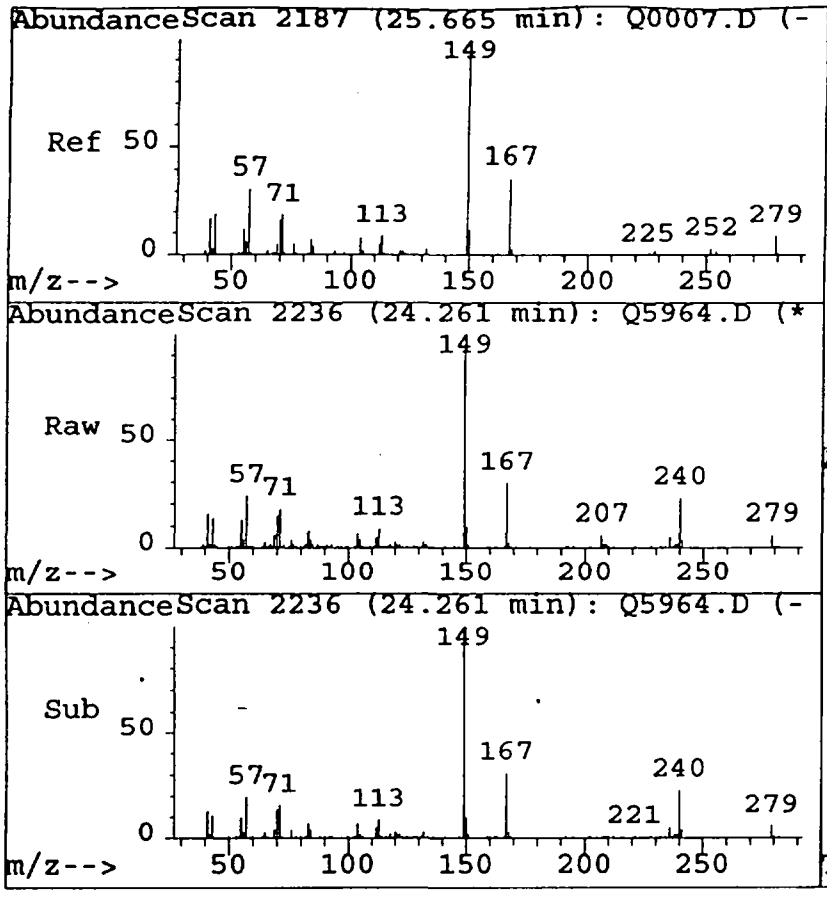


#67
Di-n-butylphthalate
Concen: 20.36 ug
RT: 20.08 min Scan# 1814
Delta R.T. -0.01 min
Lab File: Q5964.D
Acq: 28 Oct 99 15:08 hrs

Tgt Ion:148.8 Resp: 32342

Ion	Ratio	Lower	Upper
149	100		
150	8.2	0.0	31.5
104	5.3	0.0	25.2
0	0.0	0.0	0.0

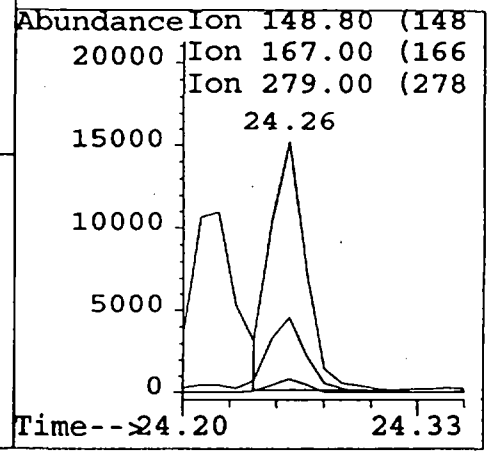


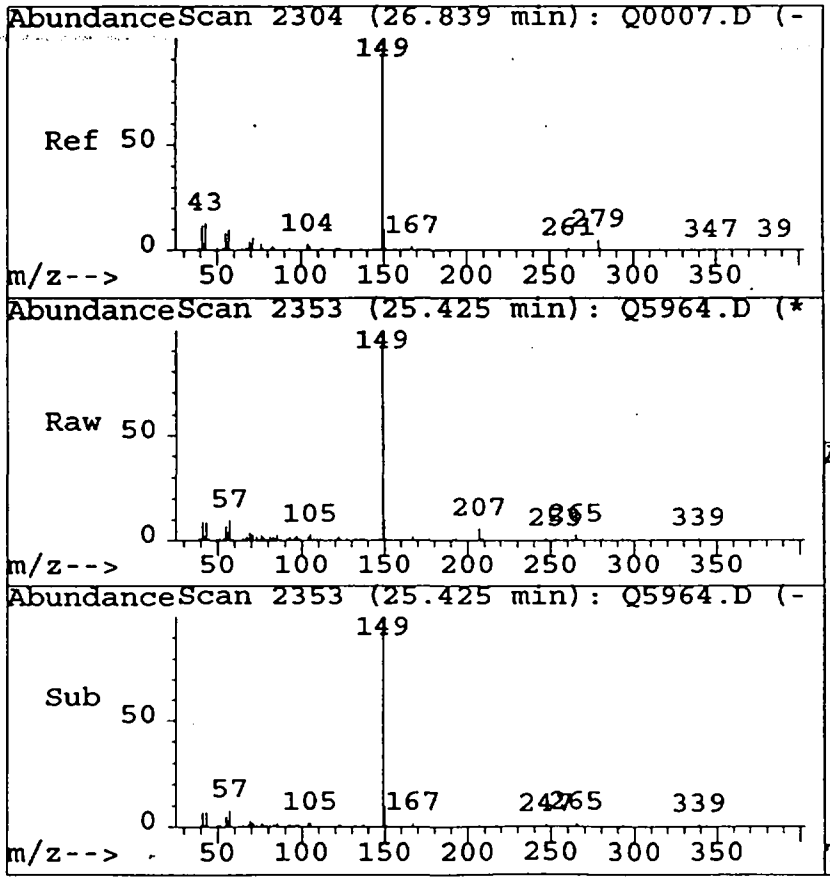


#78
bis(2-Ethylhexyl)phthalate
Concen: 21.35 ug
RT: 24.26 min Scan# 2236
Delta R.T. 0.00 min
Lab File: Q5964.D
Acq: 28 Oct 99 15:08 hrs

Tgt Ion:148.8 Resp: 20564

Ion	Ratio	Lower	Upper
149	100		
167	30.4	16.4	56.4
279	5.6	0.0	28.7
0	0.0	0.0	0.0

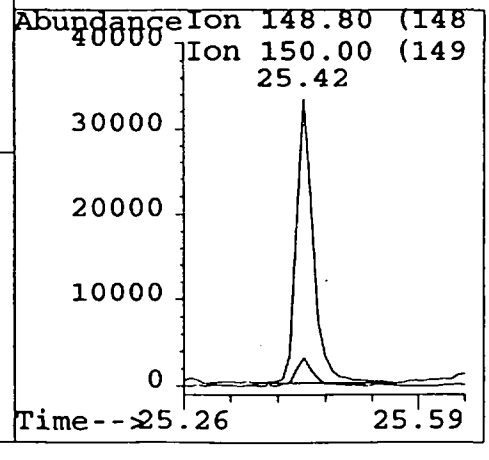




#80
Di-n-octylphthalate
Concen: 32.03 ug
RT: 25.42 min Scan# 2353
Delta R.T. 0.02 min
Lab File: Q5964.D
Acq: 28 Oct 99 15:08 hrs

Tgt Ion:148.8 Resp: 54505

Ion	Ratio	Lower	Upper
149	100		
150	9.4	0.0	32.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKJQFMS

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: SBLKJQFMS

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5965

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1200	
111-44-4	bis(2-Chloroethyl)ether	1100	
95-57-8	2-Chlorophenol	1300	
541-73-1	1,3-Dichlorobenzene	1100	
106-46-7	1,4-Dichlorobenzene	1100	
100-51-6	Benzyl alcohol	1300	
95-50-1	1,2-Dichlorobenzene	1200	
95-48-7	2-Methylphenol	1100	
108-60-1	2,2'-oxybis(1-Chloropropane)	1400	
106-44-5	4-Methylphenol	1300	
621-64-7	N-Nitroso-di-n-propylamine	1300	
67-72-1	Hexachloroethane	1000	
98-95-3	Nitrobenzene	1100	
78-59-1	Isophorone	1100	
88-75-5	2-Nitrophenol	1200	
105-67-9	2,4-Dimethylphenol	1100	
65-85-0	Benzoic acid	440	J
111-91-1	bis(2-Chloroethoxy)methane	1200	
120-83-2	2,4-Dichlorophenol	1400	
120-82-1	1,2,4-Trichlorobenzene	1200	
91-20-3	Naphthalene	1200	
106-47-8	4-Chloroaniline	940	
87-68-3	Hexachlorobutadiene	1100	
59-50-7	4-Chloro-3-methylphenol	1400	
91-57-6	2-Methylnaphthalene	1200	
77-47-4	Hexachlorocyclopentadiene	240	J
88-06-2	2,4,6-Trichlorophenol	1100	
95-95-4	2,4,5-Trichlorophenol	1200	J
91-58-7	2-Chloronaphthalene	1300	
88-74-4	2-Nitroaniline	1200	J
131-11-3	Dimethylphthalate	1200	
208-96-8	Acenaphthylene	990	
606-20-2	2,6-Dinitrotoluene	1200	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKJQFMS

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: SBLKJQFMS

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5965

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1200	J
83-32-9	Acenaphthene	1000	
51-28-5	2,4-Dinitrophenol	860	J
100-02-7	4-Nitrophenol	1300	J
132-64-9	Dibenzofuran	1200	
121-14-2	2,4-Dinitrotoluene	1200	
84-66-2	Diethylphthalate	1100	B
7005-72-3	4-Chlorophenyl-phenylether	1100	
86-73-7	Fluorene	1100	
100-01-6	4-Nitroaniline	1400	J
534-52-1	4,6-Dinitro-2-methylphenol	1100	J
86-30-6	N-Nitrosodiphenylamine (1)	1300	
101-55-3	4-Bromophenyl-phenylether	1300	
118-74-1	Hexachlorobenzene	1300	
87-86-5	Pentachlorophenol	970	J
85-01-8	Phenanthrene	1300	
120-12-7	Anthracene	1100	
86-74-8	Carbazole	1400	
84-74-2	Di-n-butylphthalate	1400	B
206-44-0	Fluoranthene	1400	
129-00-0	Pyrene	1300	
85-68-7	Butylbenzylphthalate	1800	
91-94-1	3,3'-Dichlorobenzidine	810	
56-55-3	Benzo(a)anthracene	1200	
218-01-9	Chrysene	1200	
117-81-7	bis(2-Ethylhexyl)phthalate	1300	B
117-84-0	Di-n-octylphthalate	1300	B
205-99-2	Benzo(b)fluoranthene	1200	
207-08-9	Benzo(k)fluoranthene	1300	
50-32-8	Benzo(a)pyrene	1200	
193-39-5	Indeno(1,2,3-cd)pyrene	1600	
53-70-3	Dibenzo(a,h)anthracene	1600	
191-24-2	Benzo(g,h,i)perylene	1600	

(1) - Cannot be separated from Diphenylamine

001153

0170

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5965.D
Acq On : 28 Oct 99 15:50 hrs
Sample : 102299-B01FMS
Misc : SBLKJQFMS ; SWC ; 1 ; LLS
Quant Time: Oct 29 8:20 1999

Vial: 10
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

All specified manual integrations for this sample have been reviewed and approved.
By: [signature] Date: 10/28/99
Secondary review: [signature] Date: 10/29/99

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.86	152	163664	40.00	ug	0.02
20) Naphthalene-d8	11.82	136	590840	40.00	ug	0.02
35) Acenaphthene-d10	15.76	164	388127	40.00	ug	0.02
57) Phenanthrene-d10	18.83	188	596659	40.00	ug	0.02
70) Chrysene-d12	24.23	240	518611	40.00	ug	0.01
79) Perylene-d12	26.98	264	476220	40.00	ug	0.02

System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	6.21	112	791679	134.98	ug	67.49%
3) Phenol-d5	8.31	99	1018072	153.78	ug	76.89%
21) Nitrobenzene-d5	10.23	82	502228	78.63	ug	78.63%
40) 2-Fluorobiphenyl	14.32	172	701551	70.83	ug	70.83%
56) 2,4,6-Tribromophenol	17.46	330	317644	167.30	ug	83.65%
73) Terphenyl-d14	22.08	244	1135239	82.59	ug	82.59%

Target Compounds							Qvalue
4) Pyridine	2.67	52	192111	760.31	ug	#	67
5) N-Nitrosodimethylamine	2.71	42	178930	1056.39	ug	#	71
7) Phenol	8.33	94	438539	1165.08	ug		85
8) Aniline	8.25	93	549399	1149.78	ug		99
9) bis(2-Chloroethyl)ether	8.38	63	204722	1137.94	ug		100
10) 2-Chlorophenol	8.51	128	382672	1336.53	ug		86
11) 1,3-Dichlorobenzene	8.77	146	371438	1090.53	ug		97
12) 1,4-Dichlorobenzene	8.90	146	339976	1117.16	ug		99
13) Benzyl alcohol	9.29	108	254282	1311.69	ug		96
14) 1,2-Dichlorobenzene	9.31	146	339345	1229.96	ug		96
15) bis(2-Chloroisopropyl)ethe	9.59	45	321938	1351.06	ug	#	55
16) 2-Methylphenol	9.63	108	291200	1126.29	ug		97
17) Hexachloroethane	10.00	117	121963	998.18	ug		84
18) N-Nitroso-di-n-propylamine	9.93	70	231602	1326.72	ug		92
19) 4-Methylphenol	9.97	108	333458	1323.51	ug		98
22) Nitrobenzene	10.27	77	357211	1123.05	ug		93
23) Isophorone	10.79	82	814227	1130.30	ug		90
24) 2-Nitrophenol	11.01	139	273717	1178.84	ug		90
25) 2,4-Dimethylphenol	11.16	107	325237	1085.19	ug		96
26) Benzoic acid	11.49	122	95811	445.03	ug		98
27) bis(2-Chloroethoxy)methane	11.33	93	505084	1204.86	ug		98
28) 2,4-Dichlorophenol	11.57	162	374175	1360.30	ug		96
29) 1,2,4-Trichlorobenzene	11.73	180	299141	1173.07	ug		99
30) Naphthalene	11.86	128	903804	1200.58	ug		99
31) 4-Chloroaniline	12.09	127	354368	938.24	ug		98
32) Hexachlorobutadiene	12.27	225	164331	1132.95	ug		99
33) 4-Chloro-3-methylphenol	13.26	107	420269	1372.63	ug		99

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5965.D
Acq On : 28 Oct 99 15:50 hrs
Sample : 102299-B01FMS
Misc : SBLKJQFMS ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 29 8:20 1999

Vial: 10 ~~0171~~
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
34)	2-Methylnaphthalene	13.45	142	577425	1178.02 ug		98
36)	2,4,5-Trichlorotoluene	13.44	159	279009	966.95 ug		98
37)	Hexachlorocyclopentadiene	13.94	237	20603	246.35 ug		100
38)	2,4,6-Trichlorophenol	14.18	196	240553	1105.95 ug		100
39)	2,4,5-Trichlorophenol	14.29	196	245064	1167.31 ug		99
41)	2-Chloronaphthalene	14.53	162	711188	1300.12 ug		98
42)	2-Nitroaniline	14.88	65	254350	1205.65 ug		92
43)	Acenaphthylene	15.43	152	993562	992.44 ug		98
44)	Dimethylphthalate	15.30	163	1008118	1224.47 ug		99
45)	2,6-Dinitrotoluene	15.48	165	215553	1218.54 ug		91
46)	Acenaphthene	15.83	153	590855	1044.77 ug		96
47)	3-Nitroaniline	15.78	138	248574	1190.31 ug		95
48)	2,4-Dinitrophenol	16.01	184	82231	858.30 ug		87
49)	Dibenzofuran	16.16	168	986871	1171.64 ug		94
50)	2,4-Dinitrotoluene	16.31	165	300797	1160.26 ug		94
51)	4-Nitrophenol	16.24	109	149811	1314.65 ug	#	48
52)	Fluorene	16.89	166	684662	1138.10 ug		97
53)	4-Chlorophenyl-phenylether	16.89	204	299655	1116.18 ug		95
54)	Diethylphthalate	16.79	149	977276	1138.01 ug		100
55)	4-Nitroaniline	17.10	138	320524	1369.23 ug	#	77
58)	4,6-Dinitro-2-methylphenol	17.17	198	143596	1145.47 ug		100
59)	N-Nitrosodiphenylamine (1)	17.18	169	527033	1329.73 ug		95
60)	1,2-Diphenylhydrazine	17.22	77	690244	1220.68 ug	m	100
61)	4-Bromophenyl-phenylether	17.89	248	248712	1326.23 ug		93
62)	Hexachlorobenzene	18.20	284	282870	1340.00 ug		91
63)	Pentachlorophenol	18.61	266	118610	970.40 ug		98
64)	Phenanthrene	18.88	178	983237	1297.48 ug		98
65)	Carbazole	19.34	167	1192785	1365.94 ug		97
66)	Anthracene	18.97	178	843535	1103.17 ug		99
67)	Di-n-butylphthalate	20.09	149	1781568	1369.63 ug		99
68)	Fluoranthene	21.31	202	1286057	1370.08 ug		78
71)	Benzidine	21.61	184	5719	13.85 ug		100
72)	Pyrene	21.77	202	1253027	1261.76 ug		76
74)	Butylbenzylphthalate	23.12	149	912110	1839.69 ug		88
75)	3,3'-Dichlorobenzidine	24.18	252	315437	813.94 ug		98
76)	Benzo(a)anthracene	24.20	228	1091052	1244.68 ug		98
77)	Chrysene	24.29	228	820695	1169.78 ug		99
78)	bis(2-Ethylhexyl)phthalate	24.27	149	874782	1290.40 ug		99
80)	Di-n-octylphthalate	25.43	149	1842302	1336.71 ug		100
81)	Benzo(b)fluoranthene	26.27	252	1179215	1188.40 ug		91
82)	Benzo(k)fluoranthene	26.32	252	745362	1306.19 ug		92
83)	Benzo(a)pyrene	26.87	252	980090	1259.28 ug		91
84)	Indeno(1,2,3-cd)pyrene	29.43	276	1430732	1577.93 ug	#	60

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

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Sample : 102299-B01FMS
Misc : SBLKJQFMS ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 29 8:20 1999

Vial: 10
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85)	Dibenzo(a,h)anthracene	29.43	278	1208064	1577.12	ug		82
86)	Benzo(g,h,i)perylene	30.14	276	1459096	1642.52	ug	#	77

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5965.D
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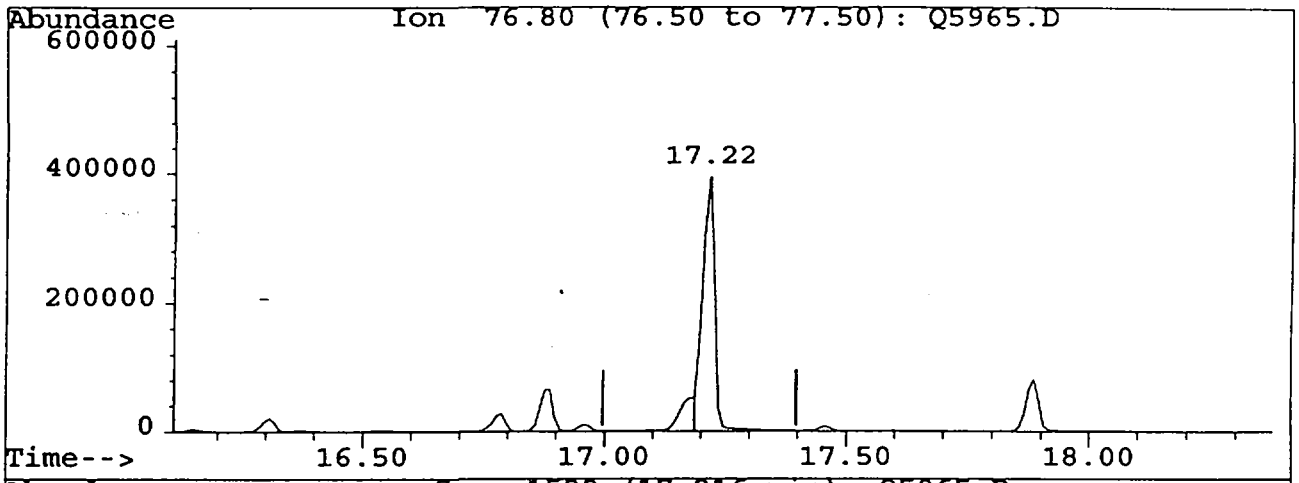

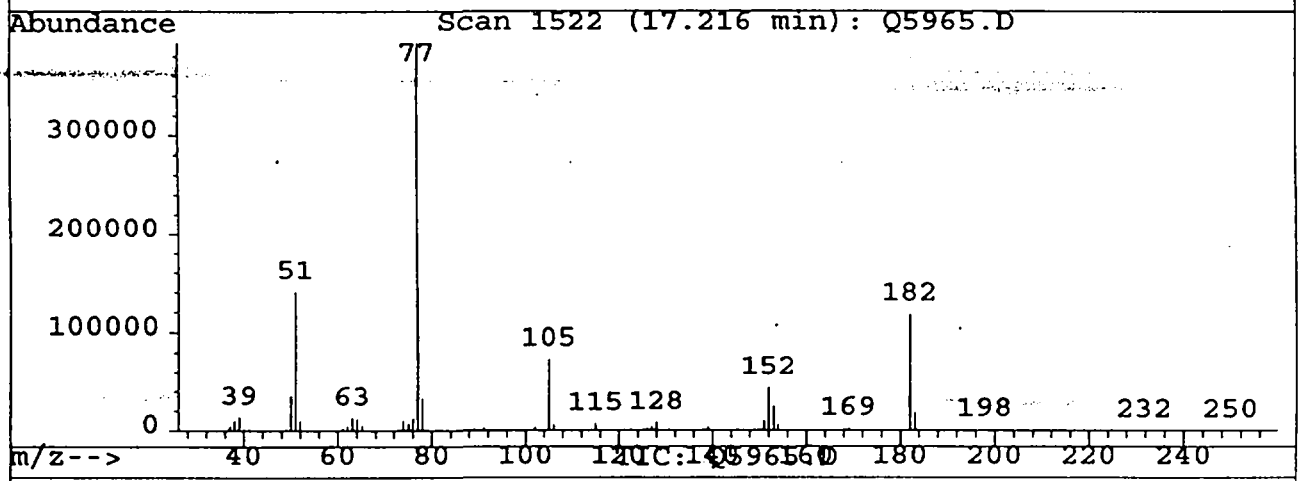

(60) 1,2-Diphenylhydrazine (T)
17.22min 1220.68ug m
response 690244

Ion	Exp%	Act%
76.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

50 total

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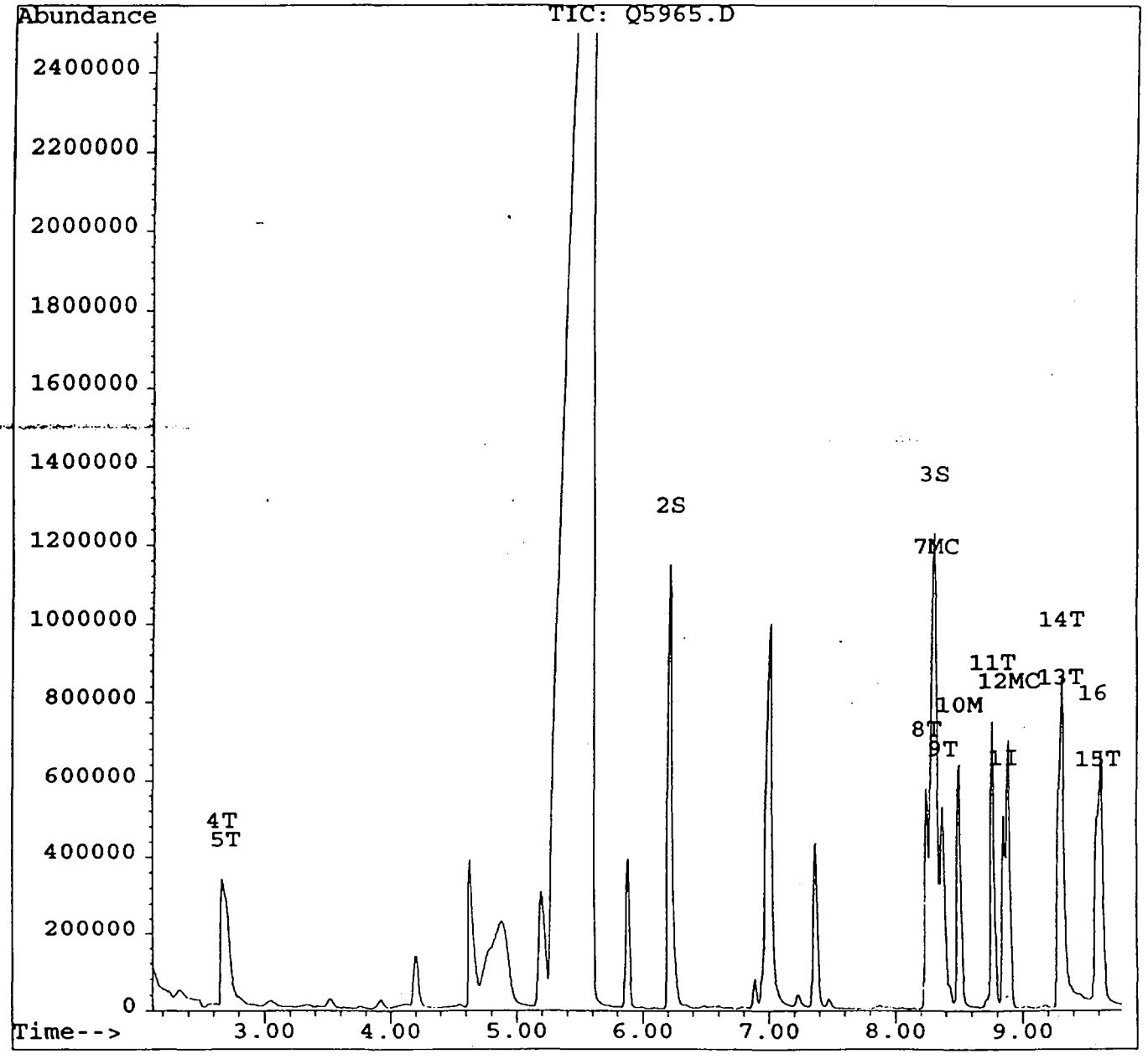

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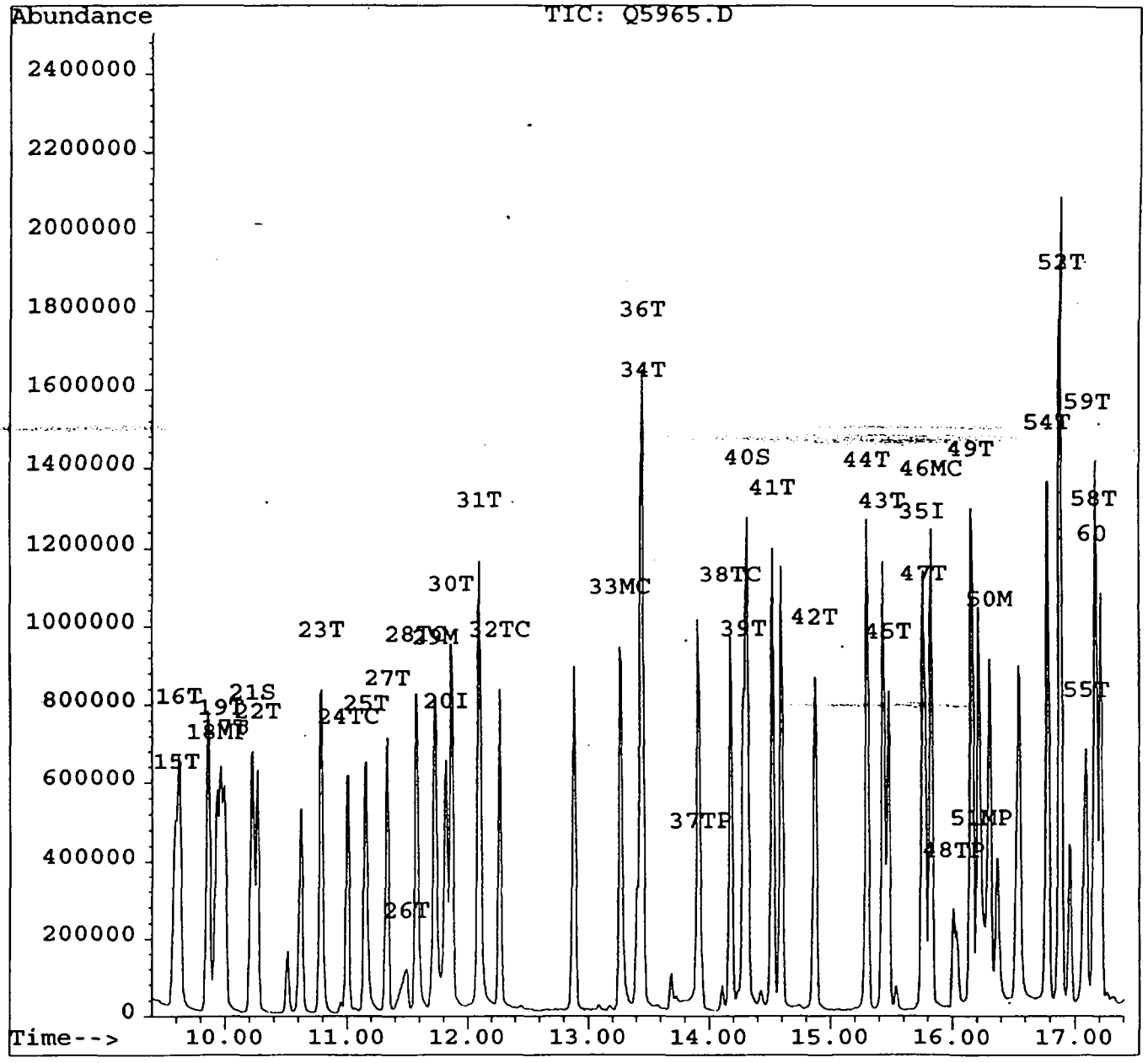

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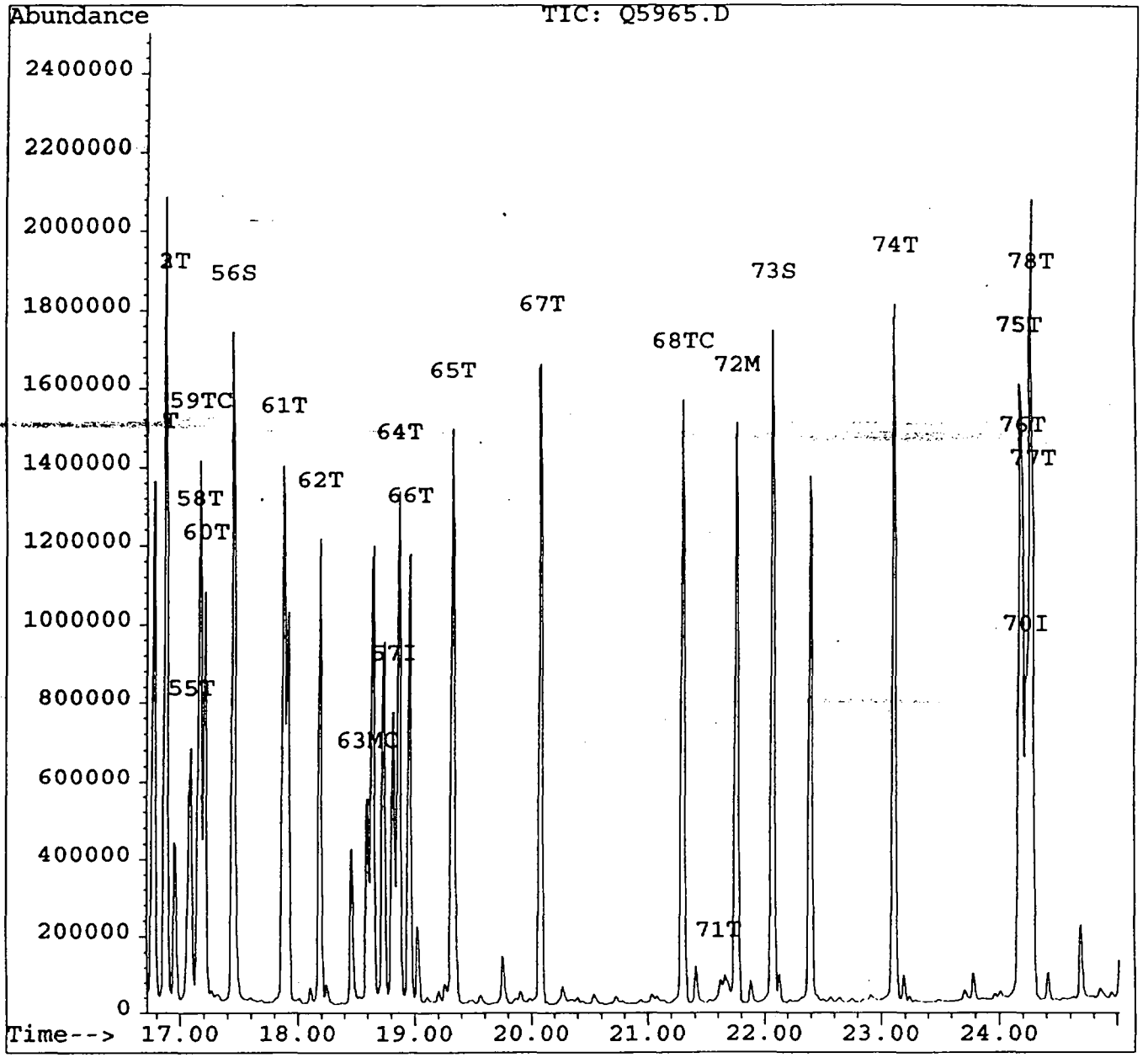

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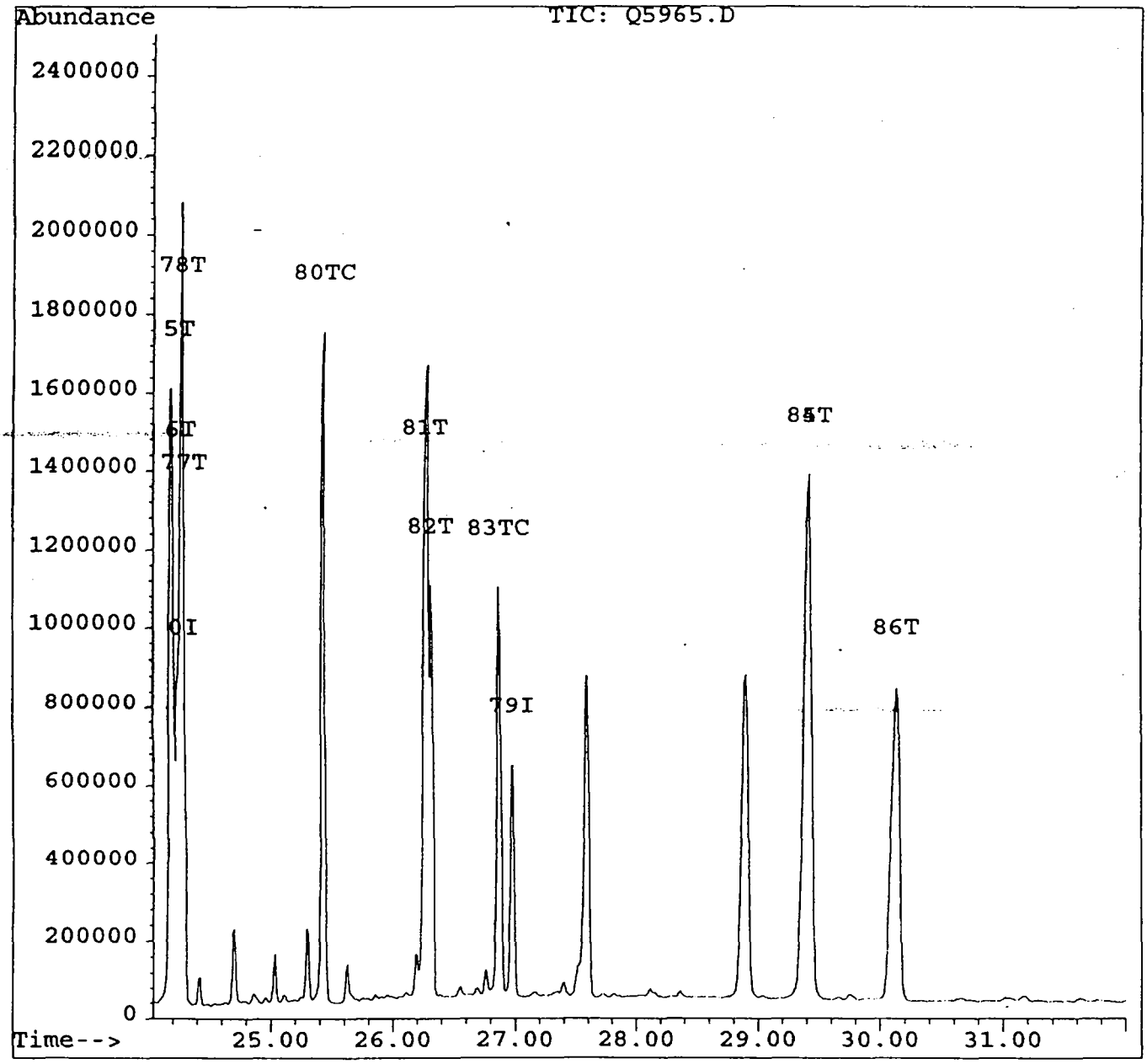

Organic Sample Preparation Log

Parameter	SW846 LLS BNA	Ext. Meth	SONC	Na2SO4 Lot #	N18593	Extraction Date	10/22/99
Corr. MS/MSD				Alumina Lot	—	Completion Date	10/22/99 / 10-24-99
Surrogate By	SBW			Reagent H2O Lot	—	Surrogate Code	
Spike By	SBW	MeCl2 Lot #	—	H2SO4 Lot #	—	Spike Code MS	081699:16:01
Extracted By	CJM / SBW	Acetone Lot#	—	NaOH Lot #	—	EMS	101199:18:02,03,04
Int. Conc By		1:1 MeCL2 Acet. Lot#	102099:80:1	Cont.EXT Start time	—		
Final Conc By	SBW / TS			Cont. EXT Stop time	—	Witness	CJM

Client	STLSample #	Sign Out COC	Init pH/Cl2	Vol/Wt Extracted	Surr. Volume (ulz)	Matrix Spike Volume (ulz)	C/U	Final Extract Volume (mls)	Soil pH	% Solids Info: Tare Wt.	Wet Wt.	Dry Wt.	% Solids (dec)	Location: Ref	Tray	Slot	Comments
Blank	102299 B01	N/A	N/A	30g	500	N/A	N/A	1ml		—	—	—	—	29			J
↓	↓ B01FMS	↓		30g	↓	100x3	↓	↓						↓			
↓	↓ B03			30g		N/A		1mL		—	—	—					
QEI	2786A 01			30g				1ml		1.27	11.97	11.45					
↓	↓ 02			30g				↓		1.30	14.62	14.05					
↓	↓ 03			30g				↓		1.26	12.02	11.23					
↓	↓ 04			30g				↓		1.26	12.40	~~11.23~~	11.86	10-25-99			
STL	2732A 01			30g				1mL		1.28	12.52	5.23					
↓	↓ 02			30g				↓		1.30	15.80	6.37					
↓	↓ 03			30g						1.29	12.87	10.36					
↓	↓ 04		↓	30g	↓	↓	↓	2mL		1.29	15.37	7.28		↓			

STL Form# SPF00102.CT Reviewed by [signature] Date: 10/27/99 STL Logbook # SP1.54 Page 178 of 9

001161

NEA
NORTHERN ECOLOGICAL ASSOCIATES, INC

New York Office:
33 Park Street
Canton, New York 13617

Corporate Headquarters:
451 Presumpscot Street
Portland, Maine 04103

APPENDIX D, VOLUME IV OF VI

FINAL
FORMER STEWART AIR FORCE BASE (AFB)
HTRW INVESTIGATION

NEWBURGH, NEW YORK

Contract Number: DACW51-97-D-0010
Delivery Order No. 61

Prepared for:

U.S. Army Corps of Engineers
New York District
26 Federal Plaza
New York, New York 10278-0090

Prepared by:

Ogden Environmental and Energy Services Co., Inc.
Northern Ecological Associates, Inc.

MARCH 2000

Committed To *Your* Success

Severn Trent Laboratories
628 Route 10
Whippany, NJ 07981

Tel: (973) 428-8181
Fax: (973) 428-5222

NYSDEC CATEGORY B

SAMPLING DATE OCTOBER 14, 1999

OGDEN ENVIRONMENTAL

PROJECT: STEWART AFB 770760061

PREPARED BY:

SEVERN TRENT LABORATORIES, INC.

(CERTIFICATION NUMBER 10997)

STL JOB NO: 20990-94127

VOLUME I OF III

Committed To *Your* Success

DECEMBER 14, 1999

20990-94127
OGDEN ENVIRONMENTAL
285 DAVIDSON AVENUE
SOMERSET , NJ 08873

ATTENTION: STEVE POSTEN

The following samples were received for analysis by STL-NJ (NY Cert.#10997). These samples were received on and labeled as follows:

STL Sample No.:	Client ID:	Date Received
94127001	SB1-1-1-01	10/14/99
94127002	SB1-1-2-01	10/14/99
94127003	SB1-5-1-01	10/14/99
94127004	SB1-5-2-01	10/14/99
94127005	SB1-6-1-01	10/14/99
94127006	SB1-6-2-01	10/14/99
94127007	SB1-2-1-01	10/14/99
94127008	SB1-2-2-01	10/14/99
94127009	SB1-3-1-01	10/14/99
94127010	SB1-3-2-01	10/14/99
94127011	SB1-7-1-01	10/14/99
94127012	SB1-7-2-01	10/14/99
94127013	SB1-4-1-01	10/14/99
94127014	SB1-4-2-01	10/14/99
94127015	SB1-4-2-02	10/14/99
94127016	SB1-8-1-01	10/14/99
94127017	SB1-8-2-01	10/14/99
94127018	S2-2-01	10/14/99
94127019	SW2-2-01	10/14/99
94127020	SW2-2-03	10/14/99
94127021	FB-101499	10/14/99
94127022	TB-1014991	10/14/99
94127023	TB-1014992	10/14/99
94127024	TB-1014993	10/14/99

DATA RELEASE AUTHORIZED BY:

Carl W. Armbruster
Director of Operations

Committed To *Your* Success

DECEMBER 14, 1999

20990-94127
OGDEN ENVIRONMENTAL
285 DAVIDSON AVENUE
SOMERSET , NJ 08873

ATTENTION: STEVE POSTEN

The following samples were received for analysis by STL-NJ (NY Cert.#10997). These samples were received on and labeled as follows:

STL Sample No.:	Client ID:	Date Received
94127025	S2-3-01	10/14/99
94127026	SW2-3-01	10/14/99

DATA RELEASE AUTHORIZED BY:

Carl W. Armbruster
Director of Operations

Committed To *Your* Success

Severn Trent Laboratories
628 Route 10
Whippany, NJ 07981

Tel: (973) 428-8181
Fax: (973) 428-5222

STL - WHIPPANY LAB CERTIFICATIONS

STL - NJ possesses the following regulatory certification and is currently certified to perform analysis in accordance with regulations pertaining to these certifications. Certificates are on file at the laboratory.

State/Agency Certification	Lab ID Number
CLP Organics Contract	68D50011
Connecticut	PH0722
Maryland	195
New Jersey	14530
New York	10997
North Carolina	339
Pennsylvania	68-355
Rhode Island	178
USDA Permit	S-3295 Revised
Delaware	NJ323

rpdata\stlcert.for

Last Updated: 8/18/99

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PCB's. 610

VOLUME III

Metals 781

Subcontracting 1097

CASE NARRATIVE

Client: OGDEN ENVIRONMENTAL

Job No: 20990-94127

CASE NARRATIVE

VOLATILES:

Sample 94127002 (SB1-1-2-01) has one surrogate recovery outside of QC Limits due matrix interference. This result was confirmed by reanalyzing the sample.

The Methylene Chloride and Acetone detected in some of the samples is believed to be due laboratory contamination.

SEMIVOLATILES:

Sample 94127020 (SW2-2-03) has one surrogate recovery outside of QC limits. Several compounds were outside of QC limits in the matrix spike and matrix spike duplicate therefore the blank spike was reported.

GAS CHROMATOGRAPHY:

PESTICIDES (WATER):
The recovery of Endrin in the batch matrix spike/matrix spike duplicate exceeded QC limits. The blank spike met criteria.

The following continuing calibration checks have compounds over 15% difference; b02ab061 (INDA) with 4,4'DDD at 17.8%; b02ab062 (INDB) with Tetrachloro-m-xylene at 15.9%; b02ab073 (INDA) with 4,4'DDD at 19.4%, Dieldrin at 16%, Endrin at 18%, Methoxychlor at 17.8% and Decachlorobiphenyl at 18.7%; b02ab074 (INDB) with Tetrachloro-m-xylene at 15.6% and Decachlorobiphenyl at 17.9%; b02aa061 (INDA) with 4,4'DDD at 19.2 and Endrin at 19.8% and bo2aa073 (INDA) with 4,4'DDD at 20.5% and Endrin at 15.1%. The average of all the percent differences is less than 15% and per SW846 method 8000B the data is reportable.

PESTICIDES (SOILS):
The confirmation column DB608 is used for retention time verification and pattern recognition only, not quantitation. Sample 94127025 (S2-3-01) was analyzed with a twenty-five-fold dilution due to the high concentration of target compounds. The surrogate was diluted out.

PCBs:
No problems were encountered.

METALS:

Samples 94127018 (S2-2-01) and 94127025 (S2-3-01) were digested and analyzed for Mercury twenty days outside of the method-specified holding time.

A ICB was above the reporting limits for Arsenic, however all associated samples were reanalyzed.

A CCB (continuing calibration blank) was above the reporting limits for Cadmium, however it was not directly associated with these samples.

Some CCV'S (continuing calibration verification standards) were above the control limits for Potassium, however that analyte was not required on the 11/03/99 analytical analysis.

Some ICSAB'S were above the control limits for Zinc, however that analyte was not required on the 11/03/99 analytical analysis.

Sample 94127018 (S2-2-01) was diluted five fold Calcium due to the sample concentration exceeding the calibration range.

WET CHEMISTRY:

No analysis was performed.

SUBCONTRACTING:

The analysis for Semivolatiles was subcontracted to Severn Trent Laboratories, Inc., Monroe, Connecticut (NJ Cert. #46410).

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Whippany NJ 07981

Tel: (973) 428-8181
Fax: (973) 428-5222

ORGANICS ANALYSIS
DATA AND SAMPLE QUALIFIERS

DATA QUALIFIERS:

U - Indicates that the compound was analyzed for but not detected.

J - This qualifier indicates an estimated concentration. This qualifier is used (1) when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, (2) when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the CRQL or PQL but greater than zero, and (3) when the retention time data indicate the presence of a compound that meets the Pesticide/Aroclor identification criteria, and the result is less than the CRQL or PQL but greater than zero.

B - This qualifier is used when the analyte is found in a method blank as well as the sample. It indicates possible sample contamination and warns the user to use caution when applying the results of this analyte.

E - Exceeds calibration curve

A - Indicates that a tentatively identified compound is a suspected Aldol-condensation product.

N - Indicates presumptive evidence of a compound. This qualifier is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all tentatively identified compound results. For generic classification of a tentatively identified compound, such as chlorinated hydrocarbon, the N code is not used.

D - This qualifier identifies all compounds identified in an analysis at a secondary dilution factor.

P - Indicates that the quantitative results from the two GC columns differed by more than 25 percent.

SAMPLE QUALIFIERS:

DL - Indicates that the analysis was performed at a secondary dilution.

RE - Rerun - Indicates that the analysis is a reinjection or a reextraction and reanalysis, usually due to a failed QC element in the initial analysis.

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Whippany NJ 07981

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METALS ANALYSIS
DATA QUALIFIERS

U - Result is below the Method Detection Limit (MDL)

B - Result is between the MDL and the RL (Reporting Limit). (Note that this flag does not have the same meaning as in Organics analysis).

CP-TR - Trace Inductively Coupled Argon Plasma.

ICAP - Inductively Coupled Argon Plasma.

FAA 6211
FAA 6398 - Graphite Furnace Atomic Absorption.

CV - Cold Vapor Atomic Absorption.

NR - Not Requested.

METHODOLOGY SUMMARY

VOLATILE ORGANICS

EPA SW846 Method 8260B is used for the analysis of Volatile Organics. Helium is bubbled through a sample contained in a specifically designed purging chamber. The purgeables are efficiently transferred from the sample to the vapor phase. The vapor is swept through a sorbent column where the purgeables are trapped. After purging is completed, the sorbent column is heated and backflushed with Helium to desorb the purgeables onto a gas chromatographic column. The gas chromatograph is temperature programmed to separate the purgeables which are then detected with a mass spectrometer. The holding time for aqueous samples is fourteen (14) days from the date of collection, providing that the samples are preserved to pH <2 with HCl (seven (7) days otherwise). The holding time for soil samples is also fourteen (14) days from collection.

SEMIVOLATILE ORGANICS - WATER

EPA SW846 Methods 3510C and 8270C are used for the extraction and analysis of Semivolatile Organics. Measured volumes of sample are pH adjusted to >12. The sample aliquots are then serially extracted with Methylene Chloride. The Methylene Chloride extracts are concentrated and analyzed by GC/MS. The holding time for extraction is seven (7) days from date of collection. The holding time for analysis is forty (40) days from date of extraction.

PESTICIDES - WATER

EPA SW846 Methods 3510C and 8081A are used for the extraction and analysis of Pesticides and PCBs. One liter of sample is solvent extracted with three 60-milliliter aliquots of Methylene Chloride. The Methylene Chloride extract is filtered through Sodium Sulfate, concentrated and exchanged to Hexane. Florisil cleanup may also be performed. The extract is analyzed by gas chromatography and target compounds are measured using an electron capture detector. The holding time for extraction is seven (7) days from date of collection. The holding time for analysis is forty (40) days from date of collection.

PESTICIDES - SOIL

EPA SW846 Methods 3550B and 8081 are used for the extraction and analysis of Pesticides and PCBs. A 30 gram sample aliquot is sonicated three times with a 1:1 mixture of Acetone and Methylene Chloride. The extracts are concentrated and exchanged to Hexane. PCB only samples are treated with sulfuric acid as a cleanup. Pesticide/PCB samples may have florisil cleanup. The extract is then analyzed by gas chromatography and the compounds are measured using an electron capture detector. The holding time for extraction is fourteen (14) days from date of collection. The holding time for analysis is forty (40) days from date of extraction.

PCB - WATER

EPA Methods 3510C/8082 are used for the extraction analysis of PCBs. A measured volume of sample is solvent extracted with Methylene Chloride. The Methylene Chloride extract is filtered through Sodium Sulfate, exchanged to Hexane, concentrated and treated with Sulfuric Acid to remove interferences, if necessary. The extract is separated by gas chromatography and the compounds are measured using an electron capture detector.

PCB - SOIL

The analysis of PCBs is performed by EPA Method 3550B/8082. A 30 gram sample is sonicated three times with a 1:1 mixture of Acetone and Methylene Chloride. The extracts are concentrated, treated with Sulfuric Acid, and exchanged to Hexane. The extract is then analyzed by gas chromatography with electron capture detector on two different GC columns.

METALS

Metals analysis is based on SW846. Arsenic, Selenium, Thallium and Lead maybe analyzed by furnace AA with Zeeman background correction. Mercury is analyzed by cold vapor technique. All other metals are analyzed by Inductively Coupled Argon Plasma emission spectroscopy (if the ICP61E Trace is used, Arsenic, Selenium, Thallium and Lead can be analyzed by ICP). Samples for ICP analysis are digested with Hydrochloric and Nitric Acids. Samples for furnace analysis are digested with Nitric Acid. Samples for Mercury analysis are digested with Potassium permanganate and Nitric Acid. The holding time for Mercury is twenty-six (26) days from collection. The holding time for all other Metals is six (6) months.

CHAIN OF CUSTODY

STL Committed To Your Success
Severn Trent Laboratories
628 Route 10
Whippany NJ 07981
Tel: (973) 428-8181
Fax: (973) 428-5222

No. 73530

CHAIN OF CUSTODY

FIELD BOOK: _____ Pg 1 of 2

(1) Client: Ogden
(2) Project Name/no.: Steward AFB 770760061
(3) Client Contact: Steve Posten
(4) STL Contact: Dan Glenn
(5) TAT: 1wk, 2wk, 3wk, OTHER _____
(6) Proj. Type: NJPDES, NPDES, ISRA, CLP, CERCLA, RCRA, UST, ACO, MOA, OTHER USACE
(7) Protocol: CLP, SW846, EPA 600, DW, OTHER _____
(8) Reporting Type: NJ Reg Format, NJ Reduced Format, CLP, Level II, Level I (Data Sum), Other NYSDEC ASP CAT. B

(14) Bill To: Ogden Environmental, 285 Davidson Ave, Somerset, NJ 08873
PO#: 770760061

(15) ANALYSIS REQUIRED

For Lab Use Only
Job No. 94127
Quote No.
# of Coolers:
Cooler Temp.(s)
Custody Seal #(s)
Date Due:

PM NON-CONFORMANCE
Preserved: Temp:
Container: Volume:
Broken: Initials:
Holding Time:
Other:
Logged By:

(9) Client ID (10 CHAR)	(10) Date	(11) Time	(12) Mtx	(13) # OF CONTAINERS	TCL VOA	LAB ID	DESCRIPTION
SB1-1-1-01	10/14	9:10	Soil	1	X	01	
SB1-1-2-01	10/14	9:10	Soil	1	X	02	
SB1-5-1-01	10/14	9:35	Soil	1	X	03	
SB1-5-2-01	10/14	9:40	Soil	1	X	04	
SB1-6-1-01	10/14	9:55	Soil	1	X	05	
SB1-6-2-01	10/14	11:00	Soil	1	X	06	
SB1-2-1-01	10/14	10:05	Soil	1	X	07	
SB1-2-2-01	10/14	10:10	Soil	1	X	08	
SB1-3-1-01	10/14	10:20	Soil	1	X	09	
SB1-3-2-01	10/14	10:25	Soil	1	X	10	
SB1-7-1-01	10/14	10:35	Soil	1	X	11	
SB1-7-2-01	10/14	10:40	Soil	1	X	12	
SB1-4-1-01	10/14	11:00	Soil	1	X	13	
SB1-4-2-01	10/14	11:05	Soil	1	X	14	

(16) COMMENTS: (Please include hazards on site.)

(17)

	Print Name and Company	Signature	Custody Seal # (s)	Date/Time
Sampled By:	Madhu Pate/SP/JM/Ogden	[signature]	9590	10/14/99 1750
Received By:	C. Dvorz	[signature]	9590	10/14/99 1750
Relinquished By:				/
Received By:				/
Relinquished By:				/
Received By:				/

Mtx = Matrix of Sample. (AI=Air, AQ=Aqueous, LE=Leachate, ML=Misc Liquid, MS=Misc Solids, OIL, SE=Sediment, SL=Sludge, SO=Soil)

000009

STL Committed To Your Success
Severn Trent Laboratories
628 Route 10
Whippany NJ 07981
Tel: (973) 428-8181
Fax: (973) 428-5222

No. 73531

CHAIN OF CUSTODY

FIELD BOOK: _____ Pg 2 of 2

(1) Client: Ogden
(2) Project Name/no.: Steward AFB 770760061
(3) Client Contact: Steve Posten
(4) STL Contact: Dan Glenn
(5) TAT: 1wk, 2wk, (3wk,) OTHER _____
(6) Proj. Type: NJPDES, NPDES, ISRA, CLP, CERCLA, RCRA, UST, ACO, MOA, OTHER USACE
(7) Protocol: CLP (SW846) EPA 600 DW, OTHER _____
(8) Reporting Type: NJ Reg Format, NJ Reduced Format, CLP, Level II, Level I (Data Sum), Other NYSDEC ASP CAT. B

(14) Bill To: Ogden Environmental
285 Davidson Ave
Somerset NJ 08873
PO# 770760061

(15) ANALYSIS REQUIRED

For Lab Use Only
Job No. 94127
Quote No.
# of Coolers:
Cooler Temp.(s)
Custody Seal #(s)
Date Due:

PM NON-CONFORMANCE
Preserved: Temp:
Container: Volume:
Broken: Initials:
Holding Time:
Other:
Logged By:

(9) Client ID (10 CHAR)	(10) Date	(11) Time	(12) Mtx	(13) # OF CONTAINERS	TCL VOA	TCL BN/AE	TCL Pest. PCBs	TAL Metals	LAB ID	DESCRIPTION
SB1-4-2-02	10/14	11:05	Soil	1	X				15	
JM ~~SB1-4-2-03~~	~~10/14~~	~~11:05~~	~~Soil~~	~~1~~	~~X~~					
SB1-8-1-01	10/14	11:10	Soil	1	X				16	
SB1-8-2-01	10/14	11:12	Soil	1	X				17	
S2-2-01	10/14	12:25	Soil	3	X	X	X	X	18	
JM ~~S2-2~~										
SW2-2-01	10/14	12:30	Water	8	X	X	X	X	19	
SW2-2-03	10/14	12:30	Water	8	X	X	X	X	20	
FB-101499	10/14	14:45	Water	8	X	X	X	X	21	
TB-1014991	10/14		water	3	X				22	
TB-1014992	10/14		water	3	X				23	
TB-1014993	10/14		water	3	X				24	
S2-3-01	10/14	1545	Soil	3	X	X	X	X	25	
SW2-3-01	10/14	1545	Water	8	X	X	X	X	26	

(16) COMMENTS: (Please include hazards on site.)

(17)	Print Name and Company	Signature	Custody Seal # (s)	Date/Time
Sampled By:	Madhu Patel/SP/JM-Ogden	[signature]	~~5990~~ 9590	10/14/94 1750
Received By:	G. Pilot	[signature]	9590	10/14/94 1750
Relinquished By:				/
Received By:				/
Relinquished By:				/
Received By:				/

Mtx = Matrix of Sample. (AI=Air, AQ=Aqueous, LE=Leachate, ML=Misc Liquid, MS=Misc Solids, OIL, SE=Sediment, SL=Sludge, SO=Soil)

000010

(Copies: White and yellow copies should accompany samples to STL. The pink copy should be retained by the client.) See reverse for directions.

SEVERN TRENT LABORATORIES, Inc. - NEW JERSEY
SAMPLE RECEIPT VERIFICATION FORM

JOB NUMBER: 94127 CLIENT Ogden DATE RECEIVED: 10/14/99

OF SAMPLES 26 # OF COOLERS 1

CUSTODY SEALS: PRESENT/ ABSENT INTACT/ BROKEN TEMPERATURE BLANK PRESENT: ✓YES _NO

COOLER TEMP/S ° C 3.9 COOLER OUTSIDE 2-6 ° C ___ PRESERVED: ICE/BLUE ICE/ NONE

IF OUTSIDE TEMP RANGE - WERE SAMPLES RECEIVED LESS THAN 4 HOURS FROM COLLECTION? __YES __NO

CHAIN OF CUSTODY: PRESENT/ ABSENT PROPERLY SIGNED, DATED, TIME: ✓YES _NO

SAMPLE TAGS: PRESENT/ ABSENT RECEIVED BY: DRIVER ✓ IF SHIPPED AIRBILL PRESENT ___#

COOLER RADIOACT. SCREEN BELOW 0.50 uR/hr ✓YES __ NO __ (INFORM SAFETY OFFICER IMMED.)

✓YES __NO SAMPLE BOTTLES INTACT
✓YES __NO PROPER CONTAINERS PER ANALYSIS USED
✓YES __NO SAMPLE LABELS INTACT
✓YES __NO LABELS COMPLETE AND LEGIBLE (ID, DATE,TIME,SIGNATURE,PRESERVATIVE)
✓YES __NO SAMPLES RECEIVED WITHIN HOLDING TIME
✓YES __NO SAMPLES PROPERLY PRESERVED
✓YES __NO NO BUBBLES PRESENT VOA WATER MATRIX __NA
✓YES __NO SUFFICIENT SAMPLE VOLUME RECEIVED
__YES __NO DRINKING H20/TREATED H20 – CHECKED FOR RESIDUAL CHLORINE ✓NA
(DOCUMENT ON pH VERIFICATION LOG FORM

_____ INTIAL _____ DATE - RUSH REPORT ISSUED BY ✓NA
_____ INTIAL _____ DATE - pH ANALYSIS PERFORMED BY ✓NA
PM INTIAL 10/14/99 DATE - % MOISTURE PERFORMED BY ✓NA
_____ INTIAL _____ DATE - SAMPLE COMPOSITE PERFORMED BY ✓NA

NOTE AND ITEMIZE BY SAMPLE AFFECTED, DISCREPANCIES AND NONCONFORMANCES FOUND: _____

PROJECT MANAGER INFORMED OF DISCREPANCIES: _____ INTIALS _____ DATE ✓NA

SUBCONTRACTING OF ANALYSIS REQUIRED ✓YES __NO SUB COC COMPLETED ✓YES __NO __NA
SUBCONTRACTED SAMPLES SHIPPED ✓YES __NO CARRIER USED Fed Ex

SAMPLE RECEIPT, LABELING AND STORAGE PROCEDURES PERFORMED BY: [signature]

FINAL INSPECTION

BOTTLES CORRECTLY LABELED ✓YES __NO REVIEWED BY [signature] DATE: 10/14/99
INTERNAL CHAIN OF CUSTODY INITIATED ✓YES __NO
ALL SIGNATURES AND DATES COMPLETE ✓YES __NO

CLIENT INFORMED OF DISCREPANCIES/NONCONFORMANCES BY PM _____ DATE ____ TIME ___

NAME CLIENT REPRESENTATIVE INFORMED _____ METHOD: PHONE ___ FAX ___

CORRECTIVE ACTION REQUESTED BY CLIENT: _____

CORRECTIVE ACTION TAKEN: _____

PROJECT MANAGER APPROVED VERIFICATION FORM COMPLETE: [signature] DATE 10/15/99
Print name [signature]

SEVERN TRENT LABORATORIES, Inc. - NEW JERSEY

SAMPLE PRESERVATION VERIFICATION LOG
SAMPLE CONTROL DEPARTMENT

JOB NUMBER: 94127 CLIENT: Ogden DATE RECEIVED: 10/14/99

OF SAMPLES: 26

If pH is not within acceptable range, document actual pH in OTHER column

VOA			METALS			PHC			OIL & GREASE		
ID #	pH <2	OTHER	ID #	pH <2	OTHER	ID #	pH <2	OTHER	ID #	pH <2	OTHER
19	*		19	✓							
20	*		20	✓							
21	*		21	✓							
22	*		26	✓							
23	*										
24	*										
26	*										

CYANIDE			H2SO4 PRES. W.C.			H2SO4 PRES. W.C.			OTHER PRESERVATIVE		
ID #	pH >12	OTHER	ID #	pH <2	OTHER	ID #	pH <2	OTHER	ID #	pH ___	OTHER

COMMENTS: NOTE BY SAMPLE ID NUMBER - NON CONFORMANCES IN pH PRESERVATION:
* not preserved

pH PRESERVATION VERIFICATION PERFORMED BY: [signature] DATE 10/14/99

PROJECT MANAGER INFORMED OF NON CONFORMANCE: ____ YES INITIAL ____

STL
Committed To Your Success

Severn Trent Laboratories

INTERNAL CHAIN OF CUSTODY CHRONICLE
VOLATILES

Job/Case Number: 94127 Sample IDs: 01-26

Relinquished By: [signature] Date/Time: ~~10/14/99~~ 10/15/99

Received By: [signature] Date/Time: 10/15/99

I confirm that I have performed the analysis below following SOP quidelines:

ANALYST RETRIEVAL:

Sample No(s)	Analyst Signature	Date	Returned Date (Soil)
001-003, 005, 019-024, 026	S. Illusey	10/18/99	
004, 006-010, 012, 015	S. Illusey	10/22/99	
017, 018, 025	S. Illusey	10/22/99	
011, 013, 014, 016	S. Illusey	10/26/99	

ANALYST RETRIEVAL: REANALYSIS:

Sample No(s)	Analyst Signature	Date	
002	S. Illusey	10/22/99	

PERCENT SOLIDS:

Sample No(s)	Analyst Signature	Date	

I confirm that I have reviewed all associated data for this job:

REVIEWED BY: Signature S. Illusey Date 12/8/99

Data Release Authorized By:

AUTHORIZATION: [signature] Group Leader/Lab Manager Date 12/9/99

Severn Trent Laboratories

INTERNAL CHAIN OF CUSTODY CHRONICLE

BNA

JOB/CASE NUMBER: 94127

I confirm that I have performed the analysis below following SOP quidelines:

ANALYSIS:

Sample No(s)	Analyst Signature	Date
019-021, 026		10/26/99

REANALYSIS:

Sample No(s)	Analyst Signature	Date

PREPARATION:

Sample No(s)	Extraction Tech. Signature	Date	Consumed
019-021, 026		10/20/99	

I confirm that I have reviewed all associated data for this job:

REVIEWED BY: Signature _____ Date 12/10/99

Data Release Authorized By:

AUTHORIZATION: _____ 12/10/99

Group Leader/Lab Manager Date

SEVERN TRENT LABORATORIES, INC. (STL)
INTERNAL CHAIN OF CUSTODY CHRONICLE
GAS CHROMATOGRAPHY (GC)

JOB/CASE NUMBERS: 94127

I Confirm that I have performed the analysis below following SOP guidelines:

Analysis: Pest/PCB (Circle which apply)

Sample Numbers	Analyst Signature	Date
018-025	Lisa Jako	10/22/99

Preparation: Pest/PCB (Circle which apply)

018, 025	John Kopinski	10-20-99

Analysis: Herbicide

Preparation: Herbicide

Analysis: Other

Preparation: Other

I confirm that I have reviewed all associated data and authorize the release of this job:

AUTHORIZATION: _____ 12/7/99
Group Leader/Lab Manager Date

SEVERN TRENT LABORATORIES, INC. (STL)
INTERNAL CHAIN OF CUSTODY CHRONICLE
GAS CHROMATOGRAPHY (GC)

JOB/CASE NUMBERS: 94127

I Confirm that I have performed the analysis below following SOP guidelines:

Analysis: Pest/PCB (Circle which apply)

Sample Numbers	Analyst Signature	Date
019-021; 026	[illegible]	1-24-99

Preparation: Pest/PCB (Circle which apply)

019-021; 026	John Kopinski	10-19-99

Analysis: Herbicide

Preparation: Herbicide

Analysis: Other

Preparation: Other

I confirm that I have reviewed all associated data and authorize the release of this job:

AUTHORIZATION: [signature] 2/14/99
Group Leader/Lab Manager Date

SEVERN TRENT LABORATORIES, INC. (STL)
INTERNAL CHAIN OF CUSTODY CHRONICLE
GAS CHROMATOGRAPHY (GC)

JOB/CASE NUMBERS: 94127

I Confirm that I have performed the analysis below following SOP guidelines:

Analysis: Pest/PCB (Circle which apply)

Sample Numbers	Analyst Signature	Date
18, 25	[signature]	10/21/99

Preparation: Pest/PCB (Circle which apply)

18, 25	[signature]	10/20/99

Analysis: Herbicide

Preparation: Herbicide

Analysis: Other

Preparation: Other

I confirm that I have reviewed all associated data and authorize the release of this job:

AUTHORIZATION: [signature] 12/06/99
Group Leader/Lab Manager Date

SEVERN TRENT LABORATORIES, INC. (STL)
INTERNAL CHAIN OF CUSTODY CHRONICLE
GAS CHROMATOGRAPHY (GC)

JOB/CASE NUMBERS: 94127

I Confirm that I have performed the analysis below following SOP guidelines:

Analysis: Pest/PCB (Circle which apply)

Sample Numbers	Analyst Signature	Date
019-021, 260	[illegible]	11/02/99

Preparation: Pest/PCB (Circle which apply)

019-021, 026	[illegible]	10.19.99

Analysis: Herbicide

Preparation: Herbicide

Analysis: Other

Preparation: Other

I confirm that I have reviewed all associated data and authorize the release of this job:

AUTHORIZATION: [illegible] 12/06/99
Group Leader/Lab Manager Date

INTERNAL CHAIN OF CUSTODY CHRONICLE - METALS

Job/Case: 94127

Leachate Relinquished By: _____ Date/Time: _____

Leachate Received By: _____ Date/Time: _____

TCLP Preparation: ICP

Sample Number	Analyst	Date/Time	Returned to Storage

Analysis: ICP

Sample Number	Analyst	Date/Time	Returned to Storage
019-021,026	[signature]	10/29/99 1000	10/29/99 1200
019-021,026	[signature]	11/1/99 1200	11/1/99 1400
018,025	[signature]	11/2/99 1200	11/2/99 1400
018,025	[signature]	11/3/99 1200	11/3/99 1400
018,025	[signature]	11/4/99 1200	11/4/99 1400

Analysis: Furnace

Sample Number	Analyst	Date/Time	Returned to Storage

Analysis: Mercury

Sample Number	Analyst	Date/Time	Returned to Storage
019,020,021,026	[signature]	11/3/99 1345	

TCLP Preparation: Mercury

Sample Number	Analyst	Date/Time	Returned to Storage

I confirm that I have reviewed all associated data and authorize the release of this job:

Group Leader/Lab Manager: [signature] Date: 12/8/99

INTERNAL CHAIN OF CUSTODY CHRONICLE - METALS

Job/Case: 94127

Leachate Relinquished By: _____ Date/Time: _____

Leachate Received By: _____ Date/Time: _____

TCLP Preparation: ICP

Sample Number	Analyst	Date/Time	Returned to Storage

Analysis: ICP

Sample Number	Analyst	Date/Time	Returned to Storage
018	[signature]	11/5/99 1200	11/5/99 1200

Analysis: Furnace

Sample Number	Analyst	Date/Time	Returned to Storage

Analysis: Mercury

Sample Number	Analyst	Date/Time	Returned to Storage
018, 025	[signature]	12/1/99 1300	

TCLP Preparation: Mercury

Sample Number	Analyst	Date/Time	Returned to Storage

I confirm that I have reviewed all associated data and authorize the release of this job:

Group Leader/Lab Manager: [signature] Date: 12/8/99

STL - NEW JERSEY SIGNATURE PAGE

Employee Name	Signature	Initials
LABORATORY DIRECTOR		
Armbruster, Carl		CAA
LABORATORY MANAGER		
Hitt, Dewey	Dewey D Hitt	DDH
QA/QC MANAGER		
Heath, Timothy		TMH
ADMINISTRATION		
Bartley, Katrina		KAB
Connelly, Joan		JMC
Davila, Nahir		N.D.
Nadzan, Al		A.N.
REPORTS PRODUCTION		
Cignarella, Christine		C.C.
Patel, Darshana	Darshana Patel	D.P.
Roman, Richard	Richard Roman	R.R.
SYSTEMS		
Foti, Lisa		
Molina, Maria	Maria Molina	MCM

STL - NEW JERSEY SIGNATURE PAGE

Employee Name	Signature	Initials
PROJECT MANAGEMENT		
Brack, Joe		
Doster, Deanna		
Glenn, Dan		
Pryor, Kelly		
Trulick, Barbra		
SAMPLE CONTROL		
Doeffinger, John		
Droz, Efrain		
Malaniak, Rachel		
BOTTLE PREP		
D'Achille, Al		
Reynolds, Ed		
Sander, James		
GC/MS VOLATILES		
Acierno, Mark		MJA
Klusey, Sylvanus		SK
Manlangit, Ferdie		
Waldron, Stacey		
GC/MS SEMIVOLATILES		
Mauriello, Gregg		
O'Brien, Patrick		
Schulze, Stephen		
Seal, Sonia		08/23/99

STL - NEW JERSEY SIGNATURE PAGE

Employee Name	Signature	Initials
GAS CHROMATOGRAPHY		
Hankerson, Anthony		
Herrmann, Claus		
Hornberger, Kasie		
Kopinski, John		
Lena, John		
Scott, Gordon		
Tako, Lisa		
Weschler, David		
Weschler		
METALS		
Chang, Grace		
Cousineau, Paul		
Herpen, Lori		
Nadzan, Tim		
Schwartz, Robert		
WET CHEMISTRY		
Begraft, Jacqueline		
Bielski, Kevin		
Florance, Gerard		
Kadakia, Geeta		
Piatt, Ernest		
FIELD SERVICES		
Dippel, Edward		
Knudsen, Troy		
Murad, John		

STL - NEW JERSEY SIGNATURE PAGE

Employee Name	Signature	Initials
RADIOLOGICALS		
Fink, Daniel		
Komanduri, Sreenivas	R Sreenivas	
Nielsen, Erik		
Smith, Benjamin	Benjamin Smith	BS
Zareian-Fink, Nahid	Nahid Zareian	N.Z

REVISED 8/20/99

RPDATA\MASTER\QCSIG.PG

VOLATILES

2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: STL-NJ

Job No. : 94127

	CLIENT SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	SMC4 (DBF) #	TOT OUT
01	991018I3	92	94	98	100	0
02	VBLKBS4	94	95	103	102	0
03	SW2-2-01	97	90	88	97	0
04	SW2-2-03	94	92	100	102	0
05	FB-101499	88	98	106	104	0
06	TB-1014991	88	98	107	106	0
07	TB-1014992	91	94	107	105	0
08	TB-1014993	94	91	106	105	0
09	SW2-3-01MS	91	94	110	105	0
10	SW2-3-01MSD	89	93	107	106	0
11	SW2-3-01	92	92	106	103	0
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(88-110)
SMC2 (BFB)	= Bromofluorobenzene	(86-115)
SMC3 (DCE)	= 1,2-Dichloroethane-d4	(80-120)
SMC4 (DBF)	= Dibromofluoromethane	(86-118)

Column to be used to flag recovery values

* Values outside of QC limits.

D System Monitoring Compound diluted out

FORM II VOA-1

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: STL-NJ

Job No. : 94127

Level:(low/med) LOW

	CLIENT SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	SMC4 (DBF)#	TOT OUT
01	991018J1	104	93	90	91	0
02	VBLKBS1	100	99	107	96	0
03	SB1-1-1-01	103	105	113	93	0
04	SB1-1-2-01	107	110	220*	88	1
05	SB1-5-1-01	104	96	98	99	0
06	SB1-6-1-01	104	94	98	95	0
07	SB1-6-1-01MS	102	95	106	98	0
08	SB1-6-1-01MSD	103	97	102	98	0
09	991022J1	102	93	90	96	0
10	VBLKBS2	98	100	108	97	0
11	SB1-5-2-01	104	101	117	94	0
12	SB1-2-1-01	101	111	93	95	0
13	SB1-2-2-01	105	106	104	94	0
14	SB1-1-2-01RE	104	104	179*	95	1
15	SB1-3-1-01	104	95	96	97	0
16	SB1-3-2-01	102	95	92	96	0
17	SB1-7-2-01	102	91	85	95	0
18	SB1-4-2-02	104	90	90	91	0
19	SB1-8-2-01	105	108	100	92	0
20	S2-2-01	101	92	92	95	0
21	S2-3-01	110	82	105	101	0
22	SB1-6-2-01	107	89	98	96	0
23	991026J1	97	100	109	112	0
24	VBLKBS3	98	104	111	110	0
25	SB1-7-1-01	101	94	94	95	0
26	SB1-4-1-01	103	92	85	91	0
27	SB1-4-2-01	102	93	96	97	0
28	SB1-8-1-01	104	94	96	92	0
29						
30						

			QC LIMITS
SMC1	(TOL)	= Toluene-d8	(81-117)
SMC2	(BFB)	= Bromofluorobenzene	(74-121)
SMC3	(DCE)	= 1,2-Dichloroethane-d4	(80-120)
SMC4	(DBF)	= Dibromofluoromethane	(80-120)

Column to be used to flag recovery values

* Values outside of QC limits.

D System Monitoring Compound diluted out

FORM II VOA-2

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL-NJ

Job No. : 94127

Matrix Spike - Client Sample No.: SW2-3-01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	42	84	61-145
Trichloroethene	50	0	50	100	71-120
Benzene	50	0	46	92	76-127
Toluene	50	0	50	100	76-125
Chlorobenzene	50	0	47	94	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	46	92	9	14	61-145
Trichloroethene	50	49	98	2	14	71-120
Benzene	50	46	92	0	11	76-127
Toluene	50	50	100	0	13	76-125
Chlorobenzene	50	44	88	6	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits.

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL-NJ

Job No. : 94127

Matrix Spike - Client Sample No.: SB1-6-1-01 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	55	0	38	69	59-172
Trichloroethene	55	0	47	85	62-137
Benzene	55	0	50	91	66-142
Toluene	55	0	50	91	59-139
Chlorobenzene	55	0	52	94	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	55	39	71	3	22	59-172
Trichloroethene	55	49	89	4	24	62-137
Benzene	55	50	91	0	21	66-142
Toluene	55	51	93	2	21	59-139
Chlorobenzene	55	55	100	6	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits.

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

VOLATILE BLANK SPIKE RECOVERY

Lab Name: STL-NJ

Job No. : 94127

Lab ID : VBLKBS 1

Compound	% Recovery
1,1-Dichloroethene	86%
Trichloroethene	96%
Benzene	98%
Toluene	98%
Chlorobenzene	97%

VOLATILE BLANK SPIKE RECOVERY

Lab Name: STL-NJ

Job No. : 94127

Lab ID : VBLKBS 2

Compound	% Recovery
1,1-Dichloroethene	98%
Trichloroethene	98%
Benzene	97%
Toluene	100%
Chlorobenzene	98%

VOLATILE BLANK SPIKE RECOVERY

Lab Name: STL-NJ

Job No. : 94127

Lab ID : VBLKBS 3

Compound	% Recovery
1,1-Dichloroethene	96%
Trichloroethene	96%
Benzene	94%
Toluene	96%
Chlorobenzene	98%

VOLATILE BLANK SPIKE RECOVERY

Lab Name: STL-NJ

Job No. : 94127

Lab ID : VBLKBS4

Compound	% Recovery
Benzene	96%
Chlorobenzene	96%
1,1-Dichloroethene	112%
Toluene	102%
Trichloroethene	102%

4A
VOLATILE METHOD BLANK SUMMARY

991018I3

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: I2275

Lab Sample ID: 991018I3

Date Analyzed: 10/18/99

Time Analyzed: 09:26

GC Column: DB-624 ID: 0.32 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSI

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLKBS4	VBLKBS4	I2276	10:05
02	SW2-2-01	94127019	I2283	13:00
03	SW2-2-03	94127020	I2284	13:29
04	FB-101499	94127021	I2285	13:58
05	TB-1014991	94127022	I2286	14:26
06	TB-1014992	94127023	I2287	14:56
07	TB-1014993	94127024	I2288	15:24
08	SW2-3-01MS	94127026MS	I2290	15:54
09	SW2-3-01MSD	94127026MSD	I2291	16:23
10	SW2-3-01	94127026	I2292	16:52
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COMMENTS:

FORM IV VOA

4A
VOLATILE METHOD BLANK SUMMARY

991018J1

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: J2010

Lab Sample ID: 991018J1

Date Analyzed: 10/18/99

Time Analyzed: 19:58

GC Column: DB-624 ID: 0.32 (mm)

Heated Purge: (Y/N) Y

Instrument ID: MSJ

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB1-1-1-01	94127001	J2025	03:22
02	SB1-1-2-01	94127002	J2026	03:51
03	SB1-5-1-01	94127003	J2027	04:20
04	SB1-6-1-01	94127005	J2029	05:19
05	SB1-6-1-01MS	94127005MS	J2030	05:48
06	SB1-6-1-01MSD	94127005MSD	J2031	06:17
07	VBIKBS1	VBIKBS1	J2011	20:26
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COMMENTS:

FORM IV VOA

4A
VOLATILE METHOD BLANK SUMMARY

991022J1

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: J2040 Lab Sample ID: 991022J1

Date Analyzed: 10/22/99 Time Analyzed: 17:47

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) Y

Instrument ID: MSJ

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB1-5-2-01	94127004	J2042	18:54
02	SB1-2-1-01	94127007	J2043	19:23
03	SB1-2-2-01	94127008	J2045	20:19
04	SB1-1-2-01RE	94127002RE	J2046	20:49
05	SB1-3-1-01	94127009	J2047	22:00
06	SB1-3-2-01	94127010	J2048	22:22
07	SB1-7-2-01	94127012	J2050	23:13
08	SB1-4-2-02	94127015	J2053	00:38
09	SB1-8-2-01	94127017	J2055	01:36
10	S2-2-01	94127018	J2056	02:06
11	S2-3-01	94127025	J2057	02:35
12	SB1-6-2-01	94127006	J2058	03:04
13	VB1KBS2	VB1KBS2	J2041	18:17
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COMMENTS:

FORM IV VOA

4A
VOLATILE METHOD BLANK SUMMARY

991026J1

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: J2065

Lab Sample ID: 991026J1

Date Analyzed: 10/26/99

Time Analyzed: 20:07

GC Column: DB-624 ID: 0.32 (mm)

Heated Purge: (Y/N) Y

Instrument ID: MSJ

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB1-7-1-01	94127011	J2067	21:04
02	SB1-4-1-01	94127013	J2074	00:30
03	SB1-4-2-01	94127014	J2075	01:00
04	SB1-8-1-01	94127016	J2078	02:30
05	VBIKBS3	VBIKBS3	J2066	20:33
06				
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COMMENTS:

FORM IV VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: I2086

BFB Injection Date: 10/13/99

Instrument ID: MSI

BFB Injection Time: 03:11

GC Column: DB-624 ID: 0.32

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	26.1
75	30.0 - 60.0% of mass 95	57.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	71.4
175	5.0 - 9.0 % of mass 174	5.0 (7.0)1
176	Greater than 95.0% but less than 101% of mass 174.	68.5 (96.0)1
177	5.0 - 9.0 of mass 176	4.4 (6.4)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD500	VSTD500	I2087	10/13/99	03:32
02	VSTD200	VSTD200	I2088	10/13/99	03:58
03	VSTD100	VSTD100	I2089	10/13/99	04:24
04	VSTD050	VSTD050	I2090	10/13/99	04:51
05	VSTD020	VSTD020	I2091	10/13/99	05:17
06	VSTD010	VSTD010	I2092	10/13/99	05:44
07	VSTD005	VSTD005	I2093	10/13/99	06:11
08	VSTD002	VSTD002	I2094	10/13/99	06:44
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FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

000039

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: J1950

BFB Injection Date: 10/13/99

Instrument ID: MSJ

BFB Injection Time: 18:50

GC Column: DB-624 ID: 0.32

Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.1
75	30.0 - 60.0% of mass 95	33.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	99.7
175	5.0 - 9.0 % of mass 174	8.9 (8.9)1
176	Greater than 95.0% but less than 101% of mass 174.	97.0 (97.3)1
177	5.0 - 9.0 of mass 176	6.4 (6.6)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD500	VSTD500	J1951	10/13/99	19:06
02	VSTD200	VSTD200	J1952	10/13/99	19:36
03	VSTD100	VSTD100	J1953	10/13/99	20:06
04	VSTD050	VSTD050	J1954	10/13/99	20:35
05	VSTD005	VSTD005	J1957	10/13/99	22:04
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FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

000040

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: I2270

BFB Injection Date: 10/18/99

Instrument ID: MSI

BFB Injection Time: 06:11

GC Column: DB-624 ID: 0.32

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.0
75	30.0 - 60.0% of mass 95	54.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.1 (0.1)1
174	Greater than 50.0% of mass 95	88.1
175	5.0 - 9.0 % of mass 174	6.3 (7.1)1
176	Greater than 95.0% but less than 101% of mass 174.	85.8 (97.4)1
177	5.0 - 9.0 of mass 176	5.6 (6.6)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	I2272	10/18/99	06:59
02	991018I3	991018I3	I2275	10/18/99	09:26
03	VBLKBS4	VBLKBS4	I2276	10/18/99	10:05
04	SW2-2-01	94127019	I2283	10/18/99	13:00
05	SW2-2-03	94127020	I2284	10/18/99	13:29
06	FB-101499	94127021	I2285	10/18/99	13:58
07	TB-1014991	94127022	I2286	10/18/99	14:26
08	TB-1014992	94127023	I2287	10/18/99	14:56
09	TB-1014993	94127024	I2288	10/18/99	15:24
10	SW2-3-01MS	94127026MS	I2290	10/18/99	15:54
11	SW2-3-01MSD	94127026MSD	I2291	10/18/99	16:23
12	SW2-3-01	94127026	I2292	10/18/99	16:52
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FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

000041

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: J2006

BFB Injection Date: 10/18/99

Instrument ID: MSJ

BFB Injection Time: 18:33

GC Column: DB-624 ID: 0.32

Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.2
75	30.0 - 60.0% of mass 95	37.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	88.5
175	5.0 - 9.0 % of mass 174	7.1 (8.0)1
176	Greater than 95.0% but less than 101% of mass 174.	86.8 (98.1)1
177	5.0 - 9.0 of mass 176	6.8 (7.9)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	J2008	10/18/99	18:44
02	991018J1	991018J1	J2010	10/18/99	19:58
03	VBLKBS1	VBLKBS1	J2011	10/18/99	20:26
04	SB1-1-1-01	94127001	J2025	10/19/99	03:22
05	SB1-1-2-01	94127002	J2026	10/19/99	03:51
06	SB1-5-1-01	94127003	J2027	10/19/99	04:20
07	SB1-6-1-01	94127005	J2029	10/19/99	05:19
08	SB1-6-1-01MS	94127005MS	J2030	10/19/99	05:48
09	SB1-6-1-01MSD	94127005MSD	J2031	10/19/99	06:17
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FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: J2036

BFB Injection Date: 10/22/99

Instrument ID: MSJ

BFB Injection Time: 15:18

GC Column: DB-624 ID: 0.32

Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.0
75	30.0 - 60.0% of mass 95	35.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	83.2
175	5.0 - 9.0 % of mass 174	6.4 (7.7)1
176	Greater than 95.0% but less than 101% of mass 174.	81.0 (97.4)1
177	5.0 - 9.0 of mass 176	5.4 (6.6)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	J2038	10/22/99	16:46
02	991022J1	991022J1	J2040	10/22/99	17:47
03	VBLKBS2	VBLKBS2	J2041	10/22/99	18:17
04	SB1-5-2-01	94127004	J2042	10/22/99	18:54
05	SB1-2-1-01	94127007	J2043	10/22/99	19:23
06	SB1-2-2-01	94127008	J2045	10/22/99	20:19
07	SB1-1-2-01RE	94127002RE	J2046	10/22/99	20:49
08	SB1-3-1-01	94127009	J2047	10/22/99	22:00
09	SB1-3-2-01	94127010	J2048	10/22/99	22:22
10	SB1-7-2-01	94127012	J2050	10/22/99	23:13
11	SB1-4-2-02	94127015	J2053	10/23/99	00:38
12	SB1-8-2-01	94127017	J2055	10/23/99	01:36
13	S2-2-01	94127018	J2056	10/23/99	02:06
14	S2-3-01	94127025	J2057	10/23/99	02:35
15	SB1-6-2-01	94127006	J2058	10/23/99	03:04
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FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: J2061

BFB Injection Date: 10/26/99

Instrument ID: MSJ

BFB Injection Time: 18:25

GC Column: DB-624 ID: 0.32

Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.4
75	30.0 - 60.0% of mass 95	33.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	98.1
175	5.0 - 9.0 % of mass 174	7.9 (8.1)1
176	Greater than 95.0% but less than 101% of mass 174.	93.6 (95.5)1
177	5.0 - 9.0 of mass 176	6.3 (6.7)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	J2063	10/26/99	19:09
02	991026J1	991026J1	J2065	10/26/99	20:07
03	VBLKBS3	VBLKBS3	J2066	10/26/99	20:33
04	SB1-7-1-01	94127011	J2067	10/26/99	21:04
05	SB1-4-1-01	94127013	J2074	10/27/99	00:30
06	SB1-4-2-01	94127014	J2075	10/27/99	01:00
07	SB1-8-1-01	94127016	J2078	10/27/99	02:30
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FORM V VOA

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: (Standard): J2008 Date Analyzed: 10/18/99

Instrument ID: MSJ Time Analyzed: 18:44

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) Y

		IS1(FBZ) AREA #	RT #	IS2(DCB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	1493580	7.17	413050	18.02	1117035	13.04
	UPPER LIMIT	2987160	7.67	826100	18.52	2234070	13.54
	LOWER LIMIT	746790	6.67	206525	17.52	558518	12.54
	EPA SAMPLE NO.						
01	991018J1	1502435	7.16	368680	18.01	1070322	13.03
02	VBLKBS1	1345644	7.10	381955	17.99	1013588	13.02
03	SB1-1-1-01	1052831	7.12	282150	17.97	745806	13.00
04	SB1-1-2-01	1140077	7.12	310469	17.98	801671	13.00
05	SB1-5-1-01	1360895	7.11	324140	17.96	970361	13.00
06	SB1-6-1-01	1527171	7.12	361761	17.97	1081954	12.99
07	SB1-6-1-01MS	1385740	7.12	325411	17.96	997794	12.99
08	SB1-6-1-01MSD	1492501	7.11	350270	17.96	1066138	12.99
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IS1 (FBZ) = Fluorobenzene
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: (Standard): J2038 Date Analyzed: 10/22/99

Instrument ID: MSJ Time Analyzed: 16:46

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) Y

		IS1(FBZ) AREA #	RT #	IS2(DCB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	858262	7.24	216608	18.10	586266	13.11
	UPPER LIMIT	1716524	7.74	433216	18.60	1172532	13.61
	LOWER LIMIT	429131	6.74	108304	17.60	293133	12.61
	EPA SAMPLE NO.						
01	991022J1	614960	7.24	149956	18.10	438030	13.12
02	VBLKBS2	582645	7.25	162176	18.11	439365	13.12
03	SB1-5-2-01	847745	7.24	215660	18.11	582756	13.13
04	SB1-2-1-01	1464218	7.25	385050	18.11	1077027	13.13
05	SB1-2-2-01	1059874	7.23	306644	18.11	750399	13.12
06	SB1-1-2-01RE	633055	7.22	176462	18.09	443392	13.11
07	SB1-3-1-01	1057567	7.21	250170	18.07	707754	13.09
08	SB1-3-2-01	1488537	7.21	364101	18.07	1062021	13.09
09	SB1-7-2-01	1217155	7.18	293416	18.07	872217	13.08
10	SB1-4-2-02	1344544	7.23	312559	18.09	952637	13.11
11	SB1-8-2-01	780848	7.21	195273	18.09	500847	13.10
12	S2-2-01	1339011	7.22	305619	18.09	931482	13.11
13	S2-3-01	912536	7.23	138605	18.09	576805	13.11
14	SB1-6-2-01	1207725	7.23	250028	18.09	815586	13.11
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: (Standard): J2063 Date Analyzed: 10/26/99

Instrument ID: MSJ Time Analyzed: 19:09

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) Y

		IS1(FBZ) AREA #	RT #	IS2(DCB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	1162499	7.24	324038	18.10	859014	13.12
	UPPER LIMIT	2324998	7.74	648076	18.60	1718028	13.62
	LOWER LIMIT	581250	6.74	162019	17.60	429507	12.62
	EPA SAMPLE NO.						
01	991026J1	855974	7.24	227981	18.10	658554	13.13
02	VBLKBS3	872405	7.22	240061	18.08	655995	13.11
03	SB1-7-1-01	1318042	7.23	316535	18.10	944393	13.11
04	SB1-4-1-01	1552835	7.21	373361	18.06	1104661	13.08
05	SB1-4-2-01	1346657	7.21	318771	18.07	968620	13.09
06	SB1-8-1-01	1310756	7.21	297548	18.07	918614	13.09
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: (Standard): I2272 Date Analyzed: 10/18/99

Instrument ID: MSI Time Analyzed: 06:59

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

		IS1(FBZ) AREA #	RT #	IS2(DCB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	735509	8.65	275942	16.79	547516	14.26
	UPPER LIMIT	1471018	9.15	551884	17.29	1095032	14.76
	LOWER LIMIT	367754	8.15	137971	16.29	273758	13.76
	EPA SAMPLE NO.						
01	991018I3	719795	8.65	269328	16.79	536064	14.25
02	VBLKBS4	694414	8.64	248493	16.80	494964	14.25
03	SW2-2-01	675556	8.63	218992	16.79	468363	14.24
04	SW2-2-03	687125	8.64	235824	16.79	491908	14.24
05	FB-101499	692019	8.64	273359	16.79	532311	14.24
06	TB-1014991	712506	8.63	286877	16.79	551983	14.24
07	TB-1014992	683795	8.63	249048	16.78	511306	14.24
08	TB-1014993	671969	8.63	223144	16.78	480547	14.24
09	SW2-3-01MS	638900	8.63	230451	16.78	469935	14.24
10	SW2-3-01MSD	677257	8.63	235046	16.79	513724	14.23
11	SW2-3-01	655095	8.62	227157	16.79	475854	14.23
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000048

SB1-1-1-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127001

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2025

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 6

Date Analyzed: 10/19/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	46	B
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	11	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	10	
591-78-6	2-Hexanone	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	11	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report (Not Reviewed)

000049

Data File : C:\HPCHEM\1\DATA\101899\J2025.D Vial: 100
Acq On : 19 Oct 99 3:22 Operator:
Sample : ;MSJ;; Inst : GC/MS Ins
Misc : 94127001;LOW;SO; Multiplr: 1.00
Quant Time: Oct 22 20:25 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.12	96	1052831	50.00 ppb	-0.04
64) Chlorobenzene-d5	13.00	117	745806	50.00 ppb	-0.04
80) 1,4-Dichlorobenzene-d4	17.97	152	282150	50.00 ppb	-0.04
System Monitoring Compounds					
37) Dibromofluoromethane	6.14	113	334986	46.57 ppb	-0.03
Surrogate Spike 50.000	Range 86 - 118		Recovery = 93.14%		
41) 1,2-Dichloroethane-d4	6.67	65	266595	56.56 ppb	-0.03
Surrogate Spike 50.000	Range 80 - 120		Recovery = 113.12%		
65) Toluene-d8	10.01	98	920040	51.65 ppb	-0.04
Surrogate Spike 50.000	Range 88 - 110		Recovery = 103.30%		
78) Bromofluorobenzene	15.50	95	316256	52.60 ppb	-0.03
Surrogate Spike 50.000	Range 86 - 115		Recovery = 105.20%		

Target Compounds					Qvalue
18) Acetone	3.31	43	58867	43.09 ppb	86
58) Isobutyl acetate	8.69	43	31527	94.88 ppb	46
69) Ethylbenzene	13.26	91	175855	9.11 ppb	95
83) n-Propylbenzene	15.98	91	99175	5.17 ppb	90
88) 1,2,4-Trimethylbenzene	17.17	105	85573	6.40 ppb	97
94) n-Butylbenzene	18.82	91	51059	3.87 ppb	91
101) Naphthalene	21.93	128	303331	24.79 ppb	100

SE
10/19/99

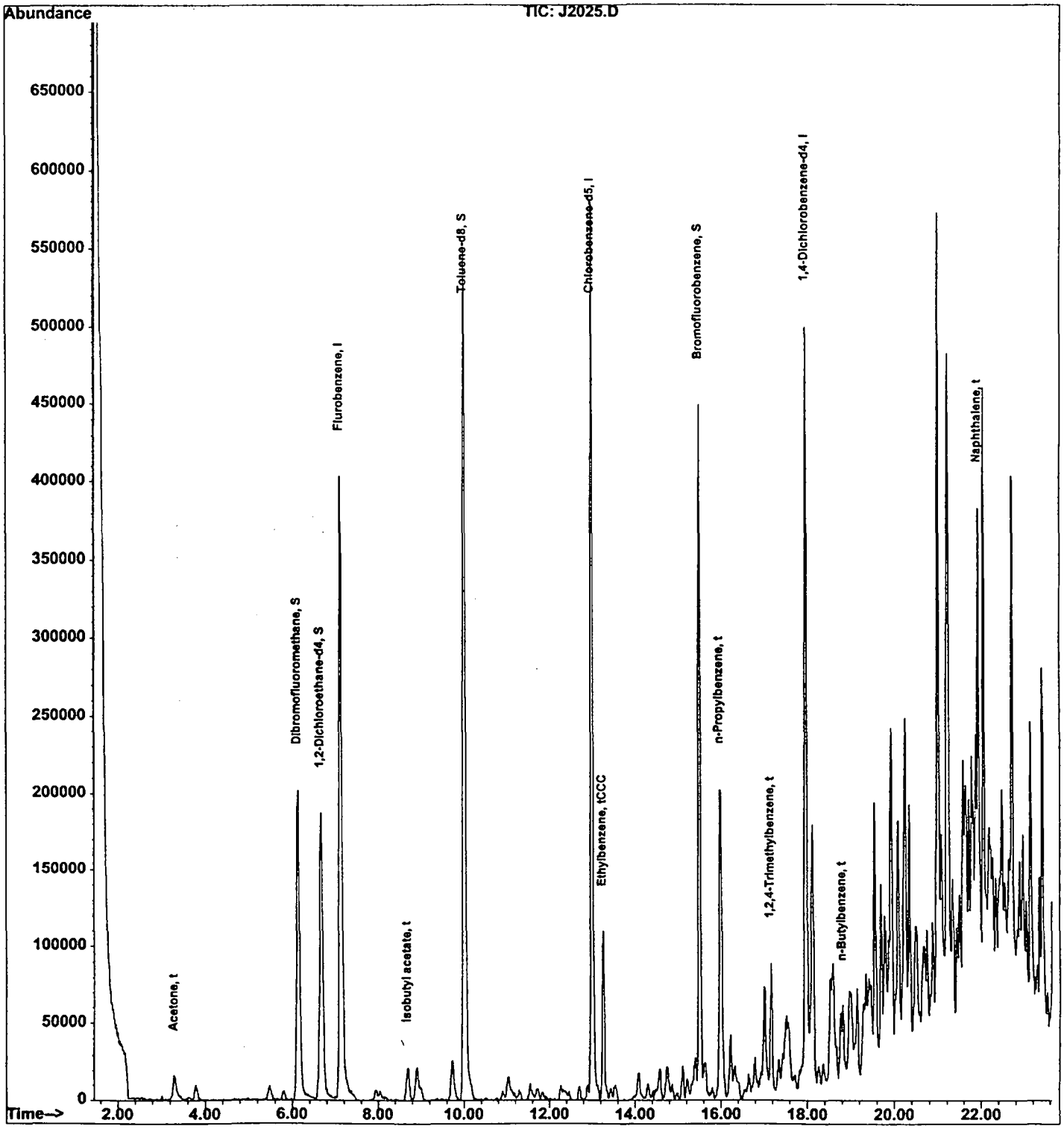
(#) = qualifier out of range (m) = manual integration

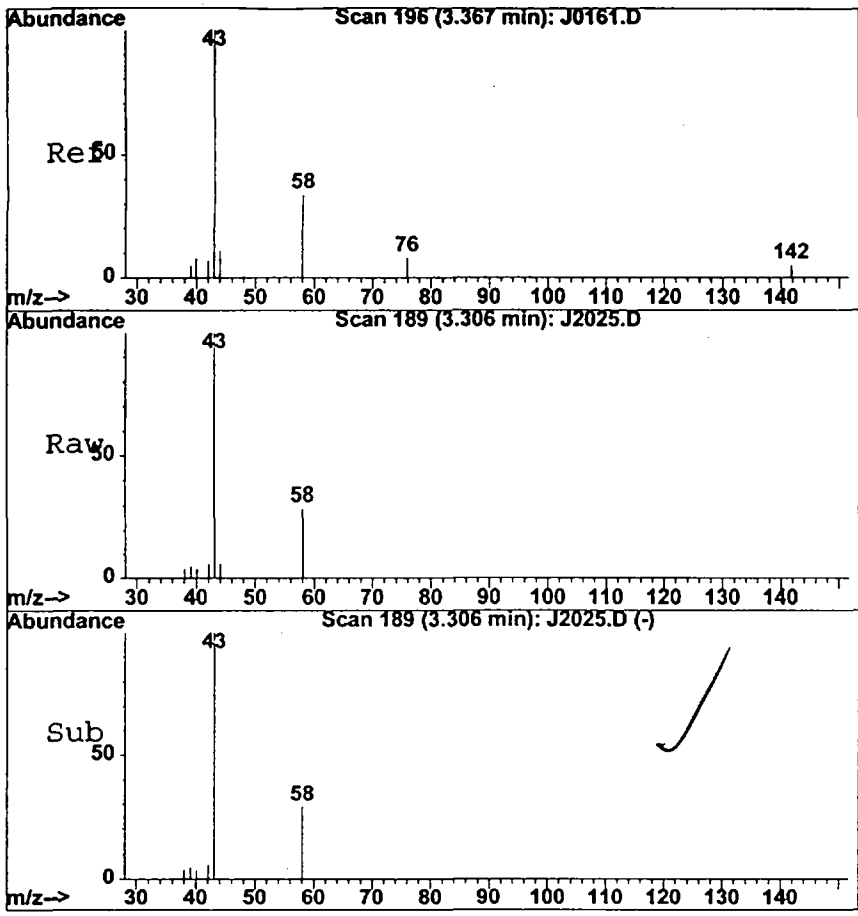
Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\J2025.D
Acq On : 19 Oct 99 3:22
Sample : ;MSJ;;
Misc : 94127001;LOW;SO;
Quant Time: Oct 22 20:25 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

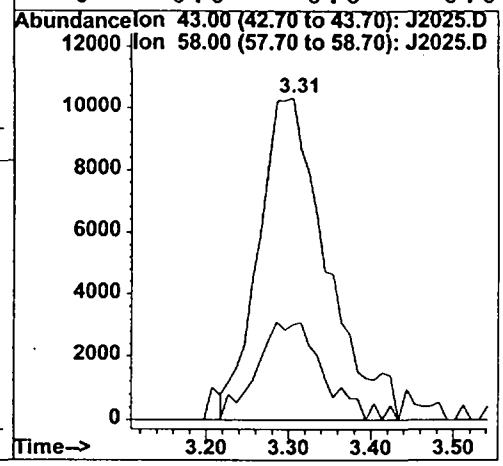


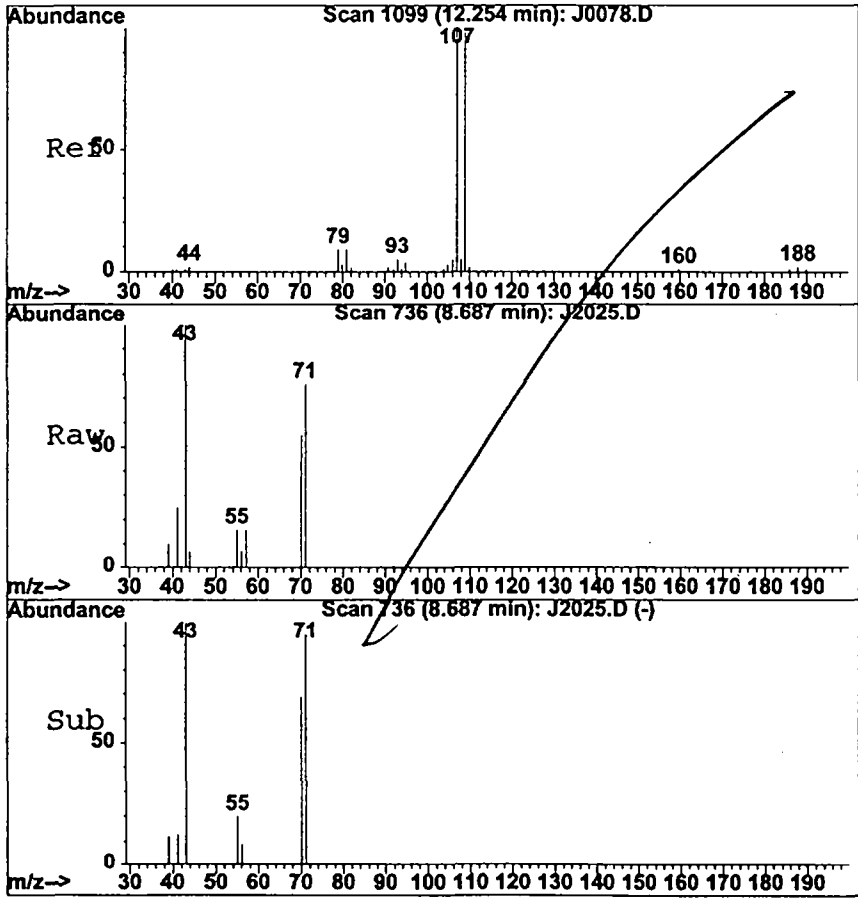


#18
Acetone
Concen: 43.09 ppb
RT: 3.31 min Scan# 189
Delta R.T. -0.01 min
Lab File: J2025.D
Acq: 19 Oct 99 3:22

Tgt Ion:43 Resp: 58867

Ion	Ratio	Lower	Upper
43	100		
58	27.5	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

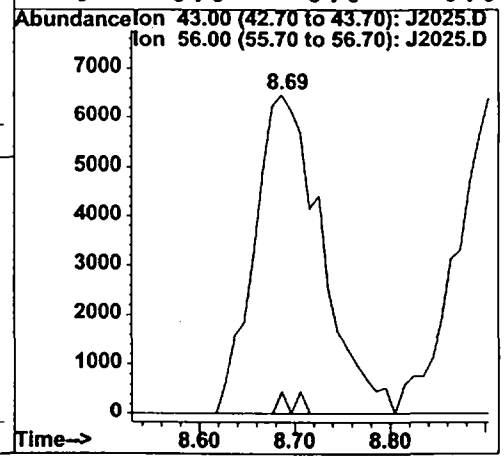


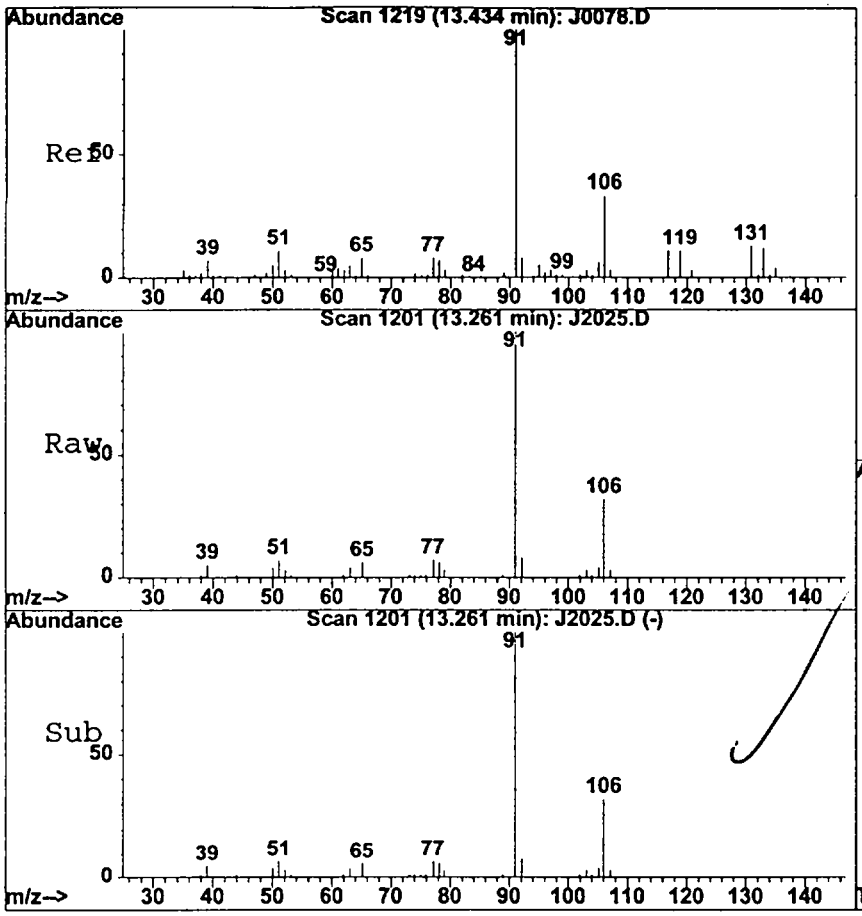


#58
Isobutyl acetate
Concen: 94.88 ppb
RT: 8.69 min Scan# 736
Delta R.T. 0.21 min
Lab File: J2025.D
Acq: 19 Oct 99 3:22

Tgt Ion:43 Resp: 31527

Ion	Ratio	Lower	Upper
43	100		
56	0.9	0.0	59.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

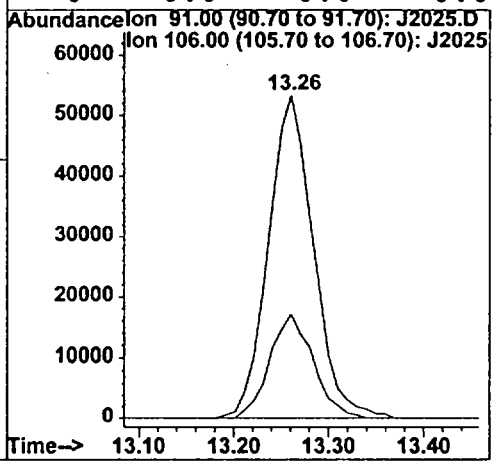


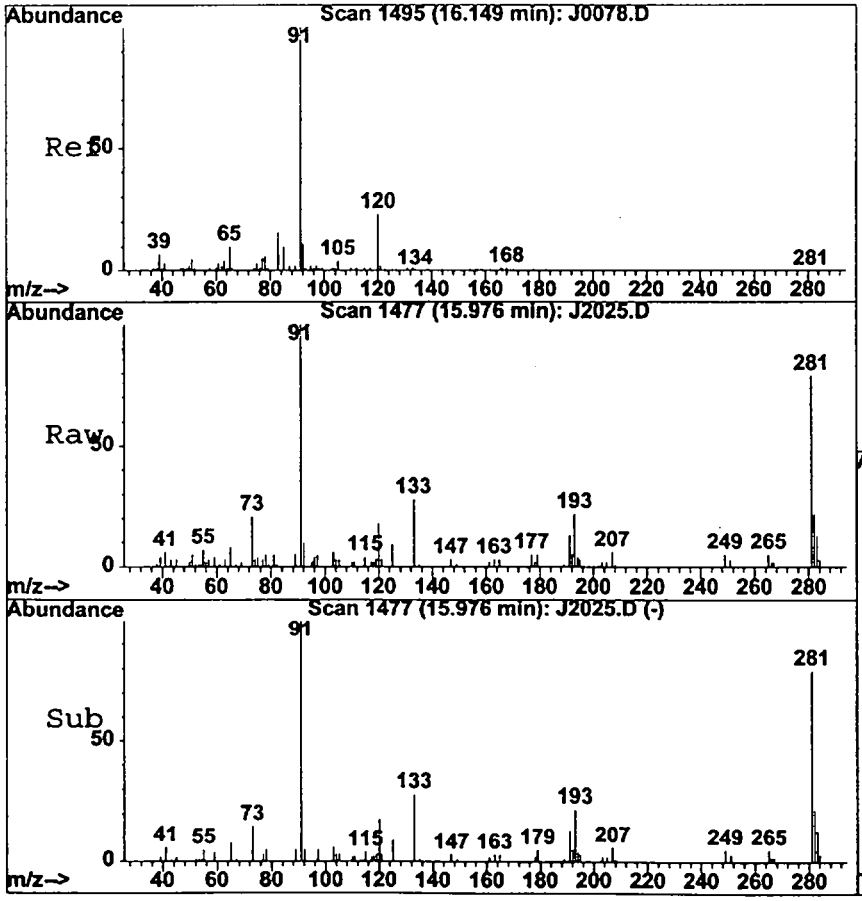


#69
Ethylbenzene
Concen: 9.11 ppb
RT: 13.26 min Scan# 1201
Delta R.T. -0.03 min
Lab File: J2025.D
Acq: 19 Oct 99 3:22

Tgt Ion:91 Resp: 175855

Ion	Ratio	Lower	Upper
91	100		
106	31.2	23.9	44.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

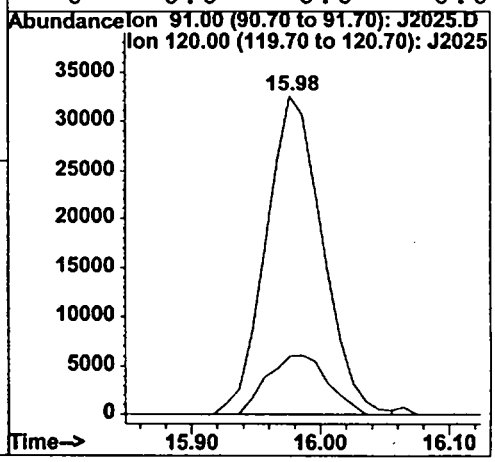




#83
n-Propylbenzene
Concen: 5.17 ppb
RT: 15.98 min Scan# 1477
Delta R.T. -0.04 min
Lab File: J2025.D
Acq: 19 Oct 99 3:22

Tgt Ion:91 Resp: 99175

Ion	Ratio	Lower	Upper
91	100		
120	18.5	0.0	53.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-1-2-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127002

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2026

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 10

Date Analyzed: 10/19/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	320	B
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	11	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	490	
591-78-6	2-Hexanone	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	3	J
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	11	U
1330-20-7	Xylenes (Total)	200	

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101899\J2026.D
Acq On : 19 Oct 99 3:51
Sample : ;MSJ;;
Misc : 94127002;LOW;SO;
Quant Time: Oct 22 20:39 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Flurobenzene	7.12	96	1140077	50.00	ppb	-0.05
64) Chlorobenzene-d5	13.00	117	801671	50.00	ppb	-0.04
80) 1,4-Dichlorobenzene-d4	17.98	152	310469	50.00	ppb	-0.04
System Monitoring Compounds						
37) Dibromofluoromethane	6.13	113	341796	43.88	ppb	-0.04
Surrogate Spike 50.000	Range 86 - 118		Recovery = 87.76%			
41) 1,2-Dichloroethane-d4	6.67	65	561873	110.08	ppb	-0.03
Surrogate Spike 50.000	Range 80 - 120		Recovery = 220.16%#			
65) Toluene-d8	10.02	98	1027415	53.66	ppb	-0.04
Surrogate Spike 50.000	Range 88 - 110		Recovery = 107.32%			
78) Bromofluorobenzene	15.51	95	356514	55.16	ppb m	-0.03
Surrogate Spike 50.000	Range 86 - 115		Recovery = 110.32%			

Target Compounds						Qvalue
~~4) Chloromethane~~	~~2.44~~	~~50~~	~~319526~~	~~57.00~~	~~ppb~~	~~99~~
11) Tertiary butyl alcohol	3.95	59	2961	3.77	ppb	100
~~15) Acrolein~~	~~3.17~~	~~56~~	~~224384~~	~~70.68~~	~~ppb~~	~~100~~
18) Acetone	3.28	43	429213	290.12	ppb	60
20) Hexane	4.27	57	4618302	510.22	ppb	97
~~23) Vinyl acetate~~	~~4.99~~	~~43~~	~~9338257~~	~~791.34~~	~~ppb~~	~~100~~
40) 2,2,4-Trimethylpentane	4.27	57	4618302	510.22	ppb	81
~~43) 1,2-Dichloroethane~~	~~6.66~~	~~62~~	~~69317~~	~~12.06~~	~~ppb~~	~~95~~
55) Toluene	10.14	92	41502	3.11	ppb	90
~~56) 2-Chloroethylvinylether~~	~~10.14~~	~~63~~	~~11332~~	~~8.35~~	~~ppb~~	~~100~~
~~58) Isobutyl acetate~~	~~8.73~~	~~43~~	~~33681262~~	~~93610.62~~	~~ppb~~	~~52~~
69) Ethylbenzene	13.26	91	9223435	444.55	ppb	100
71) m&p-Xylenes	13.53	106	1609277	180.64	ppb	98
77) Isopropylbenzene	15.11	105	1147934	57.15	ppb	98
83) n-Propylbenzene	15.98	91	2212133	104.72	ppb	99
~~85) 4-Chlorotoluene~~	~~16.79~~	~~91~~	~~122858~~	~~9.01~~	~~ppb~~	~~59~~
86) 1,3,5-Trimethylbenzene	16.40	105	1381086	98.36	ppb	99
87) tert-Butylbenzene	17.02	119	58736	4.65	ppb	95
88) 1,2,4-Trimethylbenzene	17.17	105	7055833	479.91	ppb	98
89) sec-Butylbenzene	17.51	105	718906	35.10	ppb	99
91) 4-isopropyltoluene	17.89	119	583385	36.49	ppb	98
94) n-Butylbenzene	18.82	91	1110469	76.44	ppb	46
~~96) trans-1,4-dichloro-2-buten~~	~~16.22~~	~~53~~	~~254305~~	~~741.68~~	~~ppb~~	~~20~~
101) Naphthalene	21.93	128	1692056	125.65	ppb	100

GW 10/18/99 SIP

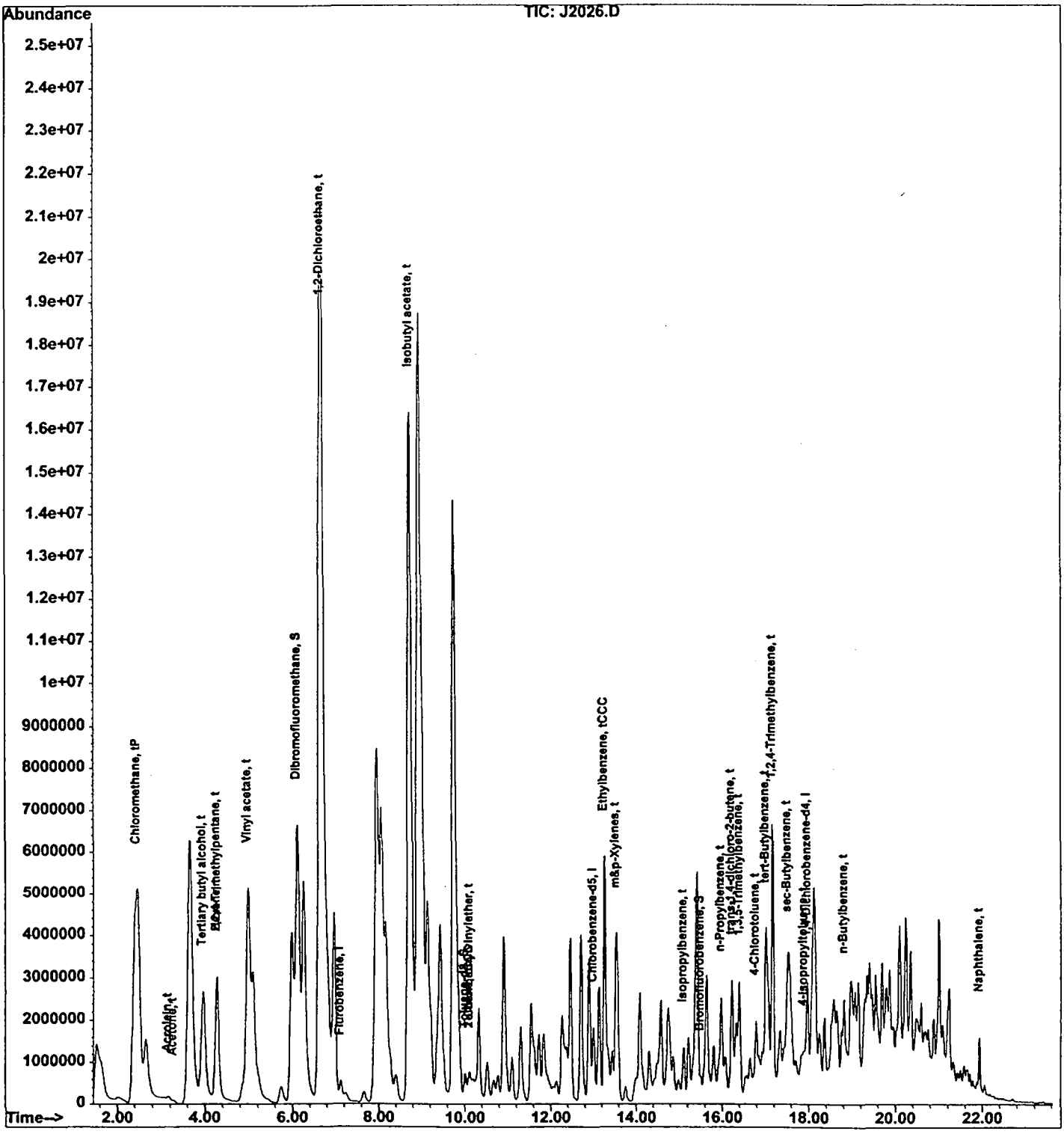
(#) = qualifier out of range (m) = manual integration

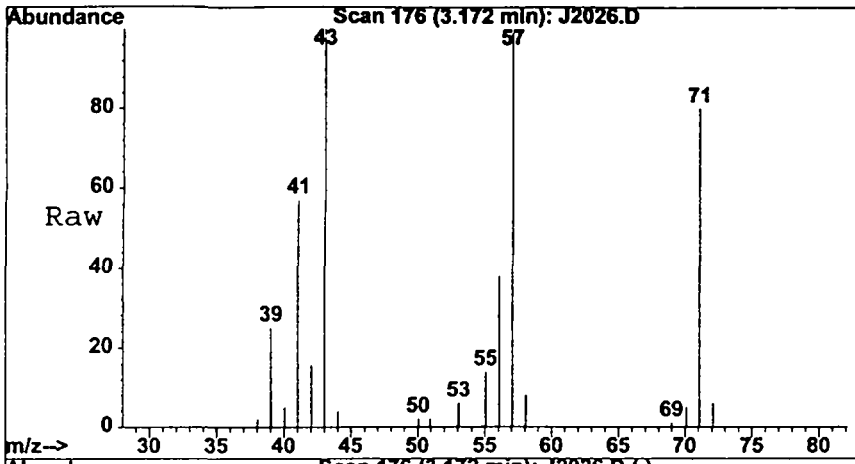
Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\J2026.D
Acq On : 19 Oct 99 3:51
Sample : ;MSJ;;
Misc : 94127002;LOW;SO;
Quant Time: Oct 22 20:39 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

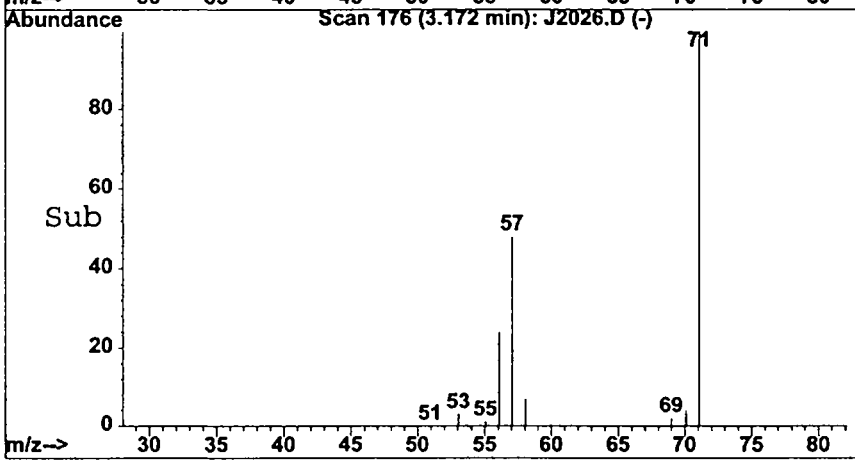


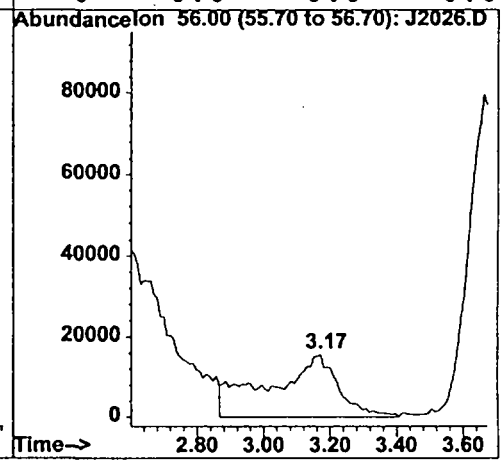


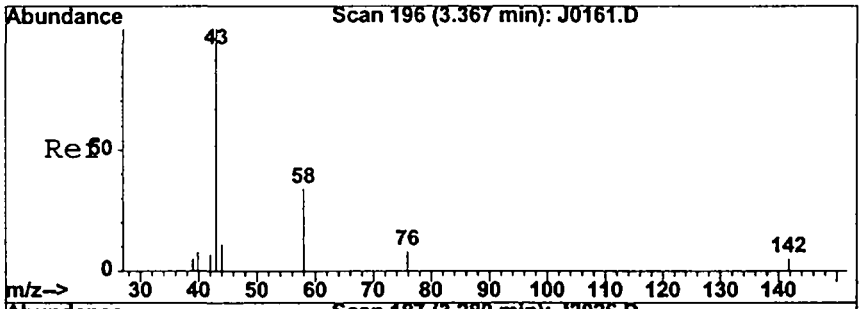
#15
Acrolein
Concen: 70.68 ppb
RT: 3.17 min Scan# 176
Delta R.T. 0.02 min
Lab File: J2026.D
Acq: 19 Oct 99 3:51

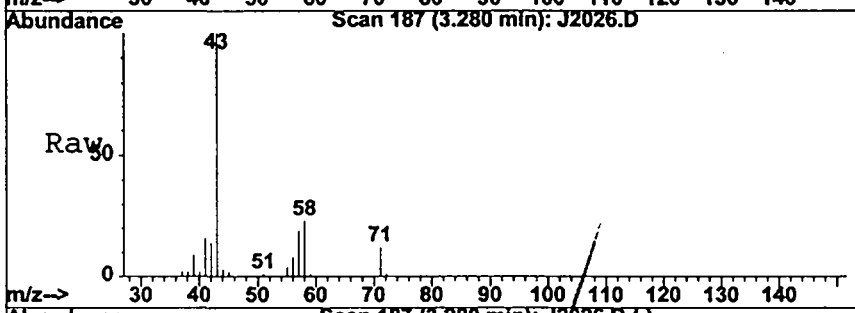
Tgt Ion:56 Resp: 224384

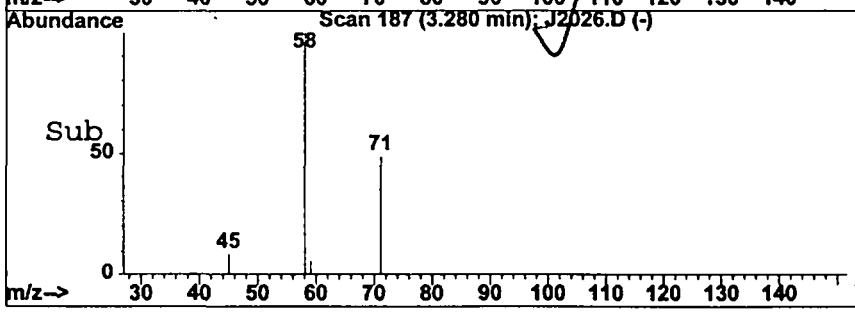
Ion	Ratio	Lower	Upper
56	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0







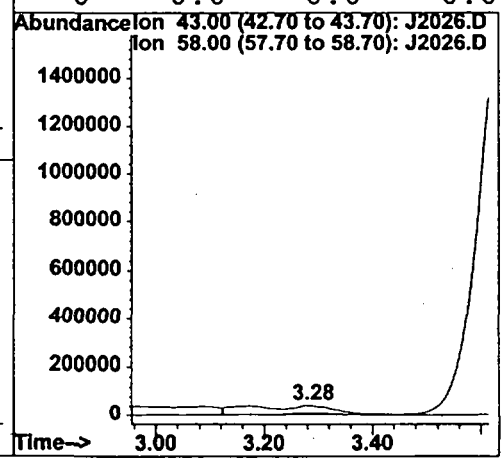


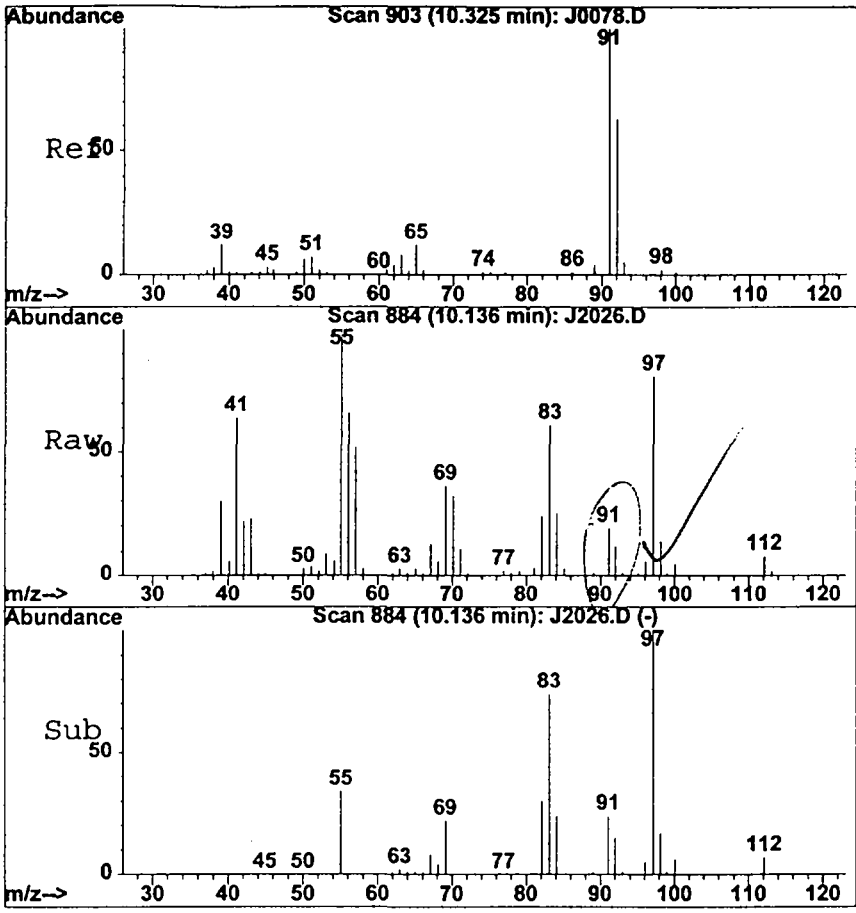


#18
Acetone
Concen: 290.12 ppb
RT: 3.28 min Scan# 187
Delta R.T. -0.04 min
Lab File: J2026.D
Acq: 19 Oct 99 3:51

Tgt Ion:43 Resp: 429213

Ion	Ratio	Lower	Upper
43	100		
58	12.0	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

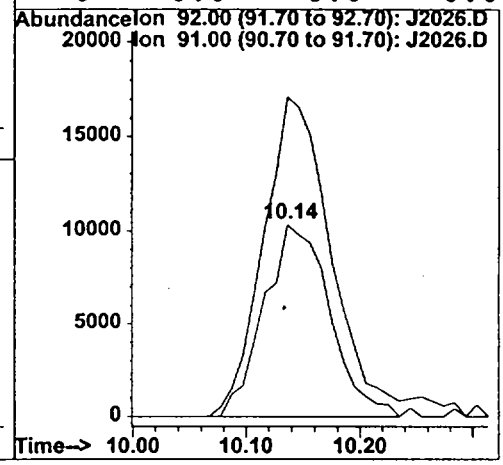


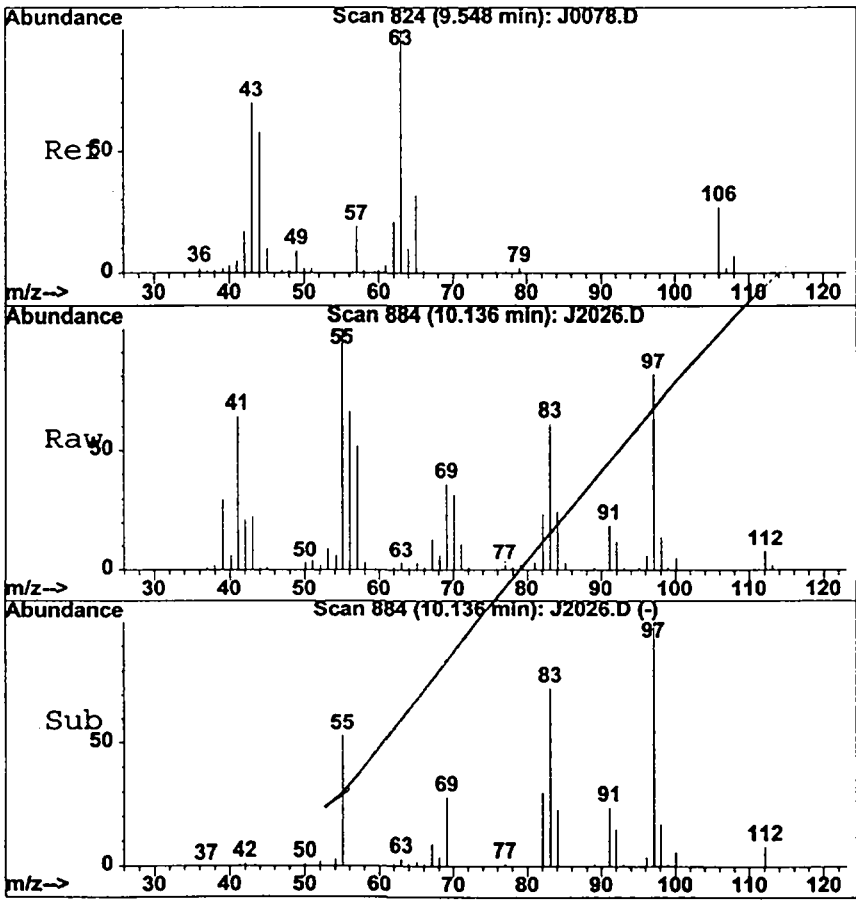


#55
Toluene
Concen: 3.11 ppb
RT: 10.14 min Scan# 884
Delta R.T. -0.05 min
Lab File: J2026.D
Acq: 19 Oct 99 3:51

Tgt Ion:92 Resp: 41502

Ion	Ratio	Lower	Upper
92	100		
91	175.6	113.6	211.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

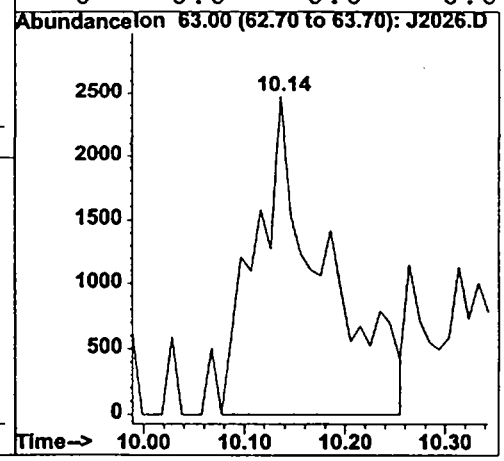


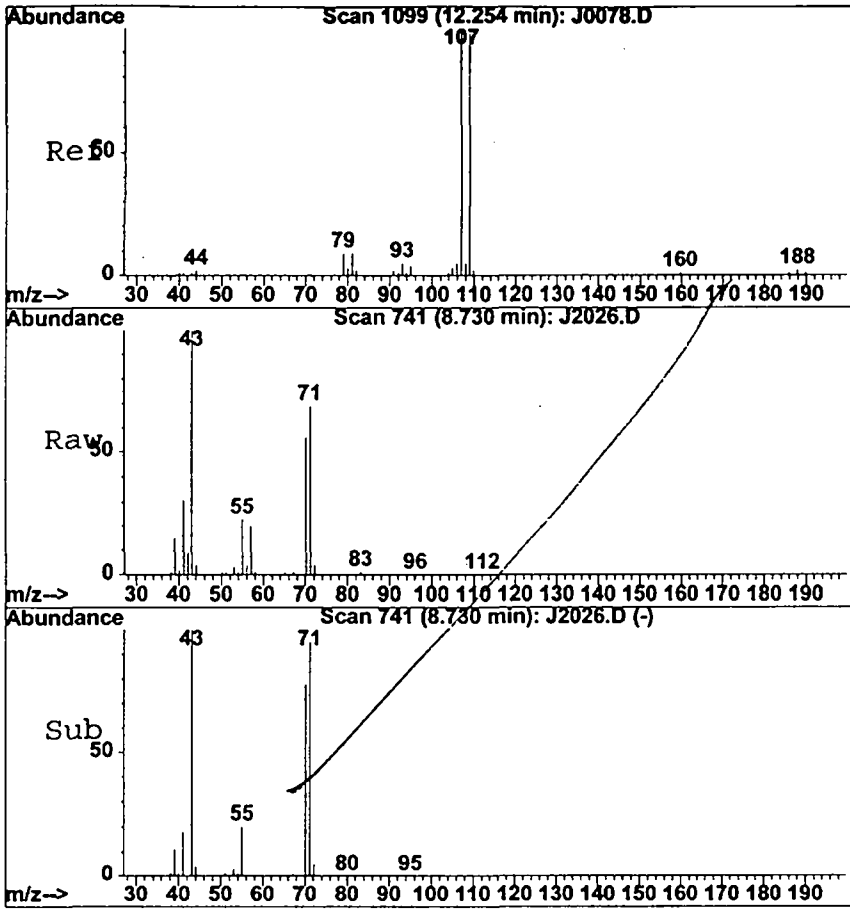


#56
2-Chloroethylvinylether
Concen: 8.35 ppb
RT: 10.14 min Scan# 884
Delta R.T. -0.04 min
Lab File: J2026.D
Acq: 19 Oct 99 3:51

Tgt Ion:63 Resp: 11332

Ion	Ratio	Lower	Upper
63	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

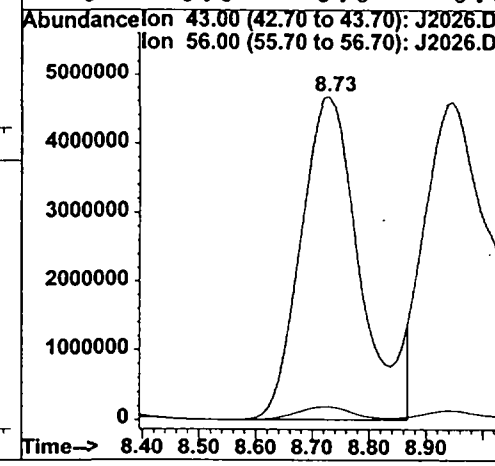


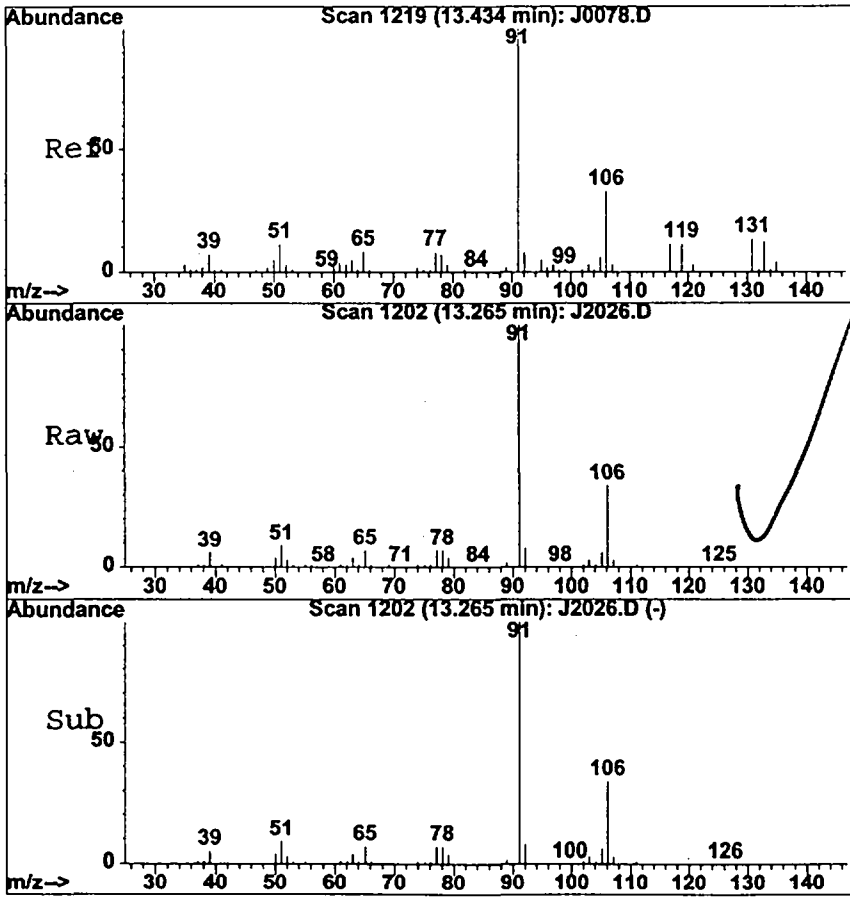


#58
Isobutyl acetate
Concen: 93610.62 ppb
RT: 8.73 min Scan# 741
Delta R.T. 0.26 min
Lab File: J2026.D
Acq: 19 Oct 99 3:51

Tgt Ion:43 Resp:33681262

Ion	Ratio	Lower	Upper
43	100		
56	4.1	0.0	59.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

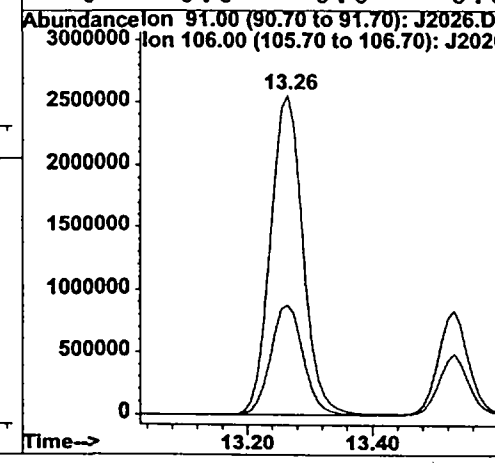


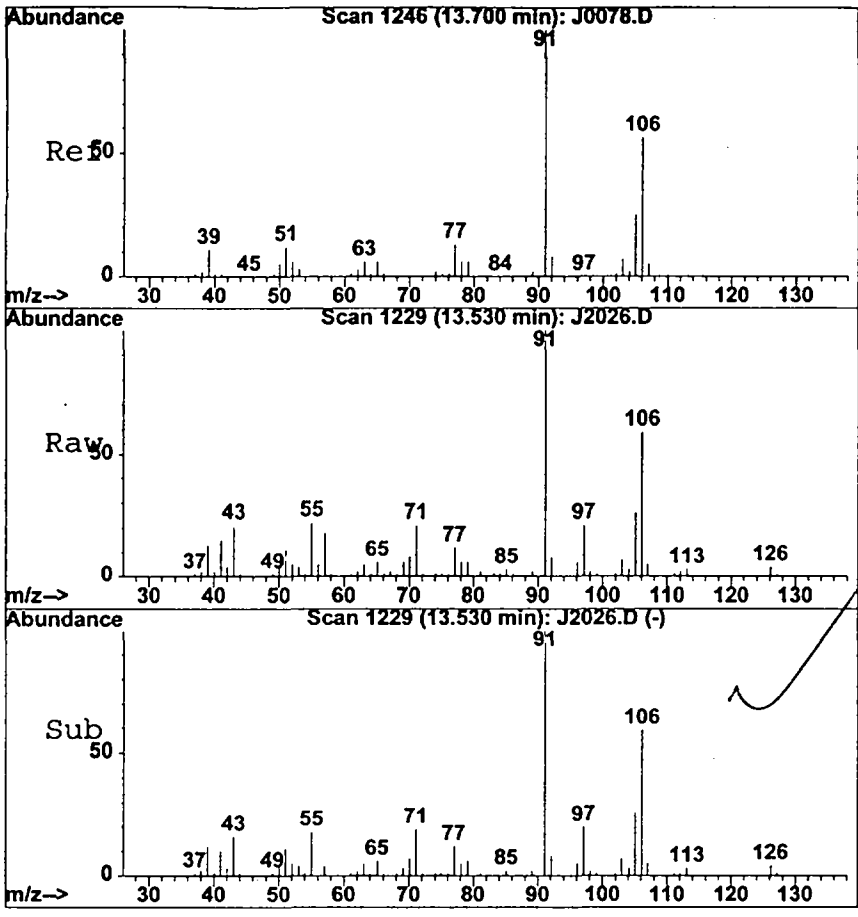


#69
Ethylbenzene
Concen: 444.55 ppb
RT: 13.26 min Scan# 1202
Delta R.T. -0.03 min
Lab File: J2026.D
Acq: 19 Oct 99 3:51

Tgt Ion:91 Resp: 9223435

Ion	Ratio	Lower	Upper
91	100		
106	34.4	23.9	44.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

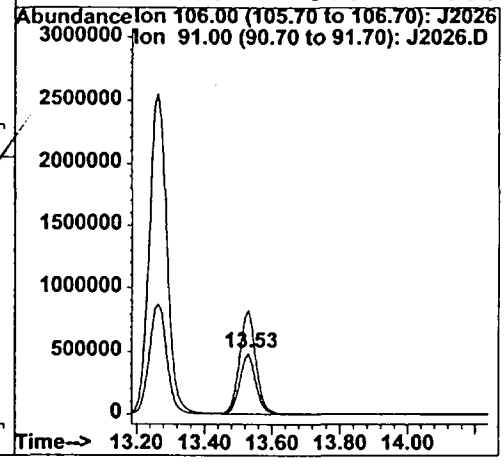


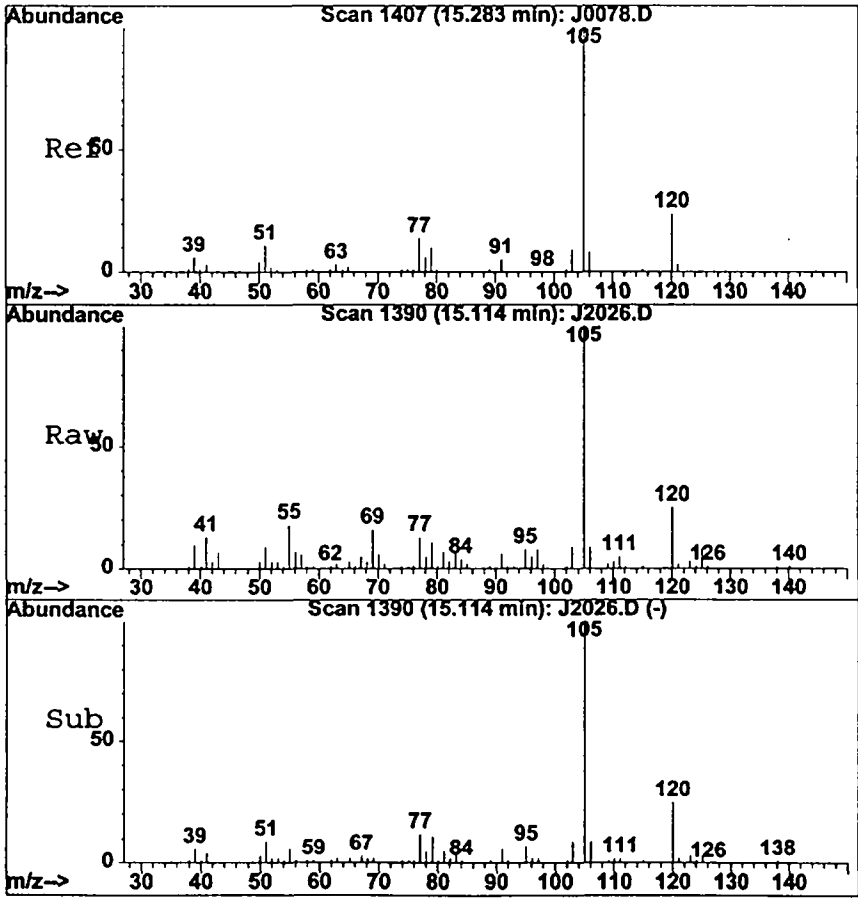


#71
m&p-Xylenes
Concen: 180.64 ppb
RT: 13.53 min Scan# 1229
Delta R.T. -0.03 min
Lab File: J2026.D
Acq: 19 Oct 99 3:51

Tgt Ion:106 Resp: 1609277

Ion	Ratio	Lower	Upper
106	100		
91	175.7	142.3	202.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

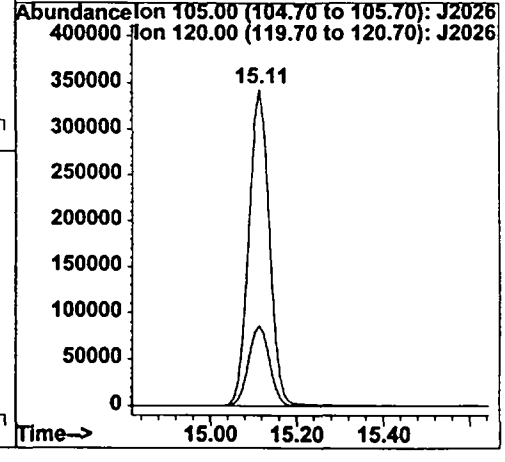




#77
Isopropylbenzene
Concen: 57.15 ppb
RT: 15.11 min Scan# 1390
Delta R.T. -0.04 min
Lab File: J2026.D
Acq: 19 Oct 99 3:51

Tgt Ion:105 Resp: 1147934

Ion	Ratio	Lower	Upper
105	100		
120	25.1	0.0	56.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-5-1-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127003

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2027

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 10

Date Analyzed: 10/19/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	76	B
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	8	J
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	11	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	6	U
591-78-6	2-Hexanone	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
75-09-2	Methylene Chloride	5	J
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	11	U
1330-20-7	Xylenes (Total)	6	U

Quantitation Report (Not Reviewed) **000061**

Data File : C:\HPCHEM\1\DATA\101899\J2027.D Vial: 100
Acq On : 19 Oct 99 4:20 Operator:
Sample : ;MSJ;; Inst : GC/MS Ins
Misc : 94127003;LOW;SO; Multiplr: 1.00
Quant Time: Oct 22 20:26 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Flurobenzene	7.11	96	1360895	50.00	ppb	-0.05
64) Chlorobenzene-d5	13.00	117	970361	50.00	ppb	-0.04
80) 1,4-Dichlorobenzene-d4	17.96	152	324140	50.00	ppb	-0.05
System Monitoring Compounds						
37) Dibromofluoromethane	6.13	113	460634	49.55	ppb	-0.04
Surrogate Spike 50.000	Range 86 - 118		Recovery = 99.10%			
41) 1,2-Dichloroethane-d4	6.66	65	297917	48.90	ppb	-0.04
Surrogate Spike 50.000	Range 80 - 120		Recovery = 97.80%			
65) Toluene-d8	10.01	98	1203453	51.93	ppb	-0.05
Surrogate Spike 50.000	Range 88 - 110		Recovery = 103.86%			
78) Bromofluorobenzene	15.50	95	376294	48.10	ppb	-0.03
Surrogate Spike 50.000	Range 86 - 115		Recovery = 96.20%			
Target Compounds						Qvalue
14) Methylene chloride	3.78	84	33481	4.36	ppb	99
18) Acetone	3.30	43	120722	68.36	ppb	89
27) 2-Butanone	5.47	72	5362	6.86	ppb	29
34) Tetrahydrofuran	5.80	42	11596	3.29	ppb	96
~~95) cis 1,4 dichloro 2 butene~~	~~15.99~~	~~75~~	~~13176~~	~~5.39~~	~~ppb~~	~~40~~
101) Naphthalene	21.92	128	86318	6.14	ppb	100

SW
10/11/99

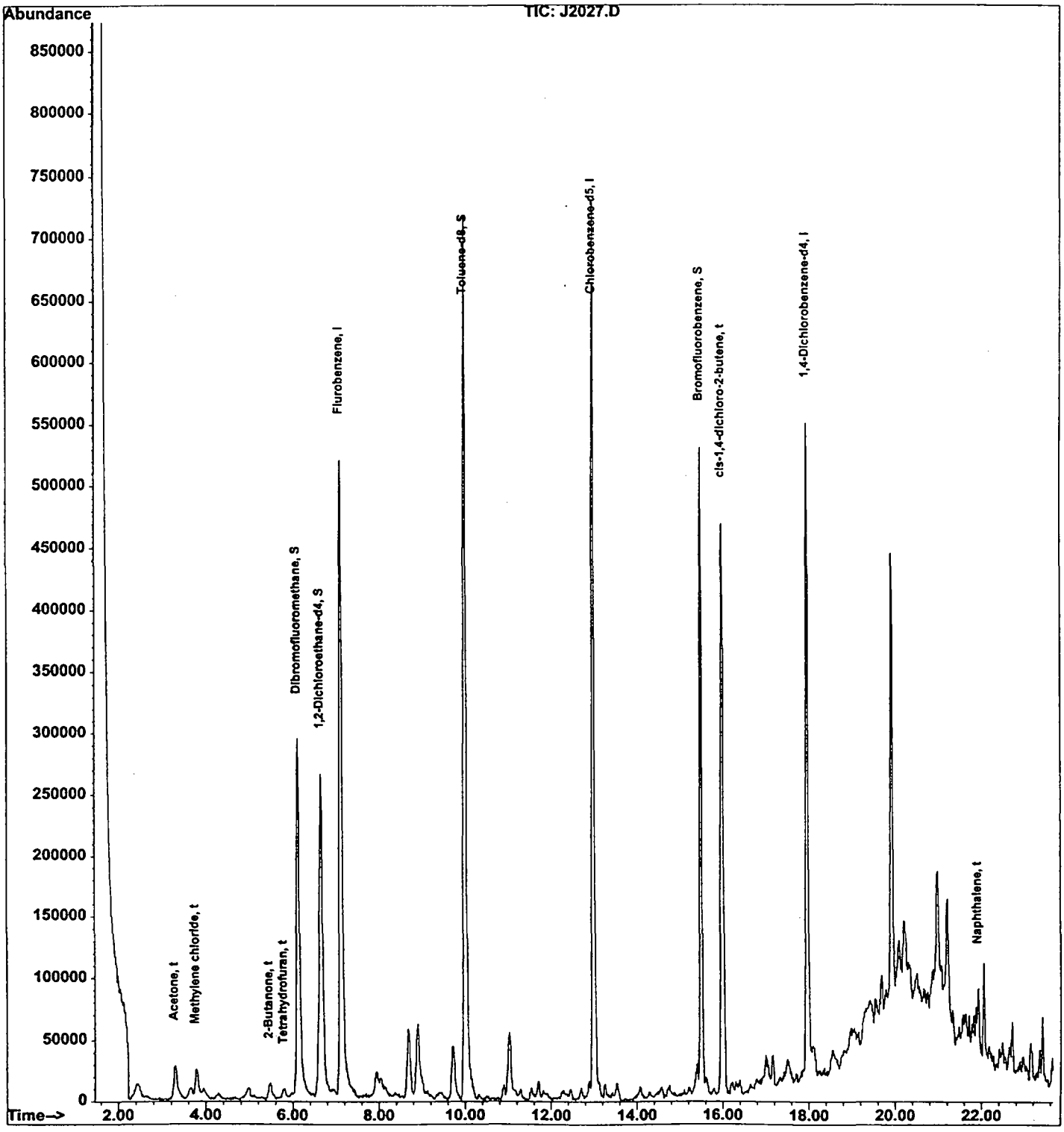
(#) = qualifier out of range (m) = manual integration

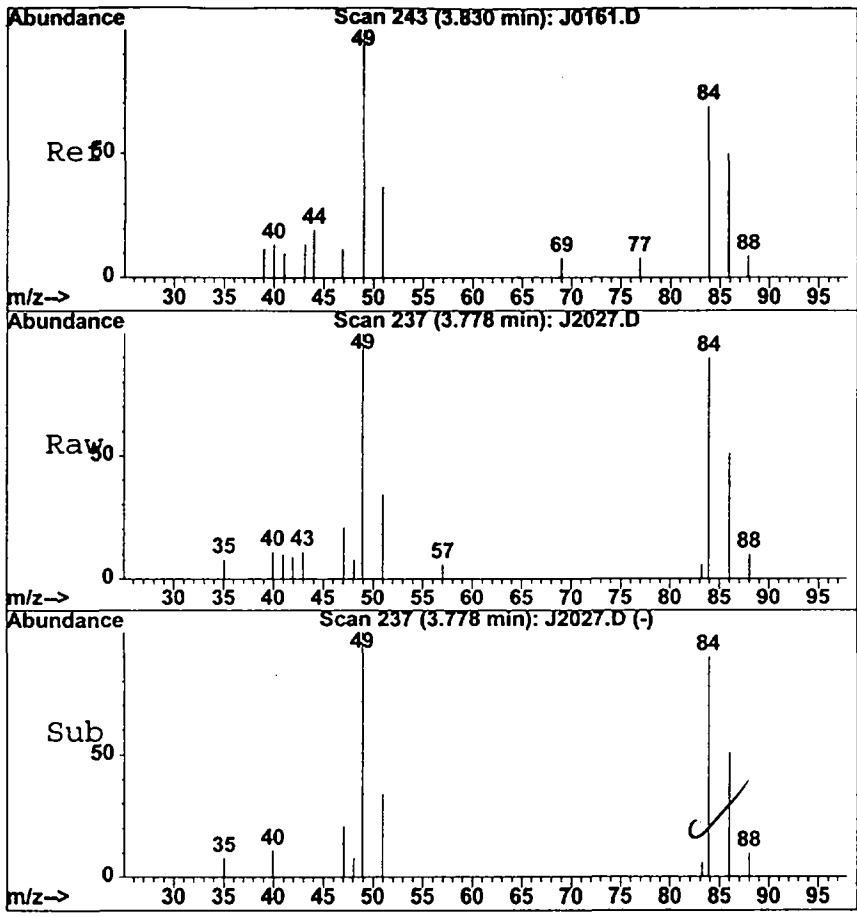
Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\J2027.D
Acq On : 19 Oct 99 4:20
Sample : ;MSJ;;
Misc : 94127003;LOW;SO;
Quant Time: Oct 22 20:26 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

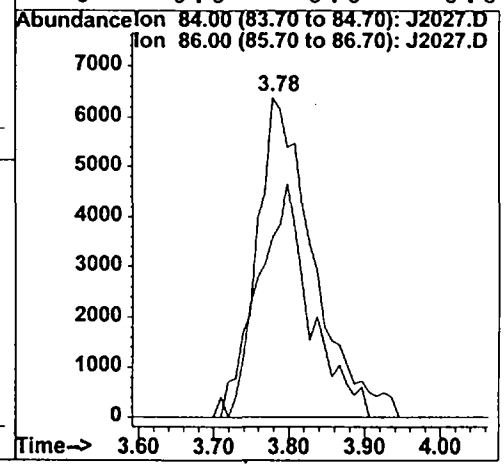


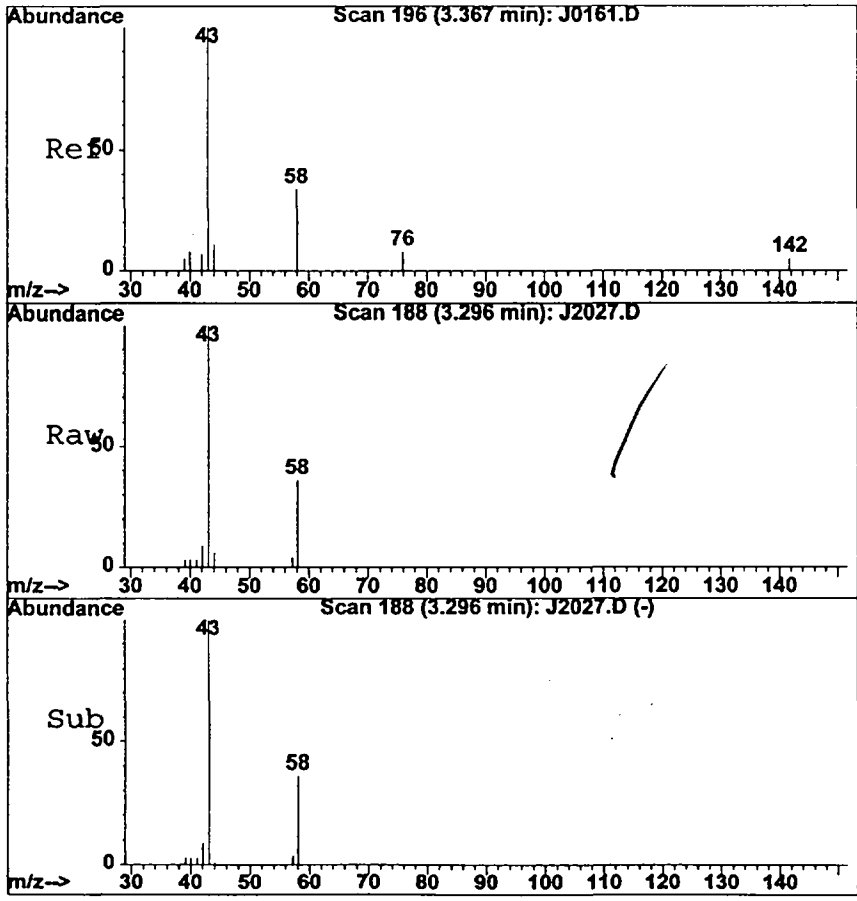


#14
Methylene chloride
Concen: 4.36 ppb
RT: 3.78 min Scan# 237
Delta R.T. -0.03 min
Lab File: J2027.D
Acq: 19 Oct 99 4:20

Tgt Ion:84 Resp: 33481

Ion	Ratio	Lower	Upper
84	100		
86	64.7	23.9	103.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

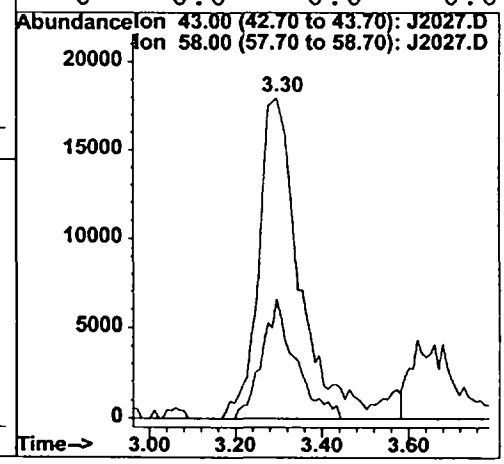


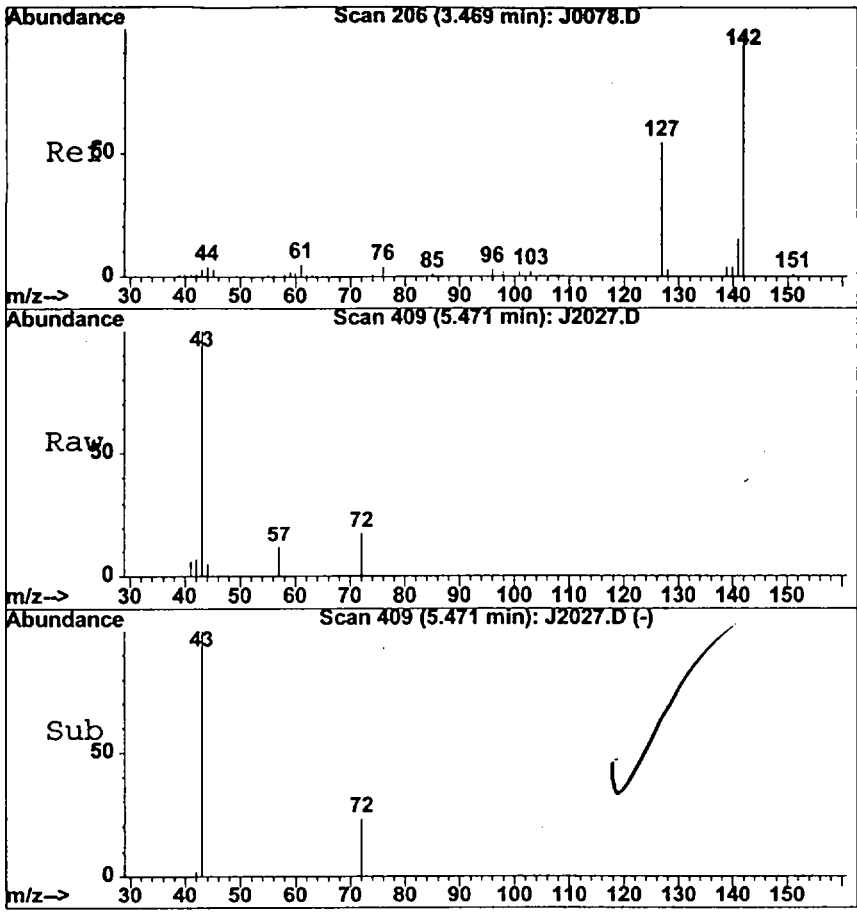


#18
Acetone
Concen: 68.36 ppb
RT: 3.30 min Scan# 188
Delta R.T. -0.02 min
Lab File: J2027.D
Acq: 19 Oct 99 4:20

Tgt Ion:43 Resp: 120722

Ion	Ratio	Lower	Upper
43	100		
58	29.3	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

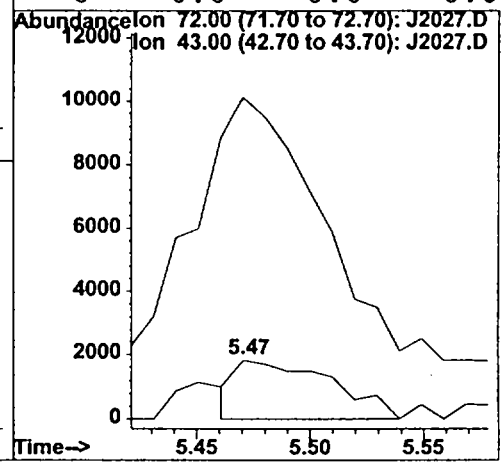


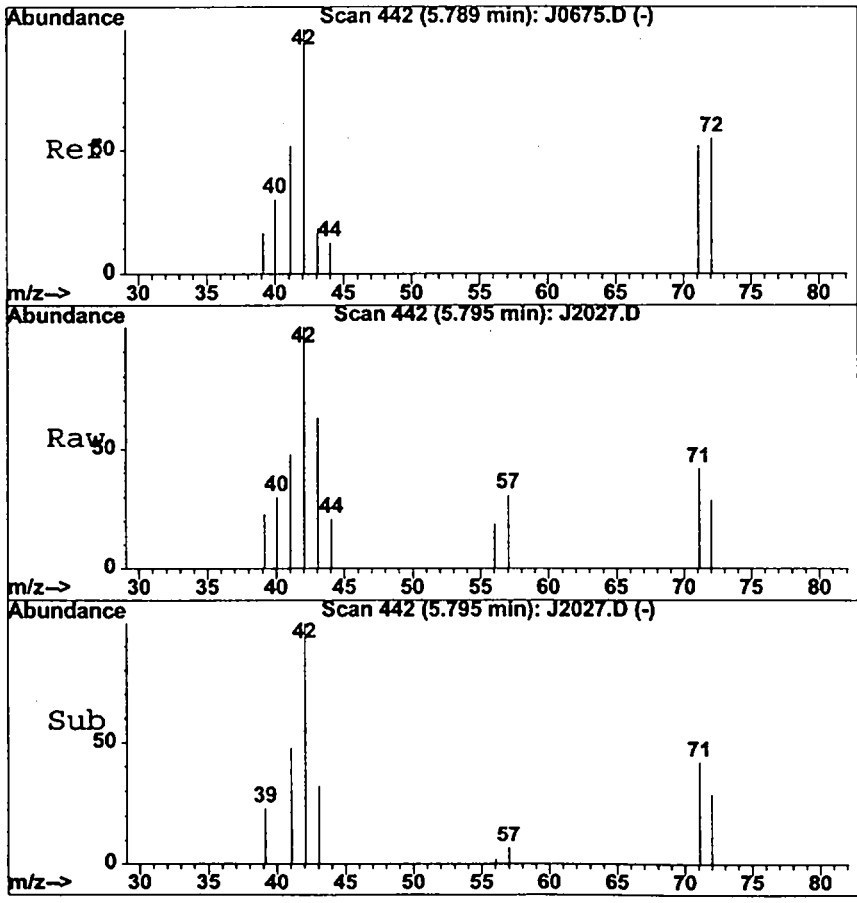


#27
2-Butanone
Concen: 6.86 ppb
RT: 5.47 min Scan# 409
Delta R.T. -0.03 min
Lab File: J2027.D
Acq: 19 Oct 99 4:20

Tgt Ion:72 Resp: 5362

Ion	Ratio	Lower	Upper
72	100		
43	952.9	940.0	1745.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0

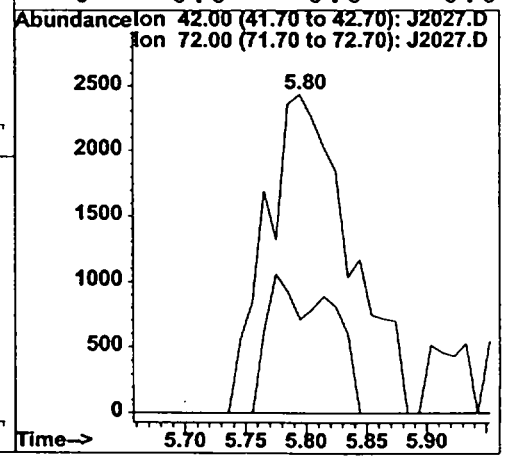




#34
Tetrahydrofuran
Concen: 3.29 ppb
RT: 5.80 min Scan# 442
Delta R.T. -0.03 min
Lab File: J2027.D
Acq: 19 Oct 99 4:20

Tgt Ion:42 Resp: 11596

Ion	Ratio	Lower	Upper
42	100		
72	32.4	21.1	39.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-5-2-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127004

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2042

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 13

Date Analyzed: 10/22/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg

CAS NO.	COMPOUND		Q
67-64-1	Acetone	11	U
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	11	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	18	
591-78-6	2-Hexanone	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	11	U
1330-20-7	Xylenes (Total)	6	U

Quantitation Report (Not Reviewed)

000066

Data File : C:\HPCHEM\1\DATA\102299\J2042.D Vial: 100
Acq On : 22 Oct 99 18:54 Operator:
Sample : ;MSJ;; Inst : GC/MS Ins
Misc : 94127004;LOW;SO; Multiplr: 1.00
Quant Time: Oct 22 20:35 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.24	96	847745	50.00 ppb	0.08
64) Chlorobenzene-d5	13.13	117	582756	50.00 ppb	0.09
80) 1,4-Dichlorobenzene-d4	18.11	152	215660	50.00 ppb	0.10

System Monitoring Compounds					
37) Dibromofluoromethane	6.24	113	270931	46.78 ppb	0.07
Surrogate Spike 50.000	Range 86 - 118		Recovery = 93.56%		
41) 1,2-Dichloroethane-d4	6.78	65	222491	58.62 ppb	0.08
Surrogate Spike 50.000	Range 80 - 120		Recovery = 117.24%		
65) Toluene-d8	10.15	98	722504	51.91 ppb	0.09
Surrogate Spike 50.000	Range 88 - 110		Recovery = 103.82%		
78) Bromofluorobenzene	15.63	95	236382	50.32 ppb	0.09
Surrogate Spike 50.000	Range 86 - 115		Recovery = 100.64%		

Target Compounds					Qvalue
~~4) Chloromethane~~	~~2.47~~	~~50~~	~~58634~~	~~14.07 ppb~~	~~95~~
~~15) Acrolein~~	~~3.22~~	~~56~~	~~40569~~	~~17.19 ppb~~	~~100~~
~~23) Vinyl acetate~~	~~5.08~~	~~43~~	~~1756473~~	~~200.17 ppb~~	~~100~~
~~31) Ethyl cyanide~~	~~6.18~~	~~54~~	~~27269~~	~~5.11 ppb~~	~~92~~
40) 2,2,4-Trimethylpentane	4.04	57	1282486	190.55 ppb	49
~~56) 2-Chloroethylvinylether~~	~~9.87~~	~~63~~	~~6772~~	~~6.71 ppb~~	~~100~~
~~58) Isobutyl acetate~~	~~8.83~~	~~43~~	~~7081153~~	~~26467.30 ppb~~	~~52~~
69) Ethylbenzene	13.38	91	240581	15.95 ppb	98
77) Isopropylbenzene	15.24	105	105019	7.19 ppb	99
83) n-Propylbenzene	16.11	91	177117	12.07 ppb	100
89) sec-Butylbenzene	17.64	105	74803	5.26 ppb	99
94) n-Butylbenzene	18.94	91	37362	3.70 ppb	97
~~96) trans 1,4-dichloro 2-buten~~	~~16.52~~	~~53~~	~~0264~~	~~34.70 ppb~~	~~12~~

CW 10/22/99

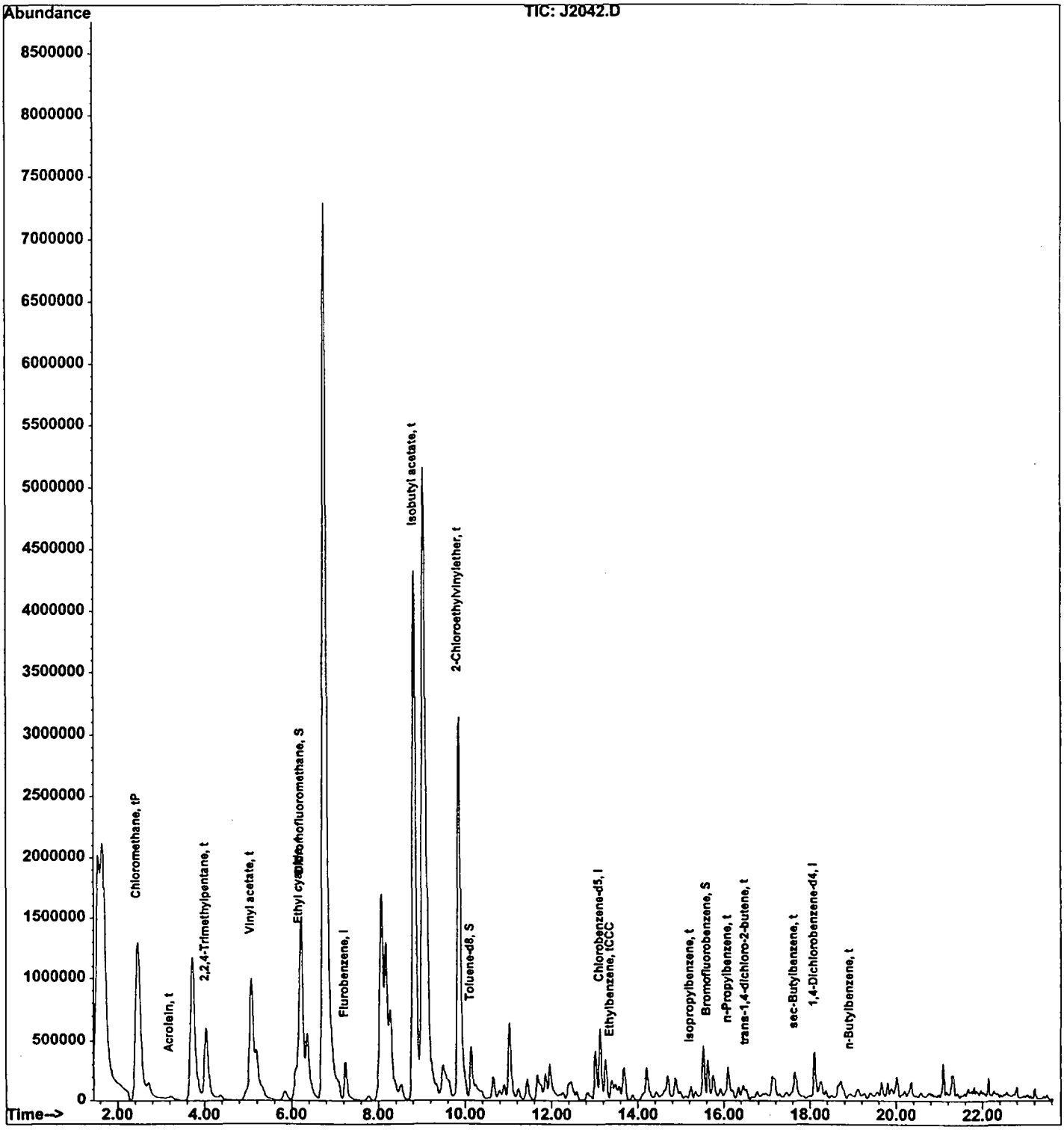
(#) = qualifier out of range (m) = manual integration

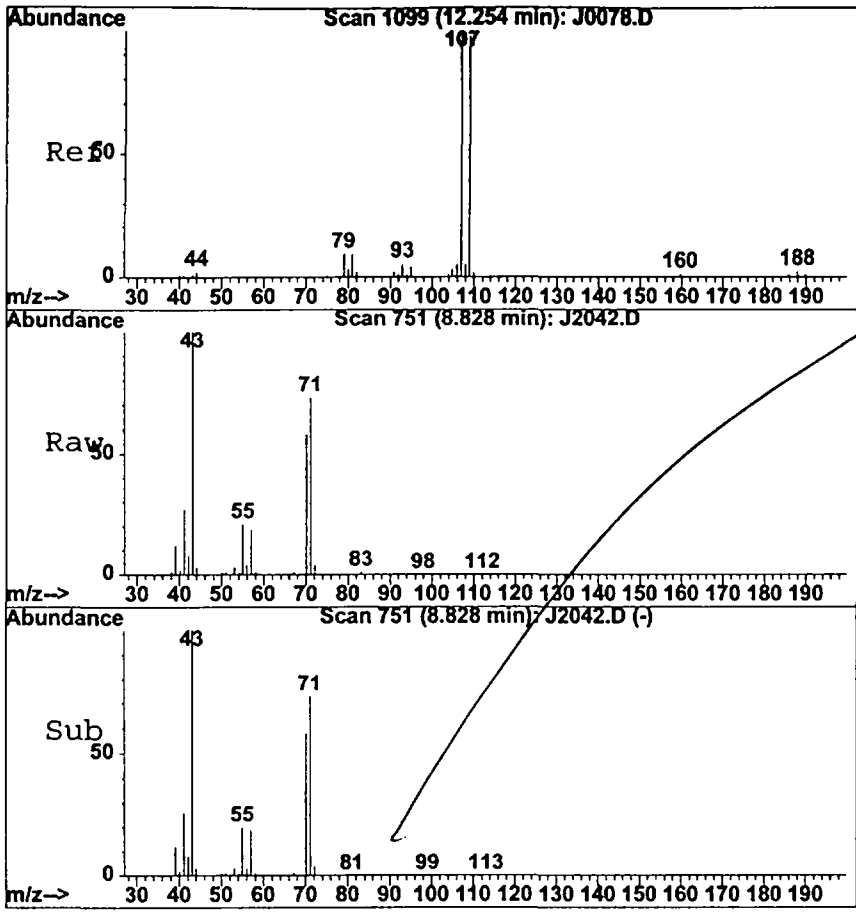
Quantitation Report

Data File : C:\HPCHEM\1\DATA\102299\J2042.D
Acq On : 22 Oct 99 18:54
Sample : ;MSJ;;
Misc : 94127004;LOW;SO;
Quant Time: Oct 22 20:35 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

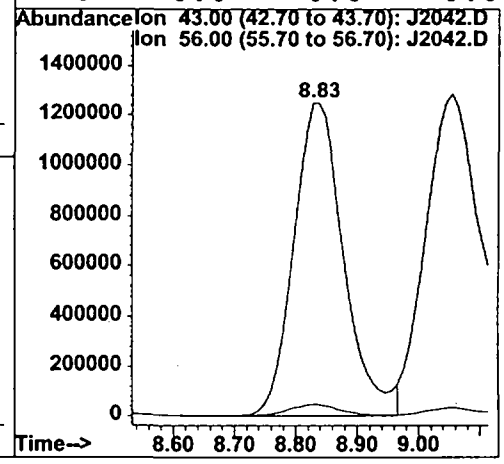


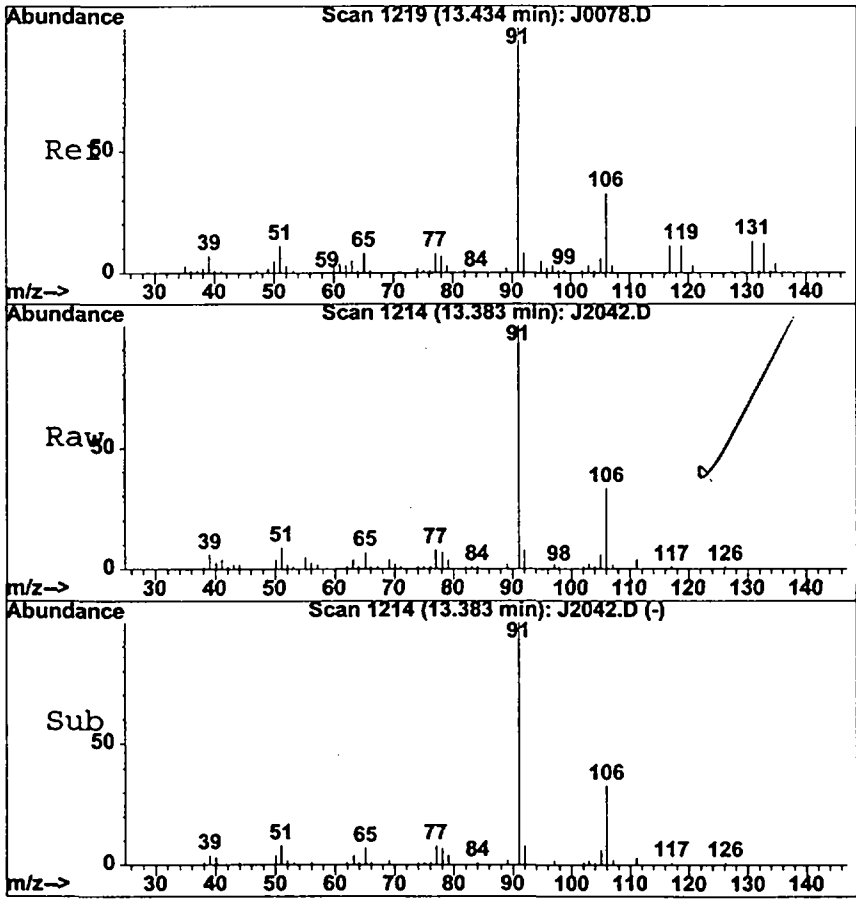


#58
Isobutyl acetate
Concen: 26467.30 ppb
RT: 8.83 min Scan# 751
Delta R.T. 0.35 min
Lab File: J2042.D
Acq: 22 Oct 99 18:54

Tgt Ion:43 Resp: 7081153

Ion	Ratio	Lower	Upper
43	100		
56	4.0	0.0	59.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

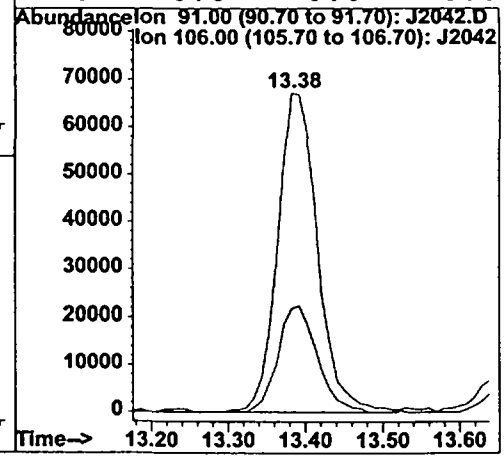




#69
Ethylbenzene
Concen: 15.95 ppb
RT: 13.38 min Scan# 1214
Delta R.T. 0.09 min
Lab File: J2042.D
Acq: 22 Oct 99 18:54

Tgt Ion:91 Resp: 240581

Ion	Ratio	Lower	Upper
91	100		
106	32.8	23.9	44.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-6-1-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127005

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2029

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 9

Date Analyzed: 10/19/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	24	B
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	11	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	11	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report (Not Reviewed) **000070**

Data File : C:\HPCHEM\1\DATA\101899\J2029.D Vial: 100
Acq On : 19 Oct 99 5:19 Operator:
Sample : ;MSJ;; Inst : GC/MS Ins
Misc : 94127005;LOW;SO; Multiplr: 1.00
Quant Time: Oct 22 20:26 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.12	96	1527171	50.00 ppb	-0.05
64) Chlorobenzene-d5	12.99	117	1081954	50.00 ppb	-0.05
80) 1,4-Dichlorobenzene-d4	17.97	152	361761	50.00 ppb	-0.05

System Monitoring Compounds					
37) Dibromofluoromethane	6.12	113	497879	47.72 ppb	-0.05
Surrogate Spike 50.000	Range 86 - 118		Recovery = 95.44%		
41) 1,2-Dichloroethane-d4	6.66	65	334340	48.90 ppb	-0.04
Surrogate Spike 50.000	Range 80 - 120		Recovery = 97.80%		
65) Toluene-d8	10.00	98	1341837	51.93 ppb	-0.06
Surrogate Spike 50.000	Range 88 - 110		Recovery = 103.86%		
78) Bromofluorobenzene	15.50	95	407769	46.75 ppb	-0.04
Surrogate Spike 50.000	Range 86 - 115		Recovery = 93.50%		

Target Compounds					Qvalue
18) Acetone	3.30	43	42712	21.55 ppb	79

SW
10/19/99

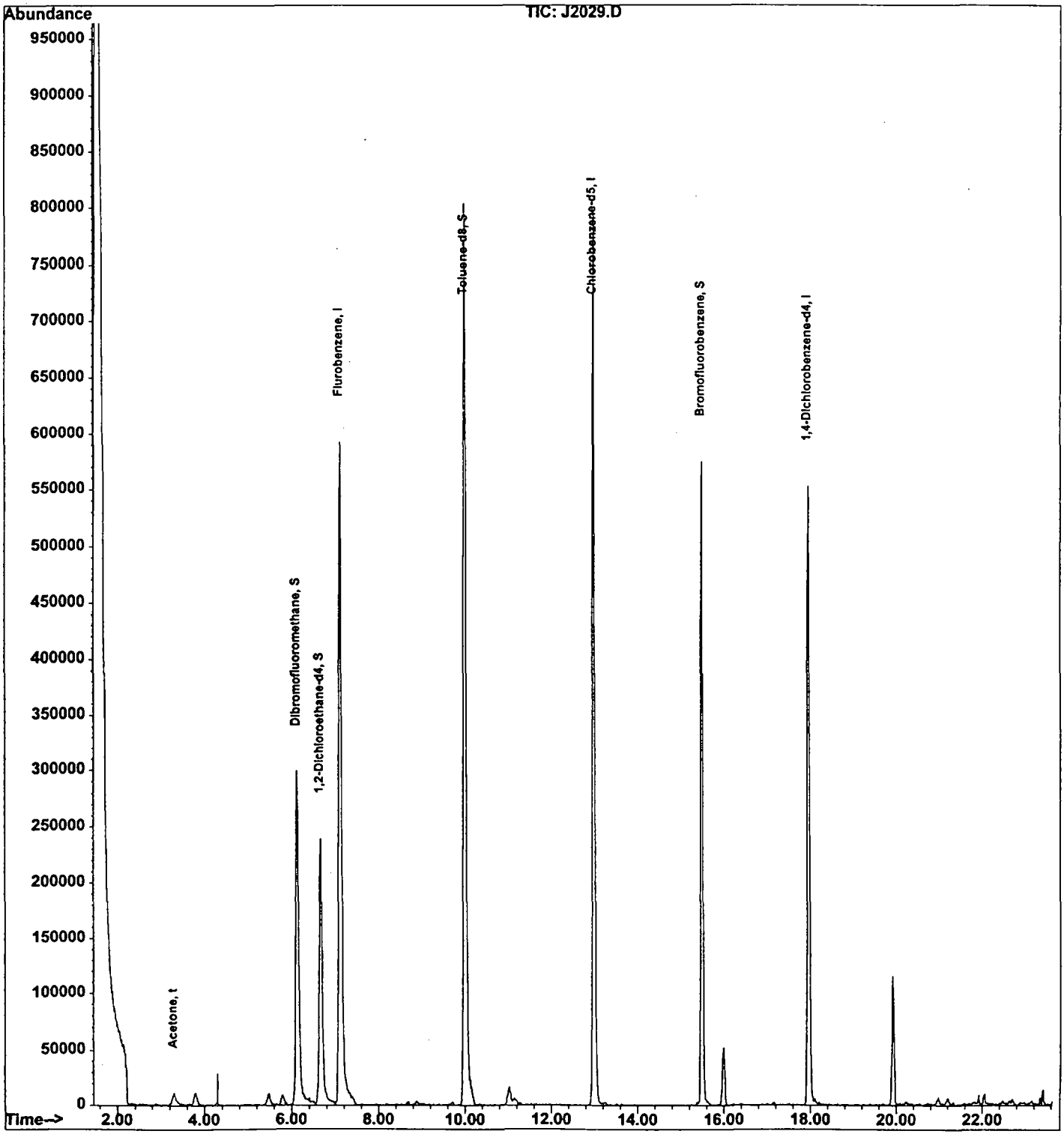
(#) = qualifier out of range (m) = manual integration

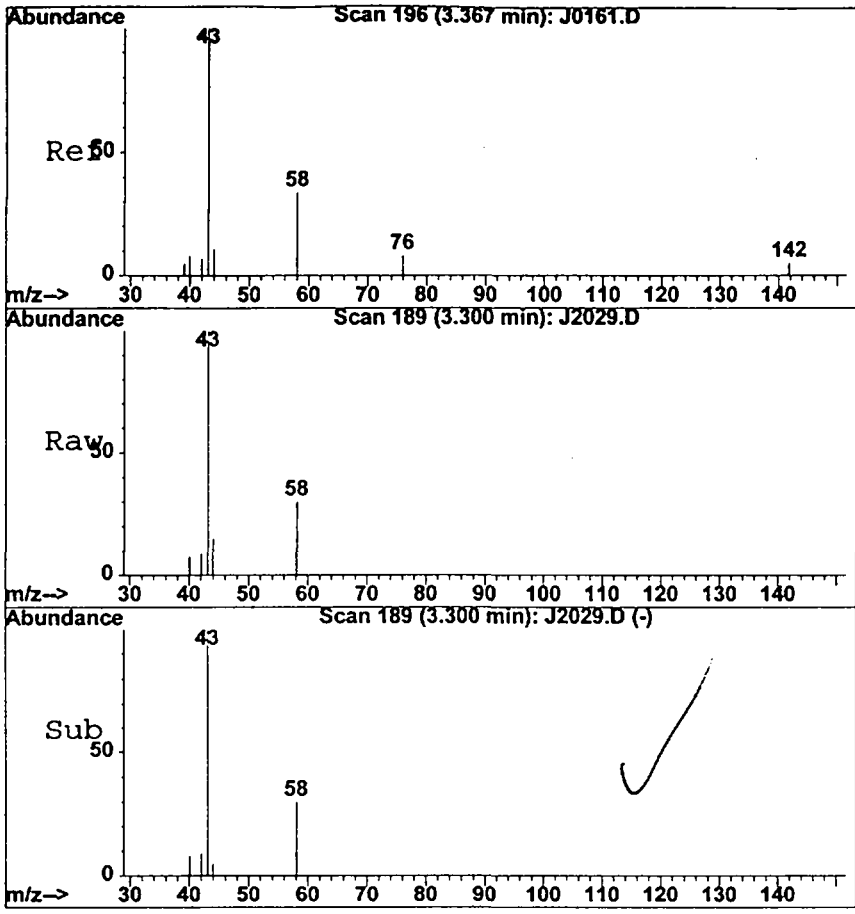
Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\J2029.D
Acq On : 19 Oct 99 5:19
Sample : ;MSJ;;
Misc : 94127005;LOW;SO;
Quant Time: Oct 22 20:26 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

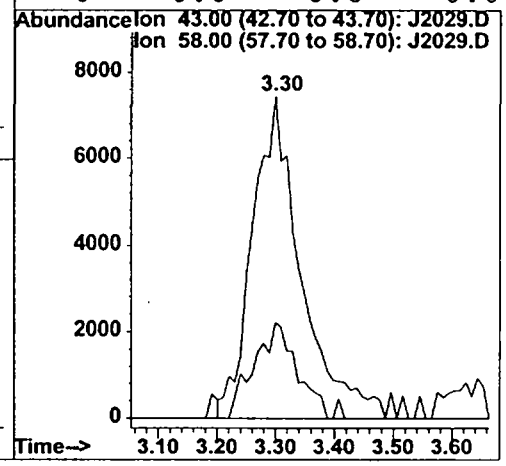




#18
Acetone
Concen: 21.55 ppb
RT: 3.30 min Scan# 189
Delta R.T. -0.02 min
Lab File: J2029.D
Acq: 19 Oct 99 5:19

Tgt Ion:43 Resp: 42712

Ion	Ratio	Lower	Upper
43	100		
58	23.1	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000073

SB1-6-2-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127006

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2058

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 11

Date Analyzed: 10/23/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg

CAS NO.	COMPOUND		Q
67-64-1	Acetone	49	
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	11	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	6	U
591-78-6	2-Hexanone	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
75-09-2	Methylene Chloride	6	
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	11	U
1330-20-7	Xylenes (Total)	6	U

Quantitation Report (Not Reviewed)

000074

Data File : C:\HPCHEM\1\DATA\102299\J2058.D
Acq On : 23 Oct 99 3:04
Sample : ;MSJ;;
Misc : 94127006;LOW;SO;
Quant Time: Nov 30 20:51 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.23	96	1207725	50.00 ppb	0.01
64) Chlorobenzene-d5	13.11	117	815586	50.00 ppb	0.01
80) 1,4-Dichlorobenzene-d4	18.09	152	250028	50.00 ppb	0.01
System Monitoring Compounds					
37) Dibromofluoromethane	6.23	113	397710	48.20 ppb	0.01
Surrogate Spike 50.000	Range 86 - 118		Recovery = 96.40%		
41) 1,2-Dichloroethane-d4	6.76	65	264617	48.94 ppb	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 97.88%		
65) Toluene-d8	10.12	98	1043110	53.55 ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 107.10%		
78) Bromofluorobenzene	15.61	95	293975	44.71 ppb	0.01
Surrogate Spike 50.000	Range 86 - 115		Recovery = 89.42%		
Target Compounds					Qvalue
14) Methylene chloride	3.86	84	37859	5.56 ppb	97
18) Acetone	3.36	43	68529	43.73 ppb	90
58) Isobutyl acetate	8.80	43	329829	865.35 ppb	50

12/7/99

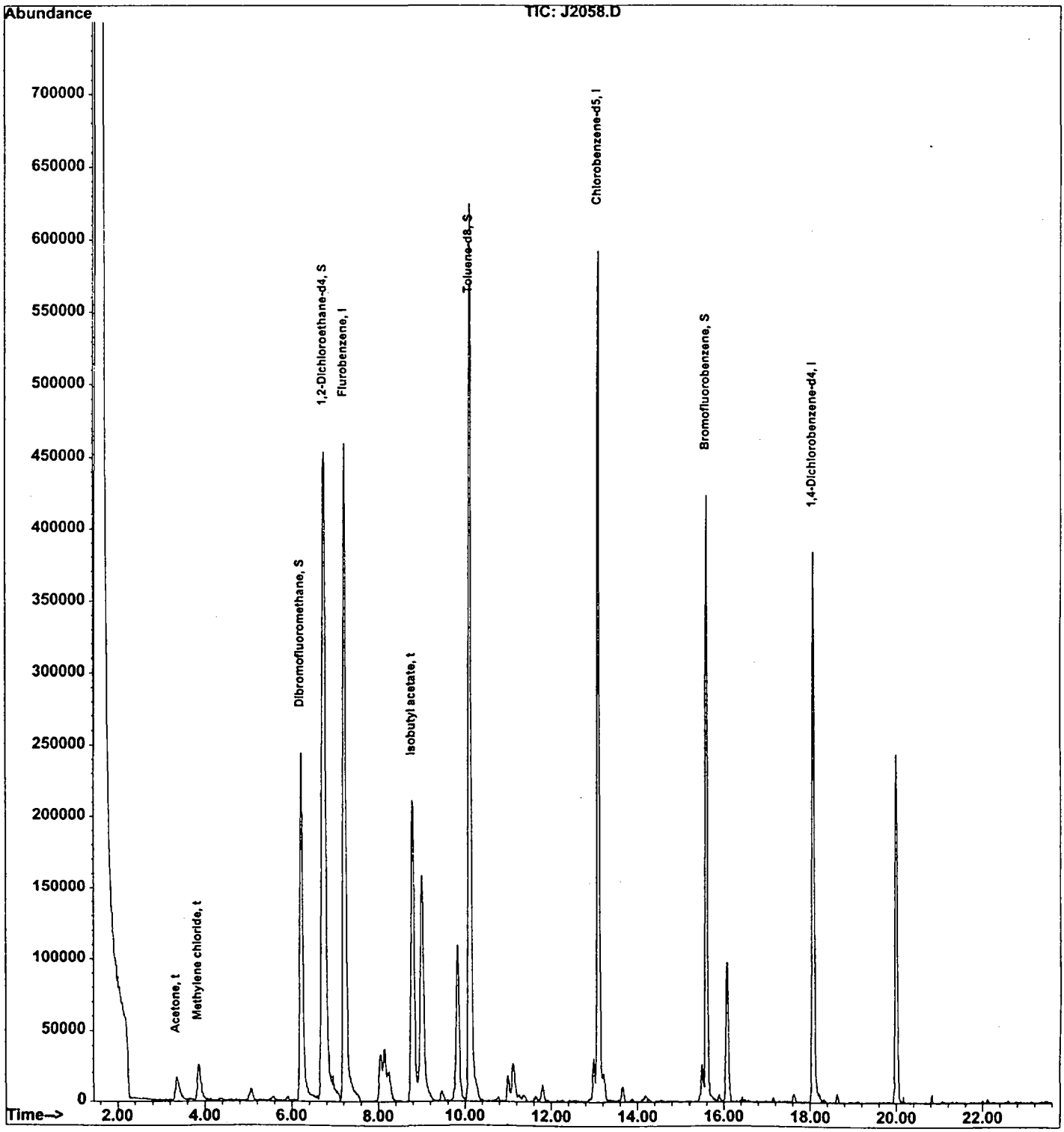
(#) = qualifier out of range (m) = manual integration

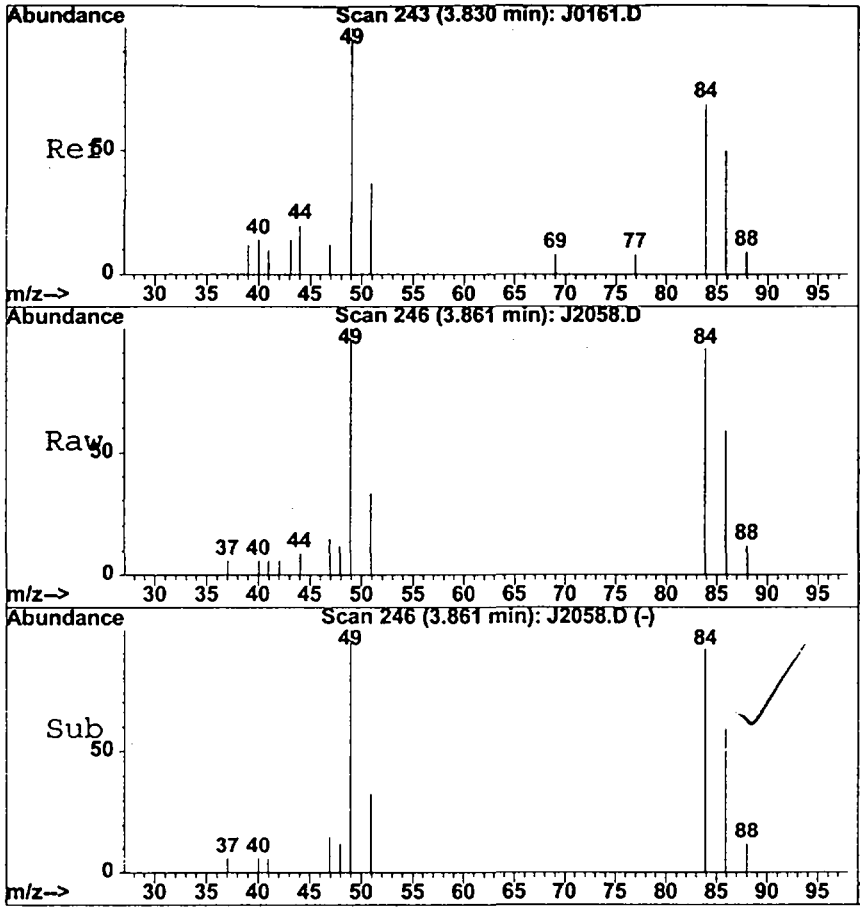
Quantitation Report

Data File : C:\HPCHEM\1\DATA\102299\J2058.D
Acq On : 23 Oct 99 3:04
Sample : ;MSJ;;
Misc : 94127006;LOW;SO;
Quant Time: Nov 30 20:51 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

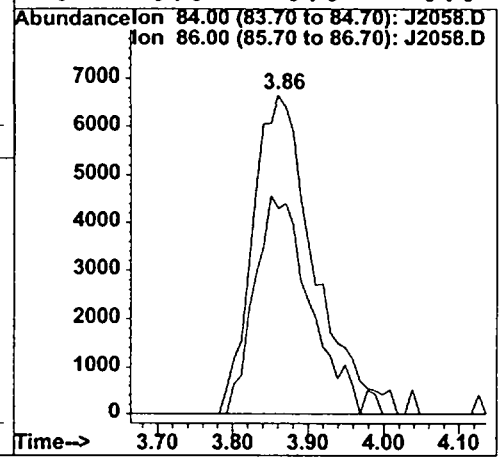


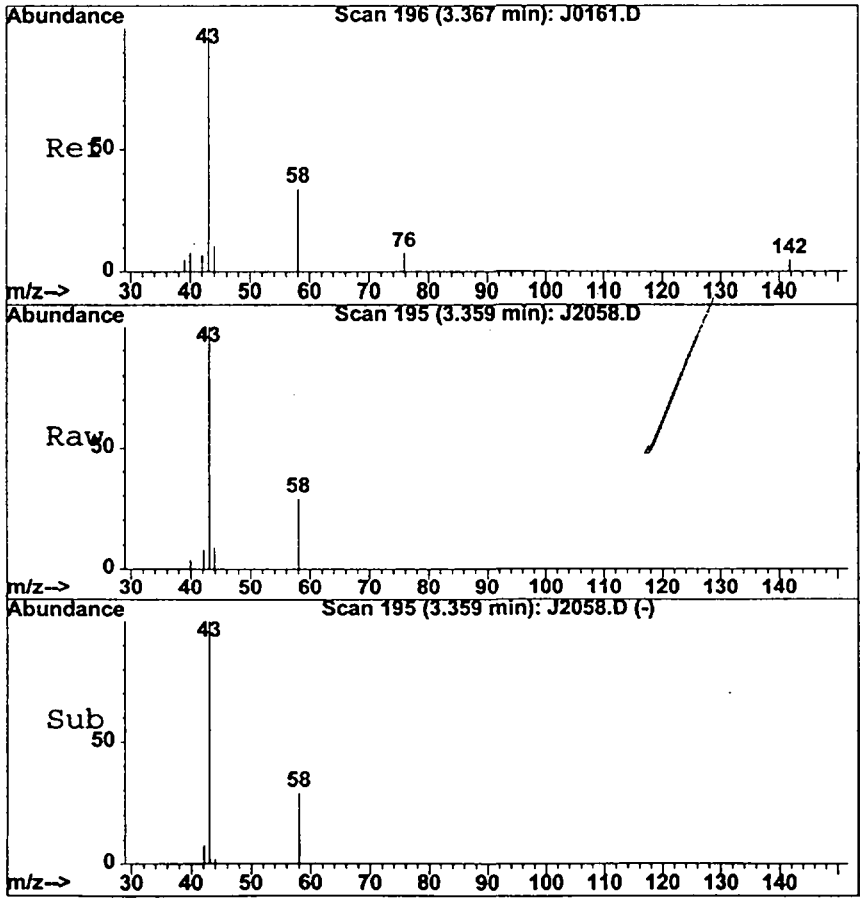


#14
Methylene chloride
Concen: 5.56 ppb
RT: 3.86 min Scan# 246
Delta R.T. 0.01 min
Lab File: J2058.D
Acq: 23 Oct 99 3:04

Tgt Ion:84 Resp: 37859

Ion	Ratio	Lower	Upper
84	100		
86	61.7	23.9	103.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

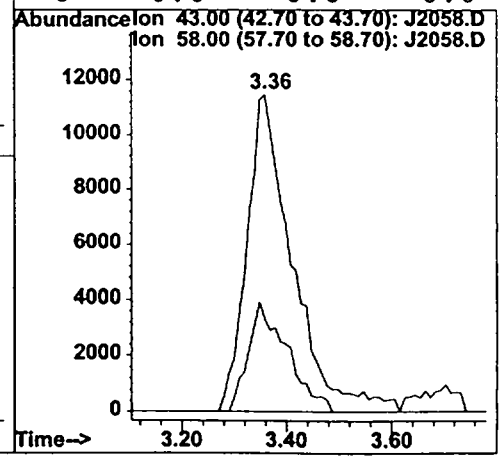




#18
Acetone
Concen: 43.73 ppb
RT: 3.36 min Scan# 195
Delta R.T. 0.01 min
Lab File: J2058.D
Acq: 23 Oct 99 3:04

Tgt Ion:43 Resp: 68529

Ion	Ratio	Lower	Upper
43	100		
58	29.5	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-2-1-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127007

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2043

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 7

Date Analyzed: 10/22/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg

CAS NO.	COMPOUND		Q
67-64-1	Acetone	23	
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	11	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	J
591-78-6	2-Hexanone	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
75-09-2	Methylene Chloride	6	
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	11	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\102299\J2043.D
Vial: 100
Acq On : 22 Oct 99 19:23
Operator:
Sample : ;MSJ;;
Inst : GC/MS Ins
Misc : 94127007;LOW;SO;
Multiplr: 1.00
Quant Time: Oct 22 20:45 1999
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.25	96	1464218	50.00 ppb	0.09
64) Chlorobenzene-d5	13.13	117	1077027	50.00 ppb	0.09
80) 1,4-Dichlorobenzene-d4	18.11	152	385050	50.00 ppb	0.09
System Monitoring Compounds					
37) Dibromofluoromethane	6.25	113	474193	47.40 ppb	0.08
Surrogate Spike 50.000	Range 86 - 118		Recovery = 94.80%		
41) 1,2-Dichloroethane-d4	6.79	65	306229	46.71 ppb	0.09
Surrogate Spike 50.000	Range 80 - 120		Recovery = 93.42%		
65) Toluene-d8	10.15	98	1303478	50.68 ppb	0.09
Surrogate Spike 50.000	Range 88 - 110		Recovery = 101.36%		
78) Bromofluorobenzene	15.63	95	480488	55.34 ppb	0.09
Surrogate Spike 50.000	Range 86 - 115		Recovery = 110.68%		
Target Compounds					Qvalue
14) Methylene chloride	3.88	84	47751	5.78 ppb	99
18) Acetone	3.38	43	41499	21.84 ppb	88
~~58) Isobutyl acetate~~	~~8.47~~	~~43~~	~~29352~~	~~63.52 ppb~~	~~53~~
69) Ethylbenzene	13.38	91	126401	4.53 ppb	97
77) Isopropylbenzene	15.23	105	145649	5.40 ppb	94
83) n-Propylbenzene	16.10	91	591201	22.57 ppb	97
86) 1,3,5-Trimethylbenzene	16.51	105	672640	38.63 ppb	98
88) 1,2,4-Trimethylbenzene	17.29	105	4140900	227.10 ppb	97
89) sec-Butylbenzene	17.64	105	353064	13.90 ppb	100
91) 4-isopropyltoluene	18.02	119	452327	22.82 ppb	100
~~96) trans-1,4-dichloro-2-buten~~	~~16.51~~	~~53~~	~~27240~~	~~64.06 ppb~~	~~34~~
101) Naphthalene	22.01	128	541443	32.42 ppb	100

GW
10/22/99

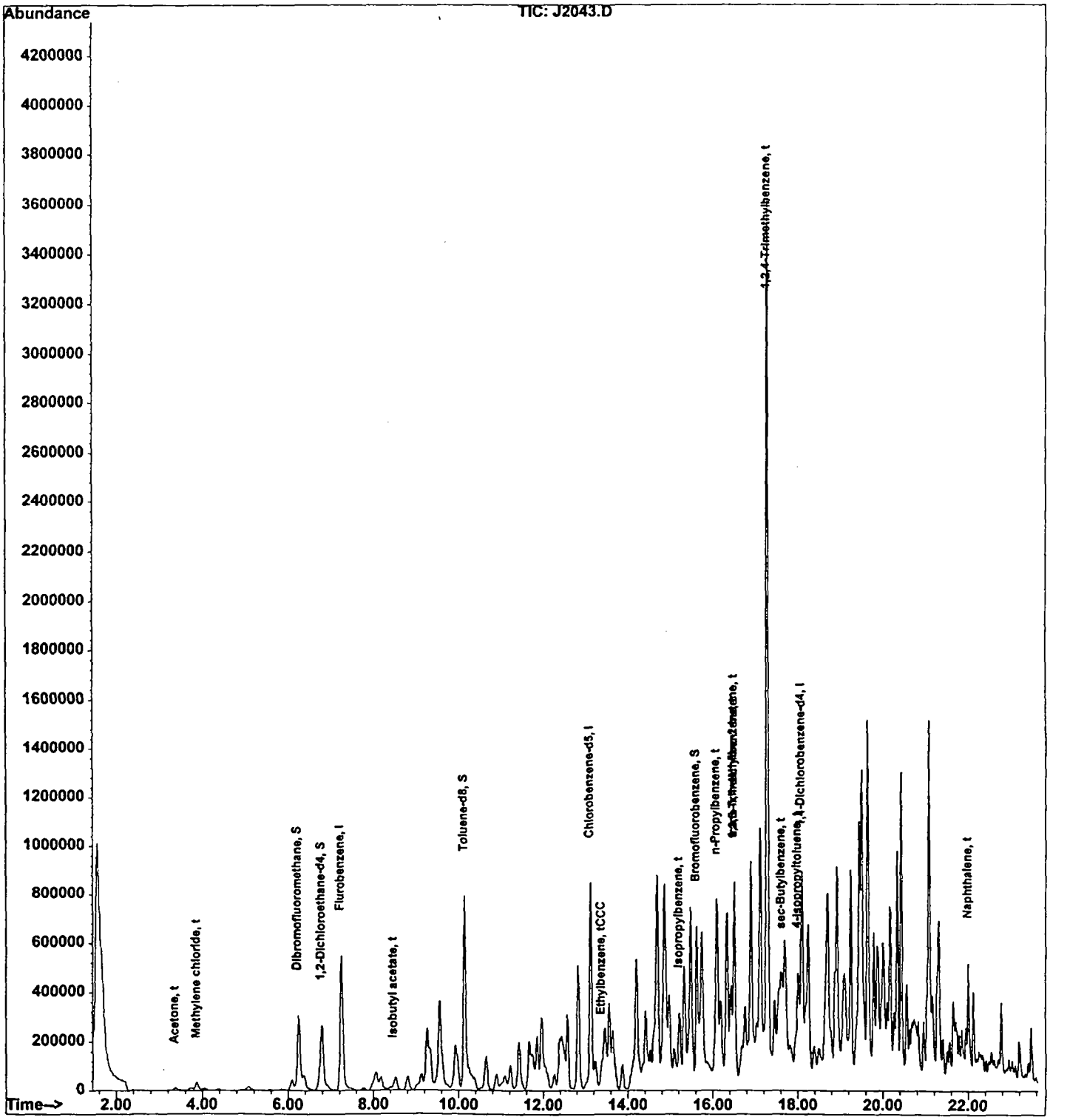
(#) = qualifier out of range (m) = manual integration

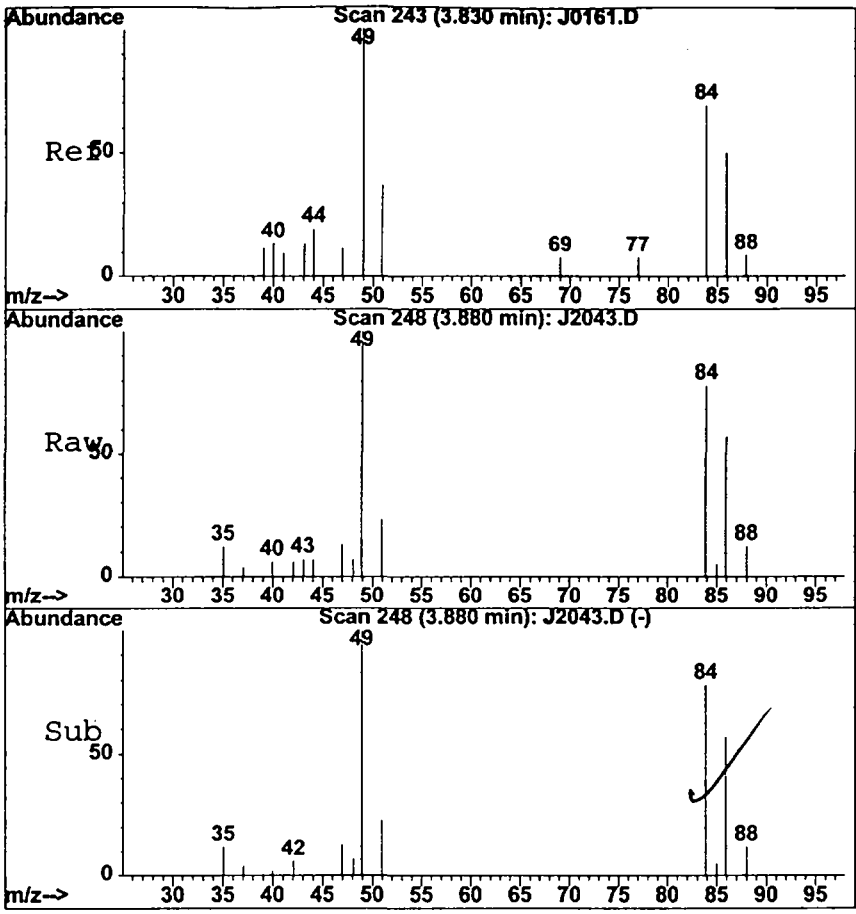
Quantitation Report

Data File : C:\HPCHEM\1\DATA\102299\J2043.D
Acq On : 22 Oct 99 19:23
Sample : ;MSJ;;
Misc : 94127007;LOW;SO;
Quant Time: Oct 22 20:45 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

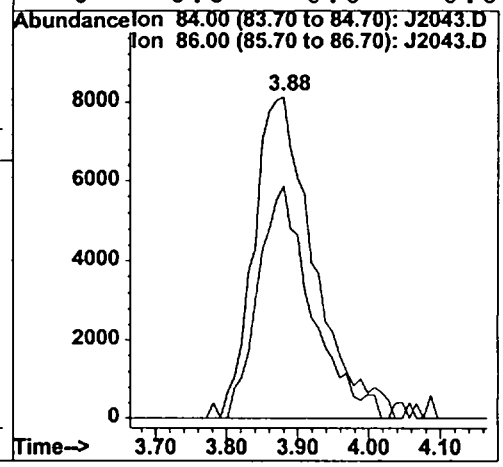


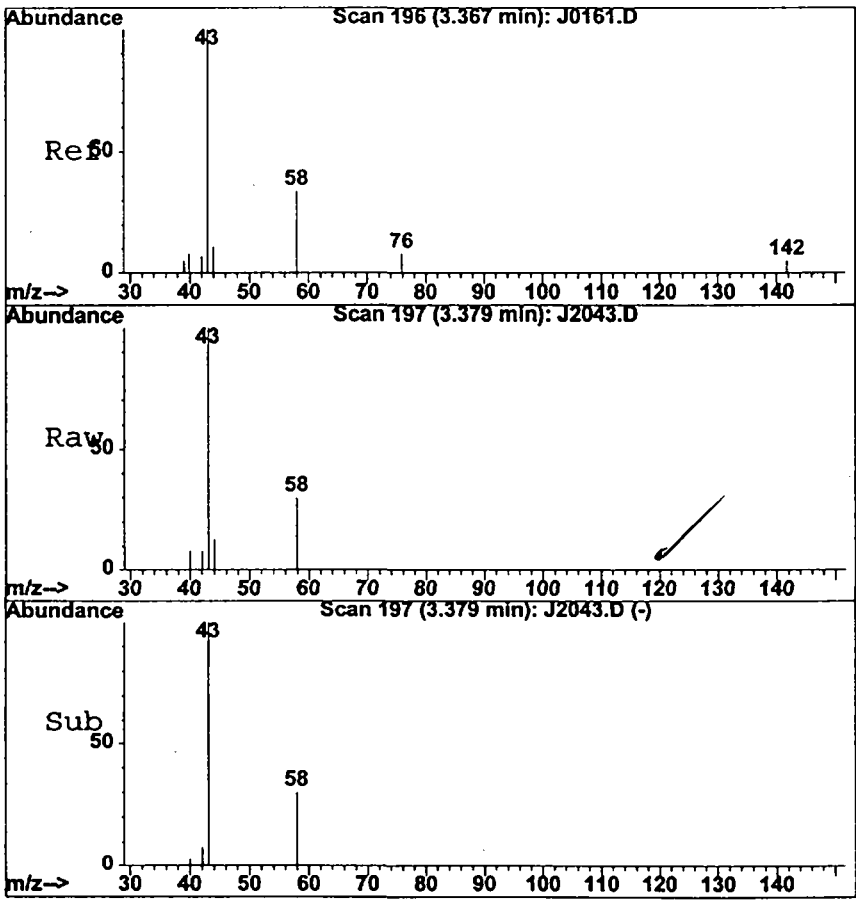


#14
Methylene chloride
Concen: 5.78 ppb
RT: 3.88 min Scan# 248
Delta R.T. 0.07 min
Lab File: J2043.D
Acq: 22 Oct 99 19:23

Tgt Ion:84 Resp: 47751

Ion	Ratio	Lower	Upper
84	100		
86	64.9	23.9	103.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

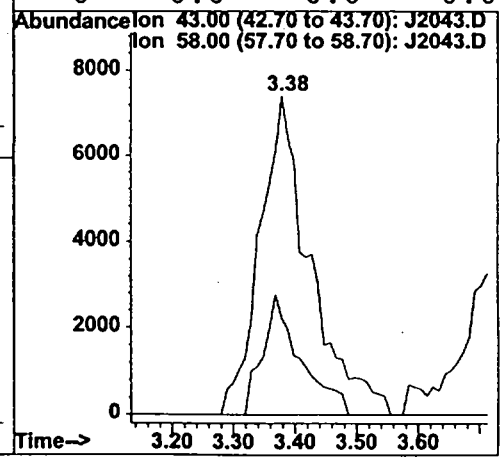


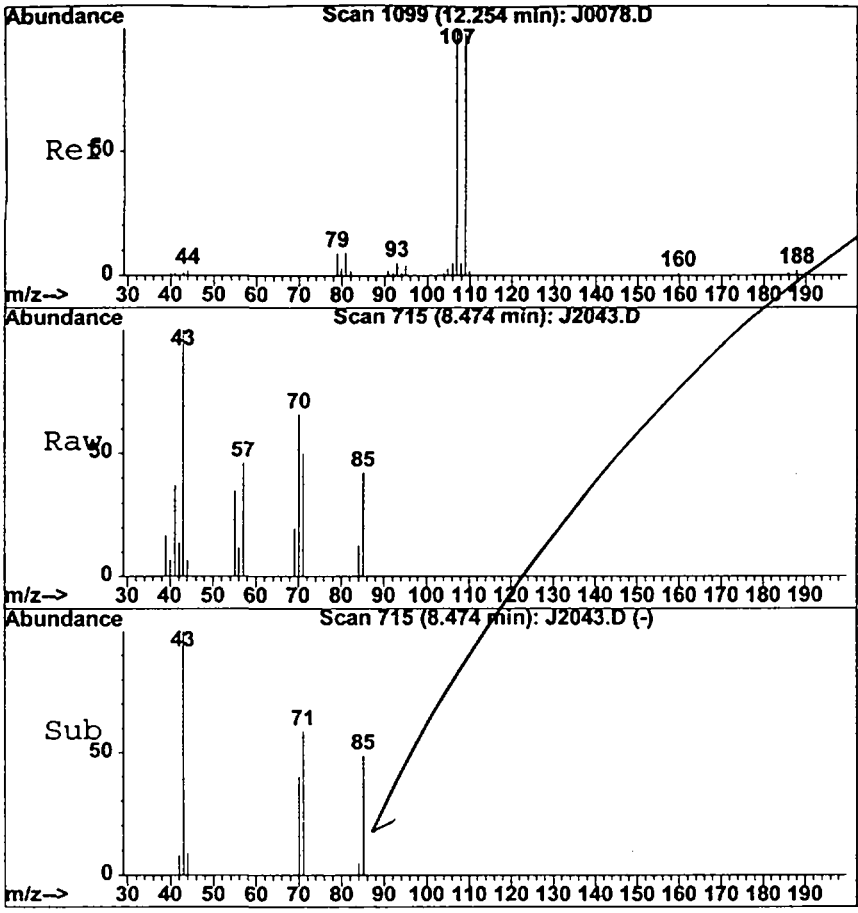


#18
Acetone
Concen: 21.84 ppb
RT: 3.38 min Scan# 197
Delta R.T. 0.06 min
Lab File: J2043.D
Acq: 22 Oct 99 19:23

Tgt Ion:43 Resp: 41499

Ion	Ratio	Lower	Upper
43	100		
58	28.3	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

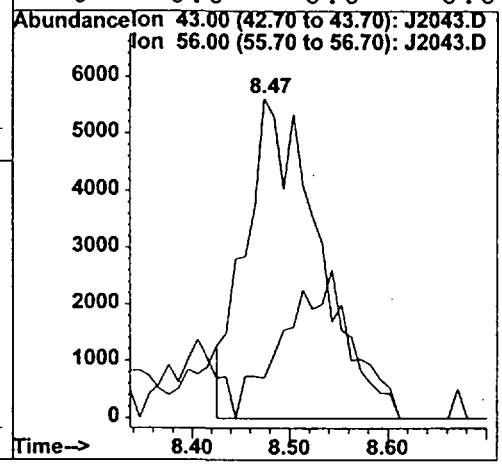


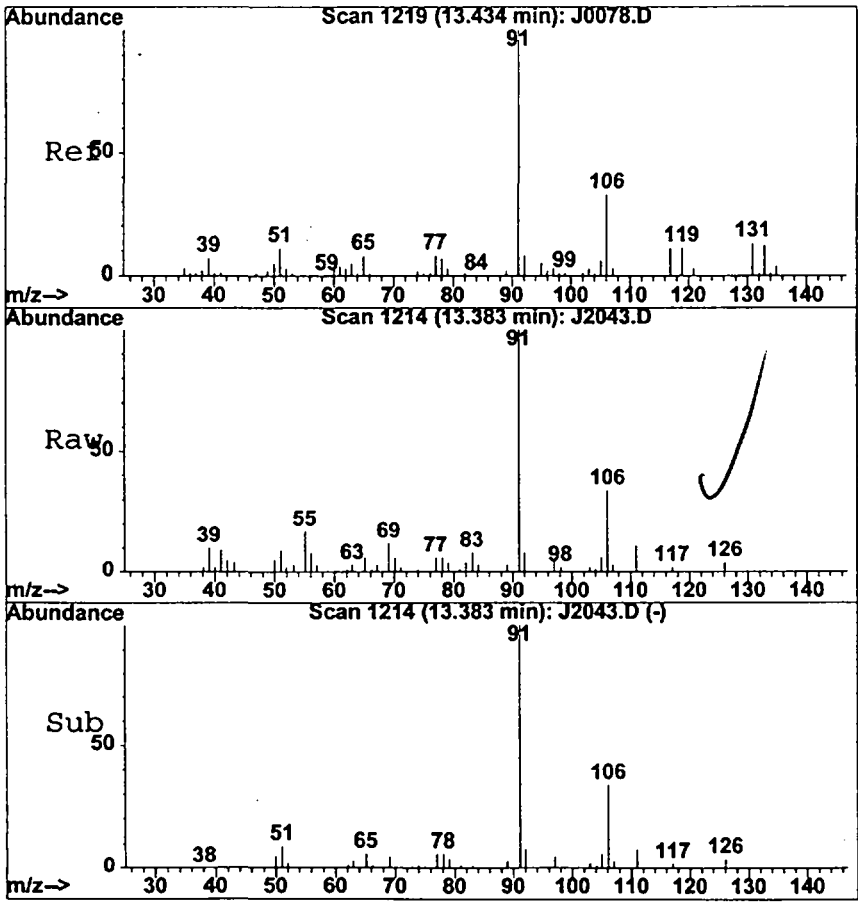


#58
Isobutyl acetate
Concen: 63.52 ppb
RT: 8.47 min Scan# 715
Delta R.T. 0.00 min
Lab File: J2043.D
Acq: 22 Oct 99 19:23

Tgt Ion:43 Resp: 29352

Ion	Ratio	Lower	Upper
43	100		
56	4.3	0.0	59.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

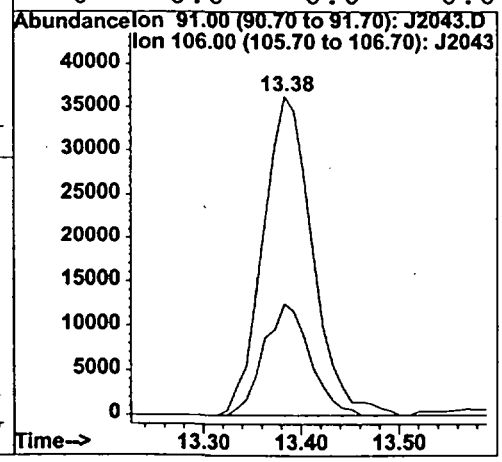




#69
Ethylbenzene
Concen: 4.53 ppb
RT: 13.38 min Scan# 1214
Delta R.T. 0.09 min
Lab File: J2043.D
Acq: 22 Oct 99 19:23

Tgt Ion:91 Resp: 126401

Ion	Ratio	Lower	Upper
91	100		
106	32.3	23.9	44.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-2-2-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127008

Sample wt/vol: 1 (g/mL) g

Lab File ID: J2045

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 14

Date Analyzed: 10/22/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

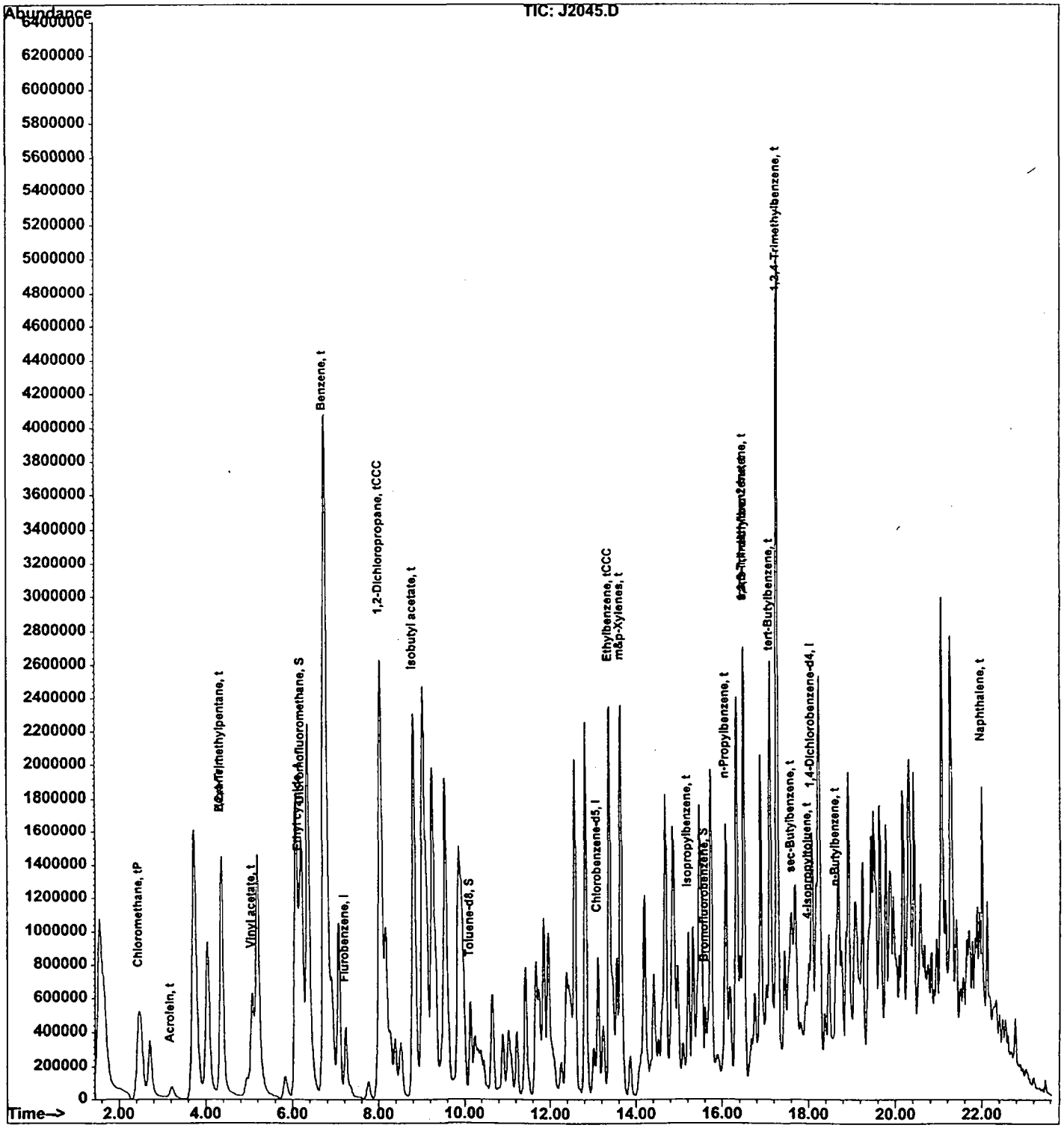
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	58	U
71-43-2	Benzene	38	
75-27-4	Bromodichloromethane	29	U
75-25-2	Bromoform	29	U
74-83-9	Bromomethane	58	U
78-93-3	2-Butanone	58	U
75-15-0	Carbon Disulfide	29	U
56-23-5	Carbon Tetrachloride	29	U
108-90-7	Chlorobenzene	29	U
124-48-1	Chlorodibromomethane	29	U
75-00-3	Chloroethane	58	U
67-66-3	Chloroform	29	U
74-87-3	Chloromethane	58	U
75-34-3	1,1-Dichloroethane	29	U
107-06-2	1,2-Dichloroethane	29	U
75-35-4	1,1-Dichloroethene	29	U
156-59-2	Cis-1,2-Dichloroethene	29	U
156-60-5	Trans-1,2-Dichloroethene	29	U
78-87-5	1,2-Dichloropropane	29	U
10061-01-5	Cis-1,3-Dichloropropene	29	U
10061-02-6	Trans-1,3-Dichloropropene	29	U
100-41-4	Ethylbenzene	1100	
591-78-6	2-Hexanone	58	U
108-10-1	4-Methyl-2-Pentanone	58	U
75-09-2	Methylene Chloride	29	U
100-42-5	Styrene	29	U
79-34-5	1,1,2,2-Tetrachloroethane	29	U
127-18-4	Tetrachloroethene	29	U
108-88-3	Toluene	5	J
71-55-6	1,1,1-Trichloroethane	29	U
79-00-5	1,1,2-Trichloroethane	29	U
79-01-6	Trichloroethylene	29	U
75-01-4	Vinyl Chloride	58	U
1330-20-7	Xylenes (Total)	860	

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102299\J2045.D
Acq On : 22 Oct 99 20:19
Sample : ;MSJ;;
Misc : 94127008;LOW;SO;
Quant Time: Nov 30 20:49 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 5.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration



Quantitation Report (Not Reviewed)

000084

Data File : C:\HPCHEM\1\DATA\102299\J2045.D
Acq On : 22 Oct 99 20:19
Sample : ;MSJ;;
Misc : 94127008;LOW;SO;
Quant Time: Nov 30 20:49 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 5.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

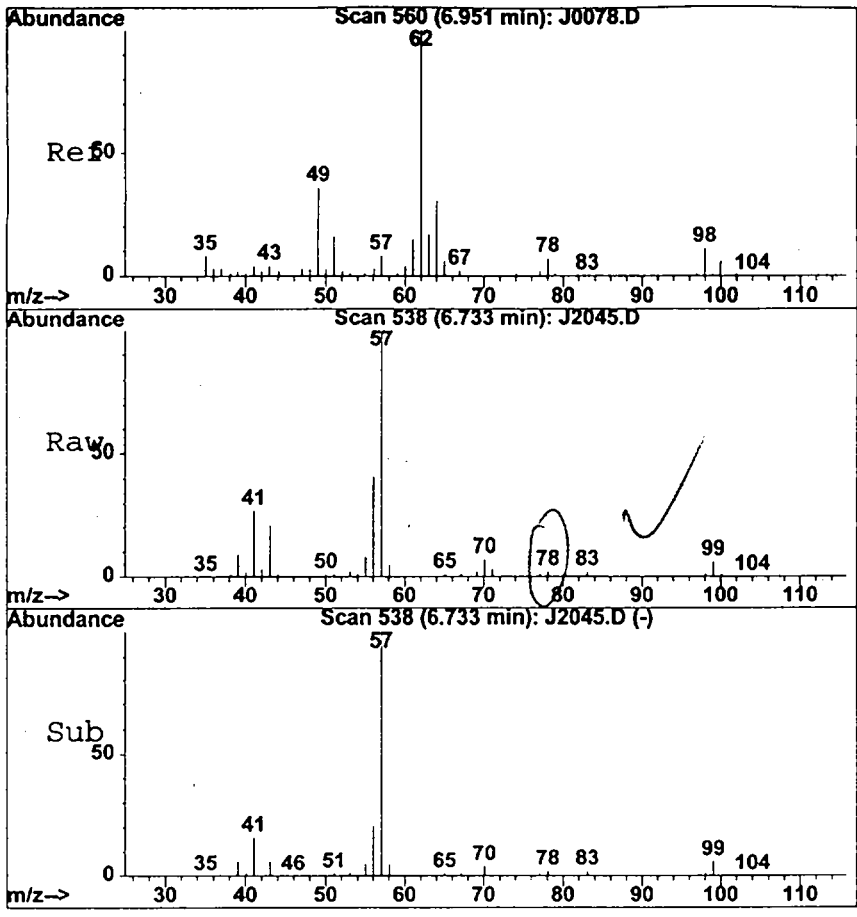
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.23	96	1059874	50.00 ppb	0.02
64) Chlorobenzene-d5	13.12	117	750399	50.00 ppb	0.02
80) 1,4-Dichlorobenzene-d4	18.11	152	306644	50.00 ppb	0.03

System Monitoring Compounds					
37) Dibromofluoromethane	6.23	113	339933	234.74 ppb	0.01
Surrogate Spike 50.000	Range 86 - 118		Recovery = 469.48%#		
41) 1,2-Dichloroethane-d4	6.77	65	248058	261.38 ppb	0.01
Surrogate Spike 50.000	Range 80 - 120		Recovery = 522.76%#		
65) Toluene-d8	10.14	98	938346	261.79 ppb	0.02
Surrogate Spike 50.000	Range 88 - 110		Recovery = 523.58%#		
78) Bromofluorobenzene	15.62	95	320288	264.72 ppb	0.02
Surrogate Spike 50.000	Range 86 - 115		Recovery = 529.44%#		

Target Compounds					Qvalue
4) ~~Chloromethane~~	~~2.48~~	~~50~~	~~23377~~	~~22.43 ppb~~	~~63~~
15) ~~Acrolein~~	~~3.19~~	~~56~~	~~48507~~	~~82.18 ppb~~	~~100~~
20) Hexane	4.36	57	2167291	1287.79 ppb	99
23) ~~Vinyl acetate~~	~~5.07~~	~~43~~	~~728807~~	~~332.17 ppb~~	~~100~~
31) ~~Ethyl cyanide~~	~~6.15~~	~~54~~	~~78666~~	~~58.92 ppb~~	~~96~~
40) 2,2,4-Trimethylpentane	4.36	57	2167291	1287.79 ppb	81
42) Benzene	6.73	78	123343	32.60 ppb	49
46) ~~1,2-Dichloropropane~~	~~8.03~~	~~63~~	~~19474~~	~~17.39 ppb~~	~~32~~
55) Toluene	10.26	92	10707	4.32 ppb	71
56) ~~2-Chloroethylvinylether~~	~~10.25~~	~~63~~	~~2850~~	~~11.30 ppb~~	~~100~~
58) ~~Isobutyl acetate~~	~~8.83~~	~~43~~	~~3538736~~	~~52897.47 ppb~~	~~59~~
69) Ethylbenzene	13.38	91	3623295	932.84 ppb	100
71) m&p-Xylenes	13.65	106	1218819	730.79 ppb	98
74) 0-Xylene	14.46	106	18325	11.38 ppb	88
77) Isopropylbenzene	15.23	105	908994	241.74 ppb	99
83) n-Propylbenzene	16.10	91	1757930	421.27 ppb	99
86) 1,3,5-Trimethylbenzene	16.51	105	2566453	925.35 ppb	97
87) tert-Butylbenzene	17.14	119	63915	25.59 ppb	96
88) 1,2,4-Trimethylbenzene	17.29	105	5994023	2063.88 ppb	95
89) sec-Butylbenzene	17.63	105	530688	131.18 ppb	99
91) 4-isopropyltoluene	18.02	119	550124	174.21 ppb	99
94) n-Butylbenzene	18.65	91	75659	26.36 ppb	56
96) ~~trans-1,4-dichloro-2-buten~~	~~16.51~~	~~53~~	~~83196~~	~~1228.35 ppb~~	~~34~~
99) 1,2,4-Trichlorobenzene	21.67	180	9068	7.39 ppb	97
101) Naphthalene	22.00	128	1400708	526.57 ppb	100
102) 1,2,3-Trichlorobenzene	22.36	182	4180	4.00 ppb	100

(#) = qualifier out of range (m) = manual integration

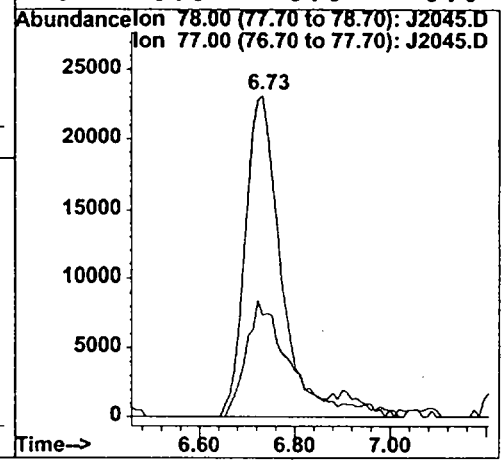
12/1/99

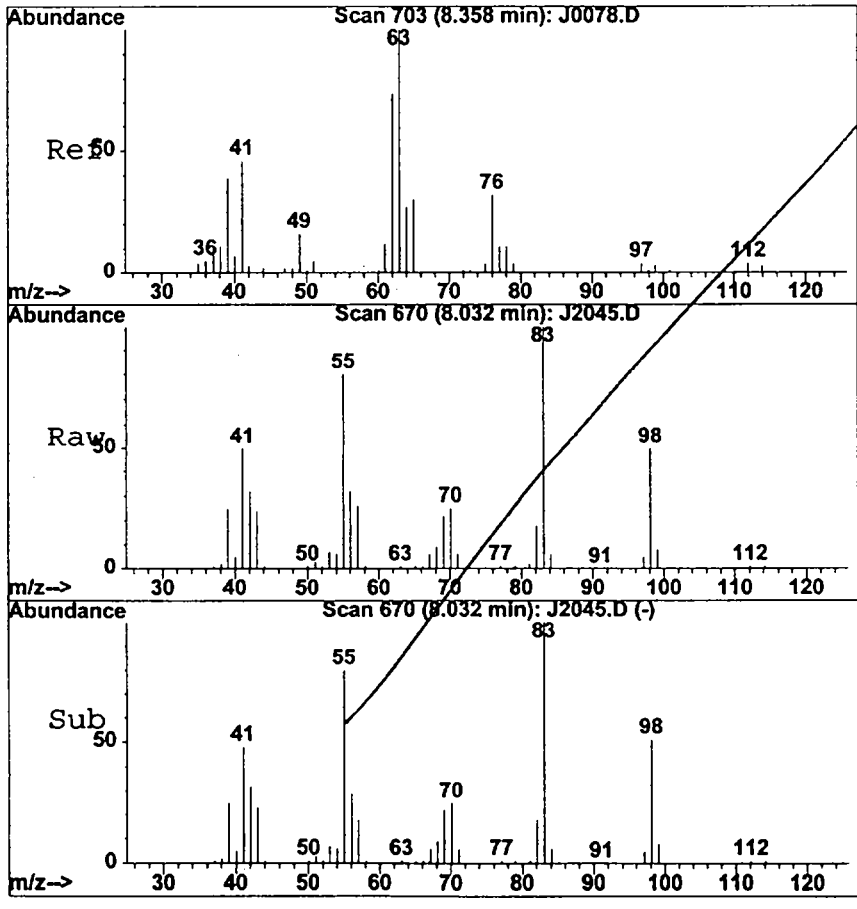


#42
Benzene
Concen: 32.60 ppb
RT: 6.73 min Scan# 538
Delta R.T. 0.02 min
Lab File: J2045.D
Acq: 22 Oct 99 20:19

Tgt Ion:78 Resp: 123343

Ion	Ratio	Lower	Upper
78	100		
77	47.6	0.0	52.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

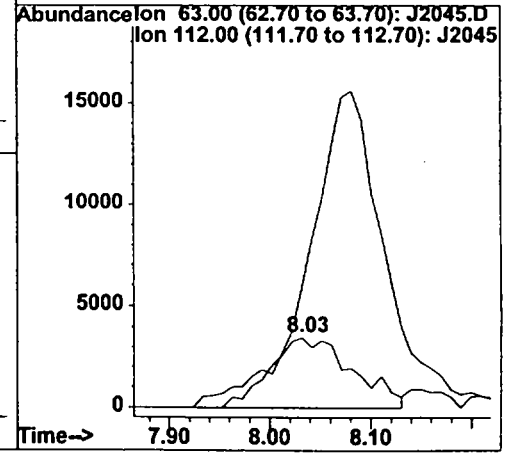


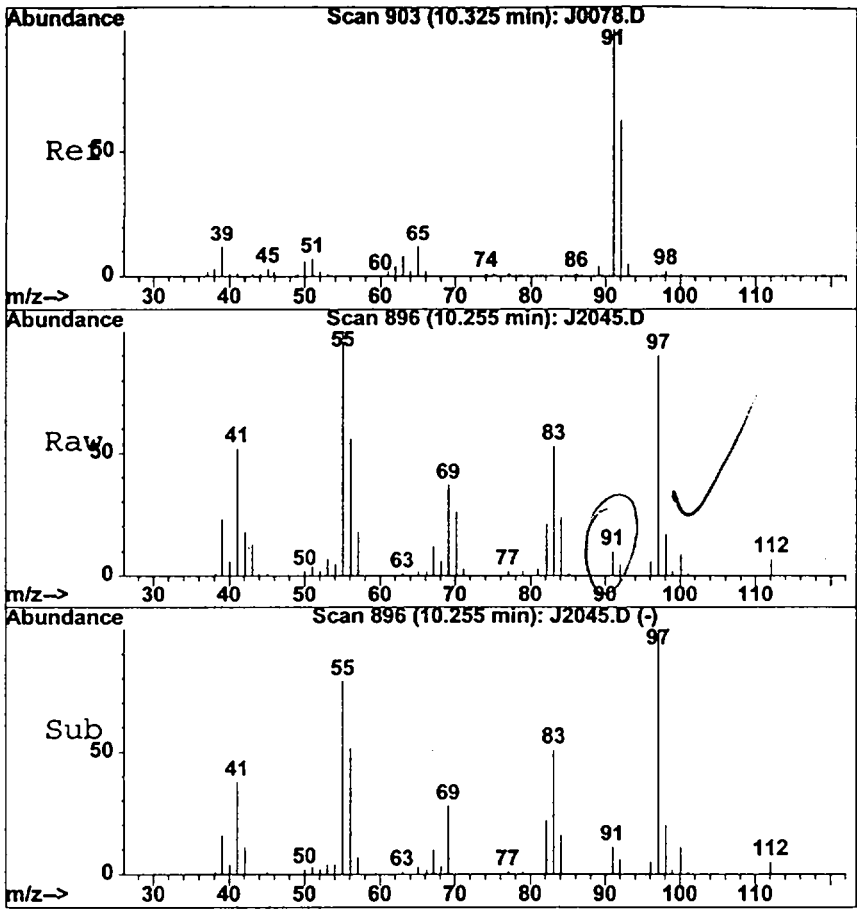


#46
1,2-Dichloropropane
Concen: 17.39 ppb
RT: 8.03 min Scan# 670
Delta R.T. -0.26 min
Lab File: J2045.D
Acq: 22 Oct 99 20:19

Tgt Ion:63 Resp: 19474

Ion	Ratio	Lower	Upper
63	100		
112	26.5	0.0	34.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

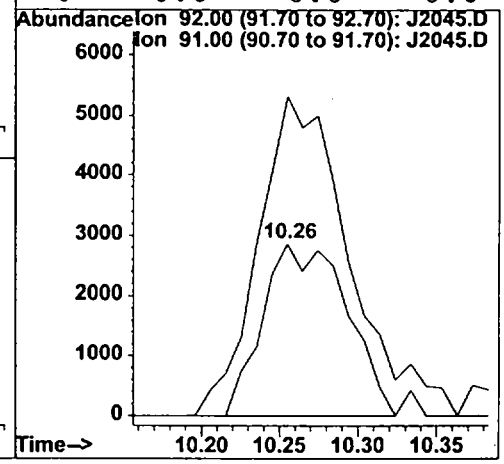


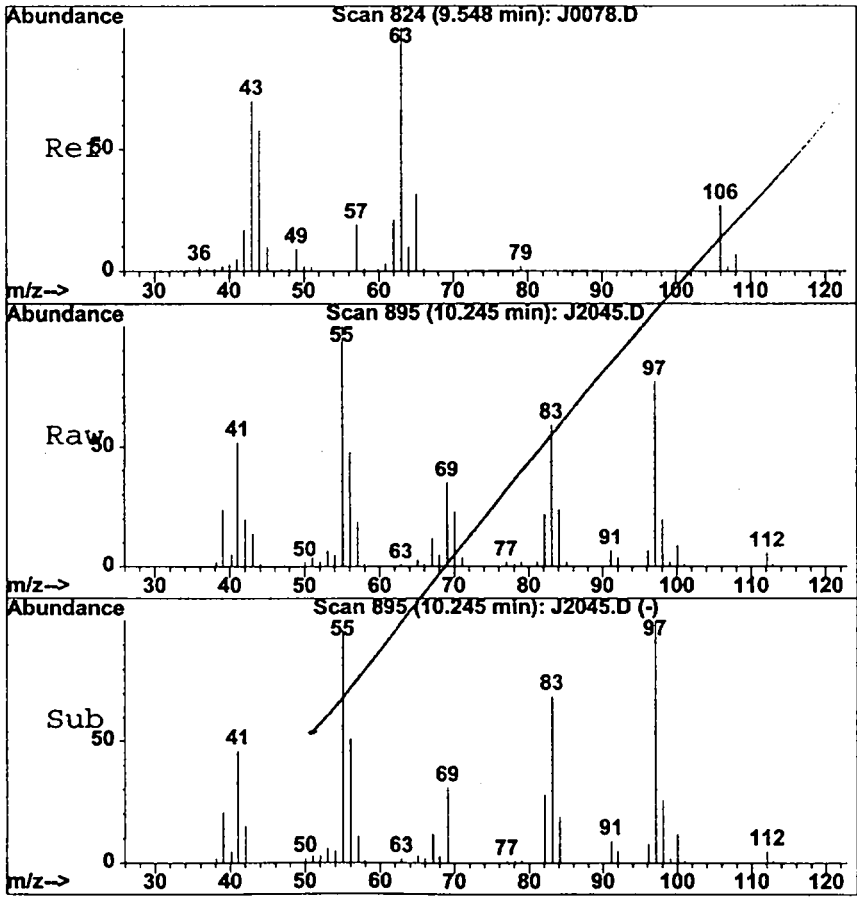


#55
Toluene
Concen: 4.32 ppb
RT: 10.26 min Scan# 896
Delta R.T. 0.01 min
Lab File: J2045.D
Acq: 22 Oct 99 20:19

Tgt Ion:92 Resp: 10707

Ion	Ratio	Lower	Upper
92	100		
91	200.3	113.6	211.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

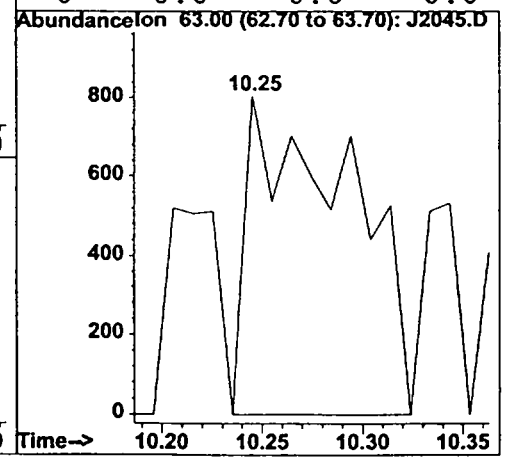


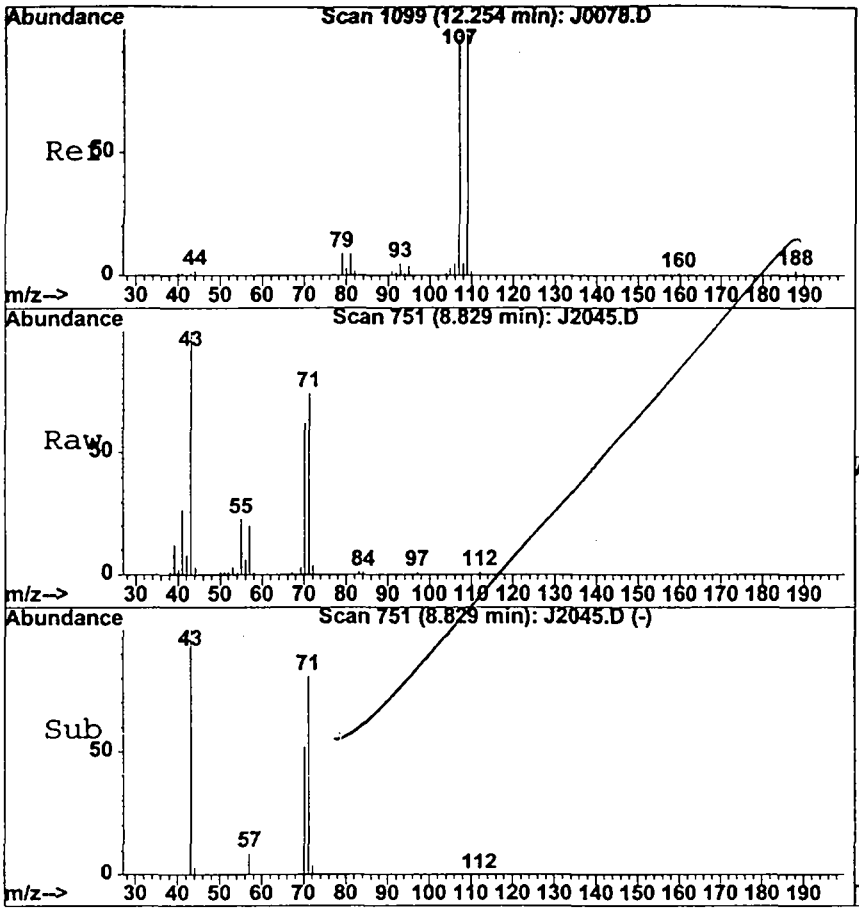


#56
2-Chloroethylvinylether
Concen: 11.30 ppb
RT: 10.25 min Scan# 895
Delta R.T. 0.00 min
Lab File: J2045.D
Acq: 22 Oct 99 20:19

Tgt Ion:63 Resp: 2850

Ion	Ratio	Lower	Upper
63	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

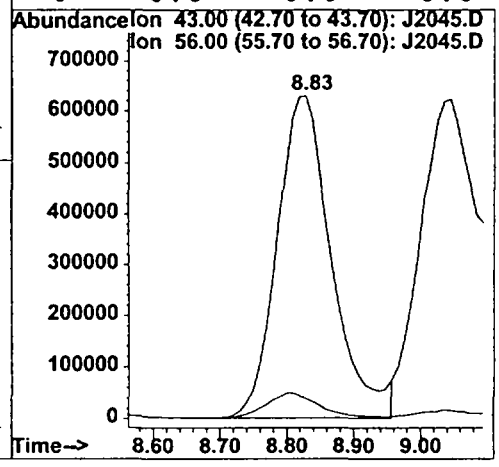


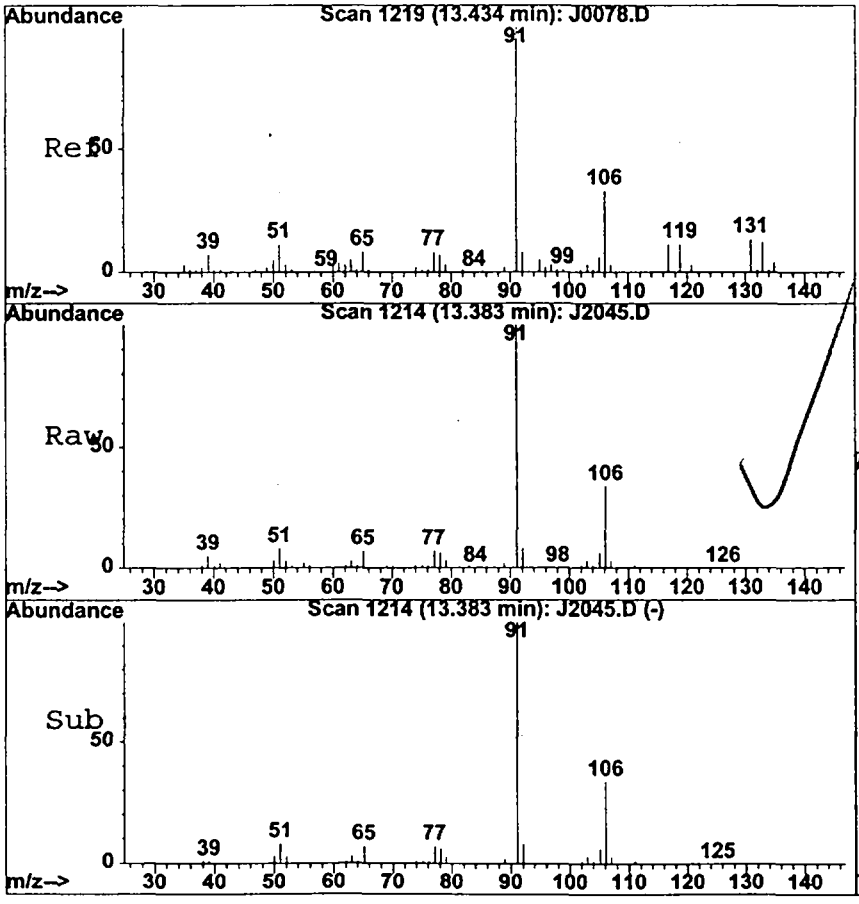


#58
Isobutyl acetate
Concen: 52897.47 ppb
RT: 8.83 min Scan# 751
Delta R.T. 0.31 min
Lab File: J2045.D
Acq: 22 Oct 99 20:19

Tgt Ion:43 Resp: 3538736

Ion	Ratio	Lower	Upper
43	100		
56	7.6	0.0	59.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

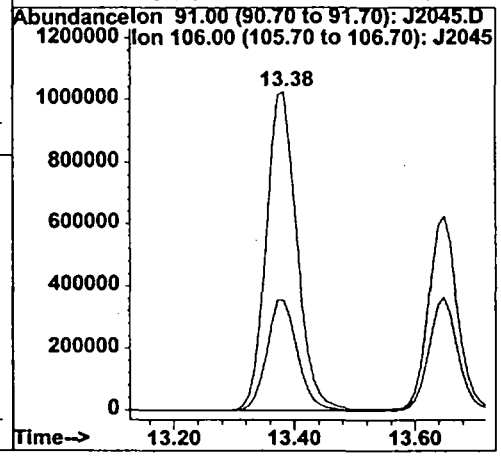


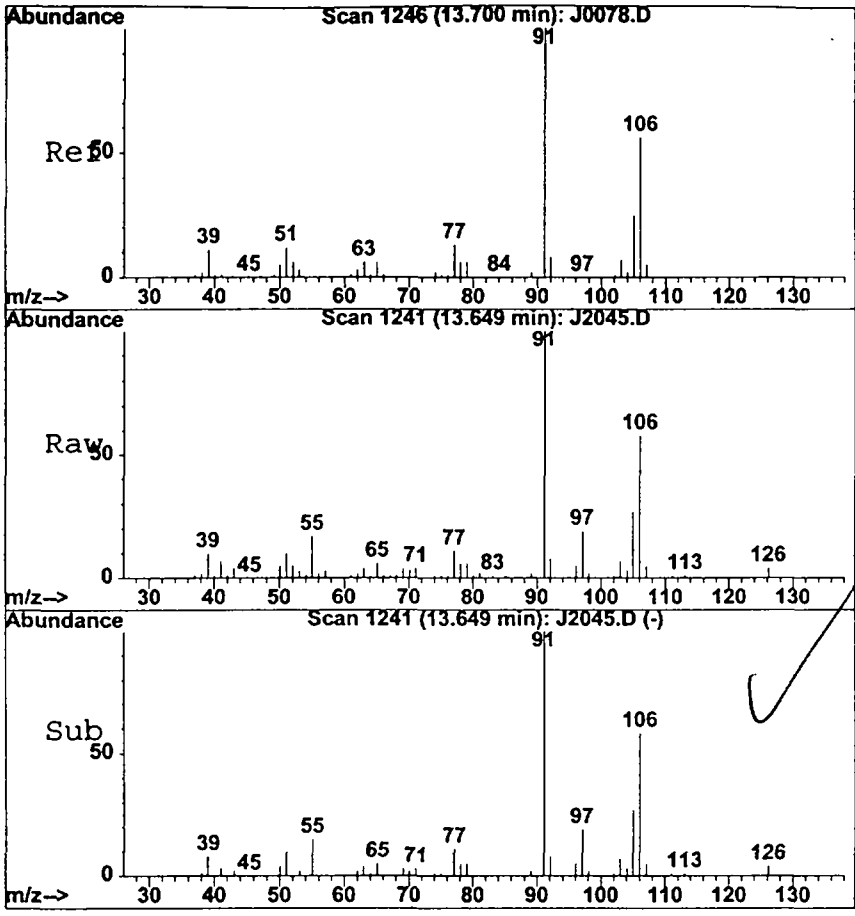


#69
Ethylbenzene
Concen: 932.84 ppb
RT: 13.38 min Scan# 1214
Delta R.T. 0.03 min
Lab File: J2045.D
Acq: 22 Oct 99 20:19

Tgt Ion:91 Resp: 3623295

Ion	Ratio	Lower	Upper
91	100		
106	34.3	23.9	44.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

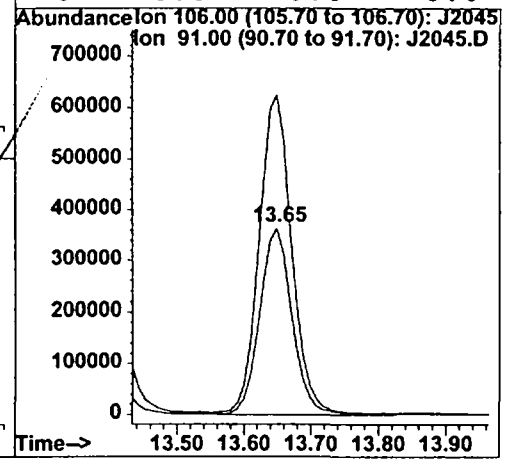


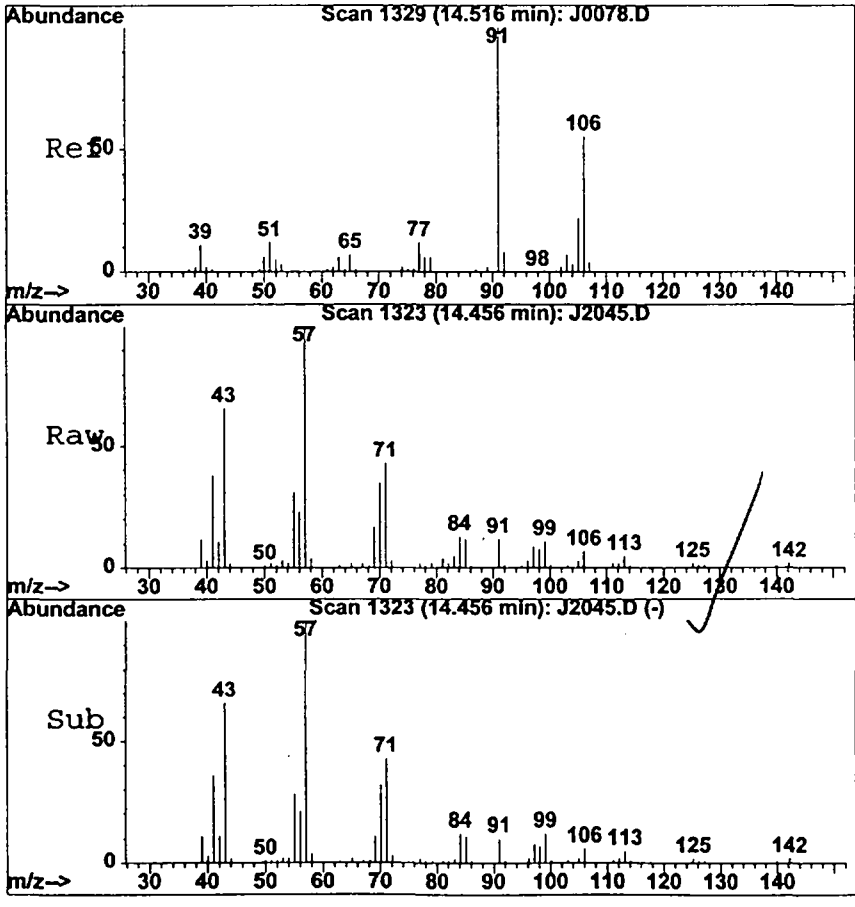


#71
m&p-Xylenes
Concen: 730.79 ppb
RT: 13.65 min Scan# 1241
Delta R.T. 0.03 min
Lab File: J2045.D
Acq: 22 Oct 99 20:19

Tgt Ion:106 Resp: 1218819

Ion	Ratio	Lower	Upper
106	100		
91	174.4	142.3	202.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

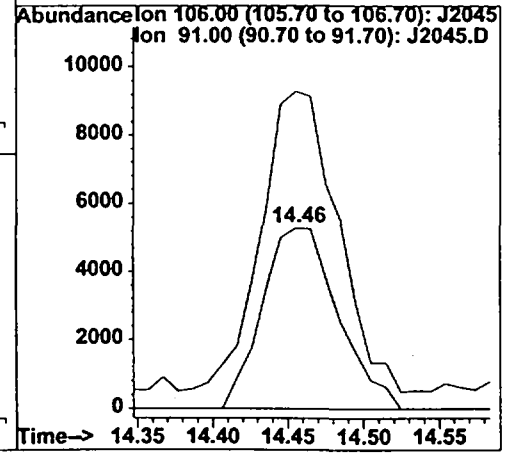




#74
O-Xylene
Concen: 11.38 ppb
RT: 14.46 min Scan# 1323
Delta R.T. 0.02 min
Lab File: J2045.D
Acq: 22 Oct 99 20:19

Tgt Ion:106 Resp: 18325

Ion	Ratio	Lower	Upper
106	100		
91	166.8	154.7	214.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-3-1-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127009

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2047

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 16

Date Analyzed: 10/22/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	12	U
78-93-3	2-Butanone	12	U
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	12	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	12	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	6	U
591-78-6	2-Hexanone	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
75-09-2	Methylene Chloride	10	
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	12	U
1330-20-7	Xylenes (Total)	6	U

Quantitation Report (Not Reviewed) 000090

Data File : C:\HPCHEM\1\DATA\102299\J2047.D
Acq On : 22 Oct 99 22:00
Sample : ;MSJ;;
Misc : 94127009;LOW;SO;
Quant Time: Nov 30 20:49 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.21	96	1057567	50.00 ppb	0.00
64) Chlorobenzene-d5	13.09	117	707754	50.00 ppb	0.00
80) 1,4-Dichlorobenzene-d4	18.07	152	250170	50.00 ppb	0.00

System Monitoring Compounds					
37) Dibromofluoromethane	6.22	113	351340	48.63 ppb	0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 97.26%		
41) 1,2-Dichloroethane-d4	6.76	65	226170	47.77 ppb	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 95.54%		
65) Toluene-d8	10.10	98	880149	52.07 ppb	-0.01
Surrogate Spike 50.000	Range 88 - 110		Recovery = 104.14%		
78) Bromofluorobenzene	15.59	95	272189	47.70 ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 95.40%		

Target Compounds					Qvalue
14) Methylene chloride	3.85	84	52625	8.82 ppb	99
~~18) Acetone~~	~~3.34~~	~~43~~	~~9055~~	~~6.60 ppb~~	57
~~58) Isobutyl acetate~~	~~8.14~~	~~43~~	~~3452~~	~~10.34 ppb~~	87

SW
12/7/99

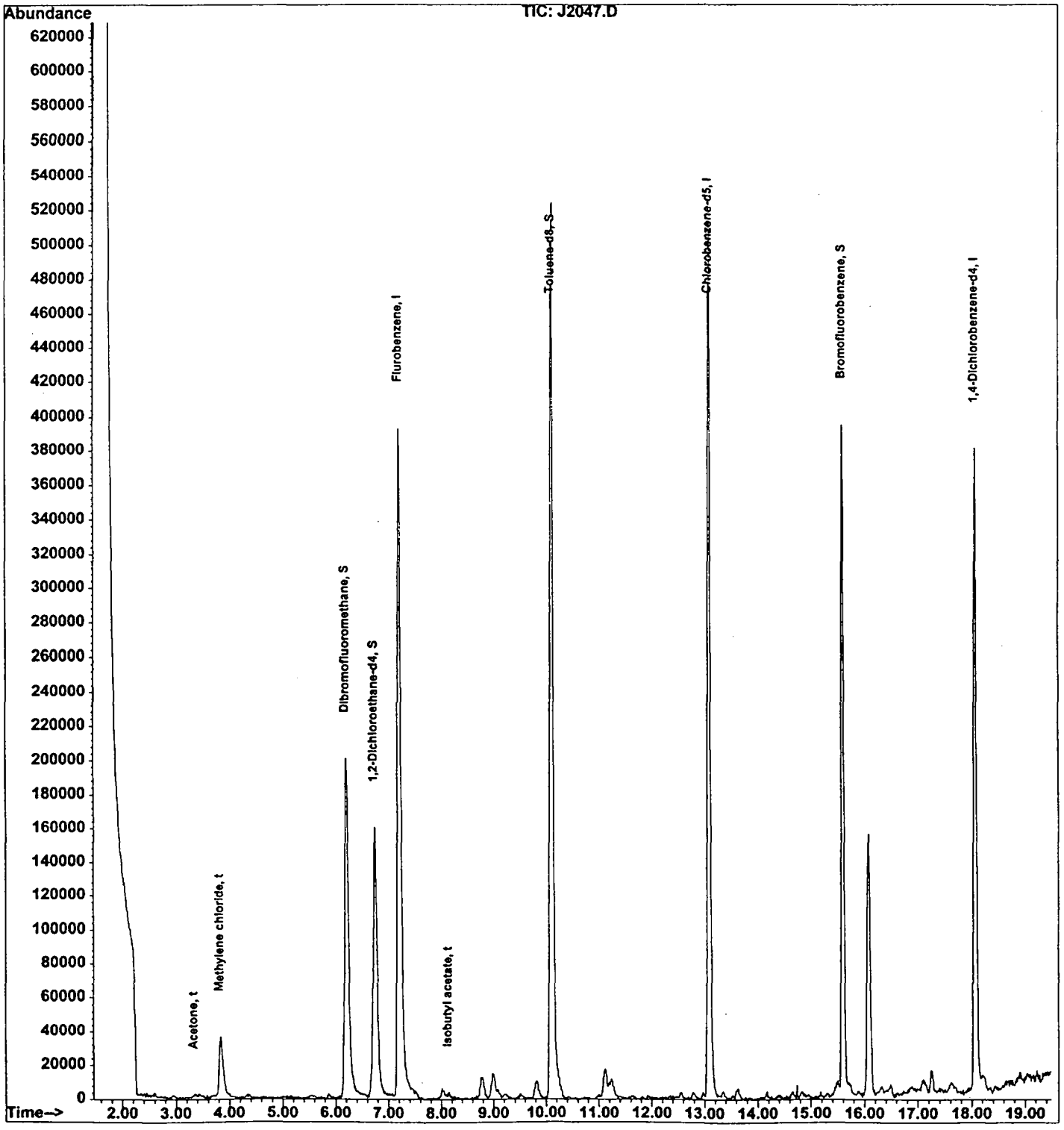
(#) = qualifier out of range (m) = manual integration

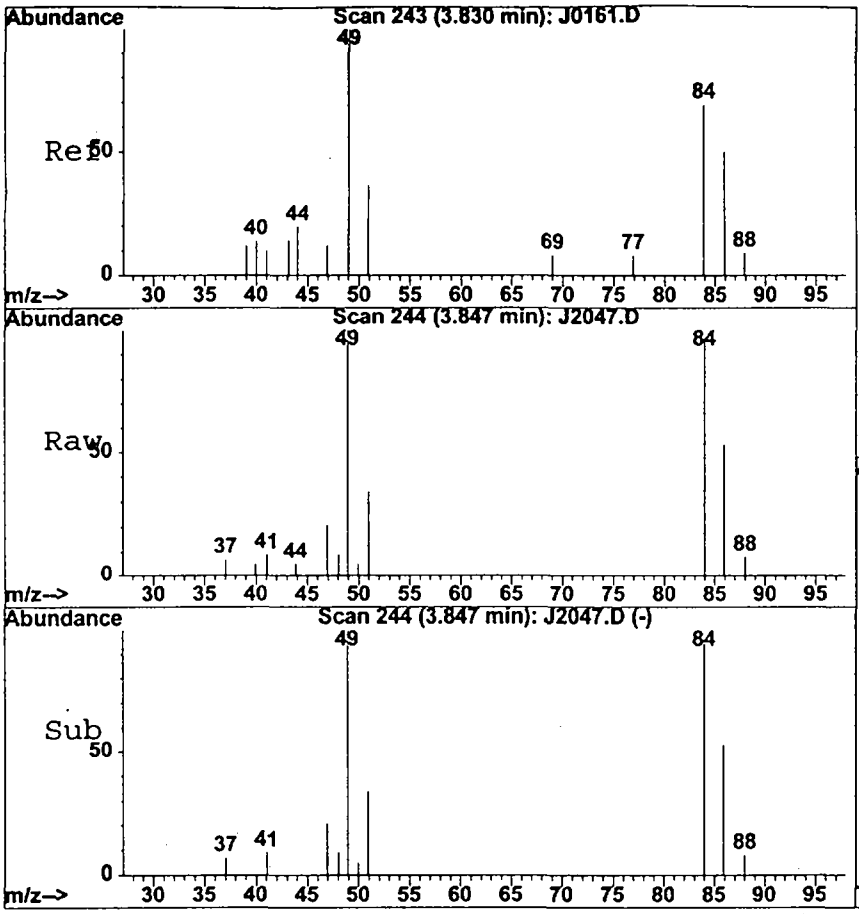
Quantitation Report

Data File : C:\HPCHEM\1\DATA\102299\J2047.D
Acq On : 22 Oct 99 22:00
Sample : ;MSJ;;
Misc : 94127009;LOW;SO;
Quant Time: Nov 30 20:49 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

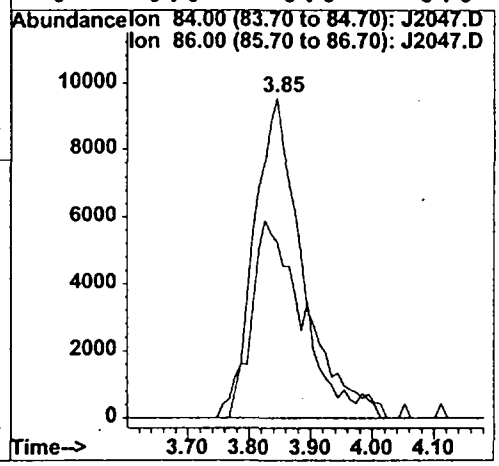


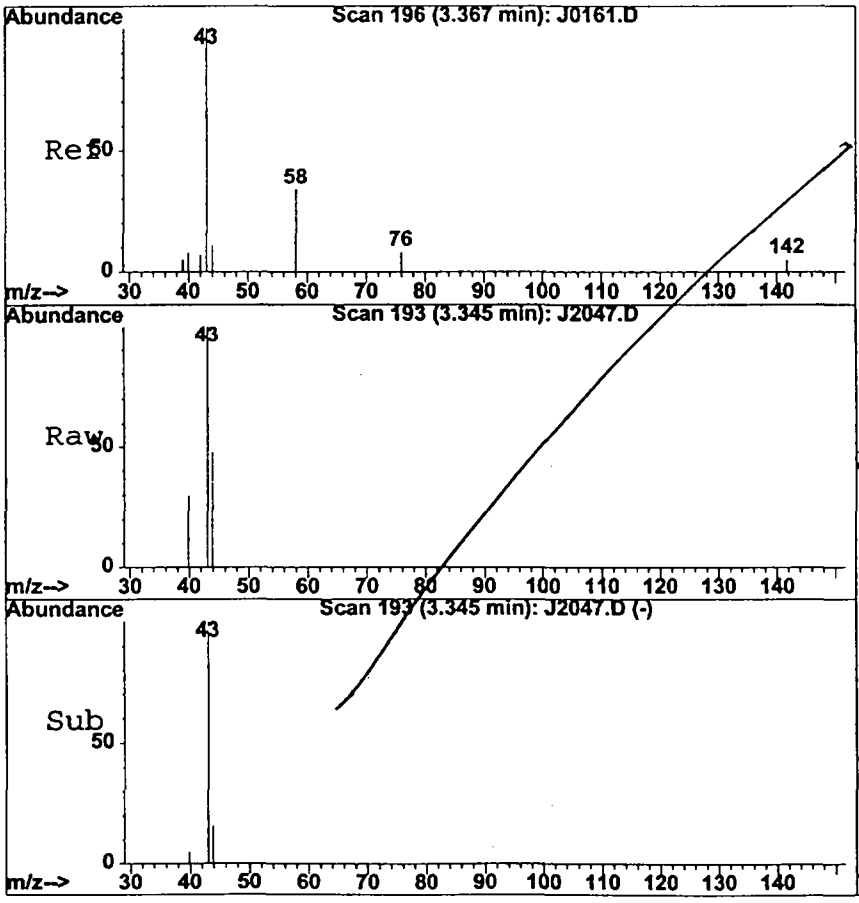


#14
Methylene chloride
Concen: 8.82 ppb
RT: 3.85 min Scan# 244
Delta R.T. -0.00 min
Lab File: J2047.D
Acq: 22 Oct 99 22:00

Tgt Ion:84 Resp: 52625

Ion	Ratio	Lower	Upper
84	100		
86	64.4	23.9	103.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

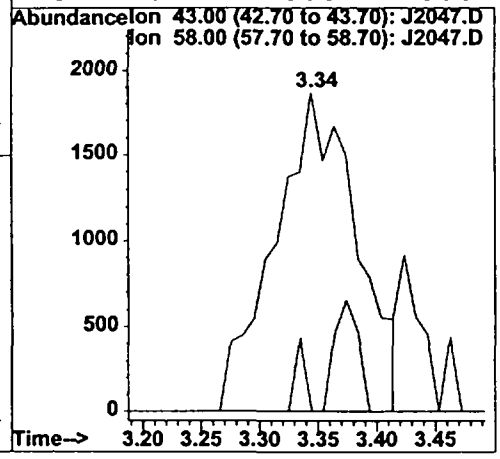




#18
Acetone
Concen: 6.60 ppb
RT: 3.34 min Scan# 193
Delta R.T. -0.00 min
Lab File: J2047.D
Acq: 22 Oct 99 22:00

Tgt Ion:43 Resp: 9055

Ion	Ratio	Lower	Upper
43	100		
58	10.3	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-3-2-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127010

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2048

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 15

Date Analyzed: 10/22/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	12	U
78-93-3	2-Butanone	12	U
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	12	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	12	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	6	U
591-78-6	2-Hexanone	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	12	U
1330-20-7	Xylenes (Total)	6	U

Quantitation Report (Not Reviewed)

000094

Data File : C:\HPCHEM\1\DATA\102299\J2048.D
Acq On : 22 Oct 99 22:22
Sample : ;MSJ;;
Misc : 94127010;LOW;SO;
Quant Time: Nov 30 20:49 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.21	96	1488537	50.00 ppb	0.00
64) Chlorobenzene-d5	13.09	117	1062021	50.00 ppb	0.00
80) 1,4-Dichlorobenzene-d4	18.07	152	364101	50.00 ppb	0.00

System Monitoring Compounds

37) Dibromofluoromethane	6.20	113	487038	47.89 ppb	-0.02
Surrogate Spike 50.000	Range 86 - 118		Recovery = 95.78%		
41) 1,2-Dichloroethane-d4	6.74	65	308275	46.26 ppb	-0.02
Surrogate Spike 50.000	Range 80 - 120		Recovery = 92.52%		
65) Toluene-d8	10.10	98	1293226	50.99 ppb	-0.02
Surrogate Spike 50.000	Range 88 - 110		Recovery = 101.98%		
78) Bromofluorobenzene	15.59	95	407893	47.64 ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 95.28%		

Target Compounds

					Qvalue
18) ~~Acetone~~	~~3.36~~	~~43~~	~~10632~~	~~5.50 ppb~~	~~49~~

12/7/99

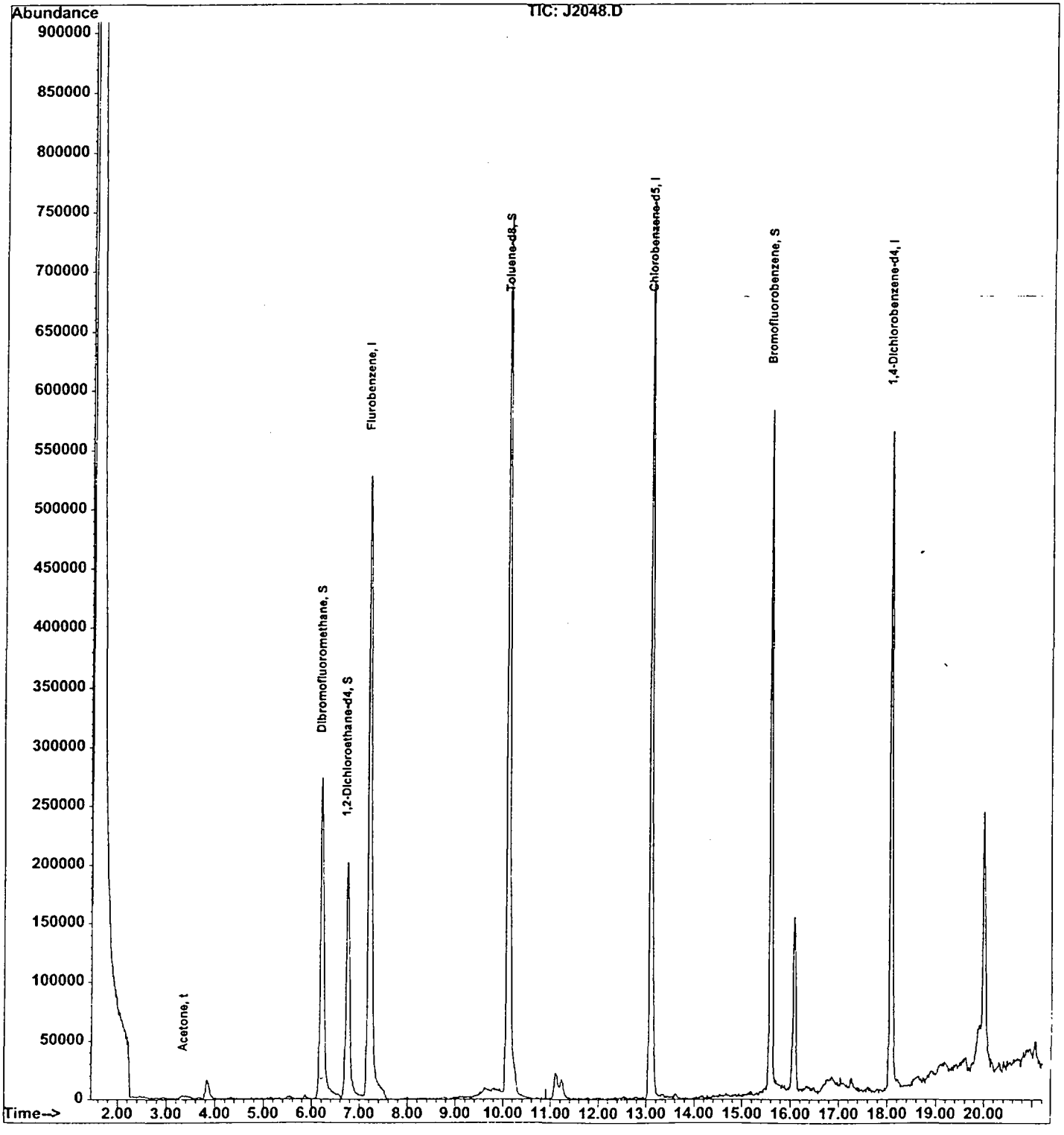
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102299\J2048.D
Acq On : 22 Oct 99 22:22
Sample : ;MSJ;;
Misc : 94127010;LOW;SO;
Quant Time: Nov 30 20:49 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-7-1-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127011

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2067

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 13

Date Analyzed: 10/26/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg

CAS NO.	COMPOUND		Q
67-64-1	Acetone	6	JB
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	11	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	6	U
591-78-6	2-Hexanone	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
75-09-2	Methylene Chloride	9	B
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	11	U
1330-20-7	Xylenes (Total)	6	U

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\102699\J2067.D
Acq On : 26 Oct 99 21:04
Sample : ;MSJ;;
Misc : 94127011;LOW;SO;
Quant Time: Nov 30 21:02 1999

Vial: 100000097
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Flurobenzene	7.23	96	1318042	50.00	ppb	0.02
64) Chlorobenzene-d5	13.11	117	944393	50.00	ppb	0.01
80) 1,4-Dichlorobenzene-d4	18.10	152	316535	50.00	ppb	0.02

System Monitoring Compounds

37) Dibromofluoromethane	6.23	113	428281	47.56	ppb	0.01
Surrogate Spike 50.000	Range 86 - 118		Recovery = 95.12%			
41) 1,2-Dichloroethane-d4	6.78	65	277652	47.05	ppb	0.02
Surrogate Spike 50.000	Range 80 - 120		Recovery = 94.10%			
65) Toluene-d8	10.13	98	1143100	50.68	ppb	0.01
Surrogate Spike 50.000	Range 88 - 110		Recovery = 101.36%			
78) Bromofluorobenzene	15.61	95	359704	47.25	ppb	0.01
Surrogate Spike 50.000	Range 86 - 115		Recovery = 94.50%			

Target Compounds

						Qvalue
14) Methylene chloride	3.85	84	56418	7.59	ppb	93
18) ~~Acetone~~	~~3.38~~	~~43~~	~~9554~~	~~5.59~~	~~ppb~~	~~61~~
95) ~~cis-1,4-dichloro-2-butene~~	~~16.10~~	~~75~~	~~11060~~	~~4.63~~	~~ppb~~	~~31~~

OK 12/6/99

SW 12/7/99

(#) = qualifier out of range (m) = manual integration

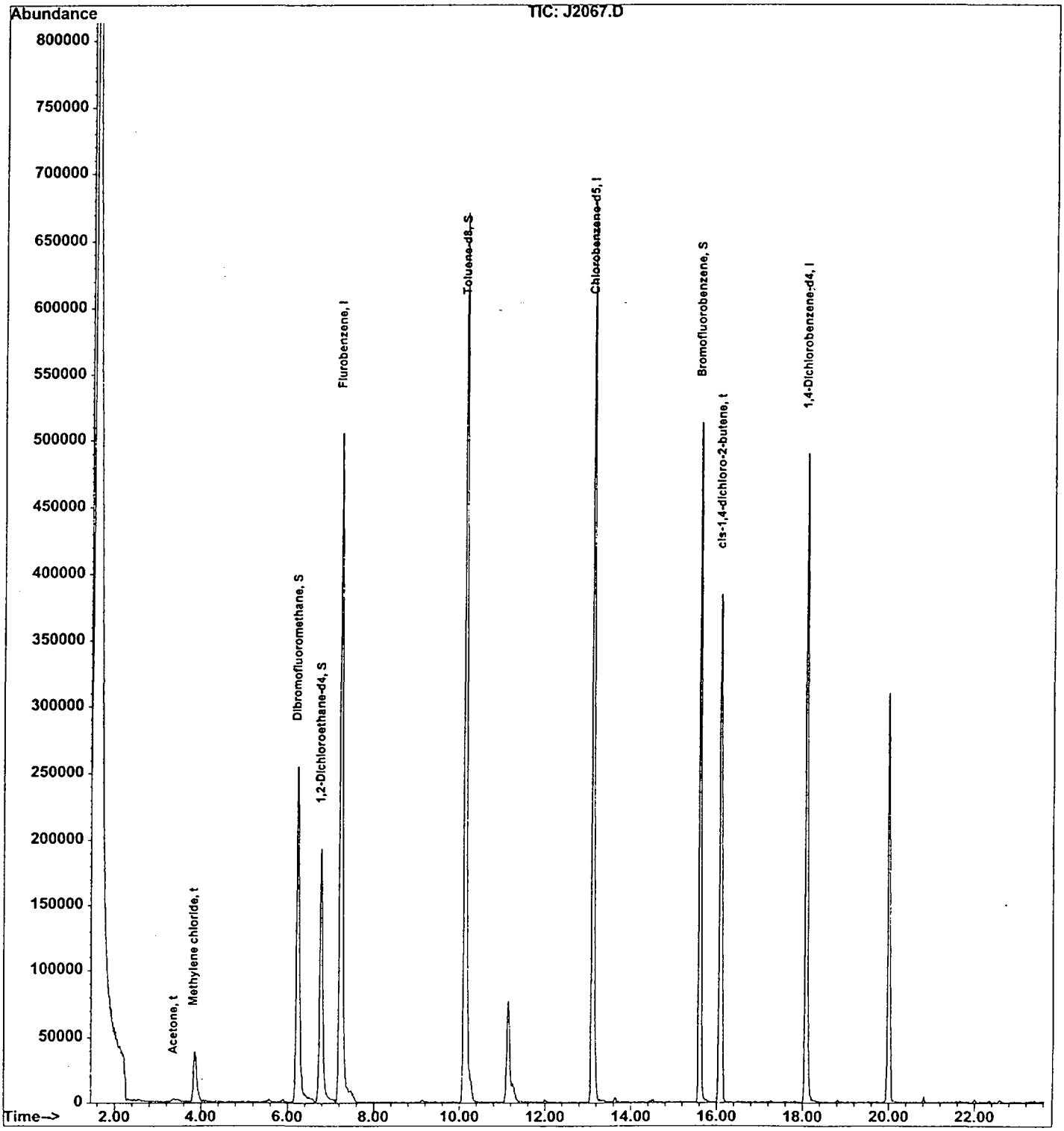
Quantitation Report

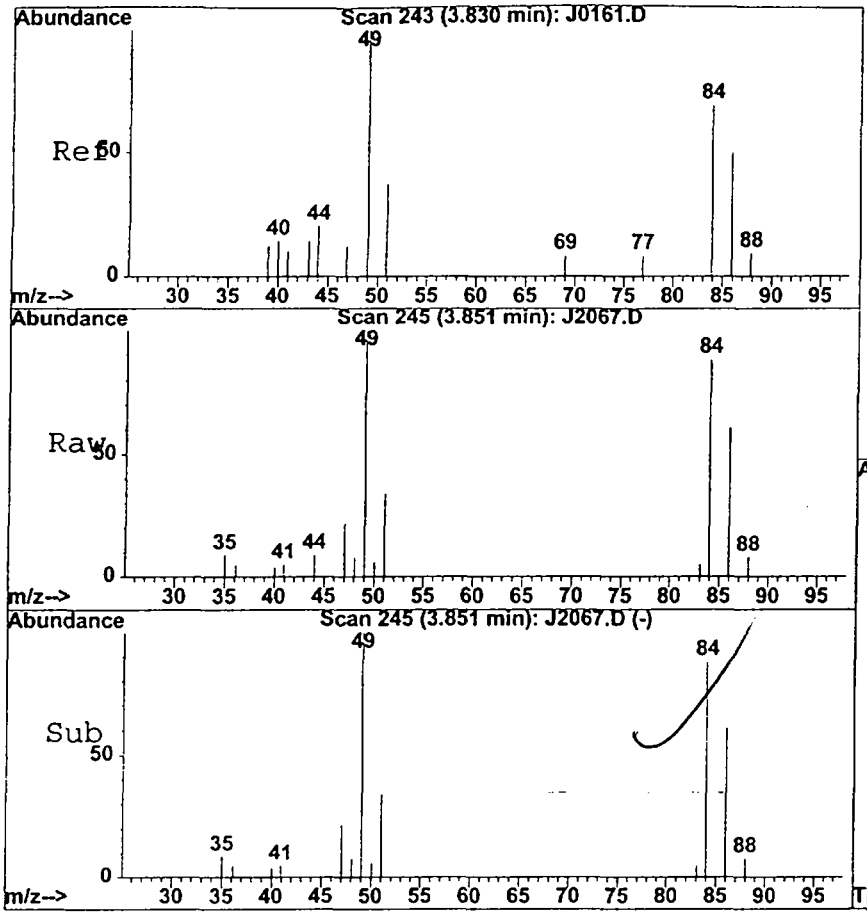
000098

Data File : C:\HPCHEM\1\DATA\102699\J2067.D
Acq On : 26 Oct 99 21:04
Sample : ;MSJ;;
Misc : 94127011;LOW;SO;
Quant Time: Nov 30 21:02 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

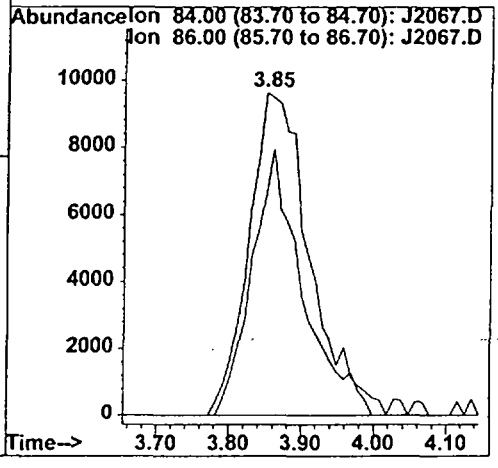


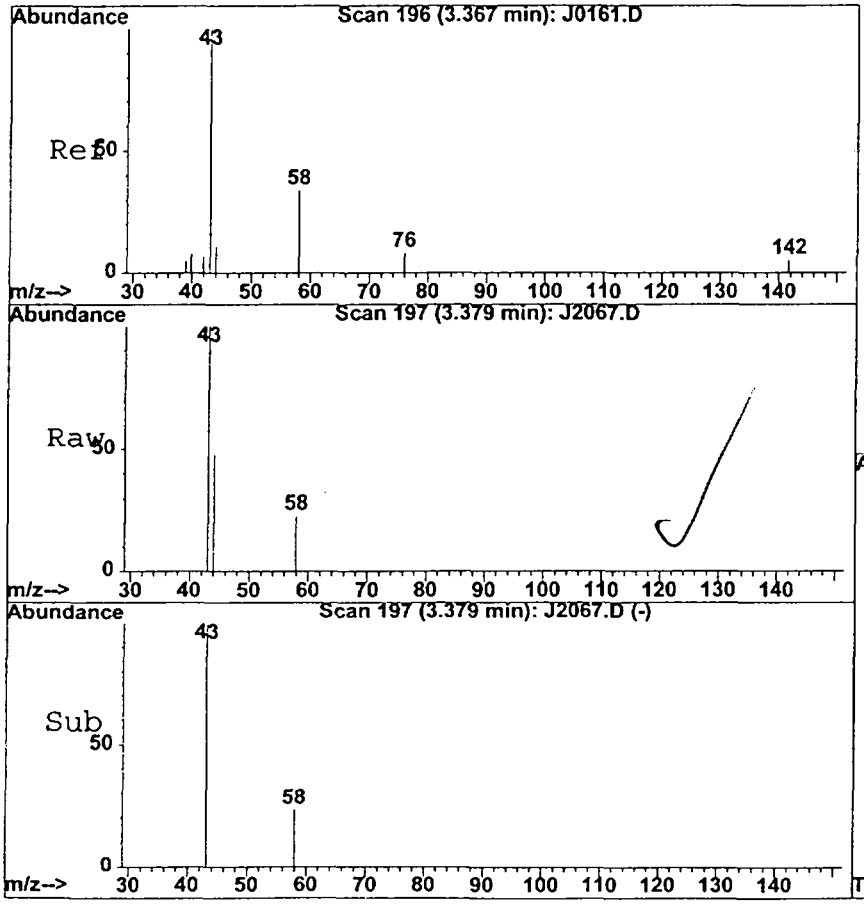


#14
Methylene chloride
Concen: 7.59 ppb
RT: 3.85 min Scan# 245
Delta R.T. 0.00 min
Lab File: J2067.D
Acq: 26 Oct 99 21:04

Tgt Ion:84 Resp: 56418

Ion	Ratio	Lower	Upper
84	100		
86	69.2	23.9	103.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

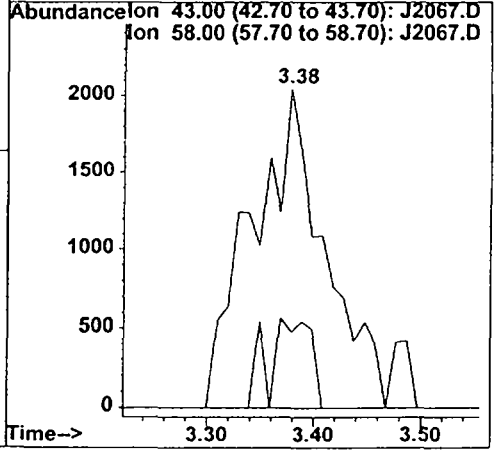




#18
Acetone
Concen: 5.59 ppb
RT: 3.38 min Scan# 197
Delta R.T. 0.03 min
Lab File: J2067.D
Acq: 26 Oct 99 21:04

Tgt Ion:43 Resp: 9554

Ion	Ratio	Lower	Upper
43	100		
58	12.8	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-7-2-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127012

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2050

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 15

Date Analyzed: 10/22/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: ____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg

CAS NO.	COMPOUND		Q
67-64-1	Acetone	12	U
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	12	U
78-93-3	2-Butanone	12	U
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	12	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	12	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	6	U
591-78-6	2-Hexanone	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
75-09-2	Methylene Chloride	9	
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	12	U
1330-20-7	Xylenes (Total)	6	U

Quantitation Report (Not Reviewed)

000101

Data File : C:\HPCHEM\1\DATA\102299\J2050.D
Acq On : 22 Oct 99 23:13
Sample : ;MSJ;;
Misc : 94127012;LOW;SO;
Quant Time: Nov 30 20:50 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.18	96	1217155	50.00 ppb	-0.04
64) Chlorobenzene-d5	13.08	117	872217	50.00 ppb	-0.02
80) 1,4-Dichlorobenzene-d4	18.07	152	293416	50.00 ppb	0.00

System Monitoring Compounds					
37) Dibromofluoromethane	6.17	113	394576	47.45 ppb	-0.05
Surrogate Spike 50.000	Range 86 - 118		Recovery = 94.90%		
41) 1,2-Dichloroethane-d4	6.71	65	232975	42.75 ppb	-0.05
Surrogate Spike 50.000	Range 80 - 120		Recovery = 85.50%		
65) Toluene-d8	10.08	98	1065916	51.17 ppb	-0.04
Surrogate Spike 50.000	Range 88 - 110		Recovery = 102.34%		
78) Bromofluorobenzene	15.59	95	320176	45.53 ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 91.06%		

Target Compounds					Qvalue
14) Methylene chloride	3.78	84	51407	7.48 ppb	99
18) ~~Acetone~~	~~3.33~~	~~43~~	~~8507~~	~~5.39 ppb~~	69

5/12/99

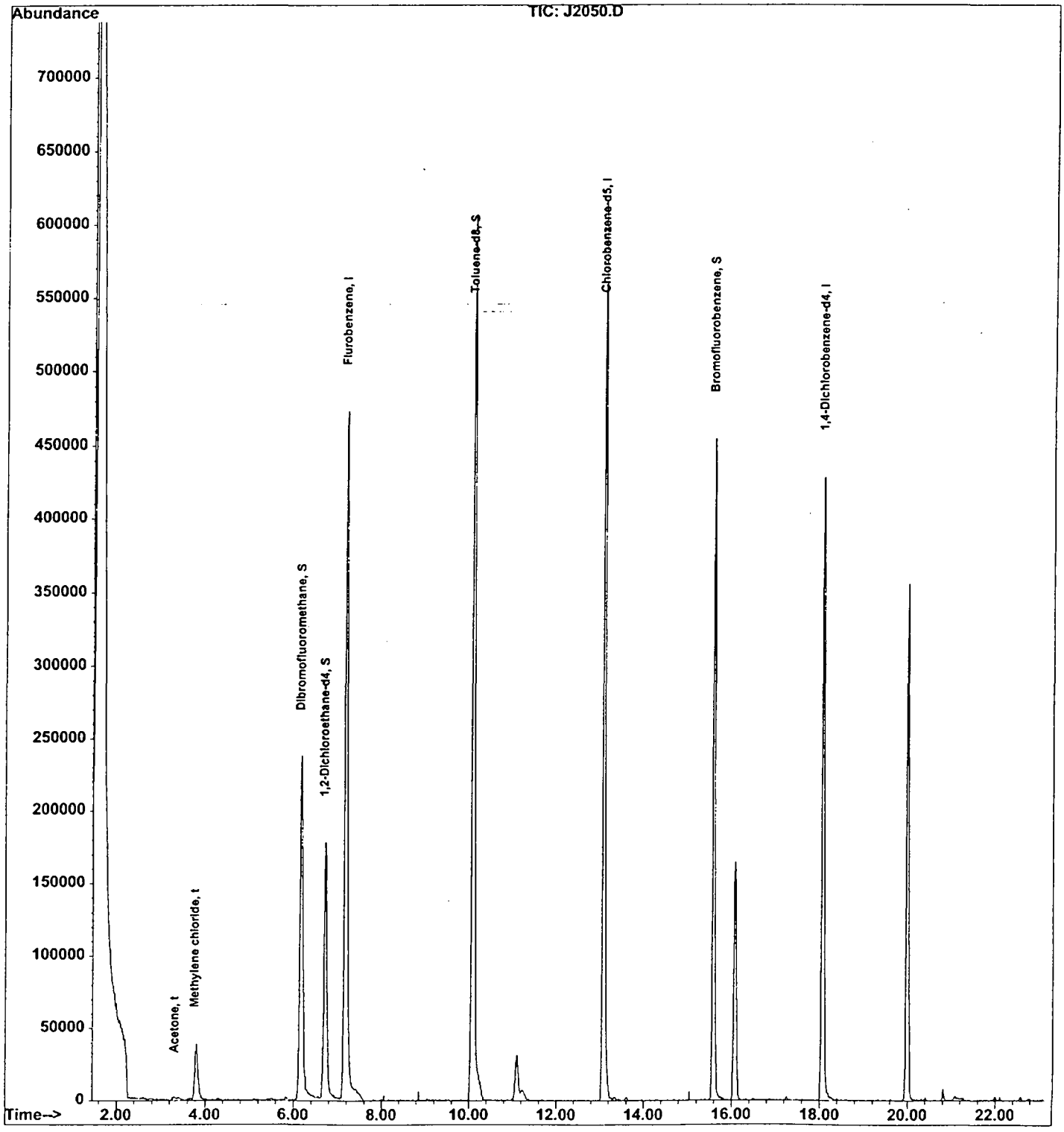
(#) = qualifier out of range (m) = manual integration

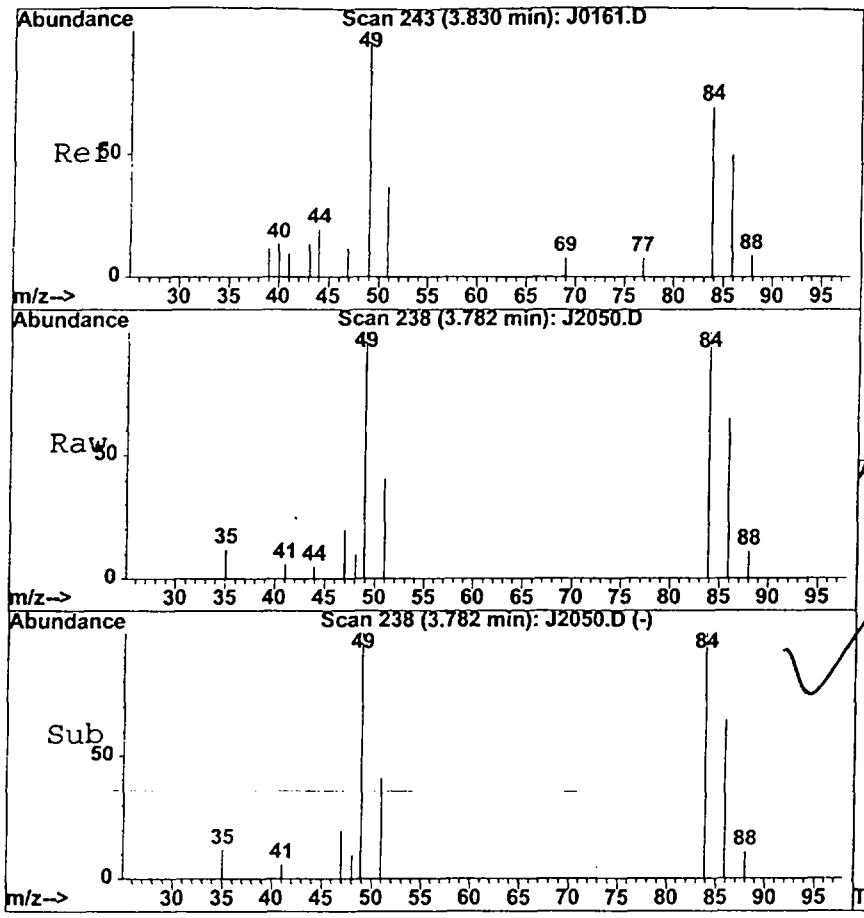
Quantitation Report

Data File : C:\HPCHEM\1\DATA\102299\J2050.D
Acq On : 22 Oct 99 23:13
Sample : ;MSJ;;
Misc : 94127012;LOW;SO;
Quant Time: Nov 30 20:50 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

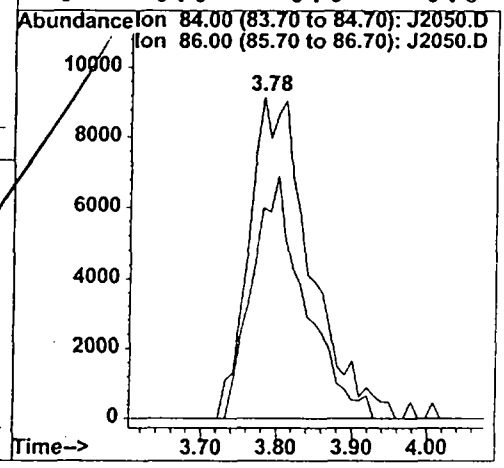


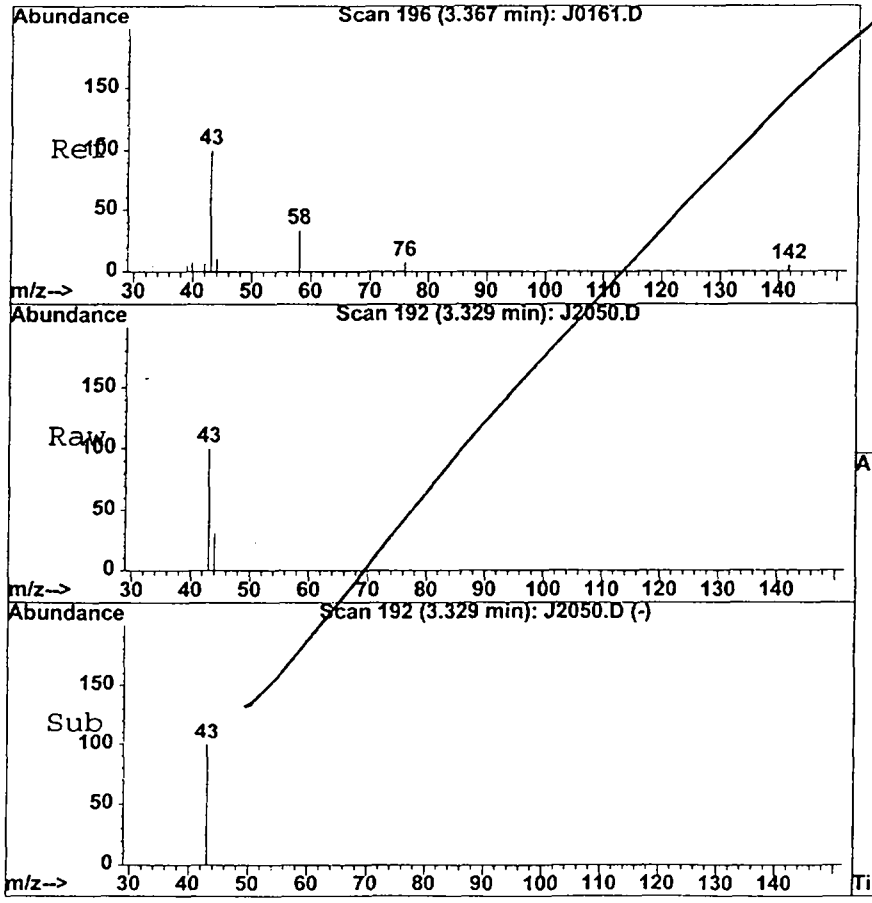


#14
Methylene chloride
Concen: 7.48 ppb
RT: 3.78 min Scan# 238
Delta R.T. -0.07 min
Lab File: J2050.D
Acq: 22 Oct 99 23:13

Tgt Ion:84 Resp: 51407

Ion	Ratio	Lower	Upper
84	100		
86	65.1	23.9	103.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

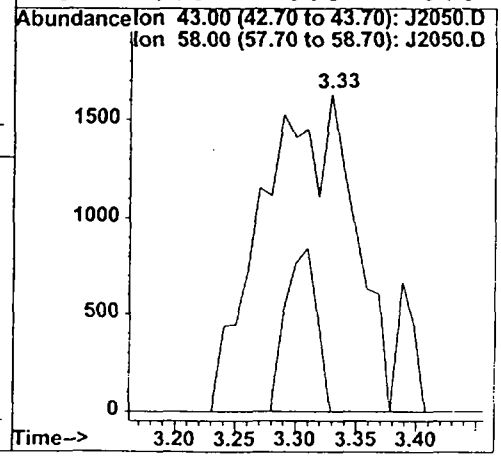




#18
Acetone
Concen: 5.39 ppb
RT: 3.33 min Scan# 192
Delta R.T. -0.02 min
Lab File: J2050.D
Acq: 22 Oct 99 23:13

Tgt Ion:43 Resp: 8507

Ion	Ratio	Lower	Upper
43	100		
58	17.6	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000104

SB1-4-1-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127013

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2074

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 12

Date Analyzed: 10/27/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: ____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg

CAS NO.	COMPOUND		Q
67-64-1	Acetone	4	JB
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	11	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	6	U
591-78-6	2-Hexanone	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	11	U
1330-20-7	Xylenes (Total)	6	U

Quantitation Report (Not Reviewed)

000105

Data File : C:\HPCHEM\1\DATA\102699\J2074.D
Acq On : 27 Oct 99 00:30
Sample : ;MSJ;;
Misc : 94127013;LOW;SO;
Quant Time: Nov 30 21:03 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.21	96	1552835	50.00 ppb	0.00
64) Chlorobenzene-d5	13.08	117	1104661	50.00 ppb	-0.01
80) 1,4-Dichlorobenzene-d4	18.06	152	373361	50.00 ppb	-0.01
System Monitoring Compounds					
37) Dibromofluoromethane	6.22	113	485355	45.75 ppb	0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 91.50%		
41) 1,2-Dichloroethane-d4	6.77	65	296315	42.62 ppb	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 85.24%		
65) Toluene-d8	10.11	98	1361249	51.60 ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 103.20%		
78) Bromofluorobenzene	15.59	95	410146	46.06 ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 92.12%		
Target Compounds					Qvalue
18) Acetone	3.38	43	6752	3.35 ppb	68

12/1/99

(#) = qualifier out of range (m) = manual integration

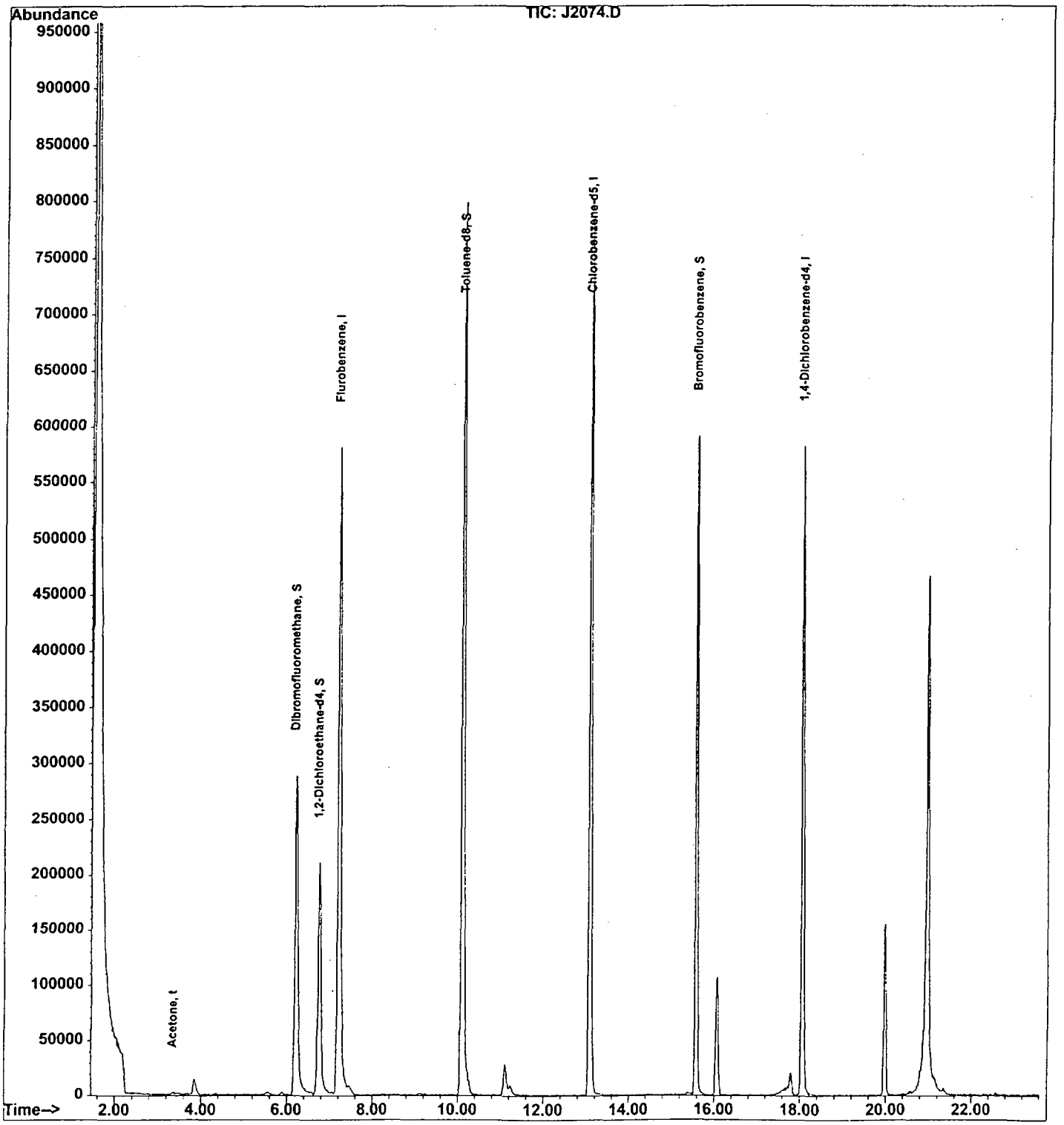
Quantitation Report

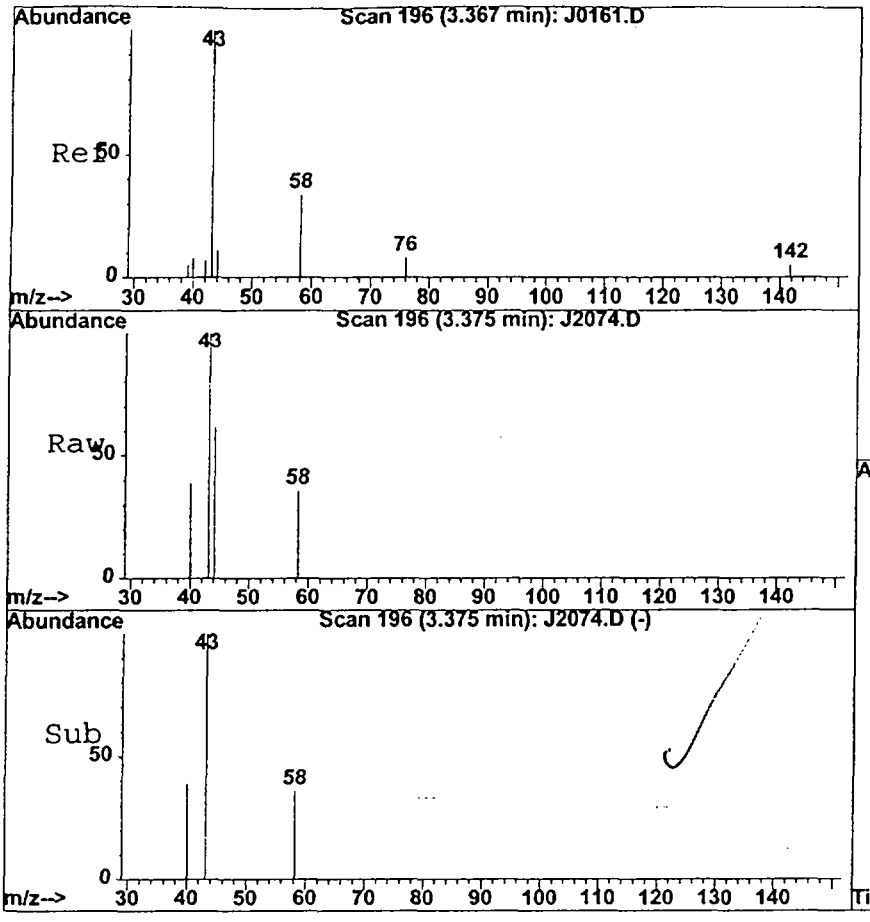
000106

Data File : C:\HPCHEM\1\DATA\102699\J2074.D
Acq On : 27 Oct 99 00:30
Sample : ;MSJ;;
Misc : 94127013;LOW;SO;
Quant Time: Nov 30 21:03 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

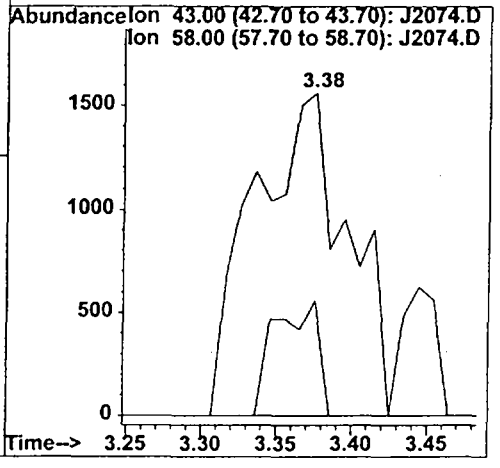




#18
Acetone
Concen: 3.35 ppb
RT: 3.38 min Scan# 196
Delta R.T. 0.03 min
Lab File: J2074.D
Acq: 27 Oct 99 00:30

Tgt Ion:43 Resp: 6752

Ion	Ratio	Lower	Upper
43	100		
58	16.7	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-4-2-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127014

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2075

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 13

Date Analyzed: 10/27/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	11	U
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	11	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	6	U
591-78-6	2-Hexanone	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
75-09-2	Methylene Chloride	6	B
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	11	U
1330-20-7	Xylenes (Total)	6	U

Quantitation Report (Not Reviewed)

000109

Data File : C:\HPCHEM\1\DATA\102699\J2075.D Vial: 100
Acq On : 27 Oct 99 1:00 Operator:
Sample : ;MSJ;; Inst : GC/MS Ins
Misc : 94127014;LOW;SO; Multiplr: 1.00
Quant Time: Nov 30 21:03 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.21	96	1346657	50.00 ppb	0.00
64) Chlorobenzene-d5	13.09	117	968620	50.00 ppb	0.00
80) 1,4-Dichlorobenzene-d4	18.07	152	318771	50.00 ppb	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	6.21	113	446735	48.56 ppb	0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 97.12%		
41) 1,2-Dichloroethane-d4	6.76	65	289094	47.95 ppb	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 95.90%		
65) Toluene-d8	10.11	98	1174944	50.79 ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 101.58%		
78) Bromofluorobenzene	15.59	95	362618	46.44 ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 92.88%		
Target Compounds					Qvalue
14) Methylene chloride	3.83	84	41754	5.49 ppb	99

5/24/99

(#) = qualifier out of range (m) = manual integration

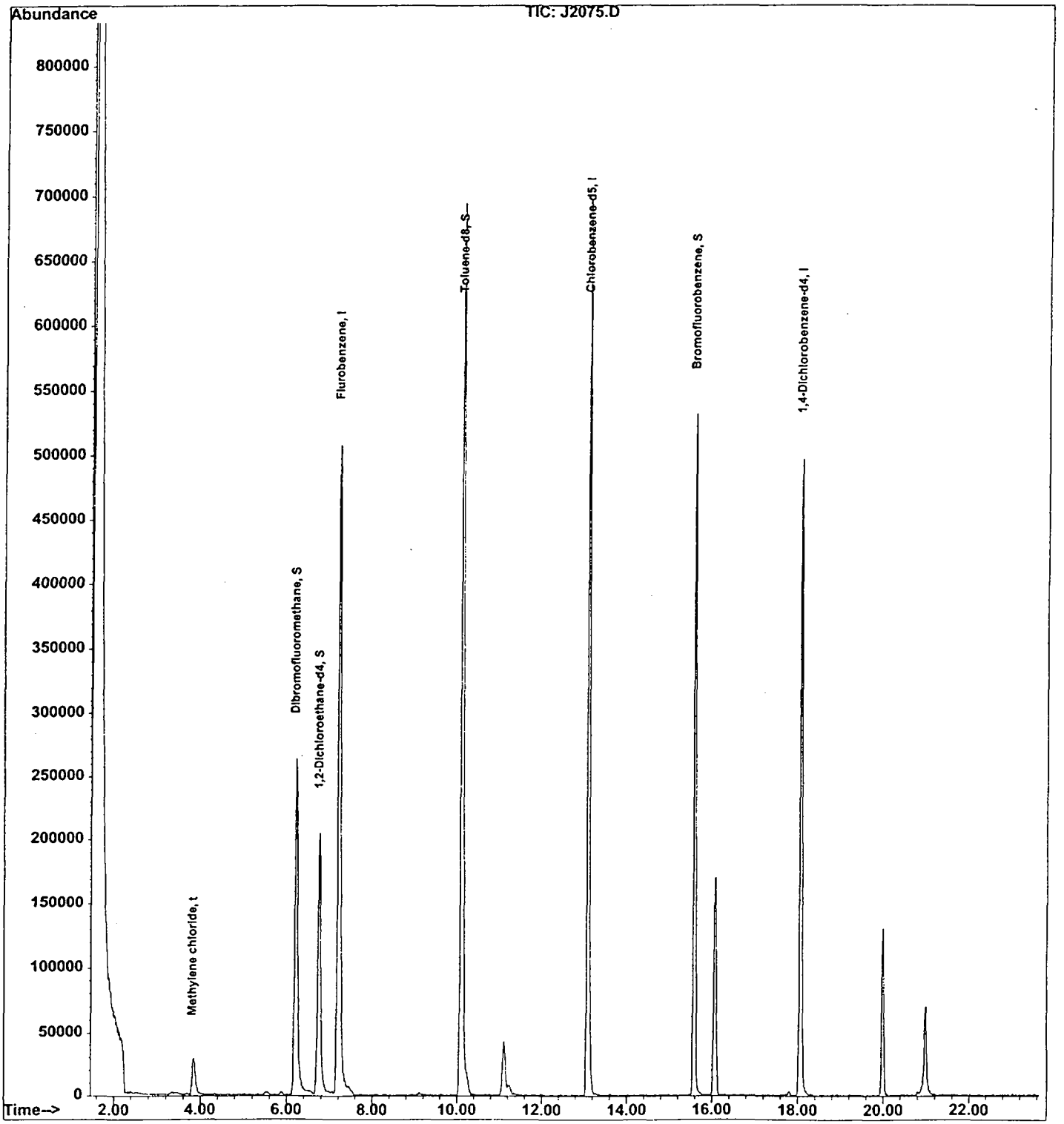
Quantitation Report

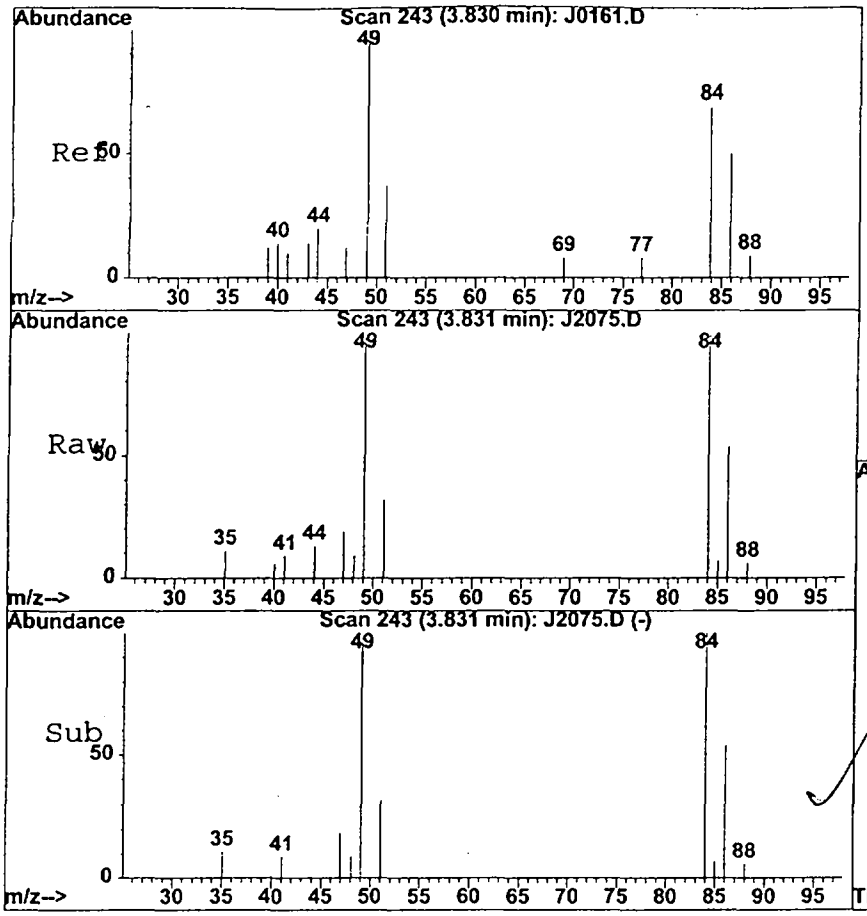
000110

Data File : C:\HPCHEM\1\DATA\102699\J2075.D
Acq On : 27 Oct 99 1:00
Sample : ;MSJ;;
Misc : 94127014;LOW;SO;
Quant Time: Nov 30 21:03 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

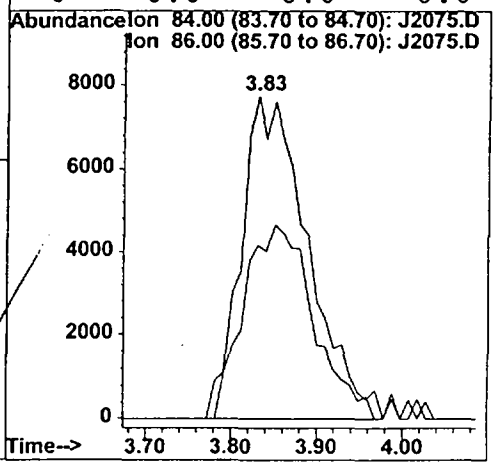




#14
Methylene chloride **000111**
Concen: 5.49 ppb
RT: 3.83 min Scan# 243
Delta R.T. -0.02 min
Lab File: J2075.D
Acq: 27 Oct 99 1:00

Tgt Ion:84 Resp: 41754

Ion	Ratio	Lower	Upper
84	100		
86	62.9	23.9	103.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0



VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-4-2-02

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127015

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2053

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 16

Date Analyzed: 10/23/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: ____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	12	U
78-93-3	2-Butanone	12	U
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	12	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	12	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	6	U
591-78-6	2-Hexanone	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
75-09-2	Methylene Chloride	8	
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	12	U
1330-20-7	Xylenes (Total)	6	U

Quantitation Report (Not Reviewed)

000113

Data File : C:\HPCHEM\1\DATA\102299\J2053.D
Vial: 100
Acq On : 23 Oct 99 00:38
Operator:
Sample : ;MSJ;;
Inst : GC/MS Ins
Misc : 94127015;LOW;SO;
Multiplr: 1.00
Quant Time: Nov 30 20:50 1999
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.23	96	1344544	50.00 ppb	0.01
64) Chlorobenzene-d5	13.11	117	952637	50.00 ppb	0.01
80) 1,4-Dichlorobenzene-d4	18.09	152	312559	50.00 ppb	0.01

System Monitoring Compounds					
37) Dibromofluoromethane	6.23	113	417008	45.40 ppb	0.01
Surrogate Spike 50.000	Range 86 - 118		Recovery = 90.80%		
41) 1,2-Dichloroethane-d4	6.77	65	269953	44.85 ppb	0.01
Surrogate Spike 50.000	Range 80 - 120		Recovery = 89.70%		
65) Toluene-d8	10.12	98	1179081	51.82 ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 103.64%		
78) Bromofluorobenzene	15.61	95	346399	45.10 ppb	0.01
Surrogate Spike 50.000	Range 86 - 115		Recovery = 90.20%		

Target Compounds					Qvalue
14) Methylene chloride	3.86	84	48153	6.35 ppb	98

S 12/1/99

(#) = qualifier out of range (m) = manual integration

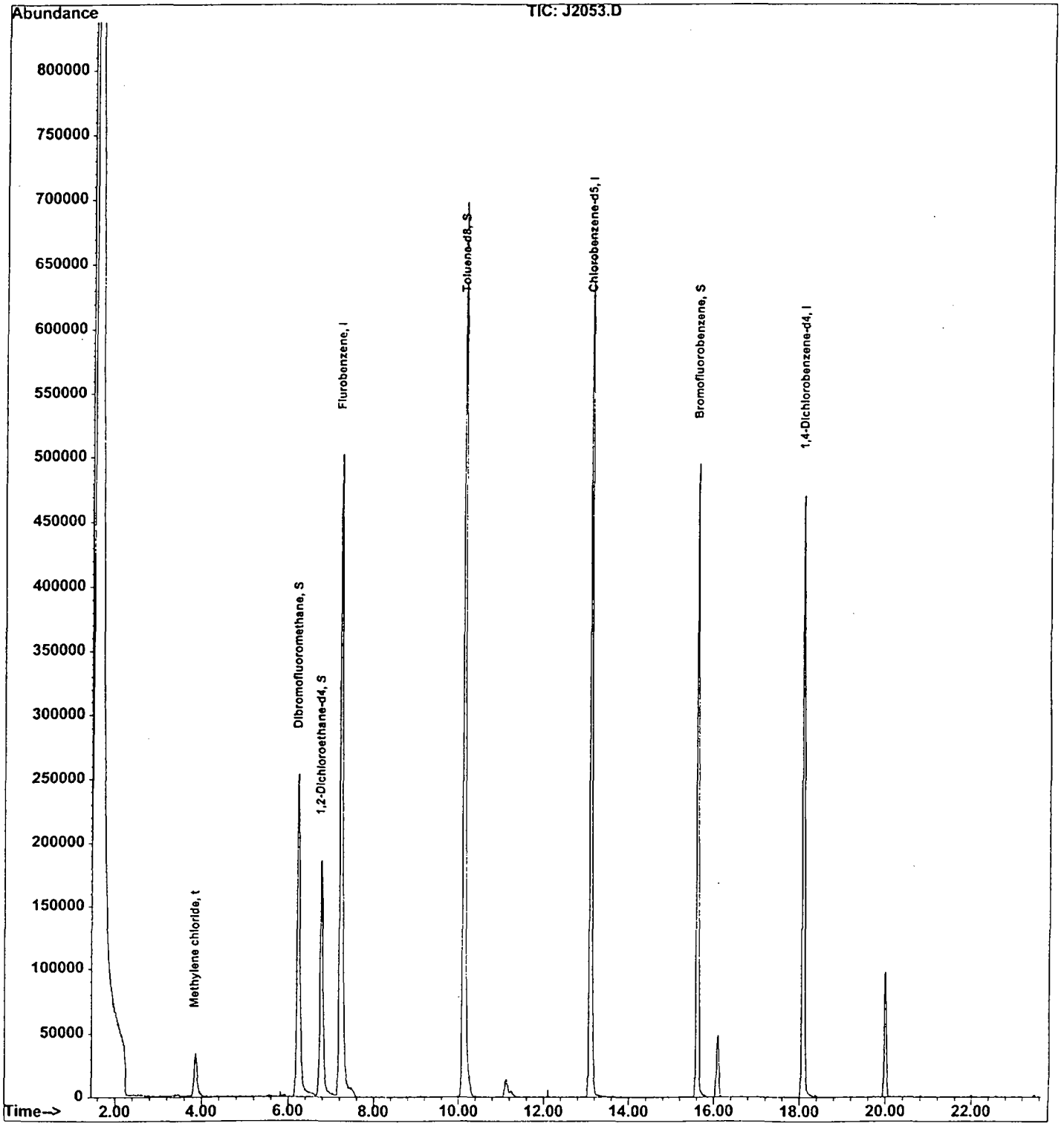
Quantitation Report

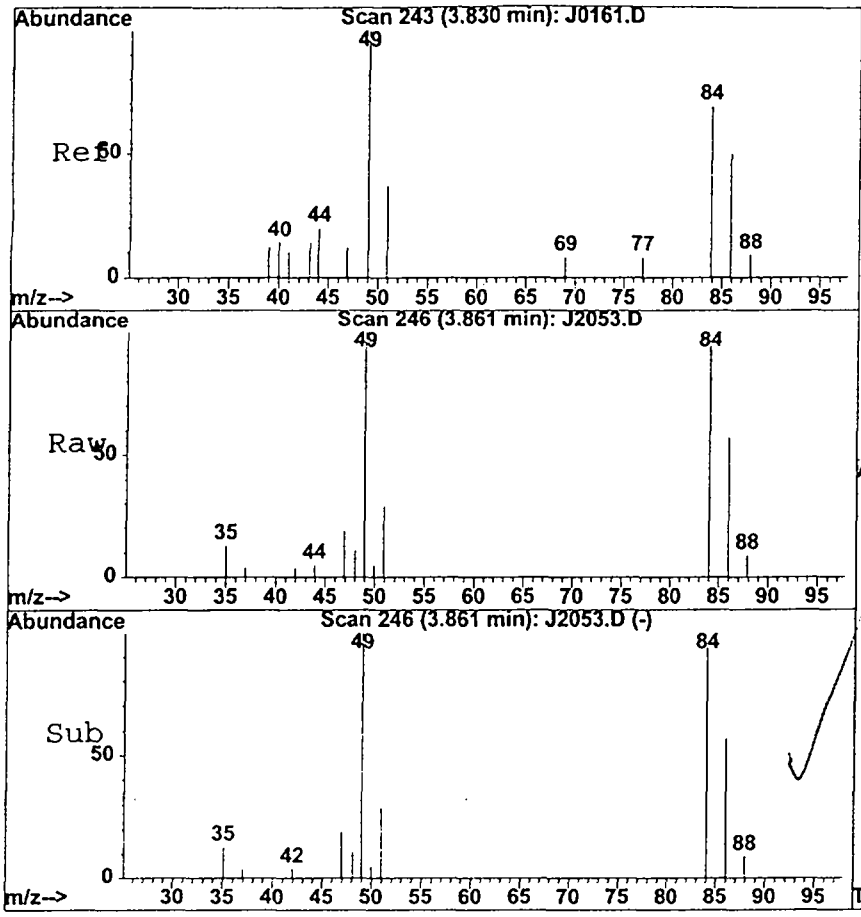
000114

Data File : C:\HPCHEM\1\DATA\102299\J2053.D
Acq On : 23 Oct 99 00:38
Sample : ;MSJ;;
Misc : 94127015;LOW;SO;
Quant Time: Nov 30 20:50 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

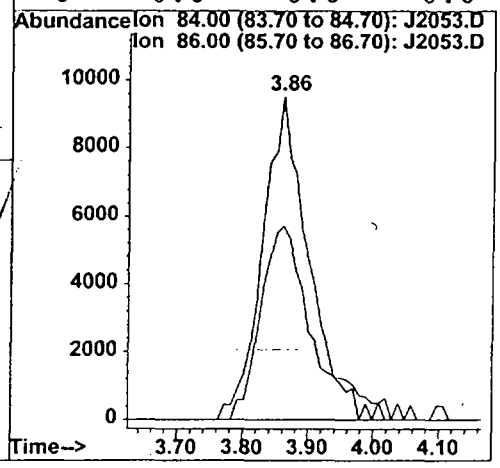




#14
Methylene chloride
Concen: 6.35 ppb
RT: 3.86 min Scan# 246
Delta R.T. 0.01 min
Lab File: J2053.D
Acq: 23 Oct 99 00:38

Tgt Ion:84 Resp: 48153

Ion	Ratio	Lower	Upper
84	100		
86	62.0	23.9	103.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SB1-8-1-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127016

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2078

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 12

Date Analyzed: 10/27/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg

CAS NO.	COMPOUND		Q
67-64-1	Acetone	4	JB
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	11	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	6	U
591-78-6	2-Hexanone	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
75-09-2	Methylene Chloride	5	JB
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	11	U
1330-20-7	Xylenes (Total)	6	U

Quantitation Report (Not Reviewed) 000117

Data File : C:\HPCHEM\1\DATA\102699\J2078.D
Acq On : 27 Oct 99 2:30
Sample : ;MSJ;;
Misc : 94127016;LOW;SO;
Quant Time: Nov 30 21:04 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.21	96	1310756	50.00 ppb	0.00
64) Chlorobenzene-d5	13.09	117	918614	50.00 ppb	0.00
80) 1,4-Dichlorobenzene-d4	18.07	152	297548	50.00 ppb	0.00

System Monitoring Compounds					
37) Dibromofluoromethane	6.21	113	410110	45.80 ppb	0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 91.60%		
41) 1,2-Dichloroethane-d4	6.75	65	280614	47.82 ppb	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 95.64%		
65) Toluene-d8	10.11	98	1140709	51.99 ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 103.98%		
78) Bromofluorobenzene	15.59	95	350220	47.29 ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 94.58%		

Target Compounds					Qvalue
14) Methylene chloride	3.86	84	34612	4.68 ppb	99
18) ~~Acetone~~ OK	~~3.35~~	~~43~~	~~6735~~	~~3.96 ppb~~	60
95) ~~cis-1,4-dichloro-2-butene~~	~~16.08~~	~~75~~	~~11488~~	~~5.12 ppb~~	31

SW 12/7/99

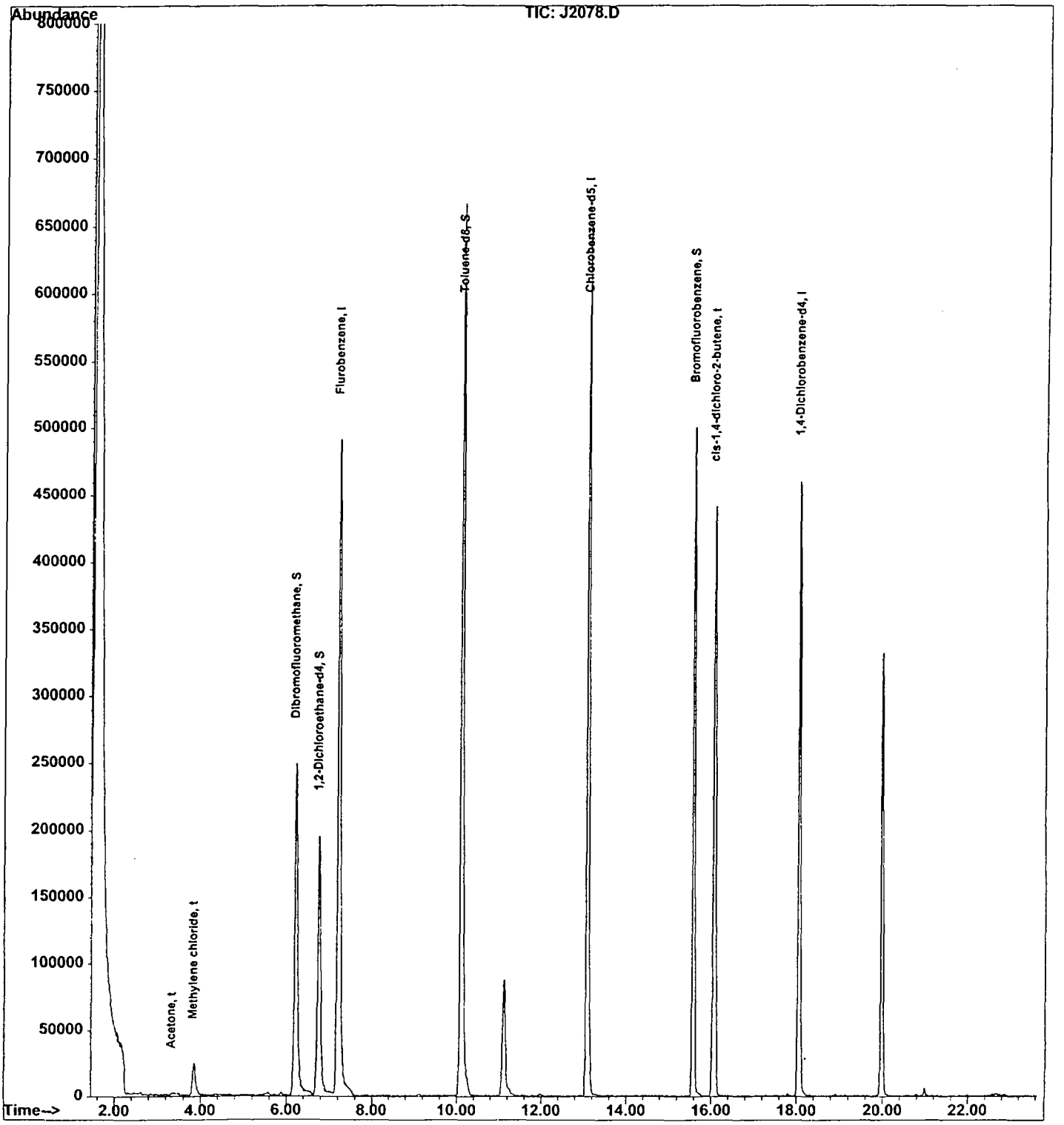
(#) = qualifier out of range (m) = manual integration

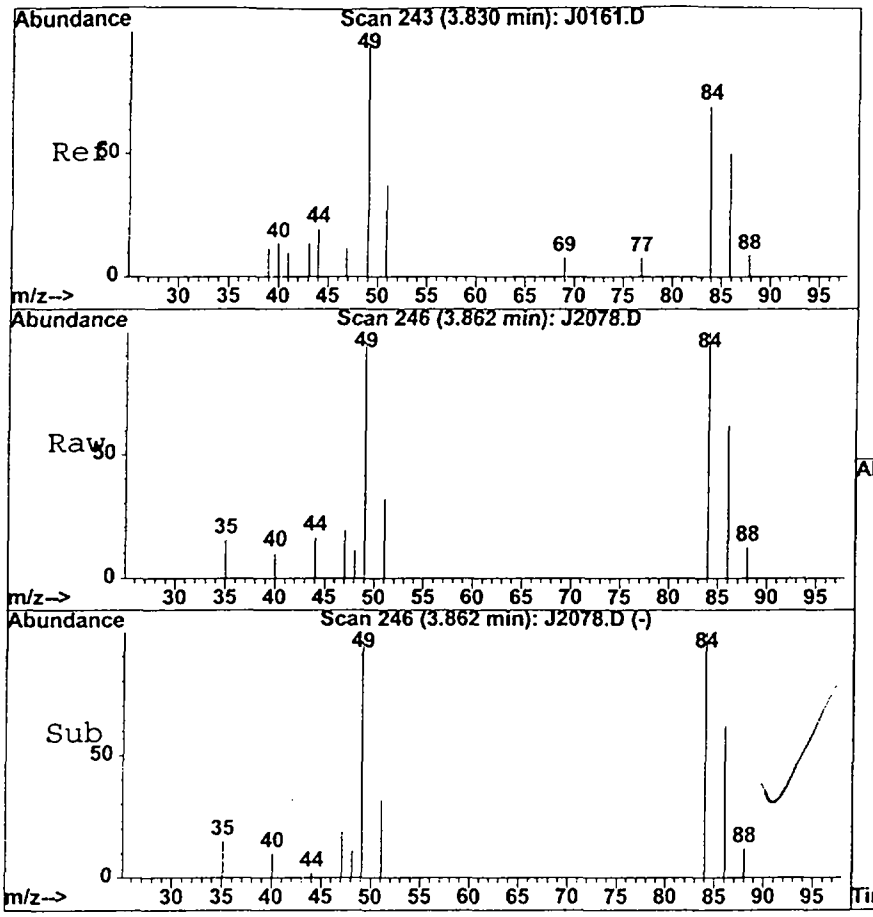
Quantitation Report

Data File : C:\HPCHEM\1\DATA\102699\J2078.D
Acq On : 27 Oct 99 2:30
Sample : ;MSJ;;
Misc : 94127016;LOW;SO;
Quant Time: Nov 30 21:04 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

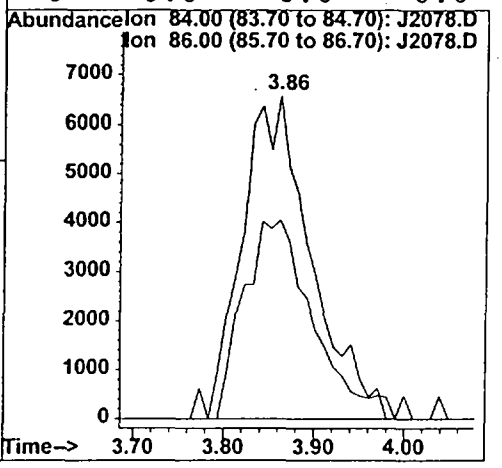


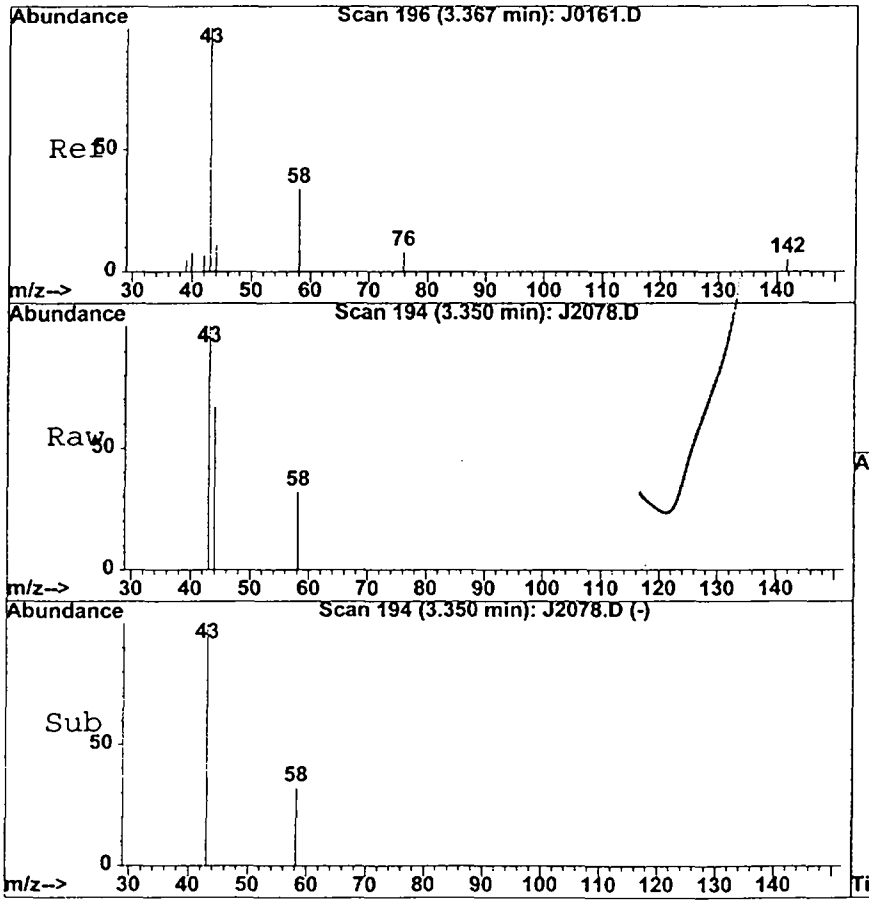


#14
Methylene chlor 000119
Concen: 4.68 ppb
RT: 3.86 min Scan# 246
Delta R.T. 0.01 min
Lab File: J2078.D
Acq: 27 Oct 99 2:30

Tgt Ion:84 Resp: 34612

Ion	Ratio	Lower	Upper
84	100		
86	62.8	23.9	103.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

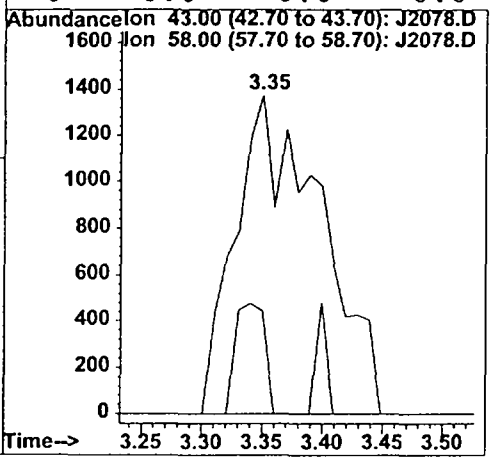




#18
Acetone
Concen: 3.96 ppb
RT: 3.35 min Scan# 194
Delta R.T. 0.00 min
Lab File: J2078.D
Acq: 27 Oct 99 2:30

Tgt Ion:43 Resp: 6735

Ion	Ratio	Lower	Upper
43	100		
58	11.9	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000120

SB1-8-2-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127017

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2055

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 7

Date Analyzed: 10/23/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: ____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg

CAS NO.	COMPOUND		Q
67-64-1	Acetone	10	J
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	11	U
78-93-3	2-Butanone	11	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	11	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	11	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
75-09-2	Methylene Chloride	6	
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	11	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report (QT Reviewed)

000121

Data File : C:\HPCHEM\1\DATA\102299\J2055.D
Acq On : 23 Oct 99 1:36
Sample : ;MSJ;;
Misc : 94127017;LOW;SO;
Quant Time: Dec 8 19:20 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.21	96	780848	50.00 ppb	0.00
64) Chlorobenzene-d5	13.10	117	500847	50.00 ppb	0.00
80) 1,4-Dichlorobenzene-d4	18.09	152	195273	50.00 ppb	0.01

System Monitoring Compounds					
37) Dibromofluoromethane	6.22	113	245902	46.10 ppb	0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 92.20%		
41) 1,2-Dichloroethane-d4	6.76	65	175300	50.14 ppb	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 100.28%		
65) Toluene-d8	10.12	98	629708	52.64 ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 105.28%		
78) Bromofluorobenzene	15.61	95	217526	53.87 ppb m	0.01
Surrogate Spike 50.000	Range 86 - 115		Recovery = 107.74%		

Target Compounds					Qvalue
14) Methylene chloride	3.84	84	22691	5.15 ppb	99
18) Acetone	3.35	43	9028	8.91 ppb	74
~~23) Vinyl acetate~~	~~5.05~~	~~43~~	~~127538~~	~~15.78 ppb~~	~~100~~
40) 2,2,4-Trimethylpentane	4.01	57	69988	11.29 ppb	50
58) Isobutyl acetate	8.46	43	46842	190.08 ppb	56
77) Isopropylbenzene	15.21	105	111054	8.85 ppb	98
83) n-Propylbenzene	16.08	91	117895	8.87 ppb	99
~~87) tert-Butylbenzene~~	~~17.12~~	~~119~~	~~27147~~	~~3.41 ppb~~	~~99~~
89) sec-Butylbenzene	17.61	105	137221	10.65 ppb	97
~~94) n-Butylbenzene~~	~~18.91~~	~~91~~	~~37704~~	~~4.13 ppb~~	~~84~~
~~96) trans-1,4-dichloro-2-buten~~	~~16.61~~	~~53~~	~~702~~	~~3.26 ppb~~	~~12~~
101) Naphthalene	21.99	128	128309	15.15 ppb	100

SW
12/7/99

(#) = qualifier out of range (m) = manual integration

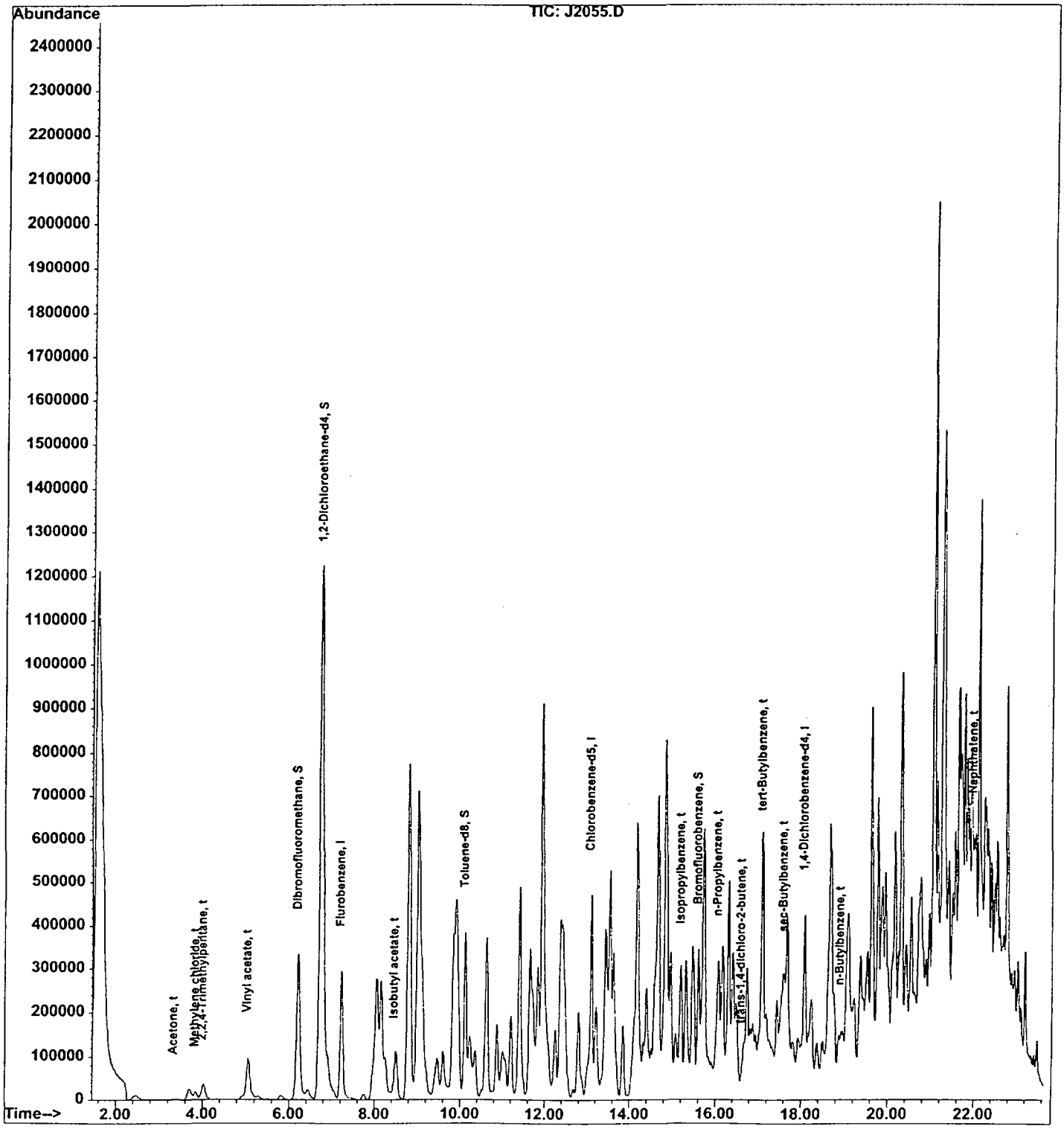
Quantitation Report

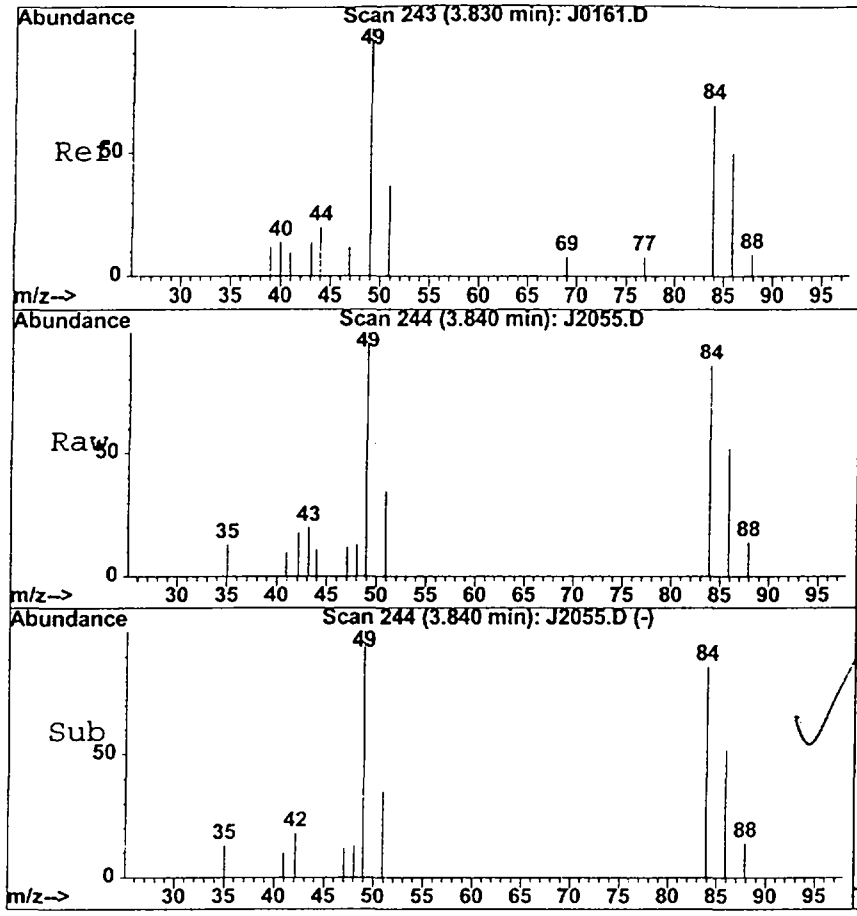
000122

Data File : C:\HPCHEM\1\DATA\102299\J2055.D
Acq On : 23 Oct 99 1:36
Sample : ;MSJ;;
Misc : 94127017;LOW;SO;
Quant Time: Dec 8 19:20 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

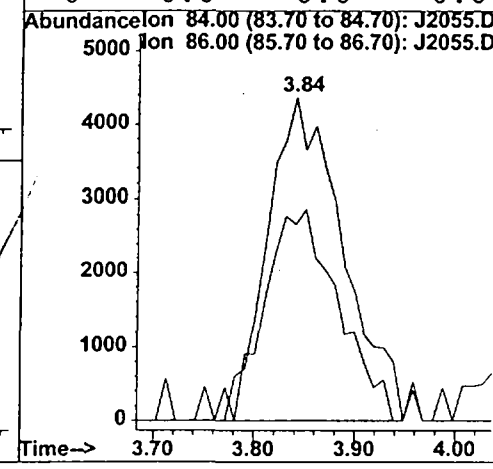


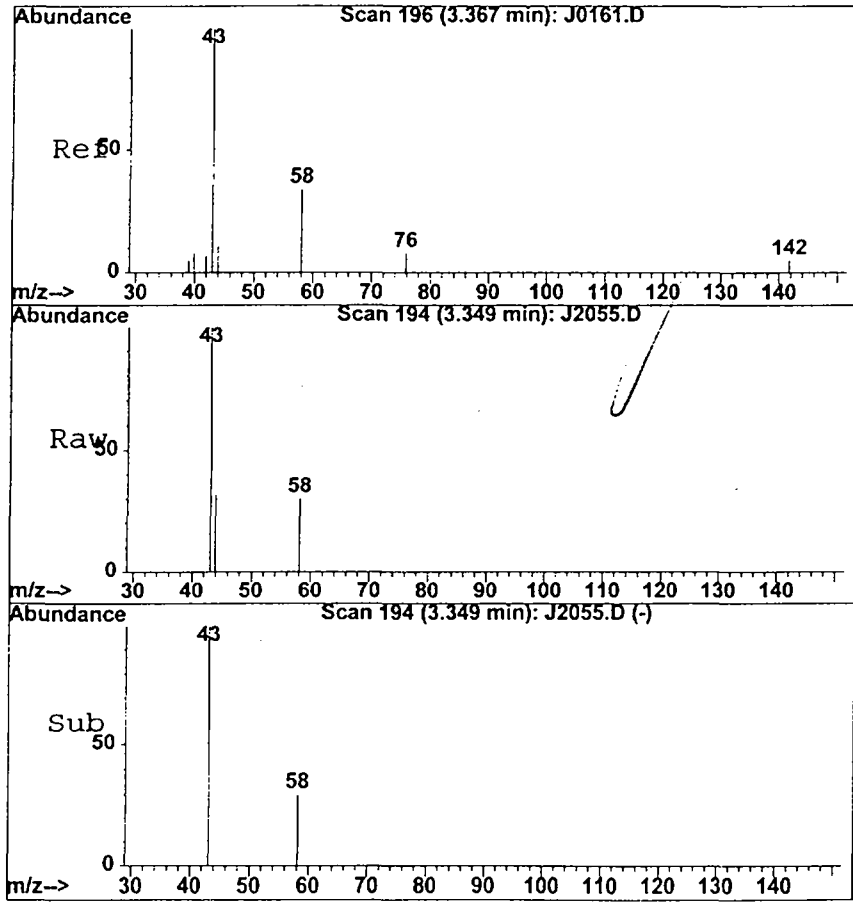


#14
Methylene chloride
Concen: 5.15 ppb
RT: 3.84 min Scan# 244
Delta R.T. -0.01 min
Lab File: J2055.D
Acq: 23 Oct 99 1:36

Tgt Ion:84 Resp: 22691

Ion	Ratio	Lower	Upper
84	100		
86	63.2	23.9	103.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

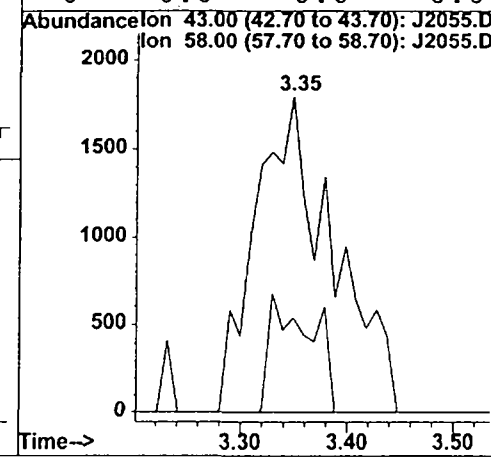




#18
Acetone
Concen: 8.91 ppb
RT: 3.35 min Scan# 194
Delta R.T. 0.00 min
Lab File: J2055.D
Acq: 23 Oct 99 1:36

Tgt Ion:43 Resp: 9028

Ion	Ratio	Lower	Upper
43	100		
58	20.4	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000124

S2-2-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127018

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2056

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 20

Date Analyzed: 10/23/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	12	U
71-43-2	Benzene	6	U
75-27-4	Bromodichloromethane	6	U
75-25-2	Bromoform	6	U
74-83-9	Bromomethane	12	U
78-93-3	2-Butanone	12	U
75-15-0	Carbon Disulfide	6	U
56-23-5	Carbon Tetrachloride	6	U
108-90-7	Chlorobenzene	6	U
124-48-1	Chlorodibromomethane	6	U
75-00-3	Chloroethane	12	U
67-66-3	Chloroform	6	U
74-87-3	Chloromethane	12	U
75-34-3	1,1-Dichloroethane	6	U
107-06-2	1,2-Dichloroethane	6	U
75-35-4	1,1-Dichloroethene	6	U
156-59-2	Cis-1,2-Dichloroethene	6	U
156-60-5	Trans-1,2-Dichloroethene	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	Cis-1,3-Dichloropropene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
100-41-4	Ethylbenzene	6	U
591-78-6	2-Hexanone	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
75-09-2	Methylene Chloride	6	U
100-42-5	Styrene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
127-18-4	Tetrachloroethene	6	U
108-88-3	Toluene	6	U
71-55-6	1,1,1-Trichloroethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
79-01-6	Trichloroethylene	6	U
75-01-4	Vinyl Chloride	12	U
1330-20-7	Xylenes (Total)	6	U

Quantitation Report (Not Reviewed) 000125

Data File : C:\HPCHEM\1\DATA\102299\J2056.D Vial: 100
Acq On : 23 Oct 99 2:06 Operator:
Sample : ;MSJ;; Inst : GC/MS Ins
Misc : 94127018;LOW;SO; Multiplr: 1.00
Quant Time: Nov 30 20:51 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.22	96	1339011	50.00 ppb	0.01
64) Chlorobenzene-d5	13.11	117	931482	50.00 ppb	0.01
80) 1,4-Dichlorobenzene-d4	18.09	152	305619	50.00 ppb	0.01

System Monitoring Compounds

37) Dibromofluoromethane	6.23	113	434975	47.55 ppb	0.01
Surrogate Spike 50.000	Range 86 - 118		Recovery = 95.10%		
41) 1,2-Dichloroethane-d4	6.78	65	277352	46.26 ppb	0.02
Surrogate Spike 50.000	Range 80 - 120		Recovery = 92.52%		
65) Toluene-d8	10.13	98	1122611	50.46 ppb	0.01
Surrogate Spike 50.000	Range 88 - 110		Recovery = 100.92%		
78) Bromofluorobenzene	15.61	95	343872	45.79 ppb	0.01
Surrogate Spike 50.000	Range 86 - 115		Recovery = 91.58%		

Target Compounds Qvalue

SM
12/27/99

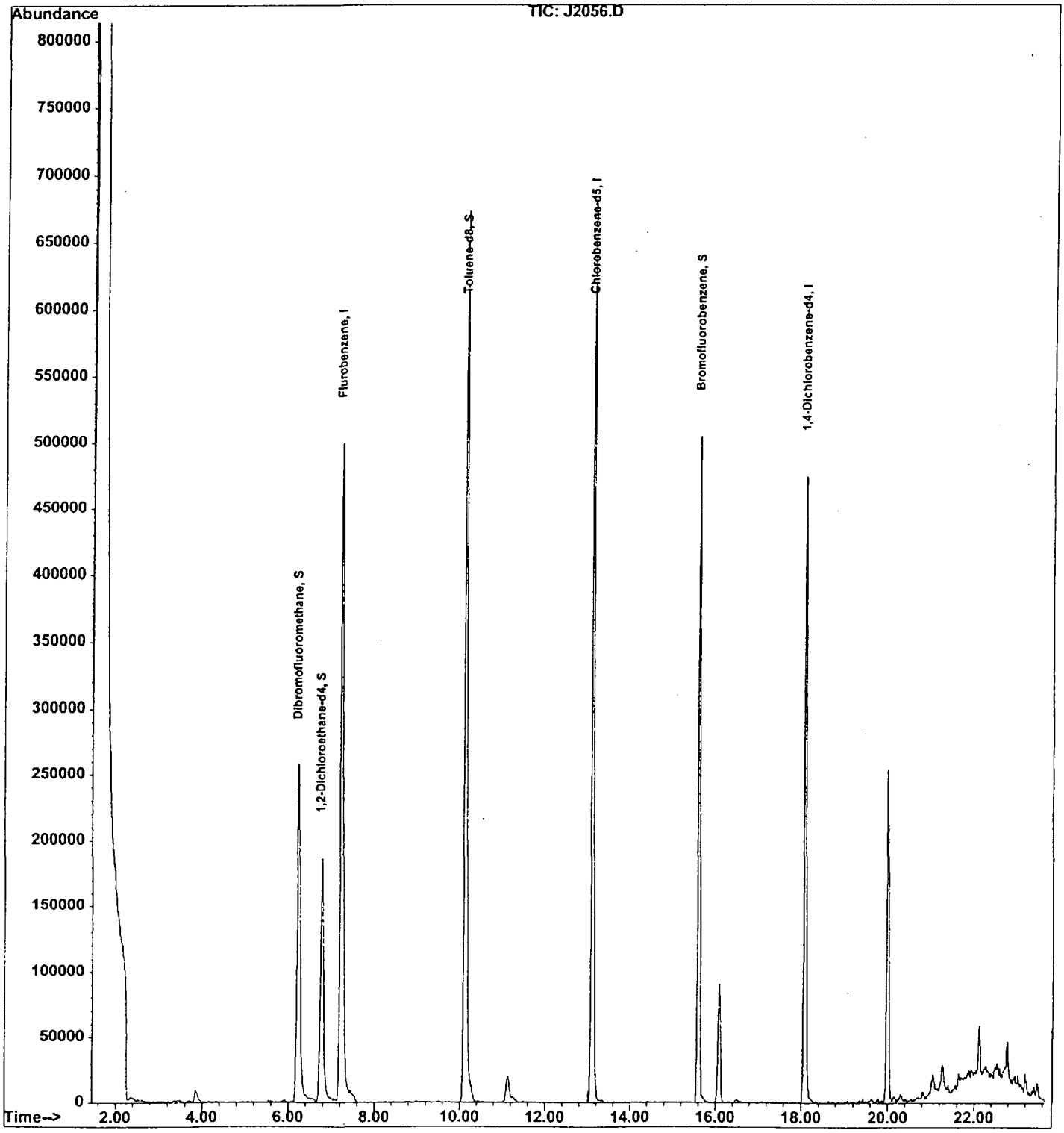
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102299\J2056.D
Acq On : 23 Oct 99 2:06
Sample : ;MSJ;;
Misc : 94127018;LOW;SO;
Quant Time: Nov 30 20:51 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SW2-2-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127019

Sample wt/vol: 5 (g/mL) ml

Lab File ID: I2283

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. _____

Date Analyzed: 10/18/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l

CAS NO.	COMPOUND		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2283.D
Acq On : 18 Oct 99 13:00 pm
Sample : ;MSI;;
Misc : 94127019;LOW;AQ;
Quant Time: Oct 18 13:21 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.63	96	675556	50.00 ug/l	0.06
70) chlorobenzene-d5	14.24	117	468363	50.00 ug/l	0.05
89) 1,4-dichlorobenzene-d4	16.79	152	218992	50.00 ug/l	0.02
System Monitoring Compounds					**%Recovery**
40) dibromofluromethane	7.26	113	211130	48.61 ug/l	97.23%
44) 1,2-dichloroethane-d4	8.00	65	211129	43.96 ug/l	87.92%
71) toluene-d8	11.33	98	582994	48.44 ug/l	96.87%
87) bromoflurobenzene	15.79	95	202697	44.99 ug/l	89.97%
Target Compounds					**Qvalue**

SU
10/18/99

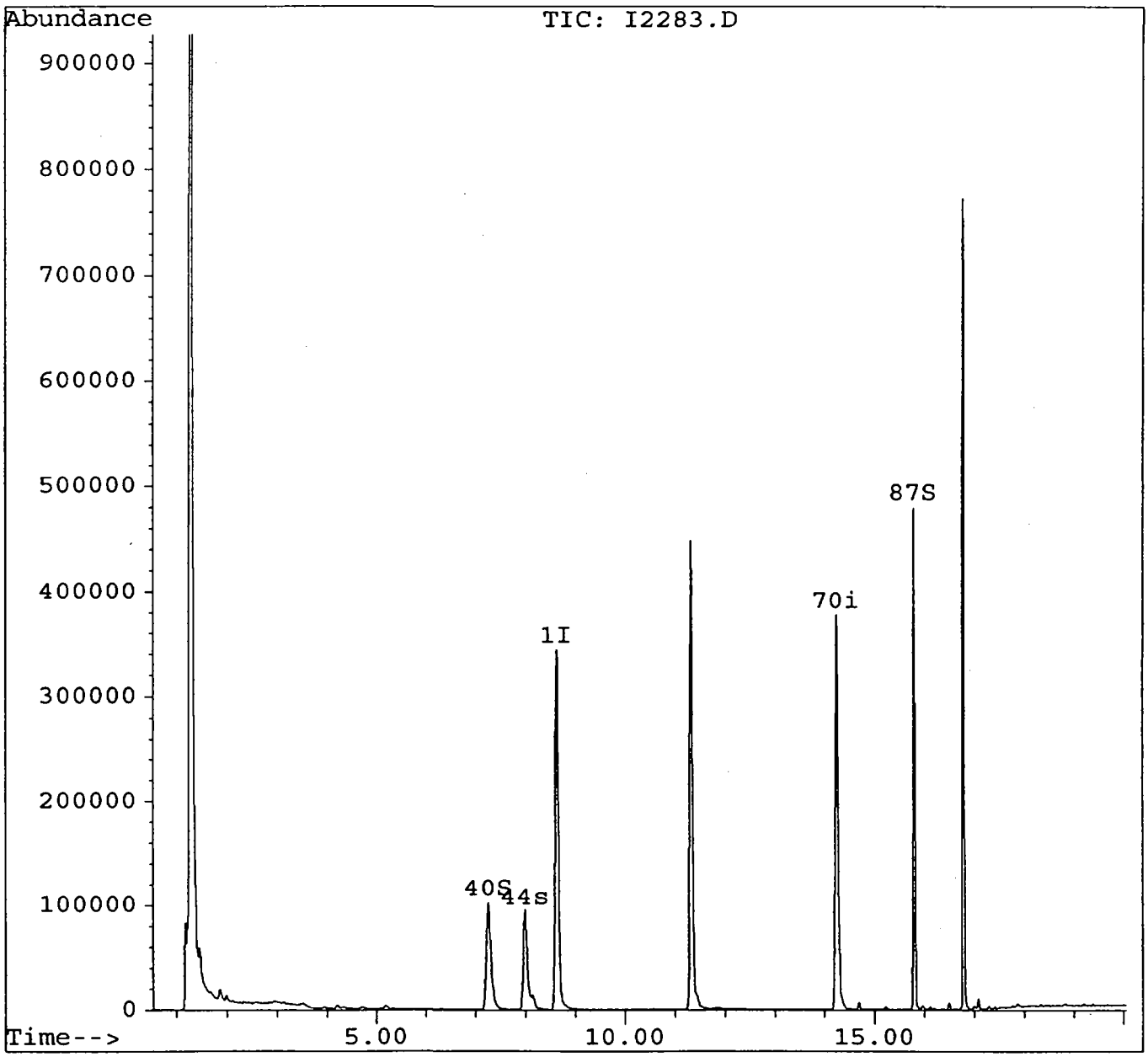
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2283.D
Acq On : 18 Oct 99 13:00 pm
Sample : ;MSI;;
Misc : 94127019;LOW;AQ;
Quant Time: Oct 18 13:21 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SW2-2-03

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127020

Sample wt/vol: 5 (g/mL) ml

Lab File ID: I2284

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. _____

Date Analyzed: 10/18/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l

CAS NO.	COMPOUND		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	J
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	3	J
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2284.D
Acq On : 18 Oct 99 13:29 pm
Sample : ;MSI;;
Misc : 94127020;LOW;AQ;
Quant Time: Oct 18 13:50 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.64	96	687125	50.00 ug/l	0.07
70) chlorobenzene-d5	14.24	117	491908	50.00 ug/l	0.05
89) 1,4-dichlorobenzene-d4	16.79	152	235824	50.00 ug/l	0.03
System Monitoring Compounds					**%Recovery**
40) dibromofluromethane	7.27	113	225790	51.11 ug/l	102.23%
44) 1,2-dichloroethane-d4	7.99	65	245026	50.16 ug/l	100.32%
71) toluene-d8	11.33	98	592981	46.91 ug/l	93.81%
87) bromoflurobenzene	15.79	95	217984	46.06 ug/l	92.13%
Target Compounds					**Qvalue**
46) 1,2-dichloroethane	8.15	62	20336	3.29 ug/l	86
73) chlorobenzene	14.30	112	50555	4.70 ug/l	98
101) 1,4-dichlorobenzene	16.80	146	48121	5.67 ug/l	94
102) 1,2-dichlorobenzene	17.07	146	232692	31.17 ug/l	92
110) naphthalene	18.31	128	35197	3.71 ug/l	100

ok 12/7/99

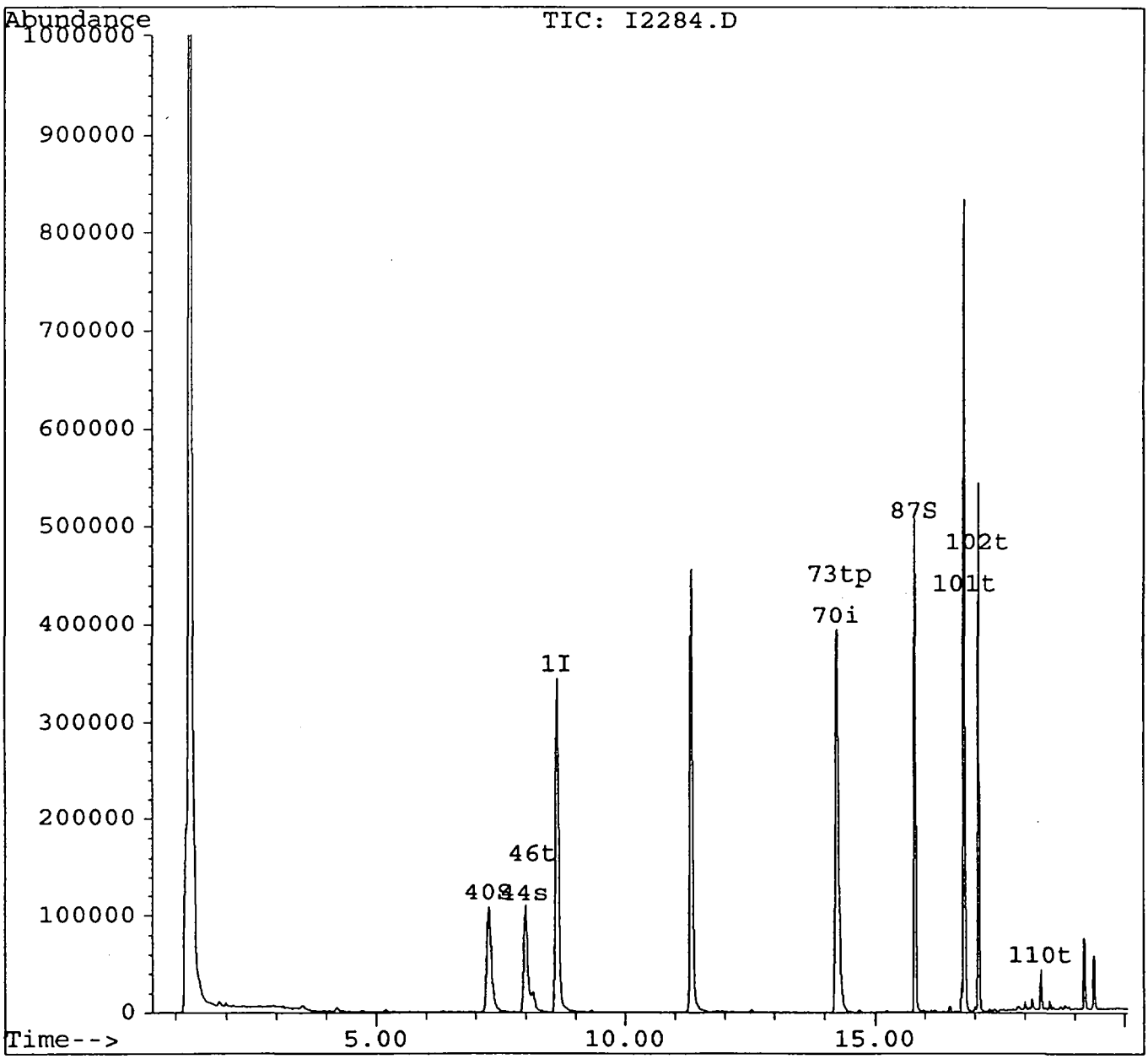
(#) = qualifier out of range (m) = manual integration

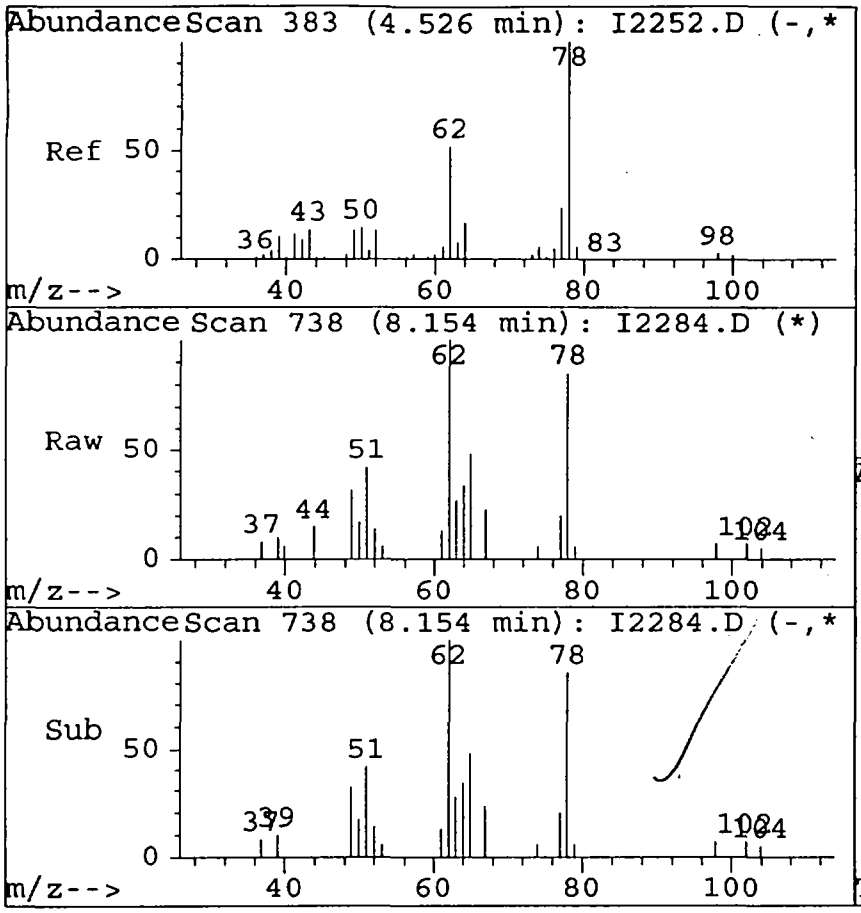
Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2284.D
Acq On : 18 Oct 99 13:29 pm
Sample : ;MSI;;
Misc : 94127020;LOW;AQ;
Quant Time: Oct 18 13:50 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

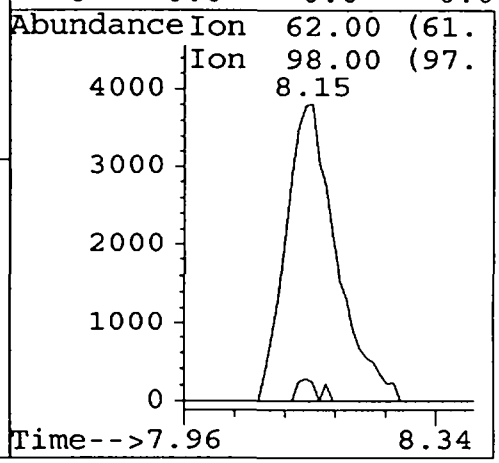


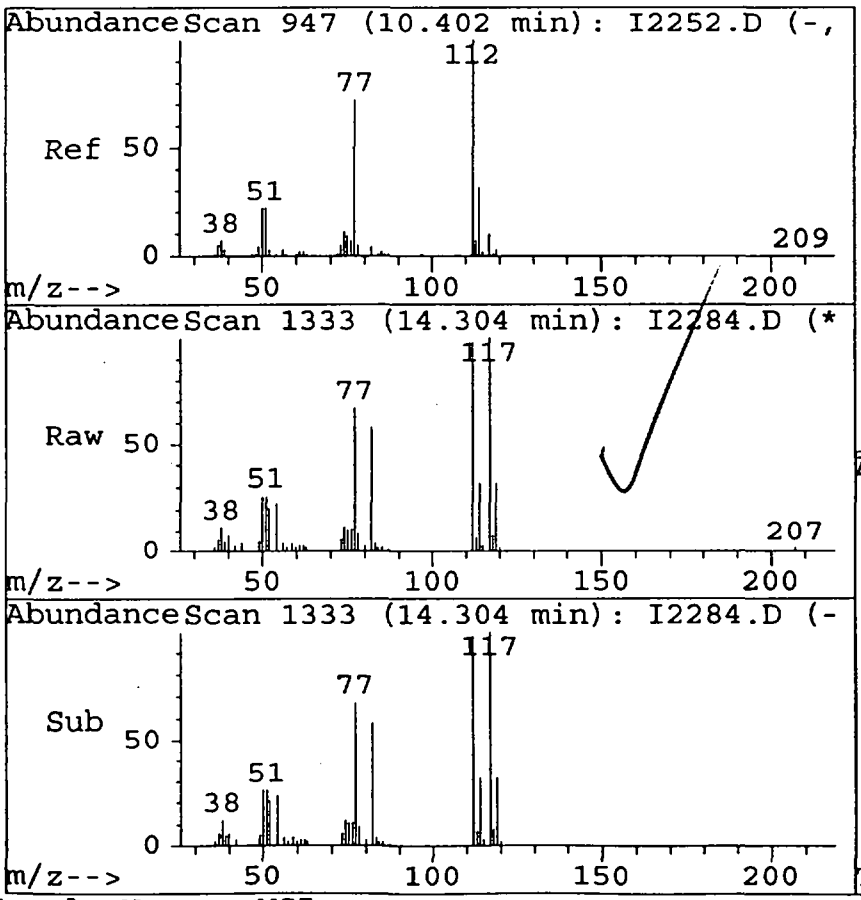


#46
1,2-dichloroethane
Concen: 3.29 ug/l
RT: 8.15 min Scan# 738
Delta R.T. 0.08 min
Lab File: I2284.D
Acq: 18 Oct 99 13:29 pm

Tgt Ion:62 Resp: 20336

Ion	Ratio	Lower	Upper
62	100		
98	6.6	0.0	41.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

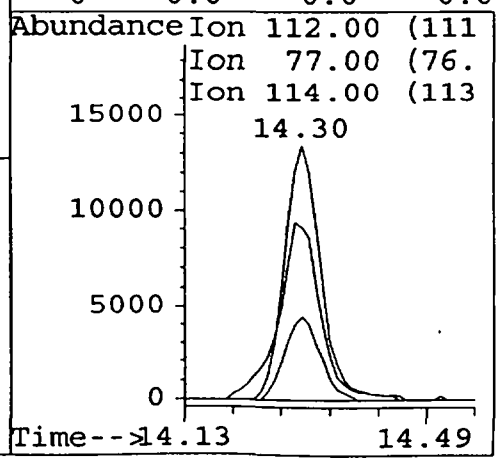




#73
chlorobenzene
Concen: 4.70 ug/l
RT: 14.30 min Scan# 1333
Delta R.T. 0.05 min
Lab File: I2284.D
Acq: 18 Oct 99 13:29 pm

Tgt Ion:112 Resp: 50555

Ion	Ratio	Lower	Upper
112	100		
77	66.0	34.1	94.1
114	33.0	1.8	61.8
0	0.0	0.0	0.0



Sample Name: ;MSI;;

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FB-101499

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127021

Sample wt/vol: 5 (g/mL) ml

Lab File ID: I2285

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. _____

Date Analyzed: 10/18/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l

CAS NO.	COMPOUND		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2285.D
Acq On : 18 Oct 99 13:58 pm
Sample : ;MSI;;
Misc : 94127021;LOW;AQ;
Quant Time: Oct 18 14:18 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.64	96	692019	50.00 ug/l	0.07
70) chlorobenzene-d5	14.24	117	532311	50.00 ug/l	0.05
89) 1,4-dichlorobenzene-d4	16.79	152	273359	50.00 ug/l	0.03

System Monitoring Compounds					%Recovery
40) dibromoflurometh ane	7.25	113	231723	52.09 ug/l	104.17%
44) 1,2-dichloroethane-d4	7.99	65	260510	52.95 ug/l	105.91%
71) toluene-d8	11.33	98	602067	44.01 ug/l	88.02%
87) bromoflurobenzene	15.79	95	250330	48.88 ug/l	97.77%

Target Compounds Qvalue

SM
10/18/99

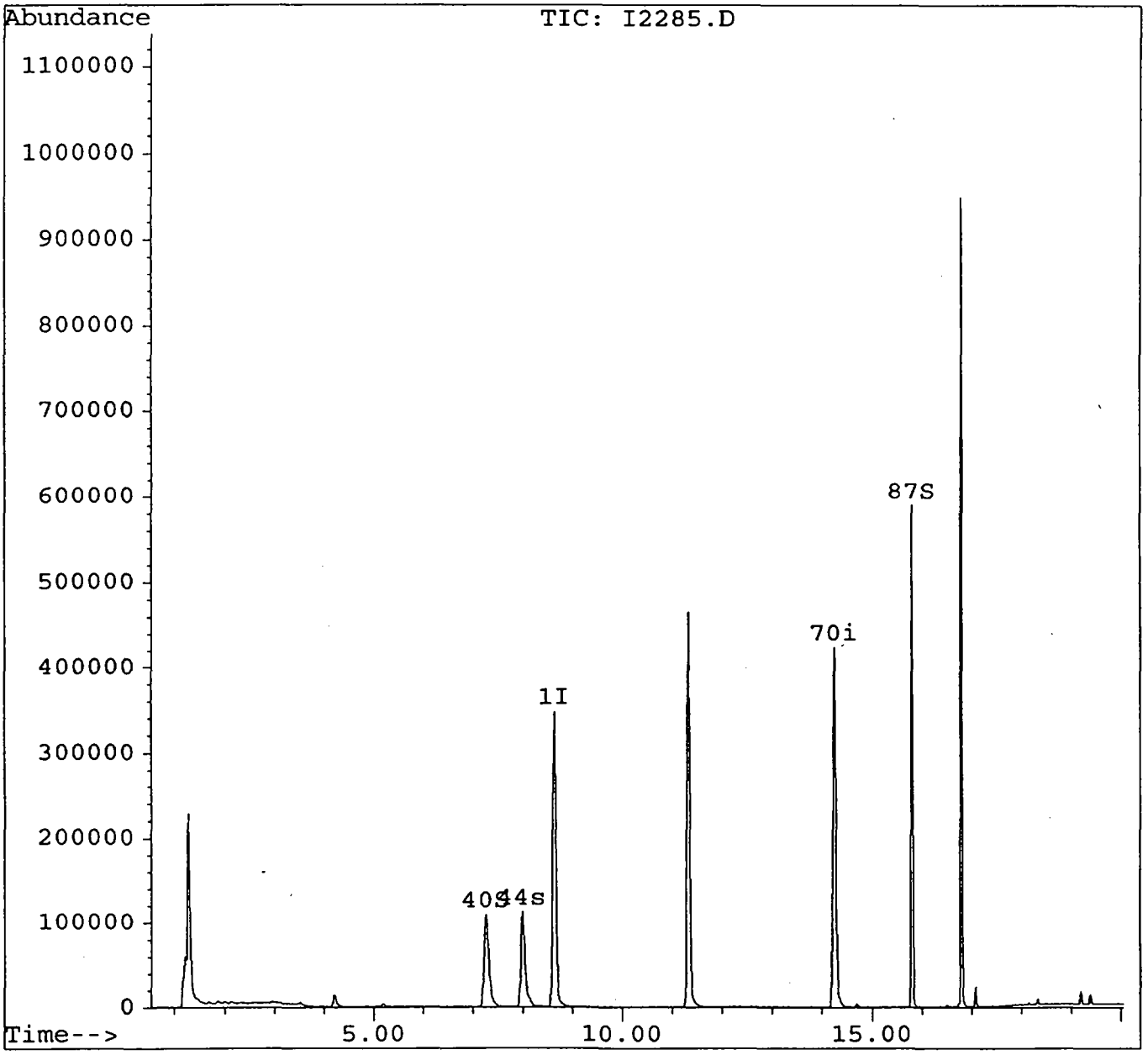
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2285.D
Acq On : 18 Oct 99 13:58 pm
Sample : ;MSI;;
Misc : 94127021;LOW;AQ;
Quant Time: Oct 18 14:18 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-1014991

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127022

Sample wt/vol: 5 (g/mL) ml

Lab File ID: I2286

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. _____

Date Analyzed: 10/18/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2286.D
Acq On : 18 Oct 99 14:26 pm
Sample : ;MSI;;
Misc : 94127022;LOW;AQ;
Quant Time: Oct 18 14:47 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.63	96	712506	50.00 ug/l	0.06
70) chlorobenzene-d5	14.24	117	551983	50.00 ug/l	0.05
89) 1,4-dichlorobenzene-d4	16.79	152	286877	50.00 ug/l	0.02

System Monitoring Compounds					%Recovery
40) dibromoflurometh ane	7.26	113	241641	52.75 ug/l	105.51%
44) 1,2-dichloroethane-d4	7.99	65	271236	53.55 ug/l	107.10%
71) toluene-d8	11.33	98	624374	44.01 ug/l	88.03%
87) bromoflurobenzene	15.79	95	259259	48.82 ug/l	97.65%

Target Compounds					Qvalue
~~102) 1,2-dichlorobenzene~~	~~17.08~~	~~146~~	~~51780~~	~~5.70 ug/l~~	~~92~~

SU
10/18/99

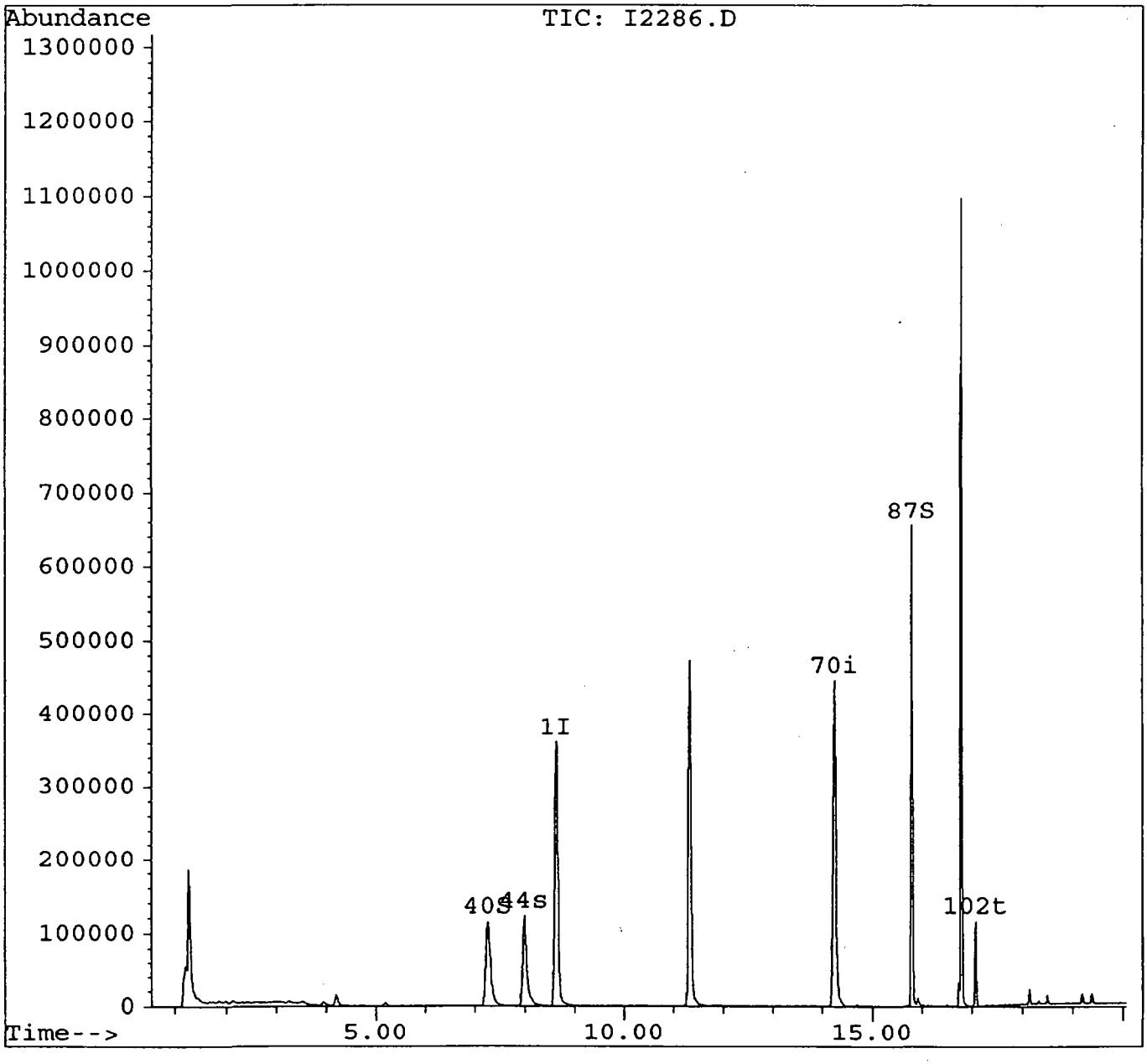
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2286.D
Acq On : 18 Oct 99 14:26 pm
Sample : ;MSI;;
Misc : 94127022;LOW;AQ;
Quant Time: Oct 18 14:47 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000140

TB-1014992

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127023

Sample wt/vol: 5 (g/mL) ml

Lab File ID: I2287

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. _____

Date Analyzed: 10/18/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2287.D
Acq On : 18 Oct 99 14:56 pm
Sample : ;MSI;;
Misc : 94127023;LOW;AQ;
Quant Time: Oct 18 15:17 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.63	96	683795	50.00 ug/l	0.06
70) chlorobenzene-d5	14.24	117	511306	50.00 ug/l	0.05
89) 1,4-dichlorobenzene-d4	16.78	152	249048	50.00 ug/l	0.02

System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.25	113	231461	52.65 ug/l	105.31%
44) 1,2-dichloroethane-d4	7.99	65	259258	53.33 ug/l	106.67%
71) toluene-d8	11.33	98	596032	45.36 ug/l	90.72%
87) bromoflurobenzene	15.79	95	231982	47.16 ug/l	94.33%

Target Compounds					Qvalue
~~99) 1,3-dichlorobenzene~~	~~16.74~~	~~146~~	~~26216~~	~~3.08 ug/l~~	~~94~~
~~101) 1,4-dichlorobenzene~~	~~16.80~~	~~146~~	~~36014~~	~~4.02 ug/l~~	~~95~~
~~102) 1,2-dichlorobenzene~~	~~17.07~~	~~146~~	~~105206~~	~~13.34 ug/l~~	~~92~~
~~108) 1,2,4-trichlorobenzene~~	~~18.14~~	~~180~~	~~23763~~	~~6.12 ug/l~~	~~98~~

SU
10/18/99

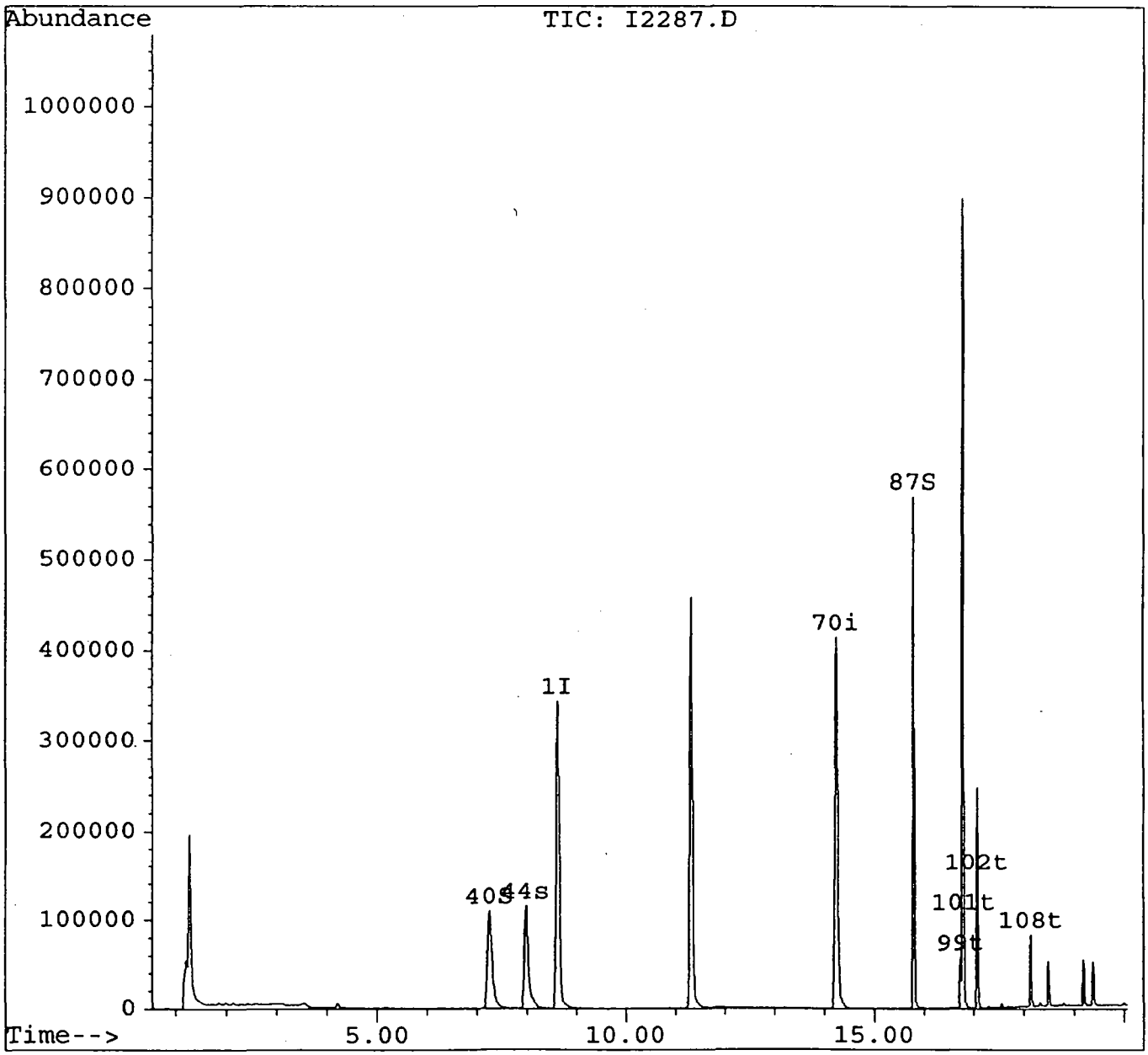
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2287.D
Acq On : 18 Oct 99 14:56 pm
Sample : ;MSI;;
Misc : 94127023;LOW;AQ;
Quant Time: Oct 18 15:17 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-1014993

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127024

Sample wt/vol: 5 (g/mL) ml

Lab File ID: I2288

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. _____

Date Analyzed: 10/18/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2288.D
Acq On : 18 Oct 99 15:24 pm
Sample : ;MSI;;
Misc : 94127024;LOW;AQ;
Quant Time: Oct 18 15:45 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.63	96	671969	50.00 ug/l	0.06
70) chlorobenzene-d5	14.24	117	480547	50.00 ug/l	0.05
89) 1,4-dichlorobenzene-d4	16.78	152	223144	50.00 ug/l	0.02

System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.25	113	226756	52.49 ug/l	104.98%
44) 1,2-dichloroethane-d4	7.99	65	254409	53.26 ug/l	106.51%
71) toluene-d8	11.33	98	578034	46.81 ug/l	93.61%
87) bromoflurobenzene	15.79	95	209837	45.39 ug/l	90.78%

Target Compounds					Qvalue
~~99) 1,3-dichlorobenzene~~	~~16.74~~	~~146~~	~~76732~~	~~10.07 ug/l~~	~~92~~
~~101) 1,4-dichlorobenzene~~	~~16.80~~	~~146~~	~~86891~~	~~10.82 ug/l~~	~~93~~
~~102) 1,2-dichlorobenzene~~	~~17.07~~	~~146~~	~~340630~~	~~48.22 ug/l~~	~~92~~
~~108) 1,2,4-trichlorobenzene~~	~~18.14~~	~~180~~	~~136493~~	~~39.25 ug/l~~	~~98~~

SW
10/18/99

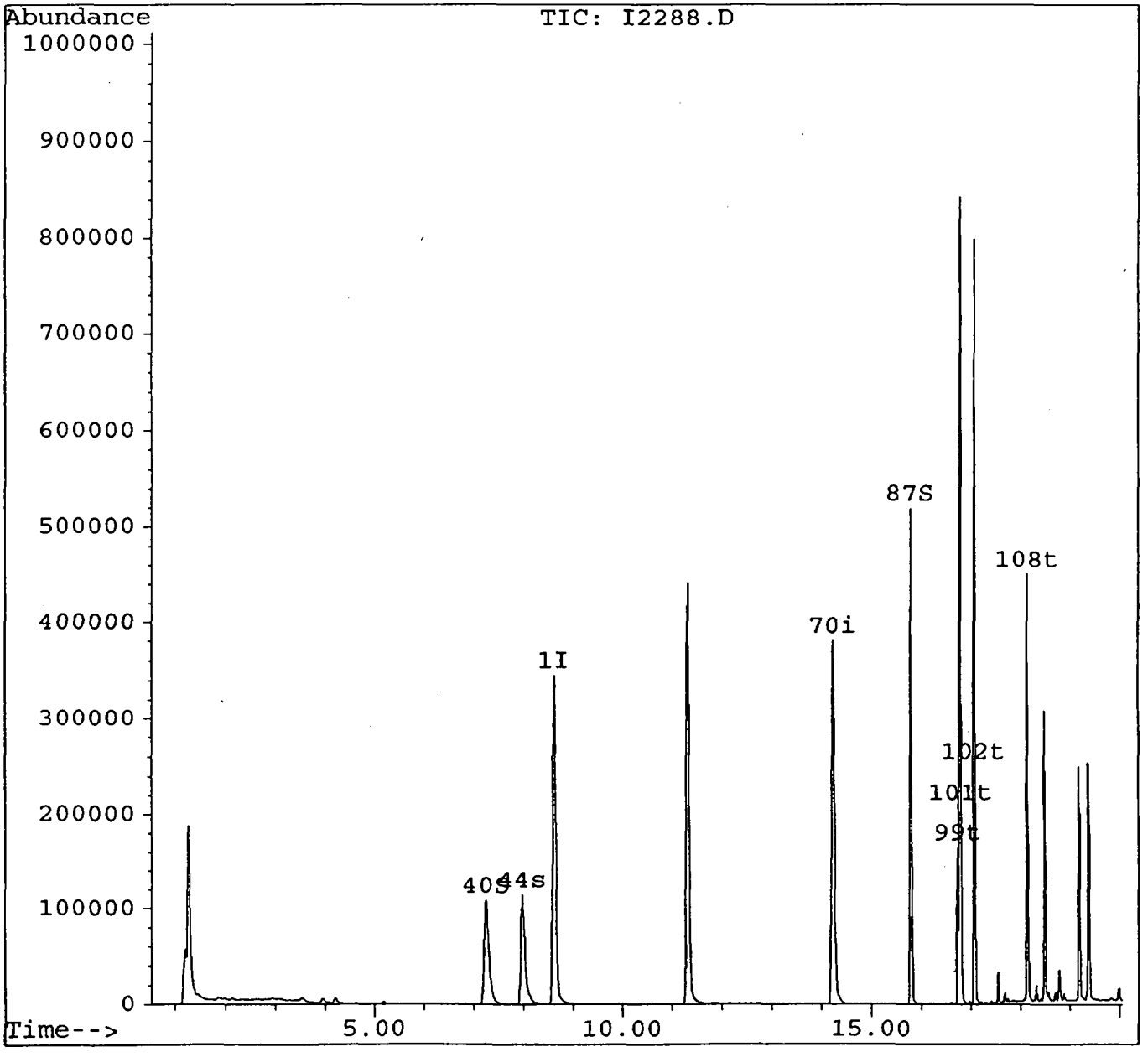
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2288.D
Acq On : 18 Oct 99 15:24 pm
Sample : ;MSI;;
Misc : 94127024;LOW;AQ;
Quant Time: Oct 18 15:45 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

S2-3-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 94127025

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2057

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. 56

Date Analyzed: 10/23/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	23	U
71-43-2	Benzene	11	U
75-27-4	Bromodichloromethane	11	U
75-25-2	Bromoform	11	U
74-83-9	Bromomethane	23	U
78-93-3	2-Butanone	23	U
75-15-0	Carbon Disulfide	11	U
56-23-5	Carbon Tetrachloride	11	U
108-90-7	Chlorobenzene	11	U
124-48-1	Chlorodibromomethane	11	U
75-00-3	Chloroethane	23	U
67-66-3	Chloroform	11	U
74-87-3	Chloromethane	23	U
75-34-3	1,1-Dichloroethane	11	U
107-06-2	1,2-Dichloroethane	11	U
75-35-4	1,1-Dichloroethene	11	U
156-59-2	Cis-1,2-Dichloroethene	11	U
156-60-5	Trans-1,2-Dichloroethene	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	Cis-1,3-Dichloropropene	11	U
10061-02-6	Trans-1,3-Dichloropropene	11	U
100-41-4	Ethylbenzene	11	U
591-78-6	2-Hexanone	23	U
108-10-1	4-Methyl-2-Pentanone	23	U
75-09-2	Methylene Chloride	11	U
100-42-5	Styrene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
127-18-4	Tetrachloroethene	11	U
108-88-3	Toluene	11	U
71-55-6	1,1,1-Trichloroethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
79-01-6	Trichloroethylene	11	U
75-01-4	Vinyl Chloride	23	U
1330-20-7	Xylenes (Total)	11	U

Quantitation Report (Not Reviewed)

000147

Data File : C:\HPCHEM\1\DATA\102299\J2057.D Vial: 100
Acq On : 23 Oct 99 2:35 Operator:
Sample : ;MSJ;; Inst : GC/MS Ins
Misc : 94127025;LOW;SO; Multiplr: 1.00
Quant Time: Nov 30 20:51 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.23	96	912536	50.00 ppb	0.02
64) Chlorobenzene-d5	13.11	117	576805	50.00 ppb	0.01
80) 1,4-Dichlorobenzene-d4	18.09	152	138605	50.00 ppb	0.01

System Monitoring Compounds

37) Dibromofluoromethane	6.24	113	315946	50.68 ppb	0.02
Surrogate Spike 50.000	Range 86 - 118		Recovery = 101.36%		
41) 1,2-Dichloroethane-d4	6.78	65	214013	52.38 ppb	0.02
Surrogate Spike 50.000	Range 80 - 120		Recovery = 104.76%		
65) Toluene-d8	10.13	98	757919	55.02 ppb	0.01
Surrogate Spike 50.000	Range 88 - 110		Recovery = 110.04%#		
78) Bromofluorobenzene	15.61	95	189887	40.84 ppb	0.01
Surrogate Spike 50.000	Range 86 - 115		Recovery = 81.68%#		

Target Compounds Qvalue

SW
12/27/99

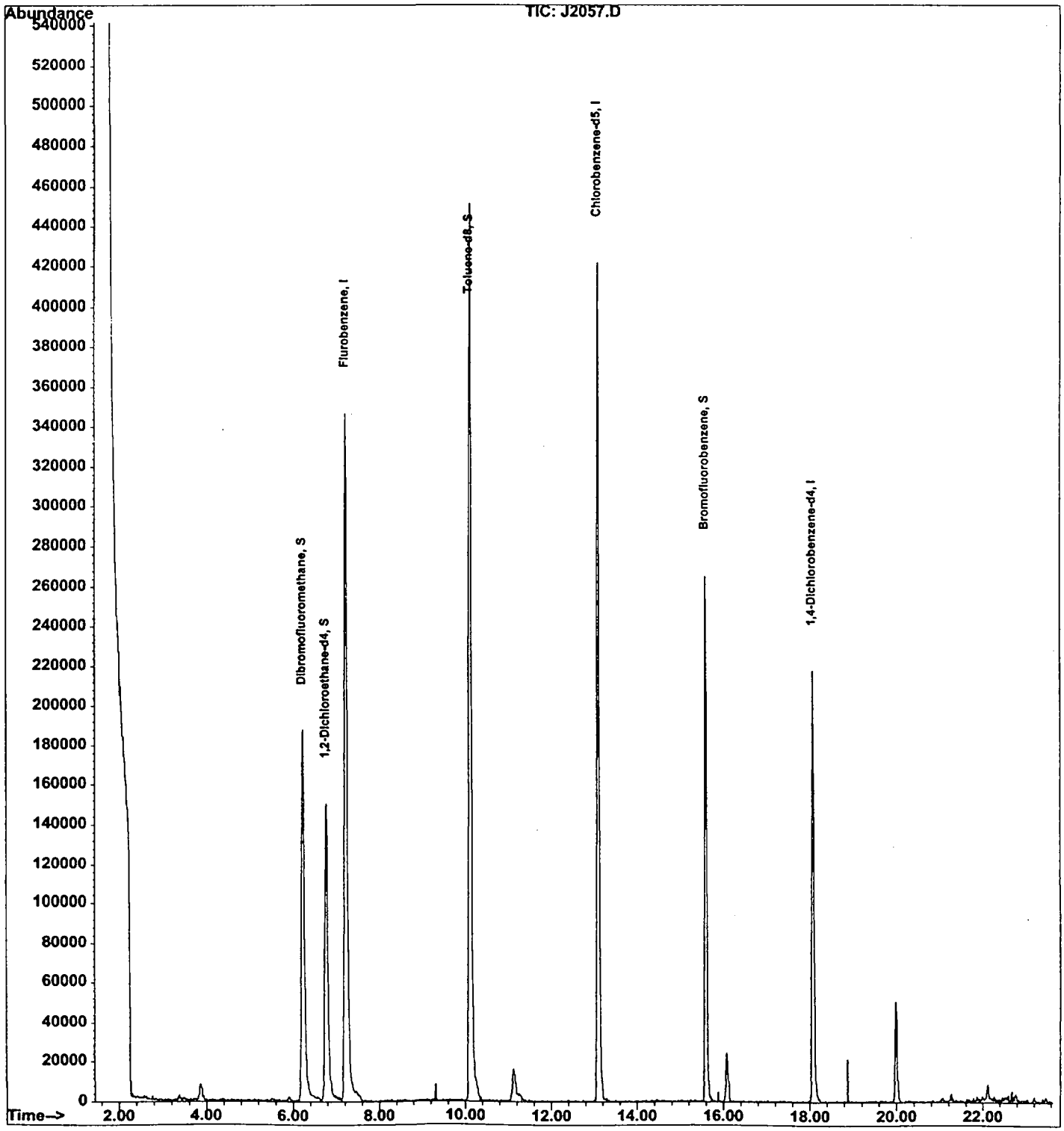
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102299\J2057.D
Acq On : 23 Oct 99 2:35
Sample : ;MSJ;;
Misc : 94127025;LOW;SO;
Quant Time: Nov 30 20:51 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SW2-3-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127026

Sample wt/vol: 5 (g/mL) ml

Lab File ID: I2292

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: not dec. _____

Date Analyzed: 10/18/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l

CAS NO.	COMPOUND		Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2292.D
Acq On : 18 Oct 99 16:52 pm
Sample : ;MSI;;
Misc : 94127026;LOW;AQ;
Quant Time: Oct 18 17:13 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.62	96	655095	50.00 ug/l	0.05
70) chlorobenzene-d5	14.23	117	475854	50.00 ug/l	0.04
89) 1,4-dichlorobenzene-d4	16.79	152	227157	50.00 ug/l	0.02

System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.25	113	216929	51.51 ug/l	103.02%
44) 1,2-dichloroethane-d4	7.98	65	247504	53.15 ug/l	106.29%
71) toluene-d8	11.32	98	562406	45.99 ug/l	91.98%
87) bromoflurobenzene	15.78	95	210068	45.89 ug/l	91.78%

Target Compounds Qvalue

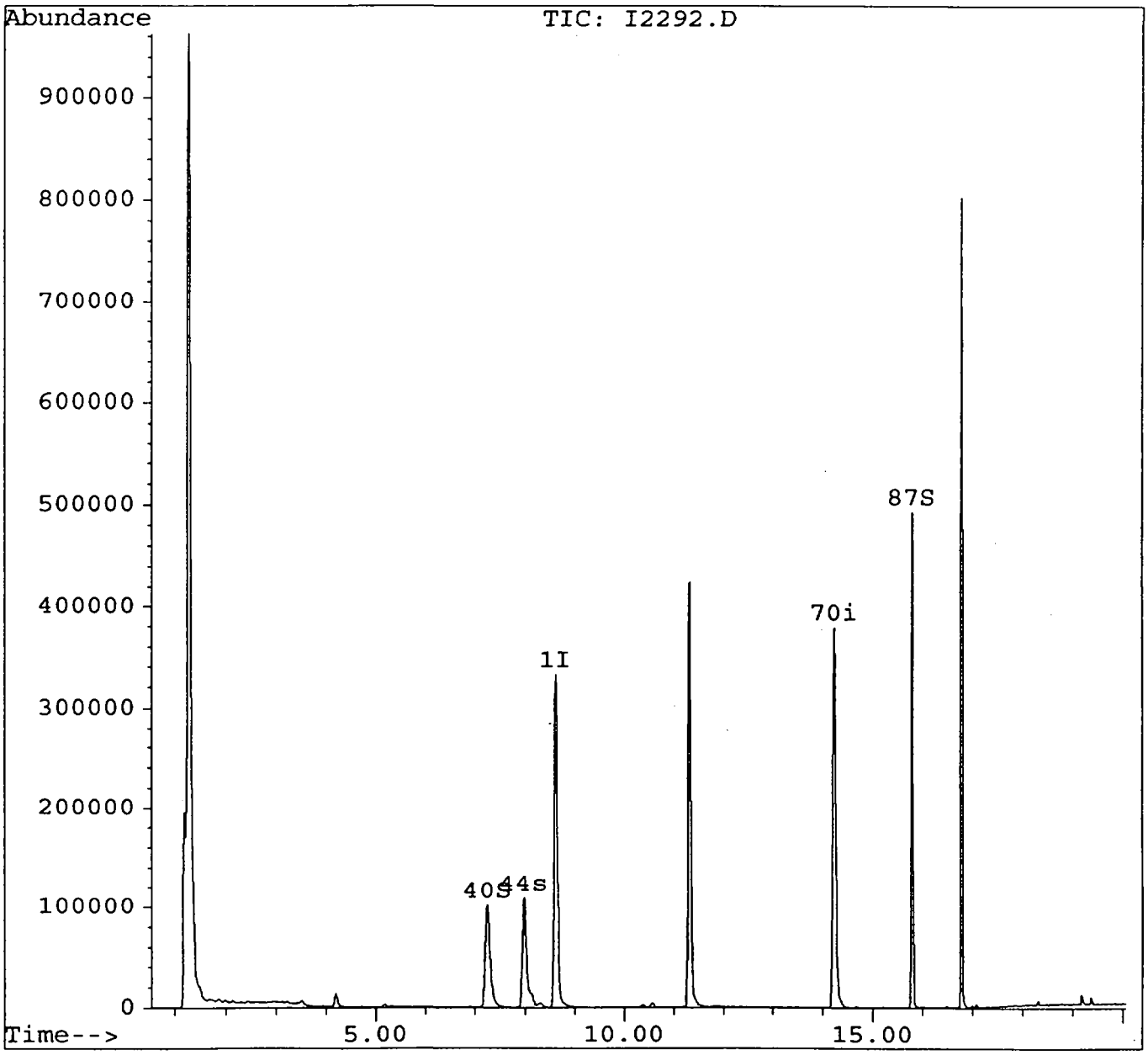
SW
10/18/99

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2292.D
Acq On : 18 Oct 99 16:52 pm
Sample : ;MSI;;
Misc : 94127026;LOW;AQ;
Quant Time: Oct 18 17:13 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



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11.7

Calibration Table Report
Method: 8260044W.M
Title: Method 8260 FOR WATERS
Last Calibration: Wed Oct 13 09:44:24 1999

Calibration Files

Compound	2 I2094.D	5 I2093.D	10 I2092.D	20 I2091.D	50 I2090.D	100 I2089.D	200 I2088.D	500 I2087.D	Avg	Stdev
Fluorobenzene	ISTD									
dichlorodifluoromethane	0.486	0.435	0.413	0.491	0.455	0.459	0.449	0.431	0.452	5.91
1,3-Butadiene	0.213	0.184	0.227	0.237	0.218	0.240	0.255	0.255	0.229	10.32
chlorotrifluoroethene									0.000	0.00
chloromethane	0.570	0.425	0.417	0.451	0.441	0.472	0.504	0.421	0.463	11.30
vinyl chloride	0.443	0.401	0.395	0.455	0.414	0.448	0.462	0.446	0.433	5.97
bromomethane	0.403	0.293	0.290	0.329	0.284	0.226	0.016		0.263	46.17
chloroethane	0.190	0.173	0.170	0.188	0.172	0.168	0.147		0.173	8.27
trichlorofluoromethane	0.396	0.365	0.338	0.405	0.374	0.380	0.378	0.395	0.379	5.60
1,2-dichloro-1,1,2 trifluoroethane									0.000	0.00
Diethyl ether	0.141	0.170	0.184	0.169	0.164	0.158	0.169	0.150	0.163	8.06
Ethyl Mercaptan	0.038	0.045	0.054	0.056	0.039	0.040	0.040	0.036	0.043	17.71
freon	0.418	0.489	0.487	0.486	0.373	0.379	0.375	0.318	0.416	15.68
Tertiary butyl alcohol		0.049	0.035	0.040	0.039	0.033	0.029	0.023	0.035	23.70
1,1-dichloroethene	0.335	0.278	0.289	0.263	0.179	0.184	0.187	0.168	0.235	26.94
Acetonitrile	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	39.56
methylene chloride	0.726	0.548	0.472	0.410	0.365	0.343	0.358	0.313	0.442	31.23
acrolein	0.052	0.040	0.029	0.029	0.028	0.028	0.028	0.024	0.032	28.62
acrylonitrile	0.041	0.035	0.042	0.043	0.038	0.043	0.045	0.046	0.042	8.50
trans-1,2-dichloroethene	0.315	0.278	0.318	0.313	0.291	0.296	0.301	0.259	0.296	6.87
acetone	0.161	0.133	0.130	0.140	0.126	0.130	0.139	0.134	0.136	8.05
carbon disulfide	1.641	1.424	1.490	1.548	1.446	1.463	1.452	1.314	1.472	6.45
hexane	0.752	0.729	0.751	0.760	0.702	0.701	0.675	0.563	0.704	9.13
1,1-dichloroethane	0.730	0.684	0.751	0.746	0.703	0.693	0.728	0.685	0.715	3.79
methyl t-butyl ether	0.529	0.476	0.500	0.535	0.560	0.567	0.605	0.551	0.540	7.48
vinyl acetate	0.351	0.508	0.594	0.571	0.608	0.598	0.642	0.583	0.557	16.42
2-chloro-1,3-butadiene	0.447	0.409	0.458	0.515	0.500	0.527	0.547	0.545	0.493	10.21
2,2-dichloropropane	0.319	0.323	0.362	0.362	0.377	0.400	0.449	0.459	0.382	13.67
cis-1,2-dichloroethene	0.323	0.298	0.330	0.324	0.311	0.306	0.321	0.283	0.312	5.02
2-butanone		0.016	0.026	0.028	0.029	0.032	0.031	0.025	0.027	20.51
Idomethane	0.662	0.558	0.570	0.572	0.487	0.432	0.373	0.451	0.513	18.26
Allyl chloride	1.641	1.424	1.486	1.534	1.427	1.445	1.436	1.299	1.462	6.73
cyclohexane	0.693	0.755	0.774	0.805	0.744	0.752	0.756	0.659	0.742	6.19
Ethyl Cyanide	0.034	0.031	0.034	0.035	0.034	0.036	0.034	0.028	0.033	7.38
Ethyl Acetate	0.715	0.752	0.785	0.798	0.730	0.726	0.694	0.601	0.725	8.43
bromochloromethane	0.152	0.146	0.167	0.155	0.148	0.144	0.152	0.142	0.151	5.33
tetrahydrofuran	0.085	0.076	0.089	0.088	0.092	0.093	0.089	0.078	0.086	7.29
chloroform	0.624	0.586	0.650	0.641	0.614	0.602	0.645	0.617	0.622	3.58
1,1,1-trichloroethane	0.362	0.356	0.393	0.412	0.395	0.408	0.442	0.443	0.401	8.06
dibromofluromethane	0.316	0.324	0.320	0.315	0.322	0.314	0.329	0.331	0.321	1.99
carbon tetrachloride	0.224	0.242	0.268	0.301	0.298	0.323	0.353	0.363	0.296	16.82
1,1-dichloropropene	0.491	0.486	0.544	0.563	0.514	0.520	0.564	0.533	0.527	5.62
2,2,4-trimethylpentane	0.752	0.729	0.751	0.760	0.702	0.704	0.680	0.568	0.706	8.85
1,2-dichloroethane-d4	0.366	0.370	0.371	0.360	0.342	0.331	0.348	0.356	0.355	3.98
benzene	1.806	1.499	1.626	1.493	1.338	1.291	1.306	1.139	1.437	14.78
1,2-dichloroethane	0.512	0.449	0.481	0.451	0.430	0.419	0.439	0.414	0.449	7.29
Isopropyl acetate	0.715	0.752	0.785	0.798	0.730	0.726	0.694	0.601	0.725	8.43
Heptane	0.715	0.752	0.785	0.798	0.730	0.726	0.694	0.601	0.725	8.43
trichloroethene	0.309	0.290	0.327	0.337	0.320	0.321	0.331	0.308	0.318	4.79
1,2-dichloropropane	0.408	0.385	0.443	0.421	0.411	0.392	0.416	0.382	0.407	5.04
methyl methacrylate	0.100	0.109	0.138	0.155	0.170	0.183	0.179	0.147	0.148	20.91
1,4-Dioxane	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	27.27
dibromomethane	0.176	0.170	0.210	0.195	0.184	0.181	0.185	0.175	0.184	7.03
bromodichloromethane	0.367	0.353	0.407	0.396	0.395	0.393	0.432	0.416	0.395	6.44
methylacrylonitrile	0.169	0.153	0.168	0.168	0.165	0.173	0.160	0.137	0.162	7.34
Propyl acetate									0.000	0.00
4-methyl-2-pentanone	0.215	0.216	0.238	0.258	0.264	0.289	0.275	0.225	0.248	11.37
2-hexanone	0.168	0.156	0.155	0.169	0.177	0.189	0.179	0.130	0.165	11.10
cis-1,3-dichloropropene	0.434	0.423	0.512	0.499	0.503	0.487	0.502	0.471	0.479	7.04
toluene	0.697	0.607	0.741	0.711	0.634	0.629	0.640	0.565	0.653	8.98
2-chloroethylvinylether	0.015	0.040	0.050	0.032	0.081	0.089	0.123	0.097	0.066	56.10
Octane									0.000	0.00

isobutyl acetate									0.000	0.00
trans-1,3-dichloropropene	0.356	0.355	0.426	0.408	0.421	0.425	0.453	0.427	0.409	8.56
1,1,2-trichloroethane	0.208	0.199	0.244	0.229	0.229	0.226	0.232	0.199	0.221	7.55
1,2-dibromoethane	0.193	0.190	0.234	0.226	0.221	0.225	0.231	0.213	0.217	7.78
tetrachloroethene	0.291	0.251	0.278	0.288	0.270	0.277	0.280	0.262	0.275	4.80
1,3-dichloropropane	0.413	0.395	0.469	0.447	0.437	0.428	0.450	0.398	0.430	6.10
chlorobenzene-d5	ISTD									
toluene-d8	1.280	1.243	1.296	1.297	1.287	1.292	1.291	1.294	1.285	1.40
dibromochloromethane	0.368	0.351	0.448	0.428	0.419	0.413	0.434	0.398	0.407	8.13
chlorobenzene	1.052	0.940	1.600	1.334	0.986	0.967	0.982	0.881	1.093	22.54
1,1,1,2-tetrachloroethane	0.397	0.355	0.430	0.416	0.394	0.381	0.405	0.374	0.394	6.06
ethylbenzene	1.737	1.536	1.886	1.866	1.695	1.683	1.673	1.459	1.692	8.62
Nonene									0.000	0.00
1-chlorohexane									0.000	0.00
m,p-Xylenes	0.630	0.575	0.702	0.669	0.568	0.542	0.498	0.435	0.577	15.29
ethyl methacrylate									0.000	0.00
Cyclohexanone	0.027	0.044	0.046	0.050	0.046	0.048	0.046	0.031	0.042	19.97
butyl acrylate									0.000	0.00
cyclohexanol									0.000	0.00
o-xylene	0.583	0.533	0.642	0.627	0.567	0.540	0.519	0.449	0.557	11.13
styrene	0.876	0.837	1.038	1.031	0.964	0.923	0.892	0.754	0.914	10.54
bromoform	0.171	0.169	0.217	0.212	0.208	0.217	0.222	0.195	0.201	10.44
isopropylbenzene	1.419	1.348	1.638	1.663	1.490	1.455	1.449	1.251	1.464	9.37
bromoflurobenzene	0.464	0.458	0.469	0.474	0.479	0.483	0.497	0.522	0.481	4.28
bromobenzene	0.418	0.374	0.445	0.436	0.410	0.405	0.413	0.365	0.408	6.74
1,4-dichlorobenzene-d4	ISTD									
1,1,2,2-tetrachloroethane	1.007	0.946	1.113	1.071	1.003	1.018	0.986	0.790	0.992	9.69
1,2,3-trichloropropane	1.257	1.148	1.356	1.267	1.219	1.247	1.152	0.901	1.193	11.37
n-propylbenzene	4.438	4.141	4.753	4.695	4.241	4.159	4.021	3.443	4.236	9.81
2-chlorotoluene	2.749	2.499	2.863	2.784	2.547	2.507	2.503	2.194	2.581	8.26
4-chlorotoluene	3.096	2.961	3.310	3.144	2.819	2.697	2.575	2.196	2.850	12.58
1,3,5-trimethylbenzene	2.644	2.498	2.884	2.830	2.484	2.377	2.298	2.003	2.502	11.50
tert-butylbenzene	3.122	2.918	3.325	3.334	3.009	2.818	2.691	2.274	2.936	11.95
1,2,4-trimethylbenzene	2.872	2.623	3.071	2.881	2.572	2.448	2.347	1.994	2.601	13.24
sec-butylbenzene	3.653	3.509	3.888	3.962	3.506	3.414	3.266	2.868	3.508	9.92
1,3-dichlorobenzene	1.957	1.757	1.970	1.891	1.677	1.600	1.590	1.221	1.708	14.51
4-isopropyltoluene	2.876	2.757	3.125	3.159	2.761	2.639	2.517	2.054	2.736	12.91
1,4-dichlorobenzene	2.022	1.797	2.025	1.929	1.716	1.693	1.696	1.522	1.800	9.91
1,2-dichlorobenzene	1.715	1.581	1.774	1.690	1.533	1.518	1.522	1.330	1.583	8.93
n-butylbenzene	3.106	3.001	3.398	3.450	3.043	2.980	2.890	2.503	3.046	9.75
cis-1,4-dichloro-2-butene	1.257	1.074	1.273	1.239	1.209	1.235	1.148	0.895	1.166	10.93
trans-1,4-dichloro-2-butene	0.148	0.184	0.224	0.224	0.236	0.245	0.240	0.213	0.214	15.40
1,2-dibromo-3-chloropropane	0.168	0.147	0.152	0.154	0.143	0.154	0.153	0.125	0.149	8.19
pentachloroethane	0.450	0.430	0.468	0.478	0.484	0.447	0.464	0.438	0.457	4.19
1,2,4-trichlorobenzene	0.834	0.769	0.865	0.839	0.700	0.729	0.788	0.710	0.779	8.06
hexachlorobutadiene	0.483	0.475	0.490	0.508	0.417	0.428	0.452	0.465	0.465	6.69
naphthalene	2.388	2.108	2.243	2.214	1.802	1.994	1.934	1.389	2.009	15.55
1,2,3-trichlorobenzene									0.000	0.00
2-Methyl Naphthalene									0.000	0.00
1,3-Dimethyl Naphthalene									0.000	0.00

Wed Oct 13 09:52:05 1999

Compound List Report 5972 - In

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration
Total Cpnds : 113

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Fluorobenzene	96	8.57	1.000	A	0	A	L
2	T	dichlorodifluoromethane	85	1.47	0.171	A	1	A	B
3	T	1,3-Butadiene	54	1.89	0.221	A	1	A	B
4	T	chlorotrifluoroethene	116	0.98	0.114	A	2	A	B
5	T	chloromethane	50	1.72	0.201	A	1	A	B
6	T	vinyl chloride	62	1.84	0.215	A	1	A	B
7	T	bromomethane	96	2.20	0.257	A	1	A	B
8	T	chloroethane	64	2.40	0.280	A	1	A	B
9	T	trichlorofluoromethane	101	2.71	0.316	A	1	A	B
10	T	1,2-dichloro-1,1,2 trifluoroet	67	1.47	0.171	A	2	A	B
11	T	Diethyl ether	59	3.14	0.367	A	2	A	B
12		Ethyl Mercaptan	62	3.45	0.403	A	1	A	B
13	T	freon	101	3.46	0.404	A	2	A	B
14	T	Tertiary butyl alcohol	59	4.41	0.515	A	0	A	B
15	T	1,1-dichloroethene	96	3.45	0.403	A	2	A	B
16	T	Acetonitrile	40	1.89	0.221	A	2	A	B
17	T	methylene chloride	84	4.12	0.481	A	2	A	B
18	T	acrolein	56	3.27	0.381	A	0	A	B
19	T	acrylonitrile	53	1.89	0.221	A	1	A	B
20	T	trans-1,2-dichloroethene	96	4.61	0.538	A	2	A	B
21	T	acetone	43	4.61	0.538	A	1	A	B
22	T	carbon disulfide	76	3.85	0.450	A	0	A	B
23	T	hexane	57	5.10	0.595	A	2	A	B
24	T	1,1-dichloroethane	63	5.24	0.612	A	2	A	B
25	T	methyl t-butyl ether	73	4.61	0.538	A	0	A	B
26	T	vinyl acetate	43	5.33	0.622	A	0	A	B
27	T	2-chloro-1,3-butadiene	53	5.44	0.634	A	2	A	B
28	T	2,2-dichloropropane	77	6.26	0.731	A	1	A	B
29	T	cis-1,2-dichloroethene	96	6.26	0.731	A	2	A	B
30	T	2-butanone	72	6.25	0.730	A	2	A	B
31	T	Idomethane	142	3.69	0.431	A	1	A	B
32	T	Allyl chloride	76	3.85	0.450	A	1	A	B
33	T	cyclohexane	56	7.56	0.882	A	2	A	B
34	T	Ethyl Cyanide	54	6.40	0.747	A	1	A	B
35	T	Ethyl Acetate	43	8.63	1.007	A	2	A	B
36	T	bromochloromethane	128	6.77	0.790	A	2	A	B
37	T	tetrahydrofuran	42	6.93	0.808	A	1	A	B
38	T	chloroform	83	6.82	0.796	A	1	A	B
39	T	1,1,1-trichloroethane	97	7.35	0.858	A	2	A	B
40	S	dibromofluromethane	113	7.17	0.837	A	1	A	B
41	T	carbon tetrachloride	117	7.77	0.907	A	1	A	B
42	T	1,1-dichloropropene	75	7.68	0.896	A	2	A	B
43	T	2,2,4-trimethylpentane	57	5.10	0.595	A	2	A	B
44	S	1,2-dichloroethane-d4	65	7.93	0.925	A	1	A	L
45	T	benzene	78	8.07	0.942	A	1	A	B
46	T	1,2-dichloroethane	62	8.07	0.942	A	1	A	B
47	T	Isopropyl acetate	43	8.63	1.007	A	2	A	B
48	T	Heptane	43	8.63	1.007	A	2	A	B
49	T	trichloroethene	95	9.26	1.081	A	2	A	B
50	T	1,2-dichloropropane	63	9.59	1.119	A	1	A	B
51	T	methyl methacrylate	69	9.80	1.144	A	2	A	B

52		T	1,4-Dioxane	88	9.93	1.159	A	1	A	B
53		T	dibromomethane	93	9.83	1.147	A	2	A	B
54		T	bromodichloromethane	83	10.03	1.170	A	2	A	B
55		T	methylacrylonitrile	41	6.67	0.778	A	3	A	B
56		T	Propyl acetate	43	6.43	0.750	A	1	A	B
57		T	4-methyl-2-pentanone	43	10.96	1.279	A	2	A	B
58		T	2-hexanone	43	12.43	1.450	A	2	A	B
59		T	cis-1,3-dichloropropene	75	10.83	1.264	A	1	A	B
60		T	toluene	92	11.39	1.329	A	1	A	B
61		T	2-chloroethylvinylether	63	10.58	1.235	A	0	A	B
62		T	Octane	43	7.56	0.882	A	2	A	B
63		T	butyl acetate	43	11.56	1.349	A	1	A	B
64		T	isobutyl acetate	43	12.79	1.492	A	1	A	B
65		T	trans-1,3-dichloropropene	75	11.72	1.368	A	1	A	B
66		T	1,1,2-trichloroethane	83	12.04	1.405	A	2	A	B
67		T	1,2-dibromoethane	107	13.15	1.534	A	2	A	B
68		T	tetrachloroethene	166	12.48	1.456	A	1	A	B
69		T	1,3-dichloropropane	76	12.37	1.444	A	1	A	B
70	I		chlorobenzene-d5	117	14.19	1.000	A	1	A	B
71		S	toluene-d8	98	11.28	0.795	A	1	A	B
72		T	dibromochloromethane	129	12.85	0.905	A	1	A	B
73		T	chlorobenzene	112	14.26	1.004	A	2	A	B
74		T	1,1,1,2-tetrachloroethane	131	14.40	1.015	A	2	A	B
75		T	ethylbenzene	91	14.46	1.019	A	1	A	B
76		T	Nonene	55	7.56	0.532	A	3	A	B
77		T	1-chlorohexane	91	8.06	0.568	A	2	A	B
78		T	m,p-Xylenes	106	14.65	1.032	A	1	A	B
79		T	ethyl methacrylate	69	14.63	1.031	A	2	A	B
80		T	Cyclohexanone	42	15.66	1.103	A	2	A	B
81		T	butyl acrylate	55	9.80	0.690	A	2	A	B
82		T	cyclohexanol	57	9.93	0.700	A	2	A	B
83		T	o-xylene	106	15.19	1.070	A	1	A	B
84		T	styrene	104	15.22	1.072	A	1	A	B
85		T	bromoform	173	15.43	1.087	A	1	A	B
86		T	isopropylbenzene	105	15.61	1.100	A	1	A	B
87		S	bromoflurobenzene	95	15.77	1.111	A	2	A	B
88		T	bromobenzene	156	15.92	1.122	A	2	A	B
89	I		1,4-dichlorobenzene-d4	152	16.77	1.000	A	1	A	B
90		T	1,1,2,2-tetrachloroethane	83	15.87	0.946	A	2	A	B
91		T	1,2,3-trichloropropane	75	15.93	0.950	A	1	A	B
92		T	n-propylbenzene	91	16.01	0.955	A	1	A	B
93		T	2-chlorotoluene	91	16.10	0.960	A	1	A	B
94		T	4-chlorotoluene	91	16.18	0.965	A	1	A	B
95		T	1,3,5-trimethylbenzene	105	16.17	0.964	A	1	A	B
96		T	tert-butylbenzene	119	16.45	0.981	A	1	A	B
97		T	1,2,4-trimethylbenzene	105	16.48	0.983	A	1	A	B
98		T	sec-butylbenzene	105	16.62	0.991	A	1	A	B
99		T	1,3-dichlorobenzene	146	16.72	0.997	A	2	A	B
100		T	4-isopropyltoluene	119	16.73	0.998	A	2	A	B
101		T	1,4-dichlorobenzene	146	16.79	1.001	A	2	A	B
102		T	1,2-dichlorobenzene	146	17.06	1.017	A	2	A	B
103		T	n-butylbenzene	91	17.03	1.015	A	1	A	B
104		T	cis-1,4-dichloro-2-butene	75	15.93	0.950	A	2	A	B
105		T	trans-1,4-dichloro-2-butene	53	15.95	0.951	A	2	A	B
106		T	1,2-dibromo-3-chloropropane	75	17.56	1.047	A	2	A	B
107		T	pentachloroethane	167	16.47	0.982	A	2	A	B
108		T	1,2,4-trichlorobenzene	180	18.12	1.081	A	1	A	B
109		T	hexachlorobutadiene	225	18.24	1.088	A	1	A	B
110		T	naphthalene	128	18.30	1.091	A	0	A	B

111	T	1,2,3-trichlorobenzene	180	18.12	1.081	A	1	A	B
112	T	2-Methyl Naphthalene	142	17.01	1.015	A	1	A	B
113	T	1,3-Dimethyl Naphthalene	156	17.56	1.047	A	0	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

8260044W.M Wed Oct 13 09:57:27 1999 VOA2

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2087.d
Acq On : 13 Oct 99 3:32 am
Sample : VSTD500;MSI;;
Misc : VSTD500;LOW;AQ;
Quant Time: Oct 13 9:42 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.57	96	665978	50.00 ug/l	-0.02
70) chlorobenzene-d5	14.19	117	467509	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	207572	50.00 ug/l	0.00
System Monitoring Compounds					**%Recovery**
40) dibromoflurometh ane	7.17	113	220411	51.37 ug/l	102.73%
44) 1,2-dichloroethane-d4	7.93	65	237123	46.41 ug/l	92.83%
71) toluene-d8	11.28	98	604910	21.75 ug/l	43.51%
87) bromoflurobenzene	15.77	95	244146	23.58 ug/l	47.16%
Target Compounds					**Qvalue**
2) dichlorodifluoromethane	1.47	85	2868131	472.96 ug/l	100
3) 1,3-Butadiene	1.89	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.72	50	2801046	476.47 ug/l	100
6) vinyl chloride	1.84	62	2971172	539.35 ug/l	100
7) bromomethane	2.20	96	101988	26.98 ug/l	99
8) chloroethane	2.40	64	52636	22.94 ug/l	88
9) trichlorofluoromethane	2.71	101	2631975	528.75 ug/l	99
10) 1,2-dichloro-1,1,2 trifluo	1.47	67		No Calib #	
11) Diethyl ether	3.14	59	1001653	458.87 ug/l	92
12) Ethyl Mercaptan	3.45	62	237680	461.54 ug/l #	47
13) freon	3.46	101	2118632	427.45 ug/l	87
14) Tertiary butyl alcohol	4.41	59	151936	296.20 ug/l	100
15) 1,1-dichloroethene	3.45	96	1117659	469.62 ug/l	94
16) Acetonitrile	1.89	40	73805	1858.40 ug/l m	1
17) methylene chloride	4.12	84	2086608	429.75 ug/l	89
18) acrolein	3.27	56	637338	427.18 ug/l	100
19) acrylonitrile	1.89	53	1215703	43180.27 ug/l #	31
20) trans-1,2-dichloroethene	4.61	96	1722120	443.79 ug/l #	71
21) acetone	4.61	43	889119	530.53 ug/l	69
22) carbon disulfide	3.85	76	8749640	454.40 ug/l	100
23) hexane	5.10	57	3750678	400.85 ug/l	95
24) 1,1-dichloroethane	5.24	63	4562072	486.99 ug/l	98
25) methyl t-butyl ether	4.61	73	3666724	491.65 ug/l	100
26) vinyl acetate	5.33	43	3885951	480.08 ug/l	100
27) 2-chloro-1,3-butadiene	5.44	53	3628148	544.89 ug/l	84
28) 2,2-dichloropropane	6.26	77	3057052	608.14 ug/l	86
29) cis-1,2-dichloroethene	6.26	96	1886726	456.17 ug/l #	70
30) 2-butanone	6.25	72	164013	421.21 ug/l	95
31) Idomethane	3.69	142	3002886	464.51 ug/l	84
32) Allyl chloride	3.85	76	8651703	454.63 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2087.d
Acq On : 13 Oct 99 3:32 am
Sample : VSTD500;MSI;;
Misc : VSTD500;LOW;AQ;
Quant Time: Oct 13 9:42 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33) cyclohexane	7.56	56	4386125	443.17 ug/l	#	63
34) Ethyl Cyanide	6.40	54	1877767	415.76 ug/l		94
35) Ethyl Acetate	8.63	43	4001019	411.10 ug/l	#	66
36) bromochloromethane	6.77	128	944236	479.37 ug/l		96
37) tetrahydrofuran	6.93	42	520638	426.44 ug/l		95
38) chloroform	6.82	83	4107821	502.13 ug/l		96
39) 1,1,1-trichloroethane	7.35	97	2950757	561.09 ug/l		89
41) carbon tetrachloride	7.77	117	2416714	609.84 ug/l		98
42) 1,1-dichloropropene	7.68	75	3549582	518.57 ug/l		93
43) 2,2,4-trimethylpentane	5.10	57	3781412	404.13 ug/l	#	20
45) benzene	8.07	78	7586043	425.80 ug/l		100
46) 1,2-dichloroethane	8.07	62	2760205	481.65 ug/l		83
47) Isopropyl acetate	8.63	43	4001019	411.10 ug/l	#	60
48) Heptane	8.63	43	4001019	411.10 ug/l		96
49) trichloroethene	9.26	95	2052798	482.11 ug/l		88
50) 1,2-dichloropropane	9.59	63	2546393	465.70 ug/l		96
51) methyl methacrylate	9.80	69	979087	432.84 ug/l	#	89
52) 1,4-Dioxane	9.93	88	229095	430.93 ug/l		76
53) dibromomethane	9.83	93	1162171	475.15 ug/l		94
54) bromodichloromethane	10.03	83	2768531	525.56 ug/l		97
55) methylacrylonitrile	6.67	41	9106956	414.84 ug/l		90
56) Propyl acetate	6.43	43		No Calib	#	
57) 4-methyl-2-pentanone	10.96	43	1497735	425.89 ug/l	#	95
58) 2-hexanone	12.43	43	862919	365.71 ug/l	#	95
59) cis-1,3-dichloropropene	10.83	75	3137159	467.79 ug/l		91
60) toluene	11.39	92	3761862	445.28 ug/l		98
61) 2-chloroethylvinylether	10.58	63	642922	593.21 ug/l		100
62) Octane	7.56	43		No Calib	#	
63) butyl acetate	11.56	43		No Calib		
64) isobutyl acetate	12.79	43		No Calib		
65) trans-1,3-dichloropropene	11.72	75	2842060	507.31 ug/l		88
66) 1,1,2-trichloroethane	12.04	83	1323698	433.72 ug/l		88
67) 1,2-dibromoethane	13.15	107	1417292	481.81 ug/l		97
68) tetrachloroethene	12.48	166	1747310	485.86 ug/l		95
69) 1,3-dichloropropane	12.37	76	2651189	455.32 ug/l		97
72) dibromochloromethane	12.85	129	1860427	205.44 ug/l		98
73) chlorobenzene	14.26	112	4117314	193.30 ug/l		88
74) 1,1,1,2-tetrachloroethane	14.40	131	1746574	205.30 ug/l		96
75) ethylbenzene	14.46	91	6821408	186.29 ug/l		97
76) Nonene	7.56	55		No Calib	#	
77) 1-chlorohexane	0.00	91		Not Detected		
78) m,p-Xylenes	14.65	106	4070564	165.98 ug/l		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2087.d
Acq On : 13 Oct 99 3:32 am
Sample : VSTD500;MSI;;
Misc : VSTD500;LOW;AQ;
Quant Time: Oct 13 9:42 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.63	69		No Calib	#	
80)	Cyclohexanone	15.66	42	144211	141.51 ug/l	#	62
81)	butyl acrylate	9.80	55		No Calib	#	
82)	cyclohexanol	9.93	57		No Calib	#	
83)	o-xylene	15.19	106	2097907	171.26 ug/l		89
84)	styrene	15.22	104	3526583	169.24 ug/l		74
85)	bromoform	15.43	173	910162	202.83 ug/l		97
86)	isopropylbenzene	15.61	105	5847154	181.66 ug/l		93
88)	bromobenzene	15.92	156	1707887	192.67 ug/l	#	84
90)	1,1,2,2-tetrachloroethane	15.87	83	1640474	394.00 ug/l		97
91)	1,2,3-trichloropropane	15.93	75	1869244	369.42 ug/l		59
92)	n-propylbenzene	16.01	91	7146873	405.97 ug/l		94
93)	2-chlorotoluene	16.10	91	4554250	430.69 ug/l		86
94)	4-chlorotoluene	16.18	91	4558217	389.51 ug/l		90
95)	1,3,5-trimethylbenzene	16.17	105	4157857	403.17 ug/l		94
96)	tert-butylbenzene	16.45	119	4720435	377.89 ug/l		93
97)	1,2,4-trimethylbenzene	16.48	105	4139724	387.67 ug/l		94
98)	sec-butylbenzene	16.62	105	5953310	409.07 ug/l		89
99)	1,3-dichlorobenzene	16.72	146	2533601	363.91 ug/l		95
100)	4-isopropyltoluene	16.73	119	4262956	371.98 ug/l		96
101)	1,4-dichlorobenzene	16.79	146	3159793	443.58 ug/l		94
102)	1,2-dichlorobenzene	17.06	146	2760082	433.72 ug/l		93
103)	n-butylbenzene	17.03	91	5195417	411.31 ug/l		87
104)	cis-1,4-dichloro-2-butene	15.93	75	1858023	370.25 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.95	53	442089	335.45 ug/l		86
106)	1,2-dibromo-3-chloropropan	17.56	75	260125	439.69 ug/l	#	71
107)	pentachloroethane	16.47	167	908263	452.48 ug/l		93
108)	1,2,4-trichlorobenzene	18.12	180	1473233	506.83 ug/l		97
109)	hexachlorobutadiene	18.24	225	964847	557.79 ug/l		93
110)	naphthalene	18.30	128	2883685	385.40 ug/l		100
111)	1,2,3-trichlorobenzene	18.12	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	17.56	156		No Calib		

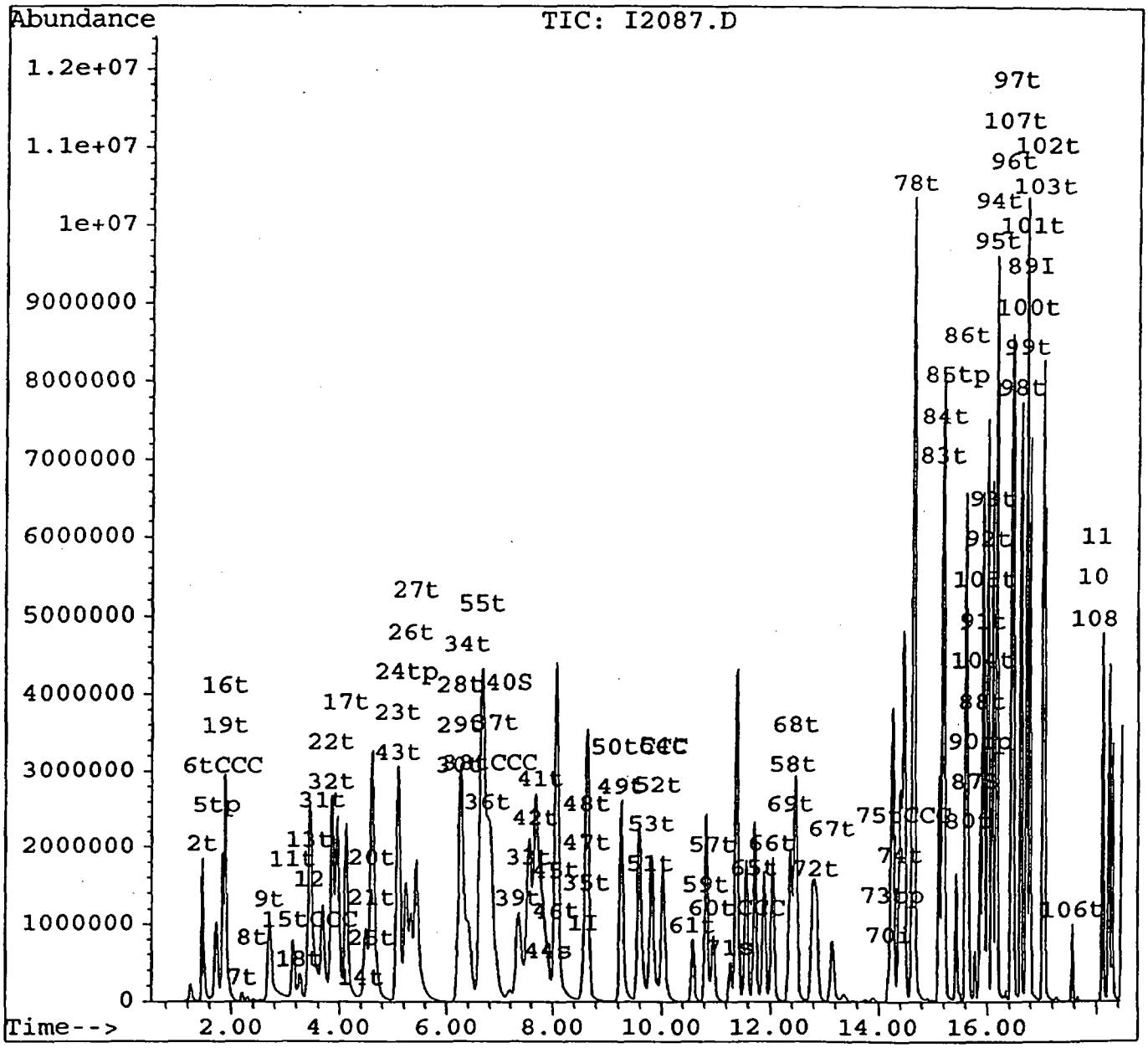
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2087.d
Acq On : 13 Oct 99 3:32 am
Sample : VSTD500;MSI;;
Misc : VSTD500;LOW;AQ;
Quant Time: Oct 13 9:42 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2088.d
Acq On : 13 Oct 99 3:58 am
Sample : VSTD200;MSI;;
Misc : VSTD200;LOW;AQ;
Quant Time: Oct 13 9:41 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.57	96	739007	50.00 ug/l	-0.02
70) chlorobenzene-d5	14.20	117	516736	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	234598	50.00 ug/l	0.00
System Monitoring Compounds					**%Recovery**
40) dibromoflurometh ane	7.20	113	243065	51.05 ug/l	102.09%
44) 1,2-dichloroethane-d4	7.94	65	256972	45.33 ug/l	90.66%
71) toluene-d8	11.28	98	667093	21.71 ug/l	43.41%
87) bromoflurobenzene	15.77	95	257059	22.46 ug/l	44.92%
Target Compounds					**Qvalue**
2) dichlorodifluoromethane	1.48	85	1327925	197.34 ug/l	100
3) 1,3-Butadiene	1.90	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.72	50	1490647	228.51 ug/l	99
6) vinyl chloride	1.85	62	1365843	223.44 ug/l	99
7) bromomethane	2.22	96	46532	11.09 ug/l	97
8) chloroethane	2.35	64	435376	171.01 ug/l	99
9) trichlorofluoromethane	2.76	101	1117327	202.29 ug/l	98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.16	59	500705	206.71 ug/l	95
12) Ethyl Mercaptan	3.49	62	117107	204.93 ug/l #	51
13) freon	3.50	101	1109331	201.70 ug/l	87
14) Tertiary butyl alcohol	4.33	59	86233	151.50 ug/l	100
15) 1,1-dichloroethene	3.49	96	551684	208.90 ug/l	91
16) Acetonitrile	1.90	40	34279	777.85 ug/l m	1
17) methylene chloride	4.15	84	1058280	196.42 ug/l	91
18) acrolein	3.29	56	325531	196.63 ug/l	100
19) acrylonitrile	1.90	53	533598	17079.82 ug/l m	99
20) trans-1,2-dichloroethene	4.63	96	889519	206.58 ug/l #	75
21) acetone	4.62	43	409930	220.43 ug/l	70
22) carbon disulfide	3.89	76	4293091	200.92 ug/l	100
23) hexane	5.13	57	1996582	192.30 ug/l	96
24) 1,1-dichloroethane	5.26	63	2152950	207.11 ug/l	100
25) methyl t-butyl ether	4.62	73	1789716	216.26 ug/l	100
26) vinyl acetate	5.35	43	1897154	211.22 ug/l	100
27) 2-chloro-1,3-butadiene	5.46	53	1617091	218.86 ug/l	87
28) 2,2-dichloropropane	6.29	77	1328457	238.16 ug/l	90
29) cis-1,2-dichloroethene	6.29	96	948453	206.65 ug/l #	76
30) 2-butanone	6.25	72	91425	211.59 ug/l	77
31) Idomethane	3.72	142	1104062	153.91 ug/l	92
32) Allyl chloride	3.89	76	4244762	201.01 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2088.d
Acq On : 13 Oct 99 3:58 am
Sample : VSTD200;MSI;;
Misc : VSTD200;LOW;AQ;
Quant Time: Oct 13 9:41 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	cyclohexane	7.58	56	2234884	203.50 ug/l	#	65
34)	Ethyl Cyanide	6.37	54	1012933	202.11 ug/l		94
35)	Ethyl Acetate	8.64	43	2052034	190.01 ug/l	#	67
36)	bromochloromethane	6.78	128	448542	205.22 ug/l		95
37)	tetrahydrofuran	6.94	42	262882	194.04 ug/l		91
38)	chloroform	6.85	83	1906940	210.07 ug/l		96
39)	1,1,1-trichloroethane	7.37	97	1305546	223.72 ug/l		88
41)	carbon tetrachloride	7.80	117	1042405	237.05 ug/l		98
42)	1,1-dichloropropene	7.69	75	1665974	219.34 ug/l		94
43)	2,2,4-trimethylpentane	5.13	57	2011535	193.73 ug/l	#	24
45)	benzene	8.09	78	3860387	195.27 ug/l		100
46)	1,2-dichloroethane	8.09	62	1296762	203.92 ug/l		85
47)	Isopropyl acetate	8.64	43	2052034	190.01 ug/l	#	60
48)	Heptane	8.64	43	2052034	190.01 ug/l		98
49)	trichloroethene	9.26	95	978849	207.17 ug/l		87
50)	1,2-dichloropropane	9.60	63	1229440	202.63 ug/l		96
51)	methyl methacrylate	9.80	69	529923	211.12 ug/l	#	91
52)	1,4-Dioxane	9.92	88	131804	223.42 ug/l		78
53)	dibromomethane	9.83	93	547857	201.86 ug/l		93
54)	bromodichloromethane	10.03	83	1276406	218.36 ug/l		97
55)	methylacrylonitrile	6.66	41	4718476	193.70 ug/l		90
56)	Propyl acetate	6.42	43		No Calib		
57)	4-methyl-2-pentanone	10.95	43	814199	208.64 ug/l	#	95
58)	2-hexanone	12.42	43	530261	202.52 ug/l	#	96
59)	cis-1,3-dichloropropene	10.84	75	1485116	199.57 ug/l		91
60)	toluene	11.39	92	1892197	201.84 ug/l		99
61)	2-chloroethylvinylether	10.59	63	362684	301.57 ug/l		100
62)	Octane	7.81	43		No Calib	#	
63)	butyl acetate	11.56	43		No Calib		
64)	isobutyl acetate	12.78	43		No Calib		
65)	trans-1,3-dichloropropene	11.71	75	1338115	215.25 ug/l		89
66)	1,1,2-trichloroethane	12.05	83	686094	202.59 ug/l		88
67)	1,2-dibromoethane	13.14	107	683835	209.50 ug/l		98
68)	tetrachloroethene	12.48	166	827886	207.45 ug/l		96
69)	1,3-dichloropropane	12.37	76	1329682	205.79 ug/l		97
72)	dibromochloromethane	12.84	129	897537	89.67 ug/l		99
73)	chlorobenzene	14.25	112	2028900	86.18 ug/l		90
74)	1,1,1,2-tetrachloroethane	14.39	131	837677	89.08 ug/l		97
75)	ethylbenzene	14.46	91	3458734	85.46 ug/l		97
76)	Nonene	7.58	55		No Calib	#	
77)	1-chlorohexane	0.00	91		Not Detected		
78)	m,p-Xylenes	14.65	106	2059039	75.96 ug/l		91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2088.d
Acq On : 13 Oct 99 3:58 am
Sample : VSTD200;MSI;;
Misc : VSTD200;LOW;AQ;
Quant Time: Oct 13 9:41 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.63	69		No Calib	#	
80)	Cyclohexanone	15.65	42	94763	84.13 ug/l	#	65
81)	butyl acrylate	9.80	55		No Calib	#	
82)	cyclohexanol	9.92	57		No Calib	#	
83)	o-xylene	15.19	106	1072305	79.20 ug/l		89
84)	styrene	15.21	104	1843024	80.02 ug/l		70
85)	bromoform	15.44	173	458741	92.49 ug/l		97
86)	isopropylbenzene	15.61	105	2994515	84.17 ug/l		95
88)	bromobenzene	15.92	156	853531	87.12 ug/l	#	76
90)	1,1,2,2-tetrachloroethane	15.86	83	925514	196.68 ug/l		97
91)	1,2,3-trichloropropane	15.92	75	1081303	189.08 ug/l		60
92)	n-propylbenzene	16.02	91	3772974	189.63 ug/l		96
93)	2-chlorotoluene	16.10	91	2349050	196.56 ug/l		88
94)	4-chlorotoluene	16.18	91	2416491	182.71 ug/l		85
95)	1,3,5-trimethylbenzene	16.16	105	2156656	185.03 ug/l		96
96)	tert-butylbenzene	16.45	119	2524931	178.84 ug/l		98
97)	1,2,4-trimethylbenzene	16.48	105	2202366	182.49 ug/l		93
98)	sec-butylbenzene	16.61	105	3065080	186.35 ug/l		94
99)	1,3-dichlorobenzene	16.72	146	1492413	189.67 ug/l		93
100)	4-isopropyltoluene	16.73	119	2361783	182.34 ug/l		97
101)	1,4-dichlorobenzene	16.79	146	1591412	197.67 ug/l		94
102)	1,2-dichlorobenzene	17.06	146	1428208	198.58 ug/l		93
103)	n-butylbenzene	17.02	91	2711535	189.94 ug/l		96
104)	cis-1,4-dichloro-2-butene	15.92	75	1077339	189.95 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.94	53	225353	151.30 ug/l	#	56
106)	1,2-dibromo-3-chloropropan	17.57	75	143771	215.02 ug/l		80
107)	pentachloroethane	16.46	167	435562	191.99 ug/l		97
108)	1,2,4-trichlorobenzene	18.11	180	739638	225.14 ug/l		97
109)	hexachlorobutadiene	18.24	225	423895	216.83 ug/l		94
110)	naphthalene	18.29	128	1814962	214.62 ug/l		100
111)	1,2,3-trichlorobenzene	18.11	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	17.57	156		No Calib		

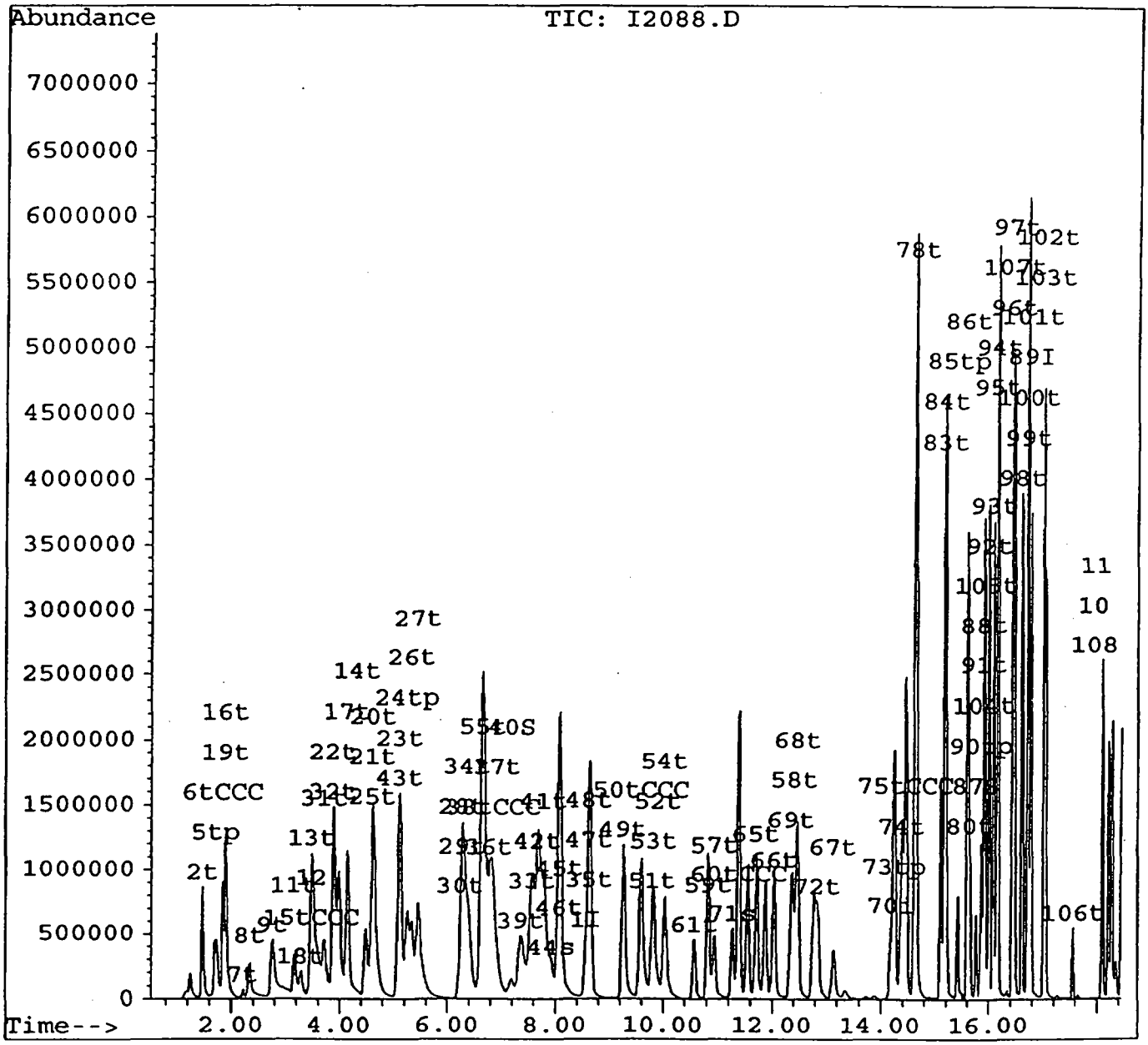
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2088.d
Acq On : 13 Oct 99 3:58 am
Sample : VSTD200;MSI;;
Misc : VSTD200;LOW;AQ;
Quant Time: Oct 13 9:41 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2089.d
Acq On : 13 Oct 99 4:24 am
Sample : VSTD100;MSI;;
Misc : VSTD100;LOW;AQ;
Quant Time: Oct 13 9:38 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.58	96	735263	50.00 ug/l	0.00
70) chlorobenzene-d5	14.19	117	506430	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	228176	50.00 ug/l	0.00
System Monitoring Compounds					**%Recovery**
40) dibromofluromethane	7.19	113	230595	48.67 ug/l	97.35%
44) 1,2-dichloroethane-d4	7.94	65	243338	43.14 ug/l	86.29%
71) toluene-d8	11.28	98	654369	21.72 ug/l	43.45%
87) bromoflurobenzene	15.77	95	244833	21.83 ug/l	43.65%
Target Compounds					**Qvalue**
2) dichlorodifluoromethane	1.48	85	675242	100.86 ug/l	99
3) 1,3-Butadiene	1.90	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.72	50	694140	106.95 ug/l	100
6) vinyl chloride	1.85	62	658066	108.20 ug/l	100
7) bromomethane	2.24	96	332552	79.69 ug/l	95
8) chloroethane	2.39	64	247701	97.79 ug/l	99
9) trichlorofluoromethane	2.79	101	558327	101.60 ug/l	100
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.17	59	231983	96.26 ug/l	95
12) Ethyl Mercaptan	3.50	62	59128	104.00 ug/l #	53
13) freon	3.51	101	557475	101.88 ug/l	88
14) Tertiary butyl alcohol	4.29	59	48810	86.19 ug/l	100
15) 1,1-dichloroethene	3.50	96	270517	102.96 ug/l	92
16) Acetonitrile	1.90	40	11962	272.82 ug/l m	1
17) methylene chloride	4.16	84	504016	94.02 ug/l	92
18) acrolein	3.30	56	166384	101.01 ug/l	100
19) acrylonitrile	1.90	53	251373	8087.12 ug/l m	90
20) trans-1,2-dichloroethene	4.64	96	434586	101.44 ug/l #	74
21) acetone	4.62	43	190624	103.03 ug/l	70
22) carbon disulfide	3.91	76	2151736	101.22 ug/l	100
23) hexane	5.14	57	1030218	99.73 ug/l	96
24) 1,1-dichloroethane	5.27	63	1018426	98.47 ug/l	99
25) methyl t-butyl ether	4.62	73	834308	101.33 ug/l	100
26) vinyl acetate	5.35	43	879693	98.44 ug/l	100
27) 2-chloro-1,3-butadiene	5.47	53	774479	105.35 ug/l	88
28) 2,2-dichloropropane	6.30	77	588446	106.03 ug/l	90
29) cis-1,2-dichloroethene	6.30	96	450139	98.58 ug/l #	75
30) 2-butanone	6.24	72	47219	109.84 ug/l	78
31) Idomethane	3.73	142	635192	89.00 ug/l	92
32) Allyl chloride	3.91	76	2125514	101.17 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2089.d
Acq On : 13 Oct 99 4:24 am
Sample : VSTD100;MSI;;
Misc : VSTD100;LOW;AQ;
Quant Time: Oct 13 9:38 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	cyclohexane	7.59	56	1106315	101.25 ug/l	#	66
34)	Ethyl Cyanide	6.37	54	532635	106.82 ug/l		95
35)	Ethyl Acetate	8.65	43	1067283	99.33 ug/l	#	67
36)	bromochloromethane	6.79	128	212356	97.65 ug/l		94
37)	tetrahydrofuran	6.94	42	137399	101.94 ug/l		90
38)	chloroform	6.85	83	884554	97.94 ug/l		97
39)	1,1,1-trichloroethane	7.38	97	600411	103.41 ug/l		89
41)	carbon tetrachloride	7.79	117	474996	108.57 ug/l		99
42)	1,1-dichloropropene	7.70	75	764666	101.19 ug/l		94
43)	2,2,4-trimethylpentane	5.14	57	1035663	100.25 ug/l	#	25
45)	benzene	8.09	78	1899012	96.55 ug/l		100
46)	1,2-dichloroethane	8.09	62	616527	97.44 ug/l		85
47)	Isopropyl acetate	8.65	43	1067283	99.33 ug/l	#	60
48)	Heptane	8.65	43	1067283	99.33 ug/l		99
49)	trichloroethene	9.27	95	472441	100.50 ug/l		87
50)	1,2-dichloropropane	9.59	63	576035	95.42 ug/l		95
51)	methyl methacrylate	9.80	69	268485	107.51 ug/l	#	91
52)	1,4-Dioxane	9.91	88	65425	111.47 ug/l		76
53)	dibromomethane	9.84	93	265841	98.45 ug/l		95
54)	bromodichloromethane	10.04	83	577672	99.33 ug/l		98
55)	methylacrylonitrile	6.66	41	2546823	105.08 ug/l		91
56)	Propyl acetate	6.42	43		No Calib		
57)	4-methyl-2-pentanone	10.95	43	425666	109.63 ug/l	#	95
58)	2-hexanone	12.42	43	277402	106.49 ug/l	#	95
59)	cis-1,3-dichloropropene	10.83	75	716039	96.71 ug/l		90
60)	toluene	11.39	92	925053	99.18 ug/l		98
61)	2-chloroethylvinylether	10.59	63	130985	109.47 ug/l		100
62)	Octane	7.59	43		No Calib	#	
63)	butyl acetate	11.56	43		No Calib		
64)	isobutyl acetate	12.78	43		No Calib		
65)	trans-1,3-dichloropropene	11.72	75	624324	100.94 ug/l		89
66)	1,1,2-trichloroethane	12.04	83	332798	98.77 ug/l		88
67)	1,2-dibromoethane	13.15	107	331391	102.04 ug/l		97
68)	tetrachloroethene	12.48	166	406852	102.47 ug/l		96
69)	1,3-dichloropropane	12.37	76	629385	97.91 ug/l		98
72)	dibromochloromethane	12.85	129	418159	42.63 ug/l		98
73)	chlorobenzene	14.26	112	979542	42.45 ug/l		92
74)	1,1,1,2-tetrachloroethane	14.39	131	386138	41.90 ug/l		98
75)	ethylbenzene	14.46	91	1704893	42.98 ug/l		97
76)	Nonene	7.59	55		No Calib	#	
77)	1-chlorohexane	0.00	91		Not Detected		
78)	m,p-Xylenes	14.65	106	1097781	41.32 ug/l		91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2089.d
Acq On : 13 Oct 99 4:24 am
Sample : VSTD100;MSI;;
Misc : VSTD100;LOW;AQ;
Quant Time: Oct 13 9:38 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.64	69		No Calib	#	
80)	Cyclohexanone	15.66	42	49074	44.45 ug/l	#	64
81)	butyl acrylate	9.80	55		No Calib	#	
82)	cyclohexanol	9.91	57		No Calib	#	
83)	o-xylene	15.19	106	547306	41.25 ug/l		91
84)	styrene	15.21	104	934494	41.40 ug/l		72
85)	bromoform	15.43	173	219750	45.21 ug/l		97
86)	isopropylbenzene	15.61	105	1473233	42.25 ug/l		96
88)	bromobenzene	15.92	156	409936	42.69 ug/l	#	69
90)	1,1,2,2-tetrachloroethane	15.86	83	464371	101.46 ug/l		97
91)	1,2,3-trichloropropane	15.92	75	569079	102.31 ug/l		60
92)	n-propylbenzene	16.01	91	1898123	98.08 ug/l		98
93)	2-chlorotoluene	16.10	91	1143934	98.41 ug/l		89
94)	4-chlorotoluene	16.18	91	1230557	95.66 ug/l		87
95)	1,3,5-trimethylbenzene	16.17	105	1084685	95.68 ug/l		93
96)	tert-butylbenzene	16.45	119	1285859	93.64 ug/l		99
97)	1,2,4-trimethylbenzene	16.48	105	1117203	95.18 ug/l		94
98)	sec-butylbenzene	16.62	105	1558087	97.39 ug/l		93
99)	1,3-dichlorobenzene	16.72	146	730369	95.43 ug/l		94
100)	4-isopropyltoluene	16.73	119	1204451	95.61 ug/l		98
101)	1,4-dichlorobenzene	16.79	146	772498	98.65 ug/l		94
102)	1,2-dichlorobenzene	17.06	146	692751	99.03 ug/l		93
103)	n-butylbenzene	17.02	91	1360039	97.95 ug/l		100
104)	cis-1,4-dichloro-2-butene	15.92	75	563531	102.16 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.94	53	111799	77.17 ug/l	#	47
106)	1,2-dibromo-3-chloropropan	17.56	75	70320	108.13 ug/l		73
107)	pentachloroethane	16.46	167	203765	92.35 ug/l		96
108)	1,2,4-trichlorobenzene	18.12	180	332620	104.10 ug/l		98
109)	hexachlorobutadiene	18.24	225	195092	102.60 ug/l		97
110)	naphthalene	18.30	128	909919	110.63 ug/l		100
111)	1,2,3-trichlorobenzene	18.12	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	17.56	156		No Calib		

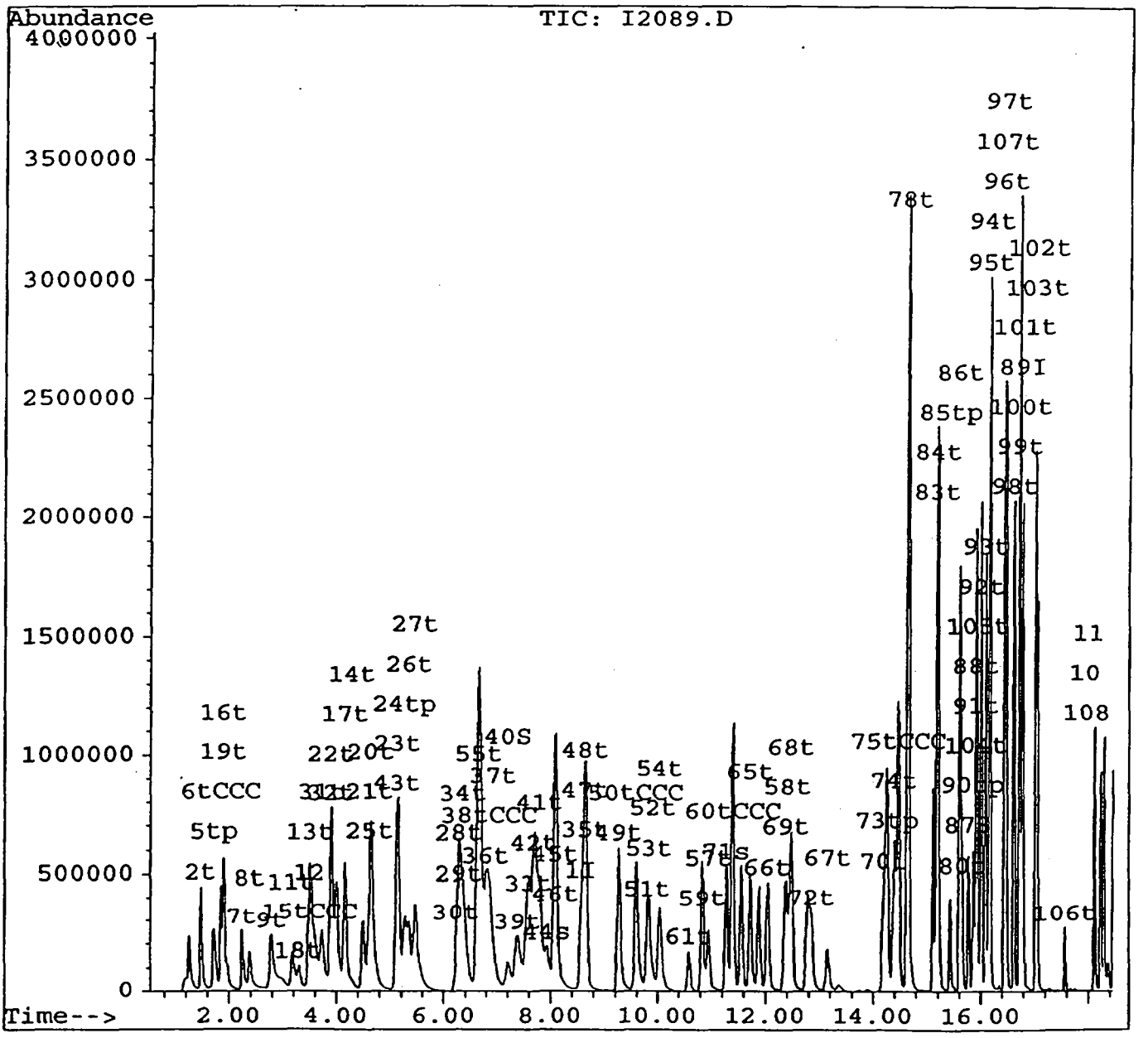
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2089.d
Acq On : 13 Oct 99 4:24 am
Sample : VSTD100;MSI;;
Misc : VSTD100;LOW;AQ;
Quant Time: Oct 13 9:38 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2090.d
Acq On : 13 Oct 99 4:51 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 13 9:39 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.58	96	812303	50.00 ug/l	0.00
70) chlorobenzene-d5	14.20	117	558495	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	249279	50.00 ug/l	0.00
System Monitoring Compounds					%Recovery
40) dibromoflurometh ane	7.21	113	261694	50.00 ug/l	100.00%
44) 1,2-dichloroethane-d4	7.94	65	278102	44.63 ug/l	89.26%
71) toluene-d8	11.28	98	718717	21.64 ug/l	43.27%
87) bromoflurobenzene	15.77	95	267645	21.64 ug/l	43.27%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.48	85	369827	50.00 ug/l	99
3) 1,3-Butadiene	1.90	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.72	50	358521	50.00 ug/l	100
6) vinyl chloride	1.85	62	335957	50.00 ug/l	100
7) bromomethane	2.27	96	230921	50.09 ug/l	95
8) chloroethane	2.40	64	139924	50.00 ug/l	99
9) trichlorofluoromethane	2.79	101	303568	50.00 ug/l	98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.19	59	133124	50.00 ug/l	92
12) Ethyl Mercaptan	3.51	62	31406	50.00 ug/l #	54
13) freon	3.53	101	303085	50.13 ug/l	87
14) Tertiary butyl alcohol	4.27	59	31283	50.00 ug/l	100
15) 1,1-dichloroethene	3.51	96	145225	50.03 ug/l	88
16) Acetonitrile	1.90	40	7195	148.53 ug/l m	1
17) methylene chloride	4.17	84	296112	50.00 ug/l	92
18) acrolein	3.30	56	90988	50.00 ug/l	100
19) acrylonitrile	1.90	53	122749	3574.52 ug/l m	98
20) trans-1,2-dichloroethene	4.64	96	236652	50.00 ug/l #	73
21) acetone	4.63	43	102206	50.00 ug/l	72
22) carbon disulfide	3.91	76	1174506	50.01 ug/l	100
23) hexane	5.14	57	570641	50.00 ug/l	96
24) 1,1-dichloroethane	5.27	63	571311	50.00 ug/l	99
25) methyl t-butyl ether	4.62	73	454833	50.00 ug/l	100
26) vinyl acetate	5.36	43	493546	49.99 ug/l	100
27) 2-chloro-1,3-butadiene	5.47	53	406533	50.06 ug/l	87
28) 2,2-dichloropropane	6.31	77	306567	50.00 ug/l	91
29) cis-1,2-dichloroethene	6.30	96	252238	50.00 ug/l #	74
30) 2-butanone	6.25	72	23747	50.00 ug/l	89
31) Idomethane	3.73	142	395245	50.13 ug/l	91
32) Allyl chloride	3.91	76	1159562	49.96 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2090.d
Acq On : 13 Oct 99 4:51 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 13 9:39 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33)	cyclohexane	7.59	56	604156	50.05 ug/l #	67
34)	Ethyl Cyanide	6.36	54	275768	50.06 ug/l	97
35)	Ethyl Acetate	8.65	43	593387	49.99 ug/l #	65
36)	bromochloromethane	6.79	128	120125	50.00 ug/l	95
37)	tetrahydrofuran	6.94	42	74457	50.00 ug/l	88
38)	chloroform	6.85	83	498908	50.00 ug/l	94
39)	1,1,1-trichloroethane	7.38	97	320722	50.00 ug/l	90
41)	carbon tetrachloride	7.81	117	241679	50.00 ug/l	96
42)	1,1-dichloropropene	7.70	75	417441	50.00 ug/l	93
43)	2,2,4-trimethylpentane	5.14	57	570641	50.00 ug/l #	28
45)	benzene	8.10	78	1086528	50.00 ug/l	100
46)	1,2-dichloroethane	8.10	62	349494	50.00 ug/l	86
47)	Isopropyl acetate	8.65	43	593387	49.99 ug/l #	60
48)	Heptane	8.65	43	593387	49.99 ug/l	97
49)	trichloroethene	9.28	95	259675	50.00 ug/l	89
50)	1,2-dichloropropane	9.60	63	333462	50.00 ug/l	95
51)	methyl methacrylate	9.80	69	137949	50.00 ug/l #	93
52)	1,4-Dioxane	9.91	88	32422	50.00 ug/l	77
53)	dibromomethane	9.84	93	149165	50.00 ug/l	96
54)	bromodichloromethane	10.04	83	321261	50.00 ug/l	98
55)	methylacrylonitrile	6.65	41	1338822	50.00 ug/l	92
56)	Propyl acetate	6.43	43		No Calib	
57)	4-methyl-2-pentanone	10.95	43	214472	50.00 ug/l #	95
58)	2-hexanone	12.42	43	143901	50.00 ug/l #	96
59)	cis-1,3-dichloropropene	10.84	75	408988	50.00 ug/l	91
60)	toluene	11.39	92	515224	50.00 ug/l	98
61)	2-chloroethylvinylether	10.59	63	66096	50.00 ug/l	100
62)	Octane	7.60	43		No Calib #	
63)	butyl acetate	11.55	43		No Calib	
64)	isobutyl acetate	12.78	43		No Calib	
65)	trans-1,3-dichloropropene	11.72	75	341656	50.00 ug/l	89
66)	1,1,2-trichloroethane	12.05	83	186125	50.00 ug/l	87
67)	1,2-dibromoethane	13.14	107	179397	50.00 ug/l	97
68)	tetrachloroethene	12.48	166	219326	50.00 ug/l	96
69)	1,3-dichloropropane	12.37	76	355103	50.00 ug/l	98
72)	dibromochloromethane	12.84	129	234076	21.64 ug/l	98
73)	chlorobenzene	14.25	112	550560	21.64 ug/l	92
74)	1,1,1,2-tetrachloroethane	14.39	131	219901	21.64 ug/l	98
75)	ethylbenzene	14.47	91	946455	21.64 ug/l	97
76)	Nonene	7.59	55		No Calib #	
77)	1-chlorohexane	0.00	91		Not Detected	
78)	m,p-Xylenes	14.65	106	633899	21.64 ug/l	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2090.d
Acq On : 13 Oct 99 4:51 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 13 9:39 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.63	69		No Calib	#	
80)	Cyclohexanone	15.65	42	25694	21.11 ug/l	m	74
81)	butyl acrylate	9.80	55		No Calib	#	
82)	cyclohexanol	9.92	57		No Calib	#	
83)	o-xylene	15.19	106	316622	21.64 ug/l		94
84)	styrene	15.21	104	538608	21.64 ug/l		76
85)	bromoform	15.44	173	115987	21.64 ug/l		96
86)	isopropylbenzene	15.61	105	831974	21.64 ug/l		95
88)	bromobenzene	15.92	156	229118	21.64 ug/l	#	70
90)	1,1,2,2-tetrachloroethane	15.86	83	250012	50.00 ug/l		97
91)	1,2,3-trichloropropane	15.92	75	303834	50.00 ug/l		60
92)	n-propylbenzene	16.02	91	1057083	50.00 ug/l		97
93)	2-chlorotoluene	16.10	91	634946	50.00 ug/l		87
94)	4-chlorotoluene	16.18	91	702684	50.00 ug/l		85
95)	1,3,5-trimethylbenzene	16.16	105	619254	50.00 ug/l		95
96)	tert-butylbenzene	16.45	119	750081	50.00 ug/l		95
97)	1,2,4-trimethylbenzene	16.48	105	641197	50.00 ug/l		93
98)	sec-butylbenzene	16.63	105	873871	50.00 ug/l		93
99)	1,3-dichlorobenzene	16.72	146	418049	50.00 ug/l		94
100)	4-isopropyltoluene	16.73	119	688150	50.00 ug/l		97
101)	1,4-dichlorobenzene	16.79	146	427731	50.00 ug/l		93
102)	1,2-dichlorobenzene	17.06	146	382117	50.00 ug/l		92
103)	n-butylbenzene	17.02	91	758463	50.00 ug/l		100
104)	cis-1,4-dichloro-2-butene	15.92	75	301330	50.00 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.94	53	58800	37.15 ug/l	#	59
106)	1,2-dibromo-3-chloropropan	17.57	75	35524	50.00 ug/l		76
107)	pentachloroethane	16.46	167	120530	50.00 ug/l		97
108)	1,2,4-trichlorobenzene	18.11	180	174541	50.00 ug/l		98
109)	hexachlorobutadiene	18.24	225	103866	50.00 ug/l		97
110)	naphthalene	18.30	128	449284	50.00 ug/l		100
111)	1,2,3-trichlorobenzene	18.11	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	17.57	156		No Calib		

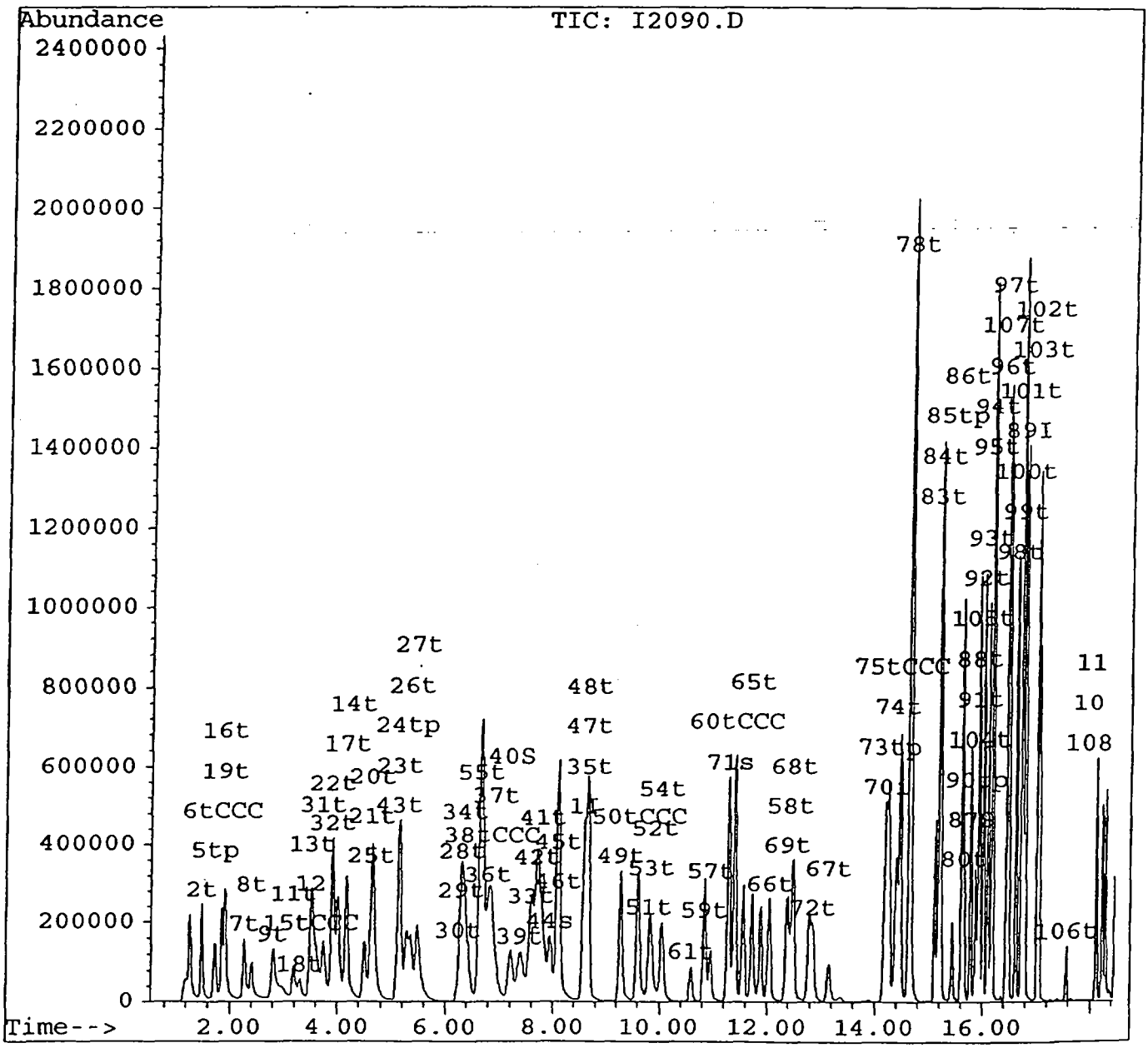
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2090.d
Acq On : 13 Oct 99 4:51 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 13 9:39 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2091.d
Acq On : 13 Oct 99 5:17 am
Sample : VSTD020;MSI;;
Misc : VSTD020;LOW;AQ;
Quant Time: Oct 13 9:34 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.59	96	785750	50.00 ug/l	0.00
70) chlorobenzene-d5	14.19	117	524797	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	235561	50.00 ug/l	0.00
System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.20	113	247491	48.88 ug/l	97.77%
44) 1,2-dichloroethane-d4	7.95	65	282864	46.93 ug/l	93.86%
71) toluene-d8	11.29	98	680533	21.80 ug/l	43.61%
87) bromoflurobenzene	15.77	95	248714	21.40 ug/l	42.79%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.49	85	154336	21.57 ug/l	99
3) 1,3-Butadiene	1.91	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.72	50	141750	20.44 ug/l	98
6) vinyl chloride	1.86	62	143119	22.02 ug/l	99
7) bromomethane	2.29	96	103289	23.16 ug/l	98
8) chloroethane	2.42	64	59167	21.86 ug/l	97
9) trichlorofluoromethane	2.81	101	127280	21.67 ug/l	99
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.18	59	53203	20.66 ug/l	92
12) Ethyl Mercaptan	3.51	62	17573	28.92 ug/l #	69
13) freon	3.53	101	152680	26.11 ug/l	95
14) Tertiary butyl alcohol	4.26	59	12667	20.93 ug/l	100
15) 1,1-dichloroethene	3.51	96	82783	29.48 ug/l	81
16) Acetonitrile	1.91	40	3170	67.65 ug/l m	1
17) methylene chloride	4.18	84	128870	22.50 ug/l	92
18) acrolein	3.31	56	36096	20.51 ug/l m	100
19) acrylonitrile	1.91	53	53541	1611.83 ug/l #	31
20) trans-1,2-dichloroethene	4.65	96	98261	21.46 ug/l #	75
21) acetone	4.64	43	44120	22.31 ug/l	69
22) carbon disulfide	3.92	76	486651	21.42 ug/l	100
23) hexane	5.15	57	238765	21.63 ug/l	95
24) 1,1-dichloroethane	5.28	63	234457	21.21 ug/l	99
25) methyl t-butyl ether	4.63	73	168097	19.10 ug/l	100
26) vinyl acetate	5.35	43	179512	18.80 ug/l	100
27) 2-chloro-1,3-butadiene	5.48	53	161932	20.61 ug/l	88
28) 2,2-dichloropropane	6.32	77	113918	19.21 ug/l	91
29) cis-1,2-dichloroethene	6.30	96	101870	20.88 ug/l #	78
30) 2-butanone	6.24	72	8920	19.42 ug/l	98
31) Idomethane	3.74	142	179833	23.58 ug/l	94
32) Allyl chloride	3.92	76	482008	21.47 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2091.d
Acq On : 13 Oct 99 5:17 am
Sample : VSTD020;MSI;;
Misc : VSTD020;LOW;AQ;
Quant Time: Oct 13 9:34 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) cyclohexane	7.59	56	252867	21.66 ug/l #	68
34) Ethyl Cyanide	6.37	54	109447	20.54 ug/l	93
35) Ethyl Acetate	8.65	43	250878	21.85 ug/l #	58
36) bromochloromethane	6.80	128	48853	21.02 ug/l	96
37) tetrahydrofuran	6.95	42	27757	19.27 ug/l	97
38) chloroform	6.85	83	201363	20.86 ug/l	95
39) 1,1,1-trichloroethane	7.39	97	129529	20.88 ug/l	87
41) carbon tetrachloride	7.80	117	94740	20.26 ug/l	99
42) 1,1-dichloropropene	7.71	75	176994	21.92 ug/l	94
43) 2,2,4-trimethylpentane	5.15	57	238765	21.63 ug/l #	28
45) benzene	8.09	78	469131	22.32 ug/l	99
46) 1,2-dichloroethane	8.09	62	141652	20.95 ug/l	85
47) Isopropyl acetate	8.65	43	250878	21.85 ug/l #	61
48) Heptane	8.65	43	250878	21.85 ug/l	97
49) trichloroethene	9.27	95	106044	21.11 ug/l	86
50) 1,2-dichloropropane	9.60	63	132262	20.50 ug/l	96
51) methyl methacrylate	9.81	69	48696	18.25 ug/l #	92
52) 1,4-Dioxane	9.90	88	12824	20.45 ug/l	84
53) dibromomethane	9.84	93	61286	21.24 ug/l	93
54) bromodichloromethane	10.04	83	124316	20.00 ug/l	98
55) methylacrylonitrile	6.66	41	529068	20.43 ug/l	90
56) Propyl acetate	6.43	43		No Calib	
57) 4-methyl-2-pentanone	10.95	43	80964	19.51 ug/l #	96
58) 2-hexanone	12.41	43	53273	19.14 ug/l #	95
59) cis-1,3-dichloropropene	10.83	75	156985	19.84 ug/l	91
60) toluene	11.39	92	223492	22.42 ug/l	99
61) 2-chloroethylvinylether	10.60	63	10016	7.83 ug/l	100
62) Octane	7.75	43		No Calib #	
63) butyl acetate	11.56	43		No Calib	
64) isobutyl acetate	12.78	43		No Calib	
65) trans-1,3-dichloropropene	11.72	75	128085	19.38 ug/l	88
66) 1,1,2-trichloroethane	12.04	83	72065	20.01 ug/l	87
67) 1,2-dibromoethane	13.15	107	71171	20.51 ug/l	97
68) tetrachloroethene	12.49	166	90500	21.33 ug/l	96
69) 1,3-dichloropropane	12.37	76	140345	20.43 ug/l	97
72) dibromochloromethane	12.85	129	89913	8.84 ug/l	97
73) chlorobenzene	14.25	112	279965	11.71 ug/l	92
74) 1,1,1,2-tetrachloroethane	14.40	131	87230	9.13 ug/l	98
75) ethylbenzene	14.46	91	391812	9.53 ug/l	97
76) Nonene	7.61	55		No Calib #	
77) 1-chlorohexane	0.00	91		Not Detected	
78) m,p-Xylenes	14.65	106	280904	10.20 ug/l	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2091.d
Acq On : 13 Oct 99 5:17 am
Sample : VSTD020;MSI;;
Misc : VSTD020;LOW;AQ;
Quant Time: Oct 13 9:34 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.64	69		No Calib	#	
80)	Cyclohexanone	15.66	42	10476	9.16 ug/l	#	60
81)	butyl acrylate	9.80	55		No Calib	#	
82)	cyclohexanol	9.90	57		No Calib	#	
83)	o-xylene	15.19	106	131525	9.56 ug/l		92
84)	styrene	15.21	104	216364	9.25 ug/l		75
85)	bromoform	15.43	173	44517	8.84 ug/l		97
86)	isopropylbenzene	15.61	105	349159	9.66 ug/l		96
88)	bromobenzene	15.92	156	91555	9.20 ug/l	#	64
90)	1,1,2,2-tetrachloroethane	15.87	83	100887	21.35 ug/l		97
91)	1,2,3-trichloropropane	15.92	75	119356	20.79 ug/l		61
92)	n-propylbenzene	16.01	91	442396	22.14 ug/l		98
93)	2-chlorotoluene	16.10	91	262320	21.86 ug/l		88
94)	4-chlorotoluene	16.18	91	296264	22.31 ug/l		89
95)	1,3,5-trimethylbenzene	16.17	105	266628	22.78 ug/l		93
96)	tert-butylbenzene	16.45	119	314114	22.16 ug/l		100
97)	1,2,4-trimethylbenzene	16.48	105	271493	22.40 ug/l		93
98)	sec-butylbenzene	16.62	105	373322	22.60 ug/l		96
99)	1,3-dichlorobenzene	16.73	146	178200	22.55 ug/l		93
100)	4-isopropyltoluene	16.73	119	297634	22.89 ug/l		97
101)	1,4-dichlorobenzene	16.79	146	181737	22.48 ug/l		94
102)	1,2-dichlorobenzene	17.06	146	159214	22.05 ug/l		92
103)	n-butylbenzene	17.03	91	325107	22.68 ug/l		96
104)	cis-1,4-dichloro-2-butene	15.92	75	116746	20.50 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.95	53	21075	14.09 ug/l	#	76
106)	1,2-dibromo-3-chloropropan	17.56	75	14480	21.57 ug/l	#	69
107)	pentachloroethane	16.46	167	45026	19.77 ug/l		93
108)	1,2,4-trichlorobenzene	18.12	180	79028	23.96 ug/l		97
109)	hexachlorobutadiene	18.24	225	47820	24.36 ug/l		99
110)	naphthalene	18.30	128	208624	24.57 ug/l		100
111)	1,2,3-trichlorobenzene	18.12	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	17.57	156		No Calib		

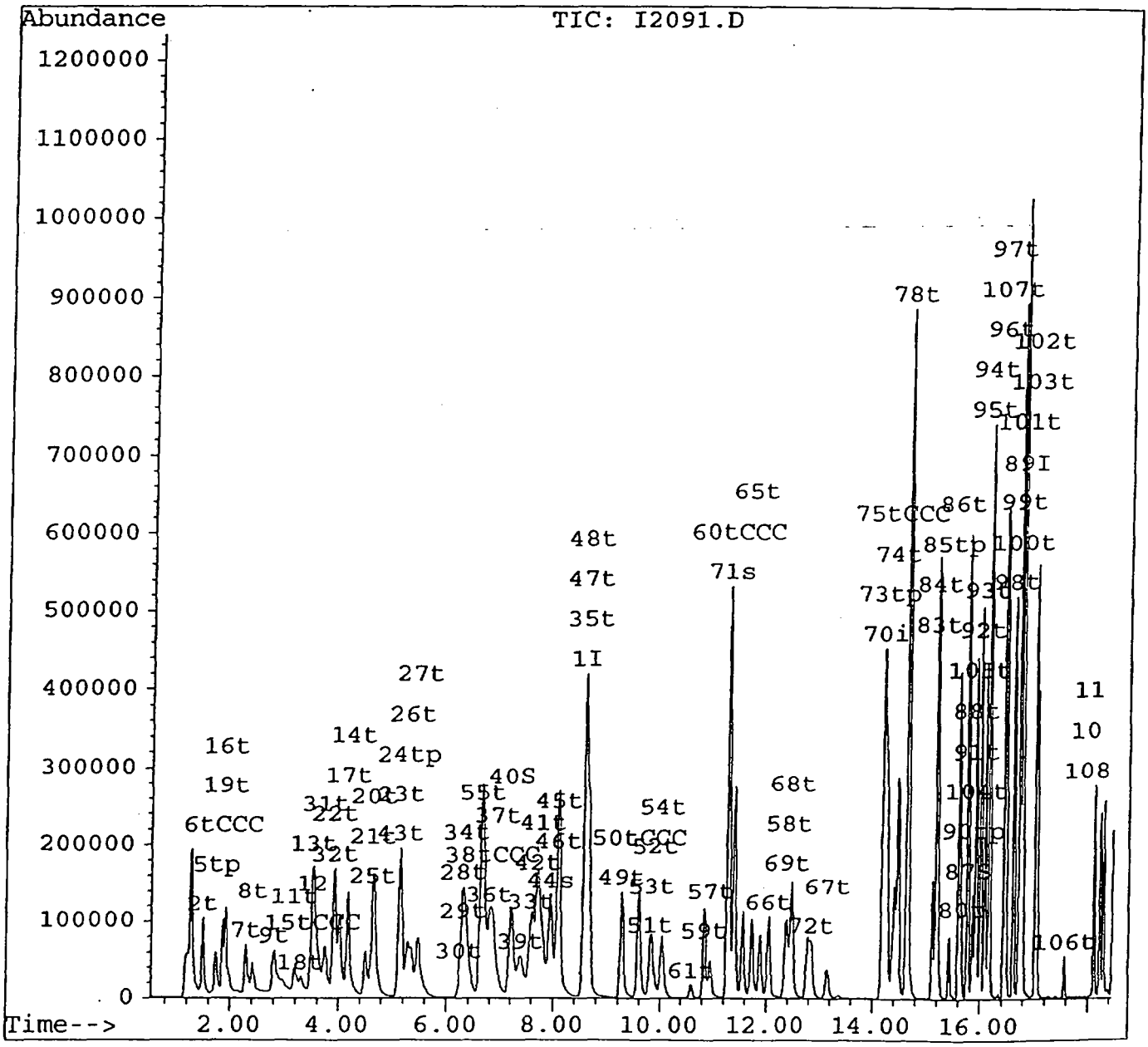
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2091.d
Acq On : 13 Oct 99 5:17 am
Sample : VSTD020;MSI;;
Misc : VSTD020;LOW;AQ;
Quant Time: Oct 13 9:34 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2092.d
Acq On : 13 Oct 99 5:44 am
Sample : VSTD010;MSI;;
Misc : VSTD010;LOW;AQ;
Quant Time: Oct 13 9:32 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.58	96	799438	50.00 ug/l	0.00
70) chlorobenzene-d5	14.20	117	532623	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	236301	50.00 ug/l	0.00
System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.21	113	255970	49.69 ug/l	99.39%
44) 1,2-dichloroethane-d4	7.95	65	296303	48.32 ug/l	96.63%
71) toluene-d8	11.28	98	690430	21.79 ug/l	43.59%
87) bromoflurobenzene	15.77	95	249891	21.18 ug/l	42.37%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.49	85	66015	9.07 ug/l	98
3) 1,3-Butadiene	1.91	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.73	50	66639	9.44 ug/l	99
6) vinyl chloride	1.86	62	63083	9.54 ug/l	99
7) bromomethane	2.30	96	46444	10.24 ug/l #	65
8) chloroethane	2.42	64	27198	9.88 ug/l	96
9) trichlorofluoromethane	2.80	101	54012	9.04 ug/l	98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.19	59	29380	11.21 ug/l	94
12) Ethyl Mercaptan	3.53	62	8655	14.00 ug/l	75
13) freon	3.53	101	77898	13.09 ug/l	98
14) Tertiary butyl alcohol	4.27	59	5642	9.16 ug/l	100
15) 1,1-dichloroethene	3.52	96	46134	16.15 ug/l	89
16) Acetonitrile	1.91	40	1182	24.79 ug/l m	1
17) methylene chloride	4.18	84	75442	12.94 ug/l	93
18) acrolein	3.31	56	18334	10.24 ug/l m	100
19) acrylonitrile	1.91	53	27077	801.19 ug/l #	31
20) trans-1,2-dichloroethene	4.65	96	50891	10.93 ug/l #	76
21) acetone	4.62	43	20748	10.31 ug/l	71
22) carbon disulfide	3.92	76	238155	10.30 ug/l	100
23) hexane	5.14	57	120103	10.69 ug/l	94
24) 1,1-dichloroethane	5.28	63	120018	10.67 ug/l	97
25) methyl t-butyl ether	4.63	73	79977	8.93 ug/l	100
26) vinyl acetate	5.36	43	94936	9.77 ug/l	100
27) 2-chloro-1,3-butadiene	5.48	53	73254	9.16 ug/l	89
28) 2,2-dichloropropane	6.32	77	57803	9.58 ug/l	88
29) cis-1,2-dichloroethene	6.31	96	52732	10.62 ug/l #	72
30) 2-butanone	6.25	72	4237	9.06 ug/l	86
31) Idomethane	3.74	142	91150	11.75 ug/l	94
32) Allyl chloride	3.92	76	237592	10.40 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2092.d
Acq On : 13 Oct 99 5:44 am
Sample : VSTD010;MSI;;
Misc : VSTD010;LOW;AQ;
Quant Time: Oct 13 9:32 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) cyclohexane	7.60	56	123779	10.42 ug/l #	67
34) Ethyl Cyanide	6.38	54	53941	9.95 ug/l	93
35) Ethyl Acetate	8.65	43	125487	10.74 ug/l #	51
36) bromochloromethane	6.79	128	26743	11.31 ug/l	98
37) tetrahydrofuran	6.95	42	14205	9.69 ug/l	95
38) chloroform	6.86	83	103934	10.58 ug/l	94
39) 1,1,1-trichloroethane	7.38	97	62786	9.95 ug/l	86
41) carbon tetrachloride	7.81	117	42850	9.01 ug/l	94
42) 1,1-dichloropropene	7.70	75	86962	10.58 ug/l	94
43) 2,2,4-trimethylpentane	5.14	57	120103	10.69 ug/l #	27
45) benzene	8.10	78	259963	12.16 ug/l	98
46) 1,2-dichloroethane	8.10	62	76871	11.17 ug/l	87
47) Isopropyl acetate	8.65	43	125487	10.74 ug/l #	61
48) Heptane	8.65	43	125487	10.74 ug/l	97
49) trichloroethene	9.27	95	52326	10.24 ug/l	90
50) 1,2-dichloropropane	9.60	63	70877	10.80 ug/l	95
51) methyl methacrylate	9.81	69	22089	8.14 ug/l #	94
52) 1,4-Dioxane	9.92	88	5323	8.34 ug/l	83
53) dibromomethane	9.84	93	33648	11.46 ug/l	92
54) bromodichloromethane	10.04	83	65113	10.30 ug/l	97
55) methylacrylonitrile	6.66	41	268202	10.18 ug/l	92
56) Propyl acetate	6.43	43		No Calib	
57) 4-methyl-2-pentanone	10.95	43	37979	9.00 ug/l #	96
58) 2-hexanone	12.43	43	24854	8.77 ug/l #	95
59) cis-1,3-dichloropropene	10.84	75	81831	10.17 ug/l	91
60) toluene	11.39	92	118538	11.69 ug/l	97
61) 2-chloroethylvinylether	10.59	63	8044	6.18 ug/l	100
62) Octane	7.60	43		No Calib #	
63) butyl acetate	11.56	43		No Calib	
64) isobutyl acetate	12.78	43		No Calib	
65) trans-1,3-dichloropropene	11.73	75	68039	10.12 ug/l	92
66) 1,1,2-trichloroethane	12.05	83	39007	10.65 ug/l	88
67) 1,2-dibromoethane	13.15	107	37450	10.61 ug/l	99
68) tetrachloroethene	12.48	166	44412	10.29 ug/l	96
69) 1,3-dichloropropane	12.38	76	75042	10.74 ug/l	98
72) dibromochloromethane	12.85	129	47681	4.62 ug/l	97
73) chlorobenzene	14.26	112	170400	7.02 ug/l	93
74) 1,1,1,2-tetrachloroethane	14.39	131	45776	4.72 ug/l	94
75) ethylbenzene	14.46	91	200893	4.82 ug/l	98
76) Nonene	7.61	55		No Calib #	
77) 1-chlorohexane	0.00	91		Not Detected	
78) m,p-Xylenes	14.65	106	149521	5.35 ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2092.d
Acq On : 13 Oct 99 5:44 am
Sample : VSTD010;MSI;;
Misc : VSTD010;LOW;AQ;
Quant Time: Oct 13 9:32 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.64	69		No Calib	#	
80)	Cyclohexanone	15.66	42	4924	4.24 ug/l	#	67
81)	butyl acrylate	9.80	55		No Calib	#	
82)	cyclohexanol	9.91	57		No Calib	#	
83)	o-xylene	15.19	106	68430	4.90 ug/l		94
84)	styrene	15.21	104	110544	4.66 ug/l		78
85)	bromoform	15.44	173	23132	4.52 ug/l		95
86)	isopropylbenzene	15.61	105	174436	4.76 ug/l		98
88)	bromobenzene	15.92	156	47380	4.69 ug/l	#	66
90)	1,1,2,2-tetrachloroethane	15.86	83	52580	11.09 ug/l		95
91)	1,2,3-trichloropropane	15.92	75	64079	11.12 ug/l		60
92)	n-propylbenzene	16.02	91	224607	11.21 ug/l		99
93)	2-chlorotoluene	16.10	91	135329	11.24 ug/l		89
94)	4-chlorotoluene	16.18	91	156438	11.74 ug/l		85
95)	1,3,5-trimethylbenzene	16.17	105	136304	11.61 ug/l		93
96)	tert-butylbenzene	16.45	119	157138	11.05 ug/l		96
97)	1,2,4-trimethylbenzene	16.48	105	145156	11.94 ug/l		94
98)	sec-butylbenzene	16.63	105	183725	11.09 ug/l		93
99)	1,3-dichlorobenzene	16.72	146	93079	11.74 ug/l		95
100)	4-isopropyltoluene	16.73	119	147700	11.32 ug/l		97
101)	1,4-dichlorobenzene	16.79	146	95682	11.80 ug/l		93
102)	1,2-dichlorobenzene	17.06	146	83838	11.57 ug/l		93
103)	n-butylbenzene	17.02	91	160609	11.17 ug/l		100
104)	cis-1,4-dichloro-2-butene	15.92	75	60161	10.53 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.94	53	10563	7.04 ug/l	#	45
106)	1,2-dibromo-3-chloropropan	17.57	75	7164	10.64 ug/l		73
107)	pentachloroethane	16.46	167	22140	9.69 ug/l		96
108)	1,2,4-trichlorobenzene	18.12	180	40863	12.35 ug/l		100
109)	hexachlorobutadiene	18.24	225	23141	11.75 ug/l		98
110)	naphthalene	18.30	128	106003	12.44 ug/l		100
111)	1,2,3-trichlorobenzene	18.12	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	0.00	156		Not Detected		

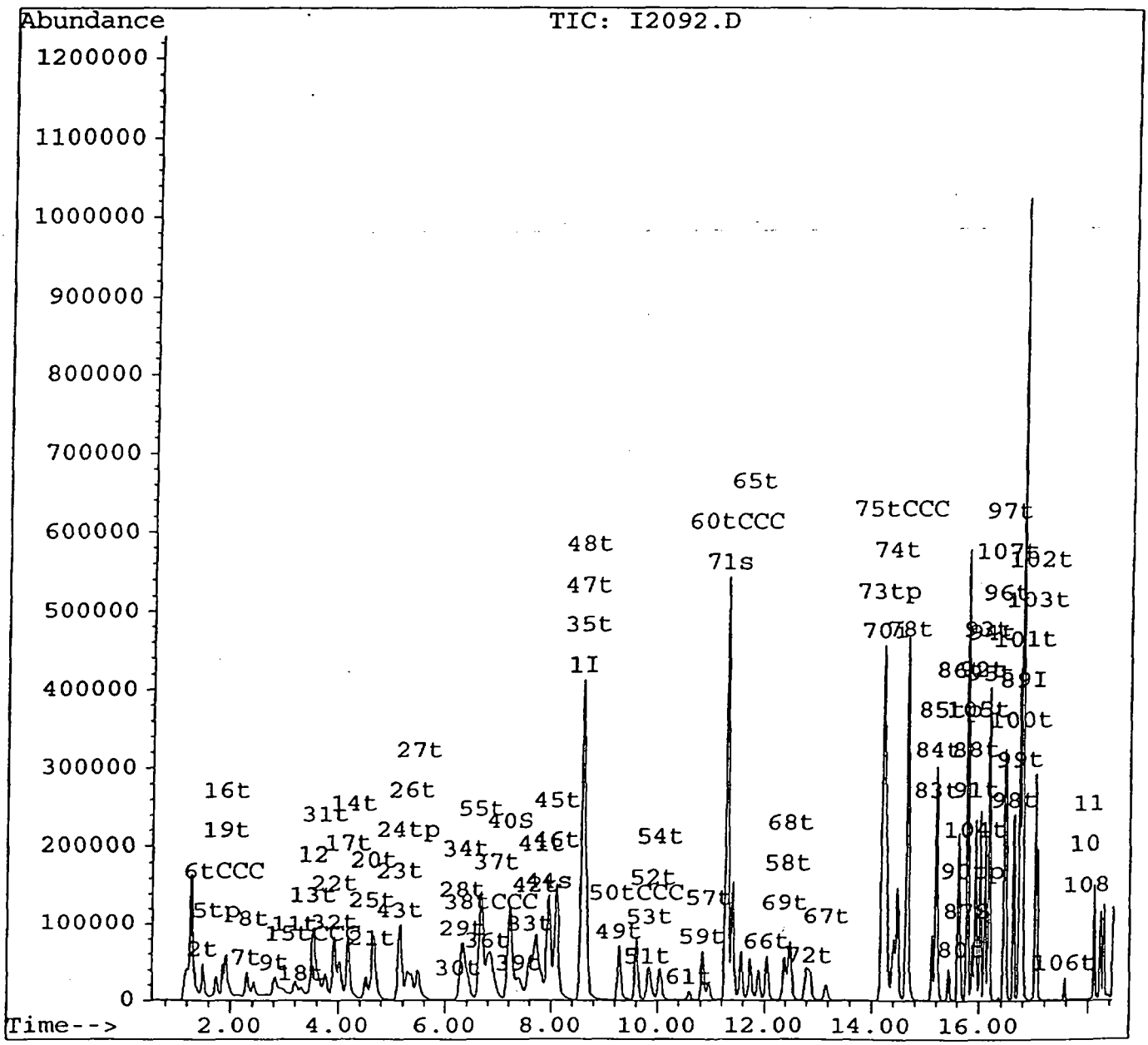
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2092.d
Acq On : 13 Oct 99 5:44 am
Sample : VSTD010;MSI;;
Misc : VSTD010;LOW;AQ;
Quant Time: Oct 13 9:32 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2093.d
Acq On : 13 Oct 99 6:11 am
Sample : VSTD005;MSI;;
Misc : VSTD005;LOW;AQ;
Quant Time: Oct 13 9:30 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.59	96	784527	50.00 ug/l	0.00
70) chlorobenzene-d5	14.20	117	546036	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	235335	50.00 ug/l	0.00
System Monitoring Compounds					%Recovery
40) dibromoflurometh ane	7.21	113	254444	50.34 ug/l	100.67%
44) 1,2-dichloroethane-d4	7.95	65	290011	48.19 ug/l	96.38%
71) toluene-d8	11.29	98	678482	20.89 ug/l	41.78%
87) bromoflurobenzene	15.77	95	250289	20.70 ug/l	41.39%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.49	85	34129	4.78 ug/l	99
3) 1,3-Butadiene	1.91	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.74	50	33360	4.82 ug/l	99
6) vinyl chloride	1.86	62	31489	4.85 ug/l	99
7) bromomethane	2.30	96	22987	5.16 ug/l #	67
8) chloroethane	2.43	64	13566	5.02 ug/l	93
9) trichlorofluoromethane	2.81	101	28639	4.88 ug/l	98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.18	59	13353	5.19 ug/l	94
12) Ethyl Mercaptan	3.51	62	3531	5.82 ug/l	75
13) freon	3.54	101	38372	6.57 ug/l	98
14) Tertiary butyl alcohol	4.26	59	3855	6.38 ug/l	100
15) 1,1-dichloroethene	3.52	96	21817	7.78 ug/l	90
16) Acetonitrile	1.84	40	597	12.76 ug/l #	1
17) methylene chloride	4.18	84	42990	7.52 ug/l	89
18) acrolein	3.31	56	12580	7.16 ug/l m	100
19) acrylonitrile	1.92	53	11037	332.78 ug/l #	37
20) trans-1,2-dichloroethene	4.65	96	21815	4.77 ug/l #	78
21) acetone	4.64	43	10435	5.29 ug/l	56
22) carbon disulfide	3.93	76	111709	4.92 ug/l	100
23) hexane	5.15	57	57224	5.19 ug/l	92
24) 1,1-dichloroethane	5.28	63	53649	4.86 ug/l	100
25) methyl t-butyl ether	4.63	73	37306	4.25 ug/l	100
26) vinyl acetate	5.36	43	39883	4.18 ug/l	100
27) 2-chloro-1,3-butadiene	5.48	53	32048	4.09 ug/l	88
28) 2,2-dichloropropane	6.32	77	25363	4.28 ug/l	91
29) cis-1,2-dichloroethene	6.30	96	23362	4.79 ug/l #	80
30) 2-butanone	6.24	72	1234	2.69 ug/l m	24
31) Idomethane	3.75	142	43769	5.75 ug/l	88
32) Allyl chloride	3.93	76	111709	4.98 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2093.d
Acq On : 13 Oct 99 6:11 am
Sample : VSTD005;MSI;;
Misc : VSTD005;LOW;AQ;
Quant Time: Oct 13 9:30 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) cyclohexane	7.61	56	59266	5.08 ug/l #	72
34) Ethyl Cyanide	6.37	54	24657	4.63 ug/l	96
35) Ethyl Acetate	8.66	43	58987	5.14 ug/l #	38
36) bromochloromethane	6.81	128	11436	4.93 ug/l	93
37) tetrahydrofuran	6.94	42	5938	4.13 ug/l	96
38) chloroform	6.86	83	45968	4.77 ug/l	98
39) 1,1,1-trichloroethane	7.38	97	27906	4.50 ug/l	87
41) carbon tetrachloride	7.80	117	18959	4.06 ug/l	98
42) 1,1-dichloropropene	7.71	75	38138	4.73 ug/l	93
43) 2,2,4-trimethylpentane	5.15	57	57224	5.19 ug/l #	24
45) benzene	8.10	78	117595	5.60 ug/l	99
46) 1,2-dichloroethane	8.09	62	35220	5.22 ug/l	84
47) Isopropyl acetate	8.66	43	58987	5.14 ug/l #	63
48) Heptane	8.66	43	58987	5.14 ug/l	93
49) trichloroethene	9.28	95	22722	4.53 ug/l	91
50) 1,2-dichloropropane	9.60	63	30167	4.68 ug/l	88
51) methyl methacrylate	9.81	69	8527	3.20 ug/l #	87
52) 1,4-Dioxane	9.91	88	4106	6.56 ug/l	76
53) dibromomethane	9.85	93	13363	4.64 ug/l	91
54) bromodichloromethane	10.04	83	27669	4.46 ug/l	98
55) methylacrylonitrile	6.67	41	119939	4.64 ug/l	91
56) Propyl acetate	6.44	43		No Calib	
57) 4-methyl-2-pentanone	10.95	43	16960	4.09 ug/l #	90
58) 2-hexanone	12.43	43	12255	4.41 ug/l #	93
59) cis-1,3-dichloropropene	10.84	75	33169	4.20 ug/l	89
60) toluene	11.40	92	47605	4.78 ug/l	95
61) 2-chloroethylvinylether	10.60	63	3160	2.48 ug/l	100
62) Octane	7.59	43		No Calib #	
63) butyl acetate	11.56	43		No Calib	
64) isobutyl acetate	12.79	43		No Calib	
65) trans-1,3-dichloropropene	11.72	75	27885	4.23 ug/l	90
66) 1,1,2-trichloroethane	12.04	83	15632	4.35 ug/l	84
67) 1,2-dibromoethane	13.15	107	14913	4.30 ug/l	97
68) tetrachloroethene	12.49	166	19669	4.64 ug/l	96
69) 1,3-dichloropropane	12.38	76	30959	4.51 ug/l	97
72) dibromochloromethane	12.85	129	19192	1.81 ug/l	99
73) chlorobenzene	14.25	112	51311	2.06 ug/l	93
74) 1,1,1,2-tetrachloroethane	14.40	131	19380	1.95 ug/l	96
75) ethylbenzene	14.47	91	83887	1.96 ug/l	96
76) Nonene	7.61	55		No Calib #	
77) 1-chlorohexane	0.00	91		Not Detected	
78) m,p-Xylenes	14.65	106	62784	2.19 ug/l	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2093.d
Acq On : 13 Oct 99 6:11 am
Sample : VSTD005;MSI;;
Misc : VSTD005;LOW;AQ;
Quant Time: Oct 13 9:30 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	14.64	69		No Calib	#	
80)	Cyclohexanone	15.66	42	2392	2.01 ug/l	#	73
81)	butyl acrylate	0.00	55		Not Detected		
82)	cyclohexanol	9.90	57		No Calib	#	
83)	o-xylene	15.20	106	29078	2.03 ug/l		98
84)	styrene	15.22	104	45684	1.88 ug/l		82
85)	bromoform	15.43	173	9243	1.76 ug/l		96
86)	isopropylbenzene	15.62	105	73628	1.96 ug/l		97
88)	bromobenzene	15.93	156	20399	1.97 ug/l	#	73
90)	1,1,2,2-tetrachloroethane	15.87	83	22258	4.72 ug/l		95
91)	1,2,3-trichloropropane	15.92	75	27020	4.71 ug/l		60
92)	n-propylbenzene	16.01	91	97446	4.88 ug/l		99
93)	2-chlorotoluene	16.10	91	58811	4.91 ug/l		89
94)	4-chlorotoluene	16.18	91	69677	5.25 ug/l		90
95)	1,3,5-trimethylbenzene	16.17	105	58782	5.03 ug/l		94
96)	tert-butylbenzene	16.45	119	68660	4.85 ug/l		99
97)	1,2,4-trimethylbenzene	16.48	105	61720	5.10 ug/l		93
98)	sec-butylbenzene	16.62	105	82568	5.00 ug/l		95
99)	1,3-dichlorobenzene	16.73	146	41360	5.24 ug/l		93
100)	4-isopropyltoluene	16.73	119	64884	4.99 ug/l		98
101)	1,4-dichlorobenzene	16.79	146	42284	5.24 ug/l		95
102)	1,2-dichlorobenzene	17.06	146	37206	5.16 ug/l		93
103)	n-butylbenzene	17.03	91	70633	4.93 ug/l		97
104)	cis-1,4-dichloro-2-butene	15.92	75	25286	4.44 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.95	53	4337	2.90 ug/l	#	72
106)	1,2-dibromo-3-chloropropan	17.56	75	3459	5.16 ug/l	#	59
107)	pentachloroethane	16.47	167	10130	4.45 ug/l		97
108)	1,2,4-trichlorobenzene	18.12	180	18101	5.49 ug/l		97
109)	hexachlorobutadiene	18.24	225	11180	5.70 ug/l		99
110)	naphthalene	18.30	128	49613	5.85 ug/l		100
111)	1,2,3-trichlorobenzene	18.12	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	0.00	156		Not Detected		

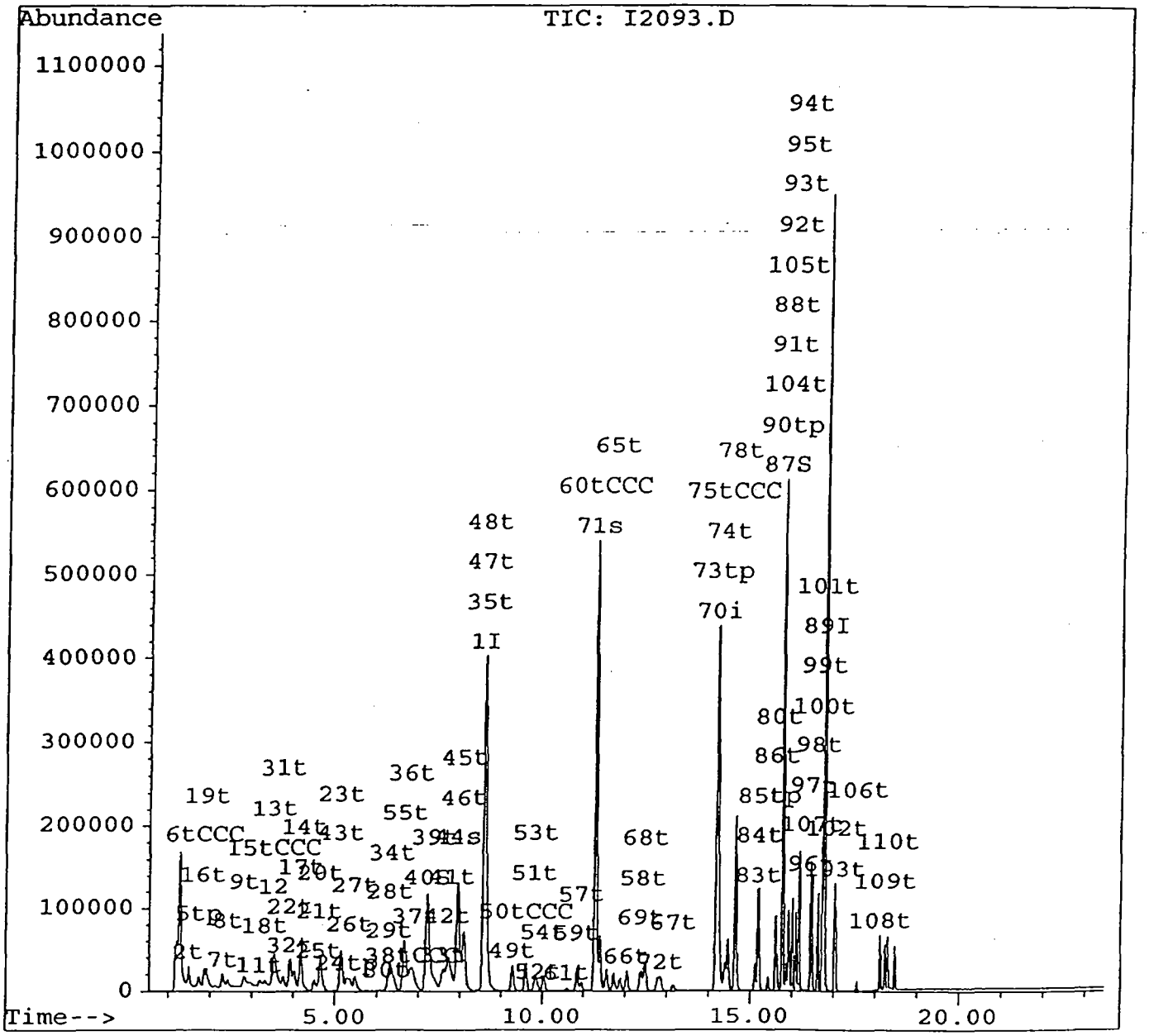
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2093.d
Acq On : 13 Oct 99 6:11 am
Sample : VSTD005;MSI;;
Misc : VSTD005;LOW;AQ;
Quant Time: Oct 13 9:30 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101399\i2094.d
Acq On : 13 Oct 99 6:44 am
Sample : VSTD002;MSI;;
Misc : VSTD002;LOW;AQ;
Quant Time: Oct 13 9:28 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.59	96	785883	50.00 ug/l	0.00
70) chlorobenzene-d5	14.20	117	534976	50.00 ug/l	0.00
89) 1,4-dichlorobenzene-d4	16.77	152	235048	50.00 ug/l	0.00
System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.21	113	248596	49.09 ug/l	98.19%
44) 1,2-dichloroethane-d4	7.95	65	287825	47.74 ug/l	95.49%
71) toluene-d8	11.29	98	684898	21.52 ug/l	43.05%
87) bromoflurobenzene	15.77	95	248317	20.96 ug/l	41.91%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.49	85	15265	2.13 ug/l	96
3) 1,3-Butadiene	1.91	54		No Calib	
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.73	50	17906	2.58 ug/l	100
6) vinyl chloride	1.86	62	13928	2.14 ug/l	98
7) bromomethane	2.30	96	12667	2.84 ug/l #	66
8) chloroethane	2.43	64	5985	2.21 ug/l	91
9) trichlorofluoromethane	2.81	101	12451	2.12 ug/l	98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.18	59	4448	1.73 ug/l	82
12) Ethyl Mercaptan	3.53	62	1186	1.95 ug/l	73
13) freon	3.54	101	13140	2.25 ug/l	96
14) Tertiary butyl alcohol	4.27	59	2462	4.07 ug/l	100
15) 1,1-dichloroethene	3.52	96	10527	3.75 ug/l	97
16) Acetonitrile	1.84	40	638	13.61 ug/l m	24
17) methylene chloride	4.18	84	22819	3.98 ug/l	92
18) acrolein	3.31	56	6504	3.69 ug/l m	100
19) acrylonitrile	1.91	53	5203	156.61 ug/l #	43
20) trans-1,2-dichloroethene	4.65	96	9901	2.16 ug/l	89
21) acetone	4.63	43	5059	2.56 ug/l	56
22) carbon disulfide	3.93	76	51580	2.27 ug/l	100
23) hexane	5.15	57	23631	2.14 ug/l	91
24) 1,1-dichloroethane	5.28	63	22958	2.08 ug/l	98
25) methyl t-butyl ether	4.64	73	16633	1.89 ug/l	100
26) vinyl acetate	5.37	43	11029	1.15 ug/l	100
27) 2-chloro-1,3-butadiene	5.48	53	14051	1.79 ug/l	87
28) 2,2-dichloropropane	6.30	77	10026	1.69 ug/l	90
29) cis-1,2-dichloroethene	6.32	96	10139	2.08 ug/l	90
30) 2-butanone	6.25	72	130	0.28 ug/l m	0
31) Idomethane	3.76	142	20797	2.73 ug/l	97
32) Allyl chloride	3.93	76	51580	2.30 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2094.d
Acq On : 13 Oct 99 6:44 am
Sample : VSTD002;MSI;;
Misc : VSTD002;LOW;AQ;
Quant Time: Oct 13 9:28 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) cyclohexane	7.61	56	21796	1.87 ug/l #	58
34) Ethyl Cyanide	6.38	54	10647	2.00 ug/l	89
35) Ethyl Acetate	8.65	43	22475	1.96 ug/l #	1
36) bromochloromethane	6.80	128	4791	2.06 ug/l #	86
37) tetrahydrofuran	6.96	42	2677	1.86 ug/l #	38
38) chloroform	6.86	83	19624	2.03 ug/l	97
39) 1,1,1-trichloroethane	7.39	97	11364	1.83 ug/l	85
41) carbon tetrachloride	7.81	117	7035	1.50 ug/l	96
42) 1,1-dichloropropene	7.71	75	15446	1.91 ug/l	96
43) 2,2,4-trimethylpentane	5.15	57	23631	2.14 ug/l #	29
45) benzene	8.10	78	56776	2.70 ug/l m	99
46) 1,2-dichloroethane	8.10	62	16092	2.38 ug/l	69
47) Isopropyl acetate	8.65	43	22475	1.96 ug/l #	72
48) Heptane	8.65	43	22475	1.96 ug/l #	79
49) trichloroethene	9.27	95	9728	1.94 ug/l	81
50) 1,2-dichloropropane	9.59	63	12840	1.99 ug/l	88
51) methyl methacrylate	9.81	69	3137	1.18 ug/l #	77
52) 1,4-Dioxane	9.91	88	2256	3.60 ug/l	85
53) dibromomethane	9.85	93	5524	1.91 ug/l	93
54) bromodichloromethane	10.04	83	11527	1.85 ug/l	93
55) methylacrylonitrile	6.66	41	53238	2.06 ug/l	91
56) Propyl acetate	6.44	43		No Calib	
57) 4-methyl-2-pentanone	10.95	43	6768	1.63 ug/l #	89
58) 2-hexanone	12.41	43	5269	1.89 ug/l #	79
59) cis-1,3-dichloropropene	10.84	75	13638	1.72 ug/l	93
60) toluene	11.40	92	21905	2.20 ug/l	99
61) 2-chloroethylvinylether	0.00	63		Not Detected	
62) Octane	7.62	43		No Calib #	
63) butyl acetate	11.56	43		No Calib	
64) isobutyl acetate	12.78	43		No Calib	
65) trans-1,3-dichloropropene	11.72	75	11190	1.69 ug/l	89
66) 1,1,2-trichloroethane	12.04	83	6541	1.82 ug/l	91
67) 1,2-dibromoethane	13.16	107	6068	1.75 ug/l	91
68) tetrachloroethene	12.49	166	9133	2.15 ug/l	99
69) 1,3-dichloropropane	12.38	76	12995	1.89 ug/l	99
72) dibromochloromethane	12.85	129	7880	0.76 ug/l	94
73) chlorobenzene	14.26	112	22515	0.92 ug/l	87
74) 1,1,1,2-tetrachloroethane	14.40	131	8495	0.87 ug/l	97
75) ethylbenzene	14.47	91	37167	0.89 ug/l	99
76) Nonene	7.60	55		No Calib #	
77) 1-chlorohexane	0.00	91		Not Detected	
78) m,p-Xylenes	14.65	106	26982	0.96 ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2094.d
Acq On : 13 Oct 99 6:44 am
Sample : VSTD002;MSI;;
Misc : VSTD002;LOW;AQ;
Quant Time: Oct 13 9:28 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 08:40:43 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101399\I2090.D

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
79)	ethyl methacrylate	14.64	69		No Calib #	
80)	Cyclohexanone	15.66	42	582	0.50 ug/l #	55
81)	butyl acrylate	0.00	55		Not Detected	
82)	cyclohexanol	0.00	57		Not Detected	
83)	o-xylene	15.20	106	12472	0.89 ug/l	94
84)	styrene	15.21	104	18741	0.79 ug/l	77
85)	bromoform	15.43	173	3651	0.71 ug/l	96
86)	isopropylbenzene	15.62	105	30360	0.82 ug/l	95
88)	bromobenzene	15.92	156	8949	0.88 ug/l #	61
90)	1,1,2,2-tetrachloroethane	15.87	83	9467	2.01 ug/l	95
91)	1,2,3-trichloropropane	15.92	75	11821	2.06 ug/l	57
92)	n-propylbenzene	16.01	91	41730	2.09 ug/l	99
93)	2-chlorotoluene	16.10	91	25845	2.16 ug/l	90
94)	4-chlorotoluene	16.18	91	29108	2.20 ug/l	90
95)	1,3,5-trimethylbenzene	16.17	105	24862	2.13 ug/l	95
96)	tert-butylbenzene	16.45	119	29349	2.07 ug/l	99
97)	1,2,4-trimethylbenzene	16.48	105	27002	2.23 ug/l	92
98)	sec-butylbenzene	16.62	105	34341	2.08 ug/l	94
99)	1,3-dichlorobenzene	16.73	146	18397	2.33 ug/l	95
100)	4-isopropyltoluene	16.73	119	27038	2.08 ug/l	98
101)	1,4-dichlorobenzene	16.79	146	19011	2.36 ug/l	97
102)	1,2-dichlorobenzene	17.06	146	16121	2.24 ug/l	94
103)	n-butylbenzene	17.03	91	29198	2.04 ug/l	99
104)	cis-1,4-dichloro-2-butene	15.92	75	11821	2.08 ug/l #	1
105)	trans-1,4-dichloro-2-buten	15.95	53	1387	0.93 ug/l	84
106)	1,2-dibromo-3-chloropropan	17.56	75	1582	2.36 ug/l #	62
107)	pentachloroethane	16.46	167	4227	1.86 ug/l	91
108)	1,2,4-trichlorobenzene	18.12	180	7838	2.38 ug/l	99
109)	hexachlorobutadiene	18.24	225	4544	2.32 ug/l	98
110)	naphthalene	18.30	128	22454	2.65 ug/l	100
111)	1,2,3-trichlorobenzene	18.12	180		No Calib	
112)	2-Methyl Naphthalene	0.00	142		Not Detected	
113)	1,3-Dimethyl Naphthalene	0.00	156		Not Detected	

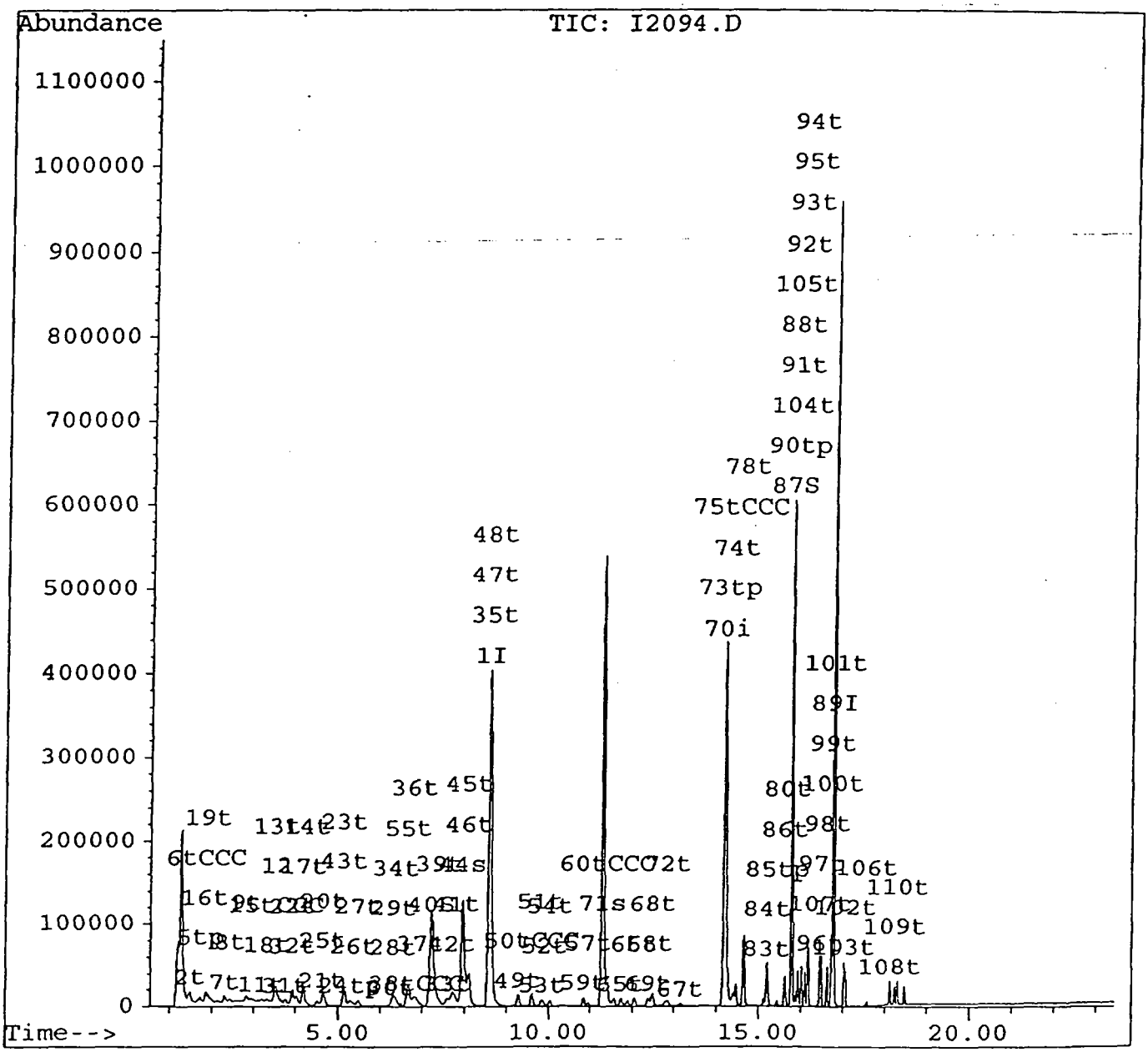
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101399\i2094.d
Acq On : 13 Oct 99 6:44 am
Sample : VSTD002;MSI;;
Misc : VSTD002;LOW;AQ;
Quant Time: Oct 13 9:28 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Single Level Calibration



Response Factor Report GC/MS Ins

000189

Average %RSD 11.9

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Calibration

Calibration Files
5 =J1957.D 50 =J1954.D 100 =J1953.D
200 =J1952.D 500 =J1951.D

		Compound	5	50	100	200	500	Avg	%RSD
1)	I	Flurobenzene	----------	----------	ISTD	----------	----------	----------	----------
2)	t	Dichlorodifluorometha	0.076	0.115	0.134	0.149	0.144	0.124	24.10
3)	T	1,3-Butadiene	0.121	0.145	0.150	0.125	0.144	0.135	10.35
4)	tP	Chloromethane	0.207	0.252	0.261	0.275	0.235	0.246	10.69
5)	tCCC	Vinyl chloride	0.177	0.197	0.190	0.217	0.184	0.193	8.08
6)		Bromomethane	0.142	0.111	0.082	0.065	0.037	0.088	46.37
7)	t	Chloroethane	0.088	0.083	0.065	0.047	0.016	0.060	49.51
8)	t	Trichlorofluoromethan	0.136	0.169	0.165	0.172	0.081	0.145	26.33
9)	t	Diethyl ether	0.211	0.208	0.222	0.198	0.145	0.197	15.24
10)	t	Freon	0.346	0.316	0.362	0.371	0.331	0.345	6.52
11)	t	Tertiary butyl alcoho	0.019	0.041	0.042	0.039	0.032	0.034	27.66
12)	tCCC	1,1-Dichloroethene	0.172	0.198	0.220	0.233	0.189	0.203	12.09
13)	t	Acetonitrile	0.019	0.012	0.014	0.016	0.015	0.015	16.13
14)	t	Methylene chloride	0.335	0.279	0.281	0.272	0.243	0.282	11.82
15)	t	Acrolein	0.114	0.154	0.168	0.136	0.124	0.139	15.50
16)	t	Acrylonitrile	0.285	0.326	0.357	0.292	0.275	0.307	10.97
17)	t	trans,1,2-Dichloroeth	0.222	0.259	0.279	0.292	0.252	0.261	10.31
18)	t	Acetone	0.086	0.068	0.069	0.053	0.049	0.065	22.81
19)	t	Carbon disulfide	0.656	0.563	0.663	0.634	0.578	0.619	7.41
20)	t	Hexane	0.402	0.373	0.399	0.429	0.382	0.397	5.44
21)	tp	1,1-Dichloroethane	0.342	0.401	0.406	0.420	0.371	0.388	8.10
22)	t	Methyl t-butyl ether	0.406	0.496	0.439	0.432	0.373	0.429	10.60
23)	t	Vinyl acetate	0.496	0.543	0.579	0.496	0.474	0.518	8.18
24)	t	2-chloro-1,3-butadien	0.252	0.256	0.279	0.274	0.260	0.264	4.50
25)	t	2,2-Dichloropropane	0.190	0.234	0.255	0.268	0.224	0.234	12.79
26)	t	cis-1,2-Dichloroethen	0.251	0.312	0.322	0.323	0.289	0.299	10.19
27)	t	2-Butanone	0.028	0.031	0.032	0.027	0.025	0.029	10.65
28)	t	Iodomethane	0.473	0.526	0.592	0.566	0.560	0.544	8.40
29)	t	Allyl chloride	0.150	0.149	0.171	0.162	0.167	0.160	6.26
30)	t	Cyclohexane	0.114	0.154	0.168	0.136	0.124	0.139	15.50
31)	t	Ethyl cyanide	0.289	0.335	0.382	0.283	0.286	0.315	13.73
32)	t	Ethyl acetate	0.082	0.091	0.078	0.077	0.068	0.079	10.57
33)	t	Bromochloromethane	0.130	0.180	0.186	0.182	0.161	0.168	13.81
34)	t	Tetrahydrofuran	0.148	0.145	0.145	0.113	0.096	0.129	18.33
35)	tCCCC	Chloroform	0.341	0.437	0.471	0.476	0.402	0.425	13.07
36)	t	1,1,1-Trichloroethane	0.254	0.287	0.308	0.321	0.272	0.288	9.28
37)	S	Dibromofluoromethane	0.339	0.337	0.355	0.363	0.313	0.342	5.69
38)	t	Carbon tetrachloride	0.239	0.265	0.290	0.316	0.277	0.278	10.31
39)	t	1,1,-Dichloropropene	0.270	0.294	0.309	0.355	0.301	0.306	10.13
40)	t	2,2,4-Trimethylpentan	0.402	0.373	0.399	0.429	0.382	0.397	5.44
41)	S	1,2-Dichloroethane-d4	0.221	0.215	0.228	0.218	0.238	0.224	4.06
42)	t	Benzene	0.828	0.919	0.936	0.961	0.818	0.892	7.32
43)	t	1,2-Dichloroethane	0.238	0.273	0.269	0.254	0.227	0.252	7.71

(#) = Out of Range

Response Factor Report GC/MS Ins

000190

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Calibration

Calibration Files
5 =J1957.D 50 =J1954.D 100 =J1953.D
200 =J1952.D 500 =J1951.D

		Compound	5	50	100	200	500	Avg	%RSD
44)	t	Heptane	0.399	0.410	0.430	0.450	0.397	0.417	5.41
45)	t	Trichloroethene	0.263	0.281	0.288	0.302	0.259	0.279	6.26
46)	tCCC	1,2-Dichloropropane	0.237	0.277	0.279	0.281	0.247	0.264	7.78
47)	t	Methylmethacrylate	0.151	0.162	0.169	0.138	0.126	0.149	11.59
48)	t	1,4-Dioxane	0.002	0.003	0.003	0.002	0.002	0.002	18.20
49)	t	Dibromomethane	0.178	0.227	0.215	0.200	0.182	0.200	10.28
50)	t	Bromodichloromethane	0.273	0.311	0.316	0.315	0.280	0.299	6.97
51)	t	Methylacrylonitrile	1.763	1.751	1.831	1.509	1.254	1.622	14.73
52)	t	4-methly-2-pentanone	0.028	0.028	0.029	0.023	0.021	0.026	13.63
53)	t	2-Hexanone	0.147	0.191	0.200	0.155	0.142	0.167	15.82
54)	t	cis-1,3-Dichloroprope	0.288	0.333	0.332	0.322	0.278	0.311	8.37
55)	tCCC	Toluene	0.598	0.598	0.613	0.617	0.500	0.585	8.24
56)	t	2-Chloroethylvinyleth	0.058	0.061	0.063	0.063	0.053	0.060	7.28
57)	t	Octane	0.186	0.231	0.248	0.186	0.169	0.204	16.42
58)	t	Isobutyl acetate	0.015	0.017	0.019	0.015	0.013	0.016	15.65
59)	t	trans-1,3-Dichloropro	0.364	0.403	0.400	0.397	0.347	0.382	6.54
60)	t	1,1,2-Trichloroethane	0.207	0.218	0.213	0.194	0.154	0.197	13.17
61)	t	1,2-Dibromoethane	0.289	0.315	0.313	0.293	0.251	0.292	8.87
62)	t	Tetrachloroethene	0.404	0.328	0.314	0.330	0.273	0.330	14.34
63)	t	1,3-Dichloropropane	0.347	0.362	0.358	0.331	0.283	0.336	9.60
64)	I	Chlorobenzene-d5	----------ISTD----------						
65)	S	Toluene-d8	1.179	1.185	1.177	1.187	1.243	1.194	2.32
66)	t	Dibromochloromethane	0.352	0.417	0.421	0.421	0.409	0.404	7.30
67)	tp	Chlorobenzene	0.954	1.015	0.998	1.037	0.924	0.986	4.66
68)	t	1,1,1,2-Tetrachloroet	0.265	0.327	0.333	0.337	0.304	0.313	9.54
69)	tCCC	Ethylbenzene	1.332	1.343	1.345	1.358	1.093	1.294	8.72
70)	t	1-Chlorohexane	1.301	1.324	1.312	1.388	1.230	1.311	4.31
71)	t	m&p-Xylenes	0.579	0.589	0.585	0.581	0.445	0.556	11.19
72)	t	Ethyl methacrylate	0.363	0.415	0.421	0.371	0.375	0.389	6.90
73)	t	Cyclohexanone	0.002	0.003	0.003	0.002	0.003	0.003	12.12
74)	t	0-Xylene	0.515	0.559	0.564	0.563	0.482	0.536	6.82
75)	t	Styrene	0.945	1.050	1.037	1.015	0.837	0.977	9.01
76)	tp	Bromoform	0.223	0.296	0.304	0.292	0.276	0.278	11.70
77)	t	Isopropylbenzene	1.234	1.268	1.295	1.336	1.131	1.253	6.20
78)	S	Bromofluorobenzene	0.388	0.404	0.422	0.412	0.388	0.403	3.67
79)	t	Bromobenzene	0.383	0.421	0.426	0.429	0.398	0.411	4.88
80)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
81)	tp	1,1,2,2-Tetrachloroet	0.908	1.020	0.963	0.842	0.676	0.882	15.06
82)	t	1,2,3-Trichloropropan	1.034	1.111	1.040	1.074	1.009	1.054	3.76
83)	t	n-Propylbenzene	3.858	3.504	3.379	3.516	2.755	3.402	11.85
84)	t	2-Chlorotoluene	2.433	2.145	2.066	2.104	1.802	2.110	10.65
85)	t	4-Chlorotoluene	2.577	2.320	2.180	2.179	1.721	2.195	14.17

(#) = Out of Range

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Calibration

Calibration Files
5 =J1957.D 50 =J1954.D 100 =J1953.D
200 =J1952.D 500 =J1951.D

		Compound	5	50	100	200	500	Avg	%RSD
86)	t	1,3,5-Trimethylbenzen	2.606	2.374	2.240	2.266	1.820	2.261	12.64
87)	t	tert-Butylbenzene	2.366	2.006	1.953	2.039	1.817	2.036	9.95
88)	t	1,2,4-Trimethylbenzen	2.709	2.430	2.314	2.376	2.010	2.368	10.59
89)	t	sec-Butylbenzene	3.901	3.264	3.150	3.333	2.844	3.298	11.69
90)	t	1,3-Dichlorobenzene	1.757	1.630	1.588	1.655	1.501	1.626	5.74
91)	t	4-isopropyltoluene	2.952	2.524	2.452	2.629	2.315	2.574	9.32
92)	t	1,4-Dichlorobenzene	1.841	1.669	1.592	1.682	1.551	1.667	6.68
93)	t	1,2-Dichlorobenzene	1.552	1.518	1.427	1.455	1.246	1.440	8.27
94)	t	n-Butylbenzene	2.847	2.375	2.268	2.348	1.860	2.340	15.01
95)	t	cis-1,4-dichloro-2-bu	0.345	0.421	0.414	0.367	0.338	0.377	10.16
96)	t	trans-1,4-dichloro-2-	0.055	0.060	0.057	0.057	0.048	0.055	8.14
97)	t	1,2-dibromo-3-chlorop	0.101	0.083	0.070	0.069	0.061	0.077	20.76
98)	t	Pentachloroethane	0.357	0.454	0.551	0.539	0.570	0.494	17.97
99)	t	1,2,4-Trichlorobenzen	1.263	1.024	0.868	0.903	0.948	1.001	15.75
100)	t	Hexachlorobutadiene	0.525	0.400	0.408	0.443	0.456	0.446	11.15
101)	t	Naphthalene	2.844	2.642	1.990	1.830	1.538	2.169	25.51
102)	t	1,2,3-Trichlorobenzen	1.179	0.948	0.740	0.760	0.636	0.853	25.15
103)	t	2-Methyl Naphthalene		0.948	0.740	0.760	0.636	0.000	-1.00
104)	t	1,3-Dimethyl Naphthal	1.047	1.027	0.994	1.026	0.951	1.009	3.72

(#) = Out of Range

Compound List Report GC/MS Ins

000192

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Calibration
Total Cpnds : 104

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Flurobenzene	96	7.20	1.000	A	0	A	B
2	T	Dichlorodifluoromethane	85	1.76	0.245	A	0	A	B
3	T	1,3-Butadiene	54	2.02	0.281	A	1	A	B
4	T	Chloromethane	50	1.87	0.260	A	1	A	B
5	T	Vinyl chloride	62	2.00	0.278	A	1	A	B
6		Bromomethane	96	2.33	0.323	A	1	A	B
7	T	Chloroethane	64	2.41	0.336	A	1	A	B
8	T	Trichlorofluoromethane	101	2.65	0.368	A	1	A	B
9	T	Diethyl ether	59	2.94	0.408	A	2	A	B
10	T	Freon	101	3.20	0.445	A	2	A	B
11	T	Tertiary butyl alcohol	59	3.99	0.554	A	0	A	B
12	T	1,1-Dichloroethene	96	3.21	0.446	A	2	A	B
13	T	Acetonitrile	40	3.73	0.519	A	1	A	B
14	T	Methylene chloride	84	3.82	0.531	A	1	A	B
15	T	Acrolein	56	3.15	0.438	A	0	A	B
16	T	Acrylonitrile	53	4.19	0.583	A	1	A	B
17	T	trans,1,2-Dichloroethene	96	4.10	0.569	A	2	A	B
18	T	Acetone	43	3.33	0.463	A	1	A	B
19	T	Carbon disulfide	76	3.45	0.479	A	0	A	B
20	T	Hexane	57	4.33	0.602	A	2	A	B
21	T	1,1-Dichloroethane	63	4.68	0.650	A	2	A	B
22	T	Methyl t-butyl ether	73	4.09	0.568	A	0	A	B
23	T	Vinyl acetate	43	4.73	0.657	A	0	A	B
24	T	2-chloro-1,3-butadiene	53	4.75	0.660	A	2	A	B
25	T	2,2-Dichloropropane	77	5.44	0.757	A	1	A	B
26	T	cis-1,2-Dichloroethene	96	5.48	0.762	A	2	A	B
27	T	2-Butanone	72	5.52	0.768	A	1	A	B
28	T	Iodomethane	142	3.41	0.474	A	1	A	B
29	T	Allyl chloride	76	3.64	0.506	A	1	A	B
30	T	Cyclohexane	56	3.15	0.438	A	2	A	B
31	T	Ethyl cyanide	54	5.72	0.795	A	1	A	B
32	T	Ethyl acetate	43	4.08	0.567	A	2	A	B
33	T	Bromochloromethane	128	5.84	0.811	A	2	A	B
34	T	Tetrahydrofuran	42	5.85	0.813	A	1	A	B
35	T	Chloroform	83	5.96	0.828	A	1	A	B
36	T	1,1,1-Trichloroethane	97	6.14	0.854	A	2	A	B
37	S	Dibromofluoromethane	113	6.19	0.861	A	1	A	B
38	T	Carbon tetrachloride	117	6.33	0.880	A	1	A	B
39	T	1,1,-Dichloropropene	75	6.39	0.888	A	2	A	B
40	T	2,2,4-Trimethylpentane	57	4.33	0.602	A	2	A	B
41	S	1,2-Dichloroethane-d4	65	6.74	0.937	A	1	A	B
42	T	Benzene	78	6.70	0.932	A	1	A	B
43	T	1,2-Dichloroethane	62	6.86	0.954	A	1	A	B
44	T	Heptane	43	7.04	0.978	A	2	A	B
45	T	Trichloroethene	95	7.80	1.083	A	2	A	B
46	T	1,2-Dichloropropane	63	8.27	1.149	A	1	A	B
47	T	Methylmethacrylate	69	8.49	1.180	A	2	A	B
48	T	1,4-Dioxane	88	8.51	1.183	A	1	A	B
49	T	Dibromomethane	93	8.49	1.180	A	2	A	B
50	T	Bromodichloromethane	83	8.79	1.221	A	2	A	B
51	T	Methylacrylonitrile	41	5.89	0.818	A	3	A	B
52	T	4-methly-2-pentanone	43	10.04	1.395	A	2	A	B
53	T	2-Hexanone	43	11.77	1.636	A	2	A	B

54		T	cis-1,3-Dichloropropene	75	10.89	1.514	A	1	A	B
55		T	Toluene	92	10.23	1.421	A	1	A	B
56		T	2-Chloroethylvinylether	63	10.23	1.421	A	0	A	B
57		T	Octane	43	6.74	0.937	A	2	A	B
58		T	Isobutyl acetate	43	8.50	1.182	A	1	A	B
59		T	trans-1,3-Dichloropropene	75	9.68	1.346	A	1	A	B
60		T	1,1,2-Trichloroethane	83	11.25	1.563	A	2	A	B
61		T	1,2-Dibromoethane	107	12.15	1.689	A	2	A	B
62		T	Tetrachloroethene	166	11.27	1.566	A	1	A	B
63		T	1,3-Dichloropropane	76	11.57	1.608	A	1	A	B
64	I		Chlorobenzene-d5	117	13.08	1.000	A	1	A	B
65		S	Toluene-d8	98	10.09	0.771	A	1	A	B
66		T	Dibromochloromethane	129	11.95	0.913	A	1	A	B
67		T	Chlorobenzene	112	13.13	1.004	A	2	A	B
68		T	1,1,1,2-Tetrachloroethane	131	13.36	1.022	A	2	A	B
69		T	Ethylbenzene	91	13.33	1.020	A	1	A	B
70		T	1-Chlorohexane	91	10.23	0.782	A	2	A	B
71		T	m&p-Xylenes	106	13.60	1.040	A	1	A	B
72		T	Ethyl methacrylate	69	11.01	0.842	A	2	A	B
73		T	Cyclohexanone	42	11.77	0.900	A	2	A	B
74		T	0-Xylene	106	14.42	1.102	A	1	A	B
75		T	Styrene	104	14.48	1.108	A	1	A	B
76		T	Bromoform	173	14.87	1.137	A	1	A	B
77		T	Isopropylbenzene	105	15.18	1.161	A	1	A	B
78		S	Bromofluorobenzene	95	15.58	1.191	A	2	A	B
79		T	Bromobenzene	156	15.81	1.209	A	2	A	B
80	I		1,4-Dichlorobenzene-d4	152	18.06	1.000	A	1	A	B
81		T	1,1,2,2-Tetrachloroethane	83	16.04	0.888	A	2	A	B
82		T	1,2,3-Trichloropropane	75	10.89	0.603	A	1	A	B
83		T	n-Propylbenzene	91	16.05	0.889	A	1	A	B
84		T	2-Chlorotoluene	91	16.23	0.899	A	1	A	B
85		T	4-Chlorotoluene	91	16.49	0.913	A	1	A	B
86		T	1,3,5-Trimethylbenzene	105	16.46	0.912	A	1	A	B
87		T	tert-Butylbenzene	119	17.09	0.947	A	1	A	B
88		T	1,2,4-Trimethylbenzene	105	17.24	0.955	A	1	A	B
89		T	sec-Butylbenzene	105	17.58	0.974	A	1	A	B
90		T	1,3-Dichlorobenzene	146	17.86	0.989	A	2	A	B
91		T	4-isopropyltoluene	119	17.97	0.995	A	2	A	B
92		T	1,4-Dichlorobenzene	146	18.10	1.003	A	2	A	B
93		T	1,2-Dichlorobenzene	146	18.91	1.047	A	2	A	B
94		T	n-Butylbenzene	91	18.88	1.046	A	1	A	B
95		T	cis-1,4-dichloro-2-butene	75	16.17	0.895	A	2	A	B
96		T	trans-1,4-dichloro-2-butene	53	16.46	0.912	A	2	A	B
97		T	1,2-dibromo-3-chloropropane	75	15.81	0.876	A	2	A	B
98		T	Pentachloroethane	167	17.19	0.952	A	2	A	B
99		T	1,2,4-Trichlorobenzene	180	21.64	1.198	A	1	A	B
100		T	Hexachlorobutadiene	225	21.84	1.210	A	1	A	B
101		T	Naphthalene	128	21.97	1.217	A	0	A	B
102		T	1,2,3-Trichlorobenzene	182	22.33	1.236	A	1	A	B
103		T	2-Methyl Naphthalene	142	17.92	0.992	A	1	A	B
104		T	1,3-Dimethyl Naphthalene	156	15.81	0.876	A	0	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

8260008S.M Thu Oct 14 15:25:44 1999 MARK

Quantitation Report (QT Reviewed)

000194

Data File : C:\HPCHEM\1\DATA\101399\J1951.D
Acq On : 13 Oct 99 19:06
Sample : VSTD500;MSJ;;
Misc : VSTD500;LOW;SO;
Quant Time: Oct 13 23:07 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Flurobenzene	7.19	96	1649190	50.00	ppb	0.00
66) Chlorobenzene-d5	13.09	117	1083280	50.00	ppb	0.00
83) 1,4-Dichlorobenzene-d4	18.06	152	453600	50.00	ppb	0.00

System Monitoring Compounds

39) Dibromofluoromethane	6.19	113	515886	46.37	ppb	0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 92.74%			
43) 1,2-Dichloroethane-d4	6.73	65	274786	37.28	ppb	-0.01
Surrogate Spike 50.000	Range 80 - 120		Recovery = 74.56%#			
67) Toluene-d8	10.10	98	1346577	52.43	ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 104.86%			
81) Bromofluorobenzene	15.59	95	420834	48.03	ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 96.06%			

Target Compounds

							Qvalue
2) Dichlorodifluoromethane	1.74	85	2381061	626.52	ppb		100
3) 1,3-Butadiene	2.00	54	2068667	507.81	PPB		91
4) Chlorotrfluoroethene	0.00	116		Not Detected			
5) Chloromethane	1.88	50	3867873	465.32	ppb		94
6) Vinyl chloride	2.01	62	3029565	467.30	ppb		100
7) Bromomethane	2.29	96	616202	167.80	ppb		95
8) Chloroethane	2.35	64	257406	93.74	ppb		97
9) Trichlorofluoromethane	2.60	101	1343159	240.97	ppb		98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		No Calib		#	
11) Diethyl ether	2.92	59	2398126	348.94	ppb		94
12) Freon	3.14	101	5452728	523.54	ppb		92
13) Tertiary butyl alcohol	4.06	59	533831	397.66	ppb		100
14) 1,1-Dichloroethene	3.17	96	3112187	476.30	ppb		78
15) Acetonitrile	3.73	40	2488626	626.52	ppb	#	79
16) Methylene chloride	3.80	84	4010303	435.09	ppb		98
17) Acrolein	3.14	56	2052079	404.74	ppb		100
18) Acrylonitrile	4.18	53	4540854	422.90	ppb		94
19) trans,1,2-Dichloroethene	4.07	96	4149360	485.24	ppb	#	80
20) Acetone	3.32	43	801664	370.64	ppb		99
21) Carbon disulfide	3.40	76	9526193	519.09	ppb	m	100
22) Hexane	4.30	57	6300473	512.04	ppb		95
23) 1,1-Dichloroethane	4.66	63	6117778	462.56	ppb		97
24) Methyl t-butyl ether	4.08	73	6157350	377.12	ppb		100
25) Vinyl acetate	4.71	43	7820730	437.05	ppb		100
26) 2-chloro-1,3-butadiene	4.72	53	4292917	508.72	ppb		88
27) 2,2-Dichloropropane	5.42	77	3696742	478.55	ppb		87
28) cis-1,2-Dichloroethene	5.47	96	4758756	462.70	ppb	#	75
29) 2-Butanone	5.53	72	411913	398.43	ppb	#	18

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

000195

Data File : C:\HPCHEM\1\DATA\101399\J1951.D
Acq On : 13 Oct 99 19:06
Sample : VSTD500;MSJ;;
Misc : VSTD500;LOW;SO;
Quant Time: Oct 13 23:07 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Iodomethane	3.36	142	9238163	533.77 ppb		98
31)	Allyl chloride	3.60	76	2753493	535.91 ppb	m	3
32)	Cyclohexane	3.14	56	2052079	404.74 ppb	#	67
33)	Ethyl cyanide	5.73	54	4720322	427.64 ppb		98
34)	Ethyl acetate	4.08	43	1116259	372.25 ppb	#	38
35)	Bromochloromethane	5.82	128	2658145	447.85 ppb		85
36)	Tetrahydrofuran	5.85	42	1578840	325.04 ppb		96
37)	Chloroform	5.94	83	6621740	459.29 ppb		99
38)	1,1,1-Trichloroethane	6.13	97	4485615	473.78 ppb		93
40)	Carbon tetrachloride	6.32	117	4571260	522.68 ppb		98
41)	1,1,-Dichloropropene	6.38	75	4965477	511.72 ppb		89
42)	2,2,4-Trimethylpentane	4.30	57	6300473	512.04 ppb		93
44)	Benzene	6.69	78	13483476	444.89 ppb		98
45)	1,2-Dichloroethane	6.86	62	3750607	417.19 ppb		90
46)	Heptane	7.03	43	6552181	484.49 ppb		93
47)	Trichloroethene	7.79	95	4279227	461.45 ppb		96
48)	1,2-Dichloropropane	8.27	63	4072388	445.53 ppb		94
49)	Methylmethacrylate	8.50	69	2082999	389.78 ppb	#	86
50)	1,4-Dioxane	8.51	88	657339	377.90 ppb		90
51)	Dibromomethane	8.48	93	3006051	402.27 ppb		97
52)	Bromodichloromethane	8.80	83	4611076	449.15 ppb		97
53)	Methylacrylonitrile	5.90	41	20686372	358.41 ppb		96
54)	4-methly-2-pentanone	10.05	43	3463402	372.25 ppb		92
55)	2-Hexanone	11.78	43	2342022	372.17 ppb	#	95
56)	cis-1,3-Dichloropropene	10.90	75	4577146	416.12 ppb	#	83
57)	Toluene	10.23	92	8252716	418.65 ppb		97
58)	2-Chloroethylvinylether	10.22	63	867507	432.56 ppb		100
59)	Octane	0.00	43		No Calib	#	
60)	Isobutyl acetate	8.50	43	206579	358.33 ppb		87
61)	trans-1,3-Dichloropropene	9.69	75	5729310	431.42 ppb		85
62)	1,1,2-Trichloroethane	11.25	83	2532063	351.80 ppb		90
63)	1,2-Dibromoethane	12.16	107	4140162	397.88 ppb		100
64)	Tetrachloroethene	11.28	166	4504885	416.29 ppb		100
65)	1,3-Dichloropropane	11.58	76	4660282	390.25 ppb		98
68)	Dibromochloromethane	11.96	129	4427354	489.88 ppb		99
69)	Chlorobenzene	13.14	112	10009361	455.06 ppb		89
70)	1,1,1,2-Tetrachloroethane	13.37	131	3289066	464.45 ppb		98
71)	Ethylbenzene	13.34	91	11837906	406.78 ppb		94
72)	Nonene	0.00	55		No Calib	#	
73)	1-Chlorohexane	10.23	91	13329064	464.69 ppb		98
74)	m&p-Xylenes	13.62	106	9634054	377.48 ppb		90
75)	Ethyl methacrylate	11.03	69	4063639	452.44 ppb		92
76)	Cyclohexanone	11.77	42	136261	429.06 ppb		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

000196

Data File : C:\HPCHEM\1\DATA\101399\J1951.D
Vial: 100
Acq On : 13 Oct 99 19:06
Operator:
Sample : VSTD500;MSJ;;
Inst : GC/MS Ins
Misc : VSTD500;LOW;SO;
Multiplr: 1.00
Quant Time: Oct 13 23:07 1999
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	0-Xylene	14.42	106	5224056	431.66 ppb	84
78)	Styrene	14.49	104	9063154	398.49 ppb	88
79)	Bromoform	14.88	173	2994110	467.03 ppb	99
80)	Isopropylbenzene	15.20	105	12251928	445.98 ppb	99
82)	Bromobenzene	15.83	156	4312727	473.28 ppb	85
84)	1,1,2,2-Tetrachloroethane	16.06	83	3064140	331.08 ppb	98
85)	1,2,3-Trichloropropane	10.90	75	4577146	454.05 ppb	85
86)	n-Propylbenzene	16.07	91	12494993	393.12 ppb	91
87)	2-Chlorotoluene	16.24	91	8174470	419.97 ppb	93
88)	4-Chlorotoluene	16.51	91	7806023	370.94 ppb	94
89)	1,3,5-Trimethylbenzene	16.48	105	8255883	383.45 ppb	98
90)	tert-Butylbenzene	17.11	119	8241747	452.93 ppb	94
91)	1,2,4-Trimethylbenzene	17.26	105	9116424	413.59 ppb	98
92)	sec-Butylbenzene	17.60	105	12899011	435.64 ppb	100
93)	1,3-Dichlorobenzene	17.88	146	6810706	460.51 ppb	99
94)	4-isopropyltoluene	17.99	119	10501038	458.60 ppb	99
95)	1,4-Dichlorobenzene	18.12	146	7037145	464.65 ppb	98
96)	1,2-Dichlorobenzene	18.93	146	5651804	410.44 ppb	98
97)	n-Butylbenzene	18.90	91	8439210	391.74 ppb	95
98)	cis-1,4-dichloro-2-butene	16.19	75	1534769	443.90 ppb	99
99)	trans-1,4-dichloro-2-buten	16.48	53	217594	403.15 ppb	97
100)	1,2-dibromo-3-chloropropan	15.83	75	274798	366.78 ppb	79
101)	Pentachloroethane	17.20	167	2586602	628.60 ppb	92
102)	1,2,4-Trichlorobenzene	21.65	180	4298401	459.24 ppb	99
103)	Hexachlorobutadiene	21.85	225	2067029	569.17 ppb	98
104)	Naphthalene	21.98	128	6976950	290.93 ppb	100
105)	1,2,3-Trichlorobenzene	22.33	182	2885469	335.63 ppb	100
106)	2-Methyl Naphthalene	0.00	142		Not Detected	
107)	1,3-Dimethyl Naphthalene	0.00	156		No Calib	

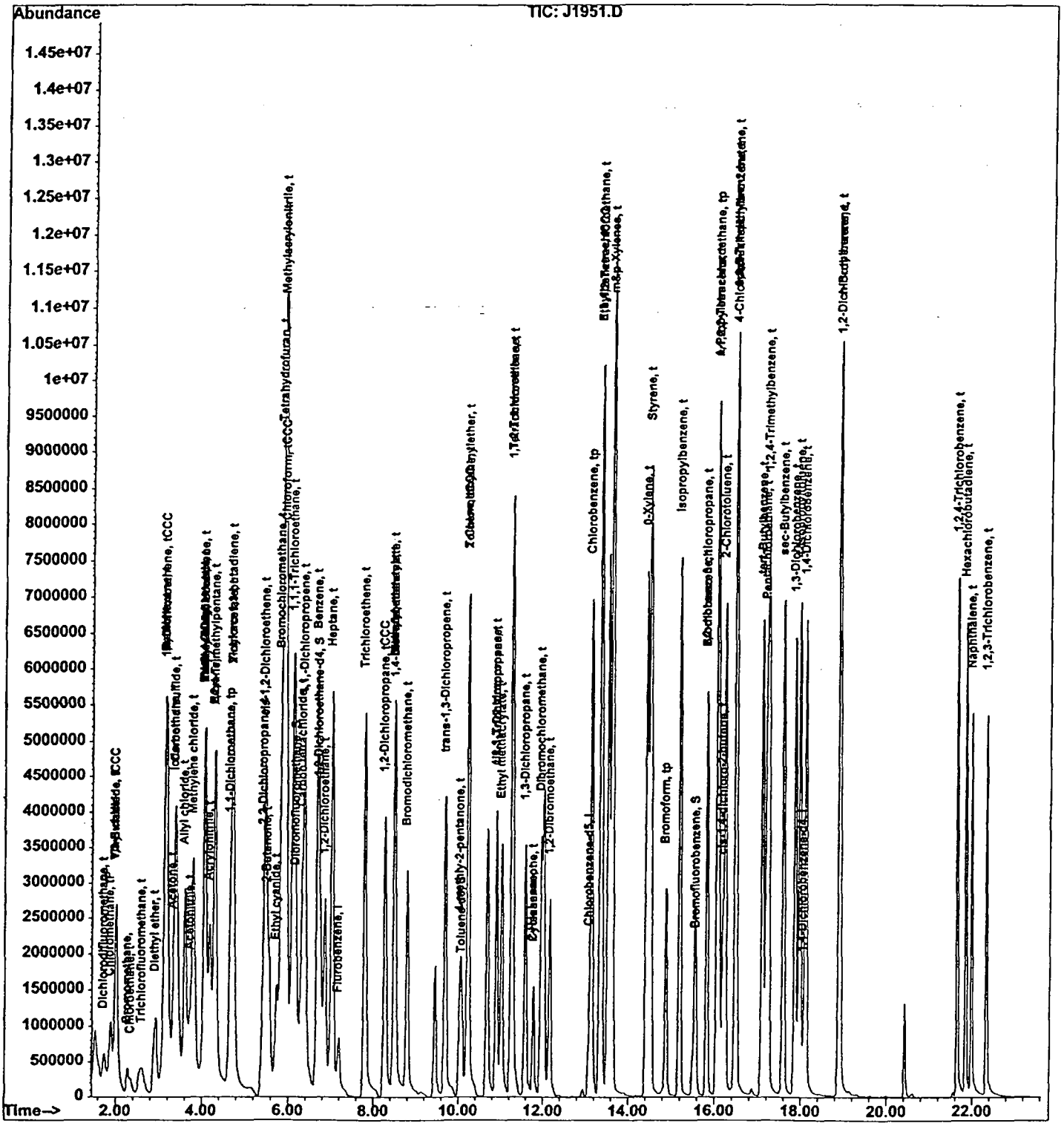
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101399\J1951.D
Acq On : 13 Oct 99 19:06
Sample : VSTD500;MSJ;;
Misc : VSTD500;LOW;SO;
Quant Time: Oct 13 23:07 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 02:59:26 1999
Response via : Single Level Calibration



Quantitation Report (QT Reviewed)

000198

Data File : C:\HPCHEM\1\DATA\101399\J1952.D Vial: 100
Acq On : 13 Oct 99 19:36 Operator:
Sample : VSTD200;MSJ;; Inst : GC/MS Ins
Misc : VSTD200;LOW;SO; Multiplr: 1.00
Quant Time: Oct 14 2:56 1999 Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.20	96	1455387	50.00 ppb	0.00
66) Chlorobenzene-d5	13.09	117	1045506	50.00 ppb	0.01
83) 1,4-Dichlorobenzene-d4	18.07	152	436542	50.00 ppb	0.01

System Monitoring Compounds					
39) Dibromofluoromethane	6.20	113	528817	53.86 ppb	0.01
Surrogate Spike 50.000	Range 86 - 118		Recovery = 107.72%		
43) 1,2-Dichloroethane-d4	6.74	65	245727	37.78 ppb m	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 75.56%#		
67) Toluene-d8	10.10	98	1240648	50.05 ppb	0.01
Surrogate Spike 50.000	Range 88 - 110		Recovery = 100.10%		
81) Bromofluorobenzene	15.59	95	430902	50.96 ppb	0.01
Surrogate Spike 50.000	Range 86 - 115		Recovery = 101.92%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.76	85	867398	258.63 ppb	100
3) 1,3-Butadiene	2.02	54	871322	242.37 PPB	88
4) Chlorotrfluoroethene	0.00	116		Not Detected	
5) Chloromethane	1.89	50	1598810	217.96 ppb	96
6) Vinyl chloride	2.01	62	1265793	221.25 ppb	99
7) Bromomethane	2.30	96	381052	117.59 ppb	94
8) Chloroethane	2.40	64	272533	112.46 ppb	98
9) Trichlorofluoromethane	2.63	101	998478	202.98 ppb	95
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		No Calib #	
11) Diethyl ether	2.93	59	1153023	190.11 ppb	95
12) Freon	3.18	101	2159625	234.97 ppb	90
13) Tertiary butyl alcohol	4.01	59	226353	191.07 ppb	100
14) 1,1-Dichloroethene	3.20	96	1359150	235.71 ppb	76
15) Acetonitrile	3.74	40	941227	268.51 ppb #	81
16) Methylene chloride	3.82	84	1585064	194.87 ppb	98
17) Acrolein	3.15	56	792774	177.18 ppb	100
18) Acrylonitrile	4.20	53	1698024	179.20 ppb	95
19) trans,1,2-Dichloroethene	4.09	96	1699060	225.15 ppb #	79
20) Acetone	3.33	43	310591	162.72 ppb	100
21) Carbon disulfide	3.43	76	3692229	227.98 ppb m	100
22) Hexane	4.32	57	2499066	230.14 ppb	94
23) 1,1-Dichloroethane	4.68	63	2442875	209.30 ppb	96
24) Methyl t-butyl ether	4.09	73	2512998	174.41 ppb	100
25) Vinyl acetate	4.72	43	2886263	182.77 ppb	100
26) 2-chloro-1,3-butadiene	4.74	53	1594735	214.14 ppb	88
27) 2,2-Dichloropropane	5.44	77	1557409	228.45 ppb	88
28) cis-1,2-Dichloroethene	5.48	96	1880406	207.18 ppb #	75
29) 2-Butanone	5.53	72	157130	172.22 ppb	21

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

000199

Data File : C:\HPCHEM\1\DATA\101399\J1952.D Vial: 100
Acq On : 13 Oct 99 19:36 Operator:
Sample : VSTD200;MSJ;; Inst : GC/MS Ins
Misc : VSTD200;LOW;SO; Multiplr: 1.00
Quant Time: Oct 14 2:56 1999 Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Iodomethane	3.39	142	3296193	215.81 ppb		97
31)	Allyl chloride	3.63	76	941400	207.62 ppb	m	2
32)	Cyclohexane	3.15	56	792774	177.18 ppb	#	90
33)	Ethyl cyanide	5.73	54	1646687	169.05 ppb		99
34)	Ethyl acetate	4.09	43	449850	169.99 ppb	#	38
35)	Bromochloromethane	5.84	128	1059142	202.21 ppb		87
36)	Tetrahydrofuran	5.86	42	657017	153.27 ppb		97
37)	Chloroform	5.96	83	2769794	217.70 ppb		99
38)	1,1,1-Trichloroethane	6.14	97	1866606	223.41 ppb		93
40)	Carbon tetrachloride	6.34	117	1839675	238.36 ppb		98
41)	1,1,-Dichloropropene	6.39	75	2065007	241.15 ppb		90
42)	2,2,4-Trimethylpentane	4.32	57	2499066	230.14 ppb		92
44)	Benzene	6.69	78	5595558	209.21 ppb		98
45)	1,2-Dichloroethane	6.87	62	1481444	186.73 ppb		90
46)	Heptane	7.04	43	2620667	219.58 ppb		93
47)	Trichloroethene	7.81	95	1755347	214.49 ppb		93
48)	1,2-Dichloropropane	8.28	63	1636829	202.92 ppb		95
49)	Methylmethacrylate	8.50	69	802426	170.15 ppb	#	86
50)	1,4-Dioxane	8.51	88	258274	168.25 ppb		90
51)	Dibromomethane	8.49	93	1166830	176.94 ppb		98
52)	Bromodichloromethane	8.80	83	1834323	202.47 ppb		97
53)	Methylacrylonitrile	5.89	41	8782726	172.43 ppb		96
54)	4-methly-2-pentanone	10.04	43	1339620	163.16 ppb	#	89
55)	2-Hexanone	11.78	43	900985	162.24 ppb	#	95
56)	cis-1,3-Dichloropropene	10.91	75	1874597	193.12 ppb	#	85
57)	Toluene	10.24	92	3593779	206.58 ppb		97
58)	2-Chloroethylvinylether	10.24	63	366577	207.12 ppb		100
59)	Octane	0.00	43		No Calib	#	
60)	Isobutyl acetate	8.51	43	85349	167.76 ppb		89
61)	trans-1,3-Dichloropropene	9.70	75	2311829	197.26 ppb		86
62)	1,1,2-Trichloroethane	11.25	83	1131986	178.22 ppb		90
63)	1,2-Dibromoethane	12.16	107	1703962	185.56 ppb		99
64)	Tetrachloroethene	11.28	166	1923393	201.41 ppb		99
65)	1,3-Dichloropropane	11.58	76	1928006	182.95 ppb		98
68)	Dibromochloromethane	11.96	129	1759630	201.74 ppb		98
69)	Chlorobenzene	13.14	112	4335484	204.23 ppb		90
70)	1,1,1,2-Tetrachloroethane	13.37	131	1411058	206.46 ppb		97
71)	Ethylbenzene	13.34	91	5677673	202.15 ppb		94
72)	Nonene	0.00	55		No Calib	#	
73)	1-Chlorohexane	10.24	91	5806171	209.73 ppb		98
74)	m&p-Xylenes	13.61	106	4858115	197.23 ppb		88
75)	Ethyl methacrylate	11.02	69	1551202	178.95 ppb		92
76)	Cyclohexanone	11.77	42	51297	167.36 ppb	m	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed) 000200

Data File : C:\HPCHEM\1\DATA\101399\J1952.D
Acq On : 13 Oct 99 19:36
Sample : VSTD200;MSJ;;
Misc : VSTD200;LOW;SO;
Quant Time: Oct 14 2:56 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	0-Xylene	14.43	106	2352949	201.45 ppb	85
78)	Styrene	14.50	104	4242840	193.29 ppb	86
79)	Bromoform	14.88	173	1222836	197.63 ppb	100
80)	Isopropylbenzene	15.19	105	5587742	210.74 ppb	99
82)	Bromobenzene	15.82	156	1792088	203.77 ppb	88
84)	1,1,2,2-Tetrachloroethane	16.06	83	1470753	165.13 ppb	99
85)	1,2,3-Trichloropropane	10.91	75	1874597	193.22 ppb	85
86)	n-Propylbenzene	16.06	91	6139897	200.72 ppb	95
87)	2-Chlorotoluene	16.25	91	3673881	196.12 ppb	97
88)	4-Chlorotoluene	16.50	91	3805717	187.92 ppb	97
89)	1,3,5-Trimethylbenzene	16.47	105	3956800	190.96 ppb	100
90)	tert-Butylbenzene	17.11	119	3560814	203.33 ppb	94
91)	1,2,4-Trimethylbenzene	17.25	105	4148426	195.56 ppb	100
92)	sec-Butylbenzene	17.59	105	5820782	204.27 ppb	97
93)	1,3-Dichlorobenzene	17.87	146	2889229	202.99 ppb	98
94)	4-isopropyltoluene	17.98	119	4590394	208.30 ppb	98
95)	1,4-Dichlorobenzene	18.13	146	2936303	201.45 ppb	99
96)	1,2-Dichlorobenzene	18.92	146	2540254	191.68 ppb	98
97)	n-Butylbenzene	18.89	91	4100872	197.80 ppb	99
98)	cis-1,4-dichloro-2-butene	16.19	75	641588	192.82 ppb	98
99)	trans-1,4-dichloro-2-buten	16.47	53	99182	190.94 ppb	84
100)	1,2-dibromo-3-chloropropan	15.82	75	120360	166.92 ppb	84
101)	Pentachloroethane	17.20	167	940335	237.45 ppb	94
102)	1,2,4-Trichlorobenzene	21.65	180	1576205	174.98 ppb	97
103)	Hexachlorobutadiene	21.84	225	773795	221.40 ppb	98
104)	Naphthalene	21.98	128	3195293	138.45 ppb	100
105)	1,2,3-Trichlorobenzene	22.33	182	1327326	160.42 ppb	100
106)	2-Methyl Naphthalene	0.00	142		Not Detected	
107)	1,3-Dimethyl Naphthalene	0.00	156		No Calib	

(#) = qualifier out of range (m) = manual integration

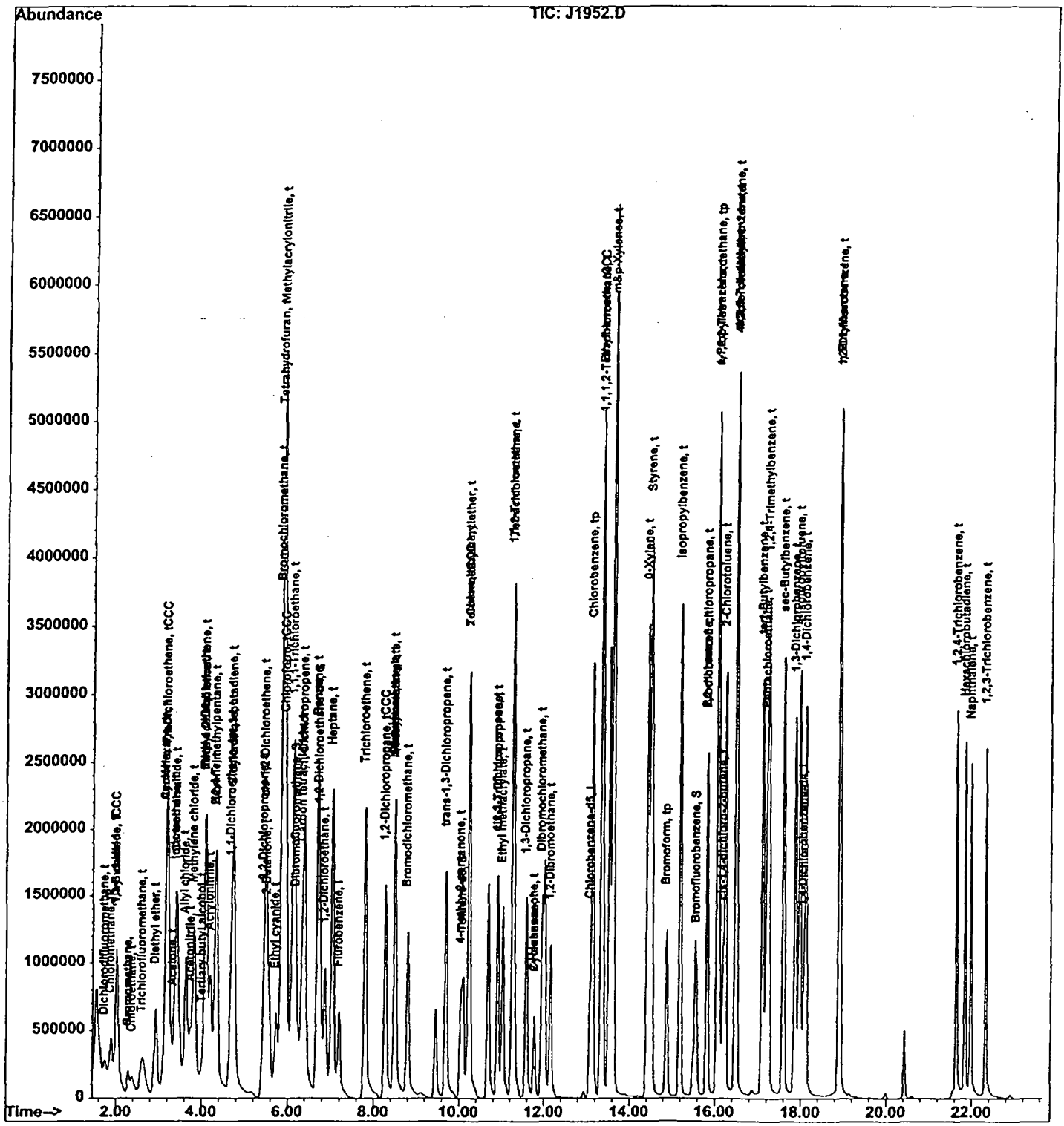
Quantitation Report

000201

Data File : C:\HPCHEM\1\DATA\101399\J1952.D
Acq On : 13 Oct 99 19:36
Sample : VSTD200;MSJ;;
Misc : VSTD200;LOW;SO;
Quant Time: Oct 14 2:56 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 02:59:26 1999
Response via : Single Level Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1953.D Vial: 10 000202
Acq On : 13 Oct 99 20:06 Operator:
Sample : VSTD100;MSJ;; Inst : GC/MS Ins
Misc : VSTD100;LOW;SO; Multiplr: 1.00
Quant Time: Oct 14 0:09 1999 Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 23:13:06 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.20	96	1374443	50.00 ppb	0.00
66) Chlorobenzene-d5	13.08	117	1022132	50.00 ppb	0.00
83) 1,4-Dichlorobenzene-d4	18.06	152	438172	50.00 ppb	0.00

System Monitoring Compounds					
39) Dibromofluoromethane	6.20	113	488255	52.66 ppb	0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 105.32%		
43) 1,2-Dichloroethane-d4	6.74	65	247473	40.28 ppb m	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 80.56%		
67) Toluene-d8	10.09	98	1202764	49.63 ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 99.26%		
81) Bromofluorobenzene	15.58	95	431450	52.19 ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 104.38%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.76	85	368034	116.20 ppb	100
3) 1,3-Butadiene	2.02	54	398435	117.36 ppb	90
4) Chlorotrfluoroethene	0.00	116		Not Detected	
5) Chloromethane	1.88	50	718310	103.69 ppb	98
6) Vinyl chloride	2.01	62	520929	96.41 ppb	98
7) Bromomethane	2.31	96	224374	73.32 ppb	94
8) Chloroethane	2.41	64	179730	78.53 ppb	92
9) Trichlorofluoromethane	2.63	101	454065	97.74 ppb	96
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		No Calib #	
11) Diethyl ether	2.94	59	609780	106.46 ppb	91
12) Freon	3.19	101	995057	114.64 ppb	89
13) Tertiary butyl alcohol	3.99	59	114622	102.45 ppb	100
14) 1,1-Dichloroethene	3.21	96	605197	111.14 ppb	76
15) Acetonitrile	3.75	40	392940	118.70 ppb #	36
16) Methylene chloride	3.83	84	771338	100.41 ppb	98
17) Acrolein	3.17	56	460545	108.99 ppb	100
18) Acrylonitrile	4.20	53	980289	109.55 ppb	95
19) trans,1,2-Dichloroethene	4.09	96	766505	107.56 ppb #	79
20) Acetone	3.33	43	188689	104.68 ppb	96
21) Carbon disulfide	3.43	76	1821746	119.11 ppb m	100
22) Hexane	4.33	57	1095489	106.83 ppb	96
23) 1,1-Dichloroethane	4.68	63	1116381	101.28 ppb	98
24) Methyl t-butyl ether	4.08	73	1205912	88.62 ppb	100
25) Vinyl acetate	4.72	43	1591067	106.69 ppb	100
26) 2-chloro-1,3-butadiene	4.74	53	767843	109.18 ppb	87
27) 2,2-Dichloropropane	5.45	77	702128	109.06 ppb	89
28) cis-1,2-Dichloroethene	5.49	96	886298	103.40 ppb #	75
29) 2-Butanone	5.54	72	88873	103.15 ppb	24

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

000203

Data File : C:\HPCHEM\1\DATA\101399\J1953.D
Acq On : 13 Oct 99 20:06
Sample : VSTD100;MSJ;;
Misc : VSTD100;LOW;SO;
Quant Time: Oct 14 0:09 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 23:13:06 1999
Response via : Initial Calibration
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30) Iodomethane	3.39	142	1626591	112.77 ppb		97
31) Allyl chloride	3.63	76	470550	109.89 ppb	m	5
32) Cyclohexane	3.17	56	460545	108.99 ppb	#	94
33) Ethyl cyanide	5.72	54	1050860	114.23 ppb		97
34) Ethyl acetate	4.08	43	215485	86.22 ppb	#	51
35) Bromochloromethane	5.83	128	511754	103.46 ppb		90
36) Tetrahydrofuran	5.85	42	399788	98.76 ppb		95
37) Chloroform	5.96	83	1293998	107.69 ppb		95
38) 1,1,1-Trichloroethane	6.15	97	846378	107.27 ppb		93
40) Carbon tetrachloride	6.33	117	798538	109.56 ppb		99
41) 1,1,-Dichloropropene	6.39	75	850305	105.15 ppb		90
42) 2,2,4-Trimethylpentane	4.33	57	1095489	106.83 ppb		78
44) Benzene	6.70	78	2573427	101.88 ppb		97
45) 1,2-Dichloroethane	6.87	62	738208	98.53 ppb		93
46) Heptane	7.03	43	1181526	104.83 ppb		95
47) Trichloroethene	7.80	95	791610	102.43 ppb		91
48) 1,2-Dichloropropane	8.27	63	765808	100.53 ppb		95
49) Methylmethacrylate	8.50	69	463347	104.04 ppb	#	85
50) 1,4-Dioxane	8.52	88	158332	109.22 ppb		89
51) Dibromomethane	8.49	93	590192	94.77 ppb		98
52) Bromodichloromethane	8.79	83	868527	101.51 ppb		97
53) Methylacrylonitrile	5.89	41	5033259	104.64 ppb		97
54) 4-methly-2-pentanone	10.03	43	794458	102.46 ppb	#	92
55) 2-Hexanone	11.76	43	548713	104.63 ppb	#	95
56) cis-1,3-Dichloropropene	10.90	75	911634	99.45 ppb	#	84
57) Toluene	10.23	92	1683932	102.50 ppb		95
58) 2-Chloroethylvinylether	10.23	63	173144	103.59 ppb		100
59) Octane	0.00	43		No Calib	#	
60) Isobutyl acetate	8.51	43	51853	107.92 ppb		96
61) trans-1,3-Dichloropropene	9.69	75	1100656	99.45 ppb		88
62) 1,1,2-Trichloroethane	11.24	83	585080	97.54 ppb		90
63) 1,2-Dibromoethane	12.16	107	860966	99.28 ppb		100
64) Tetrachloroethene	11.27	166	864212	95.83 ppb		100
65) 1,3-Dichloropropane	11.58	76	984287	98.90 ppb		99
68) Dibromochloromethane	11.95	129	860722	100.94 ppb		99
69) Chlorobenzene	13.13	112	2040652	98.32 ppb		91
70) 1,1,1,2-Tetrachloroethane	13.37	131	681693	102.02 ppb		96
71) Ethylbenzene	13.34	91	2749158	100.12 ppb		95
72) Nonene	0.00	55		No Calib	#	
73) 1-Chlorohexane	10.23	91	2682505	99.11 ppb		99
74) m&p-Xylenes	13.60	106	2391803	99.32 ppb		89
75) Ethyl methacrylate	11.02	69	860470	101.53 ppb		92
76) Cyclohexanone	11.77	42	30838	102.91 ppb		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1953.D Vial: 100 000204
Acq On : 13 Oct 99 20:06 Operator:
Sample : VSTD100;MSJ;; Inst : GC/MS Ins
Misc : VSTD100;LOW;SO; Multiplr: 1.00
Quant Time: Oct 14 0:09 1999 Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 23:13:06 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	0-Xylene	14.42	106	1153451	101.01 ppb	85
78)	Styrene	14.49	104	2119921	98.78 ppb	85
79)	Bromoform	14.87	173	621932	102.81 ppb	99
80)	Isopropylbenzene	15.19	105	2646987	102.12 ppb	98
82)	Bromobenzene	15.82	156	871362	101.34 ppb	92
84)	1,1,2,2-Tetrachloroethane	16.05	83	843700	94.37 ppb	99
85)	1,2,3-Trichloropropane	10.90	75	911634	93.62 ppb	82
86)	n-Propylbenzene	16.05	91	2960863	96.44 ppb	97
87)	2-Chlorotoluene	16.23	91	1810341	96.28 ppb	99
88)	4-Chlorotoluene	16.49	91	1910482	93.98 ppb	97
89)	1,3,5-Trimethylbenzene	16.47	105	1962968	94.38 ppb	98
90)	tert-Butylbenzene	17.10	119	1711884	97.39 ppb	96
91)	1,2,4-Trimethylbenzene	17.24	105	2028069	95.25 ppb	98
92)	sec-Butylbenzene	17.59	105	2760261	96.51 ppb	95
93)	1,3-Dichlorobenzene	17.86	146	1392043	97.44 ppb	96
94)	4-isopropyltoluene	17.96	119	2148927	97.15 ppb	98
95)	1,4-Dichlorobenzene	18.11	146	1395194	95.37 ppb	98
96)	1,2-Dichlorobenzene	18.92	146	1250363	94.00 ppb	99
97)	n-Butylbenzene	18.89	91	1987433	95.50 ppb	97
98)	cis-1,4-dichloro-2-butene	16.17	75	362880	108.65 ppb	95
99)	trans-1,4-dichloro-2-buten	16.47	53	49532	95.00 ppb	90
100)	1,2-dibromo-3-chloropropan	15.82	75	61305	84.71 ppb	80
101)	Pentachloroethane	17.19	167	482480	121.38 ppb	92
102)	1,2,4-Trichlorobenzene	21.64	180	760403	84.10 ppb	97
103)	Hexachlorobutadiene	21.85	225	357144	101.80 ppb	98
104)	Naphthalene	21.98	128	1743652	75.27 ppb	100
105)	1,2,3-Trichlorobenzene	22.32	182	648194	78.05 ppb	100
106)	2-Methyl Naphthalene	0.00	142		Not Detected	
107)	1,3-Dimethyl Naphthalene	0.00	156		No Calib	

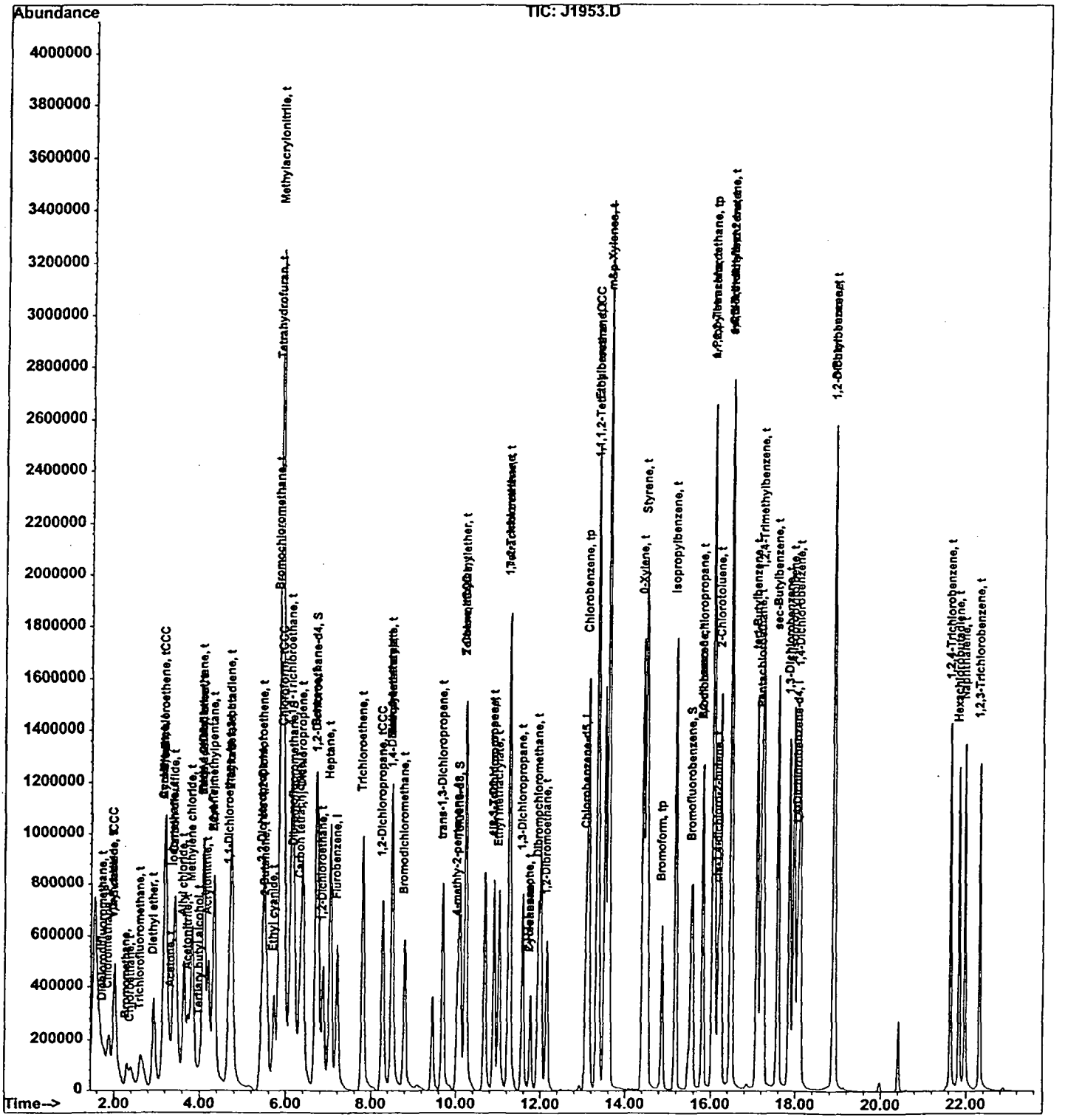
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101399\J1953.D
Acq On : 13 Oct 99 20:06
Sample : VSTD100;MSJ;;
Misc : VSTD100;LOW;SO;
Quant Time: Oct 14 0:09 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 02:59:26 1999
Response via : Single Level Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1954.D
Acq On : 13 Oct 99 20:35
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;
Quant Time: Oct 14 0:10 1999

Vial: 100
Operator: 000206
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Flurobenzene	7.20	96	1430565	50.00	ppb		0.00
66) Chlorobenzene-d5	13.08	117	1048019	50.00	ppb		0.00
83) 1,4-Dichlorobenzene-d4	18.06	152	429334	50.00	ppb		0.00

System Monitoring Compounds							
39) Dibromofluoromethane	6.19	113	482534	50.00	ppb		0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 100.00%				
43) 1,2-Dichloroethane-d4	6.74	65	277546	43.41	ppb	m	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 86.82%				
67) Toluene-d8	10.09	98	1242322	50.00	ppb		0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 100.00%				
81) Bromofluorobenzene	15.58	95	423814	50.00	ppb		0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 100.00%				

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.76	85	164664	49.95	ppb		100
3) 1,3-Butadiene	2.02	54	173746	49.17	PPB		93
4) Chlorotrfluoroethene	0.00	116		Not Detected			
5) Chloromethane	1.87	50	360517	50.00	ppb		95
6) Vinyl chloride	2.00	62	281182	50.00	ppb		99
7) Bromomethane	2.33	96	159268	50.00	ppb		96
8) Chloroethane	2.41	64	119102	50.00	ppb		59
9) Trichlorofluoromethane	2.65	101	241757	50.00	ppb		96
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected			
11) Diethyl ether	2.94	59	298078	50.00	ppb		89
12) Freon	3.20	101	451722	50.00	ppb		90
13) Tertiary butyl alcohol	3.99	59	58223	50.00	ppb		100
14) 1,1-Dichloroethene	3.21	96	283396	50.00	ppb		74
15) Acetonitrile	3.73	40	172279	50.00	ppb	#	48
16) Methylene chloride	3.82	84	399767	50.00	ppb		99
17) Acrolein	3.15	56	219900	50.00	ppb		100
18) Acrylonitrile	4.19	53	465697	50.00	ppb		98
19) trans,1,2-Dichloroethene	4.10	96	370881	50.00	ppb	#	80
20) Acetone	3.33	43	96646	51.51	ppb		98
21) Carbon disulfide	3.45	76	804853	50.56	ppb	m	100
22) Hexane	4.33	57	533676	50.00	ppb		97
23) 1,1-Dichloroethane	4.68	63	573634	50.00	ppb		98
24) Methyl t-butyl ether	4.09	73	710200	50.14	ppb		100
25) Vinyl acetate	4.73	43	776107	50.00	ppb		100
26) 2-chloro-1,3-butadiene	4.75	53	366001	50.00	ppb		92
27) 2,2-Dichloropropane	5.44	77	335045	50.00	ppb		89
28) cis-1,2-Dichloroethene	5.48	96	446069	50.00	ppb	#	75
29) 2-Butanone	5.52	72	44840	50.00	ppb	#	12

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

000207

Data File : C:\HPCHEM\1\DATA\101399\J1954.D Vial: 100
Acq On : 13 Oct 99 20:35 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00
Quant Time: Oct 14 0:10 1999 Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30) Iodomethane	3.41	142	753098	50.16 ppb		98
31) Allyl chloride	3.64	76	212836	47.75 ppb	m	3
32) Cyclohexane	3.15	56	219900	50.00 ppb	#	96
33) Ethyl cyanide	5.72	54	478743	50.00 ppb		100
34) Ethyl acetate	4.08	43	130058	50.00 ppb	#	90
35) Bromochloromethane	5.84	128	257424	50.00 ppb		89
36) Tetrahydrofuran	5.85	42	207961	49.36 ppb		97
37) Chloroform	5.96	83	625308	50.00 ppb		98
38) 1,1,1-Trichloroethane	6.14	97	410634	50.00 ppb		93
40) Carbon tetrachloride	6.33	117	379320	50.00 ppb		98
41) 1,1,-Dichloropropene	6.39	75	420855	50.00 ppb		90
42) 2,2,4-Trimethylpentane	4.33	57	533676	50.00 ppb		98
44) Benzene	6.70	78	1314490	50.00 ppb		96
45) 1,2-Dichloroethane	6.86	62	389917	50.00 ppb		95
46) Heptane	7.04	43	586560	50.00 ppb		100
47) Trichloroethene	7.80	95	402209	50.00 ppb		89
48) 1,2-Dichloropropane	8.27	63	396443	50.00 ppb		97
49) Methylmethacrylate	8.49	69	231778	50.00 ppb	#	86
50) 1,4-Dioxane	8.51	88	75444	50.00 ppb		91
51) Dibromomethane	8.49	93	324107	50.00 ppb		92
52) Bromodichloromethane	8.79	83	445262	50.00 ppb		97
53) Methylacrylonitrile	5.89	41	2504801	50.03 ppb		98
54) 4-methly-2-pentanone	10.04	43	403530	50.00 ppb	#	91
55) 2-Hexanone	11.77	43	272933	50.00 ppb	#	96
56) cis-1,3-Dichloropropene	10.89	75	477074	50.00 ppb		86
57) Toluene	10.23	92	854978	50.00 ppb		98
58) 2-Chloroethylvinylether	10.23	63	86983	50.00 ppb		100
59) Octane	0.00	43		No Calib	#	
60) Isobutyl acetate	8.50	43	25004	50.00 ppb		99
61) trans-1,3-Dichloropropene	9.68	75	575986	50.00 ppb		89
62) 1,1,2-Trichloroethane	11.25	83	312168	50.00 ppb		92
63) 1,2-Dibromoethane	12.15	107	451303	50.00 ppb		98
64) Tetrachloroethene	11.27	166	469343	50.00 ppb		99
65) 1,3-Dichloropropane	11.57	76	517930	50.00 ppb		100
68) Dibromochloromethane	11.95	129	437171	50.00 ppb		98
69) Chlorobenzene	13.13	112	1063995	50.00 ppb		92
70) 1,1,1,2-Tetrachloroethane	13.36	131	342554	50.00 ppb		96
71) Ethylbenzene	13.33	91	1407697	50.00 ppb		95
72) Nonene	0.00	55		No Calib	#	
73) 1-Chlorohexane	10.23	91	1387518	50.00 ppb		100
74) m&p-Xylenes	13.60	106	1234562	50.00 ppb		90
75) Ethyl methacrylate	11.01	69	434466	50.00 ppb		93
76) Cyclohexanone	11.77	42	15362	50.00 ppb		83

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1954.D Vial: 100 000208
Acq On : 13 Oct 99 20:35 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00
Quant Time: Oct 14 0:10 1999 Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Wed Oct 13 22:59:22 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	0-Xylene	14.42	106	585415	50.00 ppb	88
78)	Styrene	14.48	104	1100185	50.00 ppb	85
79)	Bromoform	14.87	173	310117	50.00 ppb	99
80)	Isopropylbenzene	15.18	105	1328899	50.00 ppb	98
82)	Bromobenzene	15.81	156	440790	50.00 ppb	91
84)	1,1,2,2-Tetrachloroethane	16.04	83	437990	50.00 ppb	99
85)	1,2,3-Trichloropropane	10.89	75	477074	50.00 ppb	86
86)	n-Propylbenzene	16.05	91	1504177	50.00 ppb	99
87)	2-Chlorotoluene	16.23	91	920985	49.99 ppb	97
88)	4-Chlorotoluene	16.49	91	995893	50.00 ppb	100
89)	1,3,5-Trimethylbenzene	16.46	105	1019129	50.01 ppb	97
90)	tert-Butylbenzene	17.09	119	861146	50.00 ppb	98
91)	1,2,4-Trimethylbenzene	17.24	105	1043143	50.00 ppb	96
92)	sec-Butylbenzene	17.58	105	1401252	50.00 ppb	96
93)	1,3-Dichlorobenzene	17.86	146	699917	50.00 ppb	98
94)	4-isopropyltoluene	17.97	119	1083662	50.00 ppb	98
95)	1,4-Dichlorobenzene	18.10	146	716746	50.00 ppb	95
96)	1,2-Dichlorobenzene	18.91	146	651677	50.00 ppb	99
97)	n-Butylbenzene	18.88	91	1019521	50.00 ppb	96
98)	cis-1,4-dichloro-2-butene	16.17	75	180546	55.17 ppb	96
99)	trans-1,4-dichloro-2-buten	16.46	53	25801	50.51 ppb	95
100)	1,2-dibromo-3-chloropropan	15.81	75	35457	50.00 ppb	83
101)	Pentachloroethane	17.19	167	194738	50.00 ppb	95
102)	1,2,4-Trichlorobenzene	21.64	180	439740	49.64 ppb	99
103)	Hexachlorobutadiene	21.84	225	171868	50.00 ppb	99
104)	Naphthalene	21.97	128	1134145	49.97 ppb	100
105)	1,2,3-Trichlorobenzene	22.33	182	406864	50.00 ppb	100
106)	2-Methyl Naphthalene	0.00	142		Not Detected	
107)	1,3-Dimethyl Naphthalene	0.00	156		No Calib	

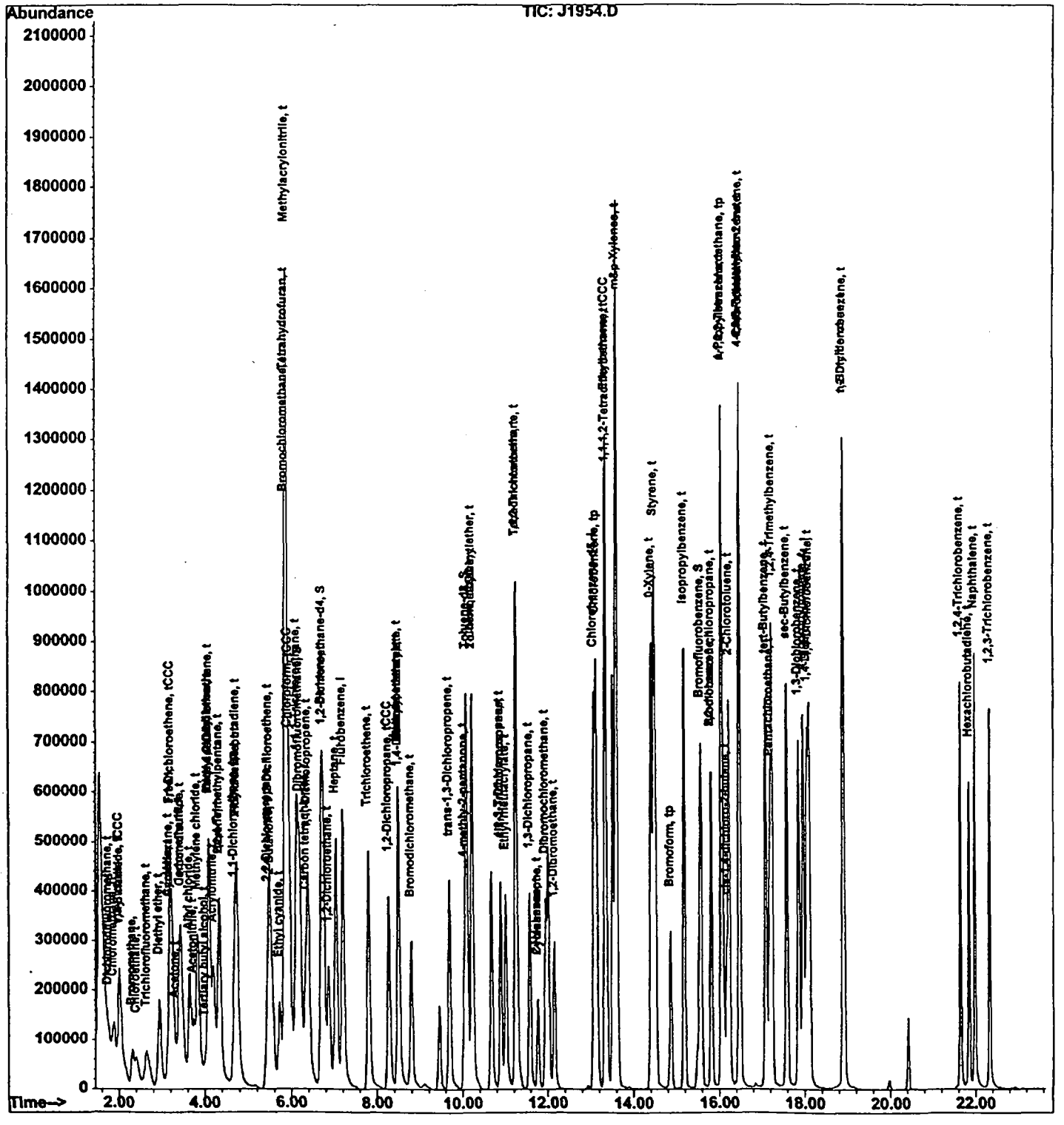
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101399\J1954.D
Acq On : 13 Oct 99 20:35
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;
Quant Time: Oct 14 0:10 1999

Vial: 100
Operator: 000209
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 02:59:26 1999
Response via : Single Level Calibration



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1957.D Vial: 10 000210
Acq On : 13 Oct 99 22:04 Operator:
Sample : VSTD005;MSJ;; Inst : GC/MS Ins
Misc : VSTD005;LOW;SO; Multiplr: 1.00
Quant Time: Oct 14 2:53 1999 Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 00:35:24 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.20	96	1272617	50.00 ppb	0.00
66) Chlorobenzene-d5	13.07	117	969804	50.00 ppb	0.00
83) 1,4-Dichlorobenzene-d4	18.05	152	354431	50.00 ppb	0.00

System Monitoring Compounds					
39) Dibromofluoromethane	6.21	113	431691	50.28 ppb	0.01
Surrogate Spike 50.000	Range 86 - 118		Recovery = 100.56%		
43) 1,2-Dichloroethane-d4	6.75	65	281182	56.94 ppb	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 113.88%		
67) Toluene-d8	10.09	98	1143230	49.72 ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 99.44%		
81) Bromofluorobenzene	15.57	95	376570	48.01 ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 96.02%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.78	85	9633	3.29 ppb	100
3) 1,3-Butadiene	0.00	54		Not Detected	
4) Chlorotrfluoroethene	0.00	116		Not Detected	
5) Chloromethane	1.88	50	26308	4.10 ppb	89
6) Vinyl chloride	2.00	62	22496	4.50 ppb	97
7) Bromomethane	2.33	96	18105	6.39 ppb	93
8) Chloroethane	2.44	64	11238	5.30 ppb #	35
9) Trichlorofluoromethane	2.65	101	17329	4.03 ppb	100
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	2.95	59	26838	5.06 ppb	98
12) Freon	3.22	101	44036	5.48 ppb	90
13) Tertiary butyl alcohol	0.00	59		Not Detected	
14) 1,1-Dichloroethene	3.22	96	21916	4.35 ppb	95
15) Acetonitrile	3.75	40	23852	7.78 ppb #	1
16) Methylene chloride	3.85	84	42666	6.00 ppb	98
17) Acrolein	3.20	56	14543	3.72 ppb	100
18) Acrylonitrile	4.21	53	36264	4.38 ppb	98
19) trans,1,2-Dichloroethene	4.10	96	28243	4.28 ppb	97
20) Acetone	3.35	43	10977	6.38 ppb m	82
21) Carbon disulfide	3.45	76	83500	5.83 ppb m	100
22) Hexane	4.35	57	51154	5.39 ppb	96
23) 1,1-Dichloroethane	4.68	63	43465	4.26 ppb	97
24) Methyl t-butyl ether	4.09	73	51662	4.09 ppb	100
25) Vinyl acetate	4.73	43	63167	4.57 ppb	100
26) 2-chloro-1,3-butadiene	4.75	53	32029	4.92 ppb	95
27) 2,2-Dichloropropane	5.44	77	24211	4.06 ppb	94
28) cis-1,2-Dichloroethene	5.48	96	31921	4.02 ppb	95
29) 2-Butanone	5.56	72	3564	4.47 ppb m	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\101399\J1957.D Vial: 10000211
Acq On : 13 Oct 99 22:04 Operator:
Sample : VSTD005;MSJ;; Inst : GC/MS Ins
Misc : VSTD005;LOW;SO; Multiplr: 1.00
Quant Time: Oct 14 2:53 1999 Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 00:35:24 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Iodomethane	3.41	142	60235	4.50 ppb		97
31)	Allyl chloride	3.65	76	19099	5.04 ppb	m	7
32)	Cyclohexane	3.20	56	14543	3.72 ppb	#	81
33)	Ethyl cyanide	5.72	54	36722	4.31 ppb		100
34)	Ethyl acetate	4.09	43	10394	4.49 ppb	#	94
35)	Bromochloromethane	5.84	128	16557	3.62 ppb		89
36)	Tetrahydrofuran	5.88	42	18779	5.08 ppb		84
37)	Chloroform	5.96	83	43451	3.91 ppb		88
38)	1,1,1-Trichloroethane	6.15	97	32347	4.43 ppb		94
40)	Carbon tetrachloride	6.34	117	30429	4.51 ppb		98
41)	1,1,-Dichloropropene	6.39	75	34370	4.59 ppb		98
42)	2,2,4-Trimethylpentane	4.35	57	51154	5.39 ppb		86
44)	Benzene	6.70	78	105417	4.51 ppb		100
45)	1,2-Dichloroethane	6.88	62	30252	4.36 ppb		97
46)	Heptane	7.02	43	50726	4.86 ppb		94
47)	Trichloroethene	7.79	95	33516	4.68 ppb		98
48)	1,2-Dichloropropane	8.26	63	30181	4.28 ppb	#	87
49)	Methylmethacrylate	8.50	69	19178	4.65 ppb		93
50)	1,4-Dioxane	8.53	88	4812	3.58 ppb		91
51)	Dibromomethane	8.50	93	22712	3.94 ppb		96
52)	Bromodichloromethane	8.79	83	34766	4.39 ppb		96
53)	Methylacrylonitrile	5.89	41	224353	5.03 ppb		95
54)	4-methly-2-pentanone	10.04	43	35041	4.88 ppb	#	1
55)	2-Hexanone	11.77	43	18754	3.86 ppb	#	95
56)	cis-1,3-Dichloropropene	10.90	75	36646	4.32 ppb		94
57)	Toluene	10.22	92	76124	5.00 ppb		97
58)	2-Chloroethylvinylether	10.23	63	7406	4.79 ppb		100
59)	Octane	0.00	43		No Calib	#	
60)	Isobutyl acetate	8.50	43	1956	4.40 ppb	#	45
61)	trans-1,3-Dichloropropene	9.69	75	46355	4.52 ppb		98
62)	1,1,2-Trichloroethane	11.24	83	26346	4.74 ppb		98
63)	1,2-Dibromoethane	12.15	107	36755	4.58 ppb	#	99
64)	Tetrachloroethene	11.26	166	51422	6.16 ppb		94
65)	1,3-Dichloropropane	11.58	76	44160	4.79 ppb		99
68)	Dibromochloromethane	11.94	129	34126	4.22 ppb		92
69)	Chlorobenzene	13.13	112	92523	4.70 ppb		94
70)	1,1,1,2-Tetrachloroethane	13.36	131	25726	4.06 ppb		96
71)	Ethylbenzene	13.33	91	129150	4.96 ppb		99
72)	Nonene	0.00	55		No Calib		
73)	1-Chlorohexane	10.22	91	126140	4.91 ppb		82
74)	m&p-Xylenes	13.59	106	112244	4.91 ppb		97
75)	Ethyl methacrylate	11.02	69	35175	4.37 ppb		98
76)	Cyclohexanone	11.99	42	1104	3.88 ppb	#	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

000212

Data File : C:\HPCHEM\1\DATA\101399\J1957.D
Acq On : 13 Oct 99 22:04
Sample : VSTD005;MSJ;;
Misc : VSTD005;LOW;SO;
Quant Time: Oct 14 2:53 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 00:35:24 1999
Response via : Initial Calibration
Response via : Initial Calibration

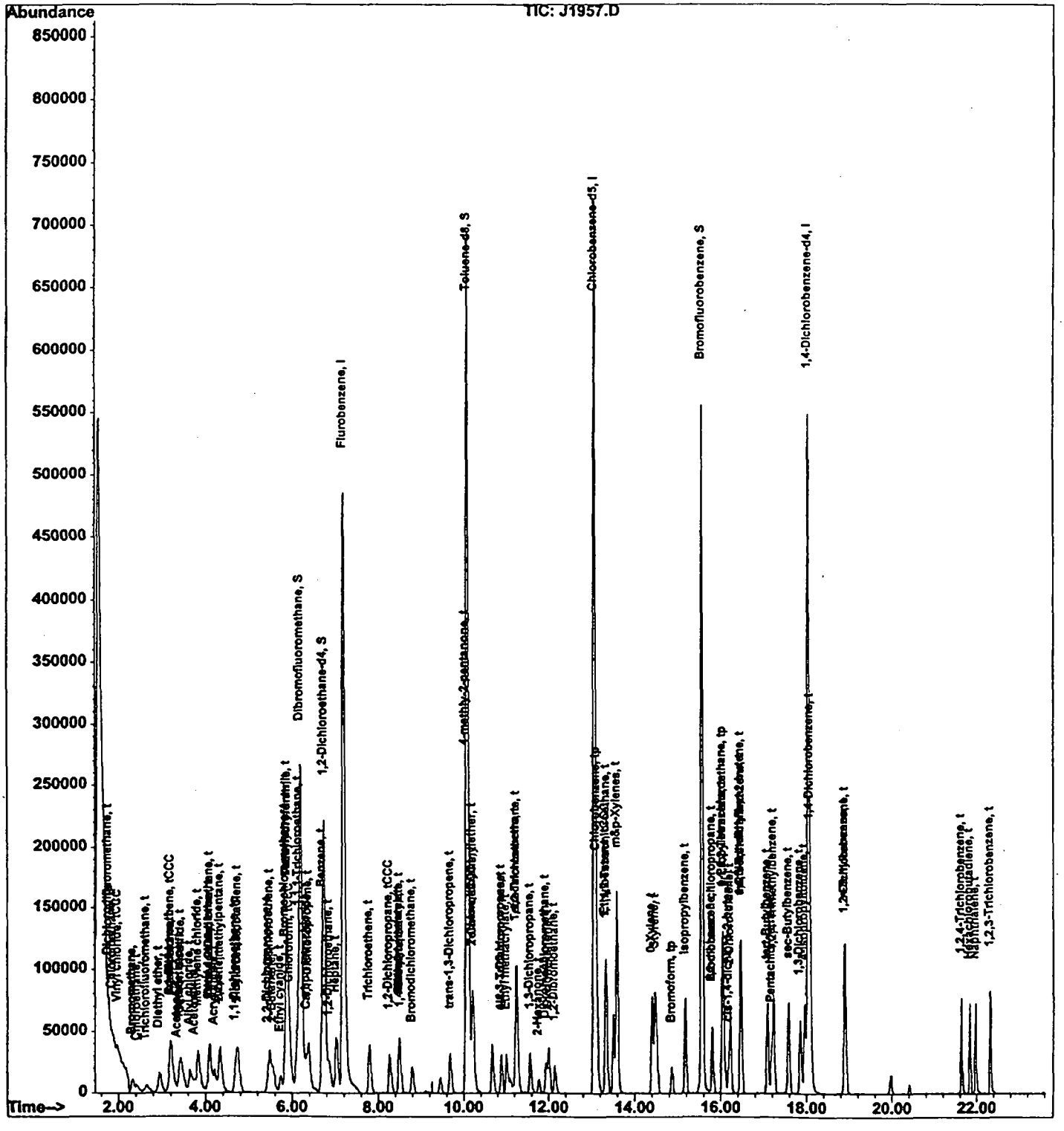
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
77)	0-Xylene	14.41	106	49915	4.61 ppb		94
78)	Styrene	14.48	104	91691	4.50 ppb		99
79)	Bromoform	14.86	173	21624	3.77 ppb		100
80)	Isopropylbenzene	15.19	105	119654	4.87 ppb		98
82)	Bromobenzene	15.81	156	37098	4.55 ppb		94
84)	1,1,2,2-Tetrachloroethane	16.05	83	32182	4.45 ppb		99
85)	1,2,3-Trichloropropane	10.90	75	36646	4.65 ppb		92
86)	n-Propylbenzene	16.05	91	136727	5.51 ppb		100
87)	2-Chlorotoluene	16.23	91	86216	5.67 ppb		97
88)	4-Chlorotoluene	16.49	91	91350	5.56 ppb		99
89)	1,3,5-Trimethylbenzene	16.47	105	92367	5.49 ppb		97
90)	tert-Butylbenzene	17.10	119	83843	5.90 ppb		99
91)	1,2,4-Trimethylbenzene	17.23	105	96030	5.58 ppb		96
92)	sec-Butylbenzene	17.59	105	138260	5.98 ppb		99
93)	1,3-Dichlorobenzene	17.85	146	62274	5.39 ppb		94
94)	4-isopropyltoluene	17.96	119	104630	5.85 ppb		96
95)	1,4-Dichlorobenzene	18.10	146	65263	5.51 ppb		91
96)	1,2-Dichlorobenzene	18.92	146	55025	5.11 ppb		97
97)	n-Butylbenzene	18.89	91	100895	5.99 ppb		95
98)	cis-1,4-dichloro-2-butene	16.18	75	12232	4.10 ppb		85
99)	trans-1,4-dichloro-2-buten	16.47	53	1939	4.55 ppb		90
100)	1,2-dibromo-3-chloropropan	15.81	75	3597	6.14 ppb	#	49
101)	Pentachloroethane	17.19	167	12639	3.93 ppb		88
102)	1,2,4-Trichlorobenzene	21.64	180	44762	6.17 ppb		94
103)	Hexachlorobutadiene	21.84	225	18606	6.56 ppb		94
104)	Naphthalene	21.98	128	100805	5.38 ppb		100
105)	1,2,3-Trichlorobenzene	22.32	182	41793	6.22 ppb		100
106)	2-Methyl Naphthalene	0.00	142		Not Detected		
107)	1,3-Dimethyl Naphthalene	0.00	156		No Calib		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101399\J1957.D Vial: 10 000213
Acq On : 13 Oct 99 22:04 Operator:
Sample : VSTD005;MSJ;; Inst : GC/MS Ins
Misc : VSTD005;LOW;SO; Multiplr: 1.00
Quant Time: Oct 14 2:53 1999 Quant Results File: 8260007S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 02:59:26 1999
Response via : Single Level Calibration



Evaluate Continuing Calibration Report

000214

Data File : C:\HPCHEM\1\DATA\101899\I2272.D
Acq On : 18 Oct 99 6:59 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	I	Fluorobenzene	1.000	1.000	0.0	91	0.08
2	t	dichlorodifluoromethane	0.452	0.434	4.1	86	0.03
3	T	1,3-Butadiene	0.229	0.284	-24.2	118	4.54#
4	t	chlorotrifluoroethene	0.000	0.000	0.0	0#	-0.98#
5	tp	chloromethane	0.463	0.494	-6.7	101	0.01
6	tCCC	vinyl chloride	0.433	0.493	-14.0	108	0.04
7	t	bromomethane	0.263	0.249	5.3	79	0.10
8	t	chloroethane	0.173	0.221	-27.7	116	0.04
9	t	trichlorofluoromethane	0.379	0.437	-15.3	106	0.12
10	t	1,2-dichloro-1,1,2 trifluor	0.000	0.000	0.0	0#	-1.47#
11	t	Diethyl ether	0.163	0.164	-0.7	91	0.08
12		Ethyl Mercaptan	0.043	0.041	4.4	97	0.10
13	t	freon	0.416	0.358	13.8	87	0.11
14	t	Tertiary butyl alcohol	0.035	0.039	-9.9	92	-0.09
15	tCCC	1,1-dichloroethene	0.235	0.230	2.3	116	0.10
16	t	Acetonitrile	0.001	0.001	-10.1	120	-0.04
17	t	methylene chloride	0.442	0.333	24.6	83	0.09
18	t	acrolein	0.032	0.027	16.1	87	0.07
19	t	acrylonitrile	0.042	0.072	-72.1#	172	2.66#
20	t	trans-1,2-dichloroethene	0.296	0.287	3.3	89	0.09
21	t	acetone	0.136	0.131	4.4	94	0.06
22	t	carbón disulfide	1.472	1.358	7.7	85	0.10
23	t	hexane	0.704	0.530	24.8	68	0.10
24	tp	1,1-dichloroethane	0.715	0.654	8.5	84	0.09
25	t	methyl t-butyl ether	0.540	0.570	-5.5	92	0.07
26	t	vinyl acetate	0.557	0.527	5.4	79	0.08
27	t	2-chloro-1,3-butadiene	0.493	0.484	1.9	88	0.09
28	t	2,2-dichloropropane	0.382	0.401	-5.1	96	0.10
29	t	cis-1,2-dichloroethene	0.312	0.306	1.7	89	0.10
30	t	2-butanone	0.027	0.026	3.4	80	0.05
31	t	Idomethane	0.513	0.517	-0.8	96	0.09
32	t	Allyl chloride	1.462	1.339	8.4	85	0.10
33	t	cyclohexane	0.742	0.595	19.8	72	0.10
34	t	Ethyl Cyanide	0.033	0.028	15.0	76	0.03
35	t	Ethyl Acetate	0.725	0.558	23.0	69	0.08
36	t	bromochloromethane	0.151	0.163	-8.0	100	0.09
37	t	tetrahydrofuran	0.086	0.074	14.7	73	0.08
38	tCCC	chloroform	0.622	0.598	3.9	88	0.10
39	t	1,1,1-trichloroethane	0.401	0.418	-4.2	96	0.10
40	S	dibromofluromethane	0.321	0.326	-1.3	91	0.10

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101899\I2272.D
Acq On : 18 Oct 99 6:59 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
41	t	carbon tetrachloride	0.296	0.364	-22.9	111	0.09
42	t	1,1-dichloropropene	0.527	0.518	1.8	91	0.09
43	t	2,2,4-trimethylpentane	0.706	0.530	24.9	68	0.10
44	s	1,2-dichloroethane-d4	0.355	0.371	-4.3	98	0.08
45	t	benzene	1.437	1.288	10.4	87	0.09
46	t	1,2-dichloroethane	0.449	0.402	10.5	85	0.08
47	t	Isopropyl acetate	0.725	0.558	23.0	69	0.08
48	t	Heptane	0.725	0.558	23.0	69	0.08
49	t	trichloroethene	0.318	0.319	-0.4	90	0.07
50	tCCC	1,2-dichloropropane	0.407	0.374	8.3	82	0.06
51	t	methyl methacrylate	0.148	0.155	-4.9	83	0.06
52	t	1,4-Dioxane	0.002	0.002	18.4	84	0.03
53	t	dibromomethane	0.184	0.170	7.9	84	0.07
54	t	bromodichloromethane	0.395	0.394	0.3	90	0.07
55	t	methylacrylonitrile	0.162	0.144	10.6	79	0.06
56	t	Propyl acetate	0.000	0.000	0.0	69	0.07
57	t	4-methyl-2-pentanone	0.248	0.225	9.1	77	0.04
58	t	2-hexanone	0.165	0.148	10.4	76	0.06
59	t	cis-1,3-dichloropropene	0.479	0.498	-3.9	90	0.06
60	tCCC	toluene	0.653	0.636	2.7	91	0.06
61	t	2-chloroethylvinylether	0.066	0.080	-20.8	89	0.06
62	t	Octane	0.000	0.000	0.0	65	0.09
63	t	butyl acetate	0.000	0.000	0.0	68	0.05
64	t	isobutyl acetate	0.000	0.000	0.0	67	0.06
65	t	trans-1,3-dichloropropene	0.409	0.408	0.2	88	0.06
66	t	1,1,2-trichloroethane	0.221	0.207	6.1	82	0.06
67	t	1,2-dibromoethane	0.217	0.218	-0.6	89	0.07
68	t	tetrachloroethene	0.275	0.328	-19.3	110	0.07
69	t	1,3-dichloropropane	0.430	0.411	4.4	85	0.06
70	i	chlorobenzene-d5	1.000	1.000	0.0	98	0.07
71	s	toluene-d8	1.285	1.196	6.9	91	0.06
72	t	dibromochloromethane	0.407	0.409	-0.3	96	0.07
73	tp	chlorobenzene	1.093	0.933	14.6	93	0.06
74	t	1,1,1,2-tetrachloroethane	0.394	0.398	-1.0	99	0.05
75	tCCC	ethylbenzene	1.692	1.582	6.5	92	0.06
76	t	Nonene	0.000	0.000	0.0	72	0.11
77	t	1-chlorohexane	0.000	0.000	0.0	0#	-8.06#
78	t	m,p-Xylenes	0.577	0.546	5.4	94	0.05
79	t	ethyl methacrylate	0.000	0.000	0.0	83	0.06

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101899\I2272.D
Acq On : 18 Oct 99 6:59 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
80	t	Cyclohexanone	0.042	0.029	32.3#	61	0.03
81	t	butyl acrylate	0.000	0.000	0.0	82	0.06
82	t	cyclohexanol	0.000	0.000	0.0	82	0.04
83	t	o-xylene	0.557	0.526	5.6	91	0.05
84	t	styrene	0.914	0.886	3.0	90	0.03
85	tp	bromoform	0.201	0.221	-9.6	104	0.04
86	t	isopropylbenzene	1.464	1.437	1.9	95	0.04
87	S	bromoflurobenzene	0.481	0.459	4.5	94	0.03
88	t	bromobenzene	0.408	0.434	-6.4	104	0.04
89	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	111	0.03
90	tp	1,1,2,2-tetrachloroethane	0.992	0.729	26.5	80	0.03
91	t	1,2,3-trichloropropane	1.193	0.912	23.6	83	0.03
92	t	n-propylbenzene	4.236	3.523	16.8	92	0.03
93	t	2-chlorotoluene	2.581	2.085	19.2	91	0.03
94	t	4-chlorotoluene	2.850	2.341	17.9	92	0.03
95	t	1,3,5-trimethylbenzene	2.502	2.180	12.9	97	0.03
96	t	tert-butylbenzene	2.936	2.702	8.0	99	0.03
97	t	1,2,4-trimethylbenzene	2.601	2.197	15.5	95	0.03
98	t	sec-butylbenzene	3.508	3.024	13.8	95	0.03
99	t	1,3-dichlorobenzene	1.708	1.742	-2.0	115	0.03
100	t	4-isopropyltoluene	2.736	2.557	6.5	103	0.03
101	t	1,4-dichlorobenzene	1.800	1.820	-1.1	117	0.03
102	t	1,2-dichlorobenzene	1.583	2.302	-45.4#	166	0.03
103	t	n-butylbenzene	3.046	2.572	15.6	94	0.02
104	t	cis-1,4-dichloro-2-butene	1.166	0.906	22.3	83	0.03
105	t	trans-1,4-dichloro-2-butene	0.214	0.170	20.6	80	0.03
106	t	1,2-dibromo-3-chloropropane	0.149	0.104	30.5#	81	0.03
107	t	pentachloroethane	0.457	0.466	-2.0	107	0.02
108	t	1,2,4-trichlorobenzene	0.779	0.872	-11.9	138	0.03
109	t	hexachlorobutadiene	0.465	0.520	-12.0	138	0.03
110	t	naphthalene	2.009	1.526	24.0	94	0.03
111	t	1,2,3-trichlorobenzene	0.000	0.000	0.0	138	0.03
112	t	2-Methyl Naphthalene	0.000	0.000	0.0	0#	-17.01#
113	t	1,3-Dimethyl Naphthalene	0.000	0.000	0.0	0#	-17.56#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2272.D
Acq On : 18 Oct 99 6:59 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 18 7:32 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.65	96	735509	50.00 ug/l	0.08
70) chlorobenzene-d5	14.26	117	547516	50.00 ug/l	0.07
89) 1,4-dichlorobenzene-d4	16.79	152	275942	50.00 ug/l	0.03
System Monitoring Compounds					%Recovery
40) dibromofluromethane	7.27	113	239414	50.63 ug/l	101.27%
44) 1,2-dichloroethane-d4	8.01	65	272619	52.14 ug/l	104.28%
71) toluene-d8	11.34	98	655015	46.55 ug/l	93.10%
87) bromoflurobenzene	15.80	95	251537	47.76 ug/l	95.51%
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.50	85	319212	47.97 ug/l	100
3) 1,3-Butadiene	6.43	54	208787	62.08 ug/l m	59
4) chlorotrifluoroethene	0.00	116		Not Detected	
5) chloromethane	1.74	50	363103	53.36 ug/l	98
6) vinyl chloride	1.88	62	362898	56.98 ug/l	100
7) bromomethane	2.30	96	183210	47.35 ug/l	100
8) chloroethane	2.44	64	162323	63.86 ug/l m	100
9) trichlorofluoromethane	2.83	101	321245	57.65 ug/l	98
10) 1,2-dichloro-1,1,2 trifluo	0.00	67		Not Detected	
11) Diethyl ether	3.22	59	120928	50.35 ug/l	90
12) Ethyl Mercaptan	3.55	62	30511	47.82 ug/l	79
13) freon	3.57	101	263454	43.08 ug/l	83
14) Tertiary butyl alcohol	4.32	59	28693	54.96 ug/l	100
15) 1,1-dichloroethene	3.55	96	169020	48.84 ug/l	97
16) Acetonitrile	1.85	40	8606	550.27 ug/l #	1
17) methylene chloride	4.22	84	244964	37.69 ug/l	98
18) acrolein	3.34	56	79251	167.75 ug/l	100
19) acrylonitrile	4.55	53	210642	344.27 ug/l m	87
20) trans-1,2-dichloroethene	4.70	96	210757	48.36 ug/l #	81
21) acetone	4.67	43	95990	47.82 ug/l	69
22) carbon disulfide	3.96	76	999154	46.14 ug/l	100
23) hexane	5.20	57	389700	37.62 ug/l	98
24) 1,1-dichloroethane	5.33	63	481330	45.76 ug/l	98
25) methyl t-butyl ether	4.68	73	419483	52.77 ug/l	100
26) vinyl acetate	5.41	43	387565	47.31 ug/l	100
27) 2-chloro-1,3-butadiene	5.53	53	355934	49.03 ug/l	90
28) 2,2-dichloropropane	6.37	77	294912	52.55 ug/l	90
29) cis-1,2-dichloroethene	6.37	96	225379	49.13 ug/l #	82
30) 2-butanone	6.30	72	19023	48.28 ug/l	84
31) Idomethane	3.78	142	380417	50.40 ug/l	98
32) Allyl chloride	3.96	76	984673	45.80 ug/l #	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2272.D
Acq On : 18 Oct 99 6:59 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 18 7:32 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	cyclohexane	7.66	56	437784	40.09 ug/l	#	70
34)	Ethyl Cyanide	6.43	54	208375	425.24 ug/l		96
35)	Ethyl Acetate	8.71	43	410695	38.50 ug/l	#	59
36)	bromochloromethane	6.86	128	119762	53.98 ug/l	#	86
37)	tetrahydrofuran	7.01	42	54112	42.64 ug/l		86
38)	chloroform	6.92	83	439722	48.03 ug/l		96
39)	1,1,1-trichloroethane	7.45	97	307479	52.10 ug/l		94
41)	carbon tetrachloride	7.86	117	267842	61.44 ug/l		98
42)	1,1-dichloropropene	7.77	75	380693	49.12 ug/l		97
43)	2,2,4-trimethylpentane	5.20	57	389700	37.53 ug/l	#	28
45)	benzene	8.16	78	947496	44.82 ug/l		100
46)	1,2-dichloroethane	8.15	62	295882	44.76 ug/l		87
47)	Isopropyl acetate	8.71	43	410695	38.50 ug/l	#	60
48)	Heptane	8.71	43	410695	38.50 ug/l		92
49)	trichloroethene	9.33	95	234759	50.18 ug/l		98
50)	1,2-dichloropropane	9.65	63	274768	45.87 ug/l		96
51)	methyl methacrylate	9.86	69	113865	52.47 ug/l		93
52)	1,4-Dioxane	9.96	88	27122	815.84 ug/l		87
53)	dibromomethane	9.90	93	125010	46.07 ug/l		95
54)	bromodichloromethane	10.10	83	289494	49.85 ug/l		98
55)	methylacrylonitrile	6.73	41	1062089	446.83 ug/l		89
56)	Propyl acetate	0.00	43		No Calib		
57)	4-methyl-2-pentanone	11.00	43	165500	45.45 ug/l		98
58)	2-hexanone	12.48	43	109057	44.81 ug/l	#	96
59)	cis-1,3-dichloropropene	10.89	75	366096	51.96 ug/l		93
60)	toluene	11.45	92	467417	48.66 ug/l		98
61)	2-chloroethylvinylether	10.64	63	58551	60.39 ug/l		100
62)	Octane	0.00	43		No Calib	#	
63)	butyl acetate	0.00	43		No Calib		
64)	isobutyl acetate	0.00	43		No Calib		
65)	trans-1,3-dichloropropene	11.78	75	300058	49.92 ug/l		91
66)	1,1,2-trichloroethane	12.10	83	152541	46.95 ug/l		89
67)	1,2-dibromoethane	13.22	107	160461	50.32 ug/l		98
68)	tetrachloroethene	12.55	166	240948	59.67 ug/l		97
69)	1,3-dichloropropane	12.43	76	302000	47.79 ug/l		99
72)	dibromochloromethane	12.92	129	223724	50.14 ug/l		98
73)	chlorobenzene	14.31	112	510698	42.69 ug/l		95
74)	1,1,1,2-tetrachloroethane	14.45	131	217805	50.50 ug/l		96
75)	ethylbenzene	14.52	91	866245	46.75 ug/l		99
76)	Nonene	0.00	55		No Calib	#	
77)	1-chlorohexane	0.00	91		Not Detected		
78)	m,p-Xylenes	14.70	106	598257	94.62 ug/l		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

000219

Data File : C:\HPCHEM\1\DATA\101899\I2272.D
Acq On : 18 Oct 99 6:59 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 18 7:32 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	ethyl methacrylate	0.00	69		No Calib	#	
80)	Cyclohexanone	15.69	42	15666	33.83 ug/l	#	59
81)	butyl acrylate	0.00	55		No Calib	#	
82)	cyclohexanol	0.00	57		No Calib	#	
83)	o-xylene	15.23	106	288058	47.19 ug/l		98
84)	styrene	15.24	104	485341	48.48 ug/l		76
85)	bromoform	15.47	173	120817	54.81 ug/l		96
86)	isopropylbenzene	15.65	105	786579	49.07 ug/l		93
88)	bromobenzene	15.96	156	237881	53.21 ug/l		88
90)	1,1,2,2-tetrachloroethane	15.89	83	201249	36.77 ug/l		97
91)	1,2,3-trichloropropane	15.96	75	251616	38.21 ug/l		61
92)	n-propylbenzene	16.04	91	972233	41.58 ug/l		96
93)	2-chlorotoluene	16.12	91	575338	40.39 ug/l		87
94)	4-chlorotoluene	16.20	91	645930	41.07 ug/l		85
95)	1,3,5-trimethylbenzene	16.19	105	601598	43.56 ug/l		90
96)	tert-butylbenzene	16.47	119	745676	46.02 ug/l		95
97)	1,2,4-trimethylbenzene	16.50	105	606346	42.24 ug/l		91
98)	sec-butylbenzene	16.65	105	834475	43.10 ug/l		89
99)	1,3-dichlorobenzene	16.74	146	480827	51.01 ug/l		92
100)	4-isopropyltoluene	16.75	119	705669	46.74 ug/l		93
101)	1,4-dichlorobenzene	16.81	146	502275	50.57 ug/l		92
102)	1,2-dichlorobenzene	17.08	146	635239	72.72 ug/l		91
103)	n-butylbenzene	17.04	91	709662	42.21 ug/l		94
104)	cis-1,4-dichloro-2-butene	15.96	75	249948	38.83 ug/l	#	1
105)	trans-1,4-dichloro-2-buten	15.98	53	46926	39.71 ug/l	#	72
106)	1,2-dibromo-3-chloropropan	17.59	75	28670	34.76 ug/l		95
107)	pentachloroethane	16.48	167	128683	50.99 ug/l		96
108)	1,2,4-trichlorobenzene	18.15	180	240492	55.93 ug/l		98
109)	hexachlorobutadiene	18.26	225	143577	56.00 ug/l		92
110)	naphthalene	18.32	128	421171	37.98 ug/l		100
111)	1,2,3-trichlorobenzene	0.00	180		No Calib		
112)	2-Methyl Naphthalene	0.00	142		Not Detected		
113)	1,3-Dimethyl Naphthalene	0.00	156		Not Detected		

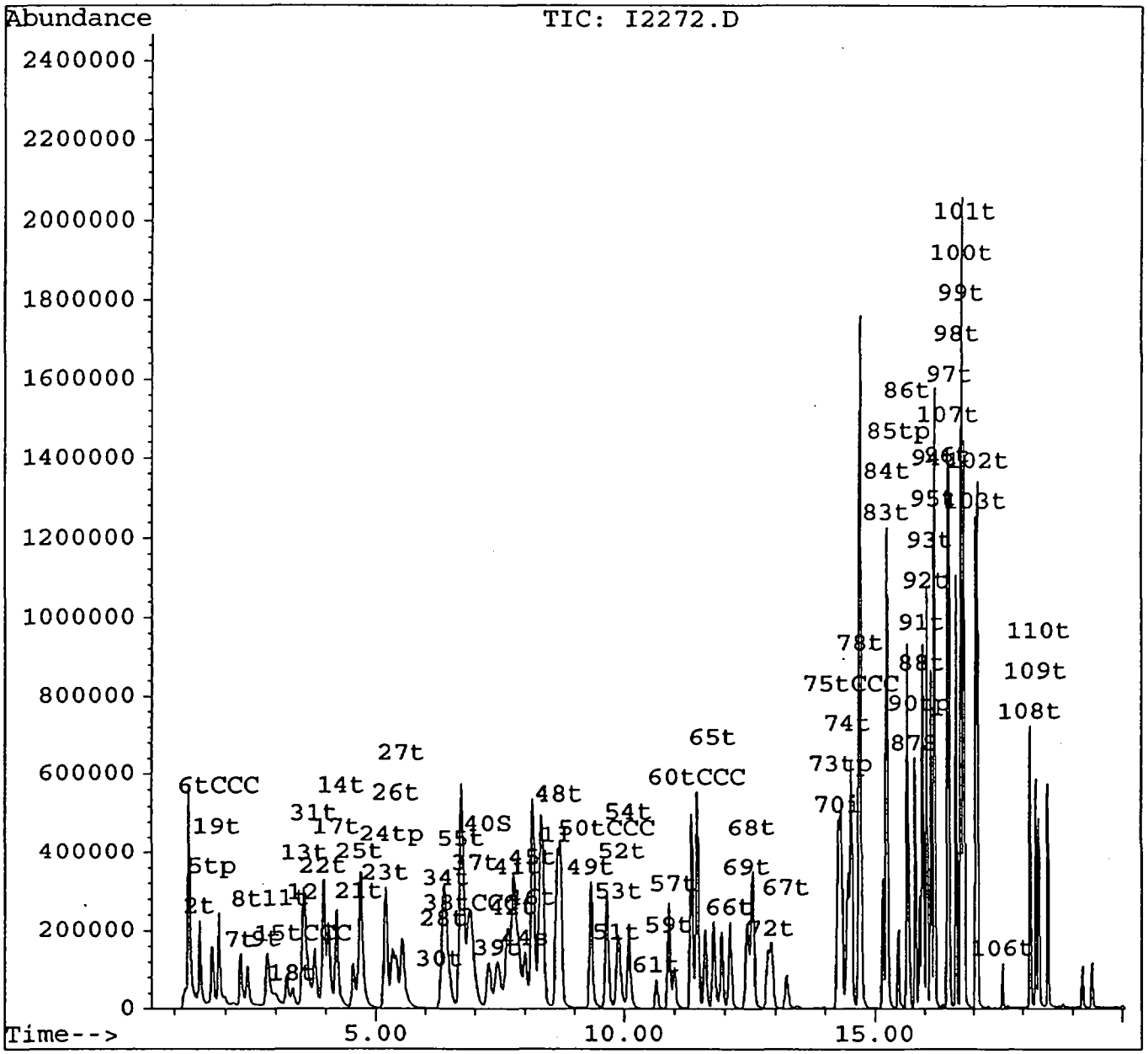
Quantitation Report

000220

Data File : C:\HPCHEM\1\DATA\101899\I2272.D
Acq On : 18 Oct 99 6:59 am
Sample : VSTD050;MSI;;
Misc : VSTD050;LOW;AQ;
Quant Time: Oct 18 7:20 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



Evaluate Continuing Calibration Report

000221

Data File : C:\HPCHEM\1\DATA\101899\J2008.D Vial: 100
Acq On : 18 Oct 99 18:44 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Flurobenzene	1.000	1.000	0.0	104	-0.02
2	t	Dichlorodifluoromethane	0.124	0.099	20.2	90	-0.02
3	T	1,3-Butadiene	0.135	0.000	100.0#	0#	0.00
4	tP	Chloromethane	0.246	0.204	17.1	85	-0.02
5	tCCC	Vinyl chloride	0.193	0.168	13.0	89	0.00
6		Bromomethane	0.088	0.102	-15.9	96	-0.02
7	t	Chloroethane	0.060	0.077	-28.3#	96	0.00
8	t	Trichlorofluoromethane	0.145	0.135	6.9	83	0.00
9	t	Diethyl ether	0.197	0.190	3.6	95	-0.02
10	t	Freon	0.345	0.296	14.2	98	-0.02
11	t	Tertiary butyl alcohol	0.034	0.022	35.3#	56	-0.02
12	tCCC	1,1-Dichloroethene	0.203	0.220	-8.4	116	-0.02
13	t	Acetonitrile	0.015	0.013	13.3	110	0.00
14	t	Methylene chloride	0.282	0.279	1.1	104	-0.02
15	t	Acrolein	0.139	0.136	2.2	92	0.00
16	t	Acrylonitrile	0.307	0.348	-13.4	112	-0.02
17	t	trans,1,2-Dichloroethene	0.261	0.269	-3.1	108	-0.02
18	t	Acetone	0.065	0.070	-7.7	108	0.00
19	t	Carbon disulfide	0.619	0.691	-11.6	128	-0.02
20	t	Hexane	0.397	0.349	12.1	98	-0.02
21	tp	1,1-Dichloroethane	0.388	0.414	-6.7	108	-0.02
22	t	Methyl t-butyl ether	0.429	0.382	11.0	80	-0.03
23	t	Vinyl acetate	0.518	0.642	-23.9	124	-0.02
24	t	2-chloro-1,3-butadiene	0.264	0.313	-18.6	128	-0.03
25	t	2,2-Dichloropropane	0.234	0.256	-9.4	114	-0.02
26	t	cis-1,2-Dichloroethene	0.299	0.319	-6.7	107	-0.02
27	t	2-Butanone	0.029	0.033	-13.8	111	-0.02
28	t	Iodomethane	0.544	0.609	-11.9	121	-0.02
29	t	Allyl chloride	0.160	0.176	-10.0	123	0.18
30	t	Cyclohexane	0.139	0.136	2.2	92	0.00
31	t	Ethyl cyanide	0.315	0.352	-11.7	110	-0.02
32	t	Ethyl acetate	0.079	0.061	22.8	70	-0.03
33	t	Bromochloromethane	0.168	0.173	-3.0	100	-0.03
34	t	Tetrahydrofuran	0.129	0.156	-20.9	112	-0.02
35	tCCC	Chloroform	0.425	0.442	-4.0	106	-0.02
36	t	1,1,1-Trichloroethane	0.288	0.304	-5.6	111	-0.02
37	S	Dibromofluoromethane	0.342	0.337	1.5	104	-0.02
38	t	Carbon tetrachloride	0.278	0.284	-2.2	112	-0.02
39	t	1,1,-Dichloropropene	0.306	0.322	-5.2	114	-0.03
40	t	2,2,4-Trimethylpentane	0.397	0.349	12.1	98	-0.02
41	S	1,2-Dichloroethane-d4	0.224	0.212	5.4	103	-0.03
42	t	Benzene	0.892	0.995	-11.5	113	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

000222

Data File : C:\HPCHEM\1\DATA\101899\J2008.D
Acq On : 18 Oct 99 18:44
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
43	t	1,2-Dichloroethane	0.252	0.257	-2.0	98	-0.02
44	t	Heptane	0.417	0.385	7.7	98	-0.02
45	t	Trichloroethene	0.279	0.295	-5.7	110	-0.02
46	tCCC	1,2-Dichloropropane	0.264	0.296	-12.1	111	-0.03
47	t	Methylmethacrylate	0.149	0.177	-18.8	114	-0.02
48	t	1,4-Dioxane	0.002	0.003	-50.0#	110	-0.03
49	t	Dibromomethane	0.200	0.206	-3.0	95	-0.03
50	t	Bromodichloromethane	0.299	0.314	-5.0	105	-0.03
51	t	Methylacrylonitrile	1.622	1.866	-15.0	111	-0.02
52	t	4-methly-2-pentanone	0.026	0.030	-15.4	112	-0.03
53	t	2-Hexanone	0.167	0.202	-21.0	111	-0.03
54	t	cis-1,3-Dichloropropene	0.311	0.337	-8.4	106	-0.04
55	tCCC	Toluene	0.585	0.644	-10.1	112	-0.03
56	t	2-Chloroethylvinylether	0.060	0.063	-5.0	109	-0.04
57	t	Octane	0.204	0.236	-15.7	107	-0.02
58	t	Isobutyl acetate	0.016	0.019	-18.7	114	-0.03
59	t	trans-1,3-Dichloropropene	0.382	0.409	-7.1	106	-0.03
60	t	1,1,2-Trichloroethane	0.197	0.216	-9.6	103	-0.03
61	t	1,2-Dibromoethane	0.292	0.302	-3.4	100	-0.03
62	t	Tetrachloroethene	0.330	0.304	7.9	97	-0.03
63	t	1,3-Dichloropropane	0.336	0.361	-7.4	104	-0.03
64	I	Chlorobenzene-d5	1.000	1.000	0.0	107	-0.03
65	S	Toluene-d8	1.194	1.192	0.2	107	-0.03
66	t	Dibromochloromethane	0.404	0.393	2.7	100	-0.03
67	tp	Chlorobenzene	0.986	1.035	-5.0	109	-0.03
68	t	1,1,1,2-Tetrachloroethane	0.313	0.317	-1.3	103	-0.03
69	tCCC	Ethylbenzene	1.294	1.420	-9.7	113	-0.03
70	t	1-Chlorohexane	1.311	1.398	-6.6	113	-0.03
71	t	m&p-Xylenes	0.556	0.623	-12.1	113	-0.04
72	t	Ethyl methacrylate	0.389	0.452	-16.2	116	-0.03
73	t	Cyclohexanone	0.003	0.003	0.0	117	-0.02
74	t	0-Xylene	0.536	0.575	-7.3	110	-0.03
75	t	Styrene	0.977	1.046	-7.1	106	-0.03
76	tp	Bromoform	0.278	0.261	6.1	94	-0.03
77	t	Isopropylbenzene	1.253	1.325	-5.7	111	-0.03
78	S	Bromofluorobenzene	0.403	0.394	2.2	104	-0.03
79	t	Bromobenzene	0.411	0.400	2.7	101	-0.03
80	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	-0.03
81	tp	1,1,2,2-Tetrachloroethane	0.882	1.010	-14.5	95	-0.03
82	t	1,2,3-Trichloropropane	1.054	1.220	-15.7	106	-0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101899\J2008.D Vial: 100 000223
Acq On : 18 Oct 99 18:44 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
83	t	n-Propylbenzene	3.402	3.873	-13.8	106	-0.03
84	t	2-Chlorotoluene	2.110	2.372	-12.4	106	-0.03
85	t	4-Chlorotoluene	2.195	2.540	-15.7	105	-0.03
86	t	1,3,5-Trimethylbenzene	2.261	2.611	-15.5	106	-0.03
87	t	tert-Butylbenzene	2.036	2.272	-11.6	109	-0.03
88	t	1,2,4-Trimethylbenzene	2.368	2.621	-10.7	104	-0.03
89	t	sec-Butylbenzene	3.298	3.657	-10.9	108	-0.03
90	t	1,3-Dichlorobenzene	1.626	1.665	-2.4	98	-0.04
91	t	4-isopropyltoluene	2.574	2.790	-8.4	106	-0.03
92	t	1,4-Dichlorobenzene	1.667	1.696	-1.7	98	-0.04
93	t	1,2-Dichlorobenzene	1.440	1.491	-3.5	95	-0.03
94	t	n-Butylbenzene	2.340	2.591	-10.7	105	-0.03
95	t	cis-1,4-dichloro-2-butene	0.377	0.448	-18.8	103	-0.03
96	t	trans-1,4-dichloro-2-butene	0.055	0.067	-21.8	107	-0.03
97	t	1,2-dibromo-3-chloropropane	0.077	0.082	-6.5	95	-0.04
98	t	Pentachloroethane	0.494	0.621	-25.7#	132	-0.03
99	t	1,2,4-Trichlorobenzene	1.001	0.863	13.8	81	-0.02
100	t	Hexachlorobutadiene	0.446	0.309	30.7#	74	-0.02
101	t	Naphthalene	2.169	2.010	7.3	73	-0.02
102	t	1,2,3-Trichlorobenzene	0.853	0.743	12.9	75	-0.02
103	t	2-Methyl Naphthalene	0.000	0.000	0.0	0#	-17.92#
104	t	1,3-Dimethyl Naphthalene	1.009	1.083	-7.3	101	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

000224

Data File : C:\HPCHEM\1\DATA\101899\J2008.D
Vial: 100
Acq On : 18 Oct 99 18:44
Operator:
Sample : VSTD050;MSJ;;
Inst : GC/MS Ins
Misc : VSTD050;LOW;SO;
Multiplr: 1.00
Quant Time: Oct 18 19:30 1999
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Flurobenzene	7.17	96	1493580	50.00 ppb		-0.02
64) Chlorobenzene-d5	13.04	117	1117035	50.00 ppb		-0.03
80) 1,4-Dichlorobenzene-d4	18.02	152	413050	50.00 ppb		-0.03
System Monitoring Compounds						
37) Dibromofluoromethane	6.17	113	503615	49.36 ppb		-0.02
Surrogate Spike 50.000	Range 86 - 118		Recovery = 98.72%			
41) 1,2-Dichloroethane-d4	6.70	65	316438	47.32 ppb		-0.03
Surrogate Spike 50.000	Range 80 - 120		Recovery = 94.64%			
65) Toluene-d8	10.06	98	1331383	49.91 ppb		-0.03
Surrogate Spike 50.000	Range 88 - 110		Recovery = 99.82%			
78) Bromofluorobenzene	15.54	95	439910	48.85 ppb		-0.03
Surrogate Spike 50.000	Range 86 - 115		Recovery = 97.70%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.74	85	147958	40.07 ppb		100
3) 1,3-Butadiene	0.00	54		Not Detected		
4) Chloromethane	1.86	50	305368	41.58 ppb		93
5) Vinyl chloride	1.99	62	251045	43.59 ppb		99
6) Bromomethane	2.30	96	152764	58.37 ppb		97
7) Chloroethane	2.40	64	114616	64.08 ppb		68
8) Trichlorofluoromethane	2.63	101	201119	46.54 ppb		99
9) Diethyl ether	2.92	59	283519	48.20 ppb		94
10) Freon	3.17	101	442578	42.94 ppb		95
11) Tertiary butyl alcohol	3.97	59	32599	31.66 ppb		100
12) 1,1-Dichloroethene	3.19	96	328923	54.37 ppb		93
13) Acetonitrile	3.72	40	188799	413.97 ppb	#	1
14) Methylene chloride	3.81	84	416157	49.38 ppb		98
15) Acrolein	3.15	56	202425	48.67 ppb		100
16) Acrylonitrile	4.17	53	520419	56.78 ppb		98
17) trans,1,2-Dichloroethene	4.07	96	401559	51.57 ppb		95
18) Acetone	3.32	43	104693	54.02 ppb		98
19) Carbon disulfide	3.42	76	1032543	55.87 ppb	m	100
20) Hexane	4.31	57	521086	43.94 ppb		98
21) 1,1-Dichloroethane	4.66	63	618330	53.37 ppb		100
22) Methyl t-butyl ether	4.06	73	570202	44.47 ppb		100
23) Vinyl acetate	4.70	43	959027	62.03 ppb		100
24) 2-chloro-1,3-butadiene	4.72	53	467959	59.29 ppb		99
25) 2,2-Dichloropropane	5.41	77	382042	54.58 ppb		99
26) cis-1,2-Dichloroethene	5.46	96	476937	53.34 ppb		97
27) 2-Butanone	5.50	72	49625	57.82 ppb		78
28) Iodomethane	3.38	142	909912	56.04 ppb		99
29) Allyl chloride	3.61	76	262696	55.05 ppb	m	6

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

000225

Data File : C:\HPCHEM\1\DATA\101899\J2008.D
Vial: 100
Acq On : 18 Oct 99 18:44
Operator:
Sample : VSTD050;MSJ;;
Inst : GC/MS Ins
Misc : VSTD050;LOW;SO;
Multiplr: 1.00
Quant Time: Oct 18 19:30 1999
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Cyclohexane	3.15	56	202425	48.67 ppb		93
31)	Ethyl cyanide	5.70	54	526143	55.93 ppb		98
32)	Ethyl acetate	4.06	43	91086	38.51 ppb	#	2
33)	Bromochloromethane	5.80	128	258702	51.59 ppb		97
34)	Tetrahydrofuran	5.83	42	233201	60.33 ppb		99
35)	Chloroform	5.93	83	659877	51.94 ppb		100
36)	1,1,1-Trichloroethane	6.12	97	454393	52.75 ppb		97
38)	Carbon tetrachloride	6.31	117	423477	51.07 ppb		100
39)	1,1,-Dichloropropene	6.36	75	480919	52.63 ppb		98
40)	2,2,4-Trimethylpentane	4.31	57	521086	43.94 ppb	#	78
42)	Benzene	6.66	78	1486379	55.76 ppb		98
43)	1,2-Dichloroethane	6.84	62	383932	50.97 ppb		98
44)	Heptane	7.01	43	574563	46.11 ppb		91
45)	Trichloroethene	7.77	95	441264	53.00 ppb		98
46)	1,2-Dichloropropane	8.24	63	441469	55.94 ppb		99
47)	Methylmethacrylate	8.46	69	264975	59.50 ppb		98
48)	1,4-Dioxane	8.47	88	83085	1196.97 ppb		98
49)	Dibromomethane	8.45	93	306984	51.26 ppb		95
50)	Bromodichloromethane	8.76	83	468460	52.45 ppb		99
51)	Methylacrylonitrile	5.86	41	2787119	57.54 ppb		100
52)	4-methly-2-pentanone	10.00	43	451150	586.95 ppb		94
53)	2-Hexanone	11.73	43	302444	60.66 ppb		99
54)	cis-1,3-Dichloropropene	10.85	75	503770	54.31 ppb		99
55)	Toluene	10.19	92	961405	54.99 ppb		100
56)	2-Chloroethylvinylether	10.18	63	94832	53.35 ppb		100
57)	Octane	6.71	43	352740	57.88 ppb	#	86
58)	Isobutyl acetate	8.47	43	28387	60.22 ppb		97
59)	trans-1,3-Dichloropropene	9.65	75	611586	53.55 ppb		99
60)	1,1,2-Trichloroethane	11.21	83	322924	54.82 ppb		99
61)	1,2-Dibromoethane	12.11	107	451786	51.75 ppb		98
62)	Tetrachloroethene	11.23	166	454289	46.08 ppb		99
63)	1,3-Dichloropropane	11.54	76	538907	53.66 ppb		99
66)	Dibromochloromethane	11.92	129	438941	48.64 ppb		99
67)	Chlorobenzene	13.10	112	1155774	52.49 ppb		99
68)	1,1,1,2-Tetrachloroethane	13.32	131	353546	50.51 ppb		99
69)	Ethylbenzene	13.29	91	1586094	54.86 ppb		100
70)	1-Chlorohexane	10.19	91	1561760	53.32 ppb		100
71)	m&p-Xylenes	13.56	106	1391710	112.11 ppb		100
72)	Ethyl methacrylate	10.98	69	505123	58.15 ppb		99
73)	Cyclohexanone	11.74	42	17959	304.63 ppb	#	81
74)	0-Xylene	14.38	106	641811	53.55 ppb		97
75)	Styrene	14.44	104	1168566	53.56 ppb		99
76)	Bromoform	14.84	173	291506	46.87 ppb		98

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\101899\J2008.D Vial: 100
Acq On : 18 Oct 99 18:44 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00
Quant Time: Oct 18 19:30 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	Isopropylbenzene	15.15	105	1480139	52.89 ppb	100
79)	Bromobenzene	15.78	156	447311	48.69 ppb	98
81)	1,1,2,2-Tetrachloroethane	16.01	83	417029	57.25 ppb	99
82)	1,2,3-Trichloropropane	10.85	75	503770	57.88 ppb	94
83)	n-Propylbenzene	16.02	91	1599893	56.93 ppb	95
84)	2-Chlorotoluene	16.20	91	979747	56.21 ppb	100
85)	4-Chlorotoluene	16.45	91	1049153	57.85 ppb	96
86)	1,3,5-Trimethylbenzene	16.43	105	1078490	57.74 ppb	98
87)	tert-Butylbenzene	17.06	119	938362	55.79 ppb	99
88)	1,2,4-Trimethylbenzene	17.21	105	1082759	55.36 ppb	99
89)	sec-Butylbenzene	17.55	105	1510541	55.44 ppb	99
90)	1,3-Dichlorobenzene	17.82	146	687634	51.18 ppb	99
91)	4-isopropyltoluene	17.93	119	1152606	54.20 ppb	99
92)	1,4-Dichlorobenzene	18.07	146	700412	50.86 ppb	96
93)	1,2-Dichlorobenzene	18.88	146	615939	51.79 ppb	97
94)	n-Butylbenzene	18.85	91	1070312	55.38 ppb	100
95)	cis-1,4-dichloro-2-butene	16.14	75	185128	59.43 ppb	99
96)	trans-1,4-dichloro-2-buten	16.42	53	27632	60.57 ppb	55
97)	1,2-dibromo-3-chloropropan	15.77	75	33684	53.16 ppb	83
98)	Pentachloroethane	17.16	167	256376	62.84 ppb	99
99)	1,2,4-Trichlorobenzene	21.62	180	356655	43.13 ppb	100
100)	Hexachlorobutadiene	21.82	225	127571	34.60 ppb	98
101)	Naphthalene	21.95	128	830351	46.35 ppb	100
102)	1,2,3-Trichlorobenzene	22.31	182	306826	43.57 ppb	100
103)	2-Methyl Naphthalene	0.00	142		Not Detected	
104)	1,3-Dimethyl Naphthalene	15.78	156	447311	53.67 ppb	100

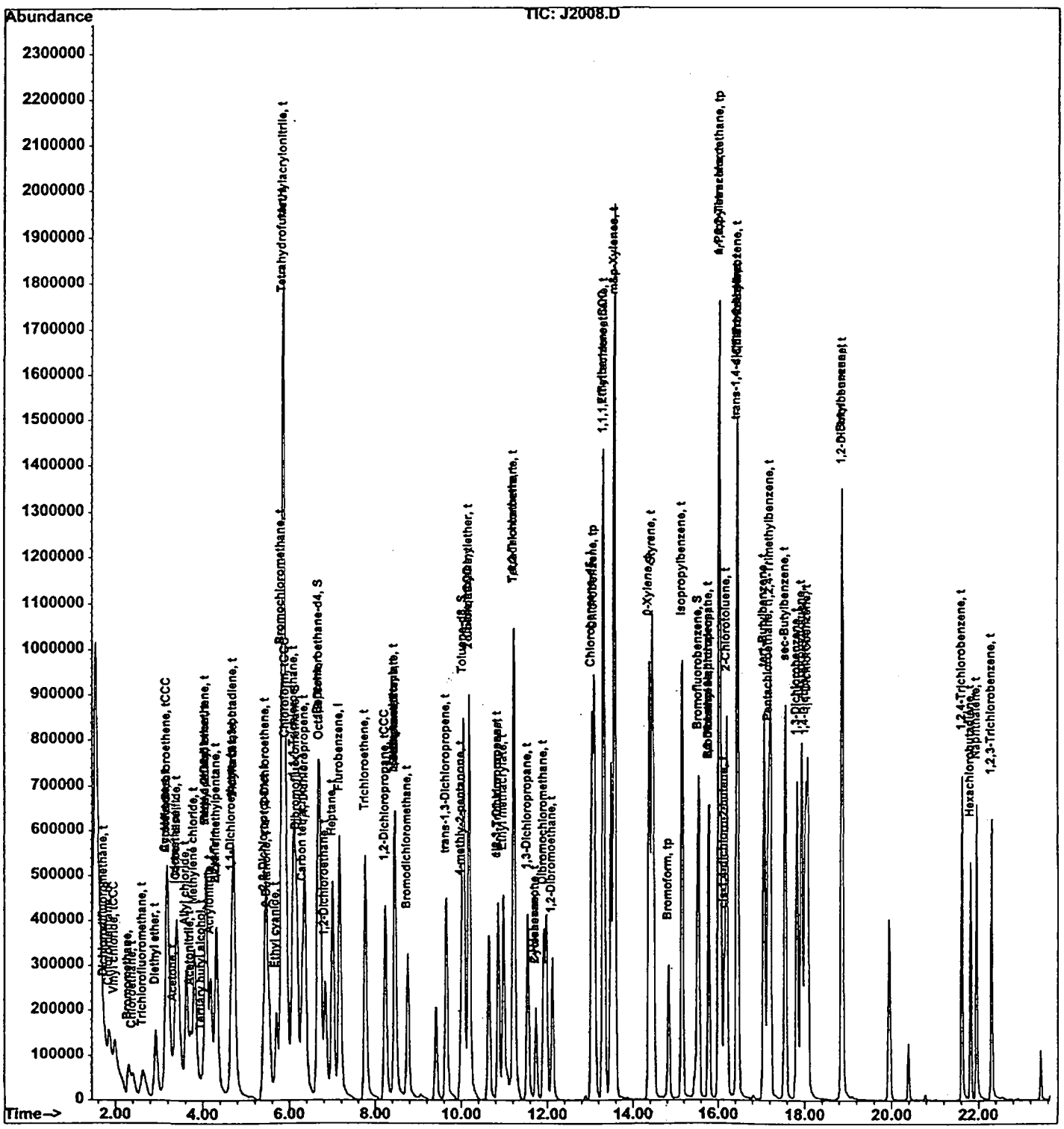
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\J2008.D
Acq On : 18 Oct 99 18:44
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;
Quant Time: Oct 18 19:30 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102299\J2038.D Vial: 100 **000228**
Acq On : 22 Oct 99 16:46 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Flurobenzene	1.000	1.000	0.0	60	0.08
2	t	Dichlorodifluoromethane	0.124	0.123	0.8	64	0.04
3	T	1,3-Butadiene	0.135	0.000	100.0#	0#	-1.99#
4	tP	Chloromethane	0.246	0.266	-8.1	63	0.04
5	tCCC	Vinyl chloride	0.193	0.225	-16.6	69	0.04
6		Bromomethane	0.088	0.133	-51.1#	72	0.05
7	t	Chloroethane	0.060	0.095	-58.3#	68	0.05
8	t	Trichlorofluoromethane	0.145	0.196	-35.2#	70	0.04
9	t	Diethyl ether	0.197	0.228	-15.7	66	0.05
10	t	Freon	0.345	0.358	-3.8	68	0.06
11	t	Tertiary butyl alcohol	0.034	0.037	-8.8	54	0.05
12	tCCC	1,1-Dichloroethene	0.203	0.221	-8.9	67	0.05
13	t	Acetonitrile	0.015	0.013	13.3	67	0.07
14	t	Methylene chloride	0.282	0.282	0.0	60	0.05
15	t	Acrolein	0.139	0.112	19.4	44#	0.05
16	t	Acrylonitrile	0.307	0.265	13.7	49#	0.06
17	t	trans,1,2-Dichloroethene	0.261	0.277	-6.1	64	0.06
18	t	Acetone	0.065	0.053	18.5	47#	0.05
19	t	Carbon disulfide	0.619	0.502	18.9	54	0.06
20	t	Hexane	0.397	0.404	-1.8	65	0.06
21	tp	1,1-Dichloroethane	0.388	0.420	-8.2	63	0.07
22	t	Methyl t-butyl ether	0.429	0.474	-10.5	57	0.06
23	t	Vinyl acetate	0.518	0.460	11.2	51	0.06
24	t	2-chloro-1,3-butadiene	0.264	0.246	6.8	58	0.07
25	t	2,2-Dichloropropane	0.234	0.248	-6.0	63	0.06
26	t	cis-1,2-Dichloroethene	0.299	0.316	-5.7	61	0.07
27	t	2-Butanone	0.029	0.024	17.2	46#	0.07
28	t	Iodomethane	0.544	0.467	14.2	53	0.06
29	t	Allyl chloride	0.160	0.155	3.1	63	0.25
30	t	Cyclohexane	0.139	0.112	19.4	44#	0.05
31	t	Ethyl cyanide	0.315	0.257	18.4	46#	0.07
32	t	Ethyl acetate	0.079	0.064	19.0	42#	0.07
33	t	Bromochloromethane	0.168	0.170	-1.2	57	0.08
34	t	Tetrahydrofuran	0.129	0.119	7.8	49#	0.07
35	tCCC	Chloroform	0.425	0.459	-8.0	63	0.07
36	t	1,1,1-Trichloroethane	0.288	0.293	-1.7	61	0.07
37	S	Dibromofluoromethane	0.342	0.330	3.5	59	0.07
38	t	Carbon tetrachloride	0.278	0.277	0.4	63	0.07
39	t	1,1,-Dichloropropene	0.306	0.312	-2.0	64	0.08
40	t	2,2,4-Trimethylpentane	0.397	0.404	-1.8	65	0.06
41	S	1,2-Dichloroethane-d4	0.224	0.202	9.8	57	0.09
42	t	Benzene	0.892	0.958	-7.4	63	0.08

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102299\J2038.D Vial: 100
Acq On : 22 Oct 99 16:46 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
43	t	1,2-Dichloroethane	0.252	0.243	3.6	54	0.07
44	t	Heptane	0.417	0.440	-5.5	64	0.07
45	t	Trichloroethene	0.279	0.289	-3.6	62	0.08
46	tCCC	1,2-Dichloropropane	0.264	0.277	-4.9	60	0.08
47	t	Methylmethacrylate	0.149	0.128	14.1	47#	0.08
48	t	1,4-Dioxane	0.002	0.002	0.0	43#	0.09
49	t	Dibromomethane	0.200	0.194	3.0	51	0.08
50	t	Bromodichloromethane	0.299	0.298	0.3	57	0.08
51	t	Methylacrylonitrile	1.622	1.473	9.2	50	0.06
52	t	4-methly-2-pentanone	0.026	0.021	19.2	45#	0.09
53	t	2-Hexanone	0.167	0.139	16.8	44#	0.08
54	t	cis-1,3-Dichloropropene	0.311	0.305	1.9	55	0.09
55	tCCC	Toluene	0.585	0.602	-2.9	60	0.08
56	t	2-Chloroethylvinylether	0.060	0.057	5.0	57	0.10
57	t	Octane	0.204	0.169	17.2	44#	0.08
58	t	Isobutyl acetate	0.016	0.012	25.0	40#	0.08
59	t	trans-1,3-Dichloropropene	0.382	0.390	-2.1	58	0.08
60	t	1,1,2-Trichloroethane	0.197	0.199	-1.0	55	0.08
61	t	1,2-Dibromoethane	0.292	0.278	4.8	53	0.09
62	t	Tetrachloroethene	0.330	0.314	4.8	57	0.09
63	t	1,3-Dichloropropane	0.336	0.331	1.5	55	0.08
64	I	Chlorobenzene-d5	1.000	1.000	0.0	56	0.08
65	S	Toluene-d8	1.194	1.248	-4.5	59	0.08
66	t	Dibromochloromethane	0.404	0.402	0.5	54	0.08
67	tp	Chlorobenzene	0.986	1.027	-4.2	57	0.08
68	t	1,1,1,2-Tetrachloroethane	0.313	0.311	0.6	53	0.08
69	tCCC	Ethylbenzene	1.294	1.393	-7.7	58	0.09
70	t	1-Chlorohexane	1.311	1.415	-7.9	60	0.09
71	t	m&p-Xylenes	0.556	0.602	-8.3	57	0.09
72	t	Ethyl methacrylate	0.389	0.356	8.5	48#	0.08
73	t	Cyclohexanone	0.003	0.002	33.3#	43#	0.07
74	t	0-Xylene	0.536	0.551	-2.8	55	0.08
75	t	Styrene	0.977	1.014	-3.8	54	0.08
76	tp	Bromoform	0.278	0.264	5.0	50#	0.08
77	t	Isopropylbenzene	1.253	1.292	-3.1	57	0.08
78	S	Bromofluorobenzene	0.403	0.382	5.2	53	0.08
79	t	Bromobenzene	0.411	0.391	4.9	52	0.08
80	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	50	0.09
81	tp	1,1,2,2-Tetrachloroethane	0.882	0.959	-8.7	47#	0.08
82	t	1,2,3-Trichloropropane	1.054	1.207	-14.5	55	0.09

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102299\J2038.D Vial: 100
Acq On : 22 Oct 99 16:46 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
83	t	n-Propylbenzene	3.402	3.921	-15.3	56	0.08
84	t	2-Chlorotoluene	2.110	2.277	-7.9	54	0.08
85	t	4-Chlorotoluene	2.195	2.498	-13.8	54	0.08
86	t	1,3,5-Trimethylbenzene	2.261	2.556	-13.0	54	0.08
87	t	tert-Butylbenzene	2.036	2.204	-8.3	55	0.08
88	t	1,2,4-Trimethylbenzene	2.368	2.516	-6.3	52	0.07
89	t	sec-Butylbenzene	3.298	3.552	-7.7	55	0.08
90	t	1,3-Dichlorobenzene	1.626	1.633	-0.4	51	0.09
91	t	4-isopropyltoluene	2.574	2.705	-5.1	54	0.08
92	t	1,4-Dichlorobenzene	1.667	1.690	-1.4	51	0.09
93	t	1,2-Dichlorobenzene	1.440	1.446	-0.4	48#	0.07
94	t	n-Butylbenzene	2.340	2.495	-6.6	53	0.08
95	t	cis-1,4-dichloro-2-butene	0.377	0.337	10.6	40#	0.08
96	t	trans-1,4-dichloro-2-butene	0.055	0.060	-9.1	50	0.09
97	t	1,2-dibromo-3-chloropropane	0.077	0.077	0.0	47#	0.08
98	t	Pentachloroethane	0.494	0.431	12.8	48#	0.07
99	t	1,2,4-Trichlorobenzene	1.001	0.891	11.0	44#	0.05
100	t	Hexachlorobutadiene	0.446	0.359	19.5	45#	0.05
101	t	Naphthalene	2.169	1.865	14.0	36#	0.05
102	t	1,2,3-Trichlorobenzene	0.853	0.759	11.0	40#	0.05
103	t	2-Methyl Naphthalene	0.000	0.000	0.0	0#	-17.92#
104	t	1,3-Dimethyl Naphthalene	1.009	1.058	-4.9	52	0.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\102299\J2038.D Vial: 100 000231
Acq On : 22 Oct 99 16:46 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00
Quant Time: Oct 22 17:17 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.24	96	858262	50.00 ppb	0.08
64) Chlorobenzene-d5	13.11	117	586266	50.00 ppb	0.08
80) 1,4-Dichlorobenzene-d4	18.10	152	216608	50.00 ppb	0.09
System Monitoring Compounds					
37) Dibromofluoromethane	6.24	113	283479	48.35 ppb	0.07
Surrogate Spike 50.000	Range 86 - 118		Recovery = 96.70%		
41) 1,2-Dichloroethane-d4	6.79	65	173790	45.23 ppb	0.09
Surrogate Spike 50.000	Range 80 - 120		Recovery = 90.46%		
65) Toluene-d8	10.13	98	731729	52.26 ppb	0.08
Surrogate Spike 50.000	Range 88 - 110		Recovery = 104.52%		
78) Bromofluorobenzene	15.61	95	223716	47.33 ppb	0.08
Surrogate Spike 50.000	Range 86 - 115		Recovery = 94.66%		

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.78	85	105912	49.92 ppb		100
3) 1,3-Butadiene	0.00	54		Not Detected		
4) Chloromethane	1.90	50	228541	54.16 ppb		95
5) Vinyl chloride	2.03	62	193446	58.45 ppb	m	100
6) Bromomethane	2.34	96	114162	75.91 ppb		96
7) Chloroethane	2.45	64	81474	79.27 ppb	m	71
8) Trichlorofluoromethane	2.67	101	168631	67.91 ppb		95
9) Diethyl ether	2.96	59	195555	57.86 ppb		92
10) Freon	3.23	101	307363	51.89 ppb		97
11) Tertiary butyl alcohol	4.02	59	31469	53.19 ppb		100
12) 1,1-Dichloroethene	3.24	96	189844	54.61 ppb		98
13) Acetonitrile	3.79	40	115173	439.47 ppb	#	84
14) Methylene chloride	3.86	84	241848	49.94 ppb		100
15) Acrolein	3.20	56	95697	40.04 ppb		100
16) Acrylonitrile	4.23	53	227749	43.24 ppb		95
17) trans,1,2-Dichloroethene	4.12	96	237723	53.12 ppb		100
18) Acetone	3.37	43	45774	41.10 ppb		93
19) Carbon disulfide	3.47	76	430778	40.56 ppb	m	100
20) Hexane	4.37	57	346882	50.91 ppb		99
21) 1,1-Dichloroethane	4.72	63	360625	54.17 ppb		99
22) Methyl t-butyl ether	4.11	73	406843	55.22 ppb		100
23) Vinyl acetate	4.75	43	394433	44.40 ppb		100
24) 2-chloro-1,3-butadiene	4.78	53	210829	46.49 ppb		95
25) 2,2-Dichloropropane	5.47	77	212533	52.84 ppb		100
26) cis-1,2-Dichloroethene	5.53	96	271174	52.78 ppb		100
27) 2-Butanone	5.57	72	20569	41.71 ppb		46
28) Iodomethane	3.43	142	400561	42.93 ppb		99
29) Allyl chloride	3.67	76	133039	48.52 ppb	m	7

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

000232

Data File : C:\HPCHEM\1\DATA\102299\J2038.D Vial: 100
Acq On : 22 Oct 99 16:46 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00
Quant Time: Oct 22 17:17 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Cyclohexane	3.20	56	95697	40.04 ppb		90
31)	Ethyl cyanide	5.77	54	220904	40.87 ppb		99
32)	Ethyl acetate	4.12	43	54943	40.42 ppb	#	19
33)	Bromochloromethane	5.87	128	146198	50.74 ppb		98
34)	Tetrahydrofuran	5.89	42	101756	45.81 ppb		97
35)	Chloroform	5.99	83	393741	53.93 ppb		96
36)	1,1,1-Trichloroethane	6.19	97	251729	50.86 ppb		98
38)	Carbon tetrachloride	6.38	117	237665	49.88 ppb		100
39)	1,1,-Dichloropropene	6.44	75	267940	51.03 ppb		99
40)	2,2,4-Trimethylpentane	4.37	57	346882	50.91 ppb		88
42)	Benzene	6.74	78	822138	53.67 ppb		100
43)	1,2-Dichloroethane	6.91	62	208889	48.26 ppb		97
44)	Heptane	7.07	43	377854	52.77 ppb		96
45)	Trichloroethene	7.84	95	248342	51.91 ppb		99
46)	1,2-Dichloropropane	8.31	63	237458	52.36 ppb		100
47)	Methylmethacrylate	8.54	69	109511	42.79 ppb		99
48)	1,4-Dioxane	8.56	88	32111	805.05 ppb		94
49)	Dibromomethane	8.53	93	166644	48.42 ppb		93
50)	Bromodichloromethane	8.84	83	255391	49.76 ppb		100
51)	Methylacrylonitrile	5.91	41	1264483	45.43 ppb		97
52)	4-methly-2-pentanone	10.09	43	182041	412.16 ppb	#	87
53)	2-Hexanone	11.81	43	119636	41.76 ppb		99
54)	cis-1,3-Dichloropropene	10.94	75	261406	49.04 ppb		100
55)	Toluene	10.26	92	516428	51.41 ppb		99
56)	2-Chloroethylvinylether	10.27	63	49276	48.24 ppb		100
57)	Octane	6.79	43	145277	41.49 ppb	#	91
58)	Isobutyl acetate	8.55	43	9948	36.73 ppb		98
59)	trans-1,3-Dichloropropene	9.73	75	334547	50.97 ppb		99
60)	1,1,2-Trichloroethane	11.29	83	170440	50.35 ppb		100
61)	1,2-Dibromoethane	12.20	107	238726	47.59 ppb		100
62)	Tetrachloroethene	11.31	166	269351	47.55 ppb		99
63)	1,3-Dichloropropane	11.62	76	283764	49.17 ppb		100
66)	Dibromochloromethane	11.99	129	235620	49.75 ppb		99
67)	Chlorobenzene	13.17	112	601892	52.08 ppb		99
68)	1,1,1,2-Tetrachloroethane	13.40	131	182413	49.65 ppb		99
69)	Ethylbenzene	13.38	91	816851	53.84 ppb		100
70)	1-Chlorohexane	10.27	91	829786	53.98 ppb		100
71)	m&p-Xylenes	13.65	106	705844	108.34 ppb		98
72)	Ethyl methacrylate	11.06	69	208529	45.74 ppb		98
73)	Cyclohexanone	11.81	42	6618	213.89 ppb		97
74)	0-Xylene	14.45	106	322953	51.34 ppb		100
75)	Styrene	14.52	104	594737	51.93 ppb		99
76)	Bromoform	14.92	173	154841	47.44 ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\102299\J2038.D Vial: 100 000233
Acq On : 22 Oct 99 16:46 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00
Quant Time: Oct 22 17:17 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	Isopropylbenzene	15.23	105	757723	51.58 ppb	99
79)	Bromobenzene	15.86	156	229268	47.55 ppb	99
81)	1,1,2,2-Tetrachloroethane	16.09	83	207721	54.38 ppb	99
82)	1,2,3-Trichloropropane	10.94	75	261406	57.27 ppb	97
83)	n-Propylbenzene	16.10	91	849377	57.63 ppb	99
84)	2-Chlorotoluene	16.27	91	493248	53.96 ppb	98
85)	4-Chlorotoluene	16.53	91	541019	56.88 ppb	96
86)	1,3,5-Trimethylbenzene	16.51	105	553632	56.52 ppb	99
87)	tert-Butylbenzene	17.14	119	477307	54.11 ppb	100
88)	1,2,4-Trimethylbenzene	17.28	105	544895	53.12 ppb	98
89)	sec-Butylbenzene	17.63	105	769299	53.84 ppb	99
90)	1,3-Dichlorobenzene	17.91	146	353720	50.20 ppb	99
91)	4-isopropyltoluene	18.00	119	585879	52.53 ppb	98
92)	1,4-Dichlorobenzene	18.15	146	366175	50.70 ppb	97
93)	1,2-Dichlorobenzene	18.95	146	313261	50.23 ppb	99
94)	n-Butylbenzene	18.93	91	540361	53.31 ppb	96
95)	cis-1,4-dichloro-2-butene	16.21	75	72995	44.68 ppb	97
96)	trans-1,4-dichloro-2-buten	16.51	53	13027	54.46 ppb	77
97)	1,2-dibromo-3-chloropropan	15.85	75	16650	50.10 ppb	95
98)	Pentachloroethane	17.23	167	93282	43.60 ppb	98
99)	1,2,4-Trichlorobenzene	21.66	180	192929	44.49 ppb	97
100)	Hexachlorobutadiene	21.87	225	77806	40.24 ppb	98
101)	Naphthalene	22.00	128	403947	43.00 ppb	100
102)	1,2,3-Trichlorobenzene	22.35	182	164322	44.49 ppb	100
103)	2-Methyl Naphthalene	0.00	142		Not Detected	
104)	1,3-Dimethyl Naphthalene	15.86	156	229268	52.45 ppb	100

(#) = qualifier out of range (m) = manual integration

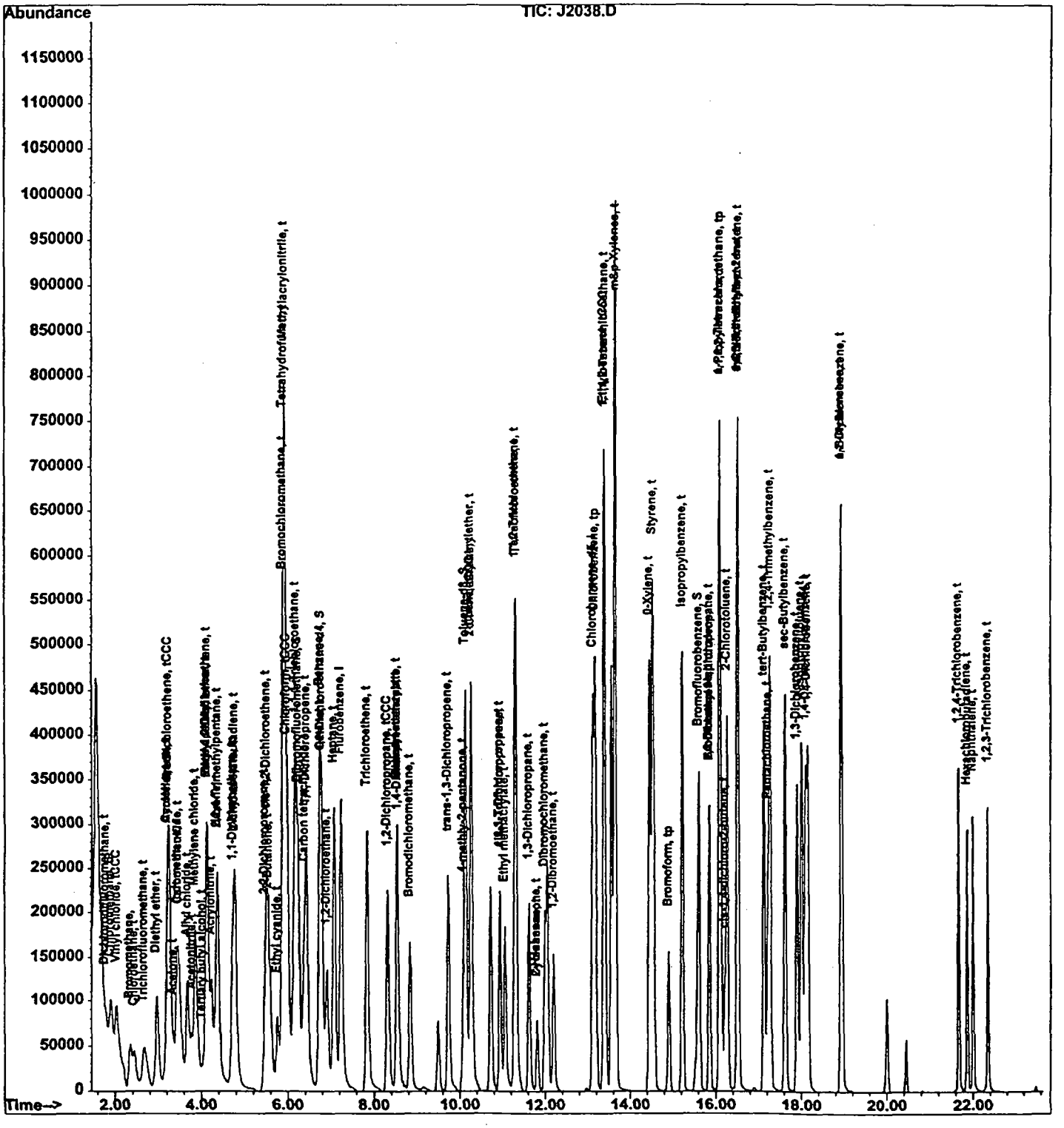
Quantitation Report

000234

Data File : C:\HPCHEM\1\DATA\102299\J2038.D
Acq On : 22 Oct 99 16:46
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;
Quant Time: Oct 22 17:17 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102699\J2063.D
Acq On : 26 Oct 99 19:09
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Flurobenzene	1.000	1.000	0.0	81	0.07
2	t	Dichlorodifluoromethane	0.124	0.117	5.6	83	0.04
3	T	1,3-Butadiene	0.135	0.115	14.8	77	0.05
4	tP	Chloromethane	0.246	0.259	-5.3	84	0.04
5	tCCC	Vinyl chloride	0.193	0.194	-0.5	80	0.03
6		Bromomethane	0.088	0.118	-34.1#	86	0.04
7	t	Chloroethane	0.060	0.082	-36.7#	80	0.03
8	t	Trichlorofluoromethane	0.145	0.167	-15.2	80	0.04
9	t	Diethyl ether	0.197	0.214	-8.6	84	0.05
10	t	Freon	0.345	0.329	4.6	85	0.05
11	t	Tertiary butyl alcohol	0.034	0.040	-17.6	80	0.05
12	tCCC	1,1-Dichloroethene	0.203	0.210	-3.4	86	0.05
13	t	Acetonitrile	0.015	0.011	26.7#	78	0.05
14	t	Methylene chloride	0.282	0.287	-1.8	83	0.05
15	t	Acrolein	0.139	0.125	10.1	66	0.05
16	t	Acrylonitrile	0.307	0.321	-4.6	80	0.05
17	t	trans,1,2-Dichloroethene	0.261	0.289	-10.7	91	0.05
18	t	Acetone	0.065	0.062	4.6	75	0.05
19	t	Carbon disulfide	0.619	0.646	-4.4	93	0.05
20	t	Hexane	0.397	0.393	1.0	86	0.05
21	tp	1,1-Dichloroethane	0.388	0.425	-9.5	86	0.06
22	t	Methyl t-butyl ether	0.429	0.467	-8.9	76	0.06
23	t	Vinyl acetate	0.518	0.515	0.6	77	0.05
24	t	2-chloro-1,3-butadiene	0.264	0.258	2.3	82	0.06
25	t	2,2-Dichloropropane	0.234	0.246	-5.1	85	0.07
26	t	cis-1,2-Dichloroethene	0.299	0.318	-6.4	83	0.06
27	t	2-Butanone	0.029	0.029	0.0	76	0.06
28	t	Iodomethane	0.544	0.532	2.2	82	0.05
29	t	Allyl chloride	0.160	0.177	-10.6	97	0.25
30	t	Cyclohexane	0.139	0.125	10.1	66	0.05
31	t	Ethyl cyanide	0.315	0.342	-8.6	83	0.06
32	t	Ethyl acetate	0.079	0.075	5.1	67	0.05
33	t	Bromochloromethane	0.168	0.188	-11.9	85	0.08
34	t	Tetrahydrofuran	0.129	0.139	-7.8	78	0.06
35	tCCC	Chloroform	0.425	0.449	-5.6	84	0.06
36	t	1,1,1-Trichloroethane	0.288	0.304	-5.6	86	0.06
37	S	Dibromofluoromethane	0.342	0.310	9.4	75	0.06
38	t	Carbon tetrachloride	0.278	0.281	-1.1	86	0.06
39	t	1,1,-Dichloropropene	0.306	0.332	-8.5	92	0.07
40	t	2,2,4-Trimethylpentane	0.397	0.393	1.0	86	0.05
41	S	1,2-Dichloroethane-d4	0.224	0.217	3.1	82	0.07
42	t	Benzene	0.892	1.005	-12.7	89	0.07

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102699\J2063.D Vial: 100
Acq On : 26 Oct 99 19:09 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
43	t	1,2-Dichloroethane	0.252	0.257	-2.0	77	0.06
44	t	Heptane	0.417	0.428	-2.6	85	0.07
45	t	Trichloroethene	0.279	0.304	-9.0	88	0.07
46	tCCC	1,2-Dichloropropane	0.264	0.300	-13.6	88	0.08
47	t	Methylmethacrylate	0.149	0.172	-15.4	86	0.07
48	t	1,4-Dioxane	0.002	0.002	0.0	75	0.09
49	t	Dibromomethane	0.200	0.227	-13.5	81	0.08
50	t	Bromodichloromethane	0.299	0.327	-9.4	85	0.08
51	t	Methylacrylonitrile	1.622	1.700	-4.8	79	0.06
52	t	4-methly-2-pentanone	0.026	0.026	0.0	75	0.07
53	t	2-Hexanone	0.167	0.180	-7.8	77	0.08
54	t	cis-1,3-Dichloropropene	0.311	0.343	-10.3	84	0.08
55	tCCC	Toluene	0.585	0.656	-12.1	89	0.08
56	t	2-Chloroethylvinylether	0.060	0.062	-3.3	83	0.09
57	t	Octane	0.204	0.221	-8.3	78	0.07
58	t	Isobutyl acetate	0.016	0.016	0.0	75	0.07
59	t	trans-1,3-Dichloropropene	0.382	0.412	-7.9	83	0.08
60	t	1,1,2-Trichloroethane	0.197	0.225	-14.2	84	0.08
61	t	1,2-Dibromoethane	0.292	0.318	-8.9	82	0.08
62	t	Tetrachloroethene	0.330	0.380	-15.2	94	0.08
63	t	1,3-Dichloropropane	0.336	0.367	-9.2	82	0.07
64	I	Chlorobenzene-d5	1.000	1.000	0.0	82	0.08
65	S	Toluene-d8	1.194	1.176	1.5	81	0.08
66	t	Dibromochloromethane	0.404	0.437	-8.2	86	0.07
67	tp	Chlorobenzene	0.986	1.063	-7.8	86	0.07
68	t	1,1,1,2-Tetrachloroethane	0.313	0.327	-4.5	82	0.08
69	tCCC	Ethylbenzene	1.294	1.446	-11.7	88	0.08
70	t	1-Chlorohexane	1.311	1.440	-9.8	89	0.08
71	t	m&p-Xylenes	0.556	0.638	-14.7	89	0.08
72	t	Ethyl methacrylate	0.389	0.429	-10.3	85	0.07
73	t	Cyclohexanone	0.003	0.003	0.0	80	0.06
74	t	0-Xylene	0.536	0.601	-12.1	88	0.08
75	t	Styrene	0.977	1.099	-12.5	86	0.08
76	tp	Bromoform	0.278	0.288	-3.6	80	0.07
77	t	Isopropylbenzene	1.253	1.356	-8.2	88	0.07
78	S	Bromofluorobenzene	0.403	0.386	4.2	78	0.07
79	t	Bromobenzene	0.411	0.413	-0.5	80	0.07
80	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	75	0.08
81	tp	1,1,2,2-Tetrachloroethane	0.882	0.968	-9.8	72	0.07
82	t	1,2,3-Trichloropropane	1.054	1.232	-16.9	84	0.08

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102699\J2063.D Vial: 100
Acq On : 26 Oct 99 19:09 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
83	t	n-Propylbenzene	3.402	3.761	-10.6	81	0.07
84	t	2-Chlorotoluene	2.110	2.341	-10.9	82	0.07
85	t	4-Chlorotoluene	2.195	2.575	-17.3	84	0.07
86	t	1,3,5-Trimethylbenzene	2.261	2.597	-14.9	83	0.07
87	t	tert-Butylbenzene	2.036	2.277	-11.8	86	0.07
88	t	1,2,4-Trimethylbenzene	2.368	2.653	-12.0	82	0.07
89	t	sec-Butylbenzene	3.298	3.611	-9.5	84	0.07
90	t	1,3-Dichlorobenzene	1.626	1.675	-3.0	78	0.08
91	t	4-isopropyltoluene	2.574	2.760	-7.2	83	0.08
92	t	1,4-Dichlorobenzene	1.667	1.717	-3.0	78	0.09
93	t	1,2-Dichlorobenzene	1.440	1.464	-1.7	73	0.07
94	t	n-Butylbenzene	2.340	2.521	-7.7	80	0.07
95	t	cis-1,4-dichloro-2-butene	0.377	0.413	-9.5	74	0.07
96	t	trans-1,4-dichloro-2-butene	0.055	0.064	-16.4	81	0.08
97	t	1,2-dibromo-3-chloropropane	0.077	0.080	-3.9	73	0.08
98	t	Pentachloroethane	0.494	0.404	18.2	67	0.07
99	t	1,2,4-Trichlorobenzene	1.001	0.879	12.2	65	0.05
100	t	Hexachlorobutadiene	0.446	0.314	29.6#	59	0.05
101	t	Naphthalene	2.169	2.003	7.7	57	0.05
102	t	1,2,3-Trichlorobenzene	0.853	0.752	11.8	60	0.05
103	t	2-Methyl Naphthalene	0.000	0.000	0.0	0#	-17.92#
104	t	1,3-Dimethyl Naphthalene	1.009	1.094	-8.4	80	0.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : C:\HPCHEM\1\DATA\102699\J2063.D Vial: 100
Acq On : 26 Oct 99 19:09 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00
Quant Time: Oct 26 19:34 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\102699\J2062.D
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\102699\J2062.D

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Flurobenzene	7.24	96	1162499	50.00	ppb		0.00
64) Chlorobenzene-d5	13.12	117	859014	50.00	ppb		0.00
80) 1,4-Dichlorobenzene-d4	18.10	152	324038	50.00	ppb		0.00
System Monitoring Compounds							
37) Dibromofluoromethane	6.24	113	360852	46.25	ppb		0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 92.50%				
41) 1,2-Dichloroethane-d4	6.78	65	252022	51.33	ppb		0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 102.66%				
65) Toluene-d8	10.14	98	1010376	49.84	ppb		0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 99.68%				
78) Bromofluorobenzene	15.61	95	331711	49.99	ppb		0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 99.98%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.78	85	136180	70.48	ppb		100
3) 1,3-Butadiene	2.04	54	133582	53.06	ppb		96
4) Chloromethane	1.90	50	301103	63.37	ppb		97
5) Vinyl chloride	2.02	62	225122	57.81	ppb		100
6) Bromomethane	2.33	96	137322	65.43	ppb		97
7) Chloroethane	2.43	64	94814	57.32	ppb		74
8) Trichlorofluoromethane	2.67	101	194367	69.99	ppb		97
9) Diethyl ether	2.97	59	249286	46.56	ppb		94
10) Freon	3.22	101	382481	48.23	ppb		98
11) Tertiary butyl alcohol	4.02	59	46610	61.74	ppb		100
12) 1,1-Dichloroethene	3.25	96	243833	47.70	ppb		98
13) Acetonitrile	3.77	40	133672	350.76	ppb	#	1
14) Methylene chloride	3.87	84	333205	48.47	ppb		99
15) Acrolein	3.20	56	145099	42.39	ppb		100
16) Acrylonitrile	4.23	53	372777	42.58	ppb		93
17) trans,1,2-Dichloroethene	4.12	96	336034	49.32	ppb		96
18) Acetone	3.36	43	72006	40.65	ppb		99
19) Carbon disulfide	3.47	76	750743	41.06	ppb		100
20) Hexane	4.37	57	456379	50.71	ppb		99
21) 1,1-Dichloroethane	4.72	63	494597	49.29	ppb		100
22) Methyl t-butyl ether	4.12	73	542643	67.57	ppb		100
23) Vinyl acetate	4.75	43	598875	39.67	ppb		100
24) 2-chloro-1,3-butadiene	4.78	53	300051	43.98	ppb		95
25) 2,2-Dichloropropane	5.49	77	286265	48.83	ppb		99
26) cis-1,2-Dichloroethene	5.53	96	370104	46.64	ppb		97
27) 2-Butanone	5.57	72	34213	41.34	ppb		97
28) Iodomethane	3.42	142	617922	41.79	ppb		99
29) Allyl chloride	3.67	76	206212	10.33	ppb	m	8

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\102699\J2063.D Vial: 100
Acq On : 26 Oct 99 19:09 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00
Quant Time: Oct 26 19:34 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\102699\J2062.D
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\102699\J2062.D

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30) Cyclohexane	3.20	56	145099	42.39 ppb	#	84
31) Ethyl cyanide	5.76	54	397833	43.24 ppb		98
32) Ethyl acetate	4.11	43	86686	59.92 ppb	#	56
33) Bromochloromethane	5.88	128	218188	51.36 ppb		97
34) Tetrahydrofuran	5.89	42	161263	43.38 ppb		98
35) Chloroform	5.99	83	522315	46.20 ppb		98
36) 1,1,1-Trichloroethane	6.19	97	353606	49.44 ppb		98
38) Carbon tetrachloride	6.37	117	326118	48.86 ppb		98
39) 1,1,-Dichloropropene	6.43	75	386208	50.01 ppb		96
40) 2,2,4-Trimethylpentane	4.37	57	456379	50.71 ppb		80
42) Benzene	6.74	78	1168418	49.37 ppb		99
43) 1,2-Dichloroethane	6.91	62	298985	48.95 ppb		96
44) Heptane	7.08	43	497259	51.84 ppb		90
45) Trichloroethene	7.84	95	353960	49.76 ppb		96
46) 1,2-Dichloropropane	8.32	63	348294	50.29 ppb		99
47) Methylmethacrylate	8.54	69	199473	44.90 ppb		93
48) 1,4-Dioxane	8.57	88	56635	862.68 ppb		95
49) Dibromomethane	8.54	93	264048	55.47 ppb		98
50) Bromodichloromethane	8.84	83	380527	50.08 ppb		100
51) Methylacrylonitrile	5.92	41	1975864	43.88 ppb		99
52) 4-methly-2-pentanone	10.07	43	304255	432.07 ppb	#	86
53) 2-Hexanone	11.81	43	209667	43.29 ppb		99
54) cis-1,3-Dichloropropene	10.94	75	399169	51.50 ppb		97
55) Toluene	10.27	92	762486	50.70 ppb		100
56) 2-Chloroethylvinylether	10.27	63	71959	49.50 ppb		100
57) Octane	6.79	43	256669	42.63 ppb	#	93
58) Isobutyl acetate	8.55	43	18790	47.97 ppb		97
59) trans-1,3-Dichloropropene	9.74	75	479385	50.03 ppb		96
60) 1,1,2-Trichloroethane	11.29	83	261435	51.34 ppb		98
61) 1,2-Dibromoethane	12.20	107	369844	52.62 ppb		99
62) Tetrachloroethene	11.31	166	441651	58.86 ppb		99
63) 1,3-Dichloropropane	11.62	76	426121	52.68 ppb		99
66) Dibromochloromethane	11.99	129	375590	49.72 ppb		99
67) Chlorobenzene	13.17	112	912752	49.65 ppb		99
68) 1,1,1,2-Tetrachloroethane	13.41	131	280633	50.03 ppb		99
69) Ethylbenzene	13.38	91	1241898	49.63 ppb		99
70) 1-Chlorohexane	10.27	91	1237107	49.10 ppb		100
71) m&p-Xylenes	13.64	106	1095937	99.09 ppb		98
72) Ethyl methacrylate	11.06	69	368321	42.31 ppb		97
73) Cyclohexanone	11.80	42	12255	214.34 ppb	#	55
74) 0-Xylene	14.46	106	516111	50.04 ppb		96
75) Styrene	14.53	104	943998	50.37 ppb		98
76) Bromoform	14.91	173	247679	50.19 ppb		97

(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\102699\J2063.D Vial: 100
Acq On : 26 Oct 99 19:09 Operator:
Sample : VSTD050;MSJ;; Inst : GC/MS Ins
Misc : VSTD050;LOW;SO; Multiplr: 1.00
Quant Time: Oct 26 19:34 1999 Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\102699\J2062.D
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\102699\J2062.D

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	Isopropylbenzene	15.23	105	1164412	51.20 ppb	98
79)	Bromobenzene	15.86	156	354437	51.33 ppb	96
81)	1,1,2,2-Tetrachloroethane	16.08	83	313687	48.00 ppb	96
82)	1,2,3-Trichloropropane	10.94	75	399169	48.56 ppb	98
83)	n-Propylbenzene	16.09	91	1218826	50.15 ppb	97
84)	2-Chlorotoluene	16.27	91	758605	48.75 ppb	97
85)	4-Chlorotoluene	16.53	91	834260	50.78 ppb	95
86)	1,3,5-Trimethylbenzene	16.51	105	841636	49.64 ppb	97
87)	tert-Butylbenzene	17.14	119	737796	50.26 ppb	99
88)	1,2,4-Trimethylbenzene	17.28	105	859603	49.98 ppb	96
89)	sec-Butylbenzene	17.63	105	1170150	49.72 ppb	98
90)	1,3-Dichlorobenzene	17.90	146	542602	50.26 ppb	98
91)	4-isopropyltoluene	18.01	119	894411	50.26 ppb	100
92)	1,4-Dichlorobenzene	18.16	146	556317	51.26 ppb	97
93)	1,2-Dichlorobenzene	18.96	146	474282	50.51 ppb	98
94)	n-Butylbenzene	18.93	91	816811	50.18 ppb	100
95)	cis-1,4-dichloro-2-butene	16.21	75	133762	41.42 ppb	91
96)	trans-1,4-dichloro-2-buten	16.51	53	20884	52.03 ppb	95
97)	1,2-dibromo-3-chloropropan	15.86	75	25777	49.63 ppb	89
98)	Pentachloroethane	17.23	167	131022	33.13 ppb	99
99)	1,2,4-Trichlorobenzene	21.67	180	284784	50.96 ppb	95
100)	Hexachlorobutadiene	21.87	225	101790	52.66 ppb	99
101)	Naphthalene	22.01	128	649173	54.29 ppb	100
102)	1,2,3-Trichlorobenzene	22.35	182	243525	53.71 ppb	100
103)	2-Methyl Naphthalene	0.00	142		Not Detected	
104)	1,3-Dimethyl Naphthalene	15.86	156	354437	50.49 ppb	100

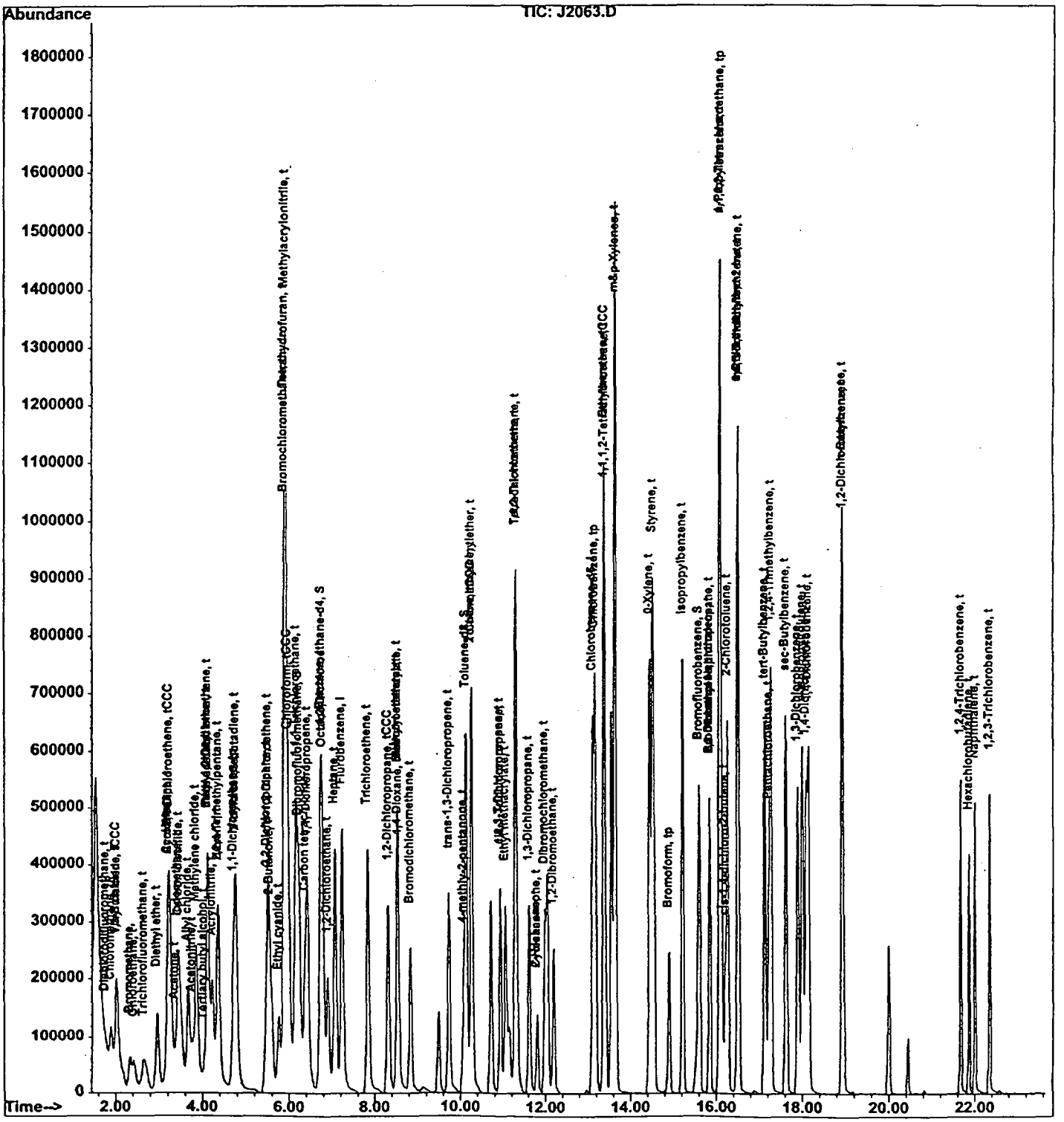
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102699\J2063.D
Acq On : 26 Oct 99 19:09
Sample : VSTD050;MSJ;;
Misc : VSTD050;LOW;SO;
Quant Time: Oct 26 19:34 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Single Level Calibration

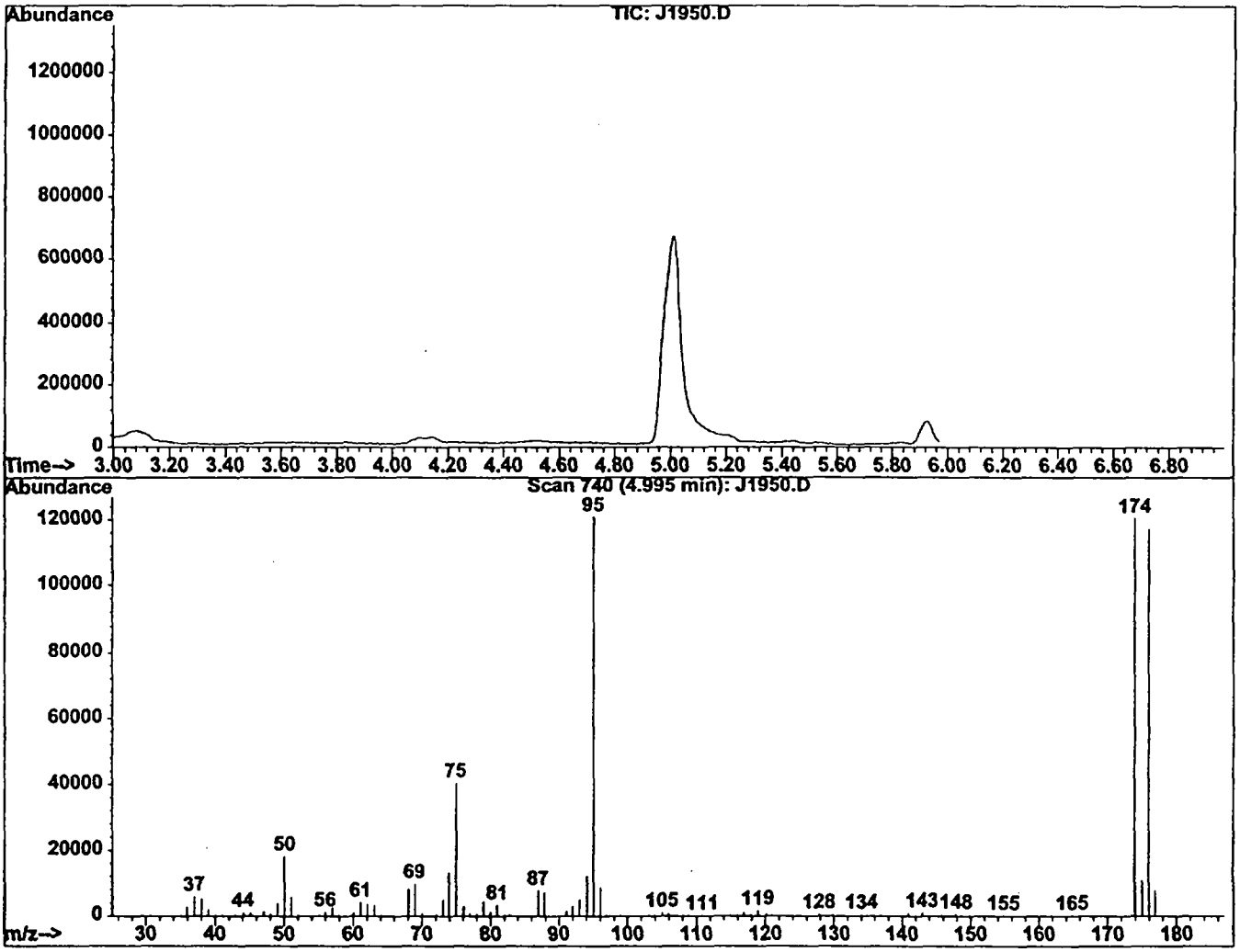


BFB

Data File : C:\HPCHEM\1\DATA\101399\J1950.D
Acq On : 13 Oct 99 18:50
Sample : 50NGBFB;MSJ;;
Misc : 50NGBFB;LOW;AQ;

Vial: 1
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260007S.M
Title : METHOD 8260B



Spectrum Information: Scan 740

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.1	18328	PASS
75	95	30	60	33.5	40544	PASS
95	95	100	100	100.0	120984	PASS
96	95	5	9	7.3	8773	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	99.7	120600	PASS
175	174	5	9	8.9	10743	PASS
176	174	95	101	97.3	117328	PASS
177	176	5	9	6.6	7726	PASS

J1950.D 8260007S.M Wed Oct 13 19:01:59 1999 MARK

Scan 740 (4.995 min): J1950.D
50NGBFB;MSJ;;

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	336	47.05	1432	61.05	4133	73.95	13243
35.90	2855	48.05	789	62.05	3564	74.95	40544
37.00	5878	49.05	3868	63.05	3452	76.05	3050
38.00	5144	50.05	18328	64.05	347	76.95	881
39.00	2013	51.05	5803	64.95	159	77.95	709
40.00	331	52.05	203	68.05	8267	78.95	4428
41.00	273	55.05	272	68.95	9794	79.95	1370
42.00	163	55.95	1285	69.95	903	80.95	3437
42.90	517	56.95	2617	71.05	219	81.95	592
44.05	1081	57.85	365	72.05	476	82.75	376
45.05	1016	60.05	1142	73.05	5053	86.95	7739

Scan 740 (4.995 min): J1950.D
50NGBFB;MSJ;;

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.85	7285	105.00	1130	120.10	584	142.90	1048
91.05	1476	105.90	878	120.90	200	144.90	170
91.95	3029	106.70	260	125.90	152	145.75	284
92.95	4988	108.00	196	127.80	613	147.85	598
94.05	12194	110.80	194	129.80	471	148.65	184
95.00	120984	112.20	162	130.70	182	149.85	218
96.00	8773	114.90	280	134.00	448	152.85	154
96.90	363	115.90	424	134.90	319	154.75	182
97.90	155	116.90	1147	136.80	340	164.85	197
103.10	343	117.90	539	140.90	909	170.25	173
103.90	384	118.90	1657	142.00	152	173.95	120600

Scan 740 (4.995 min): J1950.D
50NGBFB;MSJ;;

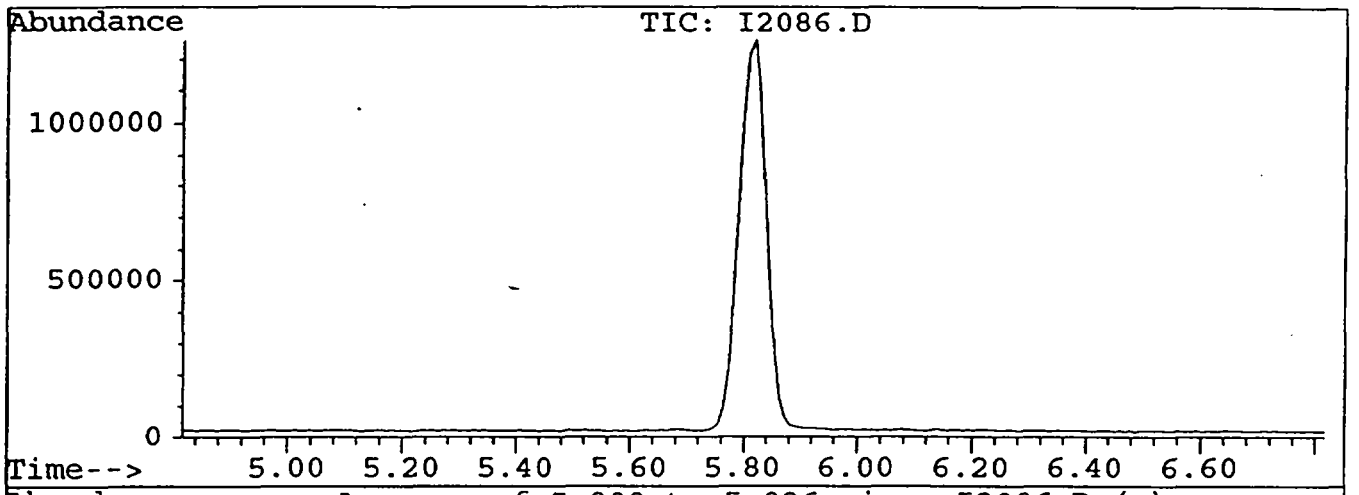
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
174.95	10743						
175.95	117328						
176.85	7726						

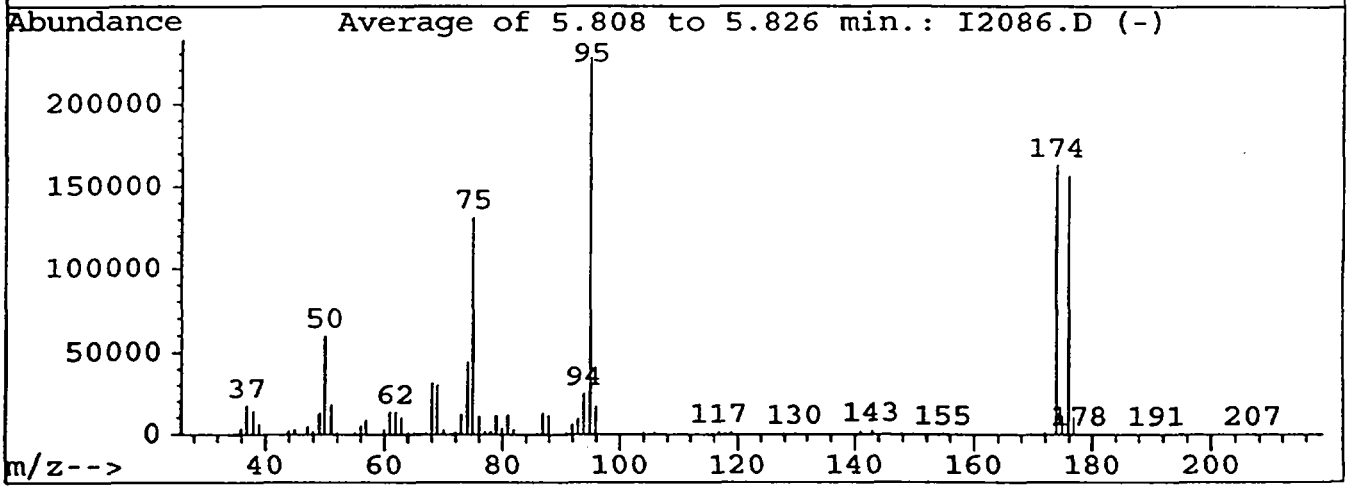
BFB

Data File : C:\HPCHEM\1\DATA\101399\I2086.D
Acq On : 13 Oct 99 3:11 am
Sample : 50NGBFB;MSI;;
Misc : 50NGBFB;LOW;AQ;

Vial: 1
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFB.M
Title :



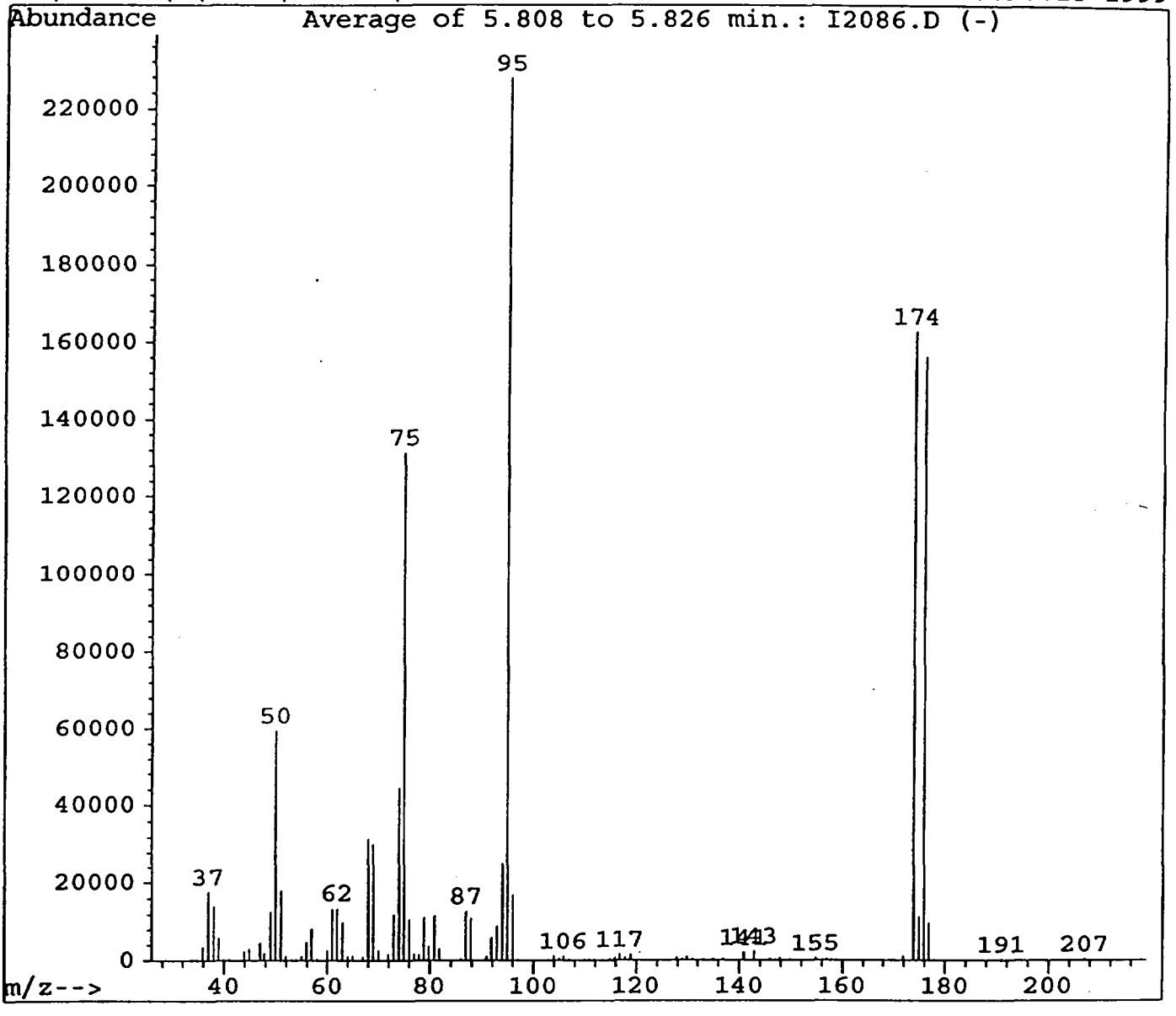


Scans Used: 534 535 536 Bkg: 525

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.1	59532	PASS
75	95	30	60	57.6	131350	PASS
95	95	100	100	100.0	227883	PASS
96	95	5	9	7.5	16993	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	71.4	162624	PASS
175	174	5	9	7.0	11329	PASS
176	174	95	101	96.0	156139	PASS
177	176	5	9	6.4	9966	PASS

BFB 624 Results

C:\HPCHEM\1\DATA\101399\I2086.D Wed Oct 13 03:20:15 1999



Peak Apex is scan: 535
Average of 3 scans: 534,535,536 minus background scan 525

Target Mass	Comparison Mass	Lower Limit,%	Upper Limit,%	Relative Abundance,%	Result Pass/Fail
50	95	15	40	26.1	PASS
75	95	30	60	57.6	PASS
95	95	100	100	100.0	PASS
96	95	5	9	7.5	PASS
173	174	0	2	0.0	PASS
174	95	50	100	71.4	PASS
175	174	5	9	7.0	PASS
176	174	95	101	96.0	PASS
177	176	5	9	6.4	PASS

Average of 5.808 to 5.826 min.: I2086.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	3571	46.10	144	55.95	4924	65.90	178
36.90	17639	47.00	4670	56.90	8435	66.95	993
38.00	14224	47.85	2024	57.90	431	67.95	31627
38.95	6019	48.95	12722	58.70	68	68.90	30334
39.90	369	49.90	59532	59.10	100	69.95	2664
41.00	326	51.00	18098	59.90	2738	71.10	179
41.95	79	51.95	1310	60.90	13434	71.90	1719
43.00	9	52.80	95	61.90	13530	72.95	12027
43.90	2431	52.95	264	62.90	10078	73.95	44341
44.85	3009	54.00	169	63.95	1193	74.90	131350
45.85	233	54.95	1117	64.95	1311	75.95	10836

Average of 5.808 to 5.826 min.: I2086.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
76.95	1800	91.85	5972	106.85	324	127.85	885
77.95	1493	92.90	9124	109.85	146	128.90	487
78.85	11299	93.90	24965	110.80	257	129.85	974
79.85	3729	94.95	227883	111.80	153	130.90	431
80.85	11763	95.95	16993	112.90	91	132.90	128
81.85	3028	96.95	380	114.85	421	134.15	84
82.90	155	102.85	212	115.75	879	134.90	423
85.90	416	103.10	75	116.80	1675	136.85	426
86.90	12790	103.85	1131	117.85	955	139.95	70
87.85	11073	104.90	576	118.85	1592	140.85	2072
90.90	1165	105.80	1210	126.75	92	141.85	101

Average of 5.808 to 5.826 min.: I2086.D

Modified:subtracted

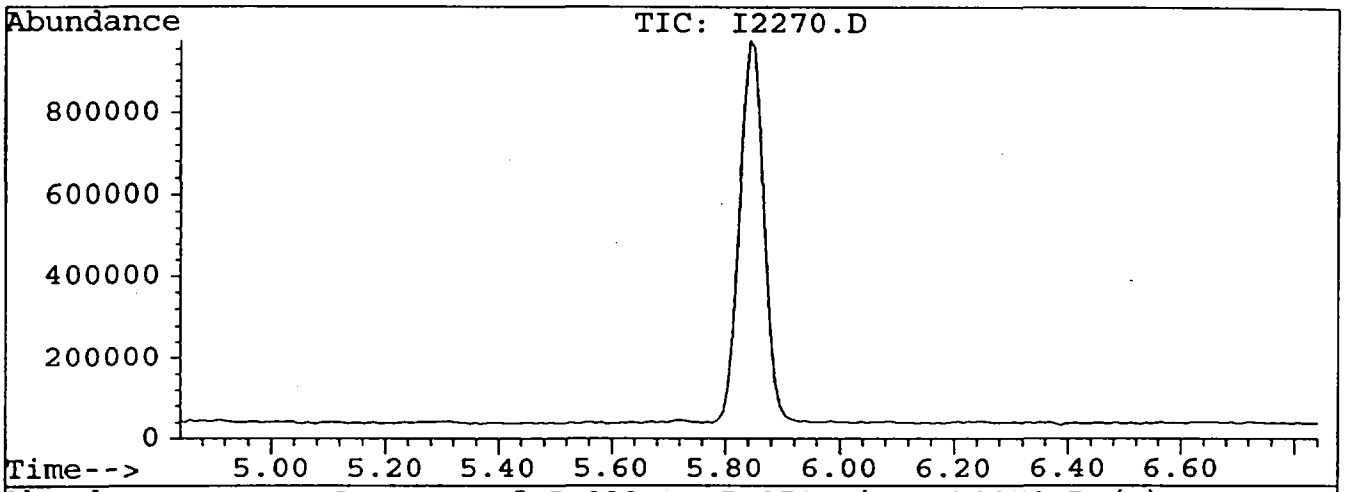
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
142.85	2377	155.95	235	177.85	358		
144.85	226	156.90	453	191.00	314		
145.85	418	157.85	214	192.85	74		
146.80	222	158.70	72	206.95	423		
147.75	675	160.70	81	208.00	65		
148.80	192	160.85	235	208.95	172		
149.75	272	171.85	1328				
152.85	79	173.90	162624				
153.75	157	174.90	11329				
154.80	701	175.90	156139				
155.80	87	176.85	9966				

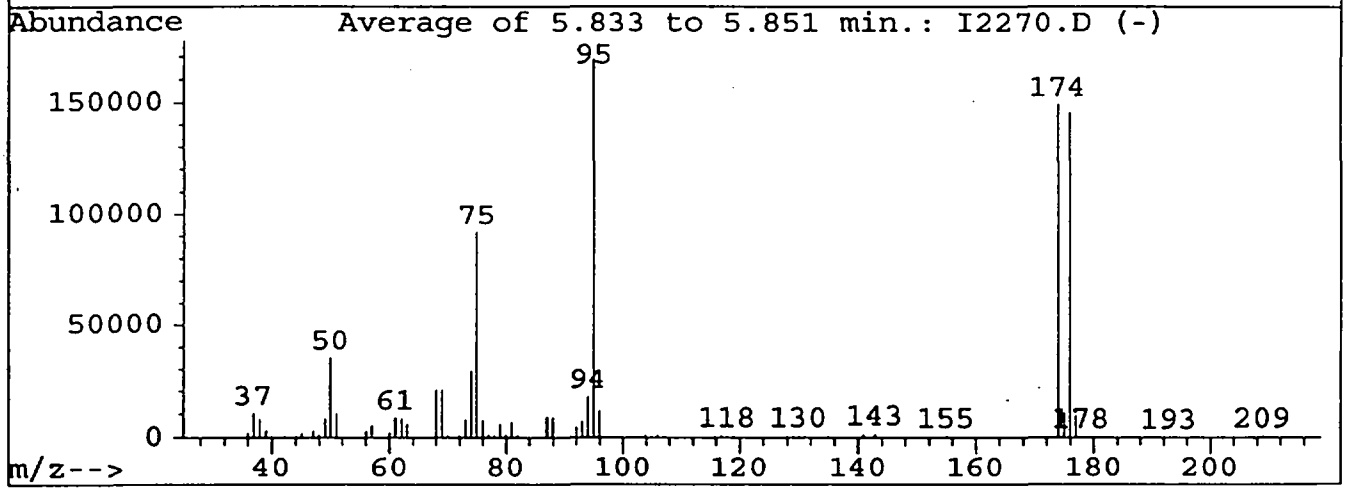
BFB

Data File : C:\HPCHEM\1\DATA\101899\I2270.D
Acq On : 18 Oct 99 6:11 am
Sample : 50NGBFB;MSI;;
Misc : 50NGBFB;LOW;AQ;

Vial: 1
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFB.M
Title :



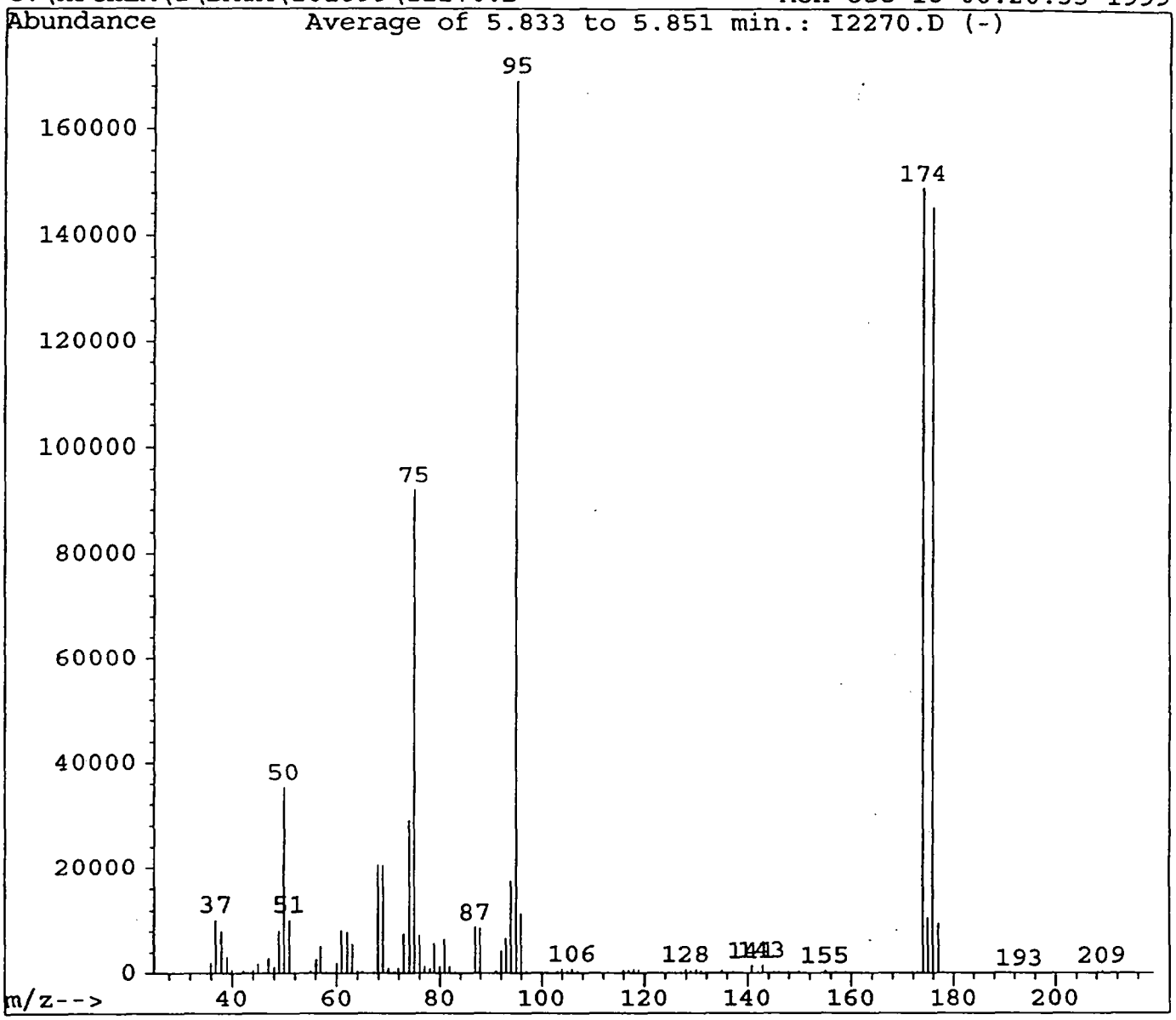


Scans Used: 537 538 539 Bkg: 529

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.0	35434	PASS
75	95	30	60	54.4	91950	PASS
95	95	100	100	100.0	169102	PASS
96	95	5	9	6.8	11478	PASS
173	174	0.00	2	0.1	197	PASS
174	95	50	120	88.1	148981	PASS
175	174	5	9	7.1	10632	PASS
176	174	95	101	97.4	145152	PASS
177	176	5	9	6.6	9514	PASS

BFB 624 Results

C:\HPCHEM\1\DATA\101899\I2270.D Mon Oct 18 06:20:33 1999



Peak Apex is scan: 538
Average of 3 scans: 537,538,539 minus background scan 529

Target Mass	Comparison Mass	Lower Limit,%	Upper Limit,%	Relative Abundance,%	Result Pass/Fail
50	95	15	40	21.0	PASS
75	95	30	60	54.4	PASS
95	95	100	100	100.0	PASS
96	95	5	9	6.8	PASS
173	174	0	2	0.1	PASS
174	95	50	100	88.1	PASS
175	174	5	9	7.1	PASS
176	174	95	101	97.4	PASS
177	176	5	9	6.6	PASS

Average of 5.833 to 5.851 min.: I2270.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	73	46.95	2850	58.00	308	69.85	634
35.90	2042	47.95	1110	60.00	1902	69.95	904
36.90	10285	49.00	8183	60.95	8298	70.85	214
37.95	8096	49.90	35434	62.00	7956	71.10	198
39.00	3082	50.95	10279	62.95	5599	71.90	984
39.90	617	51.90	301	63.95	385	72.95	7549
42.10	467	52.95	54	64.90	370	73.95	29037
42.80	264	54.95	431	65.90	44	74.90	91950
43.95	571	56.05	2671	66.95	172	76.00	7415
44.90	1834	56.95	5184	67.95	20536	76.90	1270
45.95	253	57.75	129	68.90	20511	77.95	885

Average of 5.833 to 5.851 min.: I2270.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.90	5675	91.95	4240	105.90	789	119.95	69
79.90	1302	92.95	6746	106.90	340	126.90	73
80.90	6498	93.95	17535	109.95	102	127.95	702
81.85	1309	94.95	169102	110.85	69	128.85	466
82.85	280	95.90	11478	112.85	70	129.30	96
84.00	101	96.85	359	115.00	152	129.90	702
84.90	149	97.10	193	115.80	570	130.90	456
85.80	107	103.00	356	116.75	548	132.00	112
86.90	8863	103.85	777	116.95	475	134.95	519
87.90	8737	104.95	324	117.85	662	136.75	167
90.90	491	105.55	131	118.85	630	137.00	207

Average of 5.833 to 5.851 min.: I2270.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
140.80	1442	157.00	278	193.00	26		
141.95	320	158.80	268	207.00	12		
142.85	1558	160.95	142	207.90	79		
145.00	284	162.85	68	208.15	214		
145.95	307	171.85	195	209.00	472		
147.85	294	172.80	197				
148.65	79	173.90	148981				
148.95	71	174.95	10632				
149.90	321	175.90	145152				
154.95	484	176.95	9514				
156.75	92	177.85	251				

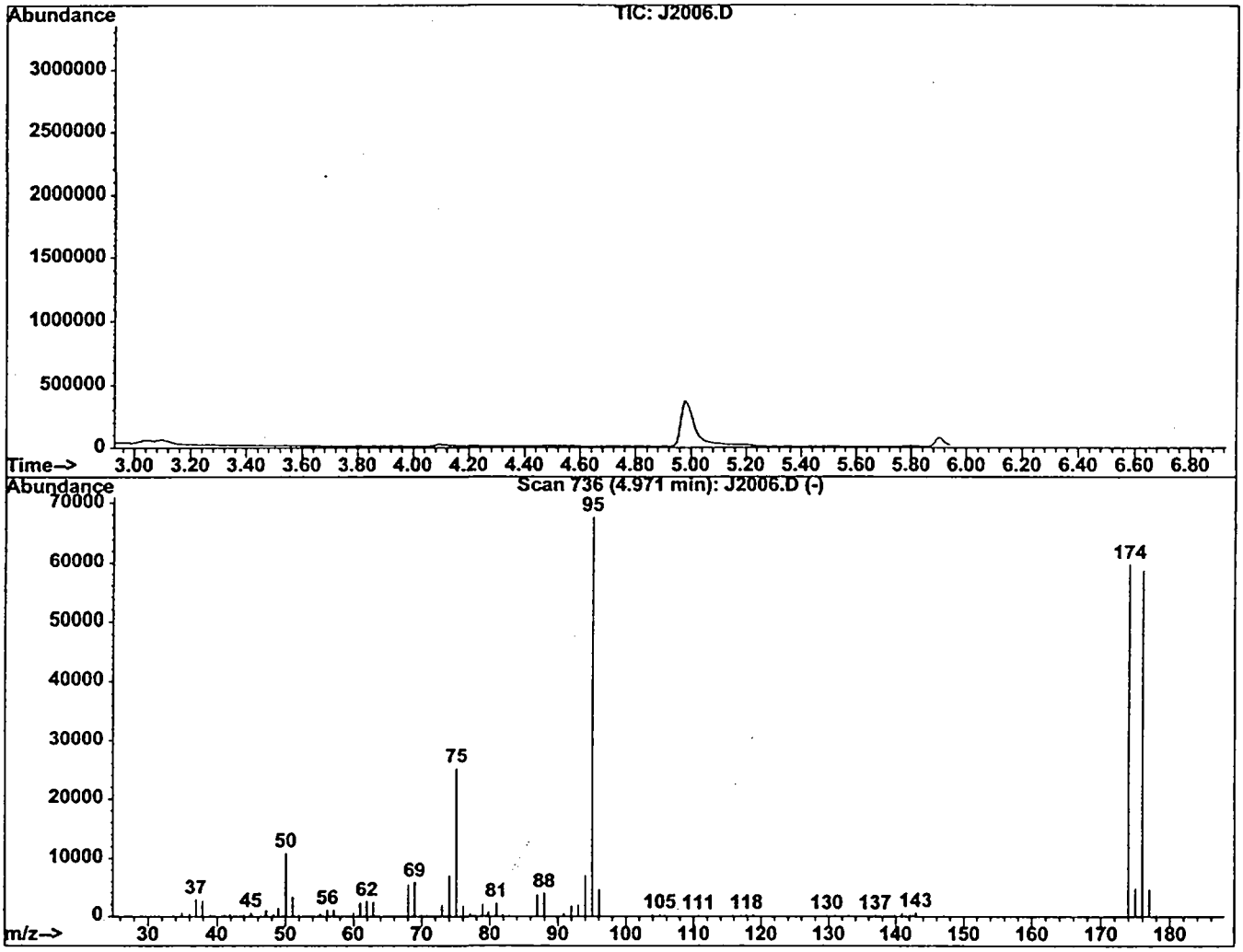
BFB

000250

Data File : C:\HPCHEM\1\DATA\101899\J2006.D
Acq On : 18 Oct 99 18:33
Sample : 50NGBFB;MSJ;;
Misc : 50NGBFB;LOW;AQ;

Vial: 1
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFB.M
Title :



Spectrum Information: Scan 736

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.2	10962	PASS
75	95	30	60	37.3	25208	PASS
95	95	100	100	100.0	67616	PASS
96	95	5	9	6.9	4636	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	88.5	59840	PASS
175	174	5	9	8.0	4805	PASS
176	174	95	101	98.1	58728	PASS
177	176	5	9	7.9	4628	PASS

J2006.D BFB.M Mon Oct 18 19:55:41 1999 MARK

Scan 736 (4.971 min): J2006.D
50NGBFB;MSJ;;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
34.90	609	48.95	1420	60.95	2293	76.05	1798
36.00	463	50.05	10962	61.95	2532	77.00	440
36.95	2915	51.05	3288	62.90	2408	78.95	2077
37.90	2619	51.95	280	68.05	5428	79.75	765
39.05	279	53.65	190	68.95	5865	80.95	2238
41.00	256	54.15	198	69.95	344	81.85	393
41.90	389	55.05	383	70.75	288	86.95	3625
43.90	221	56.15	1132	71.95	164	87.95	3930
45.00	614	57.05	1103	72.95	1967	90.85	511
47.15	1040	58.95	170	74.05	7010	91.95	1743
48.25	396	59.95	553	75.05	25208	92.95	2010

Scan 736 (4.971 min): J2006.D
50NGBFB;MSJ;;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.00	7087	117.00	246	142.90	600		
95.00	67616	117.80	296	147.05	153		
96.00	4636	118.80	292	173.95	59840		
97.00	150	127.90	81	174.95	4805		
103.90	330	129.70	200	175.95	58728		
105.00	348	130.90	154	176.95	4628		
105.70	235	132.90	222	177.95	237		
107.00	160	136.90	229				
110.70	214	139.80	218				
114.70	151	140.90	577				
115.80	223	142.10	271				

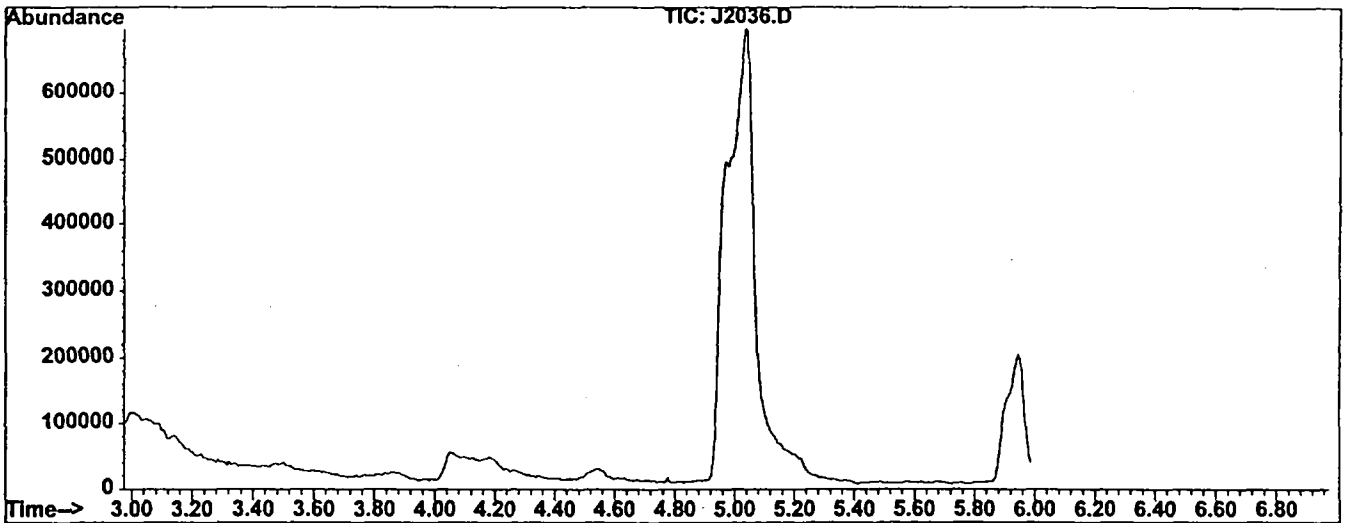
BFB

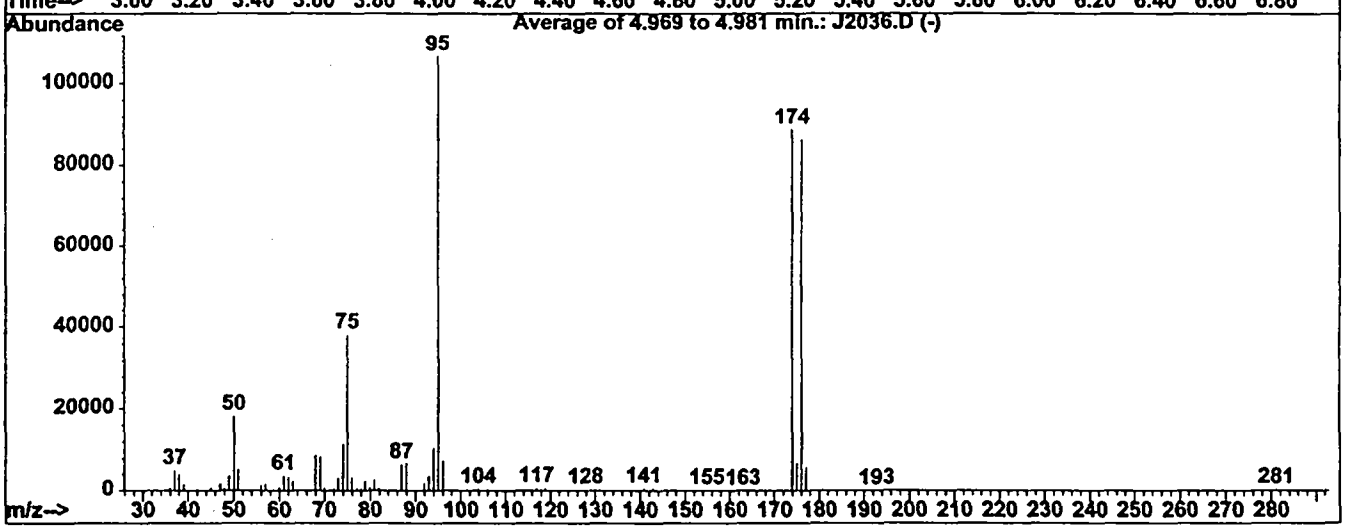
000252

Data File : C:\HPCHEM\1\DATA\102299\J2036.D
Acq On : 22 Oct 99 15:18
Sample : 50NGBFB;MSJ;;
Misc : 50NGBFB;LOW;AQ;

Vial: 1
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFB.M
Title :





AutoFind: Scans 735, 736, 737; Background Corrected with Scan 724

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.0	18117	PASS
75	95	30	60	35.7	38128	PASS
95	95	100	100	100.0	106799	PASS
96	95	5	9	7.0	7481	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.2	88835	PASS
175	174	5	9	7.7	6844	PASS
176	174	95	101	97.4	86504	PASS
177	176	5	9	6.6	5741	PASS

J2036.D BFB.M Fri Oct 22 15:24:41 1999 MARK

Average of 4.969 to 4.981 min.: J2036.D
50NGBFB;MSJ;;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	758	49.00	3705	59.95	866	71.95	482
36.95	5065	50.05	18117	60.95	3760	72.95	3169
38.00	4175	51.00	5275	62.00	3373	73.95	11592
38.95	1703	51.90	225	62.95	2521	74.95	38128
39.90	54	52.95	54	63.95	297	75.95	3386
42.00	280	54.05	51	64.95	32	76.95	749
42.95	115	55.00	319	66.95	137	77.95	617
43.90	136	55.95	1483	67.15	155	78.90	2512
45.00	849	56.95	1780	67.95	8842	79.90	808
47.00	1879	58.05	68	68.95	8502	80.85	2810
47.90	591	58.95	56	69.95	843	81.90	733

Average of 4.969 to 4.981 min.: J2036.D
50NGBFB;MSJ;;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.85	115	104.90	27	127.85	335	146.75	50
86.90	6535	105.90	405	128.90	148	147.90	252
87.95	6856	106.80	84	129.90	309	154.75	88
90.90	139	108.00	20	133.05	192	154.90	168
91.90	1996	109.00	58	133.80	75	156.90	149
92.95	3625	109.90	58	134.85	222	162.95	59
93.95	10618	111.80	54	140.85	591	173.95	88835
95.00	106799	115.80	350	141.70	66	174.95	6844
96.00	7481	116.90	645	141.90	60	175.95	86504
96.95	332	117.85	351	142.85	577	176.95	5741
103.85	407	118.85	628	145.90	153	177.85	139

Average of 4.969 to 4.981 min.: J2036.D
50NGBFB;MSJ;;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
178.05	69						
192.75	67						
281.00	245						
281.95	75						
282.95	57						

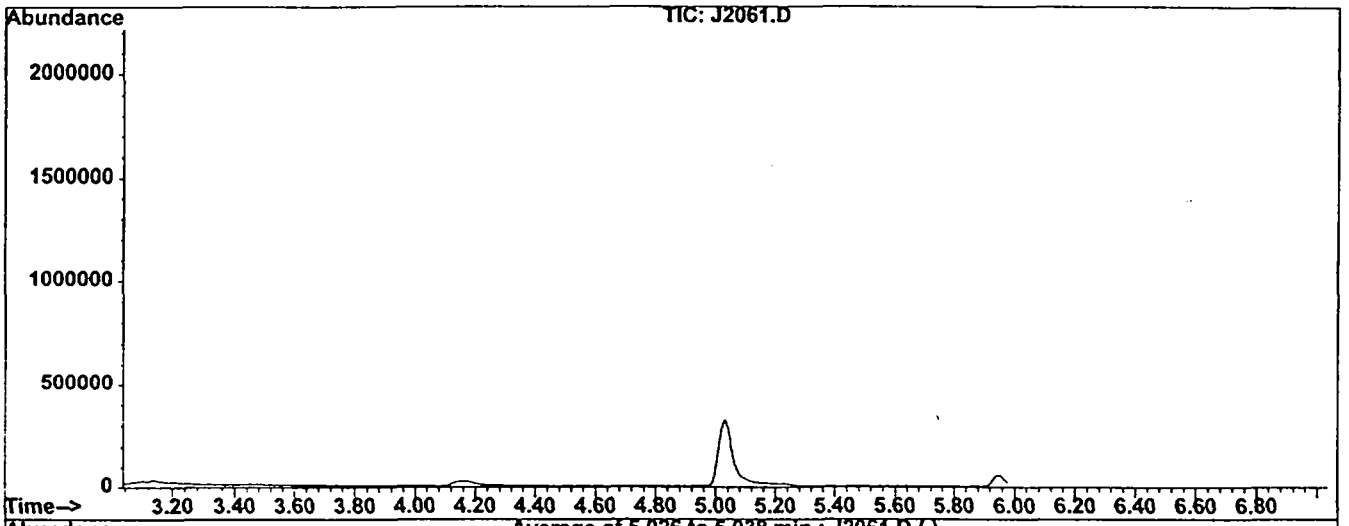
BFB

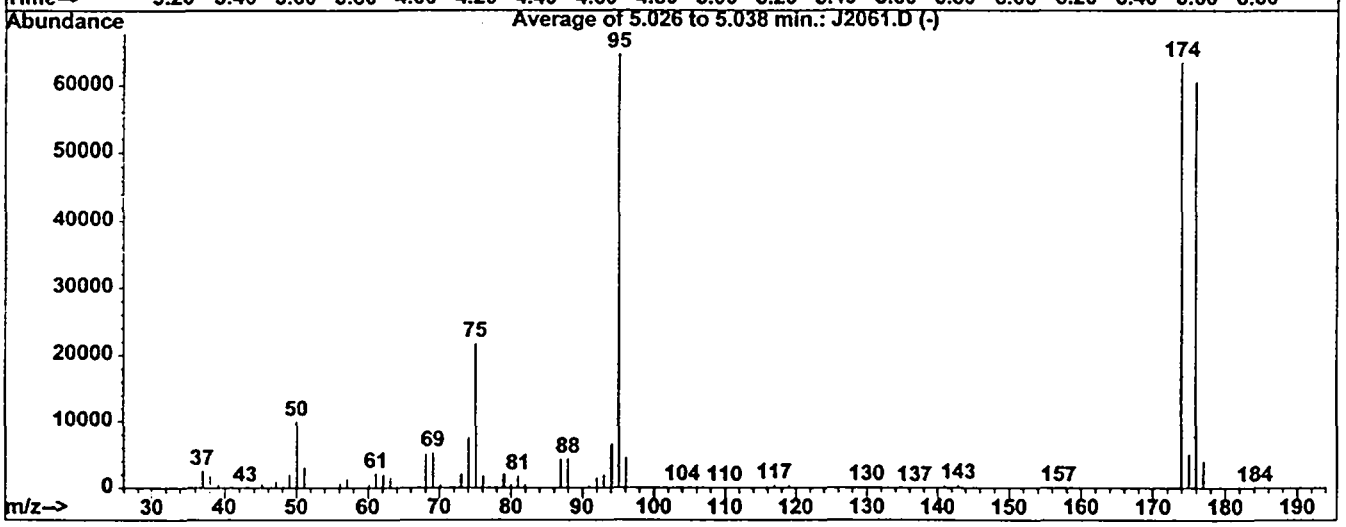
000254

Data File : C:\HPCHEM\1\DATA\102699\J2061.D
Acq On : 26 Oct 99 18:25
Sample : 50NGBFB;MSJ;;
Misc : 50NGBFB;LOW;AQ;

Vial: 1
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BFB.M
Title :





AutoFind: Scans 745, 746, 747; Background Corrected with Scan 735

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.4	9983	PASS
75	95	30	60	33.6	21755	PASS
95	95	100	100	100.0	64760	PASS
96	95	5	9	7.1	4628	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	98.1	63525	PASS
175	174	5	9	8.1	5131	PASS
176	174	95	101	95.5	60635	PASS
177	176	5	9	6.7	4062	PASS

J2061.D BFB.M Tue Oct 26 18:31:52 1999 MARK

Average of 5.026 to 5.038 min.: J2061.D
50NGBFB;MSJ;;
Modified:subtracted

000255

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	130	46.20	107	57.90	133	71.95	236
37.00	2577	47.05	929	60.10	639	72.15	55
38.00	1907	47.55	207	61.05	2167	73.05	2137
39.05	520	48.05	328	62.05	2021	74.05	7561
39.95	103	49.00	2044	63.05	1533	75.05	21755
40.90	139	50.05	9983	63.90	141	76.05	1876
41.30	59	51.05	3153	64.75	57	76.95	268
42.80	95	52.05	112	67.10	188	77.90	205
43.10	59	54.95	45	68.05	5095	78.95	2144
45.10	568	56.10	709	69.05	5314	79.95	527
45.95	51	57.05	1355	70.10	494	80.95	1813

Average of 5.026 to 5.038 min.: J2061.D
50NGBFB;MSJ;;
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.95	541	103.95	235	127.90	232	156.90	140
85.95	81	105.80	70	129.95	237	158.25	54
86.95	4320	106.05	158	134.90	74	171.35	52
87.95	4364	106.90	152	136.70	60	171.85	55
90.90	333	109.95	127	139.80	117	172.05	136
92.00	1550	115.00	57	140.90	439	173.95	63525
93.00	2002	115.90	263	141.80	99	175.00	5131
94.05	6690	116.95	494	142.90	483	175.95	60635
95.10	64760	117.90	97	145.05	53	176.95	4062
96.10	4628	118.95	408	146.85	73	184.10	110
97.05	216	127.00	55	153.85	64		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000256

991018I3

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 991018I3

Sample wt/vol: 5 (g/mL) ml

Lab File ID: I2275

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 10/18/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2275.D
Acq On : 18 Oct 99 9:26 am
Sample : VBLKI3;MSI;;
Misc : 991018I3;LOW;AQ;
Quant Time: Oct 18 9:47 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	8.65	96	719795	50.00 ug/l	0.08
70) chlorobenzene-d5	14.25	117	536064	50.00 ug/l	0.06
89) 1,4-dichlorobenzene-d4	16.79	152	269328	50.00 ug/l	0.03

System Monitoring Compounds					%Recovery
40) dibromoflurometh ane	7.28	113	230344	49.78 ug/l	99.56%
44) 1,2-dichloroethane-d4	8.01	65	250393	48.93 ug/l	97.87%
71) toluene-d8	11.34	98	632088	45.88 ug/l	91.76%
87) bromoflurobenzene	15.80	95	242824	47.09 ug/l	94.17%

Target Compounds Qvalue

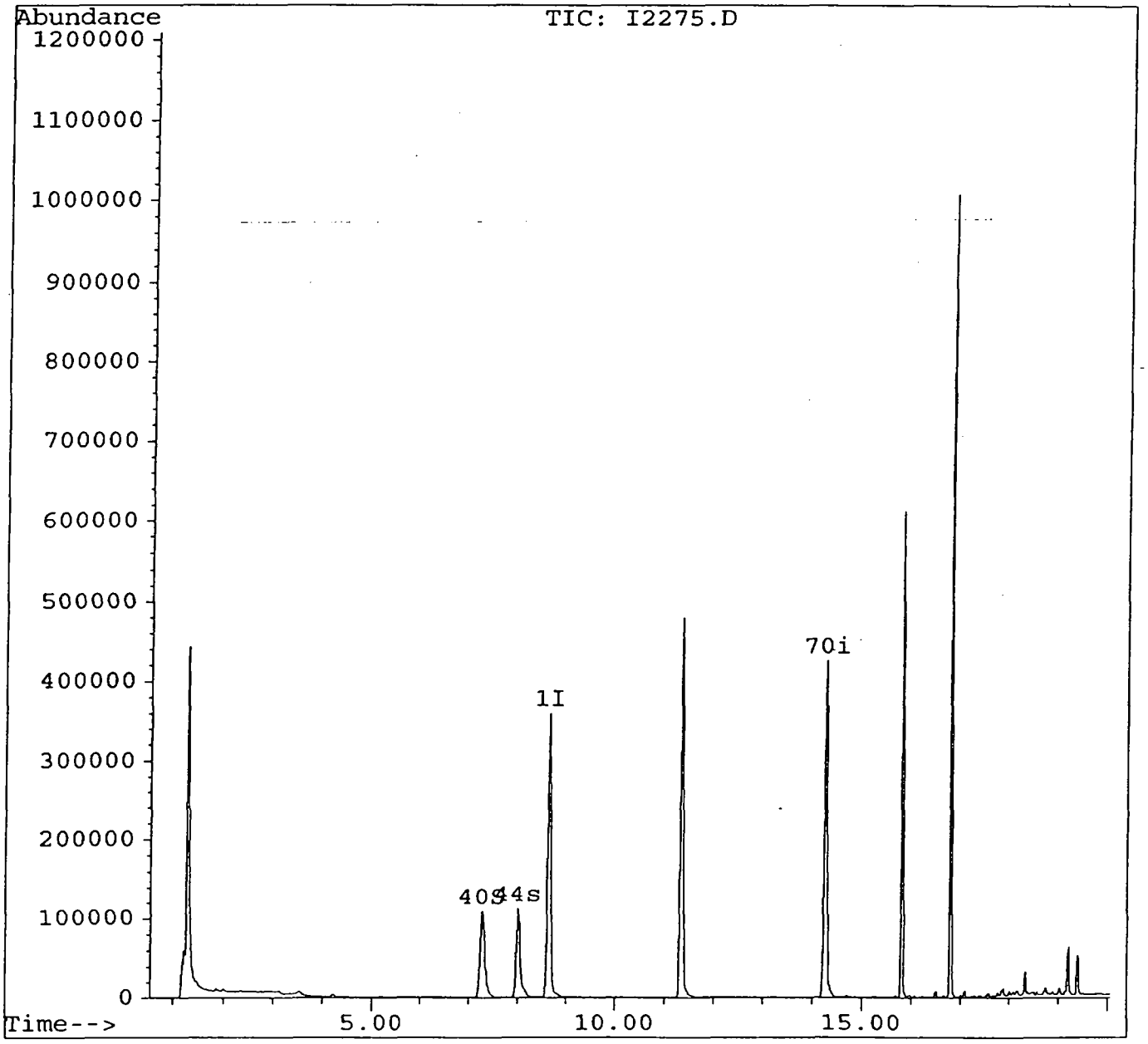
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\I2275.D
Acq On : 18 Oct 99 9:26 am
Sample : VBLKI3;MSI;;
Misc : 991018I3;LOW;AQ;
Quant Time: Oct 18 9:47 1999

Vial: 100
Operator: MVA
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260044W.M
Title : Method 8260 FOR WATERS
Last Update : Wed Oct 13 09:44:24 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

991018J1

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 991018J1

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2010

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. 0

Date Analyzed: 10/18/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	5	J
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report (Not Reviewed)

000260

Data File : C:\HPCHEM\1\DATA\101899\J2010.D
Acq On : 18 Oct 99 19:58
Sample : VBLKJ1;MSJ;;
Misc : 991018J1;LOW;SO;
Quant Time: Oct 18 22:52 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.16	96	1502435	50.00 ppb	0.00
64) Chlorobenzene-d5	13.03	117	1070322	50.00 ppb	0.00
80) 1,4-Dichlorobenzene-d4	18.01	152	368680	50.00 ppb	0.00

System Monitoring Compounds					
37) Dibromofluoromethane	6.16	113	466326	45.43 ppb	0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 90.86%		
41) 1,2-Dichloroethane-d4	6.70	65	301310	44.79 ppb	0.00
Surrogate Spike 50.000	Range 80 - 120		Recovery = 89.58%		
65) Toluene-d8	10.05	98	1331560	52.09 ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 104.18%		
78) Bromofluorobenzene	15.54	95	402301	46.62 ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 93.24%		

Target Compounds					Qvalue
18) Acetone	3.32	43	10286	5.28 ppb	58
~~95) cis 1,4 dichloro 2 butene~~	~~16.03~~	~~75~~	~~11203~~	~~4.03 ppb~~	~~31~~

SW 10/18/99

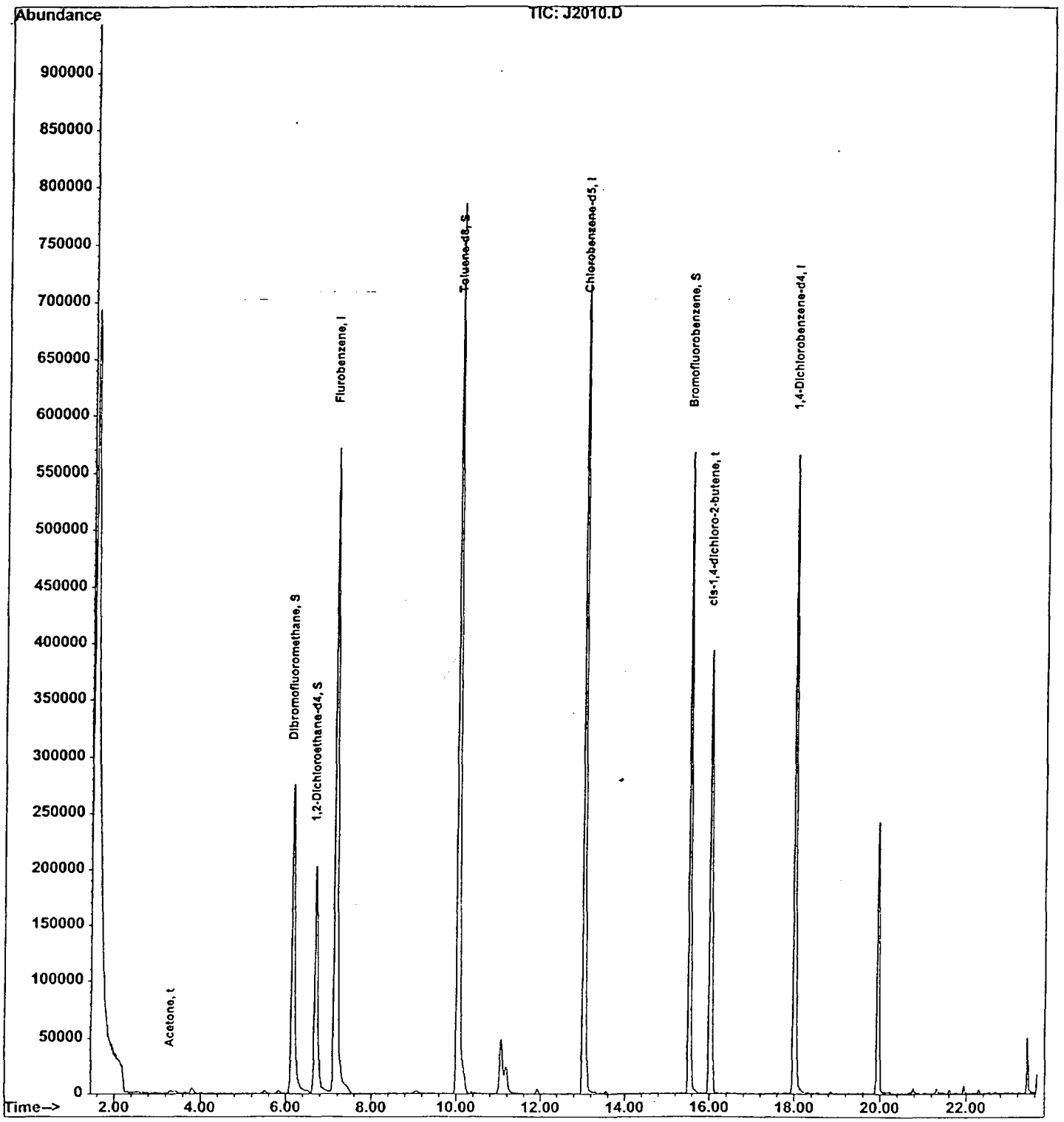
(#) = qualifier out of range (m) = manual integration

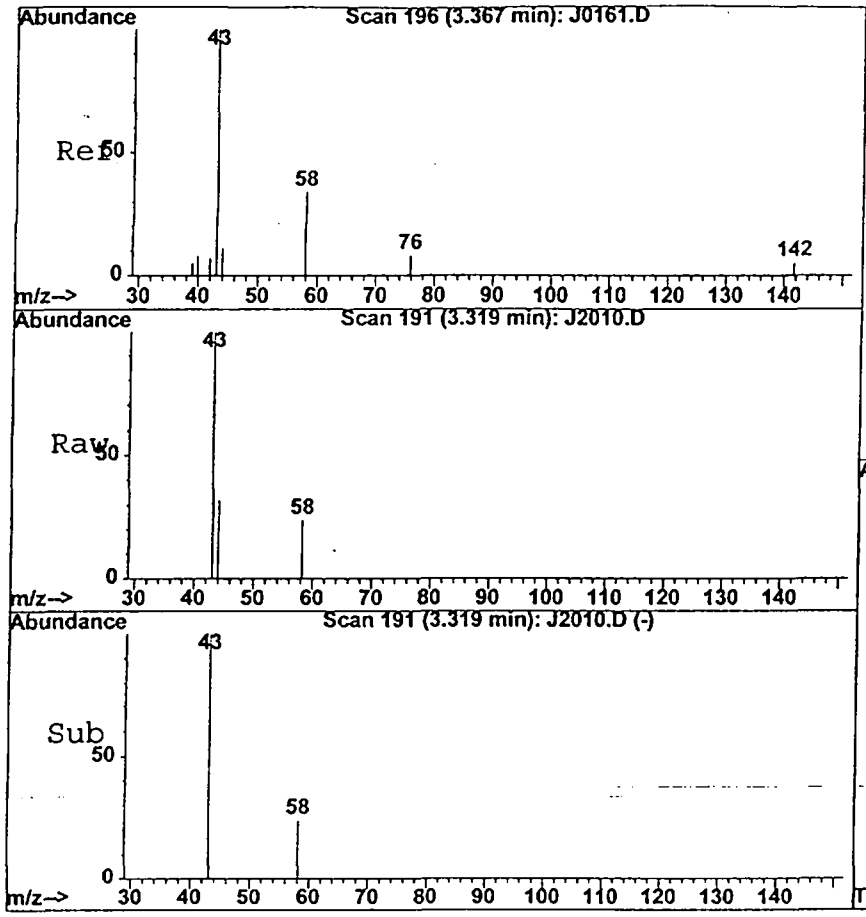
Quantitation Report

Data File : C:\HPCHEM\1\DATA\101899\J2010.D
Acq On : 18 Oct 99 19:58
Sample : VBLKJ1;MSJ;;
Misc : 991018J1;LOW;SO;
Quant Time: Oct 18 22:52 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration

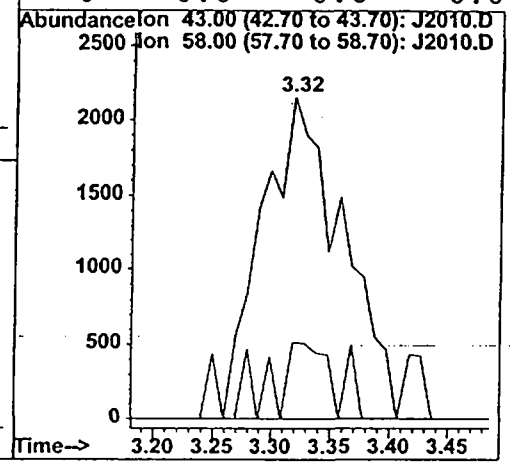


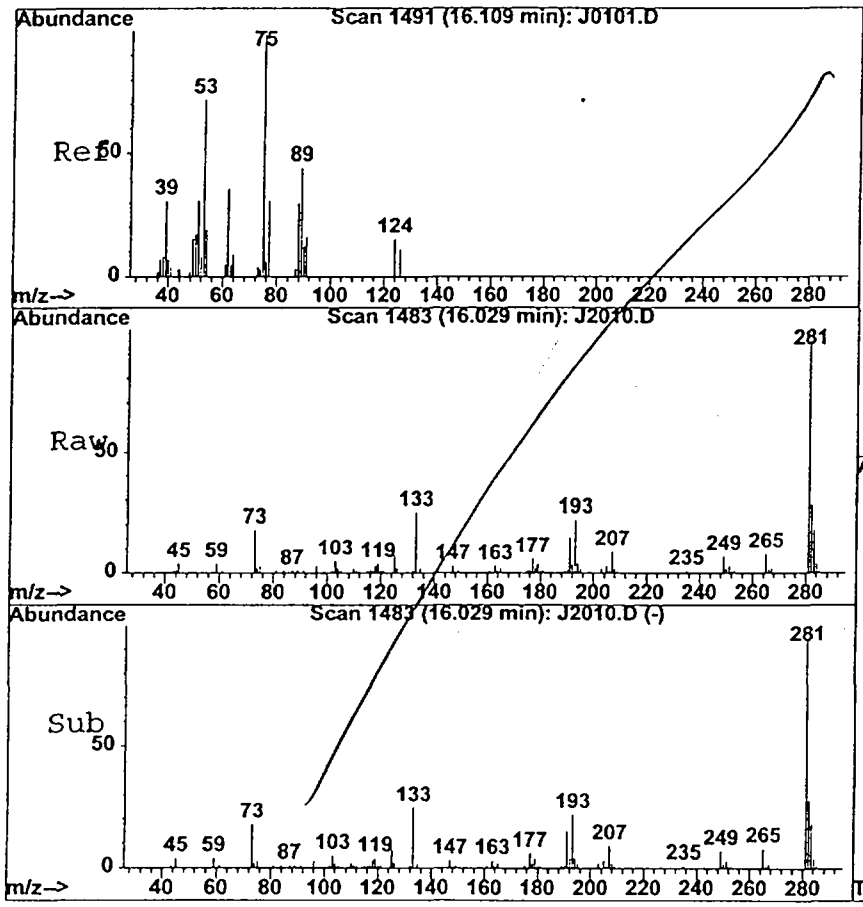


#18
Acetone **000262**
Concen: 5.28 ppb
RT: 3.32 min Scan# 191
Delta R.T. -0.00 min
Lab File: J2010.D
Acq: 18 Oct 99 19:58

Tgt Ion:43 Resp: 10286

Ion	Ratio	Lower	Upper
43	100		
58	10.8	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

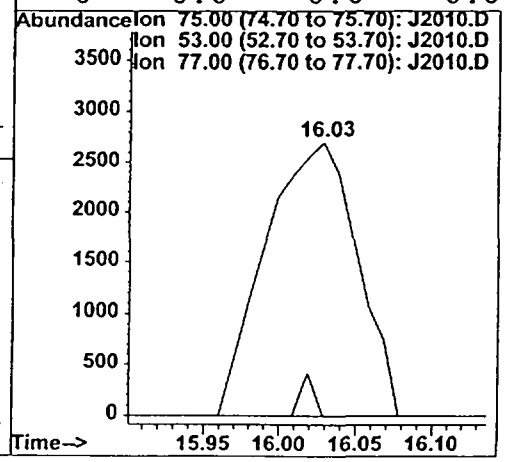




#95
cis-1,4-dichloro-2-butene
Concen: 4.03 ppb
RT: 16.03 min Scan# 1483
Delta R.T. -0.11 min
Lab File: J2010.D
Acq: 18 Oct 99 19:58

Tgt Ion:75 Resp: 11203

Ion	Ratio	Lower	Upper
75	100		
53	0.0	0.0	116.0
77	0.0	0.0	80.5
0	0.0	0.0	0.0



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

991022J1

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 991022J1

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2040

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. 0

Date Analyzed: 10/22/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	10	U
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	5	U
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report (Not Reviewed)

000264

Data File : C:\HPCHEM\1\DATA\102299\J2040.D
Acq On : 22 Oct 99 17:47
Sample : VBLKJ1;MSJ;;
Misc : 991022J1;LOW;SO;
Quant Time: Oct 22 18:50 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Initial Calibration
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Flurobenzene	7.24	96	614960	50.00 ppb	0.08
64) Chlorobenzene-d5	13.12	117	438030	50.00 ppb	0.09
80) 1,4-Dichlorobenzene-d4	18.10	152	149956	50.00 ppb	0.09

System Monitoring Compounds					
37) Dibromofluoromethane	6.25	113	200766	47.79 ppb	0.08
Surrogate Spike 50.000	Range 86 - 118		Recovery = 95.58%		
41) 1,2-Dichloroethane-d4	6.79	65	124477	45.21 ppb	0.09
Surrogate Spike 50.000	Range 80 - 120		Recovery = 90.42%		
65) Toluene-d8	10.14	98	532304	50.88 ppb	0.09
Surrogate Spike 50.000	Range 88 - 110		Recovery = 101.76%		
78) Bromofluorobenzene	15.62	95	163703	46.36 ppb	0.09
Surrogate Spike 50.000	Range 86 - 115		Recovery = 92.72%		

Target Compounds					Qvalue
~~95) cis-1,4-dichloro-2-butene~~	~~16.10~~	~~75~~	~~5088~~	~~4.50 ppb~~	~~31~~

GW
10/22/99

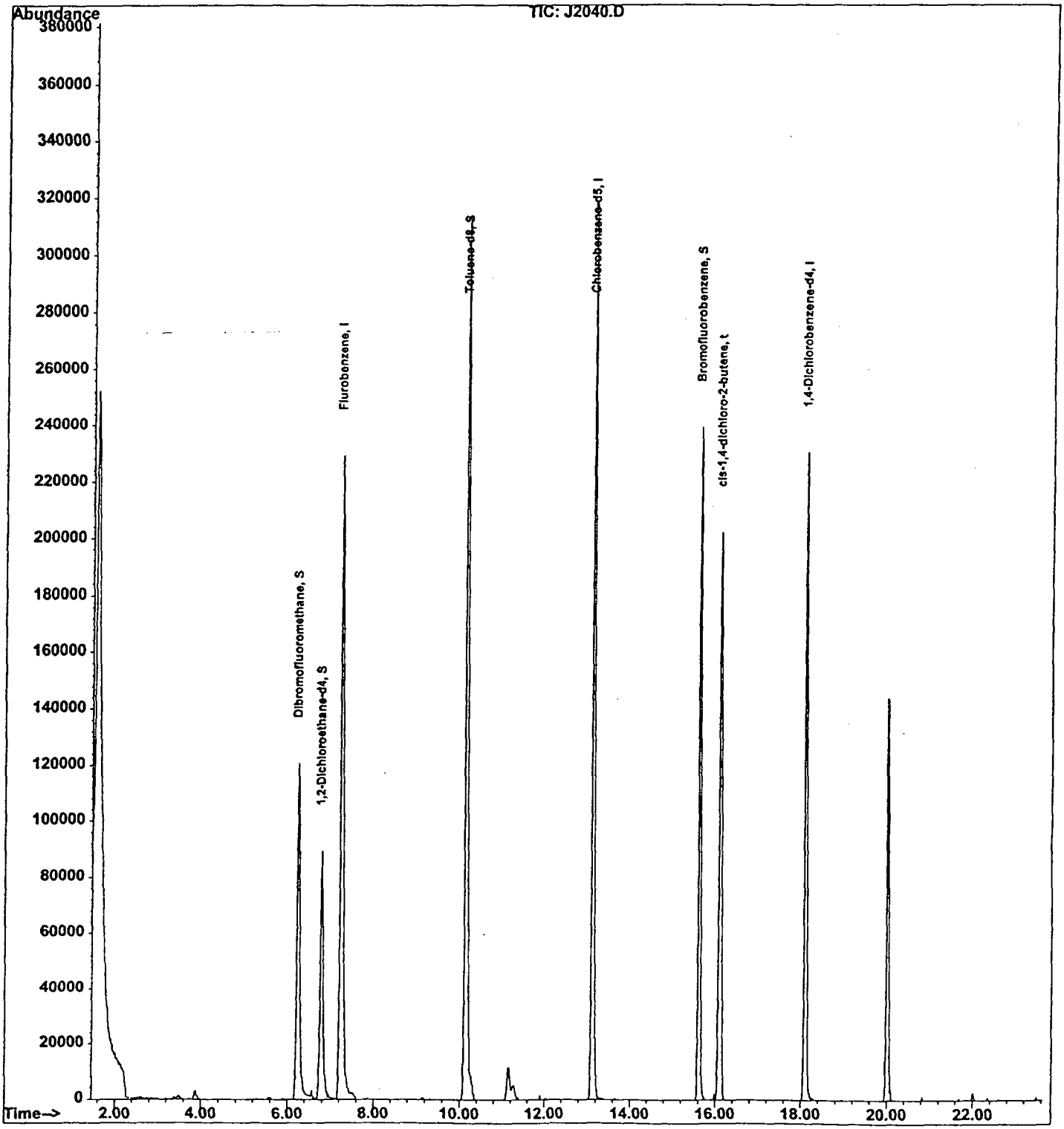
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102299\J2040.D
Acq On : 22 Oct 99 17:47
Sample : VBLKJ1;MSJ;;
Misc : 991022J1;LOW;SO;
Quant Time: Oct 22 18:50 1999

Vial: 100
Operator: 000265
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Multiple Level Calibration



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

991026J1

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Soil

Lab Sample ID: 991026J1

Sample wt/vol: 5 (g/mL) g

Lab File ID: J2065

Level: (low/med) LOW

Date Received:

% Moisture: not dec. 0

Date Analyzed: 10/26/99

GC Column: DB-624 ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
67-64-1	Acetone	5	J
71-43-2	Benzene	5	U
75-27-4	Bromodichloromethane	5	U
75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	10	U
75-15-0	Carbon Disulfide	5	U
56-23-5	Carbon Tetrachloride	5	U
108-90-7	Chlorobenzene	5	U
124-48-1	Chlorodibromomethane	5	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5	U
107-06-2	1,2-Dichloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
156-59-2	Cis-1,2-Dichloroethene	5	U
156-60-5	Trans-1,2-Dichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	Cis-1,3-Dichloropropene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
100-41-4	Ethylbenzene	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
75-09-2	Methylene Chloride	3	J
100-42-5	Styrene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
127-18-4	Tetrachloroethene	5	U
108-88-3	Toluene	5	U
71-55-6	1,1,1-Trichloroethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
79-01-6	Trichloroethylene	5	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (Total)	5	U

Quantitation Report (Not Reviewed)

000267

Data File : C:\HPCHEM\1\DATA\102699\J2065.D
Acq On : 26 Oct 99 20:07
Sample : VBLKJ1;MSJ;;
Misc : 991026J1;LOW;SO;
Quant Time: Oct 26 20:29 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\102699\J2063.D
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\102699\J2063.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Flurobenzene	7.24	96	855974	50.00	ppb	0.00
64) Chlorobenzene-d5	13.13	117	658554	50.00	ppb	0.00
80) 1,4-Dichlorobenzene-d4	18.10	152	227981	50.00	ppb	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	6.24	113	297402	55.97	ppb	0.00
Surrogate Spike 50.000	Range 86 - 118		Recovery = 111.94%			
41) 1,2-Dichloroethane-d4	6.79	65	201535	54.30	ppb	0.01
Surrogate Spike 50.000	Range 80 - 120		Recovery = 108.60%			
65) Toluene-d8	10.15	98	753919	48.67	ppb	0.00
Surrogate Spike 50.000	Range 88 - 110		Recovery = 97.34%			
78) Bromofluorobenzene	15.62	95	254810	50.10	ppb	0.00
Surrogate Spike 50.000	Range 86 - 115		Recovery = 100.20%			
Target Compounds						Qvalue
14) Methylene chloride	3.87	84	15001	3.06	ppb	94
18) Acetone	3.38	43	5576	5.26	ppb	58
~~95) cis-1,4-dichloro-2-butene~~	~~16.10~~	~~75~~	~~9562~~	~~5.08~~	~~ppb~~	~~31~~

GW
10/26/99

(#) = qualifier out of range (m) = manual integration

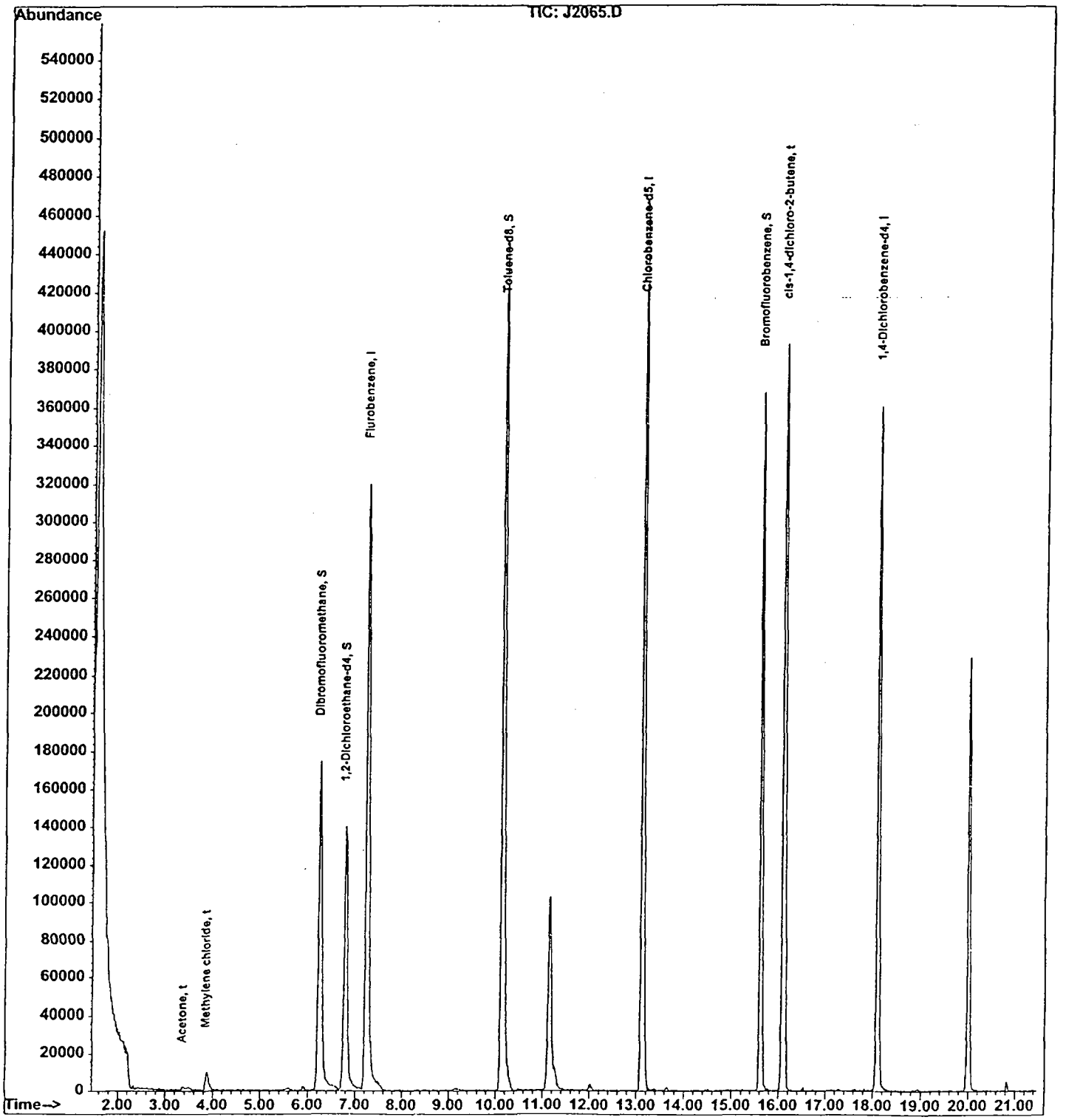
Quantitation Report

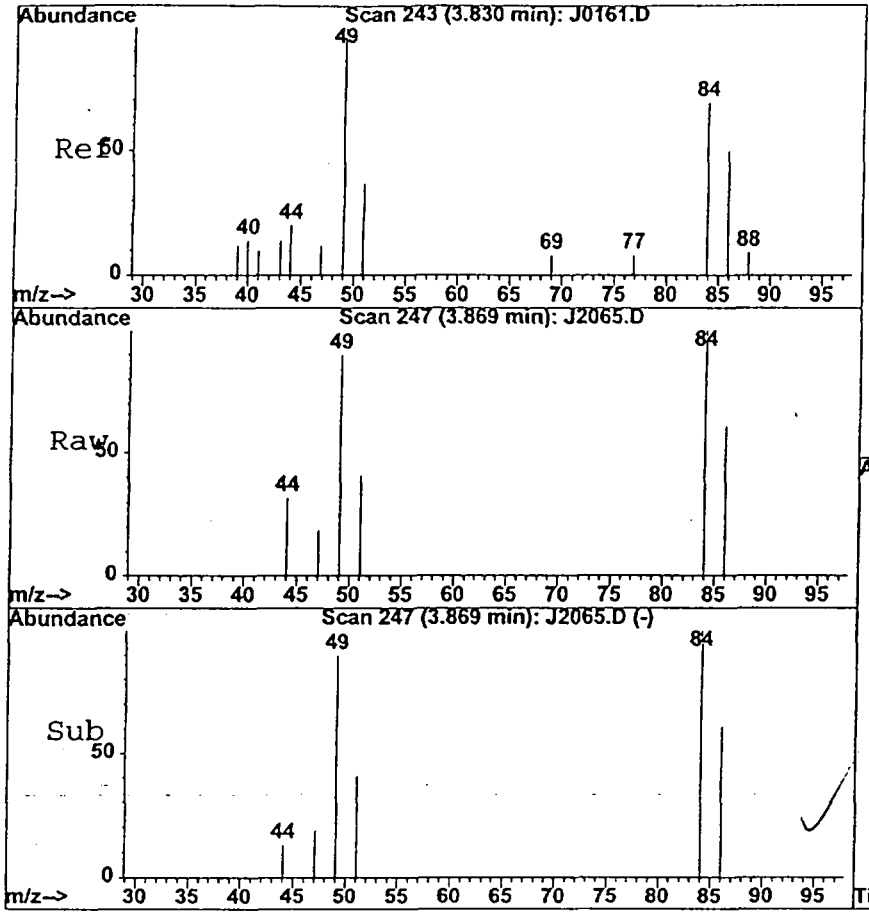
000268

Data File : C:\HPCHEM\1\DATA\102699\J2065.D
Acq On : 26 Oct 99 20:07
Sample : VBLKJ1;MSJ;;
Misc : 991026J1;LOW;SO;
Quant Time: Oct 26 20:29 1999

Vial: 100
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 8260008S.RES

Method : C:\HPCHEM\1\METHODS\8260008S.M
Title : METHOD 8260B
Last Update : Thu Oct 14 15:24:59 1999
Response via : Single Level Calibration

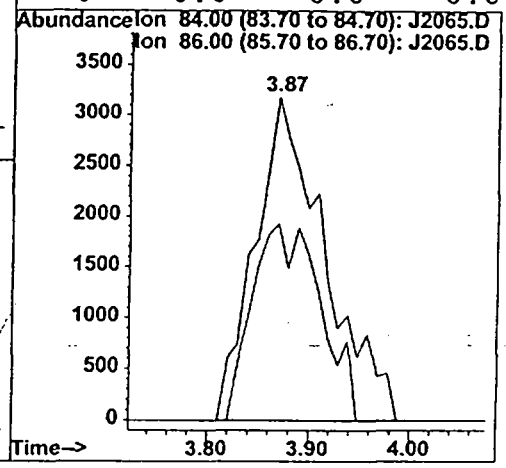


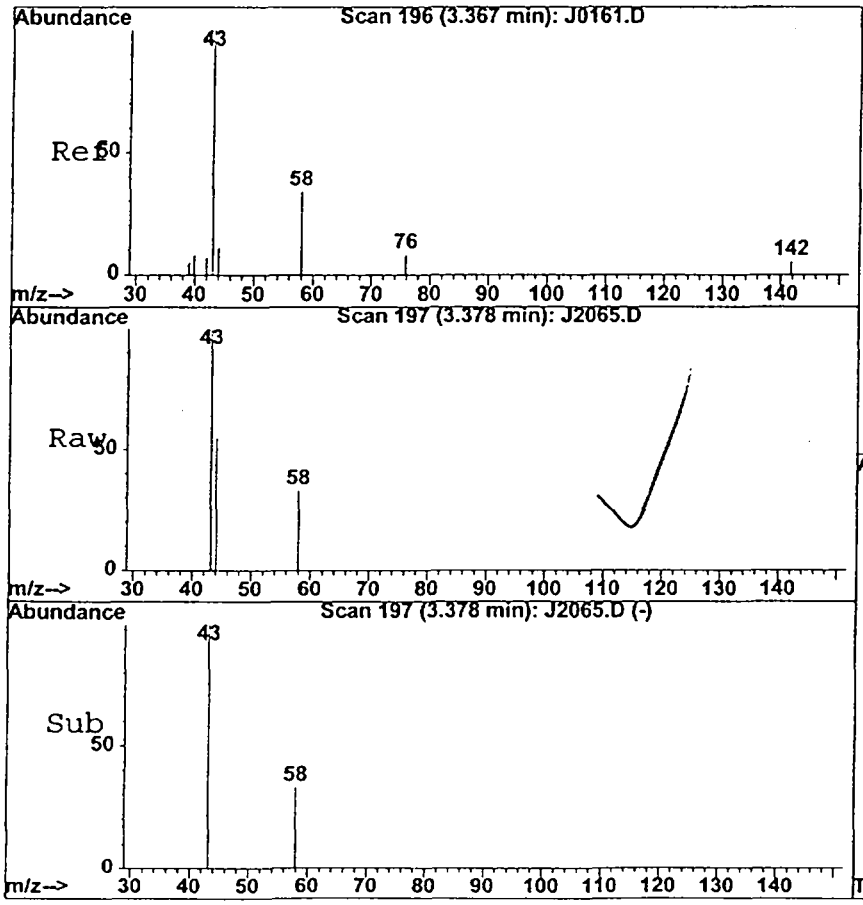


#14
Methylene chloride
Concen: 3.06 ppb
RT: 3.87 min Scan# 247
Delta R.T. 0.00 min
Lab File: J2065.D
Acq: 26 Oct 99 20:07

Tgt Ion:84 Resp: 15001

Ion	Ratio	Lower	Upper
84	100		
86	59.6	23.9	103.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

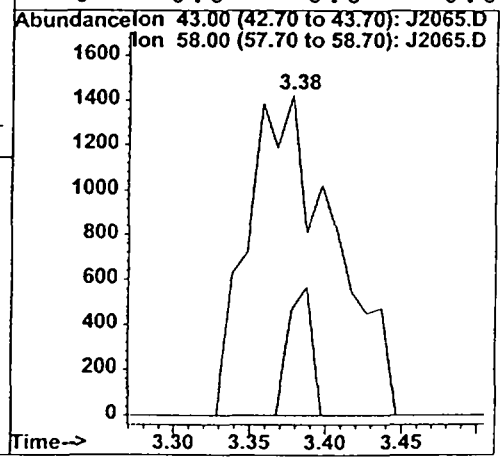




#18
Acetone
Concen: 5.26 ppb
RT: 3.38 min Scan# 197
Delta R.T. 0.01 min
Lab File: J2065.D
Acq: 26 Oct 99 20:07

Tgt Ion:43 Resp: 5576

Ion	Ratio	Lower	Upper
43	100		
58	10.9	5.5	65.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0



[redacted] Log [redacted] MSI

VOA-GC/MS Department

Analyst/Date/seq. Am 10/13/99

Analytical Fractions ___VOA___

Instrument ID ___MSI___

Tune File ___T_H.U

Calibration Standards

Standard	Lot #	Conc(ug/ml)	vol(ul)
BFB	VOAWS 0004BFB	25	2
CLP/8241SS	VOAWS	50	2
CLP MIX	VOAWS	50	2
WORK STD	VOAWS	50	2
DICH/TRI	VOAWS	50	5
8260 IS/SS	VOAWS	50	5
8260 Full	VOAWS 0032GAS	50	5
8260 Misc	VOAWS 0008 HKL	100	2.5
8240 CR	VOAWS 0027 AOD	100	2.5
524.2ISS	VOAWS 0016 ARL	10	12.5/2.5*
524.2Vmix	VOAWS	25	12.5/2.5*

IS/RTLimits 600/500	IS/RTLimits CLP/8260
IS#1 ___	IS#1 ___
RT ___	RT ___
IS#2 ___	IS#2 ___
RT ___	RT ___
IS#3 ___	IS#3 ___
RT ___	RT ___

Reviewed By : Am

2nd Review : 311

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	(✓) = pH <2	COMMENTS
1	50ngBFB	I2086	PIR	2ml	1.0	I	BFB	—	8260	—	OK
2	VSTD500	87	1	5ml		I	8260044W			—	OK
3	200	88	2			I				—	OK
4	100	89	3			I				—	OK
5	050	90	4			I				—	OK
6	020	91	5			I				—	OK
7	010	92	6			I				—	OK
8	005	93	7			I				—	OK
9	002	94	8			I				—	OK
10	991013 I1	95	9			I				—	OK
11	I1	96	10			I				—	OK
12	I2	97	11	100ul	1.5	I				—	OK
13	VBLCBS	98	12	5ml	1.0	I				—	OK
14	LB-723	99	13	500ul		I				✓	OK
15	9403800 1	2100	14			I				✓	OK
16	94011004	01	15			I				✓	OK
17	006	02	16			I				✓	OK
18	008	03	1			I				✓	OK
19	013	04	2			I				✓	OK
20	015	05	3			I				✓	OK
21	9403800 1MS	06	4			I				✓	OK
22	001MSD	07	5			I				✓	OK
23	94011014	08	6			I					half time
24		09	7			I					
25		10	8			I					

000270

STL-NJ Instrument Log
VOA-GC/MS Department

MSJ
MSJLOG1.XLS
Revised 03/09/99

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Analyst/Date/seq. S. Ichu Sy 10/13/99

Analytical Fractions ___VOA_____
Instrument ID ___MSJ_____
Tune File ____T_H.U

Calibration Standards

Standard	Lot #	Conc(ug/ml)	vol(ul)
BFB	VOAWS 0004BFB	25	2
CLP/624ISS	VOAWS -	50	2
CLP MIX	VOAWS 0007CLP	50	2
WORK STD	VOAWS —	50	2
DICH/TRI	VOAWS —	50	5
8260 IS/SS	VOAWS 0003ISS	50	5
8260 Full	VOAWS 00324	50	5
8260 Misc	VOAWS 0008m	100	2.5
8240 CR	VOAWS 0027Add	~~100~~ 50	~~2.5~~
524.2ISS	VOAWS 0015AR	~~10~~ 50	12.5/2.5*
524.2Vmix	VOAWS	25	12.5/2.5*

IS/RTLimits 600/500
IS#1 _____
RT _____
IS#2 _____
RT _____
IS#3 _____
RT _____

IS/RTLimits CLP/8260
IS#1 1430565
RT 7.20
IS#2 1048019
RT 13.08
IS#3 429334
RT 18.06

Reviewed By : Sue
2nd Review : _____

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	COMMENTS
1	50 NGBFD	J1950	DI	2ul	—	I —	—	—	8260	OK
2	VSTD500	51	1	5ml	1.0	I	82600075			OK
3	200	52	2			I				OK
4	100	53	3			I				OK
5	050	54	4			I				OK
6	005	56	6			I				OK
7	005	57	7			I				OK
8	991013J1	58	8	5g		I	82600085			OK
9	991013J1	59	9			I				OK
10	VBLKBS	60	10	5ml		I				OK
11	94401001	61	11	5g		I				RR ISL
12	002	62	12			I				
13	003	63	13			I				
14	002MS	64	14			I				
15	002MSD	65	15			I				
16	93948002	66	16			I				
17	001	67	17			I				
18	004	68	18			I				
19	005	69	19			I				
20	~~94035~~ 007	70	20			I				OK
21	008	71	21			I				OK confirms
22	94046001	72	22			I				OK
23	002	73	23			I				OK
24	003	74	24			I				OK
25	002MS	75	25			I				OK
	002MSD	76	26							

000271

STL-NJ Instrument Log

VOA-GC/MS Department

MSI

Analyst/Date/seq. Moll A. 10/11/99

Analytical Fractions___VOA_____

Instrument ID____MSI_____

Tune File_____T_H.U

Calibration Standards

Standard	Lot #		Conc(ug/ml)	vol(ul)
BFB	VOAWS	00 4 K8	25	2
CLP/624ISS	VOAWS		50	2
CLP MIX	VOAWS	00 7 KD	50	2
WORK STD	VOAWS	—	50	2
DICH/TRI	VOAWS	—	50	5
8260 IS/SS	VOAWS	0003 TGG	50	5
8260 Full	VOAWS	0032 G	50	5
8260 Misc	VOAWS	0019 M	100	2.5
8240 CR	VOAWS		100	2.5
524.2ISS	VOAWS		10	12.5/2.5*
524.2Vmix	VOAWS		25	12.5/2.5*

IS/RTLimits 600/500	IS/RTLimits CLP/8260
IS#1_____	IS#1_____
RT _____	RT _____
IS#2_____	IS#2_____
RT_____	RT_____
IS#3_____	IS#3_____
RT_____	RT_____

Reviewed By :_____

2nd Review :_____

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	(✓) = pH <2	COMMENTS
1	BFB	D2270	Dir	2uL	1:10	I —	—	—		—	OIL
2	USTD020	71	1	5ml		I	624098		600		OIL
3	USTD050	72	2			I	826044		8260		OIL
4	991018I1	73	3			I	624098		600		RR
5	991018I2	74	4			I	826044		8260		WG
6	I3	75	5	~~100uL 5ml~~	~~1:5~~ 1:0	I					OIL
7	VB11CB3	76	6	5ml		I			8260		OIL
8	VB11CB3	77	7			I	624098		600		Wotnnn
9	940500010L	78	8 10	850uL	20x	I	826044W		8260	✓	OIL
10	008DL	79	9 11		20x	I				✓	OIL
11	010DL	80	10 12		20x	I				✓	OIL
12	013DL	81	11 13	500uL	10x	I				✓	OIL
13	015	82	12 14	5ml	1x	I				✓	OIL
14	941127019	83	13 15			I				✓	OIL
15	020	84	14 16			I				✓	OIL
16	021	85	15 1			I				✓	OIL
17	022	86	16 2			I				✓	OIL
18	023	87	1 3			I				✓	OIL
19	024	88	2 4			I				✓	OIL
20	025BIK	89	3 5			I				✓	—
21	025ms	90	4 6			I				✓	OIL
22	025msD	91	5 7			I				✓	OIL
23	026	92	6 8			I				✓	OIL
24	991016I1	93	7 9			I	624098			✓	RR
25	991016I1	94	8 10			I				✓	OIL

000272

STL-NJ Instrument Log
VOA-GC/MS Department

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Analyst/Date/seq. S. Illusey 10/16/99

Analytical Fractions ___VOA_____
Instrument ID ____MSJ_____
Tune File _____T_H.U

Calibration Standards

Standard	Lot #	Conc(ug/ml)	vol(ul)
BFB	VOAWS 0604BFB	25	2
CLP/624ISS	VOAWS	50	2
CLP MIX	VOAWS	50	2
WORK STD	VOAWS	50	2
DICH/TRI	VOAWS	50	5
8260 IS/SS	VOAWS	50	5
8260 Full	VOAWS	50	5
8260 Misc	VOAWS	100	2.5
8240 CR	VOAWS	100	2.5
524.2ISS	VOAWS	10	12.5/2.5*
524.2Vmix	VOAWS	25	12.5/2.5*

IS/RTLimits 600/500		IS/RTLimits CLP/8260	
IS#1		IS#1	493580
RT		RT	7.17
IS#2		IS#2	1117039
RT		RT	13.04
IS#3		IS#3	413050
RT		RT	18.02

Reviewed By : GR
2nd Review :

6:33

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	COMMENTS
1	50 NG BFB	J2006	DT	2ml	—	I	—	—	8260	OK
2	VSTD050	08	1	5ml	1.0	I	8260008			OK
3	991016J1	09	2			I				OK
4	991016J1	10	3			I				OK
5	VBLKB5	11	4			I				OK
6	94035001	12	5	5g		I				DR NG
7	002	13	6			I				OK
8	003	14	7			I				RR ISL
9	004	15	8			I				OK
10	005	16	9			I				RR ISL
11	006	17	10			I				OK ISL
12	001	18	11			I				RR NG
13	004	19	12			I				OK Confirm IS
14	005	20	13			I				OK Confirm IS
15	006	21	14			I				OK Confirm
16	001	22	15			I				OK
17	001	23	16			I				Not needed
18	005	24	17			I				OK Confirms
19	94127001	25	18			I				RR ST OK
20	002	26	19			I				RR Sit matrix
21	003	27	20			I				OK
22	004	28	21			I				RR ISL
23	005	29	22			I				OK
24	005MSD	30	23			I				OK
25	005MSD	31	24			I				OK

000273

STL-NJ Instrument Log
VOA-GC/MS Department

MSJ
MSJLOG1.XLS
Revised 03/09/99

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Analyst/Date/seq. S. Mussey 10/22/99

Analytical Fractions ___VOA_____
Instrument ID ___MSJ_____
Tune File ____T_H.U

15:18 - 3:18

Calibration Standards

Standard	Lot #	Conc(ug/ml)	vol(ul)
BFB	VOAWS 0004BFB	25	2
CLP/624ISS	VOAWS	50	2
CLP MIX	VOAWS 0007CLP	50	2
WORK STD	VOAWS —	50	2
DICH/TRI	VOAWS —	50	5
8260 IS/SS	VOAWS 0002ISS	50	5
8260 Full	VOAWS 0032G	50	5
8260 Misc	VOAWS 0009M	100	2.5
8240 CR	VOAWS 0027AM	100	2.5
524.2ISS	VOAWS 0016AR	10	12.5/2.5*
524.2Vmix	VOAWS	25	12.5/2.5*

IS/RTLimits 600/500
IS#1 _____
RT _____
IS#2 _____
RT _____
IS#3 _____
RT _____

IS/RTLimits CLP/8260
IS#1 358262
RT 7.24
IS#2 586266
RT 13.11
IS#3 216608
RT 18.10

Reviewed By : GM
2nd Review : _____

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	COMMENTS
1	50 NG BFB	J2036	DI	2ul	—	I	—	—	8260	OK
2	VSTD050	37	1	5ml	1.0	I	8260BIES	TU		—
3	050	38	3			I				OK
4	9910 22J1	39	4	5g		I				—
5	9910 22T1	40	5			I				OK
6	VB LKB 5	41	6			I				OK
7	9UR7004	42	7			I				OK
8	007	43	8			I				OK
9	006	44	9			I				RR
10	002	45	10	2.5	2.0	I				OK Confirm S,A
11	009	47	11	5g	1.0	I				OK
12	010	48	12			I				OK
13	011	49	13			I				RR ISL
14	012	50	14			I				OK
15	013	51	15			I				LEAK
16	014	52	16			I				ISL
17	015	53	17			I				OK
18	016	54	18			I				BLEAK
19	017	55	19			I				OK
20	018	56	20			I				OK
21	025	57	21			I				OK
22	006	58	22			I				OK
23	009MS	59	23			I				Past time LEAK
24	009MSD	61	24			I				
25	008	45	25	1g	5X	I				OK

000274

STL-NJ Instrument Log

VOA-GC/MS Department

MSJ

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MSJLOG1.XLS

Revised 03/09/99

Analyst/Date/seq. S. [illegible] 10/26/99

Analytical Fractions ___ VOA _____

Instrument ID ___ MSJ _____

Tune File ___ T_H.U

Calibration Standards

Standard	Lot #	Conc(ug/ml)	vol(ul)
BFB	VOAWS 0004BFB	25	2
CLP/824ISS	VOAWS —	50	2
CLP MIX	VOAWS 0107 [illegible]	50	2
WORK STD	VOAWS —	50	2
DICH/TRI	VOAWS —	50	5
8260 IS/SS	VOAWS 0003TSS	50	5
8260 Full	VOAWS 0032G	50	5
8260 Misc	VOAWS 0009mis	100	2.5
8240 CR	VOAWS 0027ALL	50 ~~100~~ 50	2.5
524.2ISS	VOAWS 0016AL	~~50~~ 50	12.5/2.5*
524.2Vmix	VOAWS	25	12.5/2.5*

IS/RTLimits 600/500

IS#1 _____

RT _____

IS#2 _____

RT _____

IS#3 _____

RT _____

IS/RTLimits CLP/8260

IS#1 _____

RT _____

IS#2 _____

RT _____

IS#3 _____

RT _____

Reviewed By : _____

2nd Review : _____

#	LAB ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	LIST	PROTOCOL	COMMENTS
1	50 NG BFB	J020261	01	2ul	—	I —	—	—	8260	OK
2	VSTD 050	62	1	5ml	1.0	I	8260 6TWL	P/TA		OK
3	050	63	2			I				OK
4	991026J1	64	3	5g		I				OK
5	991026J1	65	4			I				OK
6	VBLKBS	66	5	5ml.		I				OK
7	94127011	67	6	5g		I		TCL		OK
8	013	68	7			I				RR TSI
9	014	69	8			I				RR TSI
10	016	70	9			I				RR TSI
11	94194001	71	10			I		BTEX		RR ~~[illegible]~~ OK confirms
12	001MS	72	11			I				OK "
13	001MSD	73	12			I				OK "
14	94127013	74	13			I				OK
15	014	75	14			I				OK
16	016	76	15			I				OK
17	014	77	16			I				OK use J2075
18	016	78	17			I				OK use J2076
19	Blank	79	18			I				OK
20	94194001	80	19			I				OK confirms
21	Blank	81	20			I				OK
22	94127013	82	21			I				OK use J2074
23	94231003	83	22	5g	5X	I				OK confirms TSI
24	003	84	23	5g	1.0	I				OK "
25						I				

000275

SEMIVOLATILES

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

000277

Lab Name: STL-NJ

Job No. : 94127

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	SBLK	62	53	37	25	42	52			0
02	SBLKBS	60	58	38	27	42	69			0
03	MW-7	72	68	44	33	53	60			0
04	MW-7MS	149 *	125 *	106	97 *	123 *	125 *			05
05	MW-7MSD	155 *	135 *	110	98 *	128 *	132 *			05
06	SW2-2-01	60	56	39	26	40	54			0
07	SW2-2-03	52	45	32 *	26	40	45			01
08	FB-101499	62	52	35	29	45	45			0
09	SW2-3-01	60	52	36	28	44	53			0
10										
11										
12										
13										
14										
15										
16										
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22										
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24										
25										
26										
27										
28										
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 QC limits.
D System Monitoring Compound diluted out

FORM II SV-1

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL-NJ

Job No. : 94127

Matrix Spike - Client Sample No.: MW-7

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	75	0	81	108	12-110
2-Chlorophenol	75	0	92	123	27-123
1,4-Dichlorobenzene	50	0	53	106	36-97
N-Nitroso-di-N-Prop.(1)	50	0	69	138*	41-116
1,2,4-Trichlorobenzene	50	0	62	124*	39-98
4-Chloro-3-Methylphenol	75	0	120	160*	23-97
Acenaphthene	50	0	62	124*	46-118
4-Nitrophenol	75	0	67	89*	10-80
2,4-Dinitrotoluene	75	0	47	63	24-96
Pentachlorophenol	75	0	73	97	9-103
Pyrene	50	0	57	114	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	75	81	108	0	35	12-110
2-Chlorophenol	75	94	125*	2	50	27-123
1,4-Dichlorobenzene	50	56	112*	6	27	36-97
N-Nitroso-di-N-Prop.(1)	50	77	154*	11	38	41-116
1,2,4-Trichlorobenzene	50	64	128*	3	23	39-98
4-Chloro-3-Methylphenol	75	120	160*	0	33	23-97
Acenaphthene	50	68	136*	9	19	46-118
4-Nitrophenol	75	71	95	6	50	10-80
2,4-Dinitrotoluene	75	52	69	9	47	24-96
Pentachlorophenol	75	77	103	6	47	9-103
Pyrene	50	57	114	0	36	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits.
RPD: 0 out of 11 outside limits
Spike Recovery: 11 out of 22 outside limits
COMMENTS:

WATER SEMIVOLATILE BLANK SPIKE RECOVERY

Lab Name: STL-NJ

Job No. : 94127

Matrix Spike - Client Sample No.: SBLKBS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	75	0	27	36	12-110
2-Chlorophenol	75	0	47	63	27-123
1,4-Dichlorobenzene	50	0	21	42	36-97
N-Nitroso-di-N-Prop.(1)	50	0	27	54	41-116
1,2,4-Trichlorobenzene	50	0	24	48	39-98
4-Chloro-3-Methylphenol	75	0	68	91	23-97
Acenaphthene	50	0	27	54	46-118
4-Nitrophenol	75	0	28	37	10-80
2,4-Dinitrotoluene	75	0	27	36	24-96
Pentachlorophenol	75	0	24	32	9-103
Pyrene	50	0	34	68	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits.

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

000280
SBLK

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: H0700

Lab Sample ID: SBLK

Instrument ID: MSH

Date Extracted: 10/20/99

Matrix: (soil/water) Water

Date Analyzed: 10/25/99

Level: (low/med) low

Time Analyzed: 13:51

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SBLKBS	SBLKBS	H0701	14:29
02	MW-7	94159005	H0706	17:37
03	MW-7MS	94159005MS	H0717	08:01
04	MW-7MSD	94159005MSD	H0718	08:32
05	SW2-2-01	94127019	H0727	14:05
06	SW2-2-03	94127020	H0728	14:44
07	FB-101499	94127021	H0729	15:21
08	SW2-3-01	94127026	H0730	16:00
09				
10				
11				
12				
13				
14				
15				
16				
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29				
30				

COMMENTS:

FORM IV SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: HH681 DFTPP Injection Date: 10/18/99

Instrument ID: MSH DFTPP Injection Time: 06:05

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	43.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	47.4
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	40.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0 of mass 198	16.6
365	Greater than 1.0% of mass 198	2.2
441	Present, but less than mass 443	7.5
442	Greater than 40.0% of mass 198	51.6
443	17.0 - 23.0% of mass 442	10.4 (20.2)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD080	H0496	10/18/99	07:16
02	SSTD010	SSTD010	H0497	10/18/99	07:54
03	SSTD050	SSTD050	H0498	10/18/99	08:25
04	SSTD100	SSTD100	H0499	10/18/99	08:58
05	SSTD120	SSTD120	H0500	10/18/99	09:35
06	SSTD160	SSTD160	H0501	10/18/99	10:06
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V SV

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: HH686 DFTPP Injection Date: 10/25/99

Instrument ID: MSH DFTPP Injection Time: 06:52

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	60.5
70	Less than 2.0% of mass 69	0.6 (0.9)1
127	40.0 - 60.0% of mass 198	44.8
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0 of mass 198	19.1
365	Greater than 1.0% of mass 198	3.1
441	Present, but less than mass 443	9.9
442	Greater than 40.0% of mass 198	65.2
443	17.0 - 23.0% of mass 442	12.5 (19.2)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD080	H0690	10/25/99	07:57
02	SBLK	SBLK	H0700	10/25/99	13:51
03	SBLKBS	SBLKBS	H0701	10/25/99	14:29
04	MW-7	94159005	H0706	10/25/99	17:37
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: HH687 DFTPP Injection Date: 10/26/99

Instrument ID: MSH DFTPP Injection Time: 06:35

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.8
68	Less than 2.0% of mass 69	0.2 (0.3)1
69	Mass 69 relative abundance	58.3
70	Less than 2.0% of mass 69	0.5 (0.8)1
127	40.0 - 60.0% of mass 198	45.1
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0 of mass 198	18.7
365	Greater than 1.0% of mass 198	2.7
441	Present, but less than mass 443	9.1
442	Greater than 40.0% of mass 198	61.5
443	17.0 - 23.0% of mass 442	12.0 (19.5)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD080	H0715	10/26/99	06:53
02	MW-7MS	94159005MS	H0717	10/26/99	08:01
03	MW-7MSD	94159005MSD	H0718	10/26/99	08:32
04	SW2-2-01	94127019	H0727	10/26/99	14:05
05	SW2-2-03	94127020	H0728	10/26/99	14:44
06	FB-101499	94127021	H0729	10/26/99	15:21
07	SW2-3-01	94127026	H0730	10/26/99	16:00
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V SV

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: (Standard): H0690 Date Analyzed: 10/25/99

Instrument ID: MSH Time Analyzed: 07:57

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	205578	6.38	503659	7.92	253720	10.24
	UPPER LIMIT	411156	6.88	1007318	8.42	507440	10.74
	LOWER LIMIT	102789	5.88	251830	7.42	126860	9.74
	EPA SAMPLE NO.						
01	SBLK	166712	6.39	379899	7.92	177632	10.24
02	SBLKBS	168142	6.40	397109	7.93	185252	10.24
03	MW-7	150175	6.40	348498	7.93	162682	10.24
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
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 values outside QC limits with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: (Standard): H0690 Date Analyzed: 10/25/99

Instrument ID: MSH Time Analyzed: 07:57

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	394981	12.25	373574	16.08	326782	19.55
	UPPER LIMIT	789962	12.75	747148	16.58	653564	20.05
	LOWER LIMIT	197490	11.75	186787	15.58	163391	19.05
	EPA SAMPLE NO.						
01	SBLK	244078	12.25	190845	16.07	205931	19.55
02	SBLKBS	256469	12.26	222161	16.09	220231	19.55
03	MW-7	233805	12.25	200593	16.08	198066	19.56
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
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 values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: (Standard): H0715 Date Analyzed: 10/26/99

Instrument ID: MSH Time Analyzed: 06:53

	IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
12 HOUR STD	220710	6.42	533809	7.95	269855	10.27
UPPER LIMIT	441420	6.92	1067618	8.45	539710	10.77
LOWER LIMIT	110355	5.92	266904	7.45	134928	9.77
EPA SAMPLE NO.						
MW-7MS	162682	6.42	373420	7.95	182146	10.27
MW-7MSD	148010	6.39	350909	7.93	171053	10.26
SW2-2-01	133183	6.43	318644	7.96	162072	10.27
SW2-2-03	140551	6.43	332272	7.96	172313	10.27
FB-101499	137550	6.43	324836	7.96	168685	10.27
SW2-3-01	132751	6.43	311624	7.96	164522	10.27

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 values outside QC limits with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-NJ

Job No. : 94127

Lab File ID: (Standard): H0715 Date Analyzed: 10/26/99

Instrument ID: MSH Time Analyzed: 06:53

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	423197	12.29	411143	16.12	336806	19.59
UPPER LIMIT	846394	12.79	822286	16.62	673612	20.09
LOWER LIMIT	211598	11.79	205572	15.62	168403	19.09
EPA SAMPLE NO.						
MW-7MS	261913	12.28	203306 *	16.11	204187	19.59
MW-7MSD	258049	12.28	218599	16.11	211582	19.60
SW2-2-01	251118	12.29	192894	16.12	187425	19.61
SW2-2-03	267333	12.29	214203	16.12	210845	19.61
FB-101499	258899	12.29	199713	16.12	195097	19.61
SW2-3-01	254453	12.29	203238	16.12	198531	19.61

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 values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM VIII SV-2

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 00238

SW2-2-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127019

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: H0727

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: _____ decanted: (Y/N) ___

Date Extracted: 10/20/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/26/99

Injection Volume: 1 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitrosodi-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	Bis(2-Chloroethoxy) Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SW2-2-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127019

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: H0727

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: _____ decanted: (Y/N) ___

Date Extracted: 10/20/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/26/99

Injection Volume: 1 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-Phenyl Ether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-Phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octylphthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

Quantitation Report

00290

Data File : C:\HPCHEM\1\DATA\102699\H0727.D
Acq On : 26 Oct 99 14:05 pm
Sample : MSH;;
Misc : 94127019;B;WG416 ;AQ;;;;LOW;
Quant Time: Oct 26 14:33 1999

Vial: 14
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 26 06:54:03 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.43	152	133183	40.00 ppb	0.03
20) Naphthalene-d8	7.96	136	318644	40.00 ppb	0.03
35) Acenaphthene-d10	10.27	164	162072	40.00 ppb	0.03
56) Phenanthrene-d10	12.29	188	251118	40.00 ppb	0.05
68) Chrysene-d12	16.12	240	192894	40.00 ppb	0.05
77) Perylene-d12	19.61	264	187425	40.00 ppb	0.07
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00 ppb	-4.46
88) Acenaphthene_d10B	10.27	164	162072	40.00 ppb	0.03
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00 ppb	-4.46

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol	5.00	112	145313	29.64 ppb	39.52%
5) Phenol-d5	6.02	99	161134	19.53 ppb	26.04%
9) 2-Chlorophenol-d4	6.21	132	141535	38.71 ppb	51.62%
13) 1,2-Dichlorobenzene-d4	6.65	152	63184	21.84 ppb	43.69%
21) Nitrobenzene-d5	7.09	82	203537	30.01 ppb	60.02%
39) 2-Fluorobiphenyl	9.32	172	160138	27.81 ppb	55.62%
59) 2,4,6-Tribromophenol	11.36	330	34969	40.62 ppb	54.16%
71) Terphenyl-d14	14.35	244	93617	19.67 ppb	39.34%

Target Compounds Qvalue

11/2/99

(#) = qualifier out of range (m) = manual integration

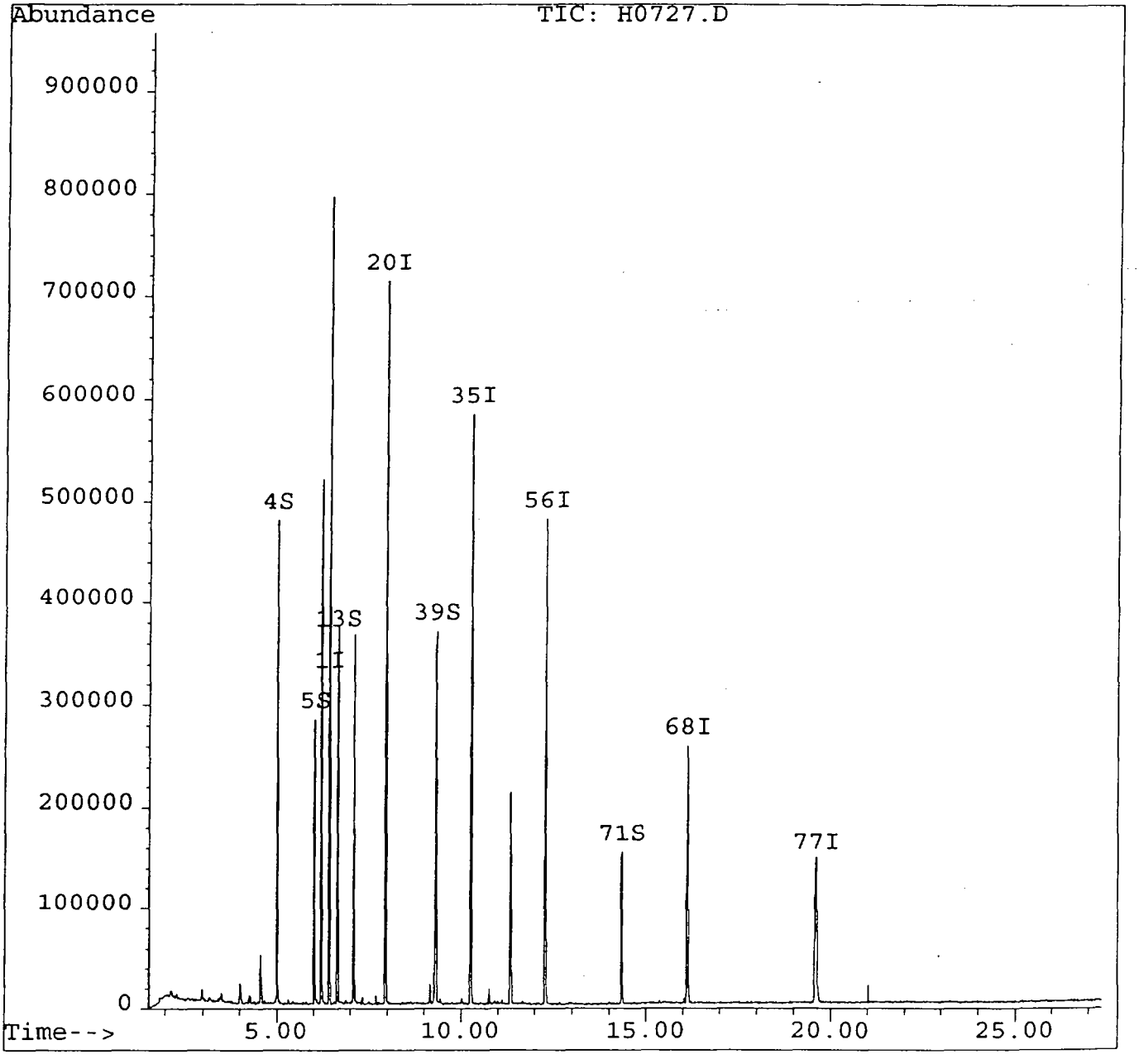
Quantitation Report

000291

Data File : C:\HPCHEM\1\DATA\102699\H0727.D
Acq On : 26 Oct 99 14:05 pm
Sample : MSH;;
Misc : 94127019;B;WG416 ;AQ;;;;LOW;
Quant Time: Oct 26 14:33 1999

Vial: 14
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Thu Oct 28 11:34:43 1999
Response via : Multiple Level Calibration



1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000292
SW2-2-03

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127020

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: H0728

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: _____ decanted: (Y/N) ___

Date Extracted: 10/20/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/26/99

Injection Volume: 1 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitrosodi-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	Bis(2-Chloroethoxy) Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000293
SW2-2-03

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127020

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: H0728

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: _____ decanted: (Y/N) ___

Date Extracted: 10/20/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/26/99

Injection Volume: 1 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-Phenyl Ether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-Phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octylphthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

Quantitation Report

00294

Data File : C:\HPCHEM\1\DATA\102699\H0728.D
Acq On : 26 Oct 99 14:44 pm
Sample : MSH;;
Misc : 94127020;B;WG416 ;AQ;;;;LOW;
Quant Time: Oct 26 15:12 1999

Vial: 15
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 26 06:54:03 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.43	152	140551	40.00 ppb	0.04
20) Naphthalene-d8	7.96	136	332272	40.00 ppb	0.04
35) Acenaphthene-d10	10.27	164	172313	40.00 ppb	0.04
56) Phenanthrene-d10	12.29	188	267333	40.00 ppb	0.05
68) Chrysene-d12	16.12	240	214203	40.00 ppb	0.05
77) Perylene-d12	19.61	264	210845	40.00 ppb	0.07
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00 ppb	-4.46
88) Acenaphthene_d10B	10.27	164	172313	40.00 ppb	0.04
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00 ppb	-4.46

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol	5.01	112	156651	30.28 ppb	40.37%
5) Phenol-d5	6.02	99	168278	19.33 ppb	25.77%
9) 2-Chlorophenol-d4	6.21	132	135560	35.13 ppb	46.85%
13) 1,2-Dichlorobenzene-d4	6.66	152	59194	19.39 ppb	38.78%
21) Nitrobenzene-d5	7.10	82	185116	26.18 ppb	52.35%
39) 2-Fluorobiphenyl	9.31	172	138357	22.60 ppb	45.20%
59) 2,4,6-Tribromophenol	11.35	330	31063	33.89 ppb	45.19%
71) Terphenyl-d14	14.34	244	84742	16.03 ppb	32.07%

Target Compounds	Qvalue

11/2/99

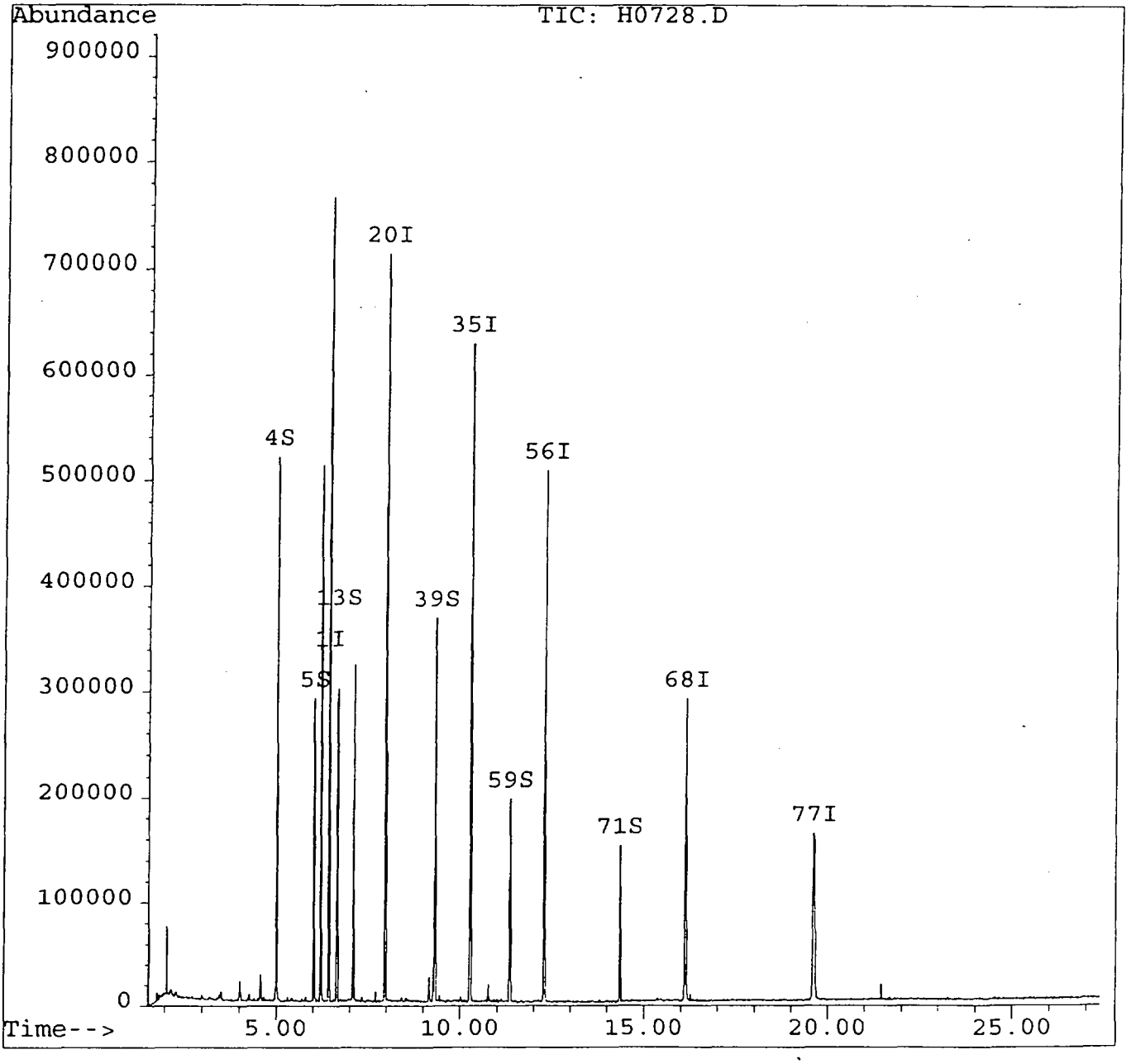
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102699\H0728.D
Acq On : 26 Oct 99 14:44 pm
Sample : MSH;;
Misc : 94127020;B;WG416 ;AQ;;;;LOW;
Quant Time: Oct 26 15:12 1999

Vial: 100295
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Thu Oct 28 11:34:43 1999
Response via : Multiple Level Calibration



1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FB-101499

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127021

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: H0729

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: _____ decanted: (Y/N) ___

Date Extracted: 10/20/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/26/99

Injection Volume: 1 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitrosodi-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	Bis(2-Chloroethoxy) Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FB-101499

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127021

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: H0729

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: _____ decanted: (Y/N) ___

Date Extracted: 10/20/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/26/99

Injection Volume: 1 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-Phenyl Ether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-Phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octylphthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

Quantitation Report

000298

Data File : C:\HPCHEM\1\DATA\102699\H0729.D
Acq On : 26 Oct 99 15:21 pm
Sample : MSH;;
Misc : 94127021;B;WG416 ;AQ;;;;LOW;
Quant Time: Oct 26 15:49 1999

Vial: 16
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 26 06:54:03 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.43	152	137550	40.00	ppb	0.04
20) Naphthalene-d8	7.96	136	324836	40.00	ppb	0.04
35) Acenaphthene-d10	10.27	164	168685	40.00	ppb	0.04
56) Phenanthrene-d10	12.29	188	258899	40.00	ppb	0.05
68) Chrysene-d12	16.12	240	199713	40.00	ppb	0.05
77) Perylene-d12	19.61	264	195097	40.00	ppb	0.07
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00	ppb	-4.46
88) Acenaphthene_d10B	10.27	164	168685	40.00	ppb	0.04
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00	ppb	-4.46

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	5.00	112	171930	33.96	ppb	45.28%
5) Phenol-d5	6.02	99	185798	21.81	ppb	29.07%
9) 2-Chlorophenol-d4	6.21	132	147781	39.14	ppb	52.18%
13) 1,2-Dichlorobenzene-d4	6.65	152	68023	22.77	ppb	45.54%
21) Nitrobenzene-d5	7.09	82	213541	30.89	ppb	61.77%
39) 2-Fluorobiphenyl	9.32	172	154675	25.81	ppb	51.61%
59) 2,4,6-Tribromophenol	11.35	330	29838	33.62	ppb	44.82%
71) Terphenyl-d14	14.35	244	86279	17.51	ppb	35.02%

Target Compounds Qvalue

11/12/99

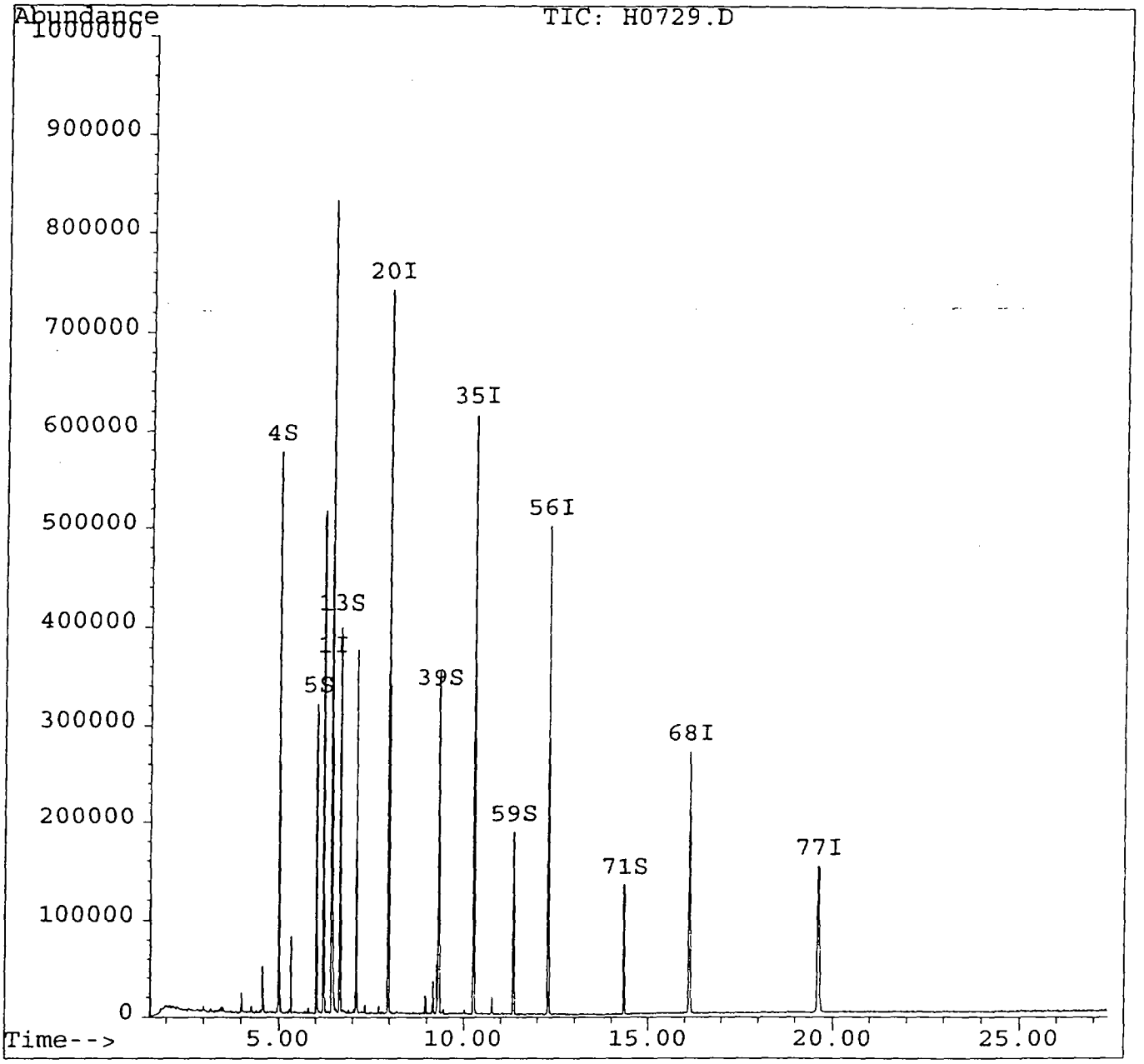
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102699\H0729.D
Acq On : 26 Oct 99 15:21 pm
Sample : MSH;;
Misc : 94127021;B;WG416 ;AQ;;;;LOW;
Quant Time: Oct 26 15:49 1999

Vial: 10299
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Thu Oct 28 11:34:43 1999
Response via : Multiple Level Calibration



1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000300

SW2-3-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127026

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: H0730

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: _____ decanted: (Y/N) ___

Date Extracted: 10/20/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/26/99

Injection Volume: 1 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitrosodi-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	Bis(2-Chloroethoxy) Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SW2-3-01

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: 94127026

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: H0730

Level: (low/med) LOW

Date Received: 10/14/99

% Moisture: _____ decanted: (Y/N) ___

Date Extracted: 10/20/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/26/99

Injection Volume: 1 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-Phenyl Ether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-Phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octylphthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

Quantitation Report

000302

Data File : C:\HPCHEM\1\DATA\102699\H0730.D
Acq On : 26 Oct 99 16:00 pm
Sample : MSH;;
Misc : 94127026;B;WG416 ;AQ;;;;LOW;
Quant Time: Oct 26 16:28 1999

Vial: 17
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 26 06:54:03 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.43	152	132751	40.00 ppb	0.04
20) Naphthalene-d8	7.96	136	311624	40.00 ppb	0.04
35) Acenaphthene-d10	10.27	164	164522	40.00 ppb	0.04
56) Phenanthrene-d10	12.29	188	254453	40.00 ppb	0.05
68) Chrysene-d12	16.12	240	203238	40.00 ppb	0.05
77) Perylene-d12	19.61	264	198531	40.00 ppb	0.07
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00 ppb	-4.46
88) Acenaphthene_d10B	10.27	164	164522	40.00 ppb	0.04
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00 ppb	-4.46

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol	5.01	112	160997	32.95 ppb	43.93%
5) Phenol-d5	6.02	99	174687	21.24 ppb	28.32%
9) 2-Chlorophenol-d4	6.21	132	144752	39.72 ppb	52.96%
13) 1,2-Dichlorobenzene-d4	6.66	152	63103	21.89 ppb	43.78%
21) Nitrobenzene-d5	7.10	82	199600	30.09 ppb	60.19%
39) 2-Fluorobiphenyl	9.31	172	151018	25.83 ppb	51.67%
59) 2,4,6-Tribromophenol	11.35	330	34621	39.69 ppb	52.92%
71) Terphenyl-d14	14.34	244	90976	18.14 ppb	36.28%

Target Compounds Qvalue

11/2/99

(#) = qualifier out of range (m) = manual integration

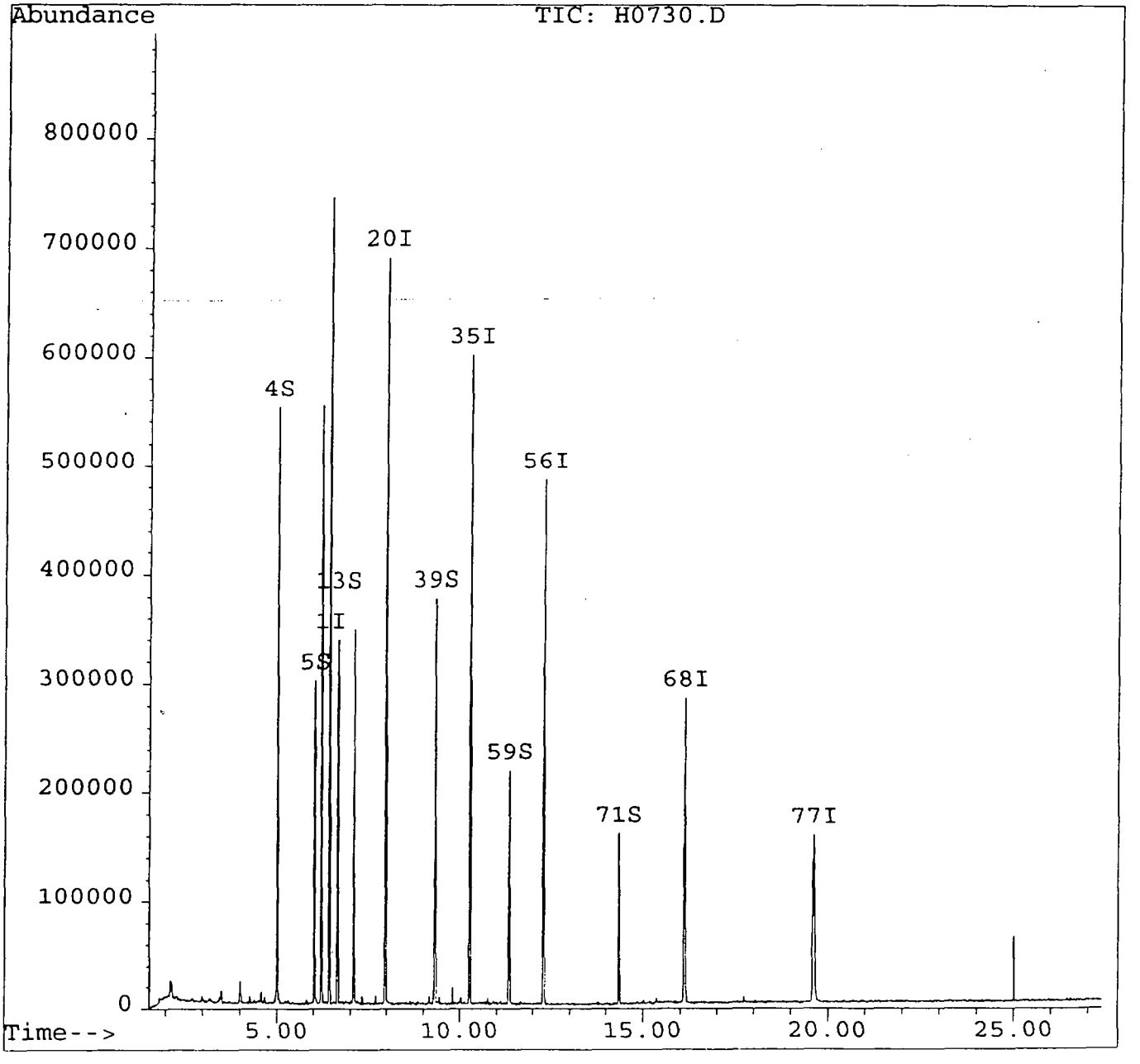
Quantitation Report

000303

Data File : C:\HPCHEM\1\DATA\102699\H0730.D
Acq On : 26 Oct 99 16:00 pm
Sample : MSH;;
Misc : 94127026;B;WG416 ;AQ;;;;LOW;
Quant Time: Oct 26 16:28 1999

Vial: 17
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Thu Oct 28 11:34:43 1999
Response via : Multiple Level Calibration



Response Factor Report 5972-BNA3

000304

AUG RF 11.77

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:50:45 1999
Response via : Initial Calibration

Calibration Files

10	=H0497.D	50	=H0498.D	80	=H0496.D
100	=H0499.D	120	=H0500.D	160	=H0501.D

		Compound	10	50	80	100	120	160	Avg	%RS
1)	I	1,4-Dichlorobenzene-d	ISTD							
2)	T	N-Nitrosodimethylam	1.681	1.633	1.478	1.559	1.502	1.444	1.549	5.9
3)		Pyridine	2.273	2.478	2.263	2.299	2.344	2.343	2.333	3.3
4)	S	2-Fluorophenol	1.378	1.456	1.435	1.459	1.499	1.607	1.472	5.2
5)	S	Phenol-d5	2.423	2.480	2.355	2.487	2.569	2.552	2.478	3.2
6)	C	Phenol	2.888	2.901	2.695	2.843	3.032	2.952	2.885	3.9
7)		bis(2-Chloroethyl)e	1.929	2.538	2.095	2.044	2.308	2.283	2.200	10.0
8)		2-Chlorophenol	1.007	1.116	1.166	1.184	1.225	1.432	1.188	11.8
9)	S	2-Chlorophenol-d4	0.943	1.032	1.063	1.090	1.130	1.331	1.098	11.9
10)		1,3-Dichlorobenzene	1.257	1.329	1.324	1.381	1.419	1.603	1.386	8.6
11)	C	1,4-Dichlorobenzene	1.332	1.334	1.413	1.424	1.476	1.667	1.441	8.6
12)		Benzyl alcohol	0.897	0.916	0.892	0.960	0.969	0.985	0.937	4.2
13)	S	1,2-Dichlorobenzene	0.760	0.794	0.851	0.860	0.936	1.012	0.869	10.6
14)		1,2-Dichlorobenzene	1.195	1.264	1.319	1.355	1.560	1.717	1.402	14.1
15)		2-Methylphenol	1.316	1.297	1.245	1.342	1.363	1.387	1.325	3.8
16)		bis(2-chloroisoprop	2.895	2.920	2.634	2.892	2.884	2.860	2.847	3.7
17)		4-Methylphenol	1.221	1.235	1.194	1.302	1.331	1.324	1.268	4.6
18)	P	n-Nitroso-di-n-prop	1.165	1.198	1.095	1.205	1.181	1.168	1.169	3.3
19)		Hexachloroethane	0.622	0.670	0.655	0.679	0.702	0.726	0.676	5.3
20)	I	Naphthalene-d8	ISTD							
21)	S	Nitrobenzene-d5	0.827	0.839	0.862	0.851	0.860	0.870	0.851	1.8
22)		Nitrobenzene	0.801	0.787	0.808	0.787	0.790	0.812	0.797	1.4
23)		Isophorone	1.564	1.607	1.603	1.617	1.601	1.627	1.603	1.3
24)	C	2-Nitrophenol	0.181	0.208	0.219	0.216	0.230	0.288	0.224	15.9
25)		2,4-Dimethylphenol	0.536	0.590	0.618	0.603	0.642	0.742	0.622	11.0
26)		bis(2-Chloroethoxy)	1.024	1.035	1.044	1.059	1.054	1.070	1.047	1.6
27)	C	2,4-Dichlorophenol	0.292	0.315	0.342	0.340	0.350	0.366	0.334	7.8
28)		Benzoic Acid	0.339	0.351	0.384	0.373	0.399	0.499	0.391	14.6
29)		1,2,4-Trichlorobenz	0.340	0.371	0.395	0.394	0.410	0.434	0.391	8.2
30)		Naphthalene	0.948	1.020	1.061	1.053	1.076	1.143	1.050	6.1
31)		4-Chloroaniline	0.358	0.381	0.401	0.425	0.419	0.445	0.405	7.8
32)	C	Hexachlorobutadiene	0.212	0.225	0.243	0.243	0.249	0.260	0.239	7.1
33)	C	4-Chloro-3-methylph	0.359	0.383	0.408	0.431	0.447	0.462	0.415	9.4
34)		2-Methylnaphthalene	0.535	0.584	0.627	0.632	0.656	0.695	0.621	8.9
35)	I	Acenaphthene-d10	ISTD							
36)	P	Hexachlorocyclopent	0.337	0.422	0.458	0.487	0.496	0.553	0.459	16.1
37)	C	2,4,6-Trichlorophen	0.425	0.463	0.481	0.492	0.508	0.538	0.485	8.0
38)		2,4,5-Trichlorophen	0.457	0.459	0.473	0.522	0.546	0.595	0.509	10.8

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:50:45 1999
Response via : Initial Calibration

Calibration Files

10	=H0497.D	50	=H0498.D	80	=H0496.D
100	=H0499.D	120	=H0500.D	160	=H0501.D

		Compound	10	50	80	100	120	160	Avg	%RS
39)	S	2-Fluorobiphenyl	1.224	1.332	1.353	1.461	1.505	1.652	1.421	10.5
40)		2-Chloronaphthalene	1.066	1.137	1.160	1.237	1.262	1.371	1.205	8.8
41)		2-Nitroaniline	0.470	0.538	0.520	0.573	0.577	0.612	0.548	9.1
42)		Dimethylphthalate	1.139	1.246	1.252	1.415	1.427	1.544	1.337	11.1
43)		Acenaphthylene	1.765	2.114	2.185	2.445	2.507	2.968	2.331	17.5
44)		2,6-Dinitrotoluene	0.220	0.266	0.271	0.301	0.304	0.330	0.282	13.6
45)		3-Nitroaniline	0.214	0.267	0.265	0.305	0.308	0.325	0.281	14.4
46)	C	Acenaphthene	0.959	1.106	1.137	1.272	1.309	1.377	1.193	12.9
47)	P	2,4-Dinitrophenol		0.119	0.133	0.183	0.200	0.228	0.173	26.5
48)	P	4-Nitrophenol	0.187	0.255	0.236	0.290	0.308	0.322	0.266	18.9
49)		Dibenzofuran	1.286	1.496	1.557	1.787	1.830	1.959	1.652	15.1
50)		2,4-Dinitrotoluene	0.253	0.367	0.379	0.486	0.501	0.536	0.420	25.4
51)		Diethylphthalate	0.994	1.115	1.199	1.394	1.395	1.521	1.270	15.7
52)		Fluorene	0.927	1.091	1.123	1.269	1.287	1.414	1.185	14.5
53)	T	1,2- Diphenyl hydra	2.391	2.686	2.593	2.879	2.888	2.975	2.735	8.0
54)		4-Chlorophenyl-phen	0.552	0.662	0.673	0.754	0.761	0.828	0.705	13.7
55)		4-Nitroaniline	0.202	0.249	0.235	0.308	0.309	0.324	0.271	18.2
56)	I	Phenanthrene-d10	----------ISTD----------							
57)		4,6-Dinitro-2-methy		0.139	0.154	0.188	0.200	0.214	0.179	17.4
58)	C	n-Nitrosodiphenylam	0.441	0.531	0.539	0.588	0.608	0.648	0.559	12.9
59)	S	2,4,6-Tribromopheno	0.109	0.126	0.136	0.142	0.148	0.161	0.137	13.2
60)		4-Bromophenyl-pheny	0.201	0.233	0.254	0.258	0.268	0.291	0.251	12.3
61)		Hexachlorobenzene	0.219	0.242	0.265	0.280	0.292	0.316	0.269	12.9
62)		Carbazole	0.683	0.811	0.813	0.980	1.021	1.086	0.899	17.1
63)	C	Pentachlorophenol		0.121	0.137	0.151	0.161	0.182	0.151	15.3
64)		Phenanthrene	0.877	1.032	1.010	1.145	1.164	1.265	1.082	12.6
65)		Anthracene	0.793	0.947	1.025	1.111	1.140	1.232	1.041	14.9
66)		Di-n-butylphthalate	0.915	1.109	1.238	1.379	1.477	1.624	1.290	19.9
67)	C	Fluoranthene	0.798	0.994	1.031	1.261	1.335	1.406	1.138	20.5
68)	I	Chrysene-d12	----------ISTD----------							
69)	T	Benzidine	0.244	0.309	0.086	0.338	0.344	0.362	0.280	37.1
70)		Pyrene	1.092	1.150	1.248	1.305	1.335	1.425	1.259	9.7
71)	S	Terphenyl-d14	0.774	0.890	0.979	1.052	1.086	1.141	0.987	13.8
72)		Butylbenzylphthalat	0.445	0.513	0.546	0.593	0.598	0.652	0.558	13.0
73)		Benzo[a]anthracene	0.974	1.064	1.129	1.179	1.225	1.278	1.142	9.7
74)		3,3'-Dichlorobenzid	0.334	0.391	0.363	0.440	0.454	0.491	0.412	14.4
75)		Chrysene	0.925	1.033	1.052	1.120	1.129	1.224	1.080	9.4
76)		bis(2-Ethylhexyl)ph	0.649	0.761	0.823	0.876	0.915	0.984	0.835	14.1
77)	I	Perylene-d12	----------ISTD----------							

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:50:45 1999
Response via : Initial Calibration

Calibration Files

10	=H0497.D	50	=H0498.D	80	=H0496.D
100	=H0499.D	120	=H0500.D	160	=H0501.D

		Compound	10	50	80	100	120	160	Avg	%RS
78)		Dibenzo(a,h)acridin							0.000	-1.0
79)	C	Di-n-octylphthalate	1.072	1.357	1.479	1.907	1.990	2.186	1.665	25.7
80)		Benzo[b]fluoranthen	1.080	1.131	1.299	1.447	1.404	1.523	1.314	13.5
81)		Benzo[k]fluoranthen	1.149	1.344	1.227	1.485	1.629	1.701	1.422	15.5
82)	C	Benzo[a]pyrene	0.941	1.124	1.151	1.275	1.298	1.415	1.201	13.7
83)		Indeno[1,2,3-cd]pyr	1.182	1.434	1.562	1.553	1.593	1.704	1.505	11.9
84)		Dibenz[a,h]anthrace	1.008	1.204	1.317	1.346	1.384	1.483	1.290	12.8
85)		Benzo[g,h,i]perylen	1.094	1.204	1.277	1.316	1.328	1.399	1.270	8.4
86)		1,4-Dichlorobenzene-d	----------ISTD----------							
87)		Aniline							0.000	-1.0
88)		Acenaphthene_d10B	----------ISTD----------							
89)		caprolactam							0.000	-1.0
90)		Biphenyl							0.000	-1.0
91)		Diphenyl Ether							0.000	-1.0
92)		1,2-Dimethylnaphtha	0.995	1.232	1.306	1.486	1.529	1.868	1.403	21.2
93)		1,4-Dichlorobenzene-d	----------ISTD----------							
94)		Isobutyric Acid							0.000	-1.0
95)		Methacrylic Acid							0.000	-1.0

(#) = Out of Range

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0496.d
Acq On : 18 Oct 99 7:16 am
Sample : MSH;SSTD080;
Misc : SSTD080;
Quant Time: Oct 18 10:47 1999

Vial: 000307
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 09:49:10 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.44	152	237589	40.00	ppb	0.00
20) Naphthalene-d8	7.97	136	556380	40.00	ppb	0.00
35) Acenaphthene-d10	10.28	164	288972	40.00	ppb	0.00
56) Phenanthrene-d10	12.30	188	391224	40.00	ppb	0.00
68) Chrysene-d12	16.13	240	317246	40.00	ppb	0.00
77) Perylene-d12	19.63	264	282269	40.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00	ppb	-4.46
88) Acenaphthene_d10B	10.28	164	288972	40.00	ppb	0.00
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00	ppb	-4.46

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	5.03	112	682100	80.00	ppb	106.66%
5) Phenol-d5	6.04	99	1119123	80.00	ppb	106.66%
9) 2-Chlorophenol-d4	6.23	132	505104	80.00	ppb	106.66%
13) 1,2-Dichlorobenzene-d4	6.67	152	404307	136.13	ppb	272.26%
21) Nitrobenzene-d5	7.10	82	959130	80.00	ppb	160.00%
39) 2-Fluorobiphenyl	9.32	172	781851	80.00	ppb	160.00%
59) 2,4,6-Tribromophenol	11.36	330	106660	80.00	ppb	106.67%
71) Terphenyl-d14	14.35	244	621276	80.00	ppb	160.00%

Target Compounds							Qvalue
2) N-Nitrosodimethylamine	3.12	42	702263	80.00	ppb	#	81
3) Pyridine	3.13	79	1075350	80.00	ppb	#	64
6) Phenol	6.05	94	1280385	80.00	ppb		86
7) bis(2-Chloroethyl)ether	6.13	93	995356	80.00	ppb		94
8) 2-Chlorophenol	6.24	128	554278	80.00	ppb	#	69
10) 1,3-Dichlorobenzene	6.40	146	629346	80.00	ppb		96
11) 1,4-Dichlorobenzene	6.45	146	671601	80.00	ppb		98
12) Benzyl alcohol	6.59	108	424036	80.00	ppb	#	49
14) 1,2-Dichlorobenzene	6.68	146	626769	80.00	ppb		97
15) 2-Methylphenol	6.71	108	591535	80.00	ppb		91
16) bis(2-chloroisopropyl)ethe	6.75	45	1251419	80.00	ppb		58
17) 4-Methylphenol	6.87	108	567478	80.00	ppb		89
18) n-Nitroso-di-n-propylamine	6.90	70	520244	80.00	ppb	#	68
19) Hexachloroethane	7.05	117	311209	80.00	ppb		91
22) Nitrobenzene	7.13	77	898978	80.00	ppb	#	59
23) Isophorone	7.38	82	1783724	80.00	ppb		63
24) 2-Nitrophenol	7.51	139	243252	80.00	ppb	#	58
25) 2,4-Dimethylphenol	7.50	107	687293	80.00	ppb	#	67
26) bis(2-Chloroethoxy)methane	7.60	93	1161528	80.00	ppb		87
27) 2,4-Dichlorophenol	7.78	162	380115	80.00	ppb	#	80

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0496.d
Acq On : 18 Oct 99 7:16 am
Sample : MSH;SSTD080;
Misc : SSTD080;
Quant Time: Oct 18 10:47 1999

Vial: 2 000308
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 09:49:10 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
28)	Benzoic Acid	7.50	122	427126	80.00	ppb		60
29)	1,2,4-Trichlorobenzene	7.90	180	439101	80.00	ppb		96
30)	Naphthalene	7.99	128	1180275	80.00	ppb		84
31)	4-Chloroaniline	8.04	127	445827	80.00	ppb		100
32)	Hexachlorobutadiene	8.18	225	270764	80.00	ppb		98
33)	4-Chloro-3-methylphenol	8.60	107	454286	80.00	ppb	#	59
34)	2-Methylnaphthalene	8.86	142	697949	80.00	ppb		97
36)	Hexachlorocyclopentadiene	9.13	237	264889	80.00	ppb		99
37)	2,4,6-Trichlorophenol	9.24	196	277822	80.00	ppb		98
38)	2,4,5-Trichlorophenol	9.30	196	273166	80.00	ppb		96
40)	2-Chloronaphthalene	9.51	162	670394	80.00	ppb		91
41)	2-Nitroaniline	9.66	65	300691	80.00	ppb	#	42
42)	Dimethylphthalate	9.87	163	723431	80.00	ppb		99
43)	Acenaphthylene	10.08	152	1262911	80.00	ppb		92
44)	2,6-Dinitrotoluene	10.00	165	156706	345.60	ppb	m	37
45)	3-Nitroaniline	10.20	138	152893	80.00	ppb	m	86
46)	Acenaphthene	10.33	153	657308	80.00	ppb		96
47)	2,4-Dinitrophenol	10.34	184	76645	80.00	ppb	#	4
48)	4-Nitrophenol	10.37	109	136372	80.00	ppb	#	57
49)	Dibenzofuran	10.53	168	899770	80.00	ppb		92
50)	2,4-Dinitrotoluene	10.53	165	218764	80.00	ppb	#	1
51)	Diethylphthalate	10.81	149	693144	80.00	ppb		99
52)	Fluorene	11.01	166	648962	80.00	ppb		96
53)	1,2- Diphenyl hydrazine	11.17	77	1498545	80.00	ppb		86
54)	4-Chlorophenyl-phenylether	10.95	204	388704	80.00	ppb		77
55)	4-Nitroaniline	11.04	138	135732	80.00	ppb	#	25
57)	4,6-Dinitro-2-methylphenol	11.10	198	120782	80.00	ppb		100
58)	n-Nitrosodiphenylamine	11.11	169	421479	80.00	ppb		90
60)	4-Bromophenyl-phenylether	11.62	248	199091	80.00	ppb	#	79
61)	Hexachlorobenzene	11.87	284	207152	80.00	ppb		89
62)	Carbazole	12.59	167	635784	80.00	ppb		96
63)	Pentachlorophenol	12.10	266	107153	80.00	ppb		96
64)	Phenanthrene	12.34	178	790621	80.00	ppb		98
65)	Anthracene	12.40	178	802317	80.00	ppb		98
66)	Di-n-butylphthalate	12.96	149	968646	80.00	ppb		94
67)	Fluoranthene	13.93	202	806758	80.00	ppb		68
69)	Benzidine	14.03	184	54266	99.08	ppb	m	98
70)	Pyrene	14.25	202	792155	80.00	ppb		73
72)	Butylbenzylphthalate	15.02	149	346511	80.00	ppb	#	1
73)	Benzo[a]anthracene	16.10	228	716216	80.00	ppb		98
74)	3,3'-Dichlorobenzidine	15.98	252	230187	80.00	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0496.d
Acq On : 18 Oct 99 7:16 am
Sample : MSH;SSTD080;
Misc : SSTD080;
Quant Time: Oct 18 10:47 1999

Vial: 2 000309
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 09:49:10 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
75) Chrysene	16.18	228	667245	80.00 ppb		100
76) bis(2-Ethylhexyl)phthalate	15.91	149	522352	80.00 ppb		94
78) Dibenzo(a,h)acridine	23.45	279	171892	80.00 ppb		97
79) Di-n-octylphthalate	17.13	149	835054	80.00 ppb		99
80) Benzo[b]fluoranthene	18.54	252	733350	80.00 ppb		96
81) Benzo[k]fluoranthene	18.60	252	692424	80.00 ppb		97
82) Benzo[a]pyrene	19.48	252	650043	80.00 ppb		98
83) Indeno[1,2,3-cd]pyrene	23.44	276	881635	80.00 ppb		87
84) Dibenz[a,h]anthracene	23.45	278	743665	80.00 ppb		96
85) Benzo[g,h,i]perylene	24.55	276	720826	80.00 ppb		90
87) Aniline	0.00	93		Not Detected		
89) caprolactam	7.97	55	5147	80.00 ppb	#	1
90) Biphenyl	0.00	154		No Calib		
91) Diphenyl Ether	9.32	170	185560	80.00 ppb		100
92) 1,2-Dimethylnaphthalene	10.08	141	754642	80.00 ppb		91
94) Isobutyric Acid	0.00	43		No Calib	#	
95) Methacrylic Acid	0.00	41		No Calib	#	

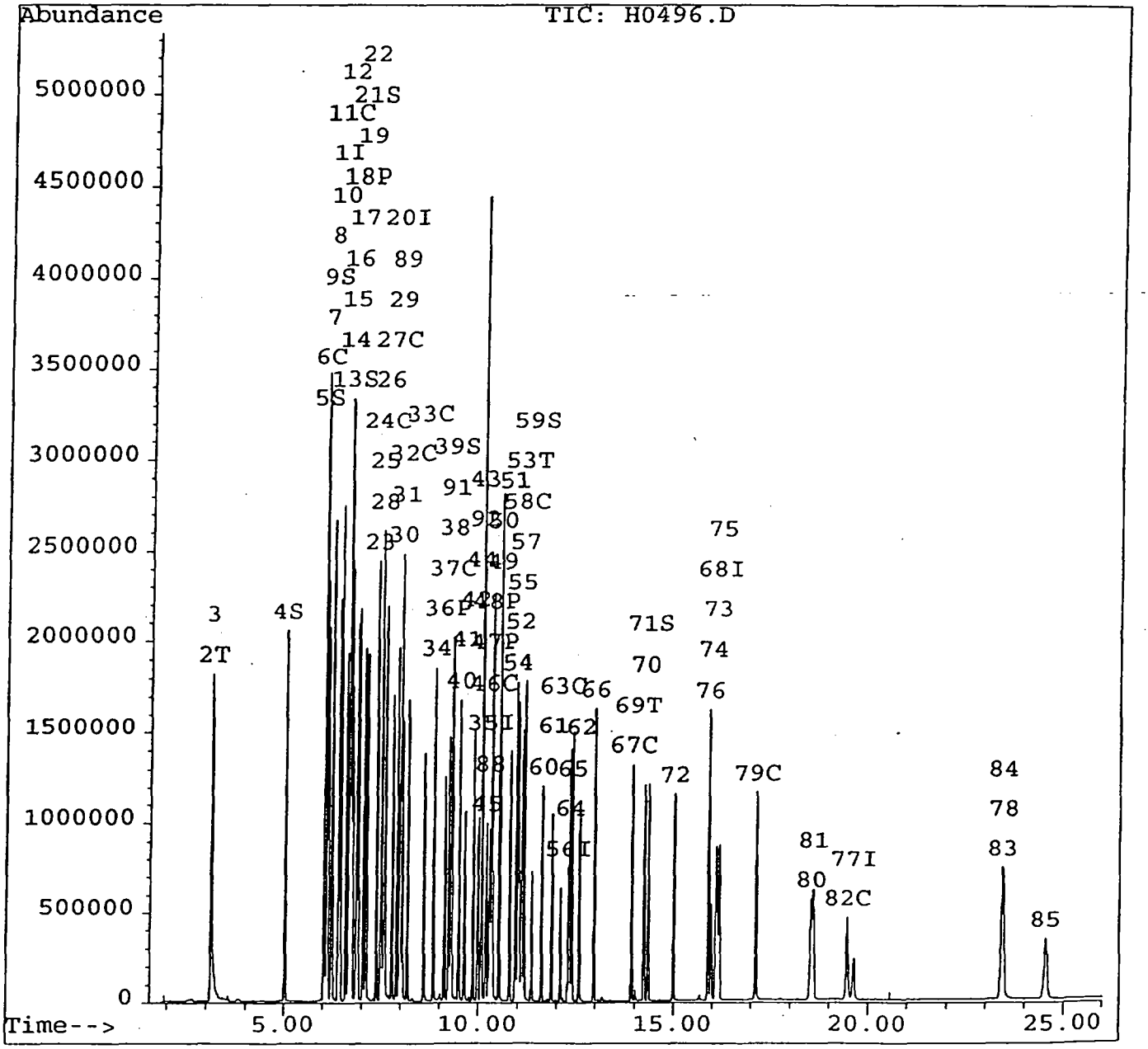
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0496.d
Acq On : 18 Oct 99 7:16 am
Sample : MSH;SSTD080;
Misc : SSTD080;
Quant Time: Oct 18 10:47 1999

Vial: 02
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:50:45 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101899\h0497.d
Acq On : 18 Oct 99 7:54 am
Sample : MSH;SSTD010;
Misc : SSTD010;
Quant Time: Oct 18 10:45 1999

Vial: 3
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

000311

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 09:49:10 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.44	152	252988	40.00	ppb	0.00
20) Naphthalene-d8	7.97	136	641098	40.00	ppb	0.00
35) Acenaphthene-d10	10.28	164	305261	40.00	ppb	0.00
56) Phenanthrene-d10	12.30	188	417387	40.00	ppb	0.00
68) Chrysene-d12	16.13	240	299135	40.00	ppb	0.00
77) Perylene-d12	19.63	264	281901	40.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00	ppb	-4.46
88) Acenaphthene_d10B	10.28	164	305261	40.00	ppb	0.00
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00	ppb	-4.46

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	5.03	112	87164	9.60	ppb	12.80%
5) Phenol-d5	6.02	99	153243	10.29	ppb	13.72%
9) 2-Chlorophenol-d4	6.21	132	59617	8.87	ppb	11.82%
13) 1,2-Dichlorobenzene-d4	6.66	152	48037	15.19	ppb	30.38%
21) Nitrobenzene-d5	7.10	82	132563	9.60	ppb	19.19%
39) 2-Fluorobiphenyl	9.32	172	93441	9.05	ppb	18.10%
59) 2,4,6-Tribromophenol	11.36	330	11337	7.97	ppb	10.63%
71) Terphenyl-d14	14.35	244	57887	7.91	ppb	15.81%

Target Compounds							Qvalue
2) N-Nitrosodimethylamine	3.12	42	106321	11.37	ppb	#	83
3) Pyridine	3.16	79	143767	10.04	ppb		71
6) Phenol	6.05	94	182680	10.72	ppb		81
7) bis(2-Chloroethyl)ether	6.13	93	121984	9.21	ppb		91
8) 2-Chlorophenol	6.24	128	63689	8.63	ppb	#	60
10) 1,3-Dichlorobenzene	6.40	146	79508	9.49	ppb		98
11) 1,4-Dichlorobenzene	6.45	146	84231	9.42	ppb		98
12) Benzyl alcohol	6.58	108	56749	10.05	ppb	#	34
14) 1,2-Dichlorobenzene	6.68	146	75582	9.06	ppb		99
15) 2-Methylphenol	6.70	108	83202	10.57	ppb		91
16) bis(2-chloroisopropyl)ethe	6.75	45	183114	10.99	ppb		54
17) 4-Methylphenol	6.85	108	77221	10.22	ppb		91
18) n-Nitroso-di-n-propylamine	6.90	70	73678	10.64	ppb	#	60
19) Hexachloroethane	7.04	117	39370	9.50	ppb		94
22) Nitrobenzene	7.11	77	128340	9.91	ppb	#	51
23) Isophorone	7.38	82	250630	9.76	ppb		62
24) 2-Nitrophenol	7.51	139	29067	8.30	ppb		61
25) 2,4-Dimethylphenol	7.48	107	85872	8.67	ppb	#	60
26) bis(2-Chloroethoxy)methane	7.59	93	164063	9.81	ppb		84
27) 2,4-Dichlorophenol	7.78	162	46874	8.56	ppb	#	78

(#) = qualifier out of range (m) = manual integration

Quantitation Report

000312

Data File : c:\hpchem\1\data\101899\h0497.d
Acq On : 18 Oct 99 7:54 am
Sample : MSH;SSTD010;
Misc : SSTD010;
Quant Time: Oct 18 10:45 1999

Vial: 3
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 09:49:10 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
28) Benzoic Acid	7.48	122	54404	8.84	ppb	#	42
29) 1,2,4-Trichlorobenzene	7.90	180	54560	8.63	ppb		92
30) Naphthalene	7.99	128	151940	8.94	ppb		87
31) 4-Chloroaniline	8.04	127	57331	8.93	ppb		96
32) Hexachlorobutadiene	8.17	225	34011	8.72	ppb		89
33) 4-Chloro-3-methylphenol	8.60	107	57553	8.80	ppb	#	62
34) 2-Methylnaphthalene	8.85	142	85744	8.53	ppb		100
36) Hexachlorocyclopentadiene	9.13	237	25684	7.34	ppb		98
37) 2,4,6-Trichlorophenol	9.24	196	32443	8.84	ppb		96
38) 2,4,5-Trichlorophenol	9.30	196	34893	9.67	ppb		100
40) 2-Chloronaphthalene	9.50	162	81387	9.19	ppb		93
41) 2-Nitroaniline	9.64	65	35865	9.03	ppb	#	38
42) Dimethylphthalate	9.87	163	86909	9.10	ppb		97
43) Acenaphthylene	10.08	152	134685	8.08	ppb		92
44) 2,6-Dinitrotoluene	9.99	165	16752	34.97	ppb	m	40
45) 3-Nitroaniline	10.19	138	16315	8.08	ppb	m	67
46) Acenaphthene	10.32	153	73218	8.44	ppb		94
47) 2,4-Dinitrophenol	10.33	184	4141	4.09	ppb	#	1
48) 4-Nitrophenol	10.35	109	14295	7.94	ppb	#	50
49) Dibenzofuran	10.53	168	98117	8.26	ppb		90
50) 2,4-Dinitrotoluene	10.52	165	19271	6.67	ppb	#	1
51) Diethylphthalate	10.79	149	75891	8.29	ppb		98
52) Fluorene	11.01	166	70781	8.26	ppb		98
53) 1,2- Diphenyl hydrazine	11.16	77	182478	9.22	ppb	#	85
54) 4-Chlorophenyl-phenylether	10.95	204	42148	8.21	ppb		75
55) 4-Nitroaniline	11.03	138	15422	8.60	ppb	#	15
57) 4,6-Dinitro-2-methylphenol	11.09	198	8201	5.09	ppb		100
58) n-Nitrosodiphenylamine	11.10	169	46031	8.19	ppb		86
60) 4-Bromophenyl-phenylether	11.61	248	20972	7.90	ppb	#	78
61) Hexachlorobenzene	11.87	284	22830	8.26	ppb		79
62) Carbazole	12.57	167	71306	8.41	ppb	m	97
63) Pentachlorophenol	12.10	266	8879	6.21	ppb		95
64) Phenanthrene	12.32	178	91477	8.68	ppb		98
65) Anthracene	12.38	178	82789	7.74	ppb		99
66) Di-n-butylphthalate	12.96	149	95494	7.39	ppb		94
67) Fluoranthene	13.92	202	83278	7.74	ppb		69
69) Benzidine	14.02	184	18256	35.35	ppb		97
70) Pyrene	14.24	202	81632	8.74	ppb		80
72) Butylbenzylphthalate	15.00	149	33258	8.14	ppb	#	1
73) Benzo[a]anthracene	16.09	228	72850	8.63	ppb		99
74) 3,3'-Dichlorobenzidine	15.98	252	24976	9.21	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0497.d
Acq On : 18 Oct 99 7:54 am
Sample : MSH;SSTD010;
Misc : SSTD010;
Quant Time: Oct 18 10:45 1999

Vial: 3 00313
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 09:49:10 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
75)	Chrysene	16.18	228	69141	8.79 ppb		99
76)	bis(2-Ethylhexyl)phthalate	15.90	149	48572	7.89 ppb		89
78)	Dibenzo(a,h)acridine	23.41	279	15482	7.21 ppb		97
79)	Di-n-octylphthalate	17.13	149	75563	7.25 ppb		98
80)	Benzo[b]fluoranthene	18.53	252	76142	8.32 ppb		94
81)	Benzo[k]fluoranthene	18.57	252	80967	9.37 ppb	m	99
82)	Benzo[a]pyrene	19.45	252	66292	8.17 ppb		98
83)	Indeno[1,2,3-cd]pyrene	23.40	276	83282	7.57 ppb		86
84)	Dibenz[a,h]anthracene	23.41	278	71027	7.65 ppb		93
85)	Benzo[g,h,i]perylene	24.53	276	77132	8.57 ppb		90
87)	Aniline	0.00	93		Not Detected		
89)	caprolactam	7.97	55	3426	50.41 ppb	#	1
90)	Biphenyl	0.00	154		Not Detected		
91)	Diphenyl Ether	9.32	170	21349	8.71 ppb		100
92)	1,2-Dimethylnaphthalene	10.07	141	75900	7.62 ppb		87
94)	Isobutyric Acid	0.00	43		No Calib	#	
95)	Methacrylic Acid	0.00	41		No Calib	#	

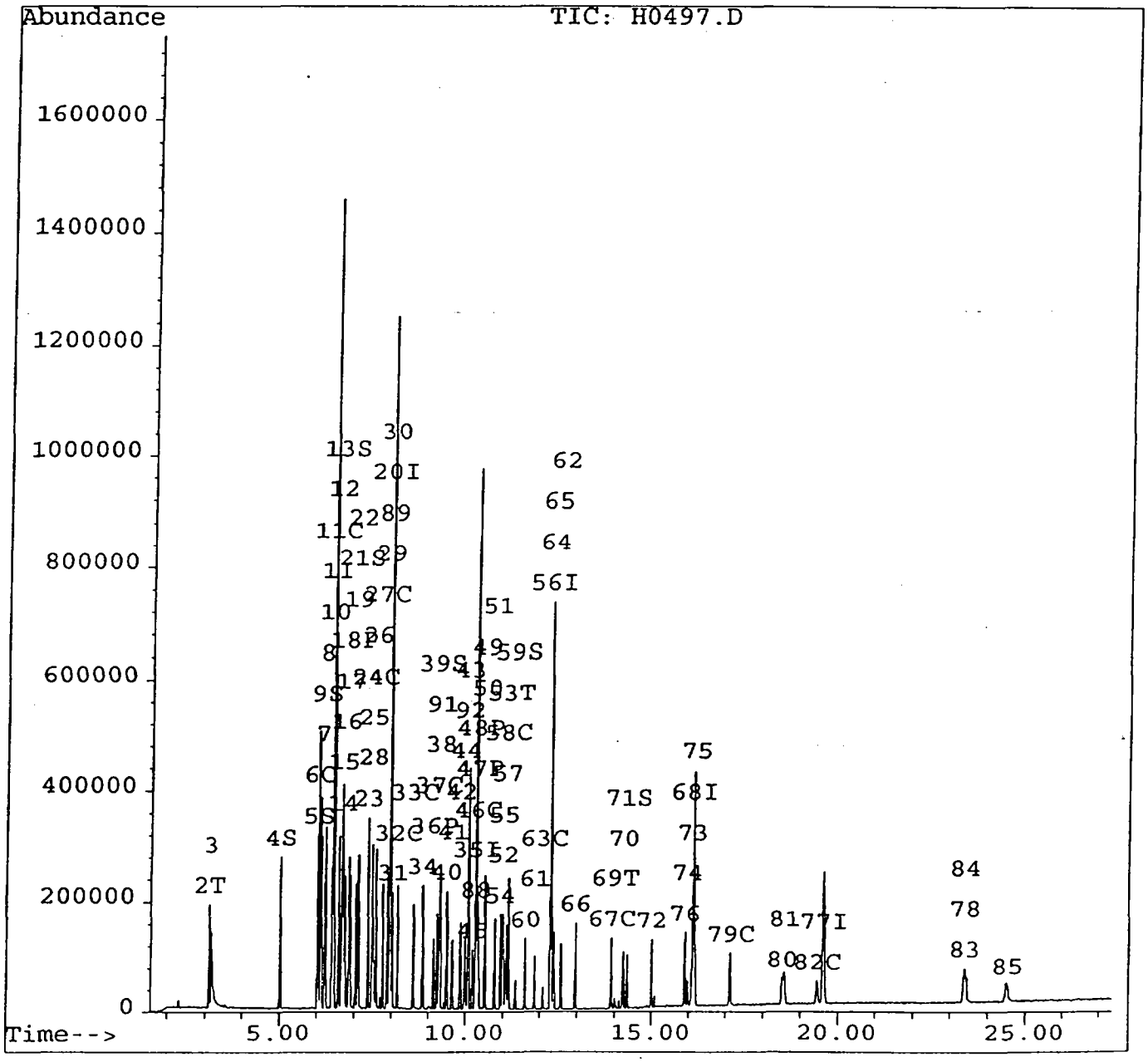
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0497.d
Acq On : 18 Oct 99 7:54 am
Sample : MSH;SSTD010;
Misc : SSTD010;
Quant Time: Oct 18 10:45 1999

Vial: 30314
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:50:45 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101899\h0498.d
Acq On : 18 Oct 99 8:25 am
Sample : MSH;SSTD050;
Misc : SSTD050;
Quant Time: Oct 18 10:46 1999

Vial: 4
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 09:49:10 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.42	152	227922	40.00	ppb	-0.02
20) Naphthalene-d8	7.96	136	591101	40.00	ppb	-0.01
35) Acenaphthene-d10	10.27	164	276664	40.00	ppb	-0.01
56) Phenanthrene-d10	12.29	188	373546	40.00	ppb	-0.01
68) Chrysene-d12	16.12	240	316787	40.00	ppb	-0.01
77) Perylene-d12	19.62	264	289017	40.00	ppb	-0.01
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00	ppb	-4.46
88) Acenaphthene_d10B	10.27	164	276664	40.00	ppb	-0.01
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00	ppb	-4.46

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	5.00	112	414735	50.70	ppb	67.60%
5) Phenol-d5	6.01	99	706452	52.64	ppb	70.19%
9) 2-Chlorophenol-d4	6.20	132	293986	48.53	ppb	64.71%
13) 1,2-Dichlorobenzene-d4	6.64	152	226265	79.41	ppb	158.83%
21) Nitrobenzene-d5	7.09	82	619733	48.65	ppb	97.31%
39) 2-Fluorobiphenyl	9.31	172	460604	49.23	ppb	98.45%
59) 2,4,6-Tribromophenol	11.35	330	58973	46.33	ppb	61.77%
71) Terphenyl-d14	14.35	244	352255	45.42	ppb	90.85%

Target Compounds							Qvalue
2) N-Nitrosodimethylamine	3.07	42	465166	55.23	ppb	#	83
3) Pyridine	3.08	79	706099	54.75	ppb	#	68
6) Phenol	6.02	94	826484	53.83	ppb		89
7) bis(2-Chloroethyl)ether	6.12	93	723155	60.58	ppb		93
8) 2-Chlorophenol	6.23	128	318067	47.85	ppb	#	67
10) 1,3-Dichlorobenzene	6.38	146	378727	50.18	ppb		99
11) 1,4-Dichlorobenzene	6.44	146	380165	47.20	ppb		97
12) Benzyl alcohol	6.57	108	260928	51.31	ppb	#	39
14) 1,2-Dichlorobenzene	6.66	146	360146	47.92	ppb		97
15) 2-Methylphenol	6.69	108	369551	52.10	ppb		90
16) bis(2-chloroisopropyl)ethe	6.72	45	831859	55.43	ppb		52
17) 4-Methylphenol	6.84	108	351888	51.71	ppb		85
18) n-Nitroso-di-n-propylamine	6.89	70	341254	54.70	ppb	#	62
19) Hexachloroethane	7.03	117	191013	51.18	ppb		100
22) Nitrobenzene	7.10	77	581409	48.70	ppb	#	56
23) Isophorone	7.36	82	1187431	50.13	ppb		63
24) 2-Nitrophenol	7.49	139	153376	47.48	ppb		63
25) 2,4-Dimethylphenol	7.47	107	435861	47.75	ppb	#	60
26) bis(2-Chloroethoxy)methane	7.58	93	764497	49.56	ppb		87
27) 2,4-Dichlorophenol	7.77	162	232786	46.11	ppb	#	78

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data\101899\h0498.d
Acq On : 18 Oct 99 8:25 am
Sample : MSH;SSTD050;
Misc : SSTD050;
Quant Time: Oct 18 10:46 1999

Vial 00316
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 09:49:10 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
28)	Benzoic Acid	7.47	122	259336	45.72	ppb	#	40
29)	1,2,4-Trichlorobenzene	7.89	180	274340	47.05	ppb		95
30)	Naphthalene	7.98	128	753979	48.10	ppb		87
31)	4-Chloroaniline	8.03	127	281540	47.55	ppb		100
32)	Hexachlorobutadiene	8.17	225	166112	46.20	ppb		98
33)	4-Chloro-3-methylphenol	8.59	107	283284	46.96	ppb	#	59
34)	2-Methylnaphthalene	8.85	142	431201	46.52	ppb		98
36)	Hexachlorocyclopentadiene	9.12	237	145882	46.02	ppb		100
37)	2,4,6-Trichlorophenol	9.23	196	160218	48.19	ppb		99
38)	2,4,5-Trichlorophenol	9.29	196	158869	48.60	ppb		99
40)	2-Chloronaphthalene	9.50	162	393300	49.02	ppb		92
41)	2-Nitroaniline	9.64	65	186196	51.74	ppb	#	40
42)	Dimethylphthalate	9.86	163	430939	49.78	ppb		98
43)	Acenaphthylene	10.07	152	731236	48.38	ppb		92
44)	2,6-Dinitrotoluene	9.99	165	92083	212.11	ppb	m	37
45)	3-Nitroaniline	10.19	138	92413	50.51	ppb	m	85
46)	Acenaphthene	10.32	153	382318	48.60	ppb		97
47)	2,4-Dinitrophenol	10.33	184	41104	44.81	ppb	#	1
48)	4-Nitrophenol	10.35	109	88257	54.08	ppb	#	57
49)	Dibenzofuran	10.52	168	517214	48.03	ppb		92
50)	2,4-Dinitrotoluene	10.52	165	127021	48.52	ppb	#	1
51)	Diethylphthalate	10.79	149	385721	46.50	ppb		99
52)	Fluorene	10.99	166	377192	48.57	ppb		98
53)	1,2- Diphenyl hydrazine	11.16	77	928792	51.79	ppb		85
54)	4-Chlorophenyl-phenylether	10.93	204	228971	49.22	ppb		78
55)	4-Nitroaniline	11.03	138	86107	53.01	ppb	#	13
57)	4,6-Dinitro-2-methylphenol	11.09	198	64938	45.05	ppb		100
58)	n-Nitrosodiphenylamine	11.10	169	247781	49.26	ppb		90
60)	4-Bromophenyl-phenylether	11.61	248	108904	45.83	ppb	#	75
61)	Hexachlorobenzene	11.87	284	113047	45.72	ppb		80
62)	Carbazole	12.57	167	378549	49.89	ppb		95
63)	Pentachlorophenol	12.09	266	56704	44.34	ppb		96
64)	Phenanthrene	12.32	178	481906	51.07	ppb		99
65)	Anthracene	12.38	178	442177	46.18	ppb		97
66)	Di-n-butylphthalate	12.96	149	517883	44.80	ppb		95
67)	Fluoranthene	13.92	202	464106	48.20	ppb		76
69)	Benzidine	14.02	184	122250	223.52	ppb		98
70)	Pyrene	14.23	202	455195	46.04	ppb		67
72)	Butylbenzylphthalate	15.00	149	203217	46.99	ppb	#	1
73)	Benzo[a]anthracene	16.08	228	421314	47.13	ppb		99
74)	3,3'-Dichlorobenzidine	15.96	252	154839	53.89	ppb		100

(#) = qualifier out of range (m) = manual integration

00317

Data File : c:\hpchem\1\data\101899\h0498.d
Acq On : 18 Oct 99 8:25 am
Sample : MSH;SSTD050;
Misc : SSTD050;
Quant Time: Oct 18 10:46 1999

Vial: 4
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 09:49:10 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
75)	Chrysene	16.18	228	408864	49.09 ppb		99
76)	bis(2-Ethylhexyl)phthalate	15.89	149	301468	46.24 ppb		91
78)	Dibenzo(a,h)acridine	23.41	279	101840	46.29 ppb		99
79)	Di-n-octylphthalate	17.12	149	490329	45.88 ppb		99
80)	Benzo[b]fluoranthene	18.53	252	408690	43.54 ppb		96
81)	Benzo[k]fluoranthene	18.57	252	485695	54.81 ppb		96
82)	Benzo[a]pyrene	19.45	252	406043	48.80 ppb		97
83)	Indeno[1,2,3-cd]pyrene	23.41	276	518126	45.92 ppb		86
84)	Dibenz[a,h]anthracene	23.43	278	434794	45.68 ppb		95
85)	Benzo[g,h,i]perylene	24.52	276	435013	47.15 ppb		93
87)	Aniline	0.00	93		No Calib	#	
89)	caprolactam	7.97	55	1307	21.22 ppb	#	1
90)	Biphenyl	0.00	154		No Calib	#	
91)	Diphenyl Ether	9.31	170	108640	48.92 ppb		100
92)	1,2-Dimethylnaphthalene	10.07	141	426164	47.19 ppb		91
94)	Isobutyric Acid	0.00	43		No Calib	#	
95)	Methacrylic Acid	0.00	41		No Calib	#	

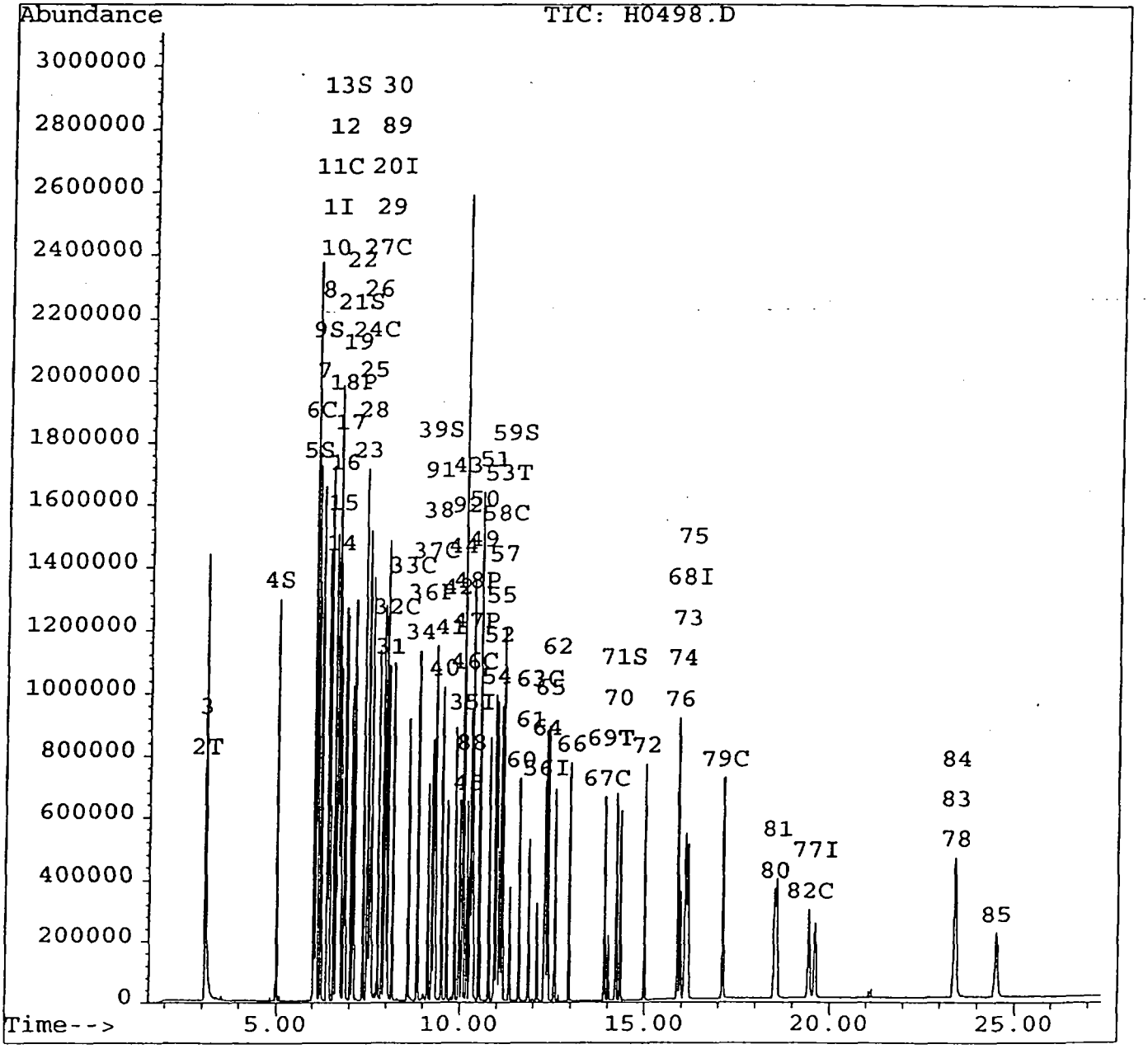
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0498.d
Acq On : 18 Oct 99 8:25 am
Sample : MSH;SSTD050;
Misc : SSTD050;
Quant Time: Oct 18 10:46 1999

Vial: 400318
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:50:45 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101899\h0499.d
Acq On : 18 Oct 99 8:58 am
Sample : MSH;SSTD100;
Misc : SSTD100;
Quant Time: Oct 18 10:48 1999

Vial: 50319
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 09:49:10 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.41	152	215734	40.00	ppb	-0.03
20) Naphthalene-d8	7.95	136	562279	40.00	ppb	-0.03
35) Acenaphthene-d10	10.27	164	273017	40.00	ppb	-0.01
56) Phenanthrene-d10	12.29	188	410619	40.00	ppb	-0.01
68) Chrysene-d12	16.13	240	394242	40.00	ppb	0.00
77) Perylene-d12	19.62	264	287492	40.00	ppb	-0.01
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00	ppb	-4.46
88) Acenaphthene_d10B	10.27	164	273017	40.00	ppb	-0.01
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00	ppb	-4.46

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	4.98	112	786849	101.63	ppb	135.50%
5) Phenol-d5	6.01	99	1341529	105.61	ppb	140.81%
9) 2-Chlorophenol-d4	6.20	132	587680	102.50	ppb	136.67%
13) 1,2-Dichlorobenzene-d4	6.64	152	464088	172.09	ppb	344.17%
21) Nitrobenzene-d5	7.08	82	1196369	98.74	ppb	197.48%
39) 2-Fluorobiphenyl	9.31	172	997164	107.99	ppb	215.99%
59) 2,4,6-Tribromophenol	11.36	330	145912	104.27	ppb	139.03%
71) Terphenyl-d14	14.35	244	1036782	107.43	ppb	214.86%

Target Compounds							Qvalue
2) N-Nitrosodimethylamine	3.03	42	840751	105.47	ppb	#	82
3) Pyridine	3.03	79	1239719	101.57	ppb	#	69
6) Phenol	6.02	94	1533521	105.52	ppb		88
7) bis(2-Chloroethyl)ether	6.11	93	1102454	97.58	ppb		93
8) 2-Chlorophenol	6.21	128	638517	101.49	ppb	#	68
10) 1,3-Dichlorobenzene	6.38	146	744852	104.27	ppb		97
11) 1,4-Dichlorobenzene	6.43	146	768025	100.75	ppb		98
12) Benzyl alcohol	6.57	108	517892	107.60	ppb	#	48
14) 1,2-Dichlorobenzene	6.65	146	730754	102.72	ppb		96
15) 2-Methylphenol	6.69	108	723586	107.77	ppb		90
16) bis(2-chloroisopropyl)ethe	6.72	45	1559752	109.81	ppb		60
17) 4-Methylphenol	6.84	108	702431	109.05	ppb		89
18) n-Nitroso-di-n-propylamine	6.88	70	649675	110.02	ppb	#	68
19) Hexachloroethane	7.02	117	366414	103.73	ppb		88
22) Nitrobenzene	7.10	77	1105641	97.36	ppb	#	58
23) Isophorone	7.35	82	2272671	100.86	ppb		61
24) 2-Nitrophenol	7.48	139	303764	98.85	ppb	#	46
25) 2,4-Dimethylphenol	7.47	107	848010	97.67	ppb	#	68
26) bis(2-Chloroethoxy)methane	7.58	93	1487965	101.41	ppb		88
27) 2,4-Dichlorophenol	7.77	162	478419	99.63	ppb		81

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0499.d
Acq On : 18 Oct 99 8:58 am
Sample : MSH;SSTD100;
Misc : SSTD100;
Quant Time: Oct 18 10:48 1999

Vial: 5
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

500320

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 09:49:10 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
28) Benzoic Acid	7.47	122	524551	97.22	ppb		53
29) 1,2,4-Trichlorobenzene	7.89	180	554161	99.90	ppb		96
30) Naphthalene	7.97	128	1480842	99.32	ppb		81
31) 4-Chloroaniline	8.02	127	597330	106.06	ppb		97
32) Hexachlorobutadiene	8.16	225	341392	99.81	ppb		98
33) 4-Chloro-3-methylphenol	8.59	107	606436	105.67	ppb	#	59
34) 2-Methylnaphthalene	8.83	142	888038	100.72	ppb		96
36) Hexachlorocyclopentadiene	9.12	237	332295	106.22	ppb		99
37) 2,4,6-Trichlorophenol	9.23	196	335860	102.36	ppb		95
38) 2,4,5-Trichlorophenol	9.29	196	356055	110.37	ppb		98
40) 2-Chloronaphthalene	9.49	162	844216	106.63	ppb		94
41) 2-Nitroaniline	9.64	65	390991	110.10	ppb	#	42
42) Dimethylphthalate	9.87	163	965784	113.04	ppb		98
43) Acenaphthylene	10.07	152	1669123	111.91	ppb		91
44) 2,6-Dinitrotoluene	9.99	165	205383	479.42	ppb	m	37
45) 3-Nitroaniline	10.19	138	207885	115.14	ppb	m	83
46) Acenaphthene	10.32	153	867934	111.81	ppb		97
47) 2,4-Dinitrophenol	10.33	184	125159	138.27	ppb	#	1
48) 4-Nitrophenol	10.35	109	197976	122.93	ppb	#	52
49) Dibenzofuran	10.52	168	1220017	114.81	ppb		91
50) 2,4-Dinitrotoluene	10.52	165	331484	128.30	ppb	#	1
51) Diethylphthalate	10.79	149	951514	116.24	ppb		99
52) Fluorene	10.99	166	865940	112.99	ppb		97
53) 1,2- Diphenyl hydrazine	11.16	77	1965320	111.05	ppb		86
54) 4-Chlorophenyl-phenylether	10.95	204	514498	112.08	ppb	#	73
55) 4-Nitroaniline	11.04	138	210508	131.32	ppb	#	23
57) 4,6-Dinitro-2-methylphenol	11.09	198	193413	122.06	ppb		100
58) n-Nitrosodiphenylamine	11.10	169	604026	109.23	ppb		89
60) 4-Bromophenyl-phenylether	11.61	248	265027	101.46	ppb	#	78
61) Hexachlorobenzene	11.87	284	287637	105.84	ppb		80
62) Carbazole	12.57	167	1006430	120.66	ppb		96
63) Pentachlorophenol	12.10	266	155327	110.49	ppb		96
64) Phenanthrene	12.32	178	1174911	113.27	ppb		99
65) Anthracene	12.38	178	1140258	108.33	ppb		98
66) Di-n-butylphthalate	12.96	149	1415436	111.38	ppb		95
67) Fluoranthene	13.92	202	1294332	122.29	ppb		77
69) Benzidine	14.02	184	333448	489.90	ppb		98
70) Pyrene	14.23	202	1286182	104.52	ppb		68
72) Butylbenzylphthalate	15.00	149	584106	108.52	ppb	#	1
73) Benzo[a]anthracene	16.09	228	1162382	104.48	ppb		99
74) 3,3'-Dichlorobenzidine	15.98	252	433207	121.15	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0499.d Vial: 5 0321
Acq On : 18 Oct 99 8:58 am Operator: mva
Sample : MSH;SSTD100; Inst : 5972-BNA3
Misc : SSTD100; Multiplr: 1.00
Quant Time: Oct 18 10:48 1999

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 09:49:10 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
75) Chrysene	16.18	228	1103824	106.50 ppb		99
76) bis(2-Ethylhexyl)phthalate	15.89	149	863821	106.46 ppb		94
78) Dibenzo(a,h)acridine	23.44	279	223540	102.15 ppb		96
79) Di-n-octylphthalate	17.11	149	1370659	128.93 ppb		99
80) Benzo[b]fluoranthene	18.53	252	1039983	111.39 ppb		97
81) Benzo[k]fluoranthene	18.59	252	1067169	121.06 ppb		98
82) Benzo[a]pyrene	19.46	252	916246	110.71 ppb		98
83) Indeno[1,2,3-cd]pyrene	23.43	276	1116053	99.43 ppb		88
84) Dibenz[a,h]anthracene	23.44	278	967383	102.18 ppb		96
85) Benzo[g,h,i]perylene	24.54	276	945652	103.05 ppb		93
87) Aniline	0.00	93		No Calib	#	
89) caprolactam	7.96	55	2950	48.53 ppb	#	1
90) Biphenyl	0.00	154		No Calib	#	
91) Diphenyl Ether	9.31	170	233466	106.54 ppb		100
92) 1,2-Dimethylnaphthalene	10.07	141	1014175	113.80 ppb		92
94) Isobutyric Acid	0.00	43		No Calib	#	
95) Methacrylic Acid	0.00	41		No Calib	#	

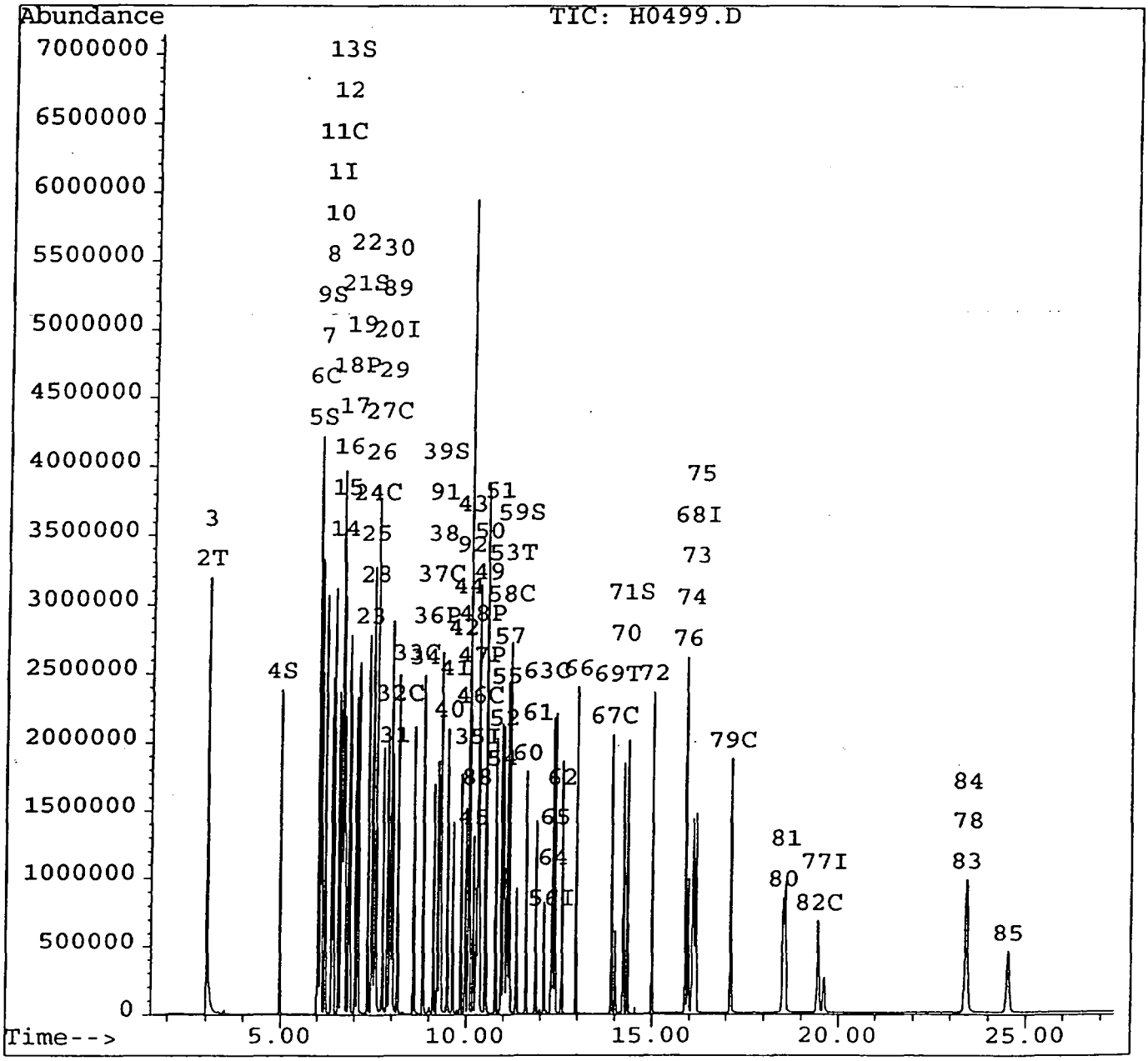
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0499.d
Acq On : 18 Oct 99 8:58 am
Sample : MSH;SSTD100;
Misc : SSTD100;
Quant Time: Oct 18 10:48 1999

Vial: 090322
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:50:45 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101899\h0500.d
Acq On : 18 Oct 99 9:35 am
Sample : MSH;SSTD120;
Misc : SSTD120;
Quant Time: Oct 18 10:49 1999

Vial: 00323
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:11:39 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.42	152	221707	40.00	ppb	-0.02
20) Naphthalene-d8	7.96	136	573511	40.00	ppb	-0.01
35) Acenaphthene-d10	10.27	164	281013	40.00	ppb	-0.01
56) Phenanthrene-d10	12.29	188	413361	40.00	ppb	-0.01
68) Chrysene-d12	16.13	240	406549	40.00	ppb	0.00
77) Perylene-d12	19.62	264	297256	40.00	ppb	-0.01
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00	ppb	-4.46
88) Acenaphthene_d10B	10.27	164	281013	40.00	ppb	-0.01
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00	ppb	-4.46

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	4.99	112	996903	125.30	ppb	167.06%
5) Phenol-d5	6.01	99	1708814	130.90	ppb	174.54%
9) 2-Chlorophenol-d4	6.20	132	751487	127.55	ppb	170.07%
13) 1,2-Dichlorobenzene-d4	6.64	152	622261	131.95	ppb	263.89%
21) Nitrobenzene-d5	7.09	82	1478890	119.67	ppb	239.34%
39) 2-Fluorobiphenyl	9.32	172	1269080	133.53	ppb	267.06%
59) 2,4,6-Tribromophenol	11.36	330	183947	130.58	ppb	174.11%
71) Terphenyl-d14	14.35	244	1324523	133.09	ppb	266.18%

Target Compounds							Qvalue
2) N-Nitrosodimethylamine	3.05	42	998767	121.93	ppb	#	82
3) Pyridine	3.05	79	1558738	124.27	ppb	#	69
6) Phenol	6.03	94	2016749	135.04	ppb		85
7) bis(2-Chloroethyl)ether	6.11	93	1535370	132.24	ppb		97
8) 2-Chlorophenol	6.21	128	814583	125.99	ppb	#	67
10) 1,3-Dichlorobenzene	6.38	146	943905	128.58	ppb		96
11) 1,4-Dichlorobenzene	6.44	146	981748	125.32	ppb		98
12) Benzyl alcohol	6.57	108	644611	130.33	ppb	#	51
14) 1,2-Dichlorobenzene	6.65	146	1037645	141.93	ppb		96
15) 2-Methylphenol	6.69	108	906262	131.34	ppb		91
16) bis(2-chloroisopropyl)ethe	6.72	45	1918192	131.41	ppb		52
17) 4-Methylphenol	6.84	108	885319	133.75	ppb		87
18) n-Nitroso-di-n-propylamine	6.89	70	785643	129.47	ppb	#	68
19) Hexachloroethane	7.02	117	467101	128.68	ppb		82
22) Nitrobenzene	7.10	77	1358475	117.28	ppb	#	58
23) Isophorone	7.37	82	2754773	119.86	ppb		64
24) 2-Nitrophenol	7.50	139	395410	126.16	ppb		62
25) 2,4-Dimethylphenol	7.47	107	1104413	124.71	ppb	#	65
26) bis(2-Chloroethoxy)methane	7.58	93	1813880	121.20	ppb		88
27) 2,4-Dichlorophenol	7.77	162	601533	122.82	ppb	#	81

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0500.d
Acq On : 18 Oct 99 9:35 am
Sample : MSH;SSTD120;
Misc : SSTD120;
Quant Time: Oct 18 10:49 1999

Vial: 6
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:11:39 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
28) Benzoic Acid	7.47	122	686616	124.76	ppb	#	46
29) 1,2,4-Trichlorobenzene	7.89	180	706151	124.81	ppb		96
30) Naphthalene	7.98	128	1850982	121.71	ppb		86
31) 4-Chloroaniline	8.03	127	720517	125.43	ppb		100
32) Hexachlorobutadiene	8.16	225	428070	122.70	ppb		99
33) 4-Chloro-3-methylphenol	8.60	107	768416	131.28	ppb	#	63
34) 2-Methylnaphthalene	8.85	142	1128403	125.48	ppb		96
36) Hexachlorocyclopentadiene	9.12	237	418429	129.95	ppb		100
37) 2,4,6-Trichlorophenol	9.24	196	428650	126.93	ppb		98
38) 2,4,5-Trichlorophenol	9.29	196	459929	138.51	ppb		97
40) 2-Chloronaphthalene	9.50	162	1063536	130.51	ppb		93
41) 2-Nitroaniline	9.64	65	486260	133.04	ppb	#	41
42) Dimethylphthalate	9.87	163	1203261	136.83	ppb		99
43) Acenaphthylene	10.08	152	2113561	137.68	ppb		93
44) 2,6-Dinitrotoluene	9.99	165	256001	580.57	ppb	m	37
45) 3-Nitroaniline	10.20	138	260019	139.91	ppb	#	1
46) Acenaphthene	10.32	153	1103872	138.16	ppb		95
47) 2,4-Dinitrophenol	10.33	184	168419	180.77	ppb	#	1
48) 4-Nitrophenol	10.35	109	259929	156.80	ppb	#	51
49) Dibenzofuran	10.53	168	1542924	141.07	ppb		89
50) 2,4-Dinitrotoluene	10.52	165	422560	158.90	ppb	#	1
51) Diethylphthalate	10.79	149	1175873	139.56	ppb		99
52) Fluorene	11.01	166	1084606	137.49	ppb		98
53) 1,2- Diphenyl hydrazine	11.16	77	2434925	133.67	ppb		86
54) 4-Chlorophenyl-phenylether	10.95	204	641592	135.79	ppb		75
55) 4-Nitroaniline	11.04	138	260774	158.05	ppb	#	20
57) 4,6-Dinitro-2-methylphenol	11.09	198	247521	155.17	ppb		100
58) n-Nitrosodiphenylamine	11.11	169	753413	135.35	ppb		89
60) 4-Bromophenyl-phenylether	11.61	248	332949	126.62	ppb	#	77
61) Hexachlorobenzene	11.87	284	361499	132.13	ppb		81
62) Carbazole	12.57	167	1265625	150.72	ppb		96
63) Pentachlorophenol	12.10	266	199047	140.65	ppb		92
64) Phenanthrene	12.32	178	1443129	138.20	ppb		98
65) Anthracene	12.38	178	1413449	133.39	ppb		99
66) Di-n-butylphthalate	12.96	149	1832122	143.21	ppb		95
67) Fluoranthene	13.93	202	1655762	155.40	ppb		76
69) Benzidine	14.02	184	419649	597.88	ppb		98
70) Pyrene	14.25	202	1628096	128.30	ppb		79
72) Butylbenzylphthalate	15.00	149	729603	131.44	ppb	#	1
73) Benzo[a]anthracene	16.10	228	1494606	130.27	ppb		99
74) 3,3'-Dichlorobenzidine	15.98	252	553394	150.08	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0500.d
Acq On : 18 Oct 99 9:35 am
Sample : MSH;SSTD120;
Misc : SSTD120;
Quant Time: Oct 18 10:49 1999

Vial: 6
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

000325

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:11:39 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
75)	Chrysene	16.18	228	1377069	128.84 ppb		100
76)	bis(2-Ethylhexyl)phthalate	15.89	149	1115616	133.33 ppb		93
78)	Dibenzo(a,h)acridine	23.45	279	288345	127.43 ppb		100
79)	Di-n-octylphthalate	17.13	149	1774728	161.45 ppb		100
80)	Benzo[b]fluoranthene	18.53	252	1252329	129.73 ppb		98
81)	Benzo[k]fluoranthene	18.59	252	1452456	159.35 ppb		98
82)	Benzo[a]pyrene	19.47	252	1157610	135.28 ppb		98
83)	Indeno[1,2,3-cd]pyrene	23.44	276	1420375	122.39 ppb		89
84)	Dibenz[a,h]anthracene	23.45	278	1234160	126.07 ppb		96
85)	Benzo[g,h,i]perylene	24.55	276	1184042	124.78 ppb		91
87)	Aniline	0.00	93		No Calib	#	
89)	caprolactam	7.98	55	1589	25.40 ppb	#	1
90)	Biphenyl	0.00	154		No Calib	#	
91)	Diphenyl Ether	9.32	170	301169	133.52 ppb		100
92)	1,2-Dimethylnaphthalene	10.07	141	1289126	140.53 ppb		92
94)	Isobutyric Acid	0.00	43		No Calib	#	
95)	Methacrylic Acid	0.00	41		No Calib	#	

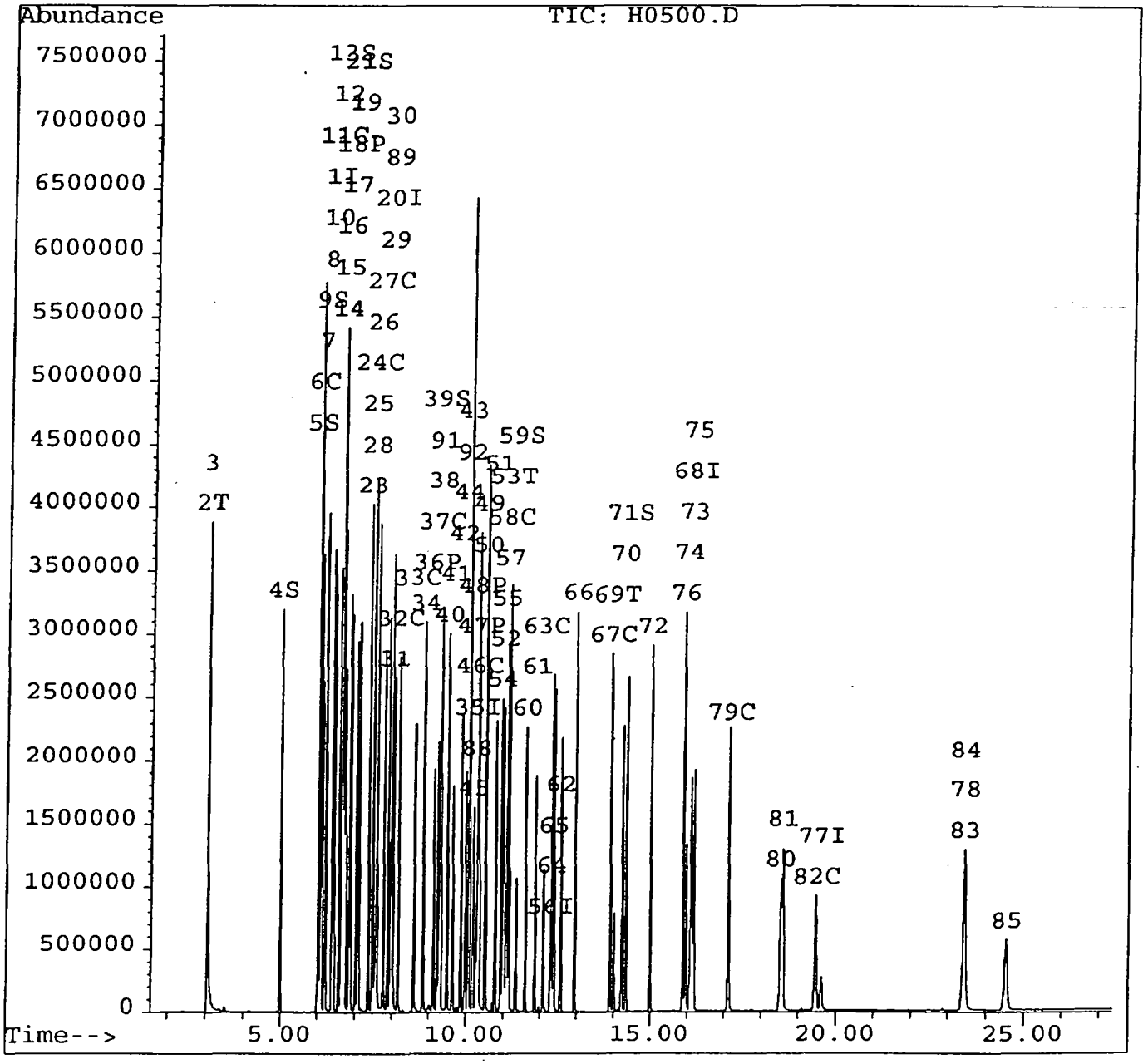
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0500.d
Acq On : 18 Oct 99 9:35 am
Sample : MSH;SSTD120;
Misc : SSTD120;
Quant Time: Oct 18 10:49 1999

Vial: 000326
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:50:45 1999
Response via : Single Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data\101899\h0501.d
Acq On : 18 Oct 99 10:06 am
Sample : MSH;SSTD160;
Misc : SSTD160;
Quant Time: Oct 18 10:50 1999

Vial: 7 000327
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:15:16 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.40	152	224502	40.00	ppb	-0.04
20) Naphthalene-d8	7.95	136	556626	40.00	ppb	-0.02
35) Acenaphthene-d10	10.27	164	268753	40.00	ppb	-0.01
56) Phenanthrene-d10	12.29	188	402874	40.00	ppb	-0.01
68) Chrysene-d12	16.13	240	398360	40.00	ppb	0.00
77) Perylene-d12	19.62	264	287598	40.00	ppb	-0.01
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00	ppb	-4.46
88) Acenaphthene_d10B	10.27	164	268753	40.00	ppb	-0.01
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00	ppb	-4.46

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	4.97	112	1443377	179.15	ppb	238.87%
5) Phenol-d5	6.00	99	2292027	173.40	ppb	231.19%
9) 2-Chlorophenol-d4	6.19	132	1195669	200.41	ppb	267.22%
13) 1,2-Dichlorobenzene-d4	6.63	152	908479	190.24	ppb	380.48%
21) Nitrobenzene-d5	7.08	82	1936290	161.43	ppb	322.86%
39) 2-Fluorobiphenyl	9.31	172	1775851	195.38	ppb	390.76%
59) 2,4,6-Tribromophenol	11.35	330	259578	189.07	ppb	252.09%
71) Terphenyl-d14	14.35	244	1818723	186.51	ppb	373.01%

Target Compounds							Qvalue
2) N-Nitrosodimethylamine	3.02	42	1296973	156.36	ppb	#	81
3) Pyridine	3.01	79	2104305	165.67	ppb		71
6) Phenol	6.01	94	2650590	175.27	ppb		89
7) bis(2-Chloroethyl)ether	6.11	93	2050464	174.41	ppb		95
8) 2-Chlorophenol	6.20	128	1286374	196.49	ppb		75
10) 1,3-Dichlorobenzene	6.37	146	1439391	193.64	ppb		97
11) 1,4-Dichlorobenzene	6.43	146	1497221	188.74	ppb		97
12) Benzyl alcohol	6.56	108	884162	176.53	ppb	#	49
14) 1,2-Dichlorobenzene	6.65	146	1541983	208.29	ppb		97
15) 2-Methylphenol	6.68	108	1245825	178.31	ppb		93
16) bis(2-chloroisopropyl)ethe	6.71	45	2568384	173.76	ppb		52
17) 4-Methylphenol	6.84	108	1189281	177.43	ppb		89
18) n-Nitroso-di-n-propylamine	6.88	70	1049061	170.72	ppb		71
19) Hexachloroethane	7.01	117	652051	177.39	ppb		76
22) Nitrobenzene	7.10	77	1808136	160.83	ppb	#	62
23) Isophorone	7.37	82	3621838	162.37	ppb		66
24) 2-Nitrophenol	7.48	139	641490	210.88	ppb		68
25) 2,4-Dimethylphenol	7.47	107	1652013	192.21	ppb		73
26) bis(2-Chloroethoxy)methane	7.58	93	2381622	163.96	ppb		89
27) 2,4-Dichlorophenol	7.77	162	815025	171.46	ppb		83

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0501.d
Acq On : 18 Oct 99 10:06 am
Sample : MSH;SSTD160;
Misc : SSTD160;
Quant Time: Oct 18 10:50 1999

Vial: 7 000328
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:15:16 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
28)	Benzoic Acid	7.47	122	1110156	207.84	ppb		71
29)	1,2,4-Trichlorobenzene	7.89	180	965328	175.80	ppb		94
30)	Naphthalene	7.97	128	2544328	172.38	ppb		80
31)	4-Chloroaniline	8.03	127	990668	177.69	ppb		99
32)	Hexachlorobutadiene	8.16	225	578028	170.71	ppb		99
33)	4-Chloro-3-methylphenol	8.59	107	1027881	180.93	ppb	#	61
34)	2-Methylnaphthalene	8.84	142	1546994	177.24	ppb		97
36)	Hexachlorocyclopentadiene	9.12	237	594215	192.96	ppb		99
37)	2,4,6-Trichlorophenol	9.23	196	578873	179.23	ppb		97
38)	2,4,5-Trichlorophenol	9.29	196	639537	201.39	ppb		98
40)	2-Chloronaphthalene	9.50	162	1473318	189.04	ppb		91
41)	2-Nitroaniline	9.64	65	657621	188.13	ppb	#	42
42)	Dimethylphthalate	9.86	163	1659734	197.35	ppb		98
43)	Acenaphthylene	10.07	152	3190892	217.34	ppb		92
44)	2,6-Dinitrotoluene	9.99	165	354779	841.28	ppb	m	37
45)	3-Nitroaniline	10.20	138	349319	196.53	ppb	#	1
46)	Acenaphthene	10.32	153	1480648	193.77	ppb		97
47)	2,4-Dinitrophenol	10.33	184	245033	275.00	ppb	#	1
48)	4-Nitrophenol	10.35	109	346242	218.40	ppb	#	55
49)	Dibenzofuran	10.52	168	2105966	201.33	ppb		92
50)	2,4-Dinitrotoluene	10.52	165	576537	226.70	ppb	#	1
51)	Diethylphthalate	10.79	149	1635623	202.98	ppb		100
52)	Fluorene	11.00	166	1519618	201.42	ppb		97
53)	1,2- Diphenyl hydrazine	11.16	77	3198072	183.57	ppb		87
54)	4-Chlorophenyl-phenylether	10.94	204	889992	196.95	ppb		81
55)	4-Nitroaniline	11.04	138	348788	221.04	ppb	#	21
57)	4,6-Dinitro-2-methylphenol	11.09	198	344170	221.37	ppb		100
58)	n-Nitrosodiphenylamine	11.10	169	1044916	192.60	ppb		89
60)	4-Bromophenyl-phenylether	11.61	248	469667	183.27	ppb	#	77
61)	Hexachlorobenzene	11.87	284	508529	190.71	ppb		78
62)	Carbazole	12.57	167	1749739	213.80	ppb		96
63)	Pentachlorophenol	12.10	266	293930	213.10	ppb		97
64)	Phenanthrene	12.32	178	2038223	200.28	ppb		98
65)	Anthracene	12.38	178	1984672	192.17	ppb		98
66)	Di-n-butylphthalate	12.96	149	2616888	209.88	ppb		96
67)	Fluoranthene	13.93	202	2266483	218.25	ppb		79
69)	Benzidine	14.02	184	576888	838.80	ppb		98
70)	Pyrene	14.23	202	2269934	182.56	ppb		71
72)	Butylbenzylphthalate	15.00	149	1038499	190.94	ppb	#	2
73)	Benzo[a]anthracene	16.10	228	2036329	181.14	ppb		99
74)	3,3'-Dichlorobenzidine	15.98	252	782602	216.61	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0501.d
Acq On : 18 Oct 99 10:06 am
Sample : MSH;SSTD160;
Misc : SSTD160;
Quant Time: Oct 18 10:50 1999

Vial: 7
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

000329

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:15:16 1999
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\101899\H0496.D

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
75)	Chrysene	16.18	228	1950500	186.24 ppb		100
76)	bis(2-Ethylhexyl)phthalate	15.89	149	1567360	191.17 ppb		96
78)	Dibenzo(a,h)acridine	23.45	279	396705	181.21 ppb		94
79)	Di-n-octylphthalate	17.12	149	2514856	236.46 ppb		100
80)	Benzo[b]fluoranthene	18.53	252	1752437	187.63 ppb		98
81)	Benzo[k]fluoranthene	18.59	252	1956834	221.90 ppb		98
82)	Benzo[a]pyrene	19.47	252	1627684	196.61 ppb		97
83)	Indeno[1,2,3-cd]pyrene	23.45	276	1960622	174.61 ppb		90
84)	Dibenz[a,h]anthracene	23.45	278	1706298	180.15 ppb		95
85)	Benzo[g,h,i]perylene	24.55	276	1609931	175.37 ppb		92
87)	Aniline	0.00	93		No Calib	#	
89)	caprolactam	7.97	55	2436	40.71 ppb	#	1
90)	Biphenyl	0.00	154		No Calib		
91)	Diphenyl Ether	9.31	170	414576	192.18 ppb		100
92)	1,2-Dimethylnaphthalene	10.07	141	2008317	228.92 ppb		90
94)	Isobutyric Acid	0.00	43		No Calib	#	
95)	Methacrylic Acid	0.00	41		No Calib	#	

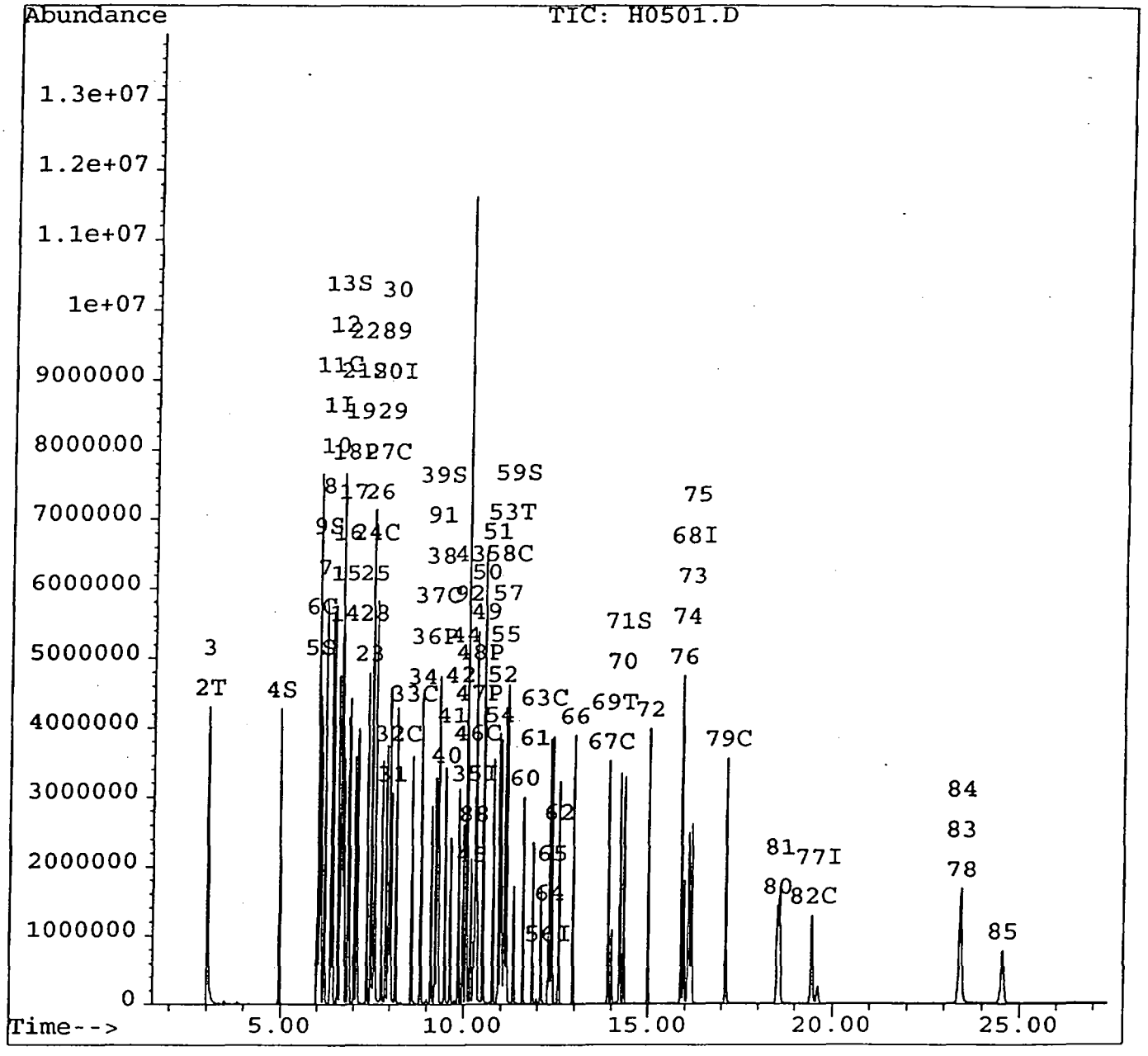
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data\101899\h0501.d
Acq On : 18 Oct 99 10:06 am
Sample : MSH;SSTD160;
Misc : SSTD160;
Quant Time: Oct 18 10:50 1999

Vial: 900330
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Mon Oct 18 10:50:45 1999
Response via : Single Level Calibration



Evaluate Continuing Calibration Report

000331

Data File : C:\HPCHEM\1\DATA\102599\H0690.D
Acq On : 25 Oct 99 7:57 am
Sample : MSH;SSTD080;
Misc : SSTD080;

Vial: 2
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 19 08:09:42 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	87	-0.01
2	T	N-Nitrosodimethylamine	1.549	1.654	-6.7	97	-0.15
3		Pyridine	2.333	2.212	5.2	85	-0.15
4	S	2-Fluorophenol	1.472	1.406	4.5	85	-0.04
5	S	Phenol-d5	2.478	2.509	-1.3	92	-0.01
6	C	Phenol	2.885	2.951	-2.3	95	-0.02
7		bis(2-Chloroethyl)ether	2.200	2.302	-4.6	95	-0.01
8		2-Chlorophenol	1.188	1.105	7.0	82	-0.01
9	S	2-Chlorophenol-d4	1.098	1.026	6.5	84	-0.01
10		1,3-Dichlorobenzene	1.386	1.321	4.7	86	-0.01
11	C	1,4-Dichlorobenzene	1.441	1.371	4.9	84	-0.01
12		Benzyl alcohol	0.937	0.987	-5.4	96	-0.01
13	S	1,2-Dichlorobenzene-d4	0.869	0.830	4.5	84	-0.01
14		1,2-Dichlorobenzene	1.402	1.293	7.8	85	-0.01
15		2-Methylphenol	1.325	1.354	-2.2	94	-0.01
16		bis(2-chloroisopropyl)ether	2.847	2.793	1.9	92	-0.01
17		4-Methylphenol	1.268	1.354	-6.8	98	0.00
18	P	n-Nitroso-di-n-propylamine	1.169	1.179	-0.9	93	0.00
19		Hexachloroethane	0.676	0.668	1.2	88	-0.01
20	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00
21	S	Nitrobenzene-d5	0.851	0.889	-4.5	93	0.00
22		Nitrobenzene	0.797	0.831	-4.2	93	-0.01
23		Isophorone	1.603	1.736	-8.3	98	0.00
24	C	2-Nitrophenol	0.224	0.213	4.9	88	0.00
25		2,4-Dimethylphenol	0.622	0.650	-4.5	95	-0.01
26		bis(2-Chloroethoxy)methane	1.047	1.178	-12.5	102	0.00
27	C	2,4-Dichlorophenol	0.334	0.339	-1.6	90	0.00
28		Benzoic Acid	0.391	0.378	3.2	89	0.00
29		1,2,4-Trichlorobenzene	0.391	0.411	-5.2	94	0.00
30		Naphthalene	1.050	1.064	-1.3	91	0.00
31		4-Chloroaniline	0.405	0.409	-1.0	92	0.00
32	C	Hexachlorobutadiene	0.239	0.260	-8.8	97	0.00
33	C	4-Chloro-3-methylphenol	0.415	0.452	-8.9	100	0.00
34		2-Methylnaphthalene	0.621	0.640	-2.9	92	0.00
35	I	Acenaphthene-d10	1.000	1.000	0.0	88	0.00
36	P	Hexachlorocyclopentadiene	0.459	0.399	13.1	76	0.00
37	C	2,4,6-Trichlorophenol	0.485	0.504	-4.0	92	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102599\H0690.D Vial: 2
Acq On : 25 Oct 99 7:57 am Operator: mva
Sample : MSH;SSTD080; Inst : 5972-BNA3
Misc : SSTD080; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 19 08:09:42 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
38		2,4,5-Trichlorophenol	0.509	0.528	-3.9	98	0.00
39	S	2-Fluorobiphenyl	1.421	1.424	-0.2	92	0.01
40		2-Chloronaphthalene	1.205	1.207	-0.1	91	0.01
41		2-Nitroaniline	0.548	0.568	-3.6	96	0.00
42		Dimethylphthalate	1.337	1.342	-0.4	94	0.01
43		Acenaphthylene	2.331	2.389	-2.5	96	0.00
44		2,6-Dinitrotoluene	0.282	0.271	3.7	88	0.00
45		3-Nitroaniline	0.281	0.284	-1.1	94	0.01
46	C	Acenaphthene	1.193	1.196	-0.2	92	0.01
47	P	2,4-Dinitrophenol	0.173	0.147	14.8	97	0.01
48	P	4-Nitrophenol	0.266	0.290	-8.9	108	0.00
49		Dibenzofuran	1.652	1.680	-1.7	95	0.00
50		2,4-Dinitrotoluene	0.420	0.434	-3.2	101	0.00
51		Diethylphthalate	1.270	1.265	0.4	93	0.00
52		Fluorene	1.185	1.186	-0.1	93	0.00
53	T	1,2- Diphenyl hydrazine	2.735	2.917	-6.7	99	0.01
54		4-Chlorophenyl-phenylether	0.705	0.757	-7.3	99	0.00
55		4-Nitroaniline	0.271	0.278	-2.6	104	0.00
56	I	Phenanthrene-d10	1.000	1.000	0.0	101	0.01
57		4,6-Dinitro-2-methylphenol	0.179	0.162	9.7	106	0.01
58	C	n-Nitrosodiphenylamine	0.559	0.533	4.7	100	0.00
59	S	2,4,6-Tribromophenol	0.137	0.132	4.0	97	0.01
60		4-Bromophenyl-phenylether	0.251	0.250	0.5	99	0.01
61		Hexachlorobenzene	0.269	0.271	-0.8	103	0.01
62		Carbazole	0.899	0.833	7.3	104	0.01
63	C	Pentachlorophenol	0.151	0.123	18.4	91	0.01
64		Phenanthrene	1.082	1.011	6.6	101	0.01
65		Anthracene	1.041	1.015	2.6	100	0.01
66		Di-n-butylphthalate	1.290	1.181	8.5	96	0.01
67	C	Fluoranthene	1.138	1.156	-1.6	113	0.01
68	I	Chrysene-d12	1.000	1.000	0.0	118	0.01
69	T	Benzidine	0.280	0.212	24.4#	292#	0.00
70		Pyrene	1.259	1.199	4.8	113	0.01
71	S	Terphenyl-d14	0.987	0.964	2.3	116	0.01
72		Butylbenzylphthalate	0.558	0.495	11.3	107	0.01
73		Benzo[a]anthracene	1.142	1.097	3.9	114	0.01
74		3,3'-Dichlorobenzidine	0.412	0.402	2.4	131	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102599\H0690.D Vial: 2
Acq On : 25 Oct 99 7:57 am Operator: mva
Sample : MSH;SSTD080; Inst : 5972-BNA3
Misc : SSTD080; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 19 08:09:42 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
75		Chrysene	1.080	1.068	1.2	120	0.01
76		bis(2-Ethylhexyl)phthalate	0.835	0.728	12.8	104	0.01
77	I	Perylene-d12	1.000	1.000	0.0	116	0.01
78		Dibenzo(a,h)acridine	0.000	0.000	0.0	118	0.02
79	C	Di-n-octylphthalate	1.665	1.338	19.7	105	0.01
80		Benzo[b]fluoranthene	1.314	1.354	-3.1	121	0.02
81		Benzo[k]fluoranthene	1.422	1.263	11.2	119	0.01
82	C	Benzo[a]pyrene	1.201	1.169	2.6	118	0.02
83		Indeno[1,2,3-cd]pyrene	1.505	1.583	-5.2	117	0.04
84		Dibenz[a,h]anthracene	1.290	1.352	-4.8	119	0.02
85		Benzo[g,h,i]perylene	1.270	1.273	-0.2	115	0.02
86		1,4-Dichlorobenzene-d4B	1.000	1.000	0.0	0#	-4.46#
87		Aniline	0.000	0.000	0.0	0#	-0.04
88		Acenaphthene_d10B	1.000	1.000	0.0	88	0.00
89		caprolactam	0.000	0.000	0.0	16#	0.07
90		Biphenyl	0.000	0.000	0.0	496#	0.00
91		Diphenyl Ether	0.000	0.000	0.0	90	0.01
92		1,2-Dimethylnaphthalene	1.403	1.423	-1.4	96	0.00
93		1,4-Dichlorobenzene-d4C	1.000	1.000	0.0	0#	-4.46#
94		Isobutyric Acid	0.000	0.000	0.0	0#	-3.05#
95		Methacrylic Acid	0.000	0.000	0.0	0#	-3.05#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102599\H0690.D
Acq On : 25 Oct 99 7:57 am
Sample : MSH;SSTD080;
Misc : SSTD080;
Quant Time: Oct 25 8:31 1999

Vial: 2
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 19 08:09:42 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.38	152	205578	40.00	ppb	-0.01
20) Naphthalene-d8	7.92	136	503659	40.00	ppb	0.00
35) Acenaphthene-d10	10.24	164	253720	40.00	ppb	0.00
56) Phenanthrene-d10	12.25	188	394981	40.00	ppb	0.01
68) Chrysene-d12	16.08	240	373574	40.00	ppb	0.01
77) Perylene-d12	19.55	264	326782	40.00	ppb	0.01
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00	ppb	-4.46
88) Acenaphthene_d10B	10.24	164	253720	40.00	ppb	0.00
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00	ppb	-4.46

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	4.95	112	577890	76.37	ppb	101.82%
5) Phenol-d5	5.98	99	1031581	81.01	ppb	108.01%
9) 2-Chlorophenol-d4	6.17	132	421996	74.78	ppb	99.70%
13) 1,2-Dichlorobenzene-d4	6.61	152	341273	76.44	ppb	152.88%
21) Nitrobenzene-d5	7.06	82	895760	83.56	ppb	167.12%
39) 2-Fluorobiphenyl	9.29	172	722639	80.16	ppb	160.32%
59) 2,4,6-Tribromophenol	11.33	330	103957	76.77	ppb	102.36%
71) Terphenyl-d14	14.32	244	720401	78.15	ppb	156.30%

Target Compounds							Qvalue
2) N-Nitrosodimethylamine	2.89	42	679910	85.38	ppb	#	86
3) Pyridine	2.90	79	909419	75.84	ppb		71
6) Phenol	5.99	94	1213376	81.83	ppb		83
7) bis(2-Chloroethyl)ether	6.07	93	946380	83.72	ppb		93
8) 2-Chlorophenol	6.18	128	454215	74.36	ppb	#	63
10) 1,3-Dichlorobenzene	6.34	146	543031	76.25	ppb		96
11) 1,4-Dichlorobenzene	6.40	146	563784	76.12	ppb		96
12) Benzyl alcohol	6.53	108	405804	84.31	ppb	#	53
14) 1,2-Dichlorobenzene	6.62	146	531539	73.78	ppb		96
15) 2-Methylphenol	6.65	108	556854	81.78	ppb		91
16) bis(2-chloroisopropyl)ethe	6.69	45	1148508	78.48	ppb		52
17) 4-Methylphenol	6.82	108	556677	85.42	ppb		87
18) n-Nitroso-di-n-propylamine	6.85	70	484714	80.71	ppb	#	68
19) Hexachloroethane	6.99	117	274700	79.07	ppb		83
22) Nitrobenzene	7.07	77	836819	83.36	ppb	#	56
23) Isophorone	7.33	82	1748960	86.65	ppb		63
24) 2-Nitrophenol	7.46	139	214084	76.04	ppb	#	55
25) 2,4-Dimethylphenol	7.44	107	654680	83.63	ppb	#	61
26) bis(2-Chloroethoxy)methane	7.55	93	1186865	89.99	ppb		88
27) 2,4-Dichlorophenol	7.73	162	341909	81.25	ppb	#	77

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102599\H0690.D
Acq On : 25 Oct 99 7:57 am
Sample : MSH;SSTD080;
Misc : SSTD080;
Quant Time: Oct 25 8:31 1999

Vial: 2
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 19 08:09:42 1999
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
28)	Benzoic Acid	7.45	122	381221	77.46	ppb		56
29)	1,2,4-Trichlorobenzene	7.85	180	414055	84.15	ppb		97
30)	Naphthalene	7.95	128	1071488	81.03	ppb		85
31)	4-Chloroaniline	7.99	127	411914	80.84	ppb		99
32)	Hexachlorobutadiene	8.14	225	261539	87.05	ppb		98
33)	4-Chloro-3-methylphenol	8.56	107	455266	87.11	ppb	#	58
34)	2-Methylnaphthalene	8.81	142	644286	82.35	ppb		97
36)	Hexachlorocyclopentadiene	9.09	237	202268	69.51	ppb		99
37)	2,4,6-Trichlorophenol	9.19	196	255886	83.23	ppb		99
38)	2,4,5-Trichlorophenol	9.25	196	268166	83.13	ppb		97
40)	2-Chloronaphthalene	9.46	162	612350	80.09	ppb		91
41)	2-Nitroaniline	9.61	65	288214	82.87	ppb	#	37
42)	Dimethylphthalate	9.83	163	680909	80.28	ppb		98
43)	Acenaphthylene	10.03	152	1212348	82.00	ppb		90
44)	2,6-Dinitrotoluene	9.95	165	137739	77.03	ppb	m	94
45)	3-Nitroaniline	10.16	138	143928	80.87	ppb	#	1
46)	Acenaphthene	10.28	153	606901	80.17	ppb		96
47)	2,4-Dinitrophenol	10.29	184	74549	68.13	ppb	#	1
48)	4-Nitrophenol	10.32	109	147206	87.09	ppb	#	48
49)	Dibenzofuran	10.48	168	852426	81.33	ppb		93
50)	2,4-Dinitrotoluene	10.48	165	220016	82.54	ppb	#	1
51)	Diethylphthalate	10.76	149	642032	79.71	ppb		99
52)	Fluorene	10.96	166	601754	80.06	ppb		98
53)	1,2- Diphenyl hydrazine	11.13	77	1480381	85.32	ppb		86
54)	4-Chlorophenyl-phenylether	10.90	204	383956	85.87	ppb		78
55)	4-Nitroaniline	10.99	138	141294	82.09	ppb	#	1
57)	4,6-Dinitro-2-methylphenol	11.05	198	127670	72.23	ppb		100
58)	n-Nitrosodiphenylamine	11.07	169	420738	76.20	ppb		90
60)	4-Bromophenyl-phenylether	11.58	248	197344	79.58	ppb	#	73
61)	Hexachlorobenzene	11.84	284	214009	80.62	ppb		77
62)	Carbazole	12.54	167	658398	74.18	ppb		96
63)	Pentachlorophenol	12.06	266	96999	65.26	ppb		96
64)	Phenanthrene	12.29	178	798285	74.71	ppb		99
65)	Anthracene	12.35	178	801484	77.95	ppb		98
66)	Di-n-butylphthalate	12.93	149	932947	73.22	ppb		94
67)	Fluoranthene	13.89	202	912834	81.26	ppb		75
69)	Benzidine	13.98	184	158415	60.48	ppb		97
70)	Pyrene	14.20	202	895502	76.16	ppb		68
72)	Butylbenzylphthalate	14.97	149	369518	70.94	ppb	#	1
73)	Benzo[a]anthracene	16.05	228	819955	76.91	ppb		100
74)	3,3'-Dichlorobenzidine	15.93	252	300510	78.09	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102599\H0690.D
Acq On : 25 Oct 99 7:57 am
Sample : MSH;SSTD080;
Misc : SSTD080;
Quant Time: Oct 25 8:31 1999

Vial: 2
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 19 08:09:42 1999
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
75)	Chrysene	16.13	228	797752	79.07 ppb		100
76)	bis(2-Ethylhexyl)phthalate	15.86	149	543826	69.75 ppb		92
78)	Dibenzo(a,h)acridine	0.00	279		No Calib		
79)	Di-n-octylphthalate	17.07	149	874403	64.27 ppb	m	100
80)	Benzo[b]fluoranthene	18.47	252	885172	82.44 ppb		95
81)	Benzo[k]fluoranthene	18.52	252	825207	71.01 ppb		98
82)	Benzo[a]pyrene	19.39	252	764071	77.90 ppb		96
83)	Indeno[1,2,3-cd]pyrene	23.34	276	1034831	84.19 ppb		82
84)	Dibenz[a,h]anthracene	23.34	278	883715	83.83 ppb		93
85)	Benzo[g,h,i]perylene	24.43	276	831816	80.19 ppb		90
87)	Aniline	0.00	93		No Calib	#	
89)	caprolactam	0.00	55		No Calib	#	
90)	Biphenyl	0.00	154		No Calib	#	
91)	Diphenyl Ether	0.00	170		No Calib		
92)	1,2-Dimethylnaphthalene	10.03	141	721858	33.84 ppb		90
94)	Isobutyric Acid	0.00	43		Not Detected		
95)	Methacrylic Acid	0.00	41		Not Detected		

(#) = qualifier out of range (m) = manual integration

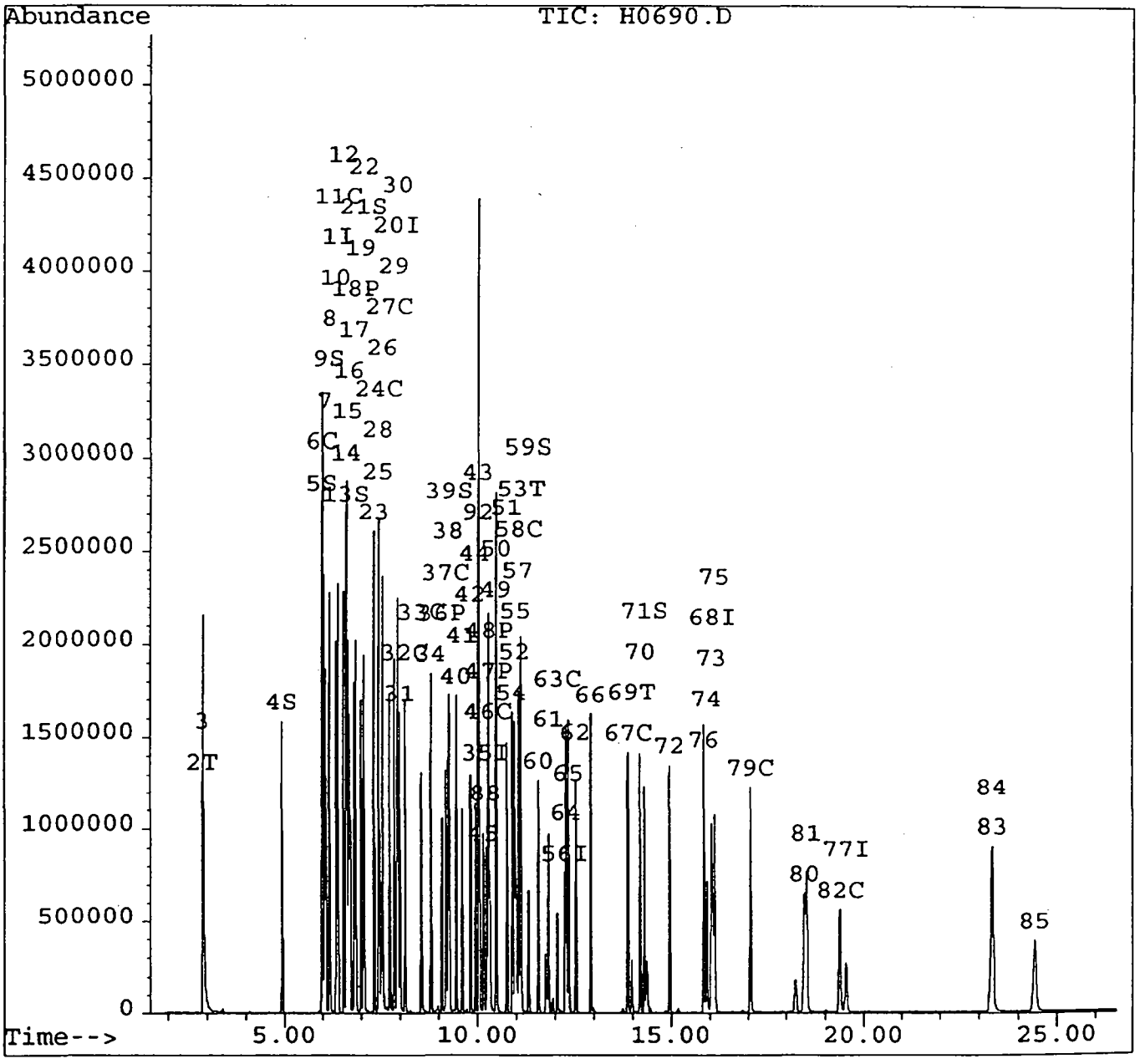
Quantitation Report

000337

Data File : C:\HPCHEM\1\DATA\102599\H0690.D
Acq On : 25 Oct 99 7:57 am
Sample : MSH;SSTD080;
Misc : SSTD080;
Quant Time: Oct 25 8:31 1999

Vial: 2
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Thu Oct 28 11:34:43 1999
Response via : Multiple Level Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102699\H0715.D Vial: 2 000338
Acq On : 26 Oct 99 6:53 am Operator: mva
Sample : MSH;SSTD080; Inst : 5972-BNA3
Misc : SSTD080; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 26 06:54:03 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	0.02
2	T	N-Nitrosodimethylamine	1.549	1.652	-6.6	104	-0.06
3		Pyridine	2.333	2.463	-5.6	101	-0.07
4	S	2-Fluorophenol	1.472	1.407	4.5	91	0.00
5	S	Phenol-d5	2.478	2.558	-3.2	101	0.02
6	C	Phenol	2.885	2.975	-3.1	103	0.01
7		bis(2-Chloroethyl)ether	2.200	2.560	-16.4	114	0.02
8		2-Chlorophenol	1.188	1.106	7.0	88	0.02
9	S	2-Chlorophenol-d4	1.098	0.996	9.3	87	0.01
10		1,3-Dichlorobenzene	1.386	1.336	3.6	94	0.01
11	C	1,4-Dichlorobenzene	1.441	1.356	5.9	89	0.01
12		Benzyl alcohol	0.937	0.972	-3.8	101	0.01
13	S	1,2-Dichlorobenzene-d4	0.869	0.850	2.1	93	0.02
14		1,2-Dichlorobenzene	1.402	1.306	6.8	92	0.02
15		2-Methylphenol	1.325	1.353	-2.2	101	0.02
16		bis(2-chloroisopropyl)ether	2.847	2.744	3.6	97	0.02
17		4-Methylphenol	1.268	1.346	-6.1	105	0.02
18	P	n-Nitroso-di-n-propylamine	1.169	1.171	-0.2	99	0.02
19		Hexachloroethane	0.676	0.664	1.7	94	0.02
20	I	Naphthalene-d8	1.000	1.000	0.0	96	0.02
21	S	Nitrobenzene-d5	0.851	0.928	-9.0	103	0.02
22		Nitrobenzene	0.797	0.842	-5.6	100	0.02
23		Isophorone	1.603	1.770	-10.4	106	0.02
24	C	2-Nitrophenol	0.224	0.222	0.9	97	0.02
25		2,4-Dimethylphenol	0.622	0.647	-4.1	101	0.02
26		bis(2-Chloroethoxy)methane	1.047	1.171	-11.8	108	0.02
27	C	2,4-Dichlorophenol	0.334	0.344	-3.0	97	0.04
28		Benzoic Acid	0.391	0.379	3.1	95	0.02
29		1,2,4-Trichlorobenzene	0.391	0.414	-5.9	101	0.04
30		Naphthalene	1.050	1.057	-0.7	96	0.02
31		4-Chloroaniline	0.405	0.396	2.0	95	0.04
32	C	Hexachlorobutadiene	0.239	0.267	-11.8	105	0.02
33	C	4-Chloro-3-methylphenol	0.415	0.457	-10.2	107	0.02
34		2-Methylnaphthalene	0.621	0.627	-1.0	96	0.02
35	I	Acenaphthene-d10	1.000	1.000	0.0	93	0.04
36	P	Hexachlorocyclopentadiene	0.459	0.341	25.6#	70	0.04
37	C	2,4,6-Trichlorophenol	0.485	0.497	-2.6	97	0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102699\H0715.D
Acq On : 26 Oct 99 6:53 am
Sample : MSH;SSTD080;
Misc : SSTD080;

Vial: 2
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 26 06:54:03 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
38		2,4,5-Trichlorophenol	0.509	0.521	-2.4	103	0.04
39	S	2-Fluorobiphenyl	1.421	1.429	-0.5	99	0.04
40		2-Chloronaphthalene	1.205	1.208	-0.3	97	0.04
41		2-Nitroaniline	0.548	0.570	-4.0	102	0.02
42		Dimethylphthalate	1.337	1.348	-0.8	101	0.04
43		Acenaphthylene	2.331	2.433	-4.4	104	0.04
44		2,6-Dinitrotoluene	0.282	0.276	2.0	95	0.02
45		3-Nitroaniline	0.281	0.283	-0.7	100	0.04
46	C	Acenaphthene	1.193	1.178	1.3	97	0.04
47	P	2,4-Dinitrophenol	0.173	0.085	51.0#	60	0.04
48	P	4-Nitrophenol	0.266	0.271	-1.7	107	0.04
49		Dibenzofuran	1.652	1.710	-3.5	103	0.04
50		2,4-Dinitrotoluene	0.420	0.451	-7.3	111	0.04
51		Diethylphthalate	1.270	1.294	-1.9	101	0.02
52		Fluorene	1.185	1.215	-2.5	101	0.04
53	T	1,2- Diphenyl hydrazine	2.735	2.926	-7.0	105	0.04
54		4-Chlorophenyl-phenylether	0.705	0.770	-9.3	107	0.04
55		4-Nitroaniline	0.271	0.269	0.9	107	0.04
56	I	Phenanthrene-d10	1.000	1.000	0.0	108	0.05
57		4,6-Dinitro-2-methylphenol	0.179	0.120	33.2#	84	0.04
58	C	n-Nitrosodiphenylamine	0.559	0.527	5.7	106	0.04
59	S	2,4,6-Tribromophenol	0.137	0.135	1.2	107	0.04
60		4-Bromophenyl-phenylether	0.251	0.253	-0.9	108	0.04
61		Hexachlorobenzene	0.269	0.277	-3.1	113	0.04
62		Carbazole	0.899	0.820	8.8	109	0.04
63	C	Pentachlorophenol	0.151	0.123	18.4	97	0.04
64		Phenanthrene	1.082	1.034	4.4	111	0.04
65		Anthracene	1.041	1.031	0.9	109	0.04
66		Di-n-butylphthalate	1.290	1.215	5.8	106	0.04
67	C	Fluoranthene	1.138	1.200	-5.5	126	0.04
68	I	Chrysene-d12	1.000	1.000	0.0	130	0.05
69	T	Benzidine	0.280	0.076	73.0#	115	0.02
70		Pyrene	1.259	1.216	3.4	126	0.05
71	S	Terphenyl-d14	0.987	1.001	-1.4	132	0.04
72		Butylbenzylphthalate	0.558	0.498	10.7	118	0.04
73		Benzo[a]anthracene	1.142	1.089	4.6	125	0.05
74		3,3'-Dichlorobenzidine	0.412	0.373	9.4	133	0.05

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102699\H0715.D Vial: 2
Acq On : 26 Oct 99 6:53 am Operator: mva
Sample : MSH;SSTD080; Inst : 5972-BNA3
Misc : SSTD080; Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 26 06:54:03 1999
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
75		Chrysene	1.080	1.071	0.9	132	0.05
76		bis(2-Ethylhexyl)phthalate	0.835	0.746	10.7	117	0.04
77	I	Perylene-d12	1.000	1.000	0.0	119	0.06
78		Dibenzo(a,h)acridine	0.000	0.000	0.0	123	0.09
79	C	Di-n-octylphthalate	1.665	1.417	14.9	114	0.05
80		Benzo[b]fluoranthene	1.314	1.450	-10.3	133	0.06
81		Benzo[k]fluoranthene	1.422	1.233	13.3	120	0.06
82	C	Benzo[a]pyrene	1.201	1.175	2.2	122	0.07
83		Indeno[1,2,3-cd]pyrene	1.505	1.592	-5.8	122	0.09
84		Dibenz[a,h]anthracene	1.290	1.359	-5.3	123	0.09
85		Benzo[g,h,i]perylene	1.270	1.302	-2.5	122	0.09
86		1,4-Dichlorobenzene-d4B	1.000	1.000	0.0	0#	-4.46#
87		Aniline	0.000	0.000	0.0	0#	0.00
88		Acenaphthene_d10B	1.000	1.000	0.0	93	0.04
89		caprolactam	0.000	0.000	0.0	34#	0.01
90		Biphenyl	0.000	0.000	0.0	0#	-8.12#
91		Diphenyl Ether	0.000	0.000	0.0	99	0.04
92		1,2-Dimethylnaphthalene	1.403	1.461	-4.2	105	0.04
93		1,4-Dichlorobenzene-d4C	1.000	1.000	0.0	0#	-4.46#
94		Isobutyric Acid	0.000	0.000	0.0	107	-0.06
95		Methacrylic Acid	0.000	0.000	0.0	102	-0.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

000341

Data File : C:\HPCHEM\1\DATA\102699\H0715.D
Acq On : 26 Oct 99 6:53 am
Sample : MSH;SSTD080;
Misc : SSTD080;
Quant Time: Oct 26 7:22 1999

Vial: 2
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 26 06:54:03 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.42	152	220710	40.00	ppb	0.02
20) Naphthalene-d8	7.95	136	533809	40.00	ppb	0.02
35) Acenaphthene-d10	10.27	164	269855	40.00	ppb	0.04
56) Phenanthrene-d10	12.29	188	423197	40.00	ppb	0.05
68) Chrysene-d12	16.12	240	411143	40.00	ppb	0.05
77) Perylene-d12	19.59	264	336806	40.00	ppb	0.06
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00	ppb	-4.46
88) Acenaphthene_d10B	10.27	164	269855	40.00	ppb	0.04
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00	ppb	-4.46

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	4.98	112	620969	76.43	ppb	101.91%
5) Phenol-d5	6.01	99	1128980	82.58	ppb	110.10%
9) 2-Chlorophenol-d4	6.19	132	439637	72.56	ppb	96.75%
13) 1,2-Dichlorobenzene-d4	6.64	152	375393	78.32	ppb	156.63%
21) Nitrobenzene-d5	7.08	82	990560	87.19	ppb	174.37%
39) 2-Fluorobiphenyl	9.31	172	771125	80.43	ppb	160.85%
59) 2,4,6-Tribromophenol	11.35	330	114642	79.02	ppb	105.35%
71) Terphenyl-d14	14.34	244	822708	81.09	ppb	162.19%

Target Compounds							Qvalue
2) N-Nitrosodimethylamine	2.99	42	729313	85.31	ppb	#	81
3) Pyridine	2.99	79	1087321	84.45	ppb		70
6) Phenol	6.02	94	1313288	82.50	ppb		83
7) bis(2-Chloroethyl)ether	6.11	93	1129869	93.09	ppb		96
8) 2-Chlorophenol	6.21	128	488058	74.42	ppb	#	70
10) 1,3-Dichlorobenzene	6.37	146	589522	77.10	ppb		98
11) 1,4-Dichlorobenzene	6.43	146	598372	75.25	ppb		98
12) Benzyl alcohol	6.56	108	429168	83.05	ppb	#	42
14) 1,2-Dichlorobenzene	6.65	146	576442	74.53	ppb		97
15) 2-Methylphenol	6.69	108	597387	81.72	ppb		91
16) bis(2-chloroisopropyl)ethe	6.72	45	1211228	77.09	ppb		60
17) 4-Methylphenol	6.84	108	594116	84.91	ppb		88
18) n-Nitroso-di-n-propylamine	6.88	70	516909	80.17	ppb	#	69
19) Hexachloroethane	7.02	117	293314	78.64	ppb		96
22) Nitrobenzene	7.10	77	898736	84.47	ppb	#	59
23) Isophorone	7.35	82	1889173	88.31	ppb		62
24) 2-Nitrophenol	7.48	139	236552	79.28	ppb	#	43
25) 2,4-Dimethylphenol	7.47	107	690782	83.25	ppb	#	63
26) bis(2-Chloroethoxy)methane	7.58	93	1250085	89.43	ppb		87
27) 2,4-Dichlorophenol	7.77	162	367457	82.39	ppb	#	80

(#) = qualifier out of range (m) = manual integration

Quantitation Report

000342

Data File : C:\HPCHEM\1\DATA\102699\H0715.D
Acq On : 26 Oct 99 6:53 am
Sample : MSH;SSTD080;
Misc : SSTD080;
Quant Time: Oct 26 7:22 1999

Vial: 2
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 26 06:54:03 1999
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
28)	Benzoic Acid	7.47	122	404338	77.52 ppb	#	45
29)	1,2,4-Trichlorobenzene	7.89	180	441641	84.69 ppb		93
30)	Naphthalene	7.97	128	1128706	80.54 ppb		80
31)	4-Chloroaniline	8.03	127	423227	78.37 ppb		99
32)	Hexachlorobutadiene	8.16	225	284733	89.42 ppb		100
33)	4-Chloro-3-methylphenol	8.59	107	488241	88.14 ppb	#	56
34)	2-Methylnaphthalene	8.84	142	669740	80.77 ppb		96
36)	Hexachlorocyclopentadiene	9.12	237	184207	59.52 ppb		97
37)	2,4,6-Trichlorophenol	9.23	196	268281	82.05 ppb		97
38)	2,4,5-Trichlorophenol	9.29	196	281122	81.94 ppb		98
40)	2-Chloronaphthalene	9.49	162	652231	80.20 ppb		92
41)	2-Nitroaniline	9.63	65	307732	83.19 ppb	#	35
42)	Dimethylphthalate	9.86	163	727581	80.66 ppb		98
43)	Acenaphthylene	10.07	152	1313292	83.52 ppb		93
44)	2,6-Dinitrotoluene	9.97	165	149176	78.43 ppb	m	86
45)	3-Nitroaniline	10.19	138	152538	80.58 ppb	#	1
46)	Acenaphthene	10.31	153	635802	78.97 ppb		96
47)	2,4-Dinitrophenol	10.32	184	45627	39.20 ppb	m	1
48)	4-Nitrophenol	10.35	109	146241	81.34 ppb	#	56
49)	Dibenzofuran	10.52	168	922848	82.78 ppb		86
50)	2,4-Dinitrotoluene	10.52	165	243369	85.84 ppb	#	1
51)	Diethylphthalate	10.78	149	698432	81.52 ppb		99
52)	Fluorene	10.99	166	655677	82.02 ppb		96
53)	1,2- Diphenyl hydrazine	11.15	77	1579457	85.59 ppb		85
54)	4-Chlorophenyl-phenylether	10.94	204	415844	87.44 ppb	#	72
55)	4-Nitroaniline	11.03	138	145158	79.29 ppb	#	2
57)	4,6-Dinitro-2-methylphenol	11.08	198	101167	53.42 ppb		100
58)	n-Nitrosodiphenylamine	11.10	169	446132	75.42 ppb		90
60)	4-Bromophenyl-phenylether	11.60	248	214515	80.74 ppb	#	74
61)	Hexachlorobenzene	11.86	284	234636	82.50 ppb		79
62)	Carbazole	12.56	167	693934	72.97 ppb		97
63)	Pentachlorophenol	12.09	266	103909	65.25 ppb		96
64)	Phenanthrene	12.31	178	875343	76.46 ppb		98
65)	Anthracene	12.37	178	873055	79.25 ppb		99
66)	Di-n-butylphthalate	12.95	149	1028592	75.34 ppb		94
67)	Fluoranthene	13.91	202	1015444	84.37 ppb		73
69)	Benzidine	14.01	184	62294	21.61 ppb	m	97
70)	Pyrene	14.23	202	1000238	77.29 ppb		76
72)	Butylbenzylphthalate	14.99	149	409754	71.47 ppb	#	1
73)	Benzo[a]anthracene	16.08	228	895488	76.31 ppb		99
74)	3,3'-Dichlorobenzidine	15.96	252	306882	72.46 ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

000343

Data File : C:\HPCHEM\1\DATA\102699\H0715.D
Acq On : 26 Oct 99 6:53 am
Sample : MSH;SSTD080;
Misc : SSTD080;
Quant Time: Oct 26 7:22 1999

Vial: 2
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 26 06:54:03 1999
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
75)	Chrysene	16.17	228	880744	79.32 ppb		99
76)	bis(2-Ethylhexyl)phthalate	15.88	149	613065	71.45 ppb		91
78)	Dibenzo(a,h)acridine	0.00	279		No Calib		
79)	Di-n-octylphthalate	17.10	149	954191	68.05 ppb		99
80)	Benzo[b]fluoranthene	18.50	252	976768	88.27 ppb		96
81)	Benzo[k]fluoranthene	18.56	252	830294	69.33 ppb		97
82)	Benzo[a]pyrene	19.44	252	791313	78.27 ppb		94
83)	Indeno[1,2,3-cd]pyrene	23.40	276	1072671	84.67 ppb		79
84)	Dibenz[a,h]anthracene	23.41	278	915214	84.24 ppb		92
85)	Benzo[g,h,i]perylene	24.51	276	876770	82.01 ppb		89
87)	Aniline	0.00	93		No Calib	#	
89)	caprolactam	0.00	55		No Calib	#	
90)	Biphenyl	0.00	154		Not Detected		
91)	Diphenyl Ether	0.00	170		No Calib		
92)	1,2-Dimethylnaphthalene	10.07	141	788697	34.77 ppb		90
94)	Isobutyric Acid	0.00	43		No Calib	#	
95)	Methacrylic Acid	0.00	41		No Calib	#	

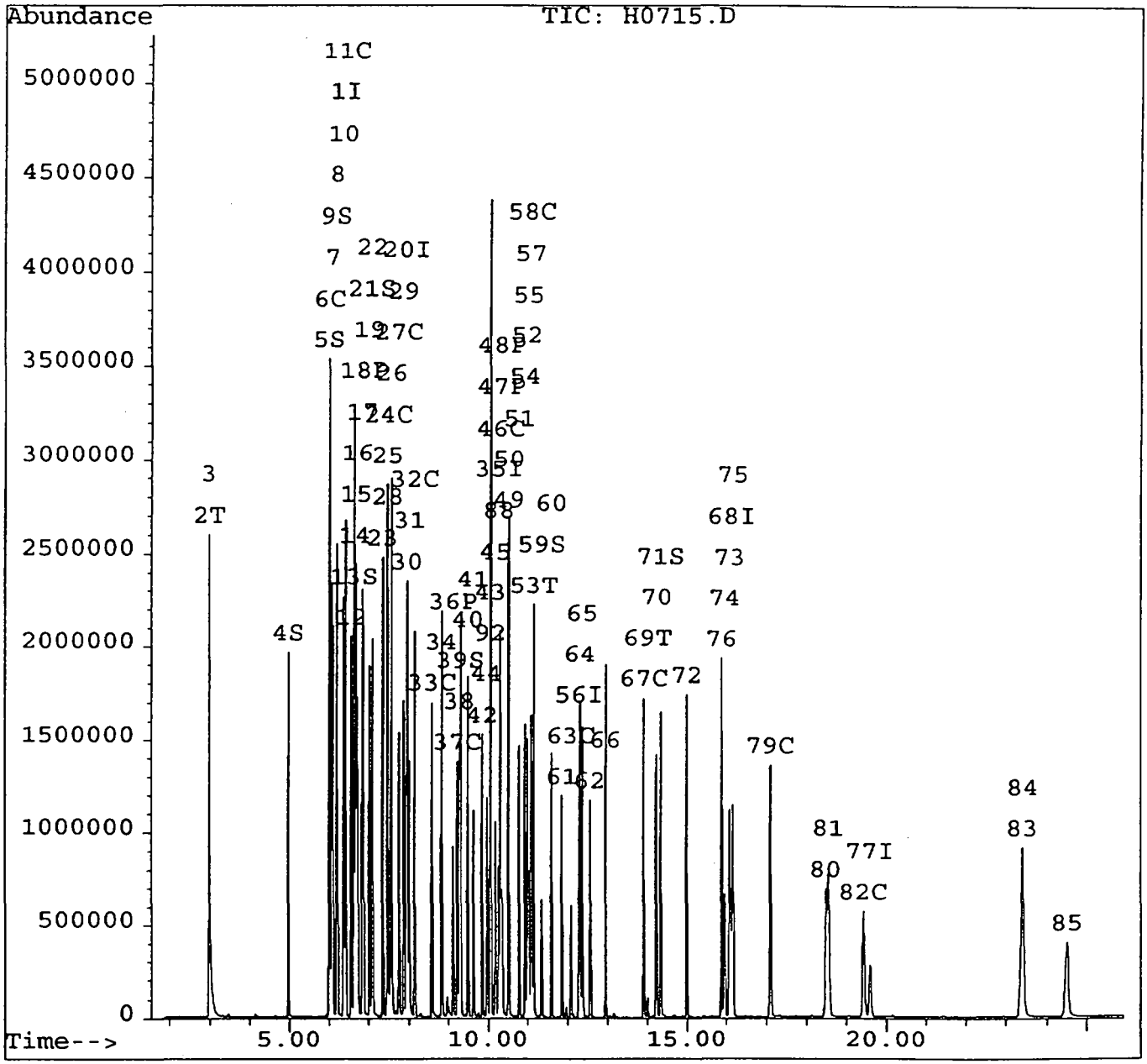
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102699\H0715.D
Acq On : 26 Oct 99 6:53 am
Sample : MSH;SSTD080;
Misc : SSTD080;
Quant Time: Oct 26 7:22 1999

Vial: 2000344
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Thu Oct 28 11:34:43 1999
Response via : Multiple Level Calibration

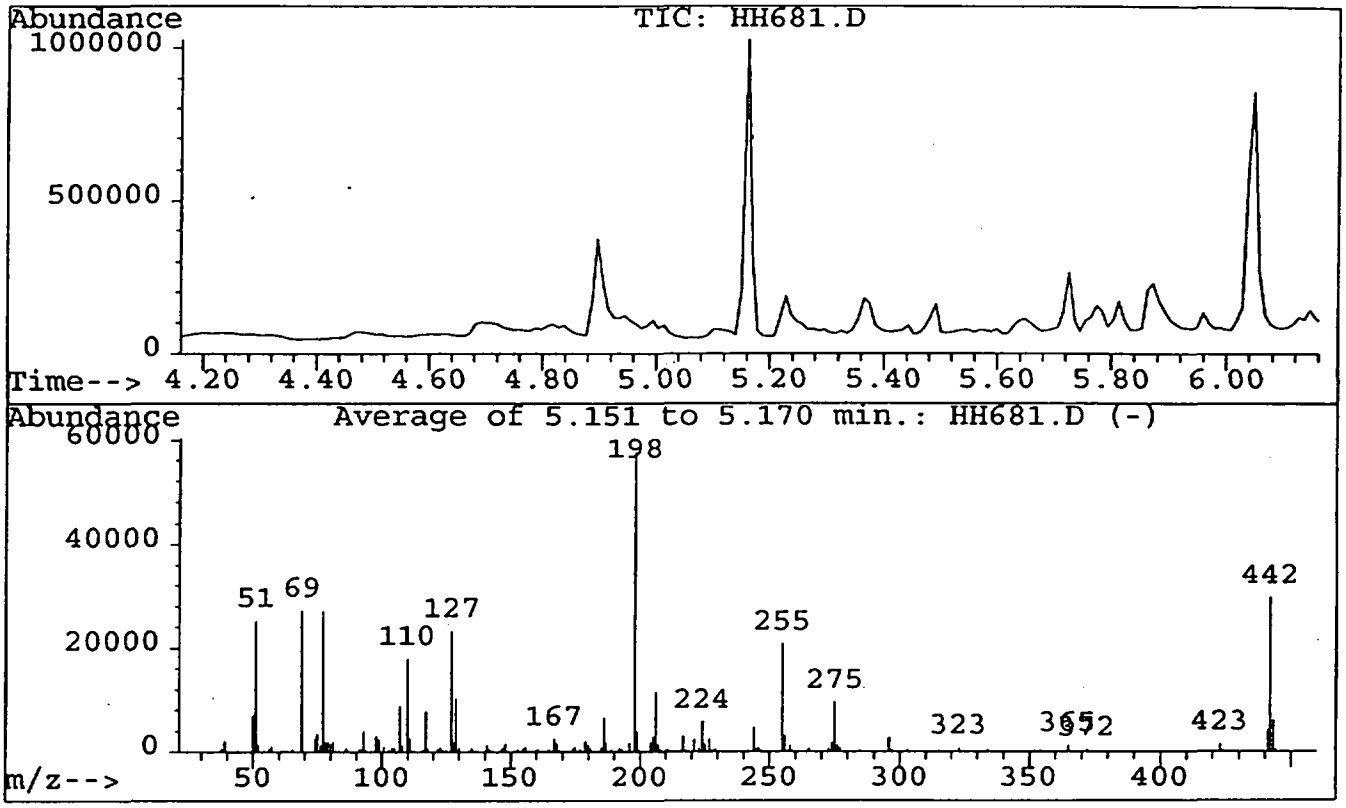


DFTPP

Data File : C:\HPCHEM\1\DATA\101899\HH681.D
Acq On : 18 Oct 99 6:05 am
Sample : MSH;50 NG DFTPP
Misc :

Vial: 1
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\DFTPH.M
Title :



Scans Used: 217 218 219 Bkg: 215

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.9	25288	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.4	27289	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	40.5	23313	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	57626	PASS
199	198	5	9	6.8	3920	PASS
275	198	10	30	16.6	9552	PASS
365	198	1.00	100	2.2	1287	PASS
441	443	0.01	100	71.8	4311	PASS
442	198	40	100	51.6	29741	PASS
443	442	17	23	20.2	6005	PASS

Average of 5.151 to 5.170 min.: HH681.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	40	56.00	639	72.95	18	85.00	160
36.85	128	56.95	1093	74.00	2562	85.90	706
37.90	582	60.00	152	74.90	3641	86.90	357
39.00	2089	60.90	219	76.05	1339	87.95	79
39.90	68	62.00	266	77.00	27105	90.10	80
43.90	182	62.95	65	78.00	1984	91.00	668
48.90	11	63.90	144	79.00	1984	92.00	578
49.95	7039	64.95	490	79.90	1590	92.90	4029
50.95	25288	66.00	53	80.90	1930	93.90	325
51.95	1430	66.95	46	82.00	311	94.95	107
54.00	313	68.90	27289	83.00	222	96.00	206

Average of 5.151 to 5.170 min.: HH681.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.90	3133	110.90	2575	124.95	321	137.00	393
98.90	2462	112.00	241	127.00	23313	138.00	115
99.90	155	112.90	77	128.00	1825	138.95	79
100.90	1064	115.95	427	128.90	10397	139.95	197
102.90	496	117.00	7738	129.95	927	140.90	1378
104.00	828	117.90	688	131.00	179	141.90	444
105.00	898	119.00	13	131.70	113	142.90	240
105.85	54	119.90	135	132.95	78	144.90	19
106.95	8857	121.90	646	133.95	234	145.90	205
107.90	1280	122.90	913	135.00	716	146.90	711
109.90	18028	123.90	377	135.90	286	147.90	1600

Average of 5.151 to 5.170 min.: HH681.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
148.90	267	158.95	105	167.90	1591	178.90	2096
149.90	79	159.80	57	168.90	346	179.90	1348
151.00	87	160.00	446	170.00	199	180.90	772
151.95	102	160.90	519	171.00	101	181.90	100
152.90	450	161.95	238	171.85	293	182.50	56
153.80	60	162.95	108	172.95	288	182.90	116
154.00	305	164.00	170	174.00	595	183.90	171
154.90	765	164.90	440	174.90	1047	185.00	897
155.90	950	165.80	57	175.95	239	186.00	6485
156.95	167	166.00	195	176.90	540	186.90	1915
157.90	301	166.90	2540	178.00	285	187.90	248

Average of 5.151 to 5.170 min.: HH681.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
188.90	553	201.05	99	210.90	497	224.00	5775
189.95	124	201.30	197	212.00	79	225.00	1460
190.90	236	201.90	62	213.05	125	226.90	2418
191.90	775	202.85	300	214.00	93	228.00	369
192.90	635	204.00	1828	214.90	211	229.00	570
193.95	139	205.00	2944	216.00	326	229.90	118
194.95	11	206.00	11613	216.90	3112	230.70	31
195.90	1679	207.00	1478	217.90	385	231.00	263

197.90	57626	207.95	503	219.00	34	231.90	70
198.90	3920	208.95	105	221.00	2466	233.00	74
199.90	377	210.00	330	222.90	725	233.80	347

Average of 5.151 to 5.170 min.: HH681.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
234.95	167	245.90	843	258.90	193	276.90	871
235.95	149	247.00	212	259.90	35	277.95	131
236.90	206	248.95	157	262.90	32	279.00	31
237.90	40	250.00	38	264.95	686	280.95	10
238.95	144	250.90	56	265.75	4	281.70	32
240.00	65	252.00	49	267.75	7	282.90	57
240.90	167	252.90	116	270.90	33	283.95	88
241.90	252	254.90	20781	272.90	644	284.90	154
243.10	246	255.90	3090	273.95	1815	289.80	48
244.00	4630	256.95	287	274.95	9552	292.85	163
245.00	662	257.90	1280	276.00	1309	293.80	39

Average of 5.151 to 5.170 min.: HH681.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
295.90	2750	323.00	806	345.90	257	372.95	106
296.90	464	324.00	166	347.00	31	382.90	156
301.00	31	326.80	99	351.20	43	389.90	71
302.10	40	327.00	53	351.90	247	390.90	39
302.95	341	327.90	110	352.80	126	401.80	96
303.95	98	331.80	42	353.10	54	402.00	82
310.00	36	332.00	36	353.95	258	402.90	271
313.85	128	332.95	76	354.90	97	403.85	98
314.90	311	333.90	528	364.90	1287	420.90	218
315.95	175	334.95	104	365.75	181	421.95	188
321.00	83	340.90	126	371.95	475	422.90	1551

Average of 5.151 to 5.170 min.: HH681.D

Modified:subtracted

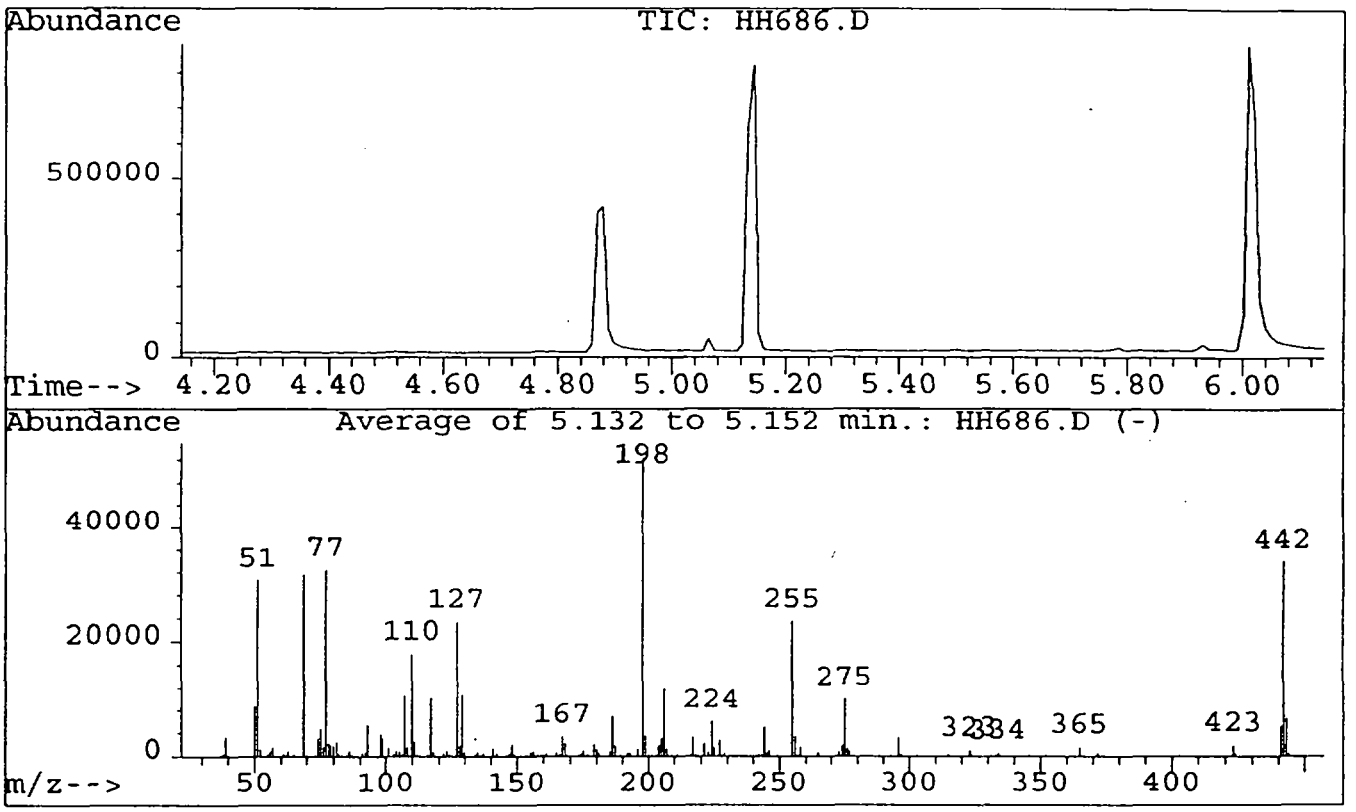
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.90	377						
441.00	4311						
441.90	29741						
442.95	6005						
444.00	509						
446.10	31						

DFTPP

Data File : C:\HPCHEM\1\DATA\102599\HH686.D
Acq On : 25 Oct 99 6:52 am
Sample : MSH;50 NG DFTPP
Misc :

Vial: 1
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\DFTPH.M
Title :



Scans Used: 215 216 217 Bkg: 212

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.7	30724	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	60.5	31639	PASS
70	69	0.00	2	0.9	298	PASS
127	198	40	60	44.8	23432	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	52333	PASS
199	198	5	9	6.8	3541	PASS
275	198	10	30	19.1	10008	PASS
365	198	1.00	100	3.1	1612	PASS
441	443	0.01	100	78.9	5162	PASS
442	198	40	100	65.2	34103	PASS
443	442	17	23	19.2	6546	PASS

HH686.D DFTPH.M Mon Oct 25 07:02:59 1999 BNACHEM1

Average of 5.132 to 5.152 min.: HH686.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.80	133	46.30	39	57.00	1728	65.70	33
36.95	276	46.50	46	57.70	47	65.95	85
37.50	36	47.05	109	58.10	173	66.85	165
37.95	460	47.85	12	58.85	101	68.90	31639
39.00	3384	48.85	117	59.90	62	69.95	298
39.90	446	50.00	8730	60.10	50	71.05	120
41.80	44	51.00	30724	61.00	412	71.60	31
42.00	40	51.95	1391	61.95	349	72.95	236
42.25	133	53.80	63	62.90	987	74.00	3096
42.90	67	55.05	310	64.05	138	74.95	4816
44.85	147	55.90	923	65.00	413	76.00	1842

Average of 5.132 to 5.152 min.: HH686.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
76.95	32618	86.00	1004	97.95	3911	110.90	2635
78.00	2377	86.90	303	98.85	3160	111.90	436
78.60	32	87.90	115	99.95	282	112.95	154
78.90	2181	88.85	135	100.95	1599	114.90	35
79.90	1931	90.90	669	102.95	402	115.15	84
80.95	2578	91.95	808	103.90	990	116.00	333
81.90	598	92.90	5455	104.95	940	116.90	10198
82.10	45	93.95	307	105.95	433	117.90	761
82.95	503	94.95	104	107.00	10646	118.10	34
83.85	167	95.90	225	108.00	1658	118.80	47
84.90	383	96.85	96	109.90	17959	119.00	93

Average of 5.132 to 5.152 min.: HH686.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
119.90	132	130.95	202	141.95	530	150.95	240
121.10	73	131.70	61	142.70	130	151.90	149
121.90	569	132.10	72	142.90	172	152.95	395
122.95	1038	134.00	290	143.80	54	153.90	332
123.95	435	134.90	759	144.00	48	155.00	811
124.80	154	136.00	264	144.95	84	155.95	914
125.00	175	136.95	579	146.00	215	156.95	290
127.00	23432	137.90	50	146.95	605	157.95	271
127.95	1883	139.00	57	147.90	2113	158.95	192
128.90	10812	139.90	109	148.95	472	159.95	365
129.90	742	140.90	1419	150.00	139	160.95	604

Average of 5.132 to 5.152 min.: HH686.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
162.05	170	173.00	329	183.10	71	193.95	172
162.95	124	173.95	560	183.90	151	194.95	82
163.90	112	175.00	1095	185.00	923	195.95	1365
165.00	661	176.00	356	186.00	6928	197.90	52333
166.00	435	176.90	497	187.00	2018	198.90	3541
166.95	3459	177.10	44	187.95	173	199.95	311
167.95	2381	177.90	74	188.95	468	201.45	295
168.90	321	178.90	2262	189.80	137	203.00	395

170.00	148	180.00	1397	190.90	270	204.00	1888
170.90	146	181.00	681	191.95	725	204.95	[illegible]
171.90	240	181.95	114	192.95	711	206.00	11959

Average of 5.132 to 5.152 min.: HH686.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
207.00	1457	220.95	2226	232.85	69	244.00	5053
207.90	319	222.90	813	233.90	186	245.00	649
209.00	328	224.00	6046	234.90	209	245.90	1076
210.05	234	224.95	1559	236.00	91	246.95	157
210.95	436	225.90	167	237.00	210	247.90	46
211.90	64	226.90	2817	238.00	31	248.95	195
213.00	35	227.90	395	238.90	83	250.90	72
214.85	136	228.90	646	239.90	107	251.90	57
216.00	360	229.80	41	240.85	154	252.40	65
216.90	3412	230.10	47	241.90	342	252.95	108
217.90	379	231.00	251	243.00	338	254.90	23458

Average of 5.132 to 5.152 min.: HH686.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
255.90	3473	272.90	782	285.00	186	303.80	34
256.85	288	274.00	1926	289.00	41	304.00	85
257.90	1640	275.00	10008	290.80	39	308.80	42
259.00	210	276.00	1408	292.00	32	313.00	37
259.90	34	276.90	992	292.85	173	313.90	116
263.90	66	278.00	150	295.90	3191	314.90	346
264.90	650	280.90	61	296.90	489	315.90	171
265.80	50	282.00	76	300.80	33	317.00	38
269.90	41	282.60	30	302.00	72	320.90	107
270.90	55	282.90	107	302.80	54	323.00	1057
272.00	44	283.80	78	303.00	275	323.90	203

Average of 5.132 to 5.152 min.: HH686.D

Modified:subtracted

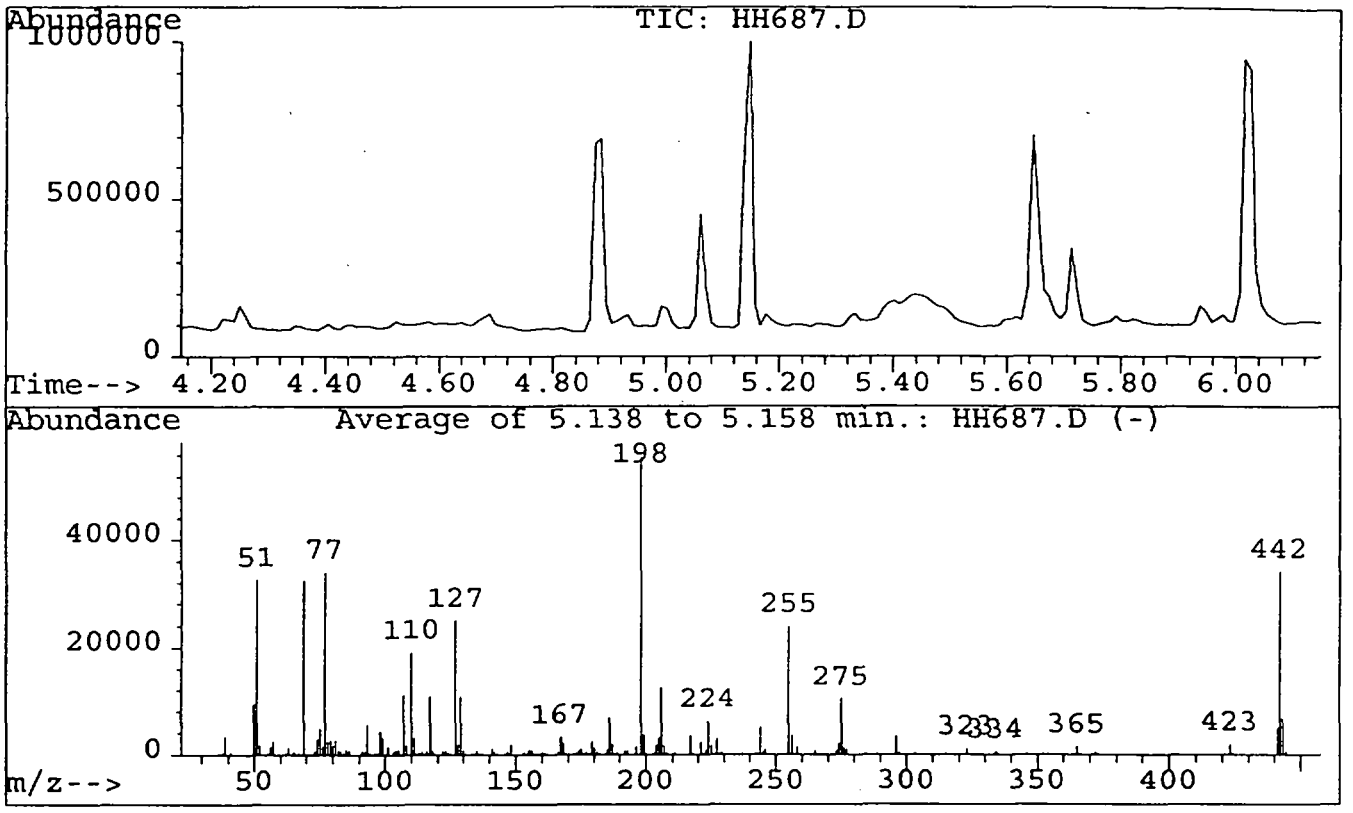
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
326.90	176	352.90	149	382.90	123	423.90	514
328.00	51	353.80	36	383.90	48	424.80	41
331.70	52	354.00	260	390.00	94	441.00	5162
333.00	71	354.90	72	390.90	60	441.90	34103
333.90	593	364.90	1612	401.80	163	442.90	6546
334.90	97	365.70	32	402.90	262	443.90	565
341.00	142	365.90	139	404.00	101		
343.70	34	370.90	105	404.80	33		
345.90	224	371.90	572	420.90	232		
346.90	40	373.00	145	421.90	212		
351.90	317	376.80	36	423.00	1922		

DFTPP

Data File : C:\HPCHEM\1\DATA\102699\HH687.D
Acq On : 26 Oct 99 6:35 am
Sample : MSH;50 NG DFTPP
Misc :

Vial: 1
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\DFTPH.M
Title :



Scans Used: 216 217 218 Bkg: 213

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.8	32703	PASS
68	69	0.00	2	0.3	112	PASS
69	198	0.00	100	58.3	32409	PASS
70	69	0.00	2	0.8	258	PASS
127	198	40	60	45.1	25067	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	55598	PASS
199	198	5	9	6.9	3831	PASS
275	198	10	30	18.7	10418	PASS
365	198	1.00	100	2.7	1528	PASS
441	443	0.01	100	75.4	5042	PASS
442	198	40	100	61.5	34197	PASS
443	442	17	23	19.5	6684	PASS

Average of 5.138 to 5.158 min.: HH687.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	178	50.00	9364	65.00	536	76.00	1697
36.90	252	50.95	32703	65.90	38	77.00	34009
37.90	393	52.00	1788	66.95	363	78.00	2449
39.00	3513	53.00	162	68.00	112	78.95	2765
40.95	527	55.00	379	68.90	32409	79.90	1759
43.00	133	55.95	1427	69.95	258	81.00	2798
43.90	131	56.95	2497	71.00	213	82.00	853
44.95	202	60.95	299	72.00	179	83.00	697
45.95	11	61.90	405	72.95	566	83.95	382
46.85	17	62.90	1300	74.00	2919	85.00	1003
48.15	109	63.95	134	74.95	4906	86.00	852

Average of 5.138 to 5.158 min.: HH687.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
86.95	2	97.95	4391	110.90	3195	121.90	697
87.90	77	98.95	3171	111.95	333	122.90	676
89.00	23	100.00	253	112.90	340	123.90	330
89.85	72	101.00	1504	114.00	628	125.00	281
90.95	660	102.95	715	115.00	156	127.00	25067
92.00	554	103.90	860	115.95	714	127.95	1936
92.90	5580	104.95	926	116.90	10975	128.95	10999
93.90	511	106.00	260	117.95	717	129.90	871
94.95	144	106.95	11209	118.95	73	130.95	271
96.00	405	107.90	1760	119.90	183	132.90	219
97.00	405	109.90	19152	120.95	43	133.90	299

Average of 5.138 to 5.158 min.: HH687.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
134.95	719	147.00	546	157.95	309	168.95	389
135.95	277	147.90	1944	159.00	304	170.00	234
136.95	311	148.90	31	159.90	461	170.95	82
137.90	111	150.00	49	160.90	535	171.85	231
138.90	164	150.90	87	161.95	227	172.10	31
139.95	56	152.00	135	162.90	10	172.90	367
140.90	1230	152.95	440	164.00	149	173.95	715
142.00	610	153.90	299	164.90	289	174.95	1096
142.95	234	154.95	924	165.95	521	175.95	230
145.00	77	155.95	890	166.90	3296	176.90	542
145.95	229	157.00	249	167.90	2118	178.10	202

Average of 5.138 to 5.158 min.: HH687.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
178.90	2450	188.90	503	200.90	173	210.25	92
179.95	1314	189.85	104	201.30	84	210.95	442
180.95	549	190.90	179	201.50	127	212.00	48
181.95	295	191.85	671	202.90	320	213.00	95
182.90	16	192.95	787	204.00	1847	213.50	31
183.70	45	194.00	192	205.00	3234	214.95	139
183.95	226	194.95	43	206.00	12634	215.90	90
185.00	906	195.95	1558	207.00	1733	216.90	3531

185.95	6909	197.90	55598	207.95	451	217.90	420
186.95	1923	198.90	3831	208.95	174	219.00	50
187.95	290	199.90	413	210.00	277	220.00	48

Average of 5.138 to 5.158 min.: HH687.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
221.00	2330	233.00	39	243.00	320	254.90	23920
221.80	397	233.95	247	244.00	5172	255.90	3546
222.95	891	234.95	196	244.95	647	256.95	231
224.00	6252	235.95	187	245.95	1117	257.90	1487
224.95	1668	236.90	289	246.90	256	258.90	240
225.90	50	238.00	30	247.90	45	259.90	47
226.90	3023	238.90	202	248.90	161	260.90	43
227.90	387	239.95	105	249.90	54	263.80	43
228.90	590	240.90	180	251.00	51	264.90	720
229.90	97	241.70	30	251.85	90	265.80	127
230.95	215	242.00	375	252.85	82	269.85	84

Average of 5.138 to 5.158 min.: HH687.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
271.05	75	282.90	127	294.90	106	309.90	43
271.60	32	283.10	40	295.90	3467	311.80	37
271.90	54	283.90	111	296.60	61	314.00	138
272.90	757	285.00	104	296.90	435	314.90	301
273.90	2134	286.00	47	297.90	38	315.90	194
274.90	10418	288.00	36	300.80	37	317.00	43
276.00	1274	288.90	89	301.80	52	320.90	92
276.90	1106	290.90	53	302.80	41	321.80	31
277.90	161	292.00	59	303.00	344	323.00	1080
278.90	45	292.90	186	304.00	91	324.00	155
281.95	130	294.00	36	308.00	38	326.85	234

Average of 5.138 to 5.158 min.: HH687.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
327.90	49	353.10	37	390.80	35	441.90	34197
330.90	35	353.90	298	400.90	66	442.90	6684
331.90	49	355.00	73	401.80	191	443.95	571
333.00	90	364.90	1528	402.90	293		
333.90	594	365.80	169	404.10	70		
334.90	95	370.90	85	420.90	193		
340.95	146	371.90	536	422.00	201		
345.90	256	372.90	118	422.90	1906		
346.80	64	382.80	159	424.00	408		
351.90	288	385.10	34	424.90	42		
352.90	138	389.90	70	441.00	5042		

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: SBLK

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: H0700

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) ___

Date Extracted: 10/20/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/25/99

Injection Volume: 1 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitrosodi-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	Bis(2-Chloroethoxy) Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000355

SBLK

Lab Name: STL-NJ

Job No. : 94127

Matrix: (soil/water) Water

Lab Sample ID: SBLK

Sample wt/vol: 1000 (g/mL) ml

Lab File ID: H0700

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) ___

Date Extracted: 10/20/99

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 10/25/99

Injection Volume: 1 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/l	Q
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-Phenyl Ether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-Phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octylphthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102599\H0700.D
Acq On : 25 Oct 99 13:51 pm
Sample : MSH;SBLK;
Misc : SBLK;B;WG416 ;AQ;;;;LOW;
Quant Time: Oct 25 14:19 1999

Vial: 1 000356
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Tue Oct 19 08:09:42 1999
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.39	152	166712	40.00 ppb	0.00
20) Naphthalene-d8	7.92	136	379899	40.00 ppb	0.00
35) Acenaphthene-d10	10.24	164	177632	40.00 ppb	0.00
56) Phenanthrene-d10	12.25	188	244078	40.00 ppb	0.01
68) Chrysene-d12	16.07	240	190845	40.00 ppb	0.00
77) Perylene-d12	19.55	264	205931	40.00 ppb	0.01
86) 1,4-Dichlorobenzene-d4B	0.00	152	0	0.00 ppb	-4.46
88) Acenaphthene_d10B	10.24	164	177632	40.00 ppb	0.00
93) 1,4-Dichlorobenzene-d4C	0.00	152	0	0.00 ppb	-4.46

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol	4.98	112	191222	31.16 ppb	41.55%
5) Phenol-d5	5.99	99	192396	18.63 ppb	24.84%
9) 2-Chlorophenol-d4	6.18	132	177502	38.79 ppb	51.71%
13) 1,2-Dichlorobenzene-d4	6.62	152	78072	21.56 ppb	43.13%
21) Nitrobenzene-d5	7.06	82	249256	30.83 ppb	61.65%
39) 2-Fluorobiphenyl	9.29	172	166529	26.39 ppb	52.77%
59) 2,4,6-Tribromophenol	11.32	330	32492	38.83 ppb	51.77%
71) Terphenyl-d14	14.32	244	86857	18.44 ppb	36.89%

Target Compounds Qvalue

CW 11/2/99

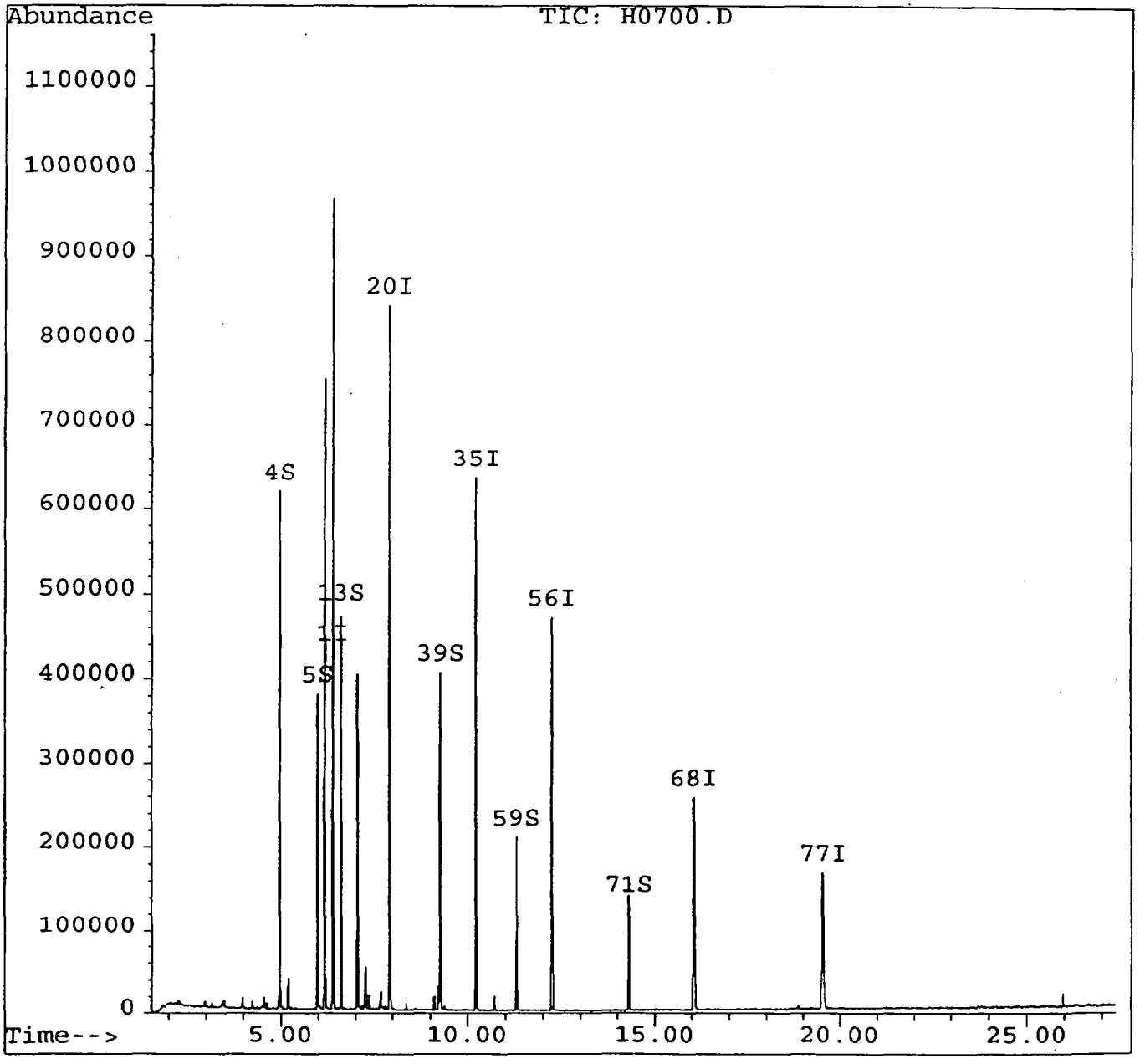
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\102599\H0700.D
Acq On : 25 Oct 99 13:51 pm
Sample : MSH;SBLK;
Misc : SBLK;B;WG416 ;AQ;;;;LOW;
Quant Time: Oct 25 14:19 1999

Vial: 100357
Operator: mva
Inst : 5972-BNA3
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SW1018H.M
Title : BNA Calibration
Last Update : Thu Oct 28 11:34:43 1999
Response via : Multiple Level Calibration



STL-NJ

BNA-GC/MS Department

MSH

Analyst/Date/ File Aeigrand 10/18/99

Analytical Fractions BNA

Instrument ID MSH

Tune File T_H

DFTPP Inj Time

Sequence File

Calibration Standards

Standard	Lot #	Conc (ug/ml)
DFTPP	WS	25
HC IS	WS	4000
CC	WS	50/80
STD 160	WS	160
STD 120	WS	120
STD 100	WS	100
STD 080	WS	80
STD 050	WS	50
STD 020	WS	20
STD 010	WS	10

IS area		IS rt	
IS#1		RT	
IS#2		RT	
IS#3		RT	
IS#4		RT	
IS#5		RT	
IS#6		RT	

Reviewed By

2nd Review

#	LAB ID	CLIENT ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	OK Comments/Corr Actions
1	DFTPP		H 681	1	2uL		WG	8270/625	OK
2	SSTD080		H 496	2			WG		OK
3	010		H 97	3			WG		OK
4	050		H 98	4			WG		OK
5	100		H 99	5			WG		OK
6	120		H 500	6			WG		OK
7	160		H 501	7			WG		OK
8	SB1K41559		H 502	8			WG		OK
9	SB1K41559BS		H 503	9		33.3	WG	8270	OK
10	93959004		H 504	10			WG		OK
11	004ms		H 505	11		32.7	WG		OK
12	004msD		H 506	12		33.3	WG		OK
13	93913006	4x	H 507	13		33.3	WG		OK
14	008	4x	H 508	14		132	WG		OK
15	009	4x	H 509	15		133	WG		OK
16	93999009		H 510	16		133	WG		OK
17	011		H 511	17		32.9	WG		OK
18	93980001	4x	H 512	18		30.2	WG		RR DL AREA L RR20X
19	002		H 513	19		133	WG		RR20X
20	003	4x	H 514	20		33.3	WG		
21	004		H 515	21		133	WG		
22	93959001	4x	H 516	22		333	WG		
23	002	4x	H 517	23		133	WG		
24	003	4x	H 518	24			WG		
25	005	4x	H 519	25			WG		PAST TUNE RR2X
							WG		RR2X
									RR STR

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MSGLOG1 1/28/98 rev.

000358

STL-NJ MSH

BNA-GC/MS Department

Analyst/Date/ File Acimno 10/7/94

Analytical Fractions BNA

Instrument ID MSH

Tune File T_H

DFTPP Inj Time 6:52 - 18:52

Sequence File

Calibration Standards

Standard	Lot #	Conc(ug/ml)
DFTPP	WS	25
HCIS	WS	4000
CC	WS	50/80
STD 160	WS	160
STD 120	WS	120
STD 100	WS	100
STD 080	WS	80
STD 050	WS	50
STD 020	WS	20
STD 010	WS	10

	IS area		IS rt
IS#1	205578	RT	6.38
IS#2	503654	RT	7.92
IS#3	253720	RT	10.24
IS#4	394981	RT	12.25
IS#5	373574	RT	16.08
IS#6	326782	RT	19.55

Reviewed By

2nd Review

#	LAB ID	CLIENT ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	OK Comments/Corr Actions
1	DFTPP		H 4686	1	2.0	1.0	WG	SW10,811	OK
2	SSTD080		H 690	2			WG		OK
3	9410300 02		H 91	3			WG		OK
4	003		H 92	4			WG		OK
5	004		H 93	5			WG		OK
6	005		H 94	6			WG		OK
7	007		H 95	7			WG		OK
8	008		H 96	8			WG		OK
9	009		H 97	9			WG		OK
10	94041014		H 98	10		1.3	WG		OK
11	OLK		H 99	11		1.0	WG		OK
12	SBLK		H 4700	12		1.0	WG		OK
13	SBLK33		H 01	13			WG		OK
14	94153001		H 02	14			WG		OK
15	002		H 03	15			WG		OK
16	003		H 04	16			WG		OK
17	004		H 05	17			WG		OK
18	005		H 06	18			WG		LL 20%
19	006		H 07	19			WG		OK
20	007		H 08	20			WG		Post Tune
21	008MS		H 09	21		2.0	WG		
22	008MSD		H 10	22		2.0	WG		
23			H	23			WG		
24			H	24			WG		
25			H	25			WG		

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MSGLOG1 1/28/98

000359

STL-NJ

BNA-GC/MS Department

MSH

Analyst/Date/ File Acwms 10/26/99

Analytical Fractions BNA

Instrument ID MSH

Tune File T_H

DFTPP Inj Time 6:35 - 18:35

Sequence File

Calibration Standards

Standard	Lot #	Conc(ug/ml)
DFTPP	WS	25
HCIS	WS	4000
CC	WS	50/80
STD 160	WS	160
STD 120	WS	120
STD 100	WS	100
STD 080	WS	80
STD 050	WS	50
STD 020	WS	20
STD 010	WS	10

	IS area	IS rt
IS#1	720710	RT 6.42
IS#2	533804	RT 7.95
IS#3	264855	RT 10.27
IS#4	423157	RT 12.25
IS#5	411143	RT 16.12
IS#6	336706	RT 19.55

Reviewed By

2nd Review

#	LAB ID	CLIENT ID	DATA FILE	ALS #	INJ VOL	DIL	BATCH	METHOD	OK Comments/Corr Actions
1	DFTPP		H 687	1	1uL		WG	SV1028H	OK
2	SSTD080		H 715	2			WG		OK
3	94159007		H 16	3		1.0	WG		OK
4	005MS		H 17	4		2.0	WG		OK
5	005MSD		H 18	5		2.0	WG		OK
6	005		H 19	6		20x	WG		OK
7	94140001		H 20	7		1x	WG		OK
8	002		H 21	8			WG		OK
9	003		H 22	9			WG		Re SSD
10	004		H 23	10			WG		OK
11	005		H 24	11			WG		Re ISL
12	006		H 25	12			WG		OK
13	007		H 26	13			WG		OK
14	94127019		H 27	14			WG		OK
15	020		H 28	15			WG		OK
16	021		H 29	16			WG		OK
17	026		H 30	17			WG		OK
18	SB116416 30		H 31	18			WG		OK
19	4163085		H 32	19		33.3	WG		Re ISL
20	94023001		H 33	20			WG		
21	002MS		H 34	21			WG		
22	003MSD		H 35	22			WG		
23	004		H 36	23			WG		
24			H 37	24			WG		
25			H 37	25			WG		

Page ____ of 200

MSGLOG1 1/28/98

000360

AEN/NJ
Organic Extractions -AQUEOUS / Matrix

Batch: 18071 Extract File#: 44 Extraction Method: SEP FUNNEL Date: 20-OCT-99 Analyst: Anthony T. Hankerson

Luis Batch: WG60126 Relinquished To Storage(Init/Date): ATH 10/26/99 Concentration (Finish) Date: 25-OCT-99 Analyst: Anthony T. Hankerson

Analysis: BNA-8270B- Removed From Storage(Init/Date):

Returned To Storage(Init/Date):

BS LOT #: ~~SS1195E~~ SS1292E
BS LOT VOLUME: .5ml

MS LOT #: ~~SS1195E~~ SS1292E
MS LOT VOLUME: .5ml

MSD LOT #: ~~SS1195E~~ SS1292E
MSD LOT VOLUME: .5ml

Spike witnessed by:

Lab ID	Client ID	Sample Vol	Int. pH	BN pH	AE pH	Initial Vol.	Split Aliquot	Final Vol.	Surr. Lot SS1377E	Vol	Comments
94127019	SW2-2-01	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94127020	SW2-2-03	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94127021	FB-101499	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94127026	SW2-3-01	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94159001	MW-10	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94159002	MW-18	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94159003	MW-16	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94159004	MW-15	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94159005	MW-7	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94159005MSD	MW-7	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94159005MS	MW-7	1000 ml	6	12	2			1 ml	SS1201E	.5 ml	
94159006	MW-17	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
94159007	EQUIPBLANK	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
QE-18071E	BLANK	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	
QE-18071ES	BL.SP.	1000 ml	6	12	2			1 ml	~~SS1201E~~	.5 ml	

NORTHERN ECOLOGICAL ASSOCIATES, INC

New York Office:
33 Park Street
Canton, New York 13617

Corporate Headquarters:
451 Presumpscot Street
Portland, Maine 04103

APPENDIX D, VOLUME V OF VI

FINAL
FORMER STEWART AIR FORCE BASE (AFB)
HTRW INVESTIGATION

NEWBURGH, NEW YORK

Contract Number: DACW51-97-D-0010
Delivery Order No. 61

Prepared for:

U.S. Army Corps of Engineers
New York District
26 Federal Plaza
New York, New York 10278-0090

Prepared by:

Ogden Environmental and Energy Services Co., Inc.
Northern Ecological Associates, Inc.

MARCH 2000

Committed To *Your* Success

Severn Trent Laboratories
628 Route 10
Whippany, NJ 07981

Tel: (973) 428-8181
Fax: (973) 428-5222

NYSDEC CATEGORY B

SAMPLING DATE OCTOBER 14, 1999

OGDEN ENVIRONMENTAL

PROJECT: STEWART AFB 770760061

PREPARED BY:

SEVERN TRENT LABORATORIES, INC.

(CERTIFICATION NUMBER 10997)

STL JOB NO: 20990-94127

VOLUME II OF III

PESTICIDES

SOIL PEST/PCB SURROGATE RECOVERY

Lab Name: STL-NJ

Batch: 10/20/99

Job Number: 94127

No.	Client ID	TCX %REC #	DCB %REC #
1	METHOD BLANK	102	94
2	BLANK SPIKE	103	94
3	3517-03MS	90	77
4	3517-03MSD	111	78
5	S2-2-01	110	81
6	S2-3-01	D	D
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

ADVISORY QC LIMITS:

Surrogate (1) = TCX - Tetrachloro-m-xylene (30-150)
Surrogate (2) = DCB - Decachlorobiphenyl (20-150)

= Column to be used to flag recovery values
* = Values outside QC Limits
D = Surrogate Diluted out

Severn Trent Laboratories - Whippany
GC ORGANICS SURROGATE RECOVERY

Matrix: WATER Level: LOW Lab Job No: 94127

	LABORATORY SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	wg41689 mb	65	70	64	56	0
02	wg41689 bs	80	79	86	64	0
03	94127019	87	78	94	68	0
04	94127020	88	79	76	65	0
05	94127021	97	98	65	62	0
06	94127026	70	90	82	66	0
07	94127026ms	71	83	70	72	0
08	94127026msd	89	88	73	72	0
09	evalb					0
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		ADVISORY QC LIMITS
S1 (TCX)	= Tetrachloro-m-xylene	(30-150)
S2 (DCB)	= Decachlorobiphenyl	(24-155)

Column to be used to flag recovery values
* Values outside of advisory QC limits
D Surrogate diluted out
R Surrogate removed during H2SO4 cleanup procedure
** Not detected due to coeluting interference

WATER PEST MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Lab Name: STL-NJ Contract: _____

Lab Code: STL-NJ Job No.: 94127

Matrix Spike/Matrix Spike Dup - Sample ID: WG41689 BS

Compound	Spike Added (ug/l)	SAMPLE concentration (ug/l)	MS concentration (ug/l)	MS % REC	QC Limits % Recovery
Gamma-BHC	0.050	0	0.0452	90	56-123
Heptachlor	0.050	0	0.0460	92	40-131
Aldrin	0.050	0	0.0401	80	40-120
Dieldrin	0.10	0	0.0910	91	52-126
Endrin	0.10	0	0.103	103	56-121
4,4'-DDT	0.30	0	0.275	92	38-127

* Values outside of QC limits.

RPD: 0 out of 6 outside limits.
Spike Recovery : 0 out of 6 outside limits.

Comments: _____

SOIL PESTICIDE BLANK SPIKE

Lab Name: STL-NJ Contract: _____

Lab Code: STL-NJ Job No.: 94127

Matrix Spike/Matrix Spike Dup - Sample ID: 10/20/99 BS

Compound	Spike Added (ug/Kg)	SAMPLE concentration (ug/Kg)	MS concentration (ug/Kg)	MS % REC	QC Limits % Recovery
Gamma-BHC	8.3	0	7.8	94	56-123
Heptachlor	8.3	0	7.6	92	40-131
Aldrin	8.3	0	8.3	100	40-120
Dieldrin	17	0	17	100	52-126
Endrin	17	0	18	106	56-121
4,4'-DDT	50	0	50	100	38-127

* Values outside of QC limits.

Spike Recovery : 0 out of 6 outside limits.

Comments: _____

WATER PEST MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Lab Name: STL-NJ Contract: _____

Lab Code: STL-NJ Job No.: 94127

Matrix Spike/Matrix Spike Dup - Sample ID: SW2-3-01

Compound	Spike Added (ug/l)	SAMPLE concentration (ug/l)	MS concentration (ug/l)	MS % REC	QC Limits % Recovery
Gamma-BHC	0.10	0	0.092	92	56-123
Heptachlor	0.10	0	0.092	92	40-131
Aldrin	0.10	0	0.082	82	40-120
Dieldrin	0.20	0	0.210	105	52-126
Endrin	0.20	0	0.247	123 *	56-121
4,4'-DDT	0.60	0	0.56 2	93	38-127

Compound	Spike Added (ug/l)	MSD concentration (ug/l)	MSD % REC	RPD	QC Limits % Recovery	QC Limits RPD
Gamma-BHC	0.10	0.086	86	7	56-123	30
Heptachlor	0.10	0.094	94	2	40-131	30
Aldrin	0.10	0.086	86	5	40-120	30
Dieldrin	0.20	0.206	103	2	52-126	30
Endrin	0.20	0.261	131*	6	56-121	30
4,4'-DDT	0.60	0.679	113	19	38-127	30

* Values outside of QC limits.

RPD: 0 out of 6 outside limits.
Spike Recovery : 2 out of 12 outside limits.

Comments: _____

SOIL PEST MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Lab Name: STL-NJ Contract: _____

Lab Code: STL-NJ Job No.: 94127

Matrix Spike/Matrix Spike Dup - Sample ID: 3517-03

Compound	Spike Added (ug/Kg)	SAMPLE concentration (ug/Kg)	MS concentration (ug/Kg)	MS % REC	QC Limits % Recovery
Gamma-BHC	20	0	16	80	56-123
Heptachlor	20	0	14	70	40-131
Aldrin	20	0	16	80	40-120
Dieldrin	40	0	33	83	52-126
Endrin	40	0	34	85	56-121
4,4'-DDT	40	0	33	83	38-127

Compound	Spike Added (ug/Kg)	MSD concentration (ug/Kg)	MSD % REC	RPD	QC Limits % Recovery	QC Limits RPD
Gamma-BHC	20	18	90	12	56-123	30
Heptachlor	20	16	80	13	40-131	30
Aldrin	20	18	90	12	40-120	30
Dieldrin	40	36	90	8	52-126	30
Endrin	40	36	90	17	56-121	30
4,4'-DDT	40	38	95	13	38-127	30

* Values outside of QC limits.

RPD: 0 out of 6 outside limits.
Spike Recovery : 0 out of 12 outside limits.

Comments: _____

NEA
NORTHERN ECOLOGICAL ASSOCIATES, INC.
ENVIRONMENTAL SCIENTISTS & PLANNERS

March 17, 2000
NPOR/00-0049

Mr. Mark Lulka
U.S. Department of the Army
New York District, Corps of Engineers
CENAN-PL-EA
26 Federal Plaza, Room 2130
New York, New York 10278-0090

Re: Contract No. DACW51-97-D-0010, Delivery Order 0061
HTRW Investigation at Former Stewart Air Force Base (AFB), Newburgh, NY
Final Report

Dear Mr. Lulka:

The Northern Ecological Associates, Inc. (NEA) Team of Consultants is pleased to submit five (5) hardcopies of the enclosed Final Report for the HTRW Investigation at the Former Stewart Air Force Base (AFB), Newburgh, New York, as well as the electronic version of the report. In addition, one set of Appendix D (Volumes I through VI), which contains the laboratory data, is also enclosed. If additional copies of the laboratory data (Appendix D) are required, please let me know. The report has been prepared by Ogden Environmental and Energy Services Co., Inc. and reviewed by Northern Ecological Associates, Inc.

If you need any additional information or would like to discuss any aspect of the enclosed deliverable, please do not hesitate to contact Mr. Stephen Posten at phone number (732) 302-9500 or me at (207) 879-9496.

Sincerely,
Northern Ecological Associates, Inc.

David J. Santillo
Supervisory Biologist

Enc.

cc: S. Posten (Ogden)
File: CE-300/0-4-1, DO61-0-7

451 Presumpscot Street • Portland, Maine 04103 • (207) 879-9496 • fax (207) 879-9481 • www.nea-enviro.com • nea@neamaine.com

PESTICIDE/PCB METHOD BLANK SUMMARY

Lab Name: STL/NJ Batch: WG41689

Job No.: 94127

Lab Sample ID: WG41689 MB
Matrix: (soil/water) SOIL
Level: (Low/Med)
Date Analyzed (1): 11/28/99
Time Analyzed (1): 1122
Instrument ID (1): HP58902A
GC Column (1): RTX-CLP

Lab File ID: b02aa063
Extraction: (sepf/sonc) SONC
Date Extracted: 10/19/99
Date Analyzed (2): 11/28/99
Time Analyzed (2): 1122
Instrument ID (2): HP58902B
GC Column (2): RTX-CLPII

This Method Blank Applies to the Following Samples, MS and MSD:

No.	CLIENT ID	Lab Sample ID	Date Analyzed 1	Date Analyzed 2
1	BLANK SPIKE	WG41689 BS	11/28/99	11/28/99
2	SW2-2-01	94127019	11/28/99	11/28/99
3	SW-2-2-03	94127020	11/28/99	11/28/99
4	FB-101499	94127021	11/28/99	11/28/99
5	SW2-3-01	94127026	11/28/99	11/28/99
6	SW2-3-01MS	94127026MS	11/28/99	11/28/99
7	SW2-3-01MSD	94127026MSD	11/28/99	11/29/99
8				
9				
10				

PESTICIDE/PCB METHOD BLANK SUMMARY

Lab Name: STL/NJ Batch: 10/20/99

Job No.: 94127

Lab Sample ID: 10/20/99 MB Lab File ID: D4AS01C_018

Matrix: (soil/water) SOIL Extraction: (sepf/cont/sonc) SONC

Level: (Low/Med) _____ Date Extracted: 10/12/99

Date Analyzed (1): 11/10/99 Date Analyzed (2): 11/10/99

Time Analyzed (1): 0337 Time Analyzed (2): 0247

Instrument ID (1): HP58904A Instrument ID (2): HP58904B

GC Column (1): DB1701 GC Column (2): DB608

This Method Blank Applies to the Following Samples, MS and MSD:

No.	CLIENT ID	Lab Sample ID	Date Analyzed 1	Date Analyzed 2
1	BLANK SPIKE	10/20/99 BS	11/10/99	11/10/99
2	3517-03MS	94091003MS	11/10/99	11/10/99
3	3517-03MSD	94091003MSD	11/10/99	11/10/99
4	S2-2-01	94127018	11/24/99	11/24/99
5	S2-3-01	94127025	11/24/99	11/24/99
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

FORM 1
PEST ORGANICS ANALYSIS DATA SHEET

CLIENT ID

S2-2-01

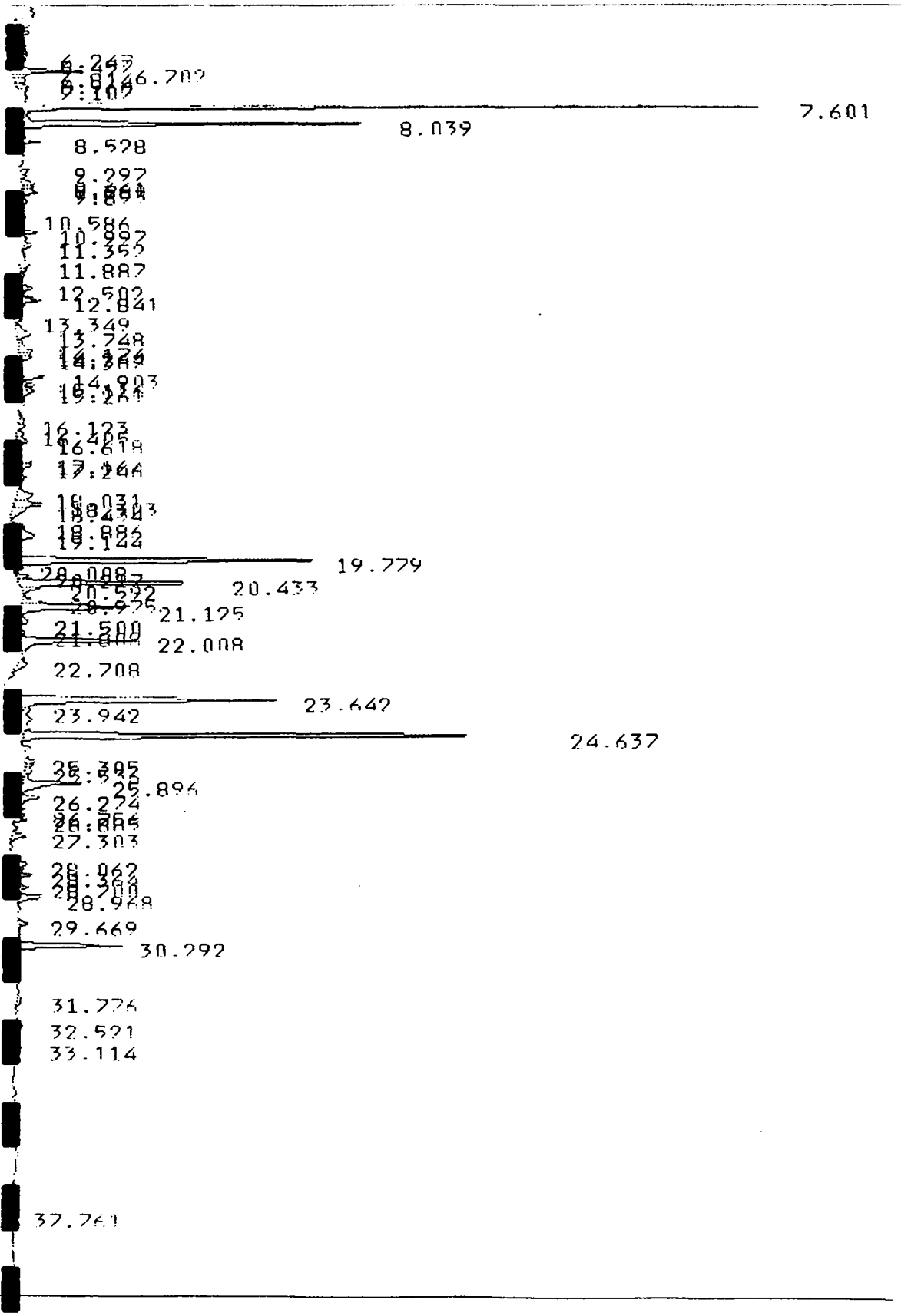
Lab Name: STL - Whippany
Matrix: (soil/water): Soil
Sample wt/vol: 30 (g/ml) g
%Moisture: 19.7
Extraction: (SepF/Cont/Sonc) Sonc
Concentrated Extract Volume: 10000(µl)
Injection Volume: 1 (µl)
GPC Cleanup: (Y/N) N pH:_____

Client: OGDEN
Lab Sample ID: 94127018
Lab File ID: D4AS01J_022
Date Received: 10/14/99
Date Extracted: 10/20/99
Date Analyzed: 11/24/99
Dilution Factor: 1
Sulfur Cleanup: Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/Kg	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
3098-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor Epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	7.7	
72-55-9	4,4'-DDE	12	
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	16	
1031-07-8	Endosulfan Sulfate	4.2	U
50-29-3	4,4'-DDT	26	
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin Ketone	4.2	U
7421-93-4	Endrin Aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	100	U

IEA Pesticide Standard Report

Sample Name : 94127018 Inj:1059 24Nov1999
Result : /DATA/MDP/RESULT/D4AS011 022.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

mple Name : 94127018 Report No :360.01
sult File : /DATA/LOOP/RLSULT/D4AS01J 022.RLS
olumn Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
nstrument : HP58904A
lculation : ExternalSTD
n Time : 40.02 Mins. Injected on 1059 24Nov1999
equence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
hseq/Sample : 1/ 22 Bottle no. : 22

% Dil-Fact
100.00

nn Status : RunStatusOK
EndOffBaseline
SpecialInteg

#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.25		0.000000	15533	VV	0.0000	
2	6.46		0.000000	16913	VV	0.0000	
3	6.70		0.000000	108929	PV	0.0000	
4	6.81		0.000000	16676	VV	0.0000	
5	6.97		0.000000	21701	VV	0.0000	
6	7.11		0.000000	19766	VV	0.0000	
7	7.60		0.000000	738927	PB	0.0000	
8	8.04	8.03	0.000000	401098	BV	22.0154	TCX
9	8.53		0.000000	21746	PV	0.0000	
10	9.30		0.000000	15928	PV	0.0000	
11	9.66		0.000000	22667	VV	0.0000	
12	9.78		0.000000	16290	VV	0.0000	
13	9.89		0.000000	23800	VV	0.0000	
14	10.59	10.58	0.000000	33073	BV	1.5984	~~A-BHC~~
15	11.00		0.000000	18854	VV	0.0000	
16	11.35		0.000000	10020	BV	0.0000	
17	11.89		0.000000	17815	VV	0.0000	
18	12.50		0.000000	21953	VV	0.0000	
19	12.84		0.000000	14881	BB	0.0000	
20	13.35		0.000000	11273	PV	0.0000	
21	13.75		0.000000	45907	VV	0.0000	
22	14.17		0.000000	38318	VV	0.0000	
23	14.26		0.000000	13612	VV	0.0000	
24	14.39	14.39	0.000000	19695	VV	1.0199	~~ALDRIN~~
25	14.90	14.95	0.000000	28761	BV	2.5220	~~B-BHC~~
26	15.12		0.000000	12735	PV	0.0000	
27	15.26		0.000000	13407	VB	0.0000	
28	16.12	16.13	0.000000	12907	BV	.8236	~~D-BHC~~
29	16.40		0.000000	15513	VV	0.0000	
30	16.62		0.000000	27149	VV	0.0000	
31	17.16		0.000000	33549	PV	0.0000	
32	17.25	17.28	0.000000	19867	VV	.9912	~~HEPTACHLOR EPOXIDE~~
33	18.03		0.000000	46379	VV	0.0000	
34	18.30		0.000000	67288	VV	0.0000	
35	18.43		0.000000	36138	VV	0.0000	
36	18.89	18.87	0.000000	27052	PV	1.3586	~~G-CHLORDANE~~

jet 12/7/99

IEA Pesticide Standard Report

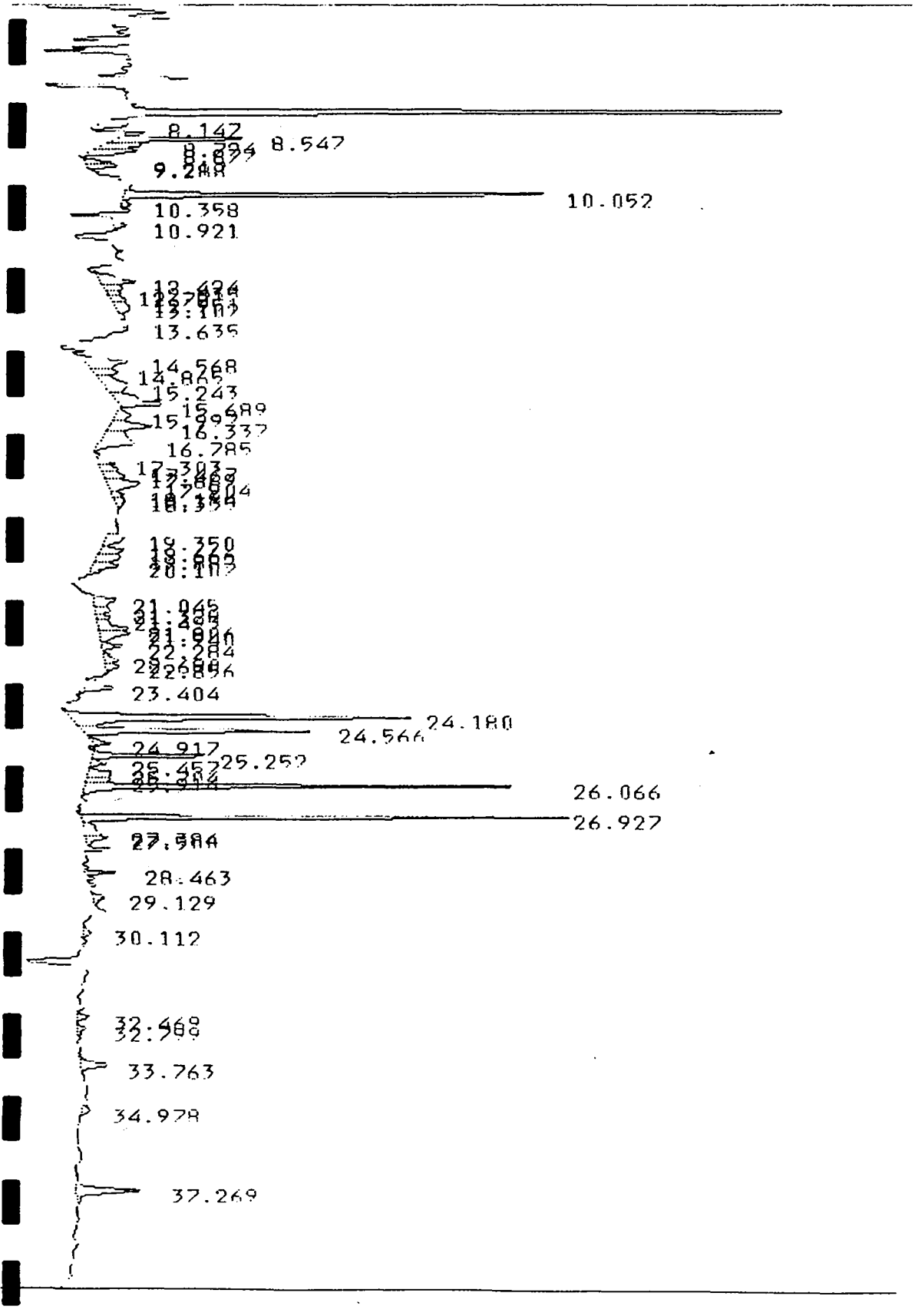
#[redacted]#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
[redacted]7	19.14	19.15	0.000000	91842	VV	4.2705	A-CHLORDANE
38	19.78	19.78	0.000000	503122	PV	28.1577	4,4' DDE
39	20.01		0.000000	14960	VV	0.0000	
[redacted]0	20.22		0.000000	22181	FF	0.0000	
[redacted]1	20.43	20.42	0.000000	321537	FF	18.6290	DIELDRIN
42	20.59		0.000000	30759	FF	0.0000	
[redacted]3	20.97		0.000000	27141	FF	0.0000	
[redacted]4	21.13		0.000000	199729	FF	0.0000	
45	21.50	21.45	0.000000	25748	FF	1.7048	ENDRIN
46	21.81		0.000000	17760	FF	0.0000	
[redacted]7	22.01		0.000000	243638	FF	0.0000	
48	22.71		0.000000	26383	FF	0.0000	
49	23.64	23.63	0.000000	480429	FF	37.7607	4,4' DDD
[redacted]0	23.94		0.000000	18573	FF	0.0000	
[redacted]1	24.64	24.63	0.000000	700760	PV	62.6797	4,4' DDT
52	25.31	25.32	0.000000	13472	VV	1.4723	~~ENDRIN ALDEHYDE~~
[redacted]3	25.54		0.000000	15835	VV	0.0000	
[redacted]4	25.90		0.000000	122413	VV	0.0000	
55	26.27	26.24	0.000000	38154	VV	9.7882	~~METHOXYCHLOR~~
56	26.76		0.000000	12002	PV	0.0000	
[redacted]7	26.88		0.000000	14731	VV	0.0000	
58	27.30		0.000000	26410	VV	0.0000	
59	28.06		0.000000	12829	BV	0.0000	
[redacted]0	28.36		0.000000	25279	VV	0.0000	
[redacted]1	28.70		0.000000	19638	VV	0.0000	
62	28.97		0.000000	48305	PV	0.0000	
[redacted]3	29.67		0.000000	16401	PV	0.0000	
[redacted]4	30.29	#30.28	0.000000	173356	FF	16.2730	DCB
65	31.78		0.000000	12803	VV	0.0000	
66	32.52		0.000000	37699	PV	0.0000	
[redacted]7	33.11		0.000000	22417	VV	0.0000	
[redacted]8	37.76		0.000000	15259	PB	0.0000	[illegible] 12/7/99

[redacted]tal Area : 5372683 Total ng inj : 211.065

[redacted]eport Time : 1312 07Dec1999
[redacted]thod : /DATA/LOOP/METHOD/HP58904APH.MTH
[redacted]esult File : /DATA/LOOP/RESULT/D4AS013 022.RES

IEA Pesticide Standard Report

Sample Name : 94127018 Inj 1005 24Nov1999
Result : /DATA/LOOP/RESULT/D4RS01J 021.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
38	22.28		.134397	28705	VV	0.0000	
39	22.69	22.77	.169102	23640	VV	1.8970	~~ENDOSULFAN I~~
40	22.86		.142963	18642	VB	0.0000	
41	23.40		.093648	23504	BV	0.0000	
42	24.18	24.10	.133622	447865	PV	37.0872	4,4' DDE
43	24.57	24.51	.110743	242782	VV	22.1113	DIELDRIN
44	24.92		.130109	22767	VB	0.0000	
45	25.25		.069841	96473	BV	0.0000	
46	25.46		.095903	15180	VV	0.0000	
47	25.70	25.72	.199448	41368	VV	8.1208	ENDRIN
48	25.91		.117143	24574	VV	0.0000	
49	26.07	26.03	.078589	346893	VV	80.7855	4,4' DDD
50	26.93	26.90	.072286	371173	BV	87.0074	4,4' DDT
51	27.38		.236580	38808	VV	0.0000	
52	27.50		.131038	29100	VV	0.0000	
53	28.46		.084522	25724	VV	0.0000	
54	29.13		.151271	19837	VV	0.0000	
55	30.11		.163965	14255	PV	0.0000	
56	32.47		.135026	14884	VV	0.0000	
57	32.80		.179173	13781	PV	0.0000	
58	33.76		.159624	41370	VV	0.0000	
59	34.98		.213530	16100	BV	0.0000	
60	37.27	37.24	.206656	122952	BV	20.9387	DCB

Total Area : 3980843 Total ng inj : 295.458

Report Time : 1316 07Dec1999
Method : /DATA/LOOP/METHOD/HP58904BPH.MTH
Result File : /DATA/LOOP/RESULT/D4BS01J 021.RES

Severn Trent Laboratories - Whippany

Client ID: **sw2-2-01**
Site:

Lab Sample ID: **94127019**
Lab Job No: 94127

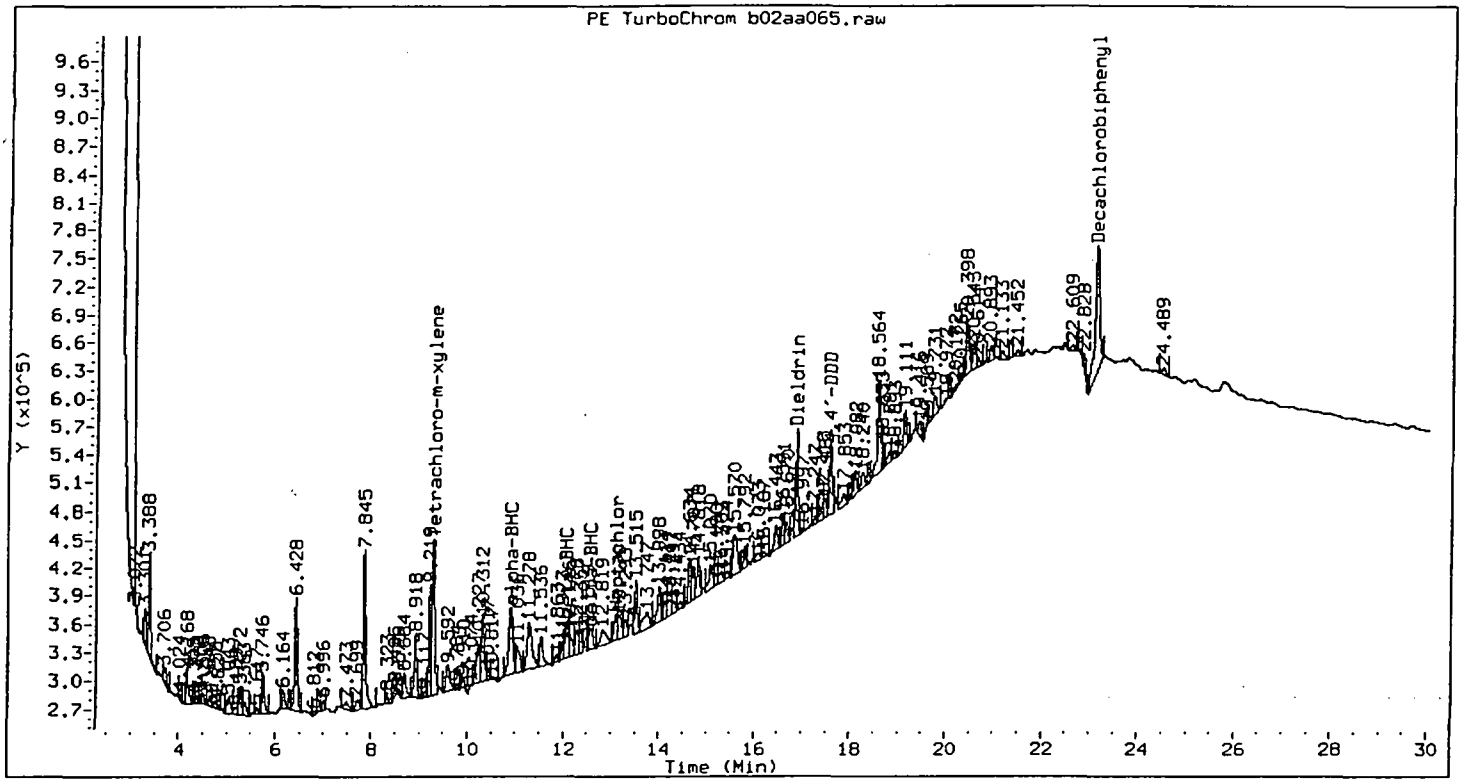
Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/19/99
Date Analyzed: 11/28/99
GC Front Column: Rtx-CLPest
GC Rear Column: Rtx-CLPestII
Instrument ID: HP58902.i

Matrix: WATER
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: b02aa065.d
Rear File ID: b02ab065.d

ORGANOCHLORINE PESTICIDES - GC/ECD
METHOD 8081A

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aldrin	ND	0.0100	R
alpha-BHC	0.0263	0.0100	F
beta-BHC	0.0171	0.0100	R
delta-BHC	0.00809J	0.0100	F
gamma-BHC (Lindane)	ND	0.0100	R
4,4'-DDD	0.0266	0.0200	R
4,4'-DDE	ND	0.0200	R
4,4'-DDT	ND	0.0200	R
Dieldrin	0.0348	0.0200	R
Endosulfan I	ND	0.0100	R
Endosulfan II	ND	0.0200	R
Endosulfan sulfate	ND	0.0200	R
Endrin	ND	0.0200	R
Endrin aldehyde	ND	0.0200	R
Endrin ketone	ND	0.0200	R
Heptachlor	ND	0.0100	R
Heptachlor epoxide	ND	0.0100	R
Methoxychlor	ND	0.100	R
Toxaphene	ND	0.500	R
gamma-Chlordane	ND	0.0100	R
alpha-Chlordane	ND	0.0100	R

000378



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/Bf8081.m
Sample Info : 94127019
Lab ID : 94127019 Inst ID : HP58902.i
Inj Date : 28-NOV-1999 12:40 Dil Factor : 1
Operator : gds Sample Matrix : WATER
Cpnd Sublist: TCLpest+ Sample Type: SAMPLE

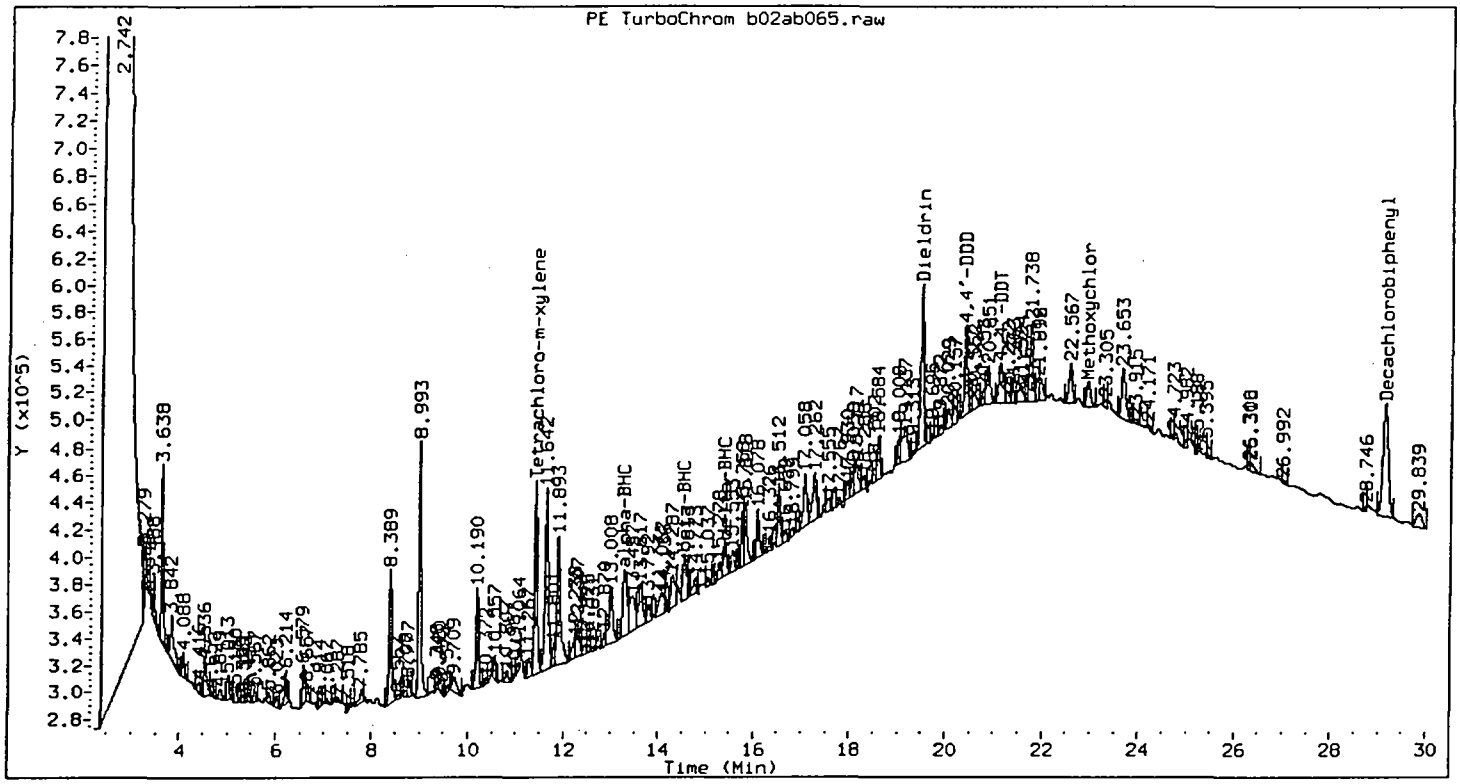
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
alpha-BHC		10.902	10.925	0.023	431401	13.143	0.026
beta-BHC	(M)	12.062	12.078	0.016	188611	8.477	0.017
delta-BHC	(M)	12.575	12.547	0.028	122671	4.043	0.008
4,4'-DDD		17.570	17.573	0.003	287951	12.483	0.025
Dieldrin		16.869	16.873	0.004	410471	12.988	0.026
Heptachlor		13.102	13.090	0.012	133578	3.095	0.006
Tetrachloro-m-xylene		9.289	9.284	0.005	603780	17.327	0.035
Decachlorobiphenyl		23.114	23.119	0.005	826605	18.902	0.038

12/14/99

COMMENTS:

M - Compound response manually integrated.

000379



thod : /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/Br8081.m
mple Info : 94127019
ab ID : 94127019 Inst ID : HP58902.i
j Date : 28-NOV-1999 12:40 Dil Factor : 1
erator : gds Sample Matrix : WATER
pnd Sublist: TCLpest+ Sample Type: SAMPLE

ompounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
ha-BHC		13.277	13.316	0.038	298980	9.119	0.018
ta-BHC	(M)	14.538	14.561	0.022	185435	8.559	0.017
lta-BHC		15.394	15.367	0.027	122400	4.030	0.008
-DDD		20.383	20.387	0.004	282748	13.279	0.027
~~4'-DDT~~		21.100	21.158	0.058	213291	10.000	0.020
drin		19.483	19.483	0.000	538732	17.430	0.035
~~thoxychlor~~		22.929	22.992	0.062	108529	9.029	0.018
rachloro-m-xylene		11.418	11.409	0.008	519099	15.576	0.031
achlorobiphenyl		29.132	29.147	0.015	640384	13.563	0.027

12/14/99

Severn Trent Laboratories - Whippany

Client ID: sw2-2-03
Site:

Lab Sample ID: 94127020
Lab Job No: 94127

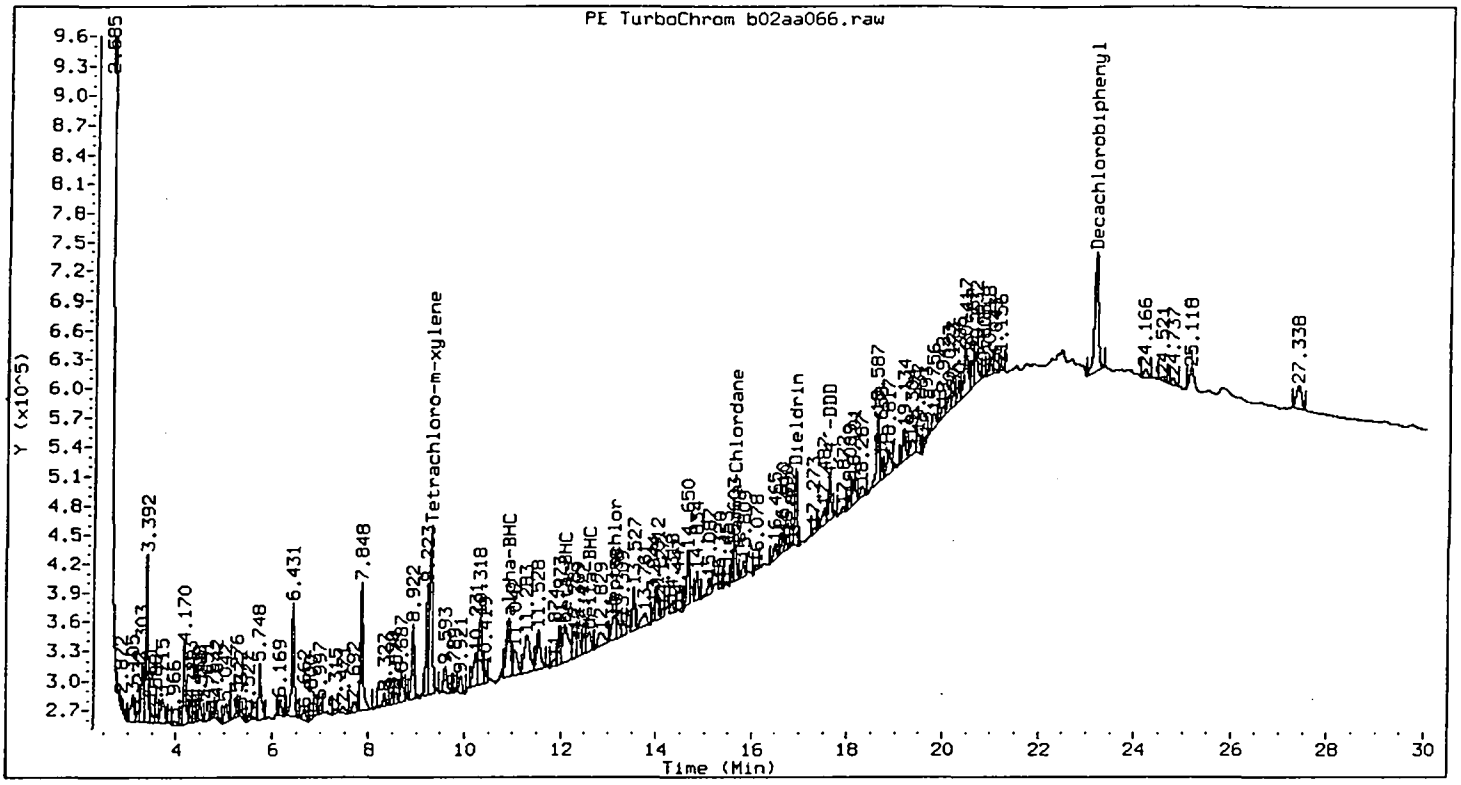
Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/19/99
Date Analyzed: 11/28/99
GC Front Column: Rtx-CLPest
GC Rear Column: Rtx-CLPestII
Instrument ID: HP58902.i

Matrix: WATER
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: b02aa066.d
Rear File ID: b02ab066.d

ORGANOCHLORINE PESTICIDES - GC/ECD
METHOD 8081A

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aldrin	ND	0.0105	R
alpha-BHC	0.0239P	0.0105	F
beta-BHC	0.0301	0.0105	F
delta-BHC	0.00847J	0.0105	F
gamma-BHC (Lindane)	ND	0.0105	R
4,4'-DDD	0.0193J	0.0210	R
4,4'-DDE	ND	0.0210	R
4,4'-DDT	ND	0.0210	R
Dieldrin	0.0293P	0.0210	R
Endosulfan I	ND	0.0105	R
Endosulfan II	ND	0.0210	R
Endosulfan sulfate	ND	0.0210	R
Endrin	ND	0.0210	R
Endrin aldehyde	ND	0.0210	R
Endrin ketone	ND	0.0210	R
Heptachlor	0.00710J	0.0105	F
Heptachlor epoxide	ND	0.0105	R
Methoxychlor	ND	0.105	R
Toxaphene	ND	0.526	R
gamma-Chlordane	ND	0.0105	R
alpha-Chlordane	ND	0.0105	R

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/b02aa066.d Page 1
Report Date 12/13/1999 14:54



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/Bf8081.m
Sample Info : 94127020
Lab ID : 94127020 Inst ID : HP58902.i
Inj Date : 28-NOV-1999 13:18 Dil Factor : 1
Operator : gds Sample Matrix : WATER
Cpnd Sublist: TCLpest+ Sample Type: SAMPLE

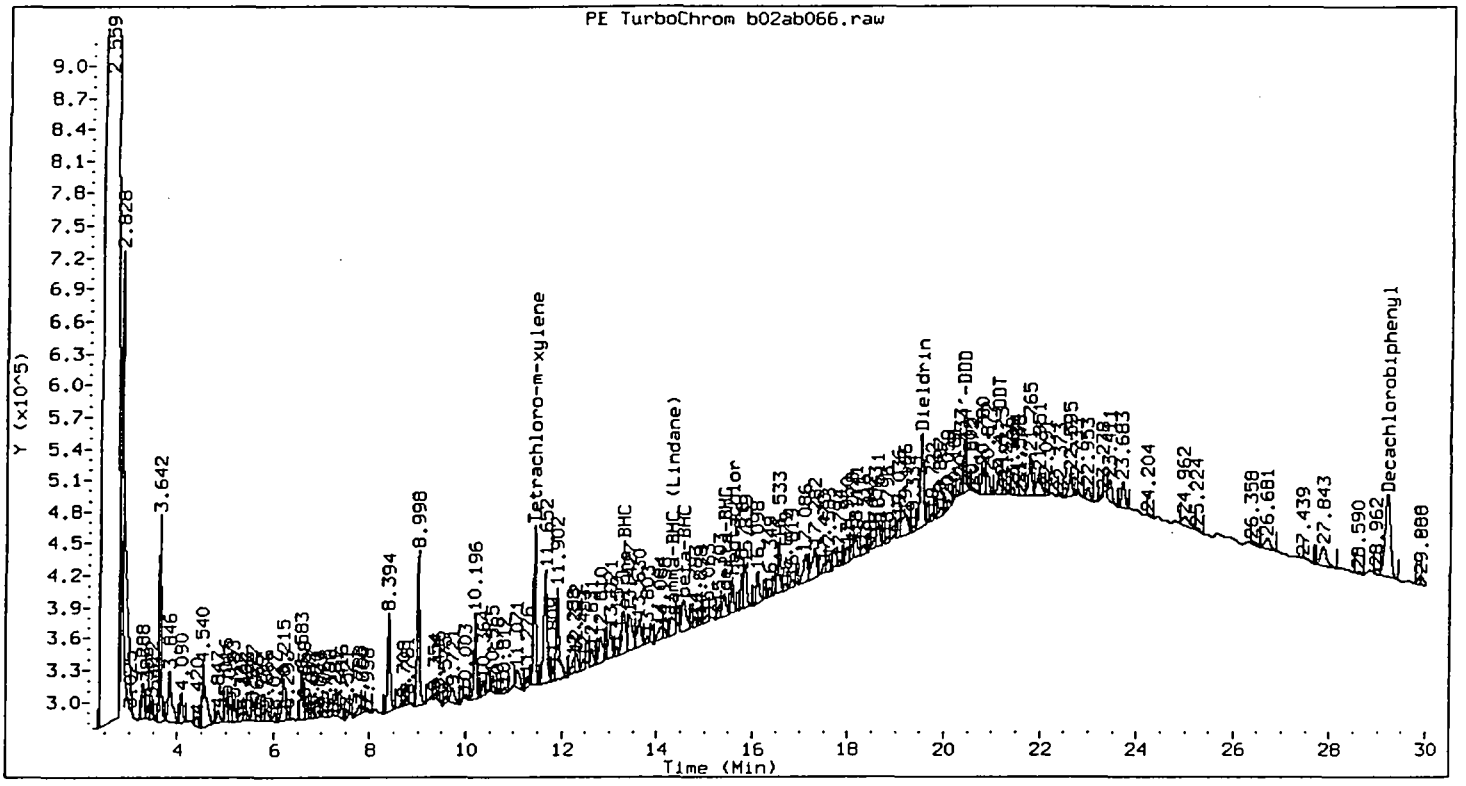
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
alpha-BHC		10.910	10.925	0.015	372319	11.343	0.024
beta-BHC		12.077	12.078	0.002	318181	14.300	0.030
delta-BHC		12.596	12.547	0.049	122036	4.022	0.008
4,4'-DDD		17.593	17.573	0.020	165153	7.160	0.015
Dieldrin		16.890	16.873	0.017	273868	8.666	0.018
Heptachlor	(M)	13.113	13.090	0.023	145454	3.370	0.007
gamma-Chlordane	(M)	15.624	15.665	0.041	144563	3.692	0.008
Tetrachloro-m-xylene		9.294	9.284	0.010	612720	17.584	0.037
Decachlorobiphenyl		23.142	23.119	0.022	667116	15.255	0.032

12/14/99

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)

COMMENTS:

M - Compound response manually integrated.



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/Br8081.m
Sample Info : 94127020
Lab ID : 94127020 Inst ID : HP58902.i
Inj Date : 28-NOV-1999 13:18 Dil Factor : 1
Operator : gds Sample Matrix : WATER
Cpnd Sublist: TCLpest+ Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
alpha-BHC		13.293	13.316	0.023	234501	7.152	0.015
beta-BHC		14.557	14.561	0.004	208754	9.635	0.020
delta-BHC		15.409	15.367	0.042	113136	3.725	0.008
~~gamma-BHC (Lindane)~~		14.307	14.339	0.033	119565	3.561	0.007
4,4'-DDD	(M)	20.407	20.387	0.019	195703	9.191	0.019
~~4,4'-DDT~~	(M)	21.127	21.158	0.032	119970	5.625	0.012
Dieldrin		19.507	19.483	0.024	430763	13.937	0.029
Heptachlor		15.572	15.545	0.027	126492	3.194	0.007
Tetrachloro-m-xylene		11.427	11.409	0.018	527888	15.839	0.033

12/14/99

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Decachlorobiphenyl	29.186	29.147	0.039	615158	13.029	0.027

COMMENTS:

M - Compound response manually integrated.

Severn Trent Laboratories - Whippany

Client ID: **FB-101499**
Site:

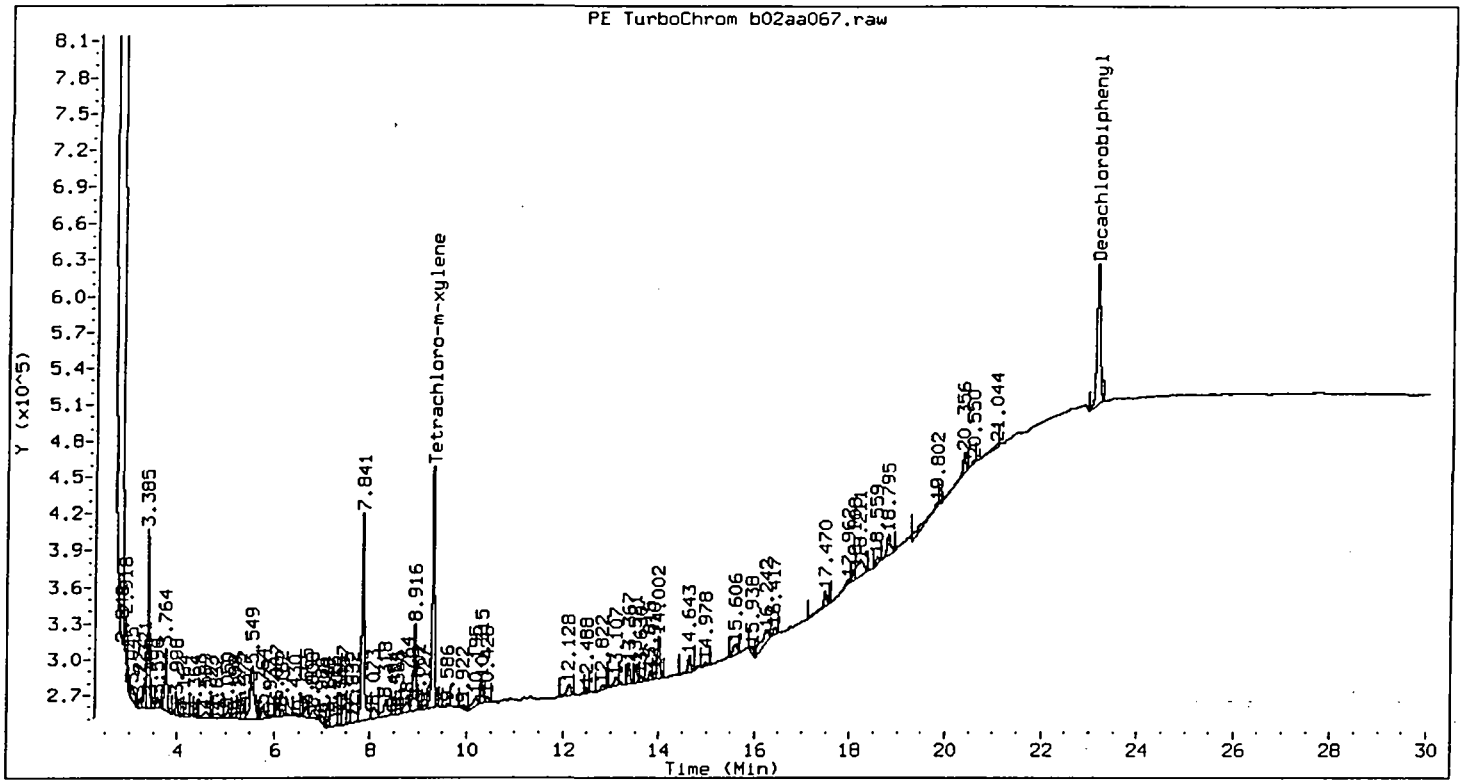
Lab Sample ID: **94127021**
Lab Job No: 94127

Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/19/99
Date Analyzed: 11/28/99
GC Front Column: Rtx-CLPest
GC Rear Column: Rtx-CLPestII
Instrument ID: HP58902.i

Matrix: WATER
Sample Volume: 900 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: b02aa067.d
Rear File ID: b02ab067.d

ORGANOCHLORINE PESTICIDES - GC/ECD
METHOD 8081A

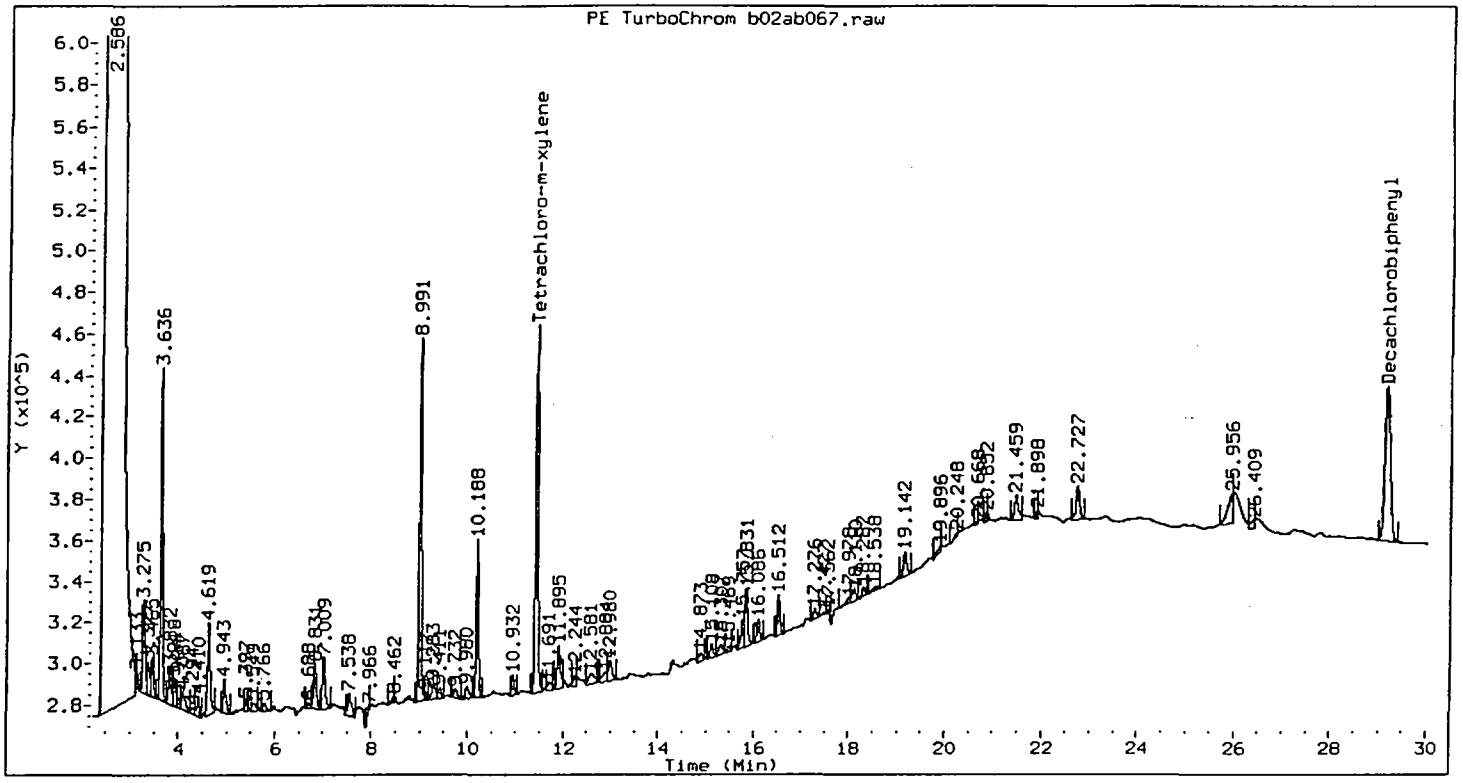
Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aldrin	ND	0.0111	R
alpha-BHC	ND	0.0111	R
beta-BHC	ND	0.0111	R
delta-BHC	ND	0.0111	R
gamma-BHC (Lindane)	ND	0.0111	R
4,4'-DDD	ND	0.0222	R
4,4'-DDE	ND	0.0222	R
4,4'-DDT	ND	0.0222	R
Dieldrin	ND	0.0222	R
Endosulfan I	ND	0.0111	R
Endosulfan II	ND	0.0222	R
Endosulfan sulfate	ND	0.0222	R
Endrin	ND	0.0222	R
Endrin aldehyde	ND	0.0222	R
Endrin ketone	ND	0.0222	R
Heptachlor	ND	0.0111	R
Heptachlor epoxide	ND	0.0111	R
Methoxychlor	ND	0.111	R
Toxaphene	ND	0.556	R
gamma-Chlordane	ND	0.0111	R
alpha-Chlordane	ND	0.0111	R



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/Bf8081.m
Sample Info : 94127021
Lab ID : 94127021 Inst ID : HP58902.i
Inj Date : 28-NOV-1999 13:58 Dil Factor : 1
Operator : gds Sample Matrix : WATER
Cpnd Sublist: TCLpest+ Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Tetrachloro-m-xylene	9.288	9.284	0.004	673497	19.328	0.043
Decachlorobiphenyl	23.123	23.119	0.004	568564	13.002	0.029

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/b02ab067.d Page 1
Report Date 12/13/1999 14:56



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/Br8081.m
Sample Info : 94127021
Lab ID : 94127021 Inst ID : HP58902.i
Inj Date : 28-NOV-1999 13:58 Dil Factor : 1
Operator : gds Sample Matrix : WATER
Cpnd Sublist: TCLpest+ Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/l)
Tetrachloro-m-xylene	11.418	11.409	0.009	655604	19.671	0.044
Decachlorobiphenyl	29.163	29.147	0.017	587041	12.433	0.028

FORM 1
PEST ORGANICS ANALYSIS DATA SHEET

CLIENT ID

S2-3-01

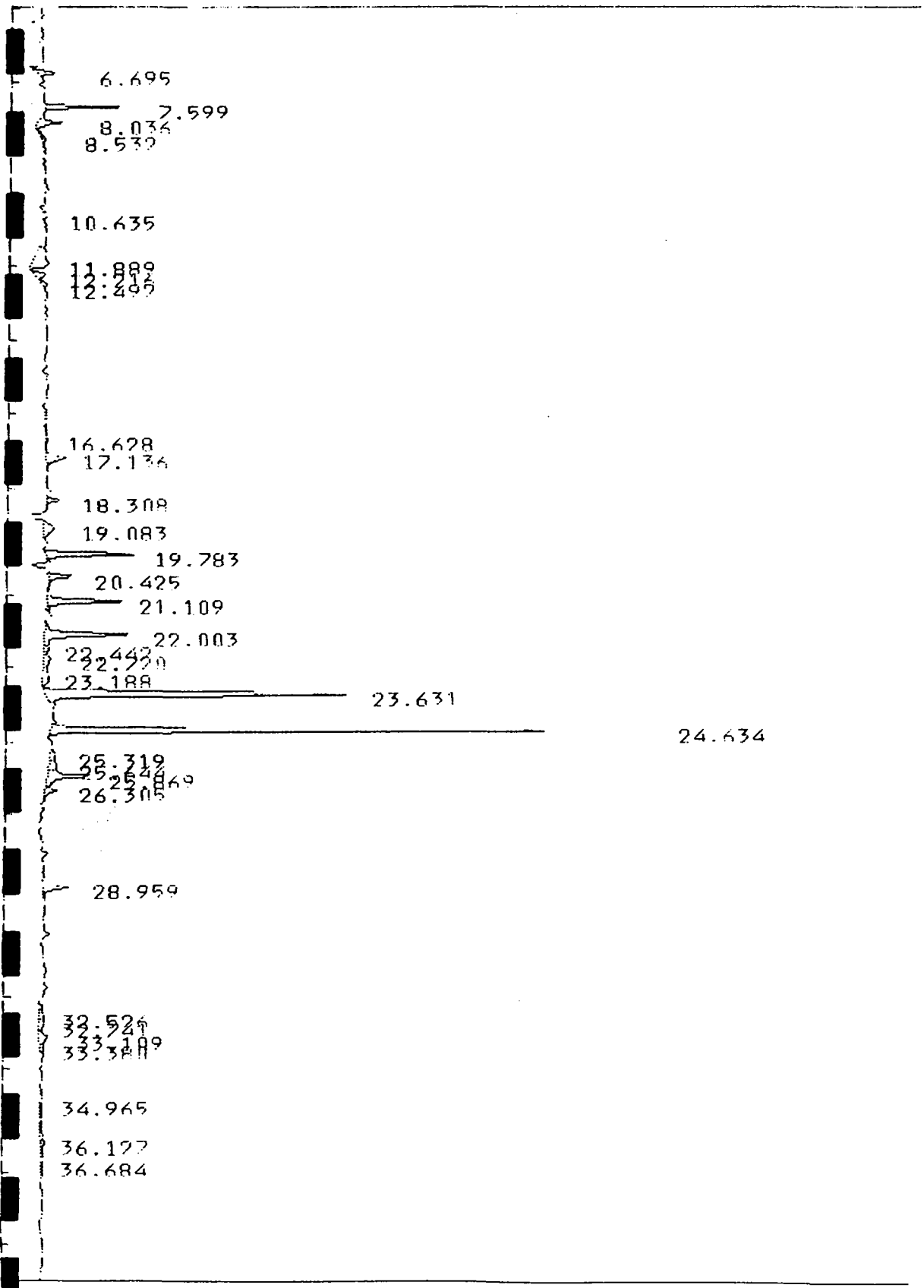
Lab Name: STL - Whippany
Matrix: (soil/water): Soil
Sample wt/vol: 30 (g/ml) g
%Moisture: 56.1
Extraction: (SepF/Cont/Sonc) Sonc
Concentrated Extract Volume: 10000(µl)
Injection Volume: 1 (µl)
GPC Cleanup: (Y/N) N pH:_____

Client: OGDEN
Lab Sample ID: 94127025
Lab File ID: D4AS01J_023
Date Received: 10/14/99
Date Extracted: 10/20/99
Date Analyzed: 11/24/99
Dilution Factor: 25
Sulfur Cleanup: Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/Kg	Q
319-84-6	alpha-BHC	95	U
319-85-7	beta-BHC	95	U
319-86-8	delta-BHC	95	U
58-89-9	gamma-BHC (Lindane)	95	U
76-44-8	Heptachlor	95	U
3098-00-2	Aldrin	95	U
1024-57-3	Heptachlor Epoxide	95	U
959-98-8	Endosulfan I	95	U
60-57-1	Dieldrin	190	U
72-55-9	4,4'-DDE	160	
72-20-8	Endrin	190	U
33213-65-9	Endosulfan II	190	U
72-54-8	4,4'-DDD	810	
1031-07-8	Endosulfan Sulfate	190	U
50-29-3	4,4'-DDT	1400	
72-43-5	Methoxychlor	950	U
53494-70-5	Endrin Ketone	190	U
7421-93-4	Endrin Aldehyde	190	U
5103-71-9	alpha-Chlordane	95	U
5103-74-2	gamma-Chlordane	95	U
8001-35-2	Toxaphene	4700	U

IEA Pesticide Standard Report

Sample Name : 94127025 25XDI Inj:1153 24Nov1999
Result : /DATA/LOUP/RESULT/D4AS011 023.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



HA Pesticide Standard Report

Sample Name : 94127025 25XDL Report No :361.01
Result File : /DATA/LOOP/RESULT/D4AS01J 023.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1153 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
Subseq/Sample : 1/ 23 Bottle no. : 23

% Dil-Fact
100.00

Run Status : RunStatusOK
NoReference
SpecialInteg

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.70		0.000000	36673	PV	0.0000	
2	7.60		0.000000	75665	PB	0.0000	
3	8.04	8.03	0.000000	42045	VV	2.3077	~~TFX~~
4	8.53		0.000000	10671	VV	0.0000	
5	10.63	10.58	0.000000	10388	BV	.5021	~~A-BHC~~
6	11.89		0.000000	97001	VV	0.0000	
7	12.22		0.000000	31265	PV	0.0000	
8	12.49		0.000000	15525	VV	0.0000	
9	16.63		0.000000	17052	BV	0.0000	
10	17.14		0.000000	51967	PV	0.0000	
11	18.31		0.000000	24717	FF	0.0000	
12	19.08	19.15	0.000000	41236	FF	1.9174	~~A-CHLORDANE~~
13	19.78	19.78	0.000000	146932	FF	8.2232	4,4' DDE
14	20.42	20.42	0.000000	41283	FF	2.3919	~~DIELDRIN~~
15	21.11		0.000000	129037	BV	0.0000	
16	22.00		0.000000	176239	PV	0.0000	
17	22.44		0.000000	15640	VV	0.0000	
18	22.72		0.000000	31520	VV	0.0000	
19	23.19		0.000000	31380	VV	0.0000	
20	23.63	23.63	0.000000	539692	PV	42.4186	4,4' DDD
21	24.63	24.63	0.000000	840278	VV	75.1590	4,4' DDT
22	25.32	25.32	0.000000	16673	BV	1.8221	~~ENDRIN ALDEHYDE~~
23	25.64		0.000000	26411	VV	0.0000	
24	25.87		0.000000	103870	VV	0.0000	
25	26.31	26.24	0.000000	24815	VB	6.3662	~~METHOXYCHLOR~~
26	28.96		0.000000	53908	PB	0.0000	
27	32.53		0.000000	14423	VV	0.0000	
28	32.74		0.000000	15295	VV	0.0000	
29	33.11		0.000000	27140	VV	0.0000	
30	33.38		0.000000	11822	VV	0.0000	
31	34.96		0.000000	17750	PV	0.0000	
32	36.13		0.000000	45223	VV	0.0000	
33	36.68		0.000000	13567	VV	0.0000	ck 12/17/99

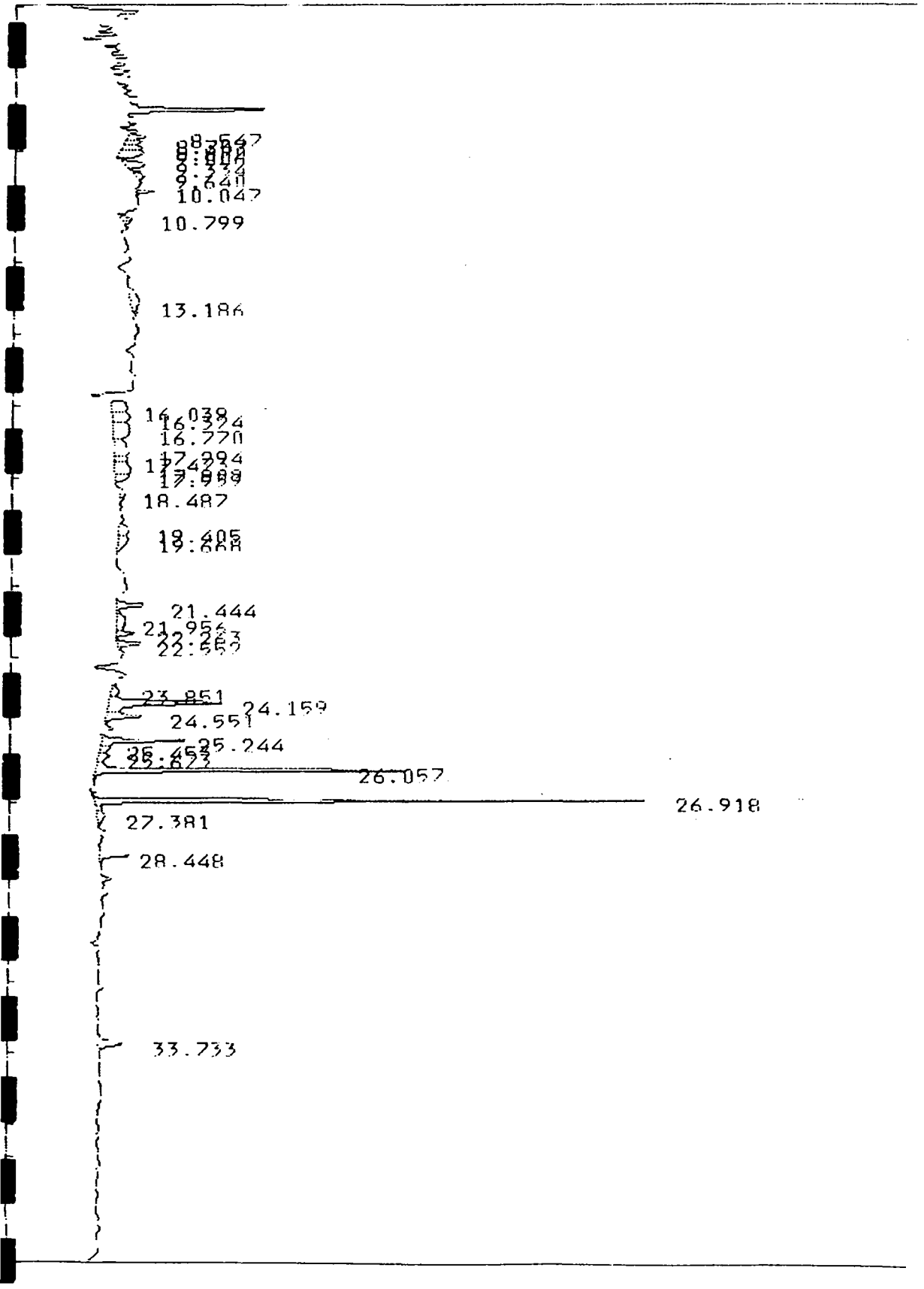
Total Area : 2777107 Total ng inj : 141.108

Report Time : 1318 02Dec1999

Result File : /DATA/LOOP/RESULT/D4AS01J 023.RES

IEA Pesticide Standard Report

Sample Name : 94127025 25XDI Inj 1059 24Nov1999
Result : /DATA/LOOP/RESULT/D4RS01J 022.RES GC : HP5890A
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : 94127025 25XDL Report No :358.10
Result File : /DATA/LOOP/RESULT/D4BS01J 022.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1059 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4BS01J.SEQ
Subseq/Sample : 1/ 22 Bottle no. : 23

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.55		.107686	21224	PV	0.0000	
2	8.71		.131497	20692	VV	0.0000	
3	8.87		.125620	23019	VV	0.0000	
4	9.01		.167011	36851	VV	0.0000	
5	9.33		.178879	35785	PV	0.0000	
6	9.64		.128687	10457	VB	0.0000	
7	10.05	#10.00	.071865	17436	PV	.7978	TCX
8	10.80		.104374	11213	BV	0.0000	
9	13.19		.458563	35304	VV	0.0000	
10	16.04		.292509	41439	BV	0.0000	
11	16.32		.295741	49077	VV	0.0000	
12	16.77	16.74	.440283	68435	VV	3.6294	D-BHC
13	17.29		.341340	48874	VV	0.0000	
14	17.47		.144610	17407	VV	0.0000	
15	17.80		.312984	47062	VV	0.0000	
16	17.94		.170958	22086	VV	0.0000	
17	18.49		.337037	16399	PB	0.0000	
18	19.40		.248593	22468	VV	0.0000	
19	19.67		.309621	27756	VV	0.0000	
20	21.44		.111509	31538	PV	0.0000	
21	21.96		.414242	32122	VV	0.0000	
22	22.26		.119106	21333	VV	0.0000	
23	22.55	22.61	.122792	31067	PV	2.5580	A-CHLORDANE
24	23.85		.272724	19611	VV	0.0000	
25	24.16	24.10	.148029	163493	VV	13.5387	4,4' DDE
26	24.55	24.51	.132360	46720	VV	4.2550	DIELDRIN
27	25.24		.080443	72428	BV	0.0000	
28	25.45		.138601	13909	VV	0.0000	
29	25.67	25.72	.184809	19062	VV	3.7420	ENDRIN
30	26.06	26.03	.072611	276733	VV	64.4465	4,4' DDD
31	26.92	26.90	.072434	403488	BV	94.5824	4,4' DDT
32	27.38		.263229	19388	VV	0.0000	
33	28.45		.103723	33504	PV	0.0000	
34	33.73		.163221	38361	BV	0.0000	ck 12/7/99

Total Area : 1795743 Total ng inj : 187.550

Report Time : 1320 07Dec1999
Method : /DATA/LOOP/METHOD/HP5900/PBW.MTH

Result File : /DATA/LOOP/RESULT/D4RS01J 022.RES

Severn Trent Laboratories - Whippany

Client ID: **sw2-3-01**
Site:

Lab Sample ID: **94127026**
Lab Job No: 94127

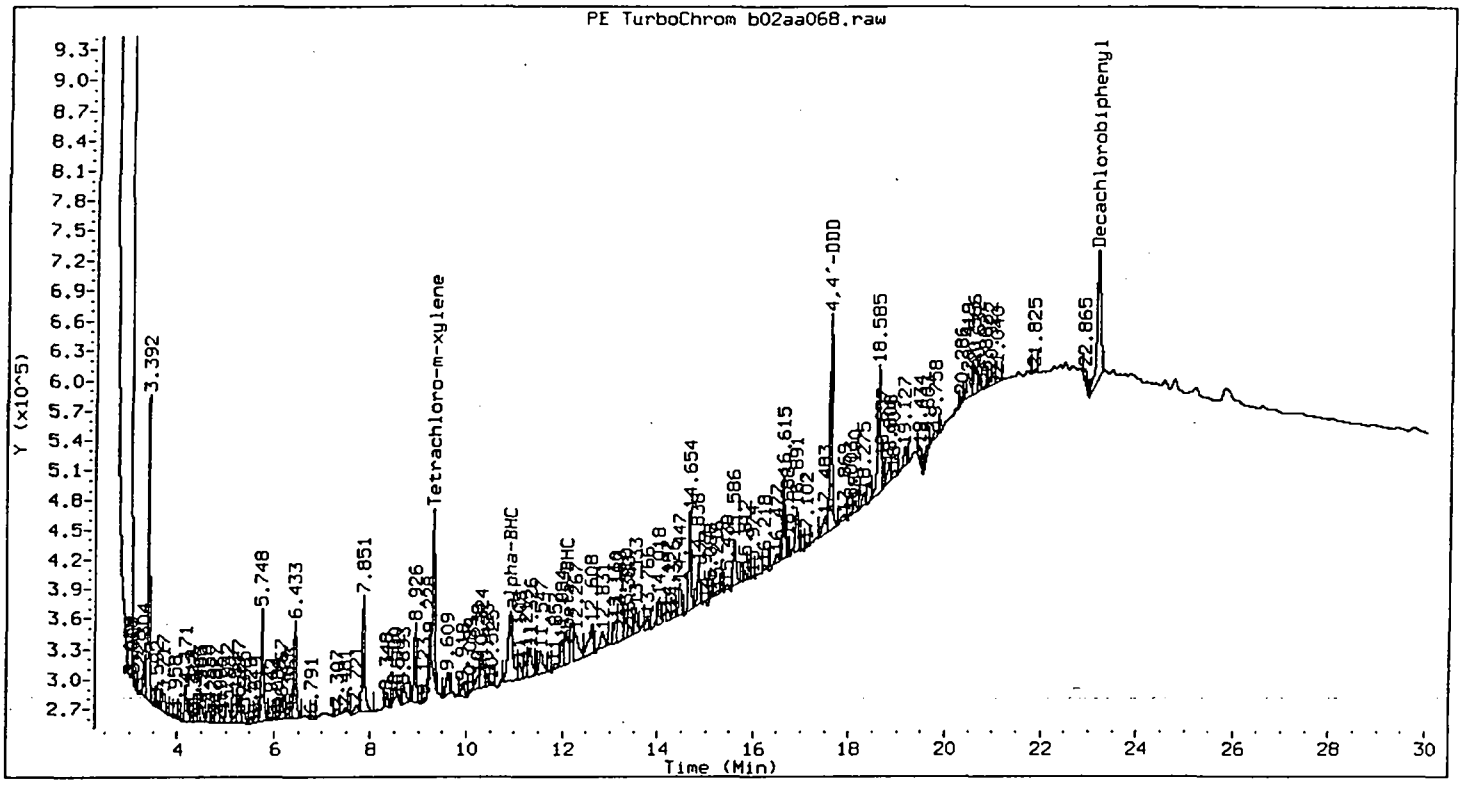
Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/19/99
Date Analyzed: 11/28/99
GC Front Column: Rtx-CLPest
GC Rear Column: Rtx-CLPestII
Instrument ID: HP58902.i

Matrix: WATER
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: b02aa068.d
Rear File ID: b02ab068.d

ORGANOCHLORINE PESTICIDES - GC/ECD
METHOD 8081A

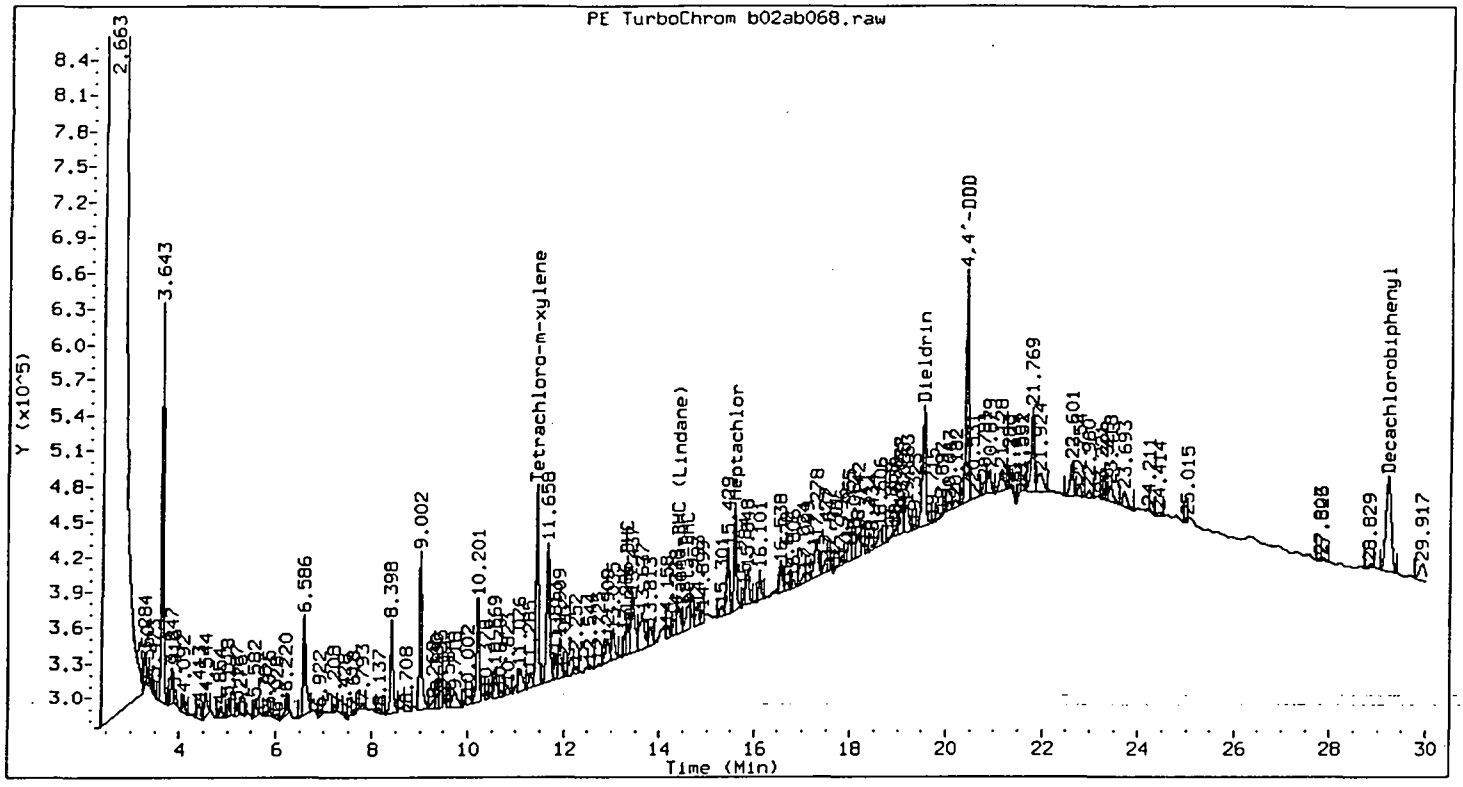
Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aldrin	ND	0.0103	R
alpha-BHC	0.0304P	0.0103	F
beta-BHC	0.0155	0.0103	F
delta-BHC	ND	0.0103	R
gamma-BHC (Lindane)	ND	0.0103	R
4,4'-DDD	0.0732	0.0206	R
4,4'-DDE	ND	0.0206	R
4,4'-DDT	ND	0.0206	R
Dieldrin	ND	0.0206	R
Endosulfan I	ND	0.0103	R
Endosulfan II	ND	0.0206	R
Endosulfan sulfate	ND	0.0206	R
Endrin	ND	0.0206	R
Endrin aldehyde	ND	0.0206	R
Endrin ketone	ND	0.0206	R
Heptachlor	ND	0.0103	R
Heptachlor epoxide	ND	0.0103	R
Methoxychlor	ND	0.103	R
Toxaphene	ND	0.515	R
gamma-Chlordane	ND	0.0103	R
alpha-Chlordane	ND	0.0103	R

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/b02aa068.d Page 1
Report Date 12/13/1999 14:55



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/Bf8081.m
Sample Info : 94127026
Lab ID : 94127026 Inst ID : HP58902.i
Inj Date : 28-NOV-1999 14:37 Dil Factor : 1
Operator : gds Sample Matrix : WATER
Cpnd Sublist: TCLpest+ Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
alpha-BHC	10.911	10.925	0.014	484281	14.754	0.030
beta-BHC	12.077	12.078	0.002	167742	7.539	0.016
4,4'-DDD	17.590	17.573	0.017	769419	33.356	0.069
Tetrachloro-m-xylene	9.298	9.284	0.014	484460	13.903	0.029
Decachlorobiphenyl	23.147	23.119	0.027	713118	16.307	0.034



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/Br8081.m
Sample Info : 94127026
Lab ID : 94127026
Inj Date : 28-NOV-1999 14:37
Operator : gds
Cpnd Sublist: TCLpest+

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
alpha-BHC	(M)	13.327	13.316	0.011	115460	3.521	0.007
beta-BHC		14.588	14.561	0.027	129257	5.966	0.012
~~gamma-BHC (Lindane)~~	(M)	14.389	14.339	0.050	131293	3.910	0.008
4,4'-DDD	(M)	20.408	20.387	0.021	755967	35.502	0.073
~~Dieldrin~~		19.521	19.483	0.038	479191	15.503	0.032
~~Heptachlor~~		15.578	15.545	0.033	339358	8.570	0.018
Tetrachloro-m-xylene		11.432	11.409	0.023	603747	18.115	0.037
Decachlorobiphenyl		29.203	29.147	0.057	625434	13.247	0.027

12/14/99

COMMENTS:

M - Compound response manually integrated.

Report Date : 13-Dec-1999 15:28

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 20:38
End Cal Date : 27-NOV-1999 09:23
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Cal Date : 29-Nov-1999 15:24 gordon
Curve Type : Average

Calibration File Names:
Level 1: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa017.d
Level 2: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa018.d
Level 3: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa023.d
Level 4: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa020.d
Level 5: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa021.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	___ RRF	% RSD
2 alpha-BHC	30079	30705	37388	30919	35031	32824	9.796
3 gamma-BHC (Lindane)	31283	31829	38320	31164	33912	33301	9.055
4 beta-BHC	21357	21466	23766	22210	22453	22250	4.354
5 delta-BHC	25362	25942	30744	32047	37604	30340	16.478
6 Heptachlor	45366	44889	49910	38149	37480	43159	12.194
7 Aldrin	31397	31603	35953	35312	38229	34499	8.537
8 Heptachlor epoxide	36765	37749	41341	38638	39342	38767	4.471
9 gamma-Chlordane	39991	37912	41023	38190	38640	39151	3.362
10 alpha-Chlordane	37120	37459	41313	38673	38949	38703	4.271
11 4,4'-DDE	30770	32359	37536	36250	37153	34814	8.774
12 Endosulfan I	35923	34152	37932	28863	28438	33062	12.842
13 Dieldrin	31933	31653	36614	28790	29029	31604	9.976
14 Endrin	26563	25944	30034	22928	23588	25811	10.901
15 4,4'-DDD	21566	21640	25610	22928	23588	23067	7.204
16 Endosulfan II	31490	43307	36563	34347	34210	35983	12.427
17 4,4'-DDT	28615	28930	33211	25876	25725	28472	10.678
18 Endrin aldehyde	26622	29367	31400	28575	27645	28722	6.320
19 Methoxychlor	18566	18144	19234	14111	12842	16579	17.457
20 Endosulfan sulfate	29154	33352	35673	32096	31219	32299	7.519
21 Endrin ketone	29154	36382	40648	37802	37396	36276	11.812
22 Toxaphene(1)	+++++	+++++	81.93133	+++++	+++++	81.93133	0.000 <-
(2)	+++++	+++++	140	+++++	+++++	140	0.000 <-
(3)	+++++	+++++	176	+++++	+++++	176	0.000 <-
(4)	+++++	+++++	201	+++++	+++++	201	0.000 <-
(5)	+++++	+++++	122	+++++	+++++	122	0.000 <-
(6)	+++++	+++++	164	+++++	+++++	164	0.000 <-

Report Date : 13-Dec-1999 15:28

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 20:38
End Cal Date : 27-NOV-1999 09:23
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Cal Date : 29-Nov-1999 15:24 gordon
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	___ RRF	% RSD	
23 Chlordane(1)	+++++	+++++	1255	+++++	+++++	1255	0.000	<-
(2)	+++++	+++++	2265	+++++	+++++	2265	0.000	<-
(3)	+++++	+++++	758	+++++	+++++	758	0.000	<-
(4)	+++++	+++++	4453	+++++	+++++	4453	0.000	<-
(5)	+++++	+++++	7233	+++++	+++++	7233	0.000	<-
(6)	+++++	+++++	1603	+++++	+++++	1603	0.000	<-
24 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 1 Tetrachloro-m-xylene	36409	37374	40682	30598	29163	34845	13.855	
$ 25 Decachlorobiphenyl	48012	48998	51231	37237	33174	43730	18.292	

Report Date : 13-Dec-1999 15:27

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 19:59
End Cal Date : 27-NOV-1999 09:23
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Cal Date : 29-Nov-1999 11:40 gordon
Curve Type : Average

Calibration File Names:
Level 1: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab017.d
Level 2: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab018.d
Level 3: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab023.d
Level 4: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab020.d
Level 5: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab021.d

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	RRF	% RSD
2 alpha-BHC	31403	31301	37266	30260	33706	32787	8.548
3 gamma-BHC (Lindane)	33379	33131	38320	30462	32595	33577	8.606
4 beta-BHC	21166	21267	23169	21397	21332	21666	3.897
5 delta-BHC	28615	27310	30811	30717	34414	30374	8.883
6 Heptachlor	41979	41512	45693	34601	34198	39597	12.666
7 Aldrin	32883	32032	36071	34960	37483	34686	6.464
8 Heptachlor epoxide	35281	35606	39778	37892	37560	37223	4.931
9 gamma-Chlordane	34747	35402	38910	36121	36734	36383	4.393
10 alpha-Chlordane	34793	35389	39980	36830	37285	36855	5.486
11 4,4'-DDE	30985	31502	36249	34312	35166	33643	6.844
12 Endosulfan I	33705	34303	37849	28683	28078	32524	12.624
13 Dieldrin	31704	31509	35823	27440	28067	30909	10.881
14 Endrin	23363	23044	25508	19340	19545	22160	11.989
15 4,4'-DDD	20979	22294	24695	19000	19499	21293	10.799
16 Endosulfan II	30559	31477	35075	32832	33806	32750	5.493
17 4,4'-DDT	21081	21508	24976	19374	19704	21329	10.447
18 Endrin aldehyde	25675	27420	29333	27329	26620	27276	4.936
19 Methoxychlor	12595	12906	14197	10501	9903	12020	14.788
20 Endosulfan sulfate	28162	29040	32644	30700	31102	30330	5.817
21 Endrin ketone	32840	33926	37583	36667	37398	35683	6.058
22 Chlordane (1)	+++++	+++++	2010	+++++	+++++	2010	0.000 <-
(2)	+++++	+++++	768	+++++	+++++	768	0.000 <-
(3)	+++++	+++++	3929	+++++	+++++	3929	0.000 <-
(4)	+++++	+++++	3469	+++++	+++++	3469	0.000 <-
(5)	+++++	+++++	3137	+++++	+++++	3137	0.000 <-
(6)	+++++	+++++	1320	+++++	+++++	1320	0.000 <-

Report Date : 14-Dec-1999 18:14

Severn Trent Laboratories

INITIAL CALIBRATION DATA

Start Cal Date : 11-NOV-1999 19:59
End Cal Date : 27-NOV-1999 09:23
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Cal Date : 29-Nov-1999 11:40 gordon
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	40.000 Level 4	80.000 Level 5	___ RRF	% RSD	
23 Toxaphene (1)	+++++	+++++	66.18467	+++++	+++++	66.18467	0.000	<-
(2)	+++++	+++++	186	+++++	+++++	186	0.000	<-
(3)	+++++	+++++	135	+++++	+++++	135	0.000	<-
(4)	+++++	+++++	123	+++++	+++++	123	0.000	<-
(5)	+++++	+++++	171	+++++	+++++	171	0.000	<-
(6)	+++++	+++++	114	+++++	+++++	114	0.000	<-
24 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 1 Tetrachloro-m-xylene	37096	35908	38261	28533	26840	33328	15.754	
$ 25 Decachlorobiphenyl	52229	51668	54847	40440	36890	47215	16.934	

SEVERN TRENT LABORATORIES, INC.
GAS CHROMATOGRAPHY
PESTICIDE
INITIAL CALIBRATION FORMS

Sequence Name: S4AS01C Column: DB1701 ID: 0.53 Date Analyzed: 11/09/99

	L1			L2			L3			L4			L5			AVE		
COMPOUND	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	RF	STD	%RSD
TCX*	5	105519	21104	10	195283	19528	20	357603	17880	40	683601	17090	80	1239556	15494	**18219**	2171	**11.9**
A-BHC	5	100380	20076	10	203151	20315	20	417286	20864	40	856017	21400	80	1664575	20807	**20692**	516	**2.5**
G-BHC	5	103287	20657	10	204901	20490	20	417138	20857	40	840634	21016	80	1620097	20251	**20654**	301	**1.5**
HEPTACHLOR	5	125916	25183	10	254545	25455	20	492272	24614	40	907364	22684	80	1694921	21187	**23825**	1829	**7.7**
ENDOSULFAN I	5	90235	18047	10	171856	17186	20	342307	17115	40	677067	16927	80	1284722	16059	**17067**	709	**4.2**
DIELDRIN	10	177618	17762	20	351122	17556	40	697634	17441	80	1386191	17327	160	2593856	16212	**17260**	607	**3.5**
ENDRIN	10	157987	15799	20	313218	15661	40	612866	15322	80	1194883	14936	160	2207137	13795	**15103**	804	**5.3**
4,4'-DDD	10	126020	12602	20	256833	12842	40	515227	12881	80	1032034	12900	160	1982539	12391	**12723**	221	**1.7**
4,4'-DDT	10	108342	10834	20	225820	11291	40	447054	11176	80	917560	11470	160	1780350	11127	**11180**	234	**2.1**
METHOXYCHLOR	50	222943	4459	100	420313	4203	200	785438	3927	400	1460295	3651	800	2599506	3249	**3898**	472	**12.1**
DCB*	10	122798	12280	20	231232	11562	40	435302	10883	80	784262	9803	160	1397550	8735	**10653**	1408	**13.2**

SEVERN TRENT LABORATORIES, INC.
GAS CHROMATOGRAPHY
PESTICIDE
INITIAL CALIBRATION FORMS

Sequence Name: S4AS01C Column: DB1701 ID: 0.53 Date Analyzed: 11/09/99-11/10/99

	L1			L2			L3			L4			L5			AVE		
COMPOUND	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	RF	STD	%RSD
TCX*	5	92694	18539	10	180078	18008	20	346224	17311	40	714808	17870	80	1232007	15400	17426	1214	7
ALDRIN	5	95550	19110	10	190790	19079	20	387007	19350	40	800668	20017	80	1519687	18996	19310	416	2.2
B-BHC	5	63123	12625	10	119483	11948	20	227927	11396	40	432871	10822	80	818168	10227	11404	937	8.2
D-BHC	5	74348	14870	10	153945	15395	20	312204	15610	40	650345	16259	80	1297786	16222	15671	585	3.7
HETACHLOR EPOXIDE	5	106910	21382	10	207541	20754	20	403063	20153	40	778488	19462	80	1476934	18462	20043	1134	5.7
G-CHLORDANE	5	100180	20036	10	209675	20968	20	394829	19741	40	818194	20455	80	1468231	18353	19911	986	5
A-CHLORDANE	5	113746	22749	10	228789	22879	20	418653	20933	40	882578	22064	80	1512502	18906	21506	1645	7.6
4,4'-DDE	10	177544	17754	20	372313	18616	40	722808	18070	80	1456143	18202	160	2671501	16697	17868	724	4.1
ENDOSULFAN II	10	160204	16020	20	318064	15903	40	616632	15416	80	1188188	14852	160	2192521	13703	15179	945	6.2
ENDRIN ALDEHYDE	10	108519	10852	20	210929	10546	40	393816	9845	80	762340	9529	160	1402797	8767	9908	829	8.4
ENDOSULFAN SULFATE	10	96821	9682	20	178591	8930	40	337281	8432	80	665189	8315	160	1207759	7548	8581	790	9.2
ENDRIN KETONE	10	78166	7817	20	162512	8126	40	327148	8179	80	640522	8007	160	1225657	7660	7958	217	2.7
DCB*	10	121181	12118	20	228743	11437	40	418676	10467	80	785652	9821	160	1405226	8783	10525	1314	12.5

00003

Sequence Name: S4AS01C Column: DB1701 ID: 0.53 Date Analyzed: 11/09/99

COMPOUND	L1-RT.	L2-RT.	L3-RT.	L4-RT.	L5-RT.	AVG. .RT.	+/-	RT	WINDOW
TCX*	7.98	7.99	8.00	7.98	7.98	7.99	0.05	7.94	8.04
A-BHC	10.53	10.54	10.56	10.53	10.53	10.54	0.05	10.49	10.59
G-BHC	12.01	12.01	12.03	12.00	12.00	12.01	0.05	11.96	12.06
HEPTACHLOR	13.09	13.09	13.12	13.08	13.08	13.09	0.05	13.04	13.14
ENDOSULFAN I	18.60	18.61	18.63	18.59	18.60	18.61	0.07	18.54	18.68
DIELDRIN	20.35	20.35	20.38	20.34	20.35	20.35	0.07	20.28	20.42
ENDRIN	21.39	21.39	21.42	21.37	21.38	21.39	0.07	21.32	21.46
4,4'-DDD	23.57	23.57	23.59	23.55	23.56	23.57	0.07	23.5	23.64
4,4'-DDT	24.58	24.58	24.60	24.57	24.57	24.58	0.07	24.51	24.65
METHOXYCHLOR	26.22	26.22	26.23	26.21	26.21	26.22	0.07	26.15	26.29
DCB*	30.23	30.23	30.27	30.22	30.22	30.23	0.10	30.13	30.33

Sequence Name: S4AS01C Column: DB1701 ID: 0.53 Date Analyzed: 11/09/99-11/10/99

COMPOUND	L1-RT.	L2-RT.	L3-RT.	L4-RT.	L5-RT.	AVG. .RT.	+/-	RT	WINDOW
TCX*	7.99	7.99	7.99	8.00	7.98	7.99	0.05	7.94	8.04
B-BHC	14.31	14.31	14.32	14.35	14.32	14.32	0.05	14.27	14.37
D-BHC	14.89	14.89	14.90	14.92	14.89	14.9	0.05	14.85	14.95
ALDRIN	16.06	16.06	16.07	16.10	16.07	16.07	0.05	16.02	16.12
HETACHLOR EPOXIDE	17.20	17.20	17.21	17.23	17.20	17.21	0.07	17.14	17.28
G-CHLORDANE	18.79	18.79	18.80	18.83	18.80	18.8	0.07	18.73	18.87
A-CHLORDANE	19.07	19.07	19.08	19.11	19.08	19.08	0.07	19.01	19.15
4,4'-DDE	19.70	19.69	19.71	19.73	19.70	19.71	0.07	19.64	19.78
ENDOSULFAN II	23.72	23.72	23.74	23.76	23.73	23.73	0.07	23.66	23.8
ENDRIN ALDEHYDE	25.29	25.28	25.30	25.31	25.30	25.3	0.07	25.23	25.37
ENDOSULFAN SULFATE	26.01	26.01	26.02	26.03	26.02	26.02	0.07	25.95	26.09
ENDRIN KETONE	27.12	27.11	27.13	27.13	27.12	27.12	0.07	27.05	27.19
DCB*	30.22	30.22	30.24	30.24	30.24	30.23	0.10	30.13	30.33

SEVERN TRENT LABORATORIES, INC.
GAS CHROMATOGRAPHY
PESTICIDE
INITIAL CALIBRATION FORMS

Sequence Name: S4BS01C Column: DB608 ID: 0.53 Date Analyzed: 11/09/99

	L1			L2			L3			L4			L5			AVE		
COMPOUND	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	RF	STD	%RSD
TCX*	5	123898	24780	10	241246	24125	20	446930	22347	40	809244	20231	80	1423485	17794	**21855**	2876	**13.2**
A-BHC	5	149690	29938	10	290749	29075	20	584793	29240	40	1065581	26640	80	1940536	24257	**27830**	2354	**8.5**
G-BHC	5	131036	26207	10	256325	25633	20	479454	23973	40	922661	23067	80	1690329	21129	**24002**	2040	**8.5**
HEPTACHLOR	5	115805	23161	10	222364	22236	20	421787	21089	40	805548	20139	80	1447803	18098	**20945**	1959	**9.4**
ENDOSULFAN I	5	74749	14950	10	130168	13017	20	243988	12199	40	459492	11487	80	852597	10657	**12462**	1641	**13.2**
DIELDRIN	10	116660	11666	20	240009	12000	40	441284	11032	80	843001	10538	160	1546541	9666	**10980**	927	**8.4**
ENDRIN	10	55581	5558	20	108438	5422	40	204013	5100	80	383391	4792	160	735326	4596	**5094**	407	**8**
4,4'-DDD	10	41814	4181	20	83118	4156	40	180241	4506	80	353516	4419	160	672918	4206	**4294**	158	**3.7**
4,4'-DDT	10	40456	4046	20	86016	4301	40	173966	4349	80	351937	4399	160	677586	4235	**4266**	137	**3.2**
METHOXYCHLOR	50	107815	2156	100	212672	2127	200	419879	2099	400	819924	2050	800	1571945	1965	**2079**	75	**3.6**
DCB*	10	62311	6231	20	123853	6193	40	239521	5988	80	458190	5727	160	835244	5220	**5872**	416	**7.[illegible]**

SEVERN TRENT LABORATORIES, INC.
GAS CHROMATOGRAPHY
PESTICIDE
INITIAL CALIBRATION FORMS

Sequence Name: S4BS01C Column: DB608 ID: 0.53 Date Analyzed: 11/09/99-11/10/99

	L1			L2			L3			L4			L5			AVE		
COMPOUND	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF	RF	STD	%RSD
TCX*	5	93807	18761	10	234934	23493	20	453676	22684	40	808447	20211	80	1459840	18248	20679	2332	11.3
B-BHC	5	60156	12031	10	120145	12015	20	231127	11556	40	439894	10997	80	789498	9869	11294	901	8
D-BHC	5	98709	19742	10	193500	19350	20	396587	19829	40	728459	18211	80	1371774	17147	18856	1152	6.1
ALDRIN	5	98478	19696	10	210553	21055	20	375561	18778	40	701393	17535	80	1293646	16171	18647	1890	10.1
HETACHLOR EPOXIDE	5	90203	18041	10	175123	17512	20	365817	18291	40	631119	15778	80	1113850	13923	16709	1841	11
G-CHLORDANE	5	81723	16345	10	186306	18631	20	321136	16057	40	566859	14171	80	1019720	12747	15590	2243	14.4
A-CHLORDANE	5	62776	12555	10	125047	12505	20	251735	12587	40	478799	11970	80	888823	11110	12145	631	5.2
4,4'-DDE	10	127869	12787	20	270765	13538	40	489967	12249	80	913402	11418	160	1661849	10387	12076	1221	10.1
ENDOSULFAN II	10	45319	4532	20	93512	4676	40	186367	4659	80	377371	4717	160	728827	4555	4628	80	1.7
ENDRIN ALDEHYDE	10	32124	3212	20	86077	4304	40	153882	3847	80	292563	3657	160	536764	3355	3675	431	11.7
ENDOSULFAN SULFATE	10	41630	4163	20	84766	4238	40	166941	4174	80	336571	4207	160	641848	4012	4159	87	2.1
ENDRIN KETONE	10	44842	4484	20	93192	4660	40	188208	4705	80	393904	4924	160	762575	4766	4708	160	3.4
DCB*	10	62355	6236	20	123874	6194	40	239767	5994	80	455600	5695	160	833428	5209	5866	425	7.2

Sequence Name: S4BS01C Column: DB608 ID: 0.53 Date Analyzed: 11/09/99

COMPOUND	L1-RT.	L2-RT.	L3-RT.	L4-RT.	L5-RT.	AVG. .RT.	+/-	RT	WINDOW
TCX*	10.01	9.99	9.99	10.02	9.98	10	0.05	9.95	10.05
A-BHC	12.79	12.77	12.78	12.81	12.77	12.78	0.05	12.73	12.83
G-BHC	14.60	14.58	14.60	14.62	14.58	14.6	0.05	14.55	14.65
HEPTACHLOR	16.20	16.18	16.19	16.22	16.17	16.19	0.05	16.14	16.24
ENDOSULFAN I	22.78	22.76	22.77	22.79	22.75	22.77	0.07	22.7	22.84
DIELDRIN	24.52	24.50	24.51	24.53	24.49	24.51	0.07	24.44	24.58
ENDRIN	25.72	25.71	25.71	25.73	25.71	25.72	0.07	25.65	25.79
4,4'-DDD	26.04	26.03	26.03	26.04	26.03	26.03	0.07	25.96	26.1
4,4'-DDT	26.91	26.89	26.89	26.91	26.89	26.9	0.07	26.83	26.97
METHOXYCHLOR	29.99	29.99	29.98	30.01	29.98	29.99	0.07	29.92	30.06
DCB*	37.23	37.24	37.23	37.28	37.23	37.24	0.10	37.14	37.34

Sequence Name: S4BS01C Column: DB608 ID: 0.53 Date Analyzed: 11/09/99-11/10/99

COMPOUND	L1-RT.	L2-RT.	L3-RT.	L4-RT.	L5-RT.	AVG. .RT.	+/-	RT	WINDOW
TCX*	9.99	9.98	9.99	9.99	10.01	9.99	0.05	9.94	10.04
B-BHC	14.90	14.89	14.89	14.90	14.92	14.9	0.05	14.85	14.95
D-BHC	16.74	16.73	16.73	16.74	16.76	16.74	0.05	16.69	16.79
ALDRIN	17.88	17.86	17.86	17.87	17.89	17.87	0.05	17.82	17.92
HETACHLOR EPOXIDE	20.84	20.83	20.82	20.84	20.86	20.84	0.07	20.77	20.91
G-CHLORDANE	21.72	21.72	21.71	21.73	21.75	21.73	0.07	21.66	21.8
A-CHLORDANE	22.61	22.60	22.59	22.61	22.63	22.61	0.07	22.54	22.68
4,4'-DDE	24.10	24.09	24.09	24.10	24.12	24.1	0.07	24.03	24.17
ENDOSULFAN II	26.22	26.22	26.21	26.22	26.23	26.22	0.07	26.15	26.29
ENDRIN ALDEHYDE	27.21	27.20	27.20	27.21	27.21	27.21	0.07	27.14	27.28
ENDOSULFAN SULFATE	27.60	27.60	27.59	27.61	27.61	27.6	0.07	27.53	27.67
ENDRIN KETONE	30.59	30.59	30.59	30.60	30.60	30.59	0.07	30.52	30.66
DCB*	37.22	37.22	37.22	37.25	37.22	37.23	0.10	37.13	37.33

SEVERN TRENT LABORATORIES, INC.
GAS CHROMATOGRAPHY
MULTICOMPONENT PESTICIDE
INITIAL CALIBRATION FORMS

Sequence Name: S4AS01I Column: DB1701 ID: 0.53 Date Analyzed: 10/16/99

COMPOUND	CONCENTRATION	PEAK 1		PEAK 2		PEAK 3		TOTAL AREA	RF
CHLORDANE	500	17.88	437985	18.76	1029726	19.06	1452571	2920282	5841
TOXAPHENE	1000	24.87	1004186	25.13	594648	26.01	374787	1973621	1974

SEVERN TRENT LABORATORIES, INC.
GAS CHROMATOGRAPHY
MULTICOMPONENT PESTICIDE
INITIAL CALIBRATION FORMS

Sequence Name: S4BS01I Column: DB608 ID: 0.53 Date Analyzed: 10/16/99

COMPOUND	CONCENTRATION	PEAK 1		PEAK 2		PEAK 3		TOTAL AREA	RF
CHLORDANE	500	21.69	668001	21.83	468656	22.57	599957	1736614	3473
TOXAPHENE	1000	26.28	182179	28.91	281354	29.15	257889	721422	721

Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/Br8081.m
Sample Info : evalb
Lab ID : evalb
Inj Date : 28-NOV-1999 09:24
Operator : gds
Cpnd Sublist: END_DDT
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	11.50%
Endrin	6.46%

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b, as of 12/13/1999 17:09)

Processing Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/Br8081.m

DataFile : b02ab061.d

Compound Ind A L3	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32787.217	37503.000	14.383	15
gamma-BHC (Lindane)	Averaged	33577.437	37754.750	12.441	15
4,4'-DDD	Averaged	21293.423	25088.809	17.824<-	15
4,4'-DDT	Averaged	21328.720	19360.400	9.228	15
Dieldrin	Averaged	30908.666	34824.150	12.668	15
Endosulfan I	Averaged	32523.645	36399.300	11.916	15
Endrin	Averaged	22159.879	25267.214	14.022	15
Heptachlor	Averaged	39596.812	45463.100	14.815	15
Methoxychlor	Averaged	12020.470	12161.960	1.177	15
Tetrachloro-m-xylene	Averaged	33327.788	38248.623	14.765	15
Decachlorobiphenyl	Averaged	47214.758	54102.550	14.588	15

Total %D Sum : 137.83
Number of Compounds: 11
Avg of %Diffs : 12.53

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b, as of 12/13/1999 17:09)

Processing Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/Br8081.m

DataFile : b02ab062.d

Compound Ind B L3	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	34685.832	37278.300	7.474	15
beta-BHC	Averaged	21666.162	24172.100	11.566	15
delta-BHC	Averaged	30373.513	31556.700	3.895	15
4,4'-DDE	Averaged	33642.975	36745.125	9.221	15
Endosulfan II	Averaged	32749.732	35765.475	9.208	15
Endosulfan sulfate	Averaged	30329.588	32868.150	8.370	15
Endrin aldehyde	Averaged	27275.621	29643.500	8.681	15

Endrin ketone	Averaged	35682.774	37691.525	5.629	15
Heptachlor epoxide	Averaged	37223.480	39049.850	4.906	15
gamma-Chlordane	Averaged	36382.800	38770.550	6.563	15
alpha-Chlordane	Averaged	36855.385	38766.750	5.186	15
Tetrachloro-m-xylene	Averaged	33327.788	38644.727	15.953<-	15
Decachlorobiphenyl	Averaged	47214.758	52282.050	10.732	15

Total %D Sum : 245.22

Number of Compounds: 24

Avg of %Diffs : 10.22

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-26-99/26nov99e.b, as of 12/13/1999 17:11)

Processing Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99e.b/Br8081.m

DataFile : b02ab073.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32787.217	37172.126	13.374	15
gamma-BHC (Lindane)	Averaged	33577.437	37827.612	12.658	15
4,4'-DDD	Averaged	21293.423	25422.306	19.390<-	15
4,4'-DDT	Averaged	21328.720	18462.593	13.438	15
Dieldrin	Averaged	30908.666	35839.575	15.953<-	15
Endosulfan I	Averaged	32523.645	38382.000	18.013<-	15
Endrin	Averaged	22159.879	26148.366	17.999<-	15
Heptachlor	Averaged	39596.812	44252.994	11.759	15
Methoxychlor	Averaged	12020.470	9884.532	17.769<-	15
Tetrachloro-m-xylene	Averaged	33327.788	38117.665	14.372	15
Decachlorobiphenyl	Averaged	47214.758	56036.298	18.684<-	15

Total %D Sum : 173.41
Number of Compounds: 11
Avg of %Diffs : 15.76

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/rear/11-26-99/26nov99e.b, as of 12/13/1999 17:11)

Processing Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99e.b/Br8081.m

DataFile : b02ab074.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	34685.832	37683.650	8.643	15
beta-BHC	Averaged	21666.162	23931.250	10.454	15
delta-BHC	Averaged	30373.513	31965.500	5.241	15
4,4'-DDE	Averaged	33642.975	37730.725	12.150	15
Endosulfan II	Averaged	32749.732	37520.900	14.569	15
Endosulfan sulfate	Averaged	30329.588	34417.950	13.480	15
Endrin aldehyde	Averaged	27275.621	30728.625	12.660	15

Endrin ketone	Averaged	35682.774	38815.350	8.779	15
Heptachlor epoxide	Averaged	37223.480	41264.400	10.856	15
gamma-Chlordane	Averaged	36382.800	40058.400	10.103	15
alpha-Chlordane	Averaged	36855.385	40665.950	10.339	15
Tetrachloro-m-xylene	Averaged	33327.788	38533.145	15.619<-	15
Decachlorobiphenyl	Averaged	47214.758	55655.300	17.877<-	15

000416

Total %D Sum : 324.18

Number of Compounds: 24

Avg of %Diffs : 13.51

Method : /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/Bf8081.m
Sample Info : evalb
Lab ID : evalb
Inj Date : 28-NOV-1999 09:24
Operator : gds
Cpnd Sublist: END_DDT
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL

Endrin/DDT Breakdown Report

Compounds	Breakdown
DDT	10.44%
Endrin	7.20%

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-26-99/26nov99d.b, as of 12/13/1999 17:11)

Processing Method : /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/Bf8081.m

DataFile : b02aa061.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32824.370	37124.900	13.102	15
gamma-BHC (Lindane)	Averaged	33301.243	37579.900	12.848	15
4,4'-DDD	Averaged	23066.677	27497.993	19.211<-	15
4,4'-DDT	Averaged	28471.628	24611.250	13.559	15
Dieldrin	Averaged	31603.791	35540.500	12.456	15
Endosulfan I	Averaged	33061.803	36994.550	11.895	15
Endrin	Averaged	25811.392	30156.725	16.835<-	15
Heptachlor	Averaged	43158.940	47824.550	10.810	15
Methoxychlor	Averaged	16579.296	15736.045	5.086	15
Tetrachloro-m-xylene	Averaged	34845.440	39840.700	14.335	15
Decachlorobiphenyl	Averaged	43730.136	49715.000	13.686	15

Total %D Sum : 143.82
Number of Compounds: 11
Avg of %Diffs : 13.07

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-26-99/26nov99d.b, as of 12/13/1999 17:11)

Processing Method : /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/Bf8081.m

DataFile : b02aa062.d

Compound	Curve Type	___ RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	34498.798	35818.276	3.825	15
beta-BHC	Averaged	22250.235	23904.621	7.435	15
delta-BHC	Averaged	30339.725	30861.450	1.720	15
4,4'-DDE	Averaged	34813.810	37378.371	7.367	15
Endosulfan II	Averaged	35983.366	38821.743	7.888	15
Endosulfan sulfate	Averaged	32298.522	33766.342	4.545	15
Endrin aldehyde	Averaged	28721.735	30525.979	6.282	15

Endrin ketone	Averaged	36276.311	38469.556	6.046	15
Heptachlor epoxide	Averaged	38767.202	41125.321	6.083	15
gamma-Chlordane	Averaged	39151.330	40689.804	3.930	15
alpha-Chlordane	Averaged	38702.817	41043.035	6.047	15
Tetrachloro-m-xylene	Averaged	34845.440	40063.501	14.975	15
Decachlorobiphenyl	Averaged	43730.136	47906.849	9.551	15

Total %D Sum : 229.52
Number of Compounds: 24
Avg of %Diffs : 9.56

CONTINUING CALIBRATION REPORT

for databatch - /chem/HP58902.i/8081/front/11-26-99/26nov99e.b, as of 12/13/1999 17:13)

rocessing Method : /chem/HP58902.i/8081/front/11-26-99/26nov99e.b/Bf8081.m

DataFile : b02aa073.d

Compound	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
alpha-BHC	Averaged	32824.370	36621.850	11.569	15
gamma-BHC (Lindane)	Averaged	33301.243	37326.000	12.086	15
4,4'-DDD	Averaged	23066.677	27793.500	20.492<-	15
4,4'-DDT	Averaged	28471.628	24552.804	13.764	15
Dieldrin	Averaged	31603.791	35390.700	11.982	15
Endosulfan I	Averaged	33061.803	37339.200	12.938	15
Endrin	Averaged	25811.392	29714.291	15.121<-	15
Heptachlor	Averaged	43158.940	47805.450	10.766	15
Methoxychlor	Averaged	16579.296	15721.720	5.173	15
Tetrachloro-m-xylene	Averaged	34845.440	39331.100	12.873	15
Decachlorobiphenyl	Averaged	43730.136	50160.125	14.704	15

Total %D Sum : 141.47
Number of Compounds: 11
Avg of %Diffs : 12.86

CONTINUING CALIBRATION REPORT

(for databatch - /chem/HP58902.i/8081/front/11-26-99/26nov99e.b, as of 12/13/1999 17:13)

rocessing Method : /chem/HP58902.i/8081/front/11-26-99/26nov99e.b/Bf8081.m

ataFile : b02aa074.d

Compound	Curve Type	RRF/CONC	CCAL RF/CONC	% DIFF/DRIFT	MAX %DIFF/DRIFT
Aldrin	Averaged	34498.798	36581.650	6.037	15
beta-BHC	Averaged	22250.235	24245.000	8.965	15
delta-BHC	Averaged	30339.725	31444.000	3.640	15
4,4'-DDE	Averaged	34813.810	38807.425	11.471	15
Endosulfan II	Averaged	35983.366	37732.750	4.862	15
Endosulfan sulfate	Averaged	32298.522	34213.612	5.929	15
Endrin aldehyde	Averaged	28721.735	31664.600	10.246	15

PESTICIDE CONTINUING CALIBRATIONS
INDA

Sequence: S4AS01C Instrument: HP58904A Column: DB1701 Analysis Date: 11/10/99 Analysis Time: 0156

Data File ID: D4AS01C_016 Initial Calibration Sequence: S4AS01I Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	7.97	7.92	8.02	357603	359446	0.5
alpha-BHC	10.52	10.47	10.57	417286	419090	0.4
gamma-BHC (Lindane)	11.99	11.94	12.04	417138	421397	1
Heptachlor	13.07	13.02	13.12	492272	477430	3
Endosulfan I	18.58	18.51	18.65	342307	359515	5
Dieldrin	20.33	20.26	20.4	697634	717266	2.8
Endrin	21.36	21.29	21.43	612866	621429	1.4
4,4'-DDD	23.54	23.47	23.61	515227	529600	2.8
4,4'-DDT	24.56	24.49	24.63	447054	471285	5.4
Methoxychlor	26.21	26.14	26.28	785438	827757	5.4
Decachlorobiphenyl*	30.21	30.14	30.28	435302	447443	2.8

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDB

Sequence: S4AS01C Instrument: HP58904A Column: DB1701 Analysis Date: 11/10/99 Analysis Time: 0247

Data File ID: D4AS01C_017 Initial Calibration Sequence: S4AS01I Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	7.97	7.92	8.02	346224	359895	3.9
Aldrin	14.30	14.25	14.35	387007	398655	3
beta-BHC	14.88	14.83	14.93	227927	234326	2.8
delta-BHC	16.05	16	16.1	312204	325095	4.1
Heptachlor Epoxide	17.18	17.11	17.25	403063	414292	2.8
gamma-Chlordane	18.77	18.7	18.84	394829	410752	4
alpha-Chlordane	19.05	18.98	19.12	418653	438811	4.8
4,4'-DDE	19.68	19.61	19.75	722808	750079	3.8
Endosulfan II	23.70	23.63	23.77	616632	634150	2.8
Endrin Aldehyde	25.28	25.21	25.35	393816	408259	3.7
Endosulfan Sulfate	26.00	25.93	26.07	337281	350532	3.9
Endrin Ketone	27.11	27.04	27.18	327148	338304	3.4
Decachlorobiphenyl*	30.21	30.14	30.28	418676	439242	4.9

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDA

Sequence: S4BS01C Instrument: HP58904B Column: DB608 Analysis Date: 11/10/99 Analysis Time: 0106

Data File ID: D4BS01C_015 Initial Calibration Sequence: S4BS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	9.99	9.94	10.04	446930	453379	1.4
alpha-BHC	12.77	12.72	12.82	584793	592154	1.3
gamma-BHC (Lindane)	14.59	14.54	14.64	479454	492255	2.7
Heptachlor	16.18	16.13	16.23	421787	426154	1
Endosulfan I	22.76	22.69	22.83	243988	233490	4.3
Dieldrin	24.50	24.43	24.57	441284	456351	3.4
Endrin	25.71	25.64	25.78	204013	208132	2
4,4'-DDD	26.03	25.96	26.1	180241	175066	2.9
4,4'-DDT	26.90	26.83	26.97	173966	173208	0.4
Methoxychlor	29.99	29.92	30.06	419879	440258	4.9
Decachlorobiphenyl*	37.24	37.17	37.31	239521	248073	3.6

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDB

Sequence: S4BS01C Instrument: HP58904B Column: DB608 Analysis Date: 11/10/99 Analysis Time: 0156

Data File ID: D4BS01C 016 Initial Calibration Sequence: S4BS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	9.97	9.92	10.02	453676	465275	2.6
beta-BHC	14.88	14.83	14.93	231127	236009	2.1
delta-BHC	16.71	16.66	16.76	396587	399316	0.7
Aldrin	17.84	17.79	17.89	375561	399841	6.5
Heptachlor Epoxide	20.82	20.75	20.89	365817	371797	1.6
gamma-Chlordane	21.70	21.63	21.77	321136	326849	1.8
alpha-Chlordane	22.59	22.52	22.66	251735	250231	0.6
4,4'-DDE	24.08	24.01	24.15	489967	508633	3.8
Endosulfan II	26.21	26.14	26.28	186367	194146	4.2
Endrin Aldehyde	27.20	27.13	27.27	153882	163215	6.1
Endosulfan Sulfate	27.59	27.52	27.66	166941	175139	4.9
Endrin Ketone	30.58	30.51	30.65	188208	200056	6.3
Decachlorobiphenyl*	37.20	37.13	37.27	239767	244296	1.9

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDA

Sequence: S4AS01C Instrument: HP58904A Column: DB1701 Analysis Date: 11/10/99 Analysis Time: 1249

Data File ID: D4AS01C_029 Initial Calibration Sequence: S4AS01I Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	7.98	7.93	8.03	357603	357185	0.1
alpha-BHC	10.54	10.49	10.59	417286	416490	0.2
gamma-BHC (Lindane)	12.01	11.96	12.06	417138	417771	0.2
Heptachlor	13.09	13.04	13.14	492272	475081	3.5
Endosulfan I	18.60	18.53	18.67	342307	345393	0.9
Dieldrin	20.35	20.28	20.42	697634	675921	3.1
Endrin	21.38	21.31	21.45	612866	592213	3.4
4,4'-DDD	23.56	23.49	23.63	515227	505566	1.9
4,4'-DDT	24.58	24.51	24.65	447054	416955	6.7
Methoxychlor	26.21	26.14	26.28	785438	738718	5.9
Decachlorobiphenyl*	30.22	30.15	30.29	435302	410939	5.6

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDB

Sequence: S4AS01C Instrument: HP58904A Column: DB1701 Analysis Date: 11/10/99 Analysis Time: 1337

Data File ID: D4AS01C_030 Initial Calibration Sequence: S4AS01I Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	8.00	7.95	8.05	346224	350294	1.2
Aldrin	14.35	14.3	14.4	387007	390811	1
beta-BHC	14.92	14.87	14.97	227927	232457	2
delta-BHC	16.10	16.05	16.15	312204	324542	4
Heptachlor Epoxide	17.24	17.17	17.31	403063	404074	0.3
gamma-Chlordane	18.83	18.76	18.9	394829	388805	1.5
alpha-Chlordane	19.11	19.04	19.18	418653	405600	3.1
4,4'-DDE	19.74	19.67	19.81	722808	696444	3.6
Endosulfan II	23.77	23.7	23.84	616632	595228	3.5
Endrin Aldehyde	25.31	25.24	25.38	393816	368061	6.5
Endosulfan Sulfate	26.03	25.96	26.1	337281	305201	9.5
Endrin Ketone	27.14	27.07	27.21	327148	309031	5.5
Decachlorobiphenyl*	30.26	30.19	30.33	418676	414203	1.1

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDA

Sequence: S4BS01C Instrument: HP58904B Column: DB608 Analysis Date: 11/10/99 Analysis Time: 1200

Data File ID: D4BS01C_028 Initial Calibration Sequence: S4BS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	10.02	9.97	10.07	446930	469138	5
alpha-BHC	12.82	12.77	12.87	584793	610968	4.5
gamma-BHC (Lindane)	14.63	14.58	14.68	479454	496377	3.5
Heptachlor	16.23	16.18	16.28	421787	426630	1.1
Endosulfan I	22.80	22.73	22.87	243988	240168	1.6
Dieldrin	24.53	24.46	24.6	441284	427252	3.2
Endrin	25.72	25.65	25.79	204013	210520	3.2
4,4'-DDD	26.04	25.97	26.11	180241	175173	2.8
4,4'-DDT	26.91	26.84	26.98	173966	164040	5.7
Methoxychlor	30.00	29.93	30.07	419879	424062	1
Decachlorobiphenyl*	37.26	37.19	37.33	239521	248139	3.6

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDB

Sequence: S4BS01C Instrument: HP58904B Column: DB608 Analysis Date: 11/10/99 Analysis Time: 1249

Data File ID: D4BS01C_029 Initial Calibration Sequence: S4BS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	9.99	9.94	10.04	453676	466968	2.9
beta-BHC	14.90	14.85	14.95	231127	236518	2.3
delta-BHC	16.74	16.69	16.79	396587	401358	1.2
Aldrin	17.87	17.82	17.92	375561	377907	0.6
Heptachlor Epoxide	20.84	20.77	20.91	365817	356408	2.6
gamma-Chlordane	21.73	21.66	21.8	321136	320218	0.3
alpha-Chlordane	22.61	22.54	22.68	251735	240470	4.5
4,4'-DDE	24.10	24.03	24.17	489967	478649	2.3
Endosulfan II	26.22	26.15	26.29	186367	181282	2.7
Endrin Aldehyde	27.20	27.13	27.27	153882	151572	1.5
Endosulfan Sulfate	27.60	27.53	27.67	166941	170231	2
Endrin Ketone	30.59	30.52	30.66	188208	191982	2
Decachlorobiphenyl*	37.22	37.15	37.29	239767	240796	0.4

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDA

Sequence: S4AS01J Instrument: HP58904A Column: DB1701 Analysis Date: 11/24/99 Analysis Time: 0917

Data File ID: D4AS01J_020 Initial Calibration Sequence: S4AS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	8.04	7.99	8.09	357603	364530	1.9
alpha-BHC	10.60	10.55	10.65	417286	417839	0.1
gamma-BHC (Lindane)	12.07	12.02	12.12	417138	414405	0.7
Heptachlor	13.17	13.12	13.22	492272	430667	12.5
Endosulfan I	18.69	18.62	18.76	342307	337387	1.4
Dieldrin	20.43	20.36	20.5	697634	667890	4.3
Endrin	21.47	21.4	21.54	612866	591932	3.4
4,4'-DDD	23.64	23.57	23.71	515227	483313	6.2
4,4'-DDT	24.64	24.57	24.71	447054	436873	2.3
Methoxychlor	26.25	26.18	26.32	785438	778091	0.9
Decachlorobiphenyl*	30.29	30.22	30.36	435302	427031	1.9

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDB

Sequence: S4AS01J Instrument: HP58904A Column: DB1701 Analysis Date: 11/2499 Analysis Time: 1005

Data File ID: D4AS01J_021 Initial Calibration Sequence: S4AS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	8.04	7.99	8.09	346224	360495	4.1
Aldrin	14.41	14.36	14.46	387007	365815	5.5
beta-BHC	14.96	14.91	15.01	227927	220187	3.4
delta-BHC	16.14	16.09	16.19	312204	328653	5.3
Heptachlor Epoxide	17.29	17.22	17.36	403063	382572	5.1
gamma-Chlordane	18.88	18.81	18.95	394829	361891	8.3
alpha-Chlordane	19.17	19.1	19.24	418653	389260	7
4,4'-DDE	19.79	19.72	19.86	722808	680772	5.8
Endosulfan II	23.82	23.75	23.89	616632	585762	5
Endrin Aldehyde	25.33	25.26	25.4	393816	373957	5
Endosulfan Sulfate	26.05	25.98	26.12	337281	321555	4.7
Endrin Ketone	27.16	27.09	27.23	327148	312957	4.3
Decachlorobiphenyl*	30.30	30.23	30.37	418676	419082	0.1

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDA

Sequence: S4BS01J Instrument: HP58904B Column: DB608 Analysis Date: 11/24/99 Analysis Time: 0825

Data File ID: D4BS01J_019 Initial Calibration Sequence: S4BS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	10.03	9.98	10.08	446930	478620	7.1
alpha-BHC	12.82	12.77	12.87	584793	635476	8.7
gamma-BHC (Lindane)	14.63	14.58	14.68	479454	541432	12.9
Heptachlor	16.24	16.19	16.29	421787	486993	15.5
Endosulfan I	22.81	22.74	22.88	243988	275619	13
Dieldrin	24.54	24.47	24.61	441284	489666	11
Endrin	25.73	25.66	25.8	204013	213875	4.8
4,4'-DDD	26.05	25.98	26.12	180241	189522	5.1
4,4'-DDT	26.91	26.84	26.98	173966	222470	27.9
Methoxychlor	29.99	29.92	30.06	419879	478309	13.9
Decachlorobiphenyl*	37.22	37.15	37.29	239521	262765	9.7

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDB

Sequence: S4BS01J Instrument: HP58904B Column: DB608 Analysis Date: 11/24/99 Analysis Time: 0917

Data File ID: D4BS01J_020 Initial Calibration Sequence: S4BS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	10.04	9.99	10.09	453676	477214	5.2
beta-BHC	14.96	14.91	15.01	231127	261895	13.3
delta-BHC	16.79	16.74	16.84	396587	452217	14
Aldrin	17.93	17.88	17.98	375561	435724	16
Heptachlor Epoxide	20.90	20.83	20.97	365817	430514	17.7
gamma-Chlordane	21.78	21.71	21.85	321136	377225	17.5
alpha-Chlordane	22.67	22.6	22.74	251735	284890	13.2
4,4'-DDE	24.16	24.09	24.23	489967	583971	19.2
Endosulfan II	26.25	26.18	26.32	186367	209015	12.2
Endrin Aldehyde	27.23	27.16	27.3	153882	175970	14.4
Endosulfan Sulfate	27.63	27.56	27.7	166941	177099	6.1
Endrin Ketone	30.62	30.55	30.69	188208	213557	13.5
Decachlorobiphenyl*	37.23	37.16	37.3	239767	257871	7.6

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDA

Sequence: S4AS01J Instrument: HP58904A Column: DB1701 Analysis Date: 11/24/99 Analysis Time: 2108

Data File ID: D4AS01J_034 Initial Calibration Sequence: S4AS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	8.01	7.96	8.06	357603	377003	5.4
alpha-BHC	10.56	10.51	10.61	417286	453939	8.8
gamma-BHC (Lindane)	12.03	11.98	12.08	417138	431985	3.6
Heptachlor	13.12	13.07	13.17	492272	473865	3.7
Endosulfan I	18.63	18.56	18.7	342307	336977	1.6
Dieldrin	20.38	20.31	20.45	697634	698789	0.2
Endrin	21.41	21.34	21.48	612866	621891	1.5
4,4'-DDD	23.59	23.52	23.66	515227	508697	1.3
4,4'-DDT	24.60	24.53	24.67	447054	434091	2.9
Methoxychlor	26.22	26.15	26.29	785438	791036	0.7
Decachlorobiphenyl*	30.24	30.17	30.31	435302	422544	2.9

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDB

Sequence: S4AS01J Instrument: HP58904A Column: DB1701 Analysis Date: 11/2499 Analysis Time: 2156

Data File ID: D4AS01J_035 Initial Calibration Sequence: S4AS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	8.01	7.96	8.06	346224	369060	6.6
Aldrin	14.36	14.31	14.41	387007	389634	0.7
beta-BHC	14.91	14.86	14.96	227927	229100	0.5
delta-BHC	16.09	16.04	16.14	312204	342352	9.7
Heptachlor Epoxide	17.24	17.17	17.31	403063	402741	0.1
gamma-Chlordane	18.83	18.76	18.9	394829	380940	3.5
alpha-Chlordane	19.11	19.04	19.18	418653	419717	0.3
4,4'-DDE	19.74	19.67	19.81	722808	731334	1.2
Endosulfan II	23.76	23.69	23.83	616632	612277	0.7
Endrin Aldehyde	25.30	25.23	25.37	393816	382392	2.9
Endosulfan Sulfate	26.02	25.95	26.09	337281	325621	3.5
Endrin Ketone	27.13	27.06	27.2	327148	321562	1.7
Decachlorobiphenyl*	30.25	30.18	30.32	418676	402108	4

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDA

Sequence: S4BS01J Instrument: HP58904B Column: DB608 Analysis Date: 11/24/99 Analysis Time: 2020

Data File ID: D4BS01J_033 Initial Calibration Sequence: S4BS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	10.04	9.99	10.09	446930	476919	6.7
alpha-BHC	12.83	12.78	12.88	584793	699804	19.7
gamma-BHC (Lindane)	14.64	14.59	14.69	479454	618429	29
Heptachlor	16.24	16.19	16.29	421787	552626	31
Endosulfan I	22.81	22.74	22.88	243988	293516	20.3
Dieldrin	24.54	24.47	24.61	441284	518982	17.6
Endrin	25.73	25.66	25.8	204013	240854	18.1
4,4'-DDD	26.05	25.98	26.12	180241	212032	17.6
4,4'-DDT	26.91	26.84	26.98	173966	197475	13.5
Methoxychlor	29.99	29.92	30.06	419879	482270	14.9
Decachlorobiphenyl*	37.23	37.16	37.3	239521	271614	13.4

*Surrogate

PESTICIDE CONTINUING CALIBRATIONS
INDB

Sequence: S4BS01J Instrument: HP58904B Column: DB608 Analysis Date: 11/24/99 Analysis Time: 2108

Data File ID: D4BS01J_034 Initial Calibration Sequence: S4BS01C Start Date: 11/09/99 End Date: 11/10/99

Compound	RT	RT Window From	RT Window To	Initial Cal. Area	Sample Area	% DIFF
Tetrachloro-m-xylene *	10.02	9.97	10.07	453676	475528	4.8
beta-BHC	14.93	14.88	14.98	231127	302973	31.1
delta-BHC	16.76	16.71	16.81	396587	467678	17.9
Aldrin	17.89	17.84	17.94	375561	440175	17.2
Heptachlor Epoxide	20.86	20.79	20.93	365817	439786	20.2
gamma-Chlordane	21.74	21.67	21.81	321136	363925	13.3
alpha-Chlordane	22.63	22.56	22.7	251735	290622	15.4
4,4'-DDE	24.12	24.05	24.19	489967	611535	24.8
Endosulfan II	26.23	26.16	26.3	186367	230864	23.9
Endrin Aldehyde	27.21	27.14	27.28	153882	176106	14.4
Endosulfan Sulfate	27.60	27.53	27.67	166941	185899	11.4
Endrin Ketone	30.58	30.51	30.65	188208	219510	16.6
Decachlorobiphenyl*	37.19	37.12	37.26	239767	259214	8.1

*Surrogate

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4AS01C_005

GC Column: DB1701 ID: 0.53mm Instrument ID: HP58904A

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	31710	1155938	2.7
p,p'-DDD	31710			
p,p'-DDT	1124228	1124228		
Endrin Ketone	0	0	786981	0
Endrin Aldehyde	0			
Endrin	786981	786981		

The % breakdown of either DDT or Endrin must not exceed 15%

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4BS01C_004

GC Column: DB608 ID: 0.53mm Instrument ID: HP58904B

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	24917	447404	5.6
p,p'-DDD	24917			
p,p'-DDT	422487	422487		
Endrin Ketone	11304	27854	289578	9.6
Endrin Aldehyde	16550			
Endrin	261724	261724		

The % breakdown of either DDT or Endrin must not exceed 15%

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4AS01C_028

GC Column: DB1701 ID: 0.53mm Instrument ID: HP58904A

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	51216	1080035	4.7
p,p'-DDD	51216			
p,p'-DDT	1028819	1028819		
Endrin Ketone	0	10040	776953	1.3
Endrin Aldehyde	10040			
Endrin	766913	766913		

The % breakdown of either DDT or Endrin must not exceed 15%

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4BS01C_027

GC Column: DB608 ID: 0.53mm Instrument ID: HP58904B

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	31059	443945	7
p,p'-DDD	31059			
p,p'-DDT	412886	412886		
Endrin Ketone	0	0	262855	0
Endrin Aldehyde	0			
Endrin	262855	262855		

The % breakdown of either DDT or Endrin must not exceed 15%

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4AS01J_019

GC Column: DB1701 ID: 0.53mm Instrument ID: HP58904A

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	20412	1120922	1.8
p,p'-DDD	20412			
p,p'-DDT	1100510	1100510		
Endrin Ketone	0	15684	812074	1.9
Endrin Aldehyde	15684			
Endrin	796390	796390		

The % breakdown of either DDT or Endrin must not exceed 15%

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4BS01J_018

GC Column: DB608 ID: 0.53mm Instrument ID: HP58904B

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	45651	530936	8.6
p,p'-DDD	45651			
p,p'-DDT	485285	485285		
Endrin Ketone	11445	11445	344284	3.3
Endrin Aldehyde	0			
Endrin	332839	332839		

The % breakdown of either DDT or Endrin must not exceed 15%

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4AS01J_033

GC Column: DB1701 ID: 0.53mm Instrument ID: HP58904A

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	15165	1076972	1.4
p,p'-DDD	15165			
p,p'-DDT	1061807	1061807		
Endrin Ketone	0	19794	817398	2.4
Endrin Aldehyde	19794			
Endrin	797604	797604		

The % breakdown of either DDT or Endrin must not exceed 15%

DEGRADATION OF DDT AND ENDRIN SERIES

Lab Name: STL-INC Contract: _____

Lab Code: STL,NJ Case No.: ____ SDG No.: ____

Lab Sample ID: EVAL B Lab File ID: D4BS01J_032

GC Column: DB608 ID: 0.53mm Instrument ID: HP58904B

COMPOUND	RESPONSE	TOTAL DEG. AREA	TOTAL CMPD. AREA	%BREAKDOWN TOT.DEG AREA / TOT.CMPD. AREA X 100
p,p'-DDE	0	18866	505601	3.7
p,p'-DDD	18866			
p,p'-DDT	486735	486735		
Endrin Ketone	14514	14514	324279	4.5
Endrin Aldehyde	0			
Endrin	309765	309765		

The % breakdown of either DDT or Endrin must not exceed 15%

GAS CHROMATOGRAPHY

ANALYTICAL SEQUENCE

Lab Name: STL/NJ GC Column: RTX-CLP ID: 0.53mm

Init. Calib. Dates: 11/27/99

Instrument ID: HP58902A

No.	Sample No.	Lab No.	Date	Time Analyzed	RT (1)	RT (2)
1	INDA L1	INDA L1	11/27/99	0214	9.32	23.18
2	INDA L2	INDA L2	11/27/99	0253	9.33	23.17
3	INDA L3	INDA L3	11/27/99	0332	9.33	23.17
4	INDA L4	INDA L4	11/27/99	0411	9.33	23.18
5	INDA L5	INDA L5	11/27/99	0450	9.33	23.18
6	INDB L1	INDB L1	11/27/99	0529	9.35	23.19
7	INDB L2	INDB L2	11/27/99	0608	9.34	23.19
8	INDB L3	INDB L3	11/27/99	0647	9.34	23.19
9	INDB L4	INDB L4	11/27/99	0726	9.33	23.19
10	INDB L5	INDB L5	11/27/99	0805	9.34	23.19
11	TOX L3	TOX L3	11/27/99	0844	9.33	23.19
12	CHLOR L3	CHLOR L3	11/27/99	0923	9.34	23.18
13	INDA L3	INDA L3	11/28/99	1003	9.28	23.12
14	INDB L3	INDB L3	11/28/99	1042	9.28	23.11
15	WG41689 MB	WG41689 MB	11/28/99	1122	9.28	23.12
16	WG41689 BS	WG41689 BS	11/28/99	1200	9.29	23.14
17	94127019	94127019	11/28/99	1240	9.29	23.11
18	94127020	94127020	11/28/99	1318	9.29	23.14
19	84127021	94127021	11/28/99	1358	9.29	23.12
20	94127026	94127026	11/28/99	1437	9.30	23.15
21	94127026MS	94127026MS	11/28/99	1516	9.30	23.14
22	94127026MSD	94127026MSD	11/28/99	1555	9.29	23.12
23	INDA L3	INDA L3	11/28/99	1752	9.28	23.12
24	INDB L3	INDB L3	11/28/99	1831	9.29	23.11
25						

Surrogate (1) = Tetrachloro-m-xylene
Surrogate (2) = Dibutylchlorendate
* = Values outside of QC Limits

GAS CHROMATOGRAPHY

ANALYTICAL SEQUENCE

Lab Name: STL/NJ GC Column: RTX-CLPII ID: 0.53mm

Init. Calib. Dates: 11/27/99

Instrument ID: HP58902B

No.	Sample No.	Lab No.	Date	Time Analyzed	RT (1)	RT (2)
1	INDA L1	INDA L1	11/27/99	0214	11.49	29.26
2	INDA L2	INDA L2	11/27/99	0253	11.46	29.26
3	INDA L3	INDA L3	11/27/99	0332	11.46	29.26
4	INDA L4	INDA L4	11/27/99	0411	11.46	29.26
5	INDA L5	INDA L5	11/27/99	0450	11.46	29.26
6	INDB L1	INDB L1	11/27/99	0529	11.48	29.26
7	INDB L2	INDB L2	11/27/99	0608	11.47	29.26
8	INDB L3	INDB L3	11/27/99	0647	11.47	29.27
9	INDB L4	INDB L4	11/27/99	0726	11.47	29.27
10	INDB L5	INDB L5	11/27/99	0805	11.47	29.27
11	TOX L3	TOX L3	11/27/99	0844	11.47	29.26
12	CHLOR L3	CHLOR L3	11/27/99	0923	11.47	29.28
13	INDA L3	INDA L3	11/28/99	1003	11.42	29.16
14	INDB L3	INDB L3	11/28/99	1042	11.41	29.15
15	WG41689 MB	WG41689 MB	11/28/99	1122	11.41	29.16
16	WG41689 BS	WG41689 BS	11/28/99	1200	11.42	29.19
17	94127019	94127019	11/28/99	1240	11.42	29.13
18	94127020	94127020	11/28/99	1318	11.73	29.19
19	84127021	94127021	11/28/99	1358	11.42	29.16
20	94127026	94127026	11/28/99	1437	11.43	29.20
21	94127026MS	94127026MS	11/28/99	1516	11.43	29.18
22	94127026MSD	94127026MSD	11/28/99	1555	11.42	29.16
23	INDA L3	INDA L3	11/28/99	1752	11.41	29.15
24	INDB L3	INDB L3	11/28/99	1831	11.42	29.13
25						

Surrogate (1) = Tetrachloro-m-xylene
Surrogate (2) = Dibutylchlorendate
* = Values outside of QC Limits

PEST/PCB EVALUATION STANDARD SUMMARY

RETENTION TIME SHIFT FOR DECACHLOROBIPHENYL/TETRACHLORO-M-XYLENE

Lab Name: STL-NJ

Job No.: _____

Sequence: S4AS01I/S4AS01C

Instrument ID: HP58904A

GC Column ID: DB1701

Dates of Anlaysis: 10/16/99 11/10/99

CLIENT ID	LAB SAMPLE ID	DATE	TIME	TCX	DCB
CHLORDANE L3	CHLORDANE L3	10/16/99	1522	7.98	30.19
TOXAPHENE L5	TOXAPHENE L5	10/16/99	2101	7.97	30.17
INDA L1	INDA L1	11/09/99	1737	7.98	30.23
INDA L2	INDA L2	11/09/99	1825	7.99	30.23
INDA L3	INDA L3	11/09/99	1914	8.00	30.27
INDA L4	INDA L4	11/09/99	2002	7.98	30.22
INDA L5	INDA L5	11/09/99	2053	7.98	30.22
INDB L1	INDB L1	11/09/99	2143	7.99	30.22
INDB L2	INDB L2	11/09/99	2234	7.99	30.22
INDB L3	INDB L3	11/09/99	2325	7.99	30.24
INDB L4	INDB L4	11/10/99	0015	8.00	30.24
INDB L5	INDB L5	11/10/99	0106	7.98	30.24

TCX = TETRACHLORO-M-XYLENE
DCB = DECACHLOROBIPHENYL
* = Values outside of QC Limits

PEST/PCB EVALUATION STANDARD SUMMARY

RETENTION TIME SHIFT FOR DECACHLOROBIPHENYL/TETRACHLORO-M-XYLENE

Lab Name: STL-NJ

Job No.: 94127 Sequence: S4AS01C/S4AS01J

Instrument ID: HP58904A GC Column ID: DB1701

Dates of Anlaysis: 11/10/99 11/24/99

CLIENT ID	LAB SAMPLE ID	DATE	TIME	TCX	DCB
INDA L3	INDA L3	11/10/99	0156	7.97	30.21
INDB L3	INDB L3	11/10/99	0247	7.97	30.21
METHOD BLANK	10/20/99 MB	11/10/99	0337	7.99	30.22
BLANK SPIKE	10/20/99 BS	11/10/99	0428	7.98	30.21
3517-03MS	94091003MS	11/10/99	0750	7.97	30.22
3517-03MSD	94091003MSD	11/10/99	0841	7.99	30.24
INDA L3	INDA L3	11/10/99	1249	7.98	30.22
INDB L3	INDB L3	11/10/99	1337	8.00	30.26
INDA L3	INDA L3	11/24/99	0917	8.04	30.29
INDB L3	INDB L3	11/24/99	1005	8.04	30.30
S2-2-01	94127018	11/24/99	1059	8.04	30.29
S2-3-01	94127025	11/24/99	1153	D	D
INDA L3	INDA L3	11/24/99	2108	8.01	30.24
INDB L3	INDB L3	11/24/99	2156	8.01	30.25

TCX = TETRACHLORO-M-XYLENE
DCB = DECACHLOROBIPHENYL
* = Values outside of QC Limits

PEST/PCB EVALUATION STANDARD SUMMARY

RETENTION TIME SHIFT FOR DECACHLOROBIPHENYL/TETRACHLORO-M-XYLENE

Lab Name: STL-NJ

Job No.: _____

Sequence: S4BS01I/S4BS01C

Instrument ID: HP58904B

GC Column ID: DB608

Dates of Anlaysis: 10/16/99 11/10/99

CLIENT ID	LAB SAMPLE ID	DATE	TIME	TCX	DCB
CHLORDANE L3	CHLORDANE L3	10/16/99	1433	10.01	37.13
TOXAPHENE L5	TOXAPHENE L5	10/16/99	2013	10.00	37.11
INDA L1	INDA L1	11/09/99	1648	10.01	37.23
INDA L2	INDA L2	11/09/99	1737	9.99	37.24
INDA L3	INDA L3	11/09/99	1825	9.99	37.23
INDA L4	INDA L4	11/09/99	1914	10.02	37.28
INDA L5	INDA L5	11/09/99	2002	9.98	37.23
INDB L1	INDB L1	11/09/99	2053	9.99	37.22
INDB L2	INDB L2	11/09/99	2143	9.98	37.22
INDB L3	INDB L3	11/09/99	2234	9.99	37.22
INDB L4	INDB L4	11/09/99	2325	9.99	37.25
INDB L5	INDB L5	11/10/99	0015	10.01	37.22

TCX = TETRACHLORO-M-XYLENE
DCB = DECACHLOROBIPHENYL
* = Values outside of QC Limits

PEST/PCB EVALUATION STANDARD SUMMARY

RETENTION TIME SHIFT FOR DECACHLOROBIPHENYL/TETRACHLORO-M-XYLENE

Lab Name: STL-NJ

Job No.: 94127 Sequence: S4BS01C/S4BS01J

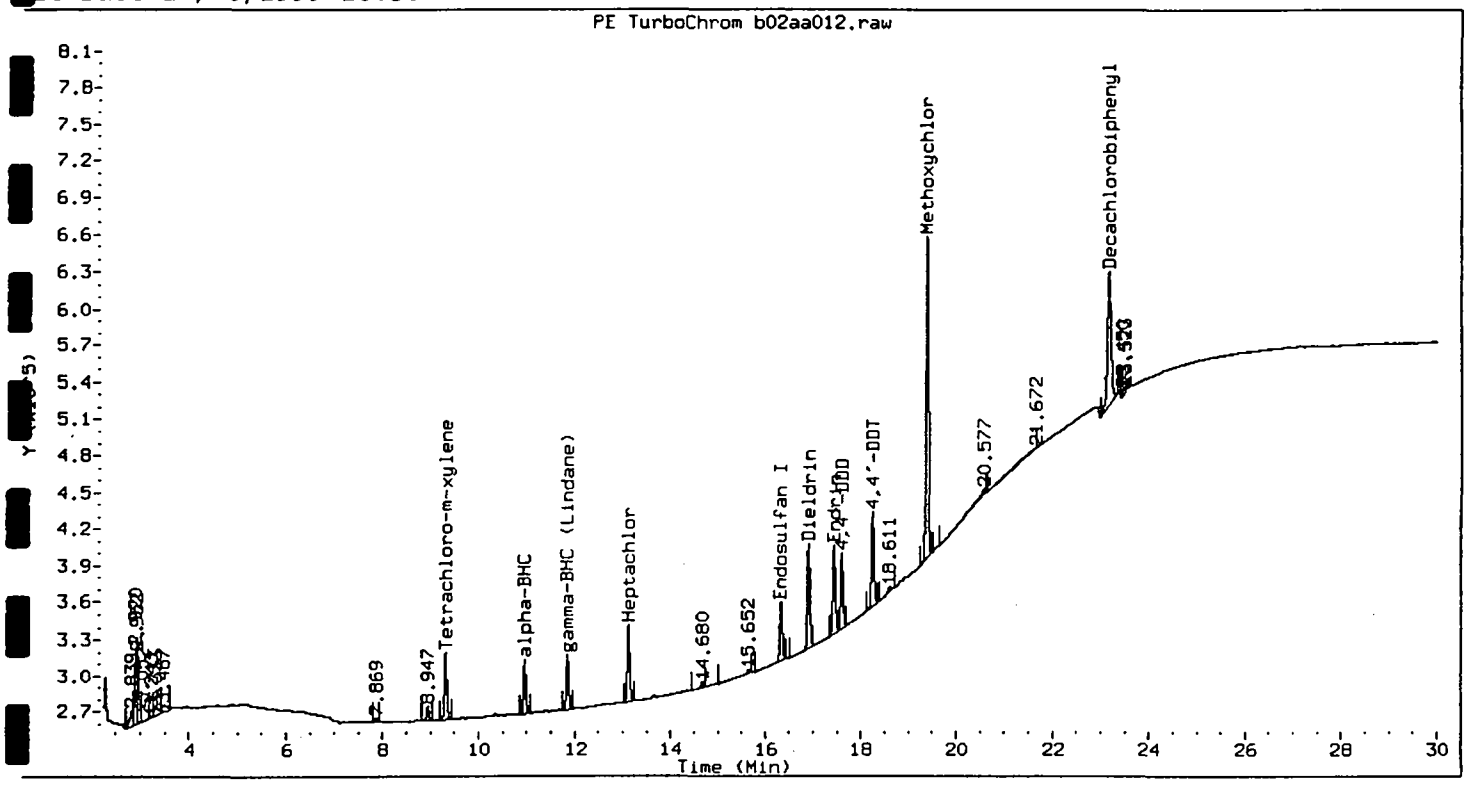
Instrument ID: HP58904B GC Column ID: DB608

Dates of Anlaysis: 11/10/99 11/24/99

CLIENT ID	LAB SAMPLE ID	DATE	TIME	TCX	DCB
INDA L3	INDA L3	11/10/99	0106	9.99	37.24
INDB L3	INDB L3	11/10/99	0156	9.97	37.20
METHOD BLANK	10/20/99 MB	11/10/99	0247	9.97	37.20
BLANK SPIKE	10/20/99 BS	11/10/99	0337	9.99	37.21
3517-03MS	94091003MS	11/10/99	0659	9.99	37.23
3517-03MSD	94091003MSD	11/10/99	0750	9.98	37.22
INDA L3	INDA L3	11/10/99	1200	10.02	37.26
INDB L3	INDB L3	11/10/99	1249	9.99	37.22
INDA L3	INDA L3	11/24/99	0825	10.03	37.22
INDB L3	INDB L3	11/24/99	0917	10.04	37.23
S2-2-01	94127018	11/24/99	1005	10.05	37.27
S2-3-01	94127025	11/24/99	1059	D	D
INDA L3	INDA L3	11/24/99	2020	10.04	37.23
INDB L3	INDB L3	11/24/99	2108	10.02	37.19

TCX = TETRACHLORO-M-XYLENE
DCB = DECACHLOROBIPHENYL
* = Values outside of QC Limits

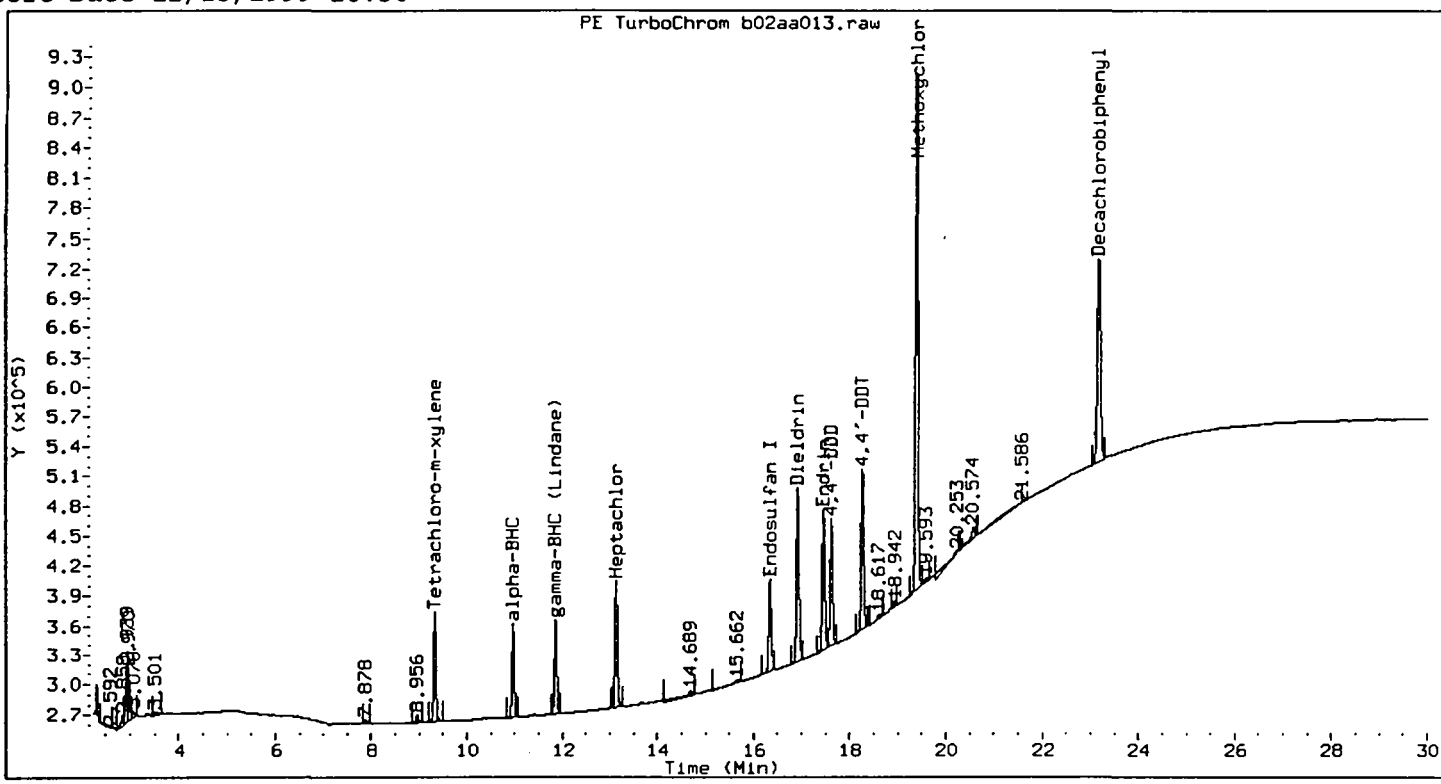
File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa012.d Page 1
rt Date 12/13/1999 16:30



od : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
le Info : INDA L1
ID : INDA L1 Inst ID : HP58902.i
Date : 27-NOV-1999 02:14 Dil Factor : 1
ator : gds Sample Matrix : SOIL
i Sublist: INDA Sample Type: CALIB_1

unds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
-BHC		10.960	10.974	0.014	150396	4.582	4.582
-BHC (Lindane)		11.851	11.864	0.013	156414	4.697	4.697
DDD	(M)	17.609	17.614	0.005	215664	9.890	9.890
DDT	(M)	18.255	18.258	0.003	286153	9.965	9.965
rin		16.912	16.918	0.006	319331	10.047	10.047
ulfan I		16.337	16.343	0.006	179617	5.397	5.397
n	(M)	17.447	17.451	0.004	265627	10.453	10.453
chlor		13.127	13.137	0.010	226830	5.256	5.256
xychlor	(M)	19.393	19.391	0.003	928309	55.949	55.949

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa013.d Page 1
Report Date 12/13/1999 16:30



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDA L2
Lab ID : INDA L2
Inj Date : 27-NOV-1999 02:53
Operator : gds
Cpnd Sublist: INDA

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_2

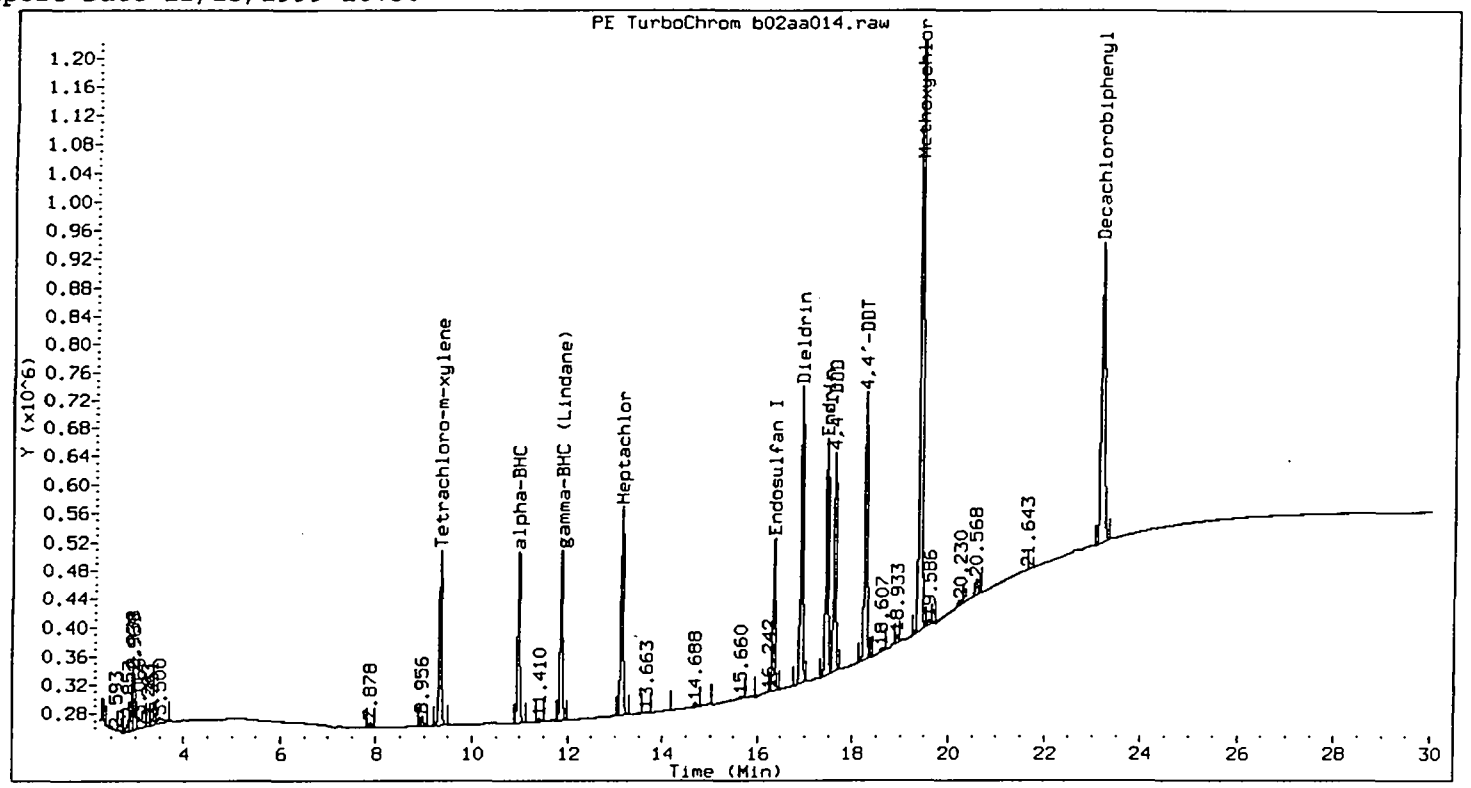
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		10.968	10.974	0.006	307054	9.354	9.354
gamma-BHC (Lindane)		11.859	11.864	0.005	318286	9.558	9.558
4,4'-DDD		17.619	17.614	0.005	432810	19.848	19.848
4,4'-DDT	(M)	18.264	18.258	0.007	578593	20.295	20.295
Dieldrin	(M)	16.922	16.918	0.005	633069	19.989	19.989
Endosulfan I	(M)	16.346	16.343	0.003	341523	10.330	10.330
Endrin		17.457	17.451	0.006	518877	20.419	20.419
Heptachlor		13.134	13.137	0.003	448893	10.401	10.401
Methoxychlor	(M)	19.398	19.391	0.007	1814371	109.404	109.404

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	9.328	9.329	0.002	373742	9.948	9.948
Decachlorobiphenyl	23.173	23.169	0.004	979951	20.557	20.557

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa014.d Page 1
Report Date 12/13/1999 16:30



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDA L3
Lab ID : INDA L3 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 03:32 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		10.974	10.974	0.000	747764	22.781	22.781
gamma-BHC (Lindane)		11.864	11.864	0.000	766391	23.014	23.014
,4'-DDD	(M)	17.614	17.614	0.000	1024410	46.821	46.821
,4'-DDT	(M)	18.258	18.258	0.000	1328450	46.659	46.659
Dieldrin	(M)	16.918	16.918	0.000	1464550	46.341	46.341
ndosulfan I		16.343	16.343	0.000	758642	22.946	22.946
Endrin	(M)	17.451	17.451	0.000	1201367	47.031	47.031
eptachlor		13.137	13.137	0.000	998205	23.129	23.129
ethoxychlor	(M)	19.391	19.391	0.000	3846824	232.026	232.026

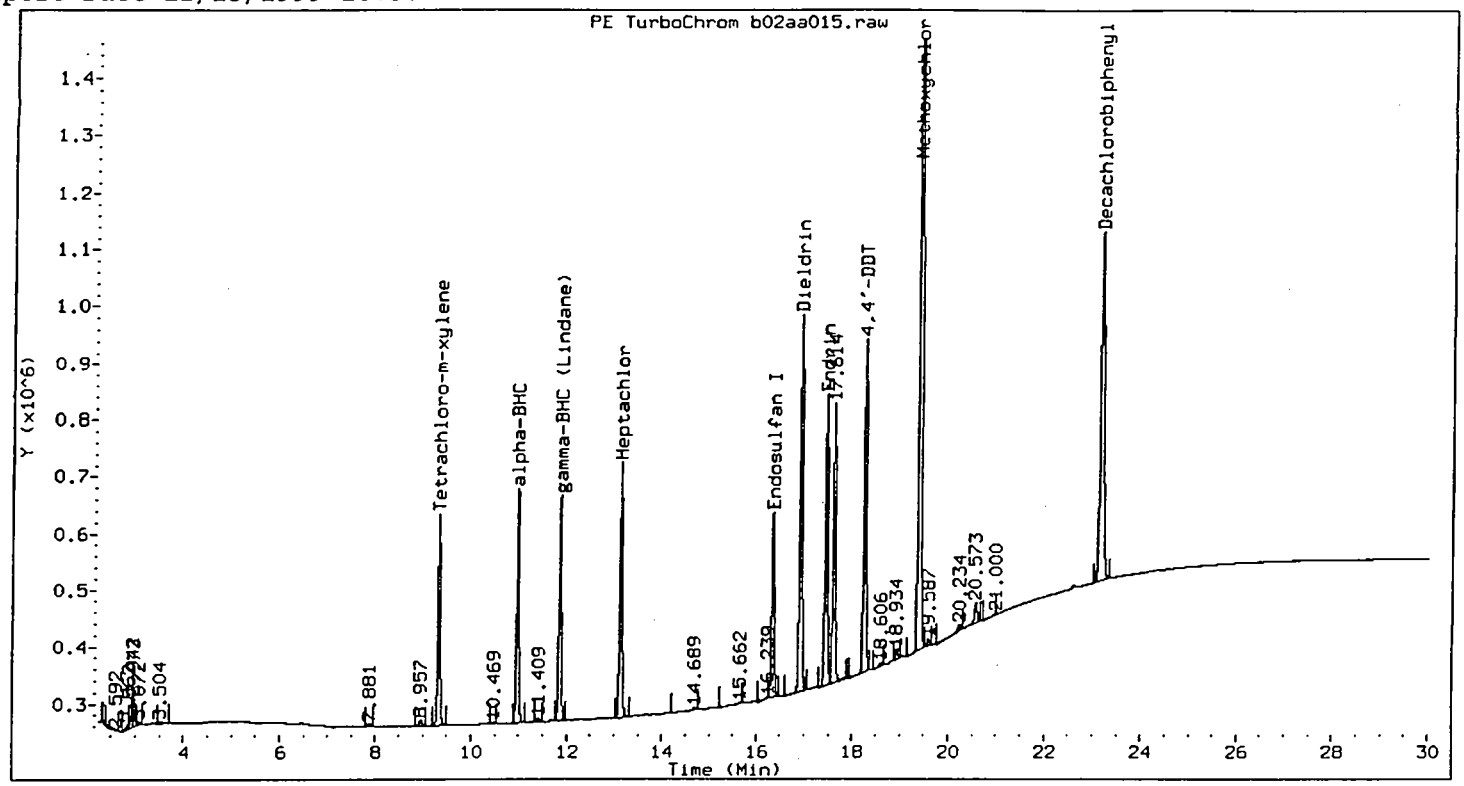
Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa014.d Page 2
Report Date 12/13/1999 16:30

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.329	9.329	0.000	813647	21.687	21.687
Decachlorobiphenyl	23.169	23.169	0.000	2049231	44.340	44.340

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa015.d Page 1
Report Date 12/13/1999 16:30



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDA L4
Lab ID : INDA L4 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 04:11 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDA Sample Type: CALIB_4

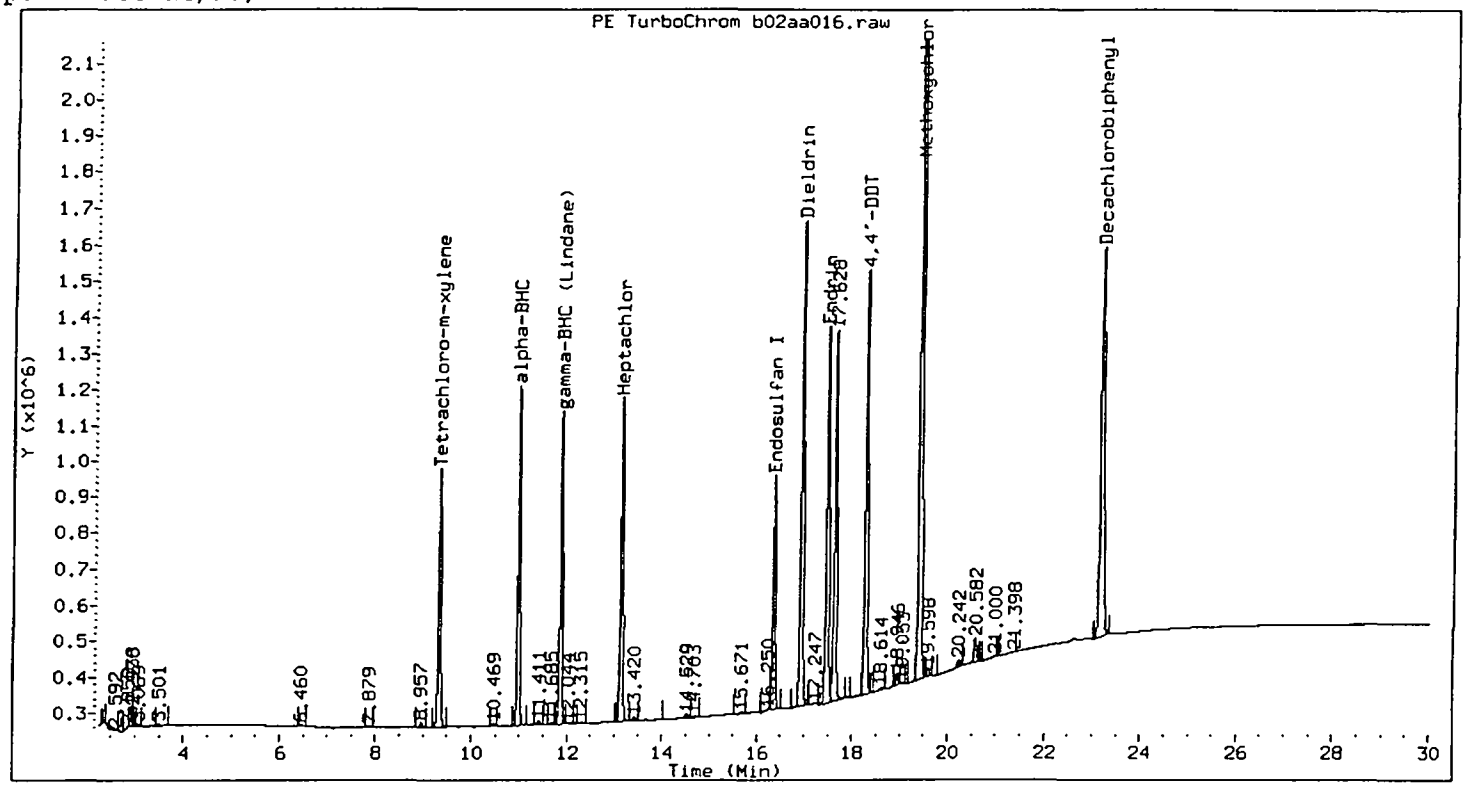
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		10.974	10.974	0.000	1236741	37.678	37.678
gamma-BHC (Lindane)		11.864	11.864	0.000	1246550	37.433	37.433
4,4'-DDD	(M)	17.451	17.614	0.163	1834262	81.322	81.322
4,4'-DDT		18.258	18.258	0.000	2070117	72.708	72.708
Dieldrin		16.918	16.918	0.000	2303202	72.877	72.877
Endosulfan I		16.343	16.343	0.000	1154528	34.920	34.920
Endrin	(M)	17.451	17.451	0.000	1834262	71.104	71.104
Heptachlor		13.137	13.137	0.001	1525959	35.357	35.357
Methoxychlor		19.393	19.391	0.003	5644259	340.440	340.440

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	9.330	9.329	0.001	1223937	35.125	35.125
Decachlorobiphenyl	23.177	23.169	0.008	2978947	68.121	68.121

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa016.d Page 1
Report Date 12/13/1999 16:30



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDA L5
Lab ID : INDA L5
Inj Date : 27-NOV-1999 04:50
Operator : gds
Cpnd Sublist: INDA

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_5

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		10.974	10.974	0.000	2802442	85.377	85.377
gamma-BHC (Lindane)		11.866	11.864	0.002	2712921	81.466	81.466
4,4'-DDD	(M)	17.465	17.614	0.149	3774073	163.616	163.616
4,4'-DDT		18.271	18.258	0.013	4116076	144.568	144.568
Dieldrin		16.931	16.918	0.013	4644581	146.963	146.963
Endosulfan I		16.356	16.343	0.013	2275041	68.812	68.812
Endrin	(M)	17.465	17.451	0.014	3774073	146.217	146.217
Heptachlor		13.142	13.137	0.004	2998414	69.474	69.474
Methoxychlor		19.403	19.391	0.012	10273458	619.656	619.656

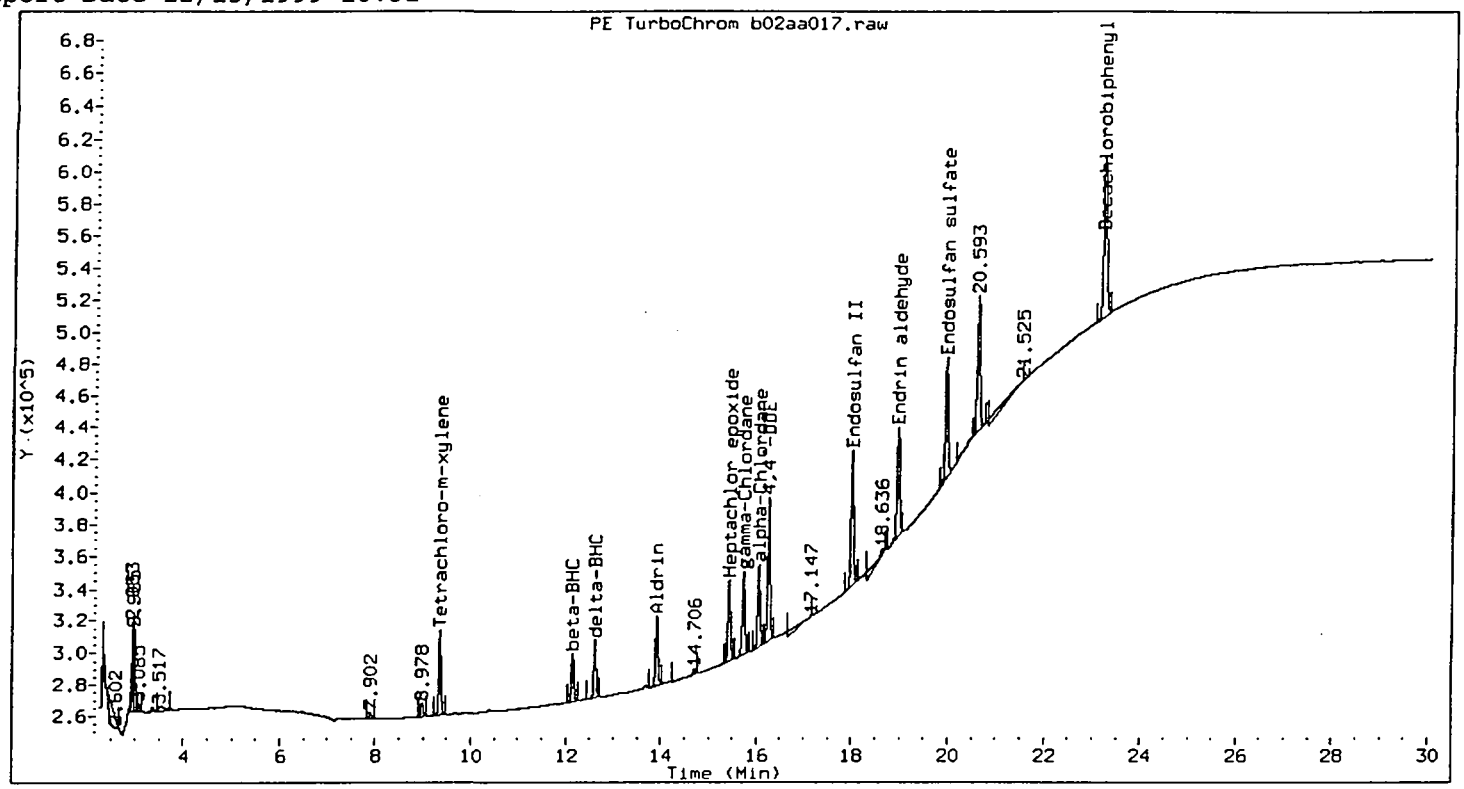
Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa016.d Page 2
Report Date 12/13/1999 16:30

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	9.329	9.329	0.000	2333042	66.954	66.954
Decachlorobiphenyl	23.180	23.169	0.011	5307763	121.375	121.375

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa017.d Page 1
Report Date 12/13/1999 16:31



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDB L1
Lab ID : INDB L1 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 05:29 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_1

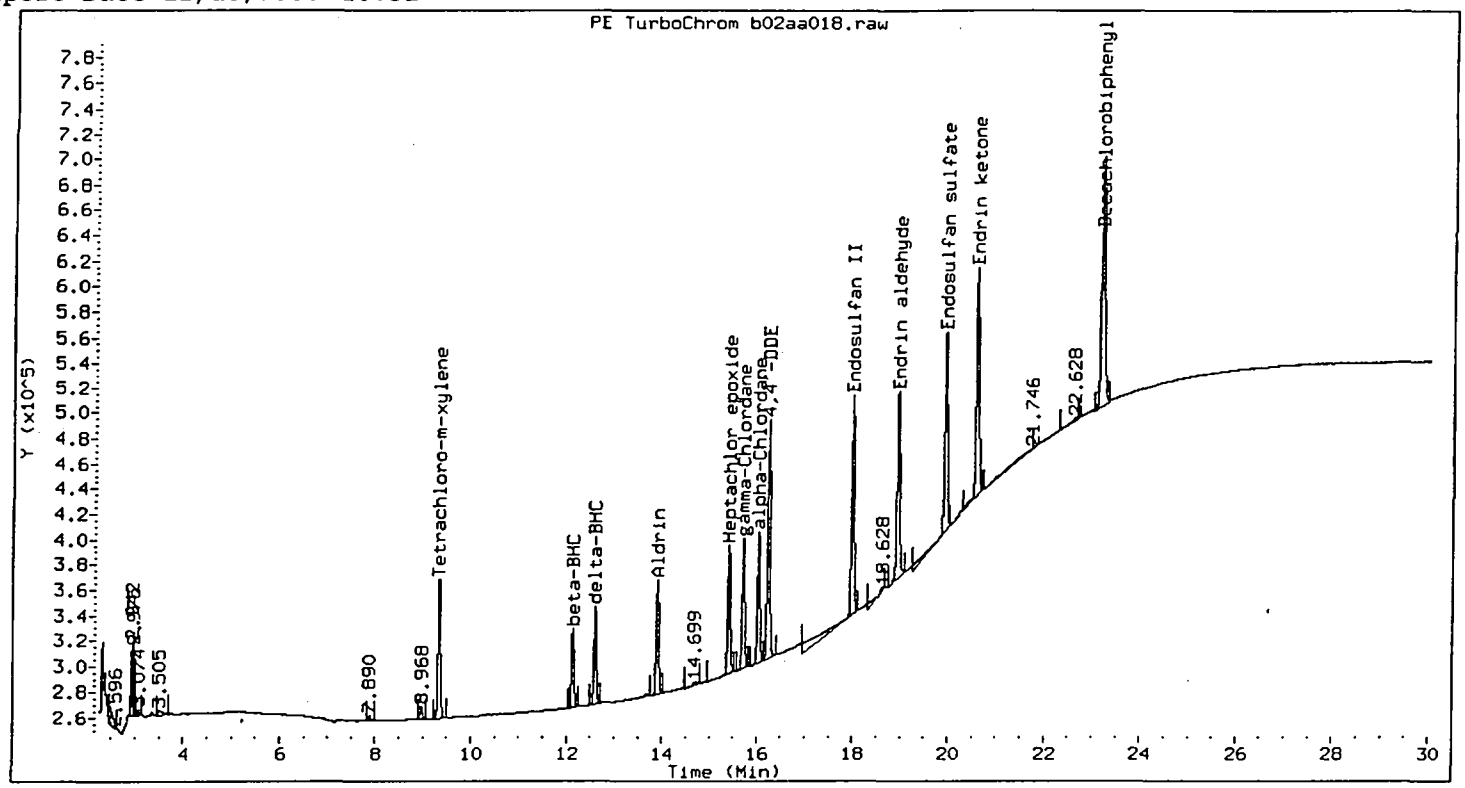
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	(M)	13.920	13.913	0.007	156986	4.550	4.550
beta-BHC		12.146	12.139	0.007	106784	4.799	4.799
delta-BHC		12.613	12.608	0.005	126810	4.180	4.180
4,4'-DDE		16.255	16.245	0.010	307705	8.839	8.839
Endosulfan II	(M)	18.003	17.988	0.015	314899	8.751	8.751
Endosulfan sulfate	(M)	19.944	19.931	0.013	291536	9.026	9.026
Endrin aldehyde		18.956	18.940	0.016	266216	9.269	9.269
Endrin ketone	(M)	19.944	20.581	0.637	291536	8.037	8.037
Heptachlor epoxide		15.430	15.422	0.008	183825	4.742	4.742

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane	15.732	15.723	0.009	199955	5.107	5.107
alpha-Chlordane	16.051	16.041	0.010	185600	4.796	4.796
Tetrachloro-m-xylene	9.351	9.329	0.022	182046	4.852	4.852
Decachlorobiphenyl	23.192	23.169	0.023	480120	10.389	10.389

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa018.d Page 1
Report Date 12/13/1999 16:31

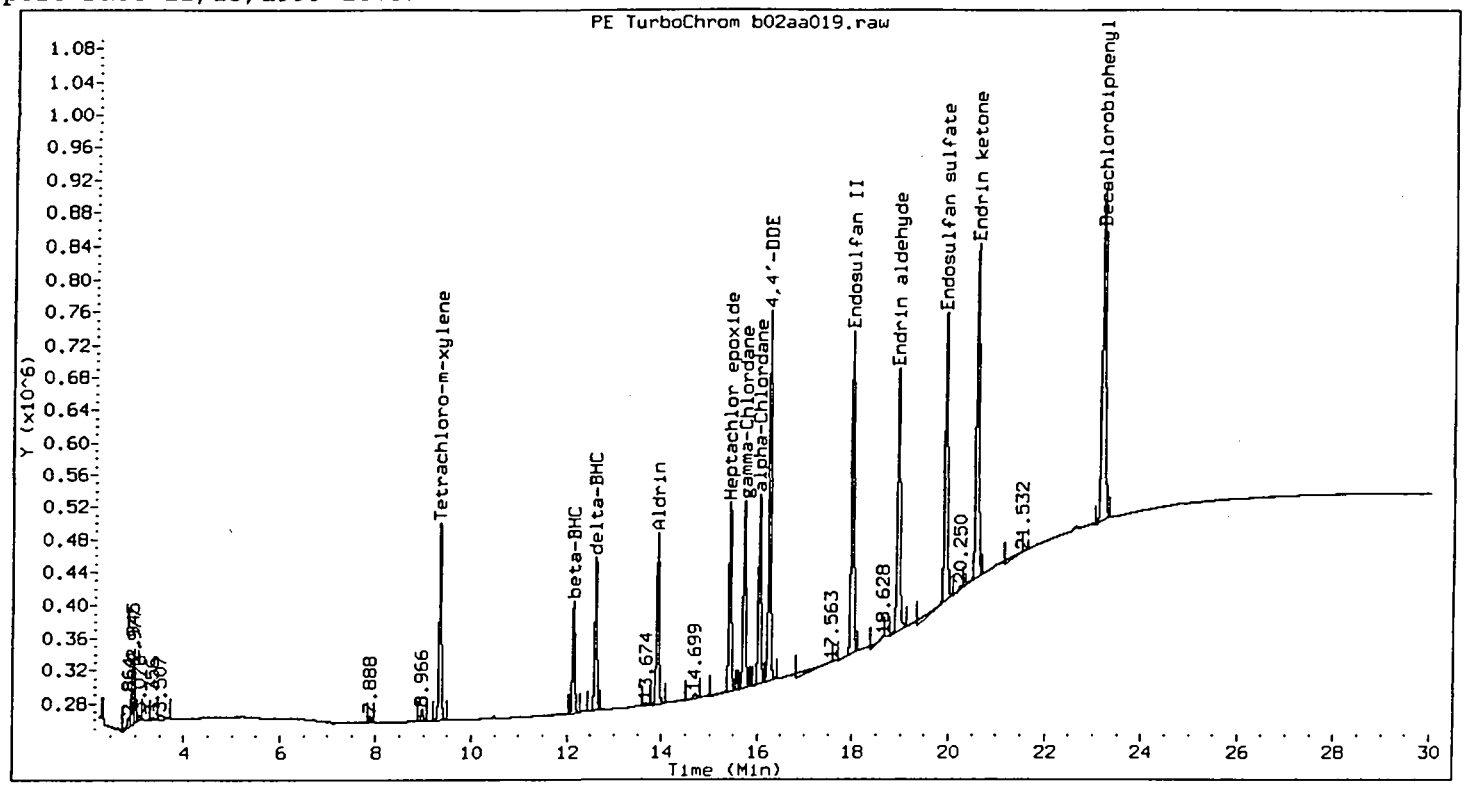


Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDB L2
Lab ID : INDB L2 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 06:08 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.911	13.913	0.003	316034	9.436	9.436
beta-BHC	12.138	12.139	0.001	214655	10.235	10.235
delta-BHC	12.607	12.608	0.002	259415	8.996	8.996
4,4'-DDE	16.243	16.245	0.002	647188	19.512	19.512
Endosulfan II	17.991	17.988	0.003	866132	24.196	24.196
Endosulfan sulfate	19.934	19.931	0.003	667032	20.886	20.886
Endrin aldehyde	18.944	18.940	0.004	587341	20.858	20.858
Endrin ketone	20.585	20.581	0.004	727633	19.594	19.594
Heptachlor epoxide	15.419	15.422	0.002	377493	10.190	10.190

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane	15.722	15.723	0.002	379125	10.114	10.114
alpha-Chlordane	16.039	16.041	0.002	374587	10.105	10.105
Tetrachloro-m-xylene	9.341	9.329	0.012	364844	10.524	10.524
Decachlorobiphenyl	23.188	23.169	0.019	954554	21.956	21.956

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa019.d Page 1
Report Date 12/13/1999 16:31



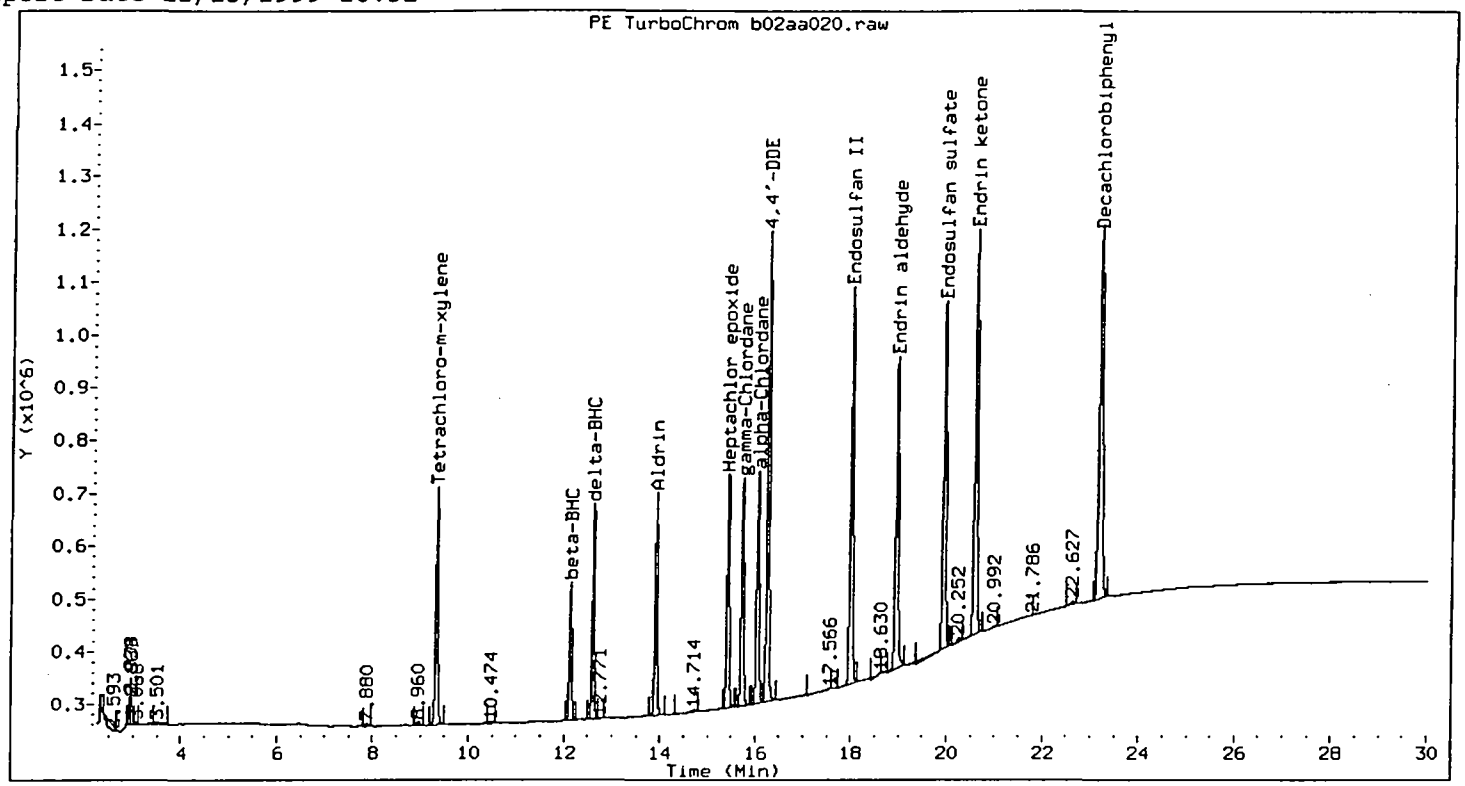
Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDB L3
Lab ID : INDB L3
Inj Date : 27-NOV-1999 06:47
Operator : gds
Cpnd Sublist: INDB

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.913	13.913	0.000	719058	20.707	20.707
beta-BHC	12.139	12.139	0.000	475318	21.831	21.831
delta-BHC	12.608	12.608	0.000	614879	20.726	20.726
4,4'-DDE	16.245	16.245	0.000	1501440	43.773	43.773
Endosulfan II	17.988	17.988	0.000	1462529	39.763	39.763
Endosulfan sulfate	19.931	19.931	0.000	1426904	42.995	42.995
Endrin aldehyde	18.940	18.940	0.000	1255999	43.707	43.707
Endrin ketone	20.581	20.581	0.000	1625926	42.800	42.800
Heptachlor epoxide	15.422	15.422	0.000	826826	21.616	21.616

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.723	15.723	0.000	820464	21.260	21.260
alpha-Chlordane	16.041	16.041	0.000	826267	21.634	21.634
Tetrachloro-m-xylene	9.338	9.329	0.009	794525	23.046	23.046
Decachlorobiphenyl	23.186	23.169	0.017	1974946	45.817	45.817

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa020.d Page 1
Report Date 12/13/1999 16:31

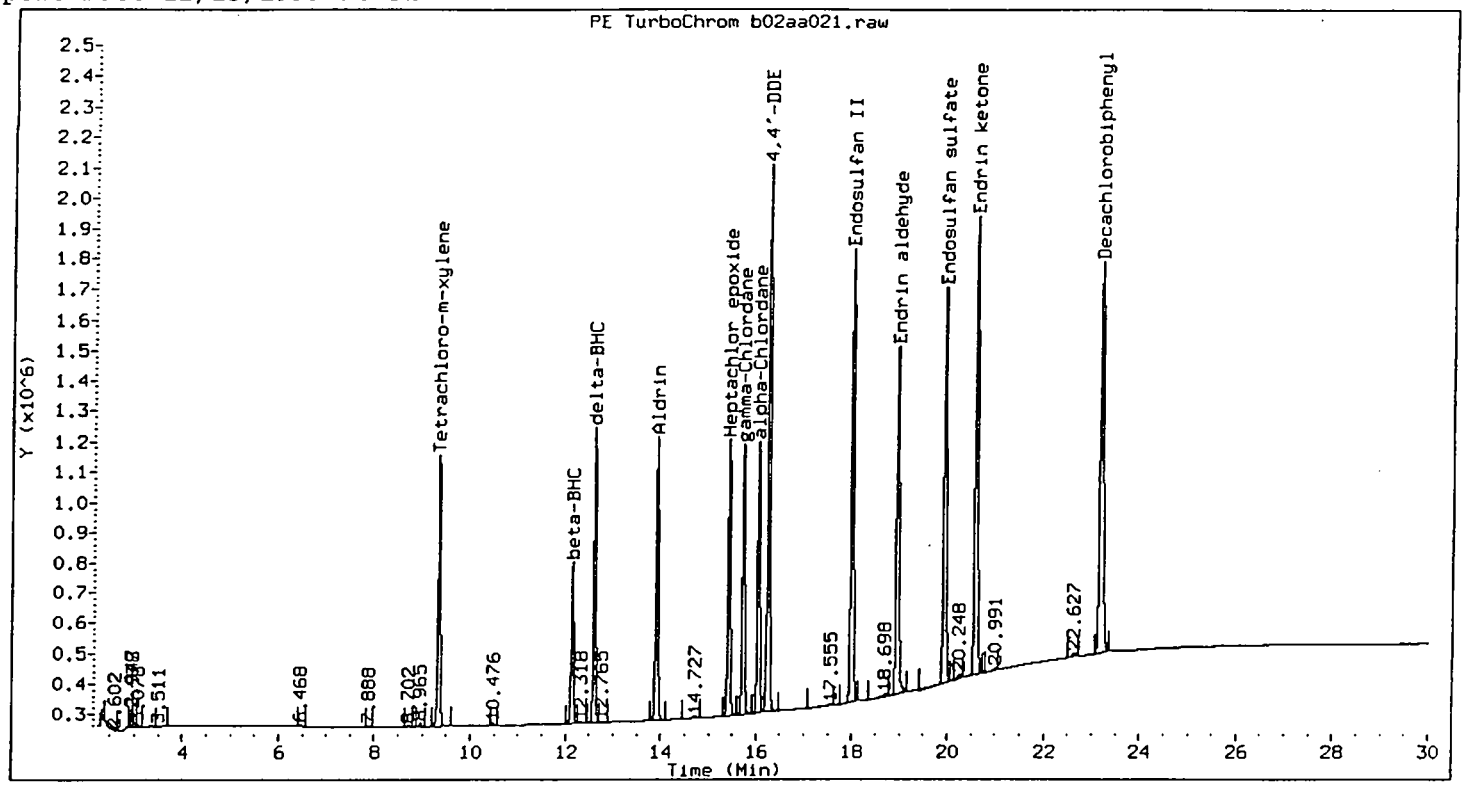


Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDB L4
Lab ID : INDB L4 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 07:26 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
ldrin	13.915	13.913	0.002	1412463	40.180	40.180
beta-BHC	12.137	12.139	0.002	888384	40.233	40.233
elta-BHC	12.608	12.608	0.000	1281871	42.629	42.629
,4'-DDE	16.249	16.245	0.004	2900034	83.598	83.598
Endosulfan II	17.994	17.988	0.006	2747739	74.200	74.200
ndosulfan sulfate	19.935	19.931	0.004	2567682	76.472	76.472
Endrin aldehyde	18.946	18.940	0.006	2286001	79.407	79.407
ndrin ketone	20.584	20.581	0.003	3024192	79.423	79.423
eptachlor epoxide	15.425	15.422	0.003	1545537	40.006	40.006

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.727	15.723	0.004	1527599	39.171	39.171
alpha-Chlordane	16.045	16.041	0.004	1546927	40.112	40.112
Tetrachloro-m-xylene	9.332	9.329	0.003	1472360	41.221	41.221
Decachlorobiphenyl	23.186	23.169	0.017	3458781	78.069	78.069

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa021.d Page 1
Report Date 12/13/1999 16:31

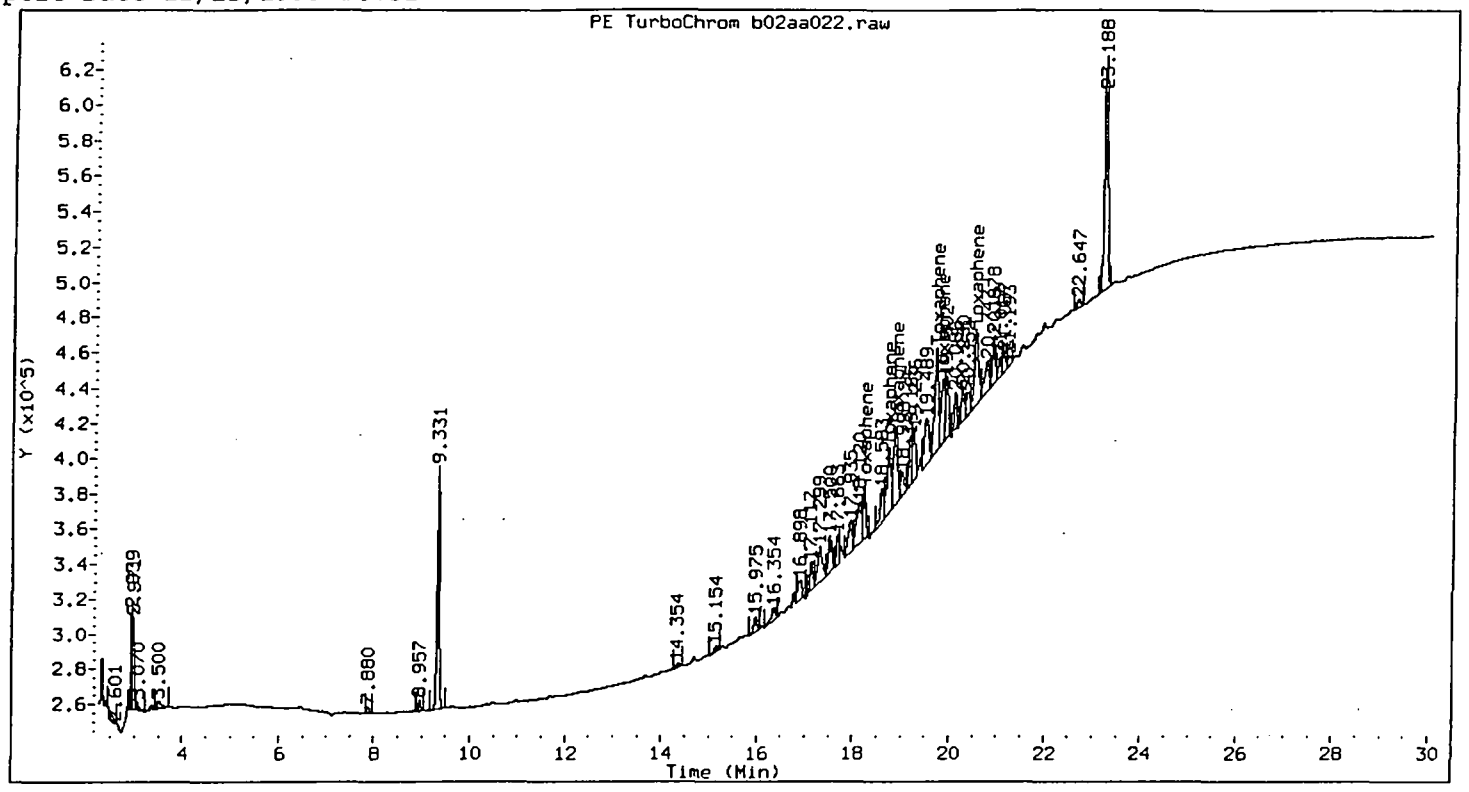


Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : INDB L5
Lab ID : INDB L5 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 08:05 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: INDB Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.910	13.913	0.003	3058313	86.701	86.701
beta-BHC	12.136	12.139	0.003	1796270	80.730	80.730
delta-BHC	12.605	12.608	0.003	3008352	99.156	99.156
4,4'-DDE	16.243	16.245	0.002	5944436	170.749	170.749
Endosulfan II	17.989	17.988	0.001	5473659	147.547	147.547
Endosulfan sulfate	19.933	19.931	0.003	4995006	148.197	148.197
Endrin aldehyde	18.942	18.940	0.002	4423206	154.002	154.002
Endrin ketone	20.582	20.581	0.002	5983321	157.349	157.349
Heptachlor epoxide	15.419	15.422	0.002	3147359	81.186	81.186

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	15.722	15.723	0.002	3091198	78.955	78.955
alpha-Chlordane	16.039	16.041	0.002	3115909	80.509	80.509
Tetrachloro-m-xylene	9.337	9.329	0.007	2904814	78.196	78.196
Decachlorobiphenyl	23.187	23.169	0.018	6337055	138.998	138.998

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa022.d Page 1
Report Date 12/13/1999 16:32



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : tox l3
Lab ID : tox l3 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 08:44 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: TOXAPH0 Sample Type: CALIB_3

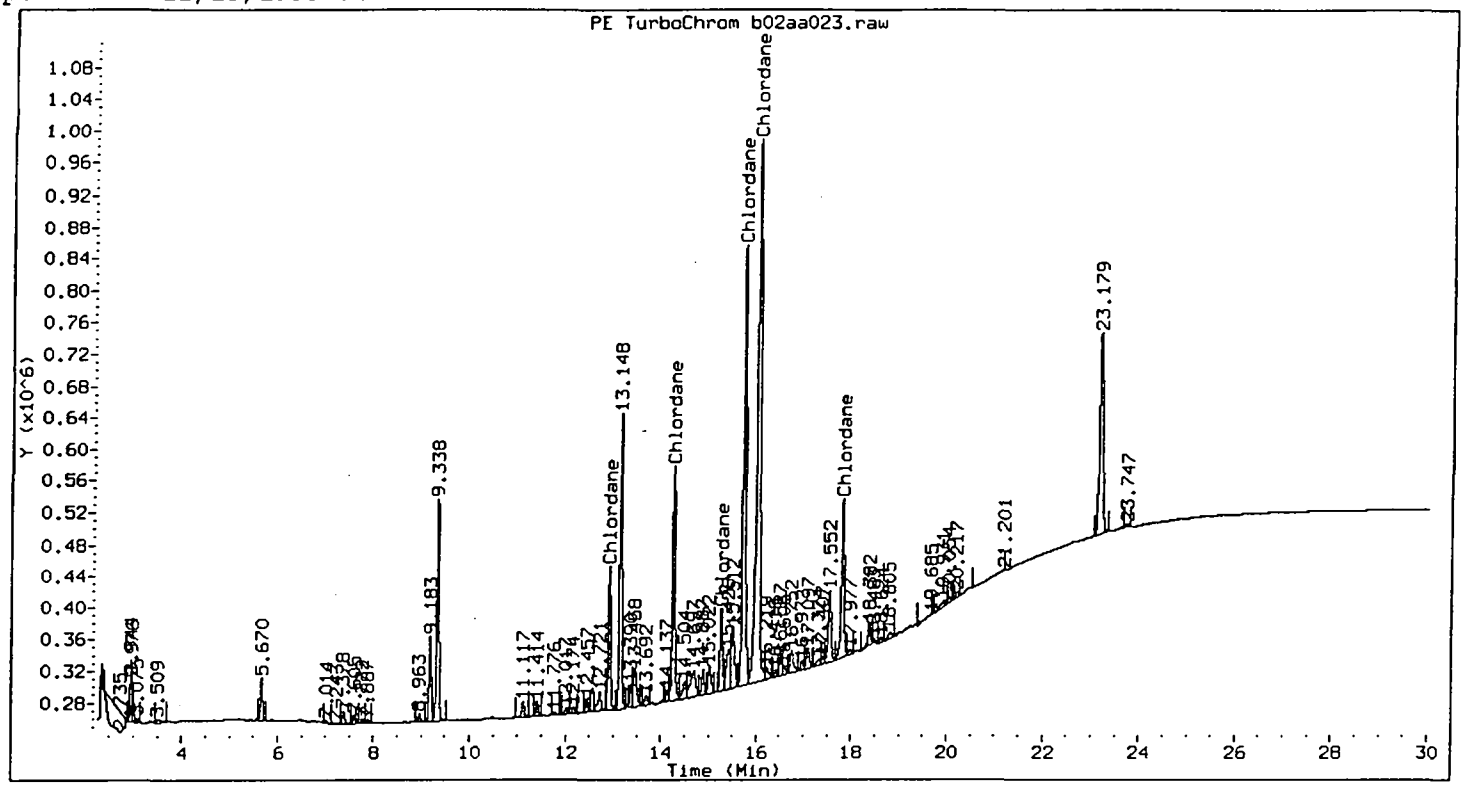
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Toxaphene	(M)	18.222	18.222	0.000	122897	1500.000	1500.000
(2)		18.724	18.724	0.000	209687	1500.000	1500.000
(3)		18.870	18.870	0.000	264678	1500.000	1500.000
(4)		19.692	19.692	0.000	301565	1500.000	1500.000
(5)		19.822	19.822	0.000	182877	1500.000	1500.000
(6)		20.513	20.513	0.000	246355	1500.000	1500.000

Average of peak concentrations: 1500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99.b/b02aa023.d Page 1
Report Date 12/13/1999 16:32



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99.b/Bf8081.m
Sample Info : chlor 13
Lab ID : chlor 13 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 09:23 Dil Factor : 1
Operator : gds Sample Matrix : SOIL
Cpnd Sublist: CHLORDANE Sample Type: CALIB_3

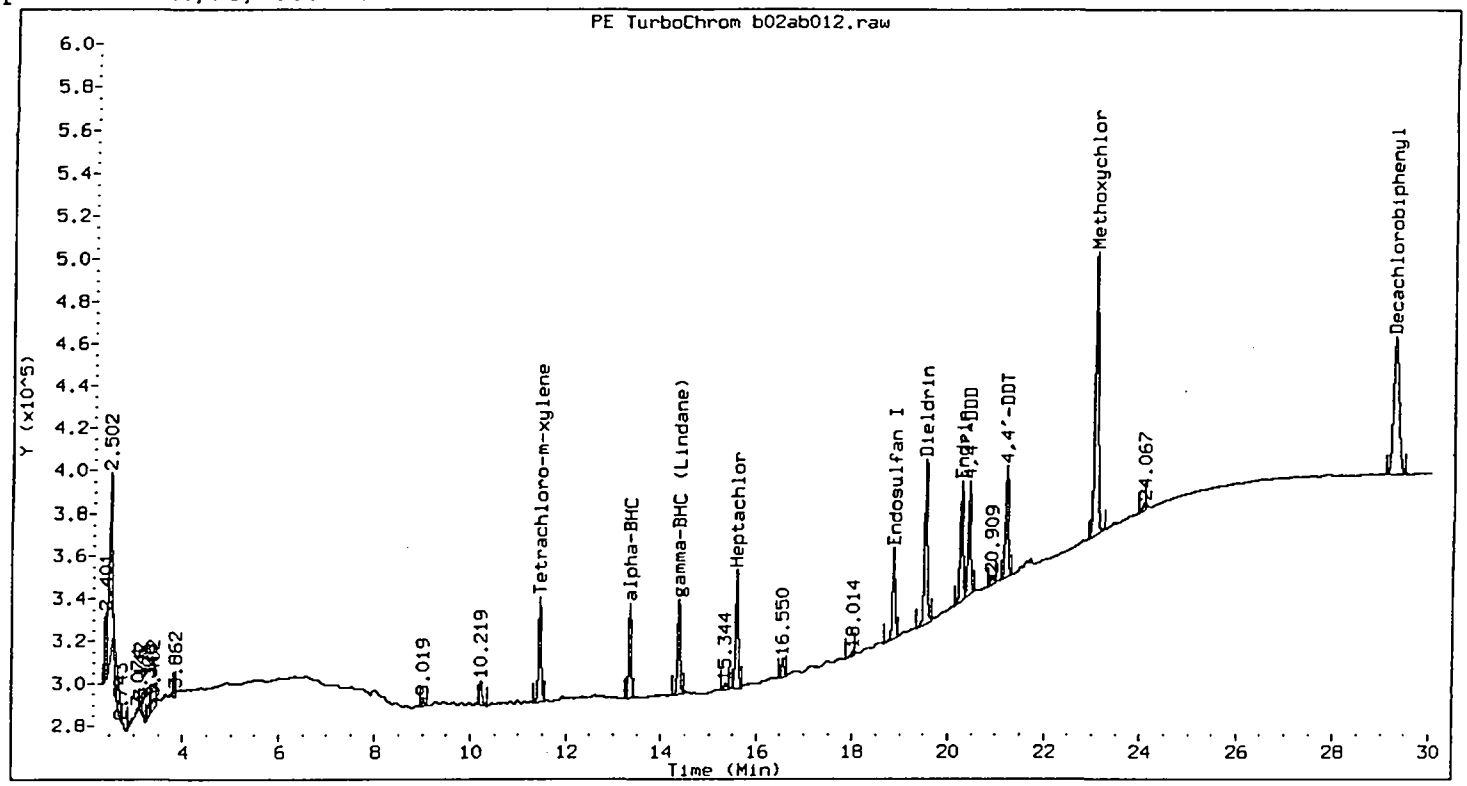
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Chlordane	(M)	12.919	12.919	0.000	627749	500.000	500.000
(2)		14.263	14.263	0.000	1132622	500.000	500.000
(3)		15.268	15.268	0.000	378882	500.000	500.000
(4)		15.726	15.726	0.000	2226608	500.000	500.000
(5)		16.023	16.023	0.000	3616312	500.000	500.000
(6)		17.819	17.819	0.000	801576	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab012.d Page 1
Report Date 12/13/1999 16:32



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDA L1
Lab ID : INDA L1 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 02:14 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDA Sample Type: CALIB_1

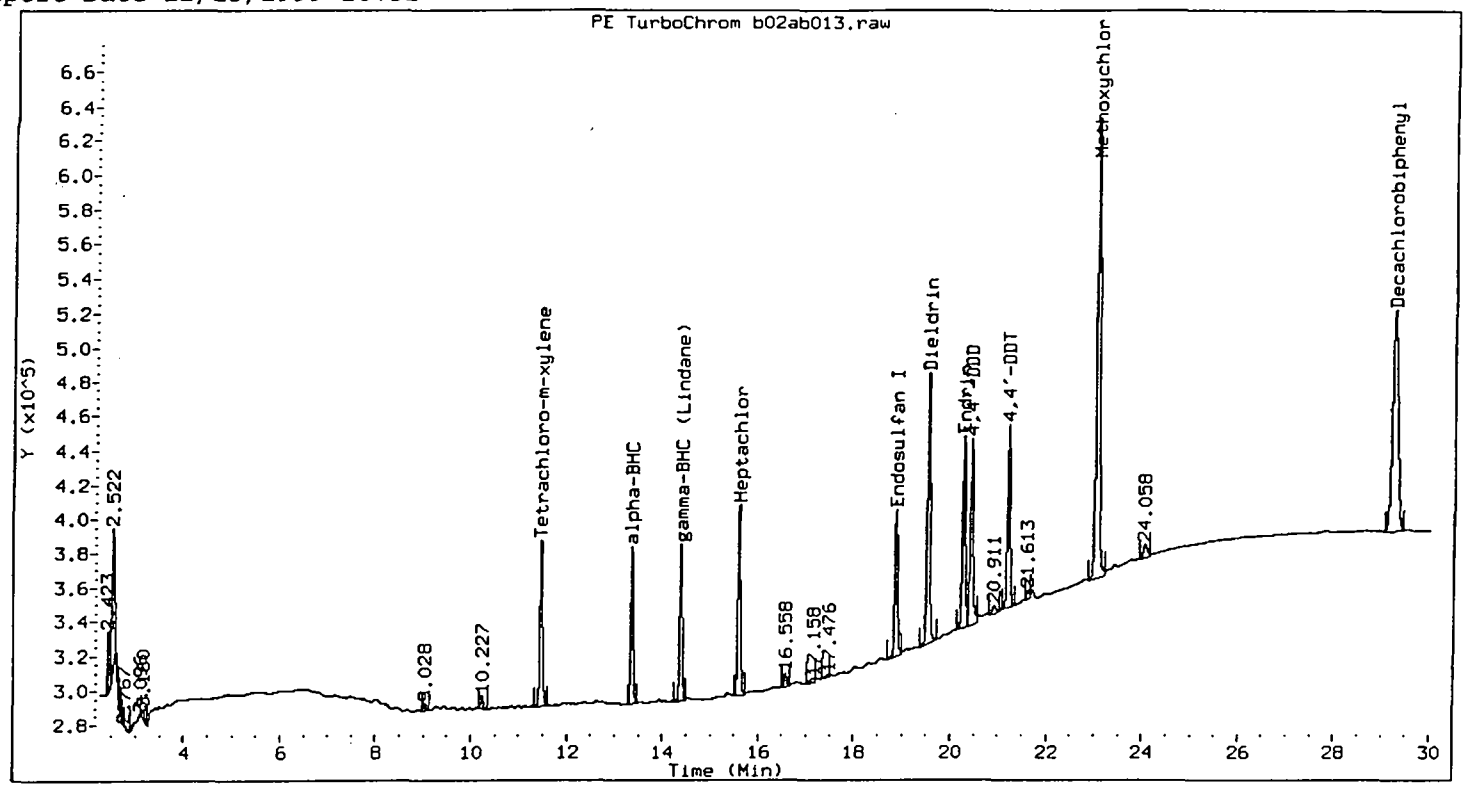
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		13.349	13.363	0.014	157013	5.000	5.000
gamma-BHC (Lindane)		14.374	14.385	0.011	166897	5.000	5.000
4,4'-DDD	(M)	20.429	20.427	0.003	209791	9.852	9.852
4,4'-DDT		21.206	21.202	0.004	210814	9.884	9.884
Dieldrin		19.526	19.526	0.000	317042	10.257	10.257
Endosulfan I		18.863	18.865	0.002	168525	5.182	5.182
Endrin	(M)	20.270	20.267	0.003	233628	10.543	10.543
Heptachlor		15.582	15.589	0.007	209897	5.000	5.000
Methoxychlor	(M)	23.047	23.039	0.008	629744	50.000	50.000

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.449	11.463	0.013	185480	5.312	5.312
Decachlorobiphenyl	29.257	29.258	0.001	522286	10.779	10.779

COMMENTS:

- Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab013.d Page 1
Report Date 12/13/1999 16:32



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDA L2
Lab ID : INDA L2
Inj Date : 27-NOV-1999 02:53
Operator : gds
Cpnd Sublist: INDA

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : OIL
Sample Type: CALIB_2

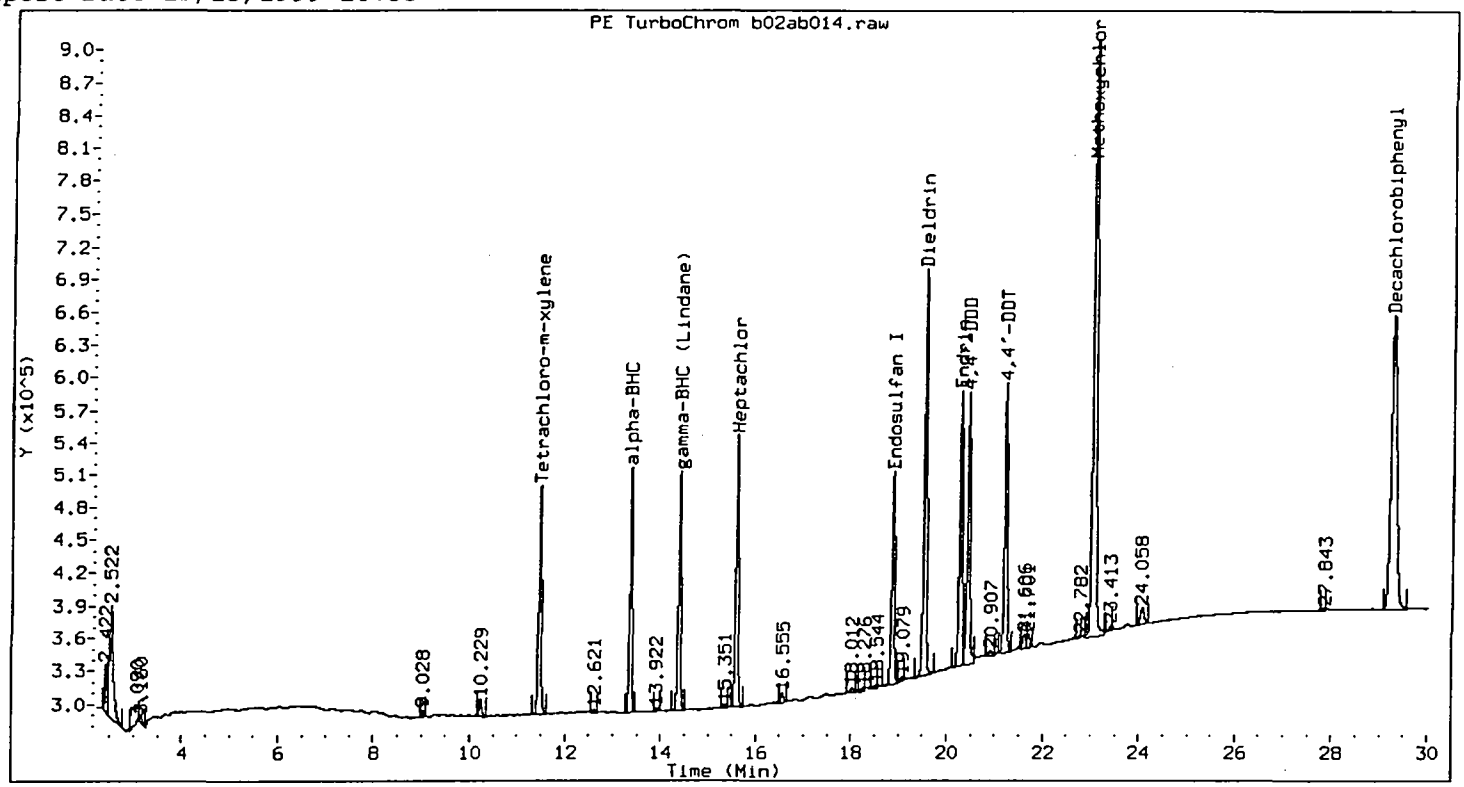
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	(M)	13.357	13.363	0.006	313014	9.984	9.984
gamma-BHC (Lindane)	(M)	14.383	14.385	0.002	331310	9.963	9.963
4,4'-DDD		20.433	20.427	0.006	445871	20.939	20.939
4,4'-DDT		21.207	21.202	0.005	430167	20.168	20.168
Dieldrin		19.532	19.526	0.006	630183	20.389	20.389
Endosulfan I		18.871	18.865	0.006	343027	10.547	10.547
Endrin		20.273	20.267	0.007	460888	20.798	20.798
Heptachlor	(M)	15.591	15.589	0.002	415121	9.944	9.944
Methoxychlor		23.043	23.039	0.004	1290578	101.219	101.219

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.457	11.463	0.006	359082	9.837	9.837
Decachlorobiphenyl	29.237	29.258	0.021	1033358	19.892	19.892

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab014.d Page 1
Report Date 12/13/1999 16:33



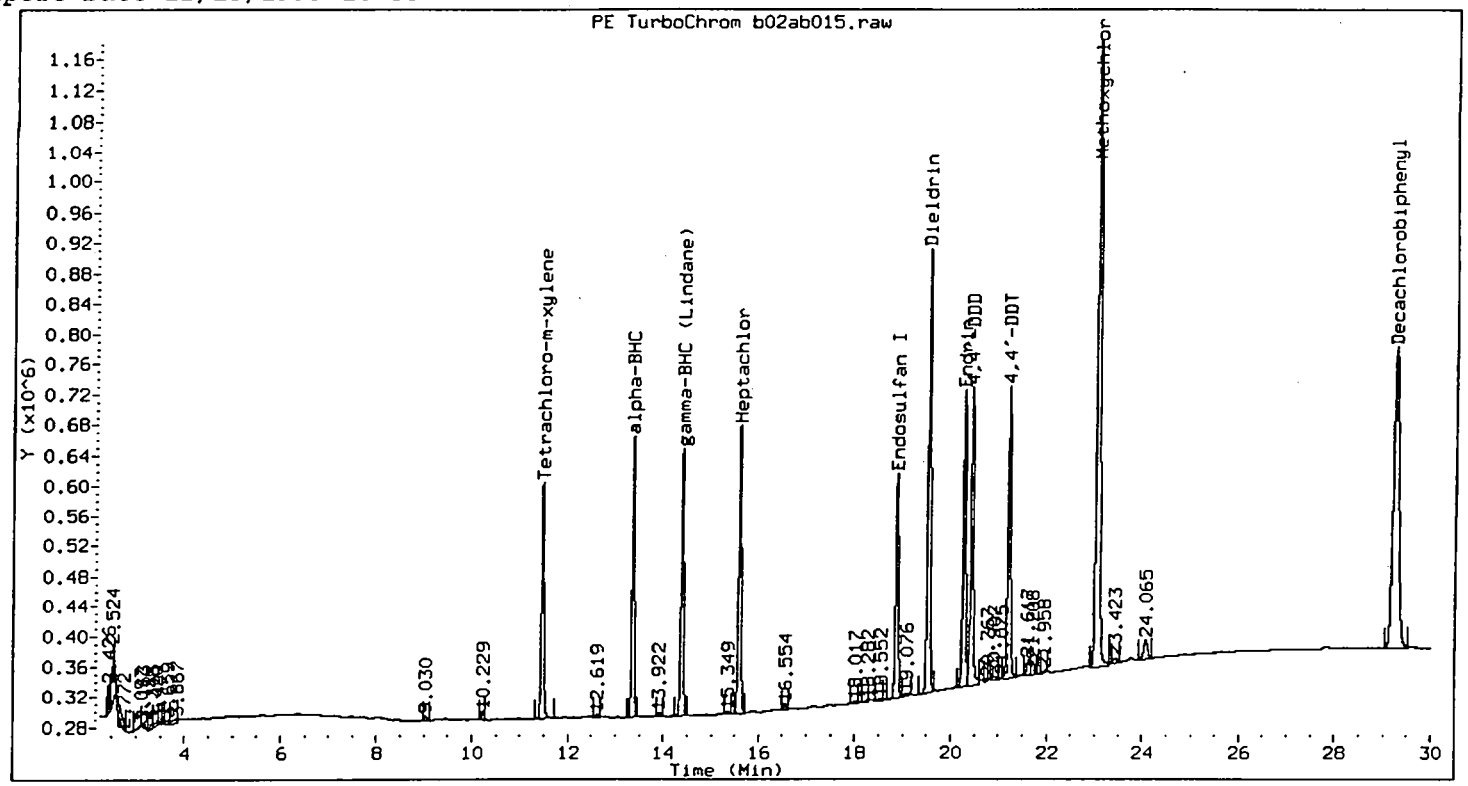
Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDA L3
Lab ID : INDA L3
Inj Date : 27-NOV-1999 03:32
Operator : gds
Cpnd Sublist: INDA

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : OIL
Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Alpha-BHC	13.363	13.363	0.000	745327	22.732	22.732
gamma-BHC (Lindane)	14.385	14.385	0.000	766399	22.825	22.825
4,4'-DDD	20.427	20.427	0.000	987810	46.390	46.390
4,4'-DDT	21.202	21.202	0.000	999054	46.841	46.841
Dieldrin	19.526	19.526	0.000	1432906	46.359	46.359
Endosulfan I	18.865	18.865	0.000	756983	23.275	23.275
Endrin	20.267	20.267	0.000	1020313	46.043	46.043
Heptachlor	15.589	15.589	0.000	913868	23.079	23.079
Methoxychlor	23.039	23.039	0.000	2839349	236.210	236.210

ompounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
etrachloro-m-xylene	11.463	11.463	0.000	765225	22.961	22.961
Decachlorobiphenyl	29.258	29.258	0.000	2193880	46.466	46.466

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab015.d Page 1
Report Date 12/13/1999 16:33

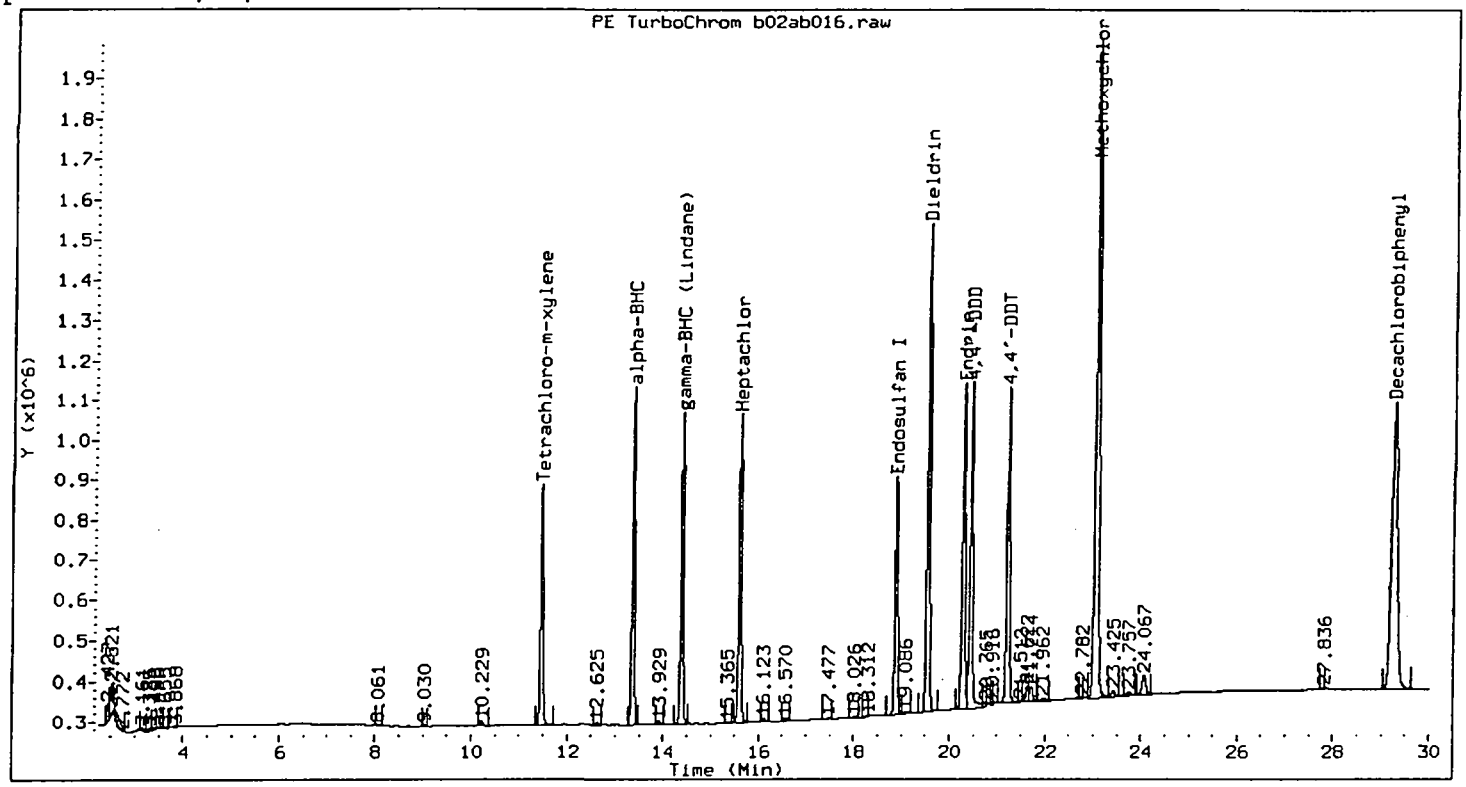


Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDA L4
Lab ID : INDA L4 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 04:11 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDA Sample Type: CALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	13.363	13.363	0.000	1210381	37.177	37.177
gamma-BHC (Lindane)	14.386	14.385	0.001	1218484	36.025	36.025
4,4'-DDD	20.433	20.427	0.006	1519993	71.383	71.383
4,4'-DDT	21.208	21.202	0.007	1549909	72.668	72.668
Dieldrin	19.529	19.526	0.003	2195238	71.023	71.023
Endosulfan I	18.867	18.865	0.002	1147329	35.277	35.277
Endrin	20.273	20.267	0.006	1547173	69.819	69.819
Heptachlor	15.591	15.589	0.002	1384047	33.801	33.801
Methoxychlor	23.048	23.039	0.009	4200582	334.715	334.715

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.463	11.463	0.000	1141320	32.656	32.656
Decachlorobiphenyl	29.248	29.258	0.009	3235203	64.969	64.969

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab016.d Page 1
Report Date 12/13/1999 16:33

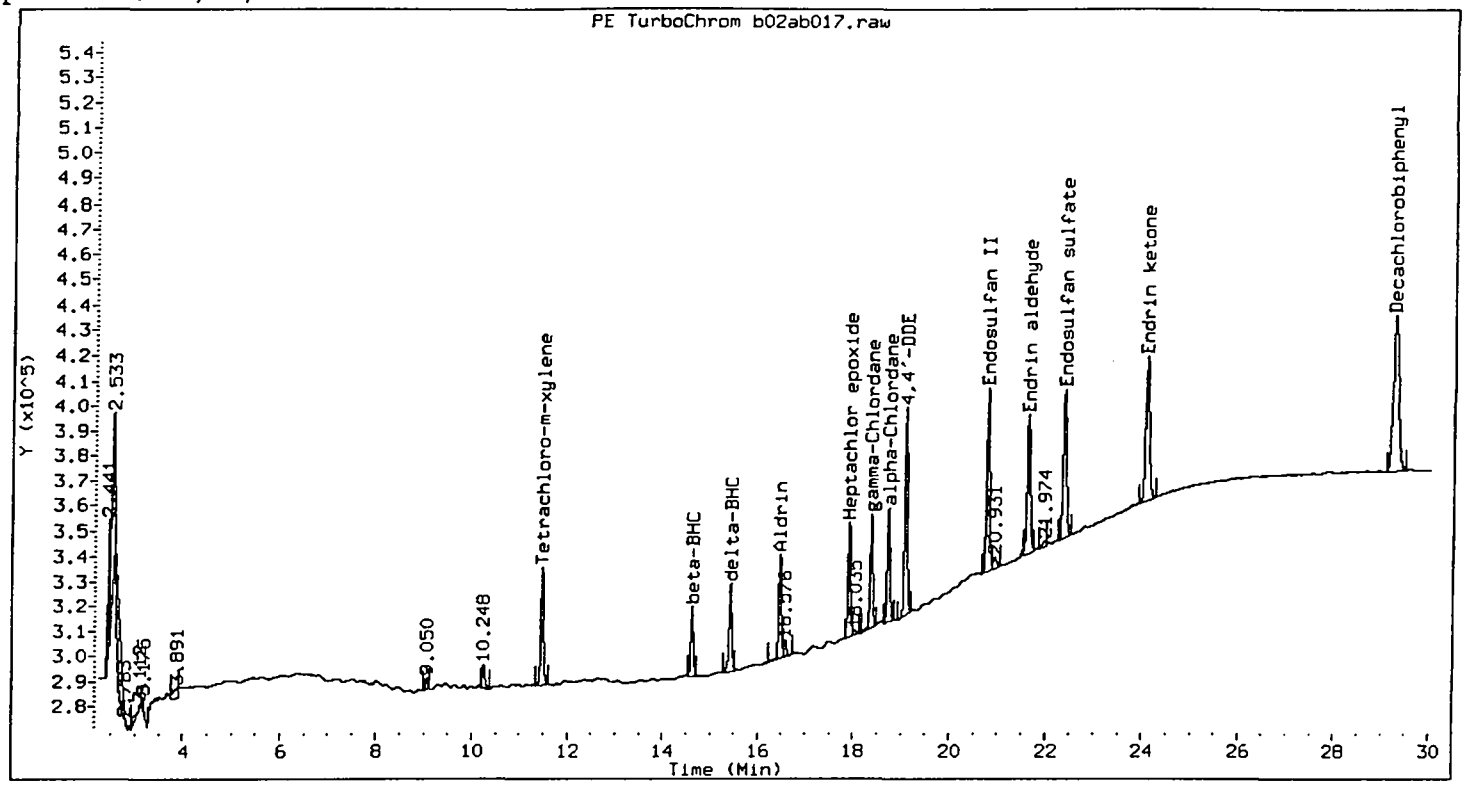


Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDA L5
Lab ID : INDA L5 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 04:50 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDA Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	13.370	13.363	0.007	2696496	82.242	82.242
gamma-BHC (Lindane)	14.396	14.385	0.011	2607577	77.659	77.659
4,4'-DDD	20.442	20.427	0.016	3119887	146.519	146.519
4,4'-DDT	21.217	21.202	0.015	3152581	147.809	147.809
Dieldrin	19.541	19.526	0.015	4490695	145.289	145.289
Endosulfan I	18.881	18.865	0.016	2246251	69.065	69.065
Endrin	20.282	20.267	0.016	3127151	141.118	141.118
Heptachlor	15.602	15.589	0.013	2735836	69.092	69.092
Methoxychlor	23.052	23.039	0.012	7922788	659.108	659.108

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	11.463	11.463	0.001	2147238	64.428	64.428
Decachlorobiphenyl	29.258	29.258	0.000	5902439	125.013	125.013

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab017.d Page 1
Report Date 12/13/1999 16:33



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDB L1
Lab ID : INDB L1 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 05:29 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDB Sample Type: CALIB_1

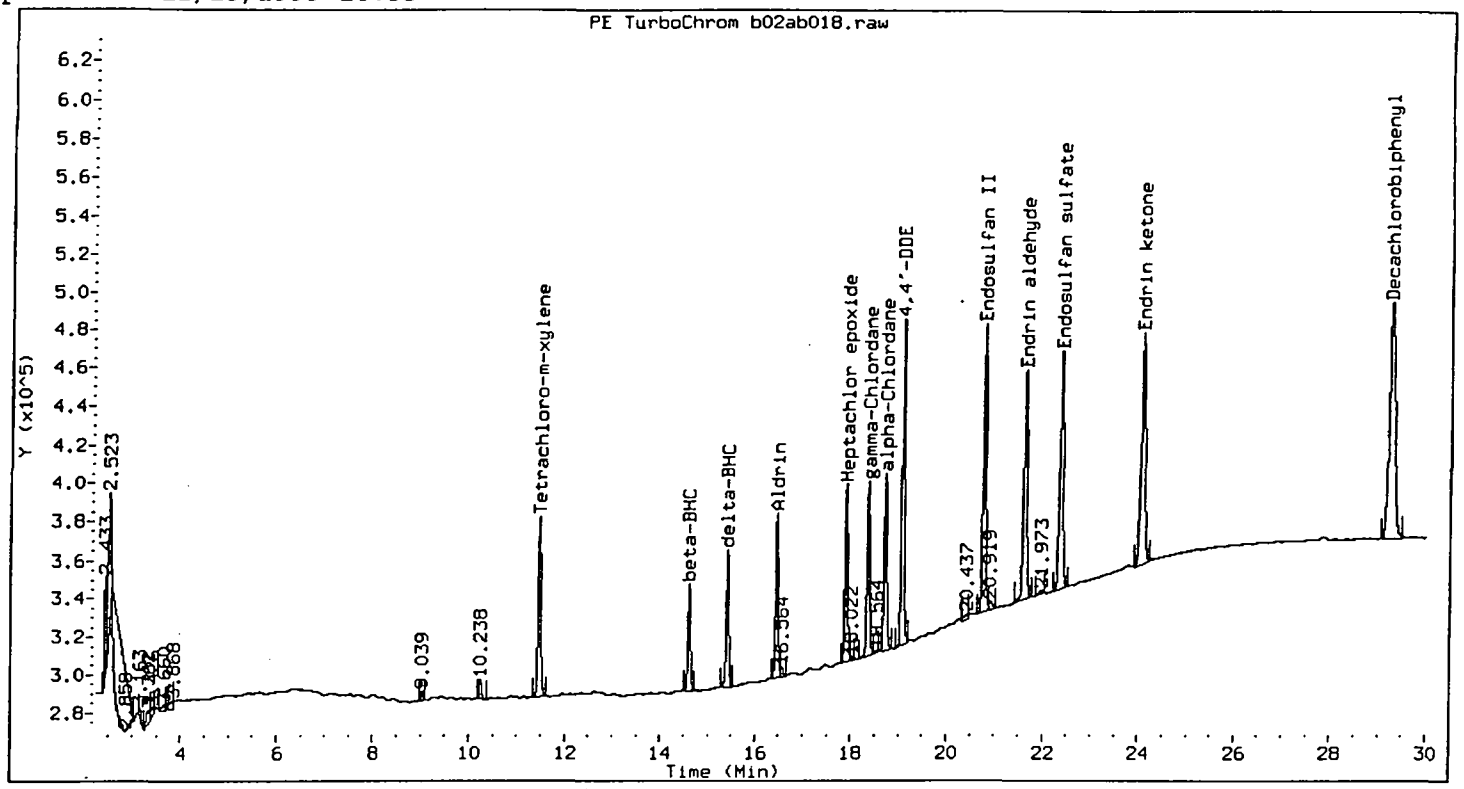
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	(M)	16.468	16.457	0.010	164416	4.788	4.788
beta-BHC	(M)	14.627	14.620	0.007	105829	4.971	4.971
delta-BHC	(M)	15.432	15.426	0.007	143077	4.728	4.728
4,4'-DDE	(M)	19.084	19.071	0.013	309848	9.210	9.210
Endosulfan II	(M)	20.786	20.776	0.010	305588	9.331	9.331
Endosulfan sulfate	(M)	22.379	22.372	0.008	281618	9.285	9.285
Endrin aldehyde	(M)	21.633	21.622	0.011	256752	9.413	9.413
Endrin ketone	(M)	24.078	24.078	0.001	328400	9.203	9.203
Heptachlor epoxide	(M)	17.914	17.900	0.014	176406	4.739	4.739

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	(M)	18.372	18.359	0.013	173733	4.775	4.775
alpha-Chlordane	(M)	18.730	18.716	0.014	173965	4.720	4.720
Tetrachloro-m-xylene	(M)	11.478	11.463	0.016	180564	5.208	5.208
Decachlorobiphenyl	(M)	29.262	29.258	0.004	499137	10.426	10.426

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab018.d Page 1
Report Date 12/13/1999 16:33



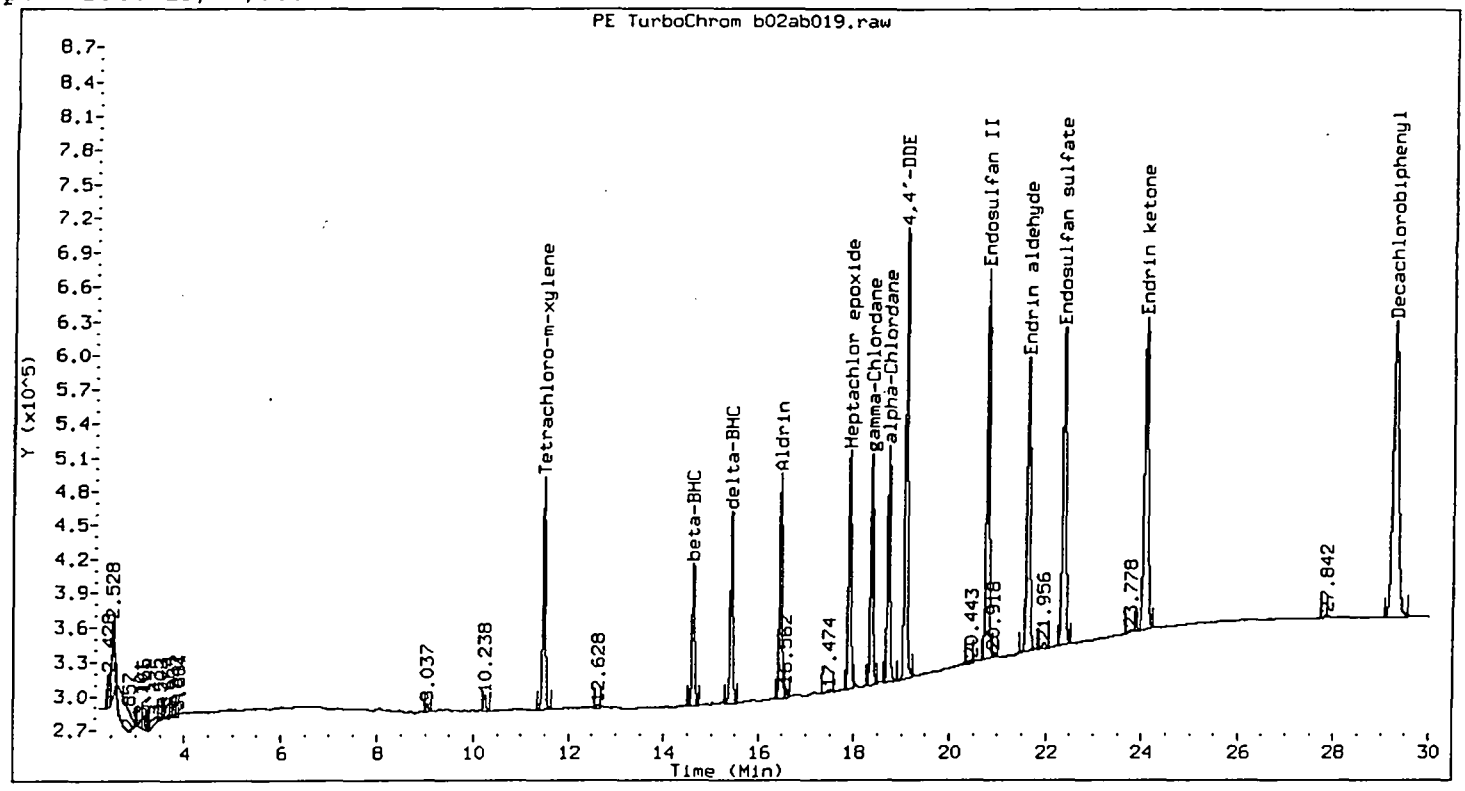
Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDB L2
Lab ID : INDB L2 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 06:08 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDB Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	16.455	16.457	0.003	320320	9.328	9.328
beta-BHC	14.617	14.620	0.003	212673	9.989	9.989
delta-BHC	15.422	15.426	0.004	273097	9.024	9.024
4,4'-DDE	19.073	19.071	0.003	630049	18.728	18.728
Endosulfan II	20.777	20.776	0.001	629547	19.223	19.223
Endosulfan sulfate	22.372	22.372	0.001	580810	19.150	19.150
Endrin aldehyde	21.625	21.622	0.003	548406	20.106	20.106
Endrin ketone	24.076	24.078	0.002	678518	19.015	19.015
Heptachlor epoxide	17.901	17.900	0.001	356064	9.566	9.566

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.361	18.359	0.002	354020	9.730	9.730
alpha-Chlordane	18.718	18.716	0.002	353886	9.602	9.602
Tetrachloro-m-xylene	11.471	11.463	0.008	351628	10.141	10.141
Decachlorobiphenyl	29.261	29.258	0.003	996045	20.805	20.805

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/b02ab019.d Page 1
Report Date 12/13/1999 16:34

000486

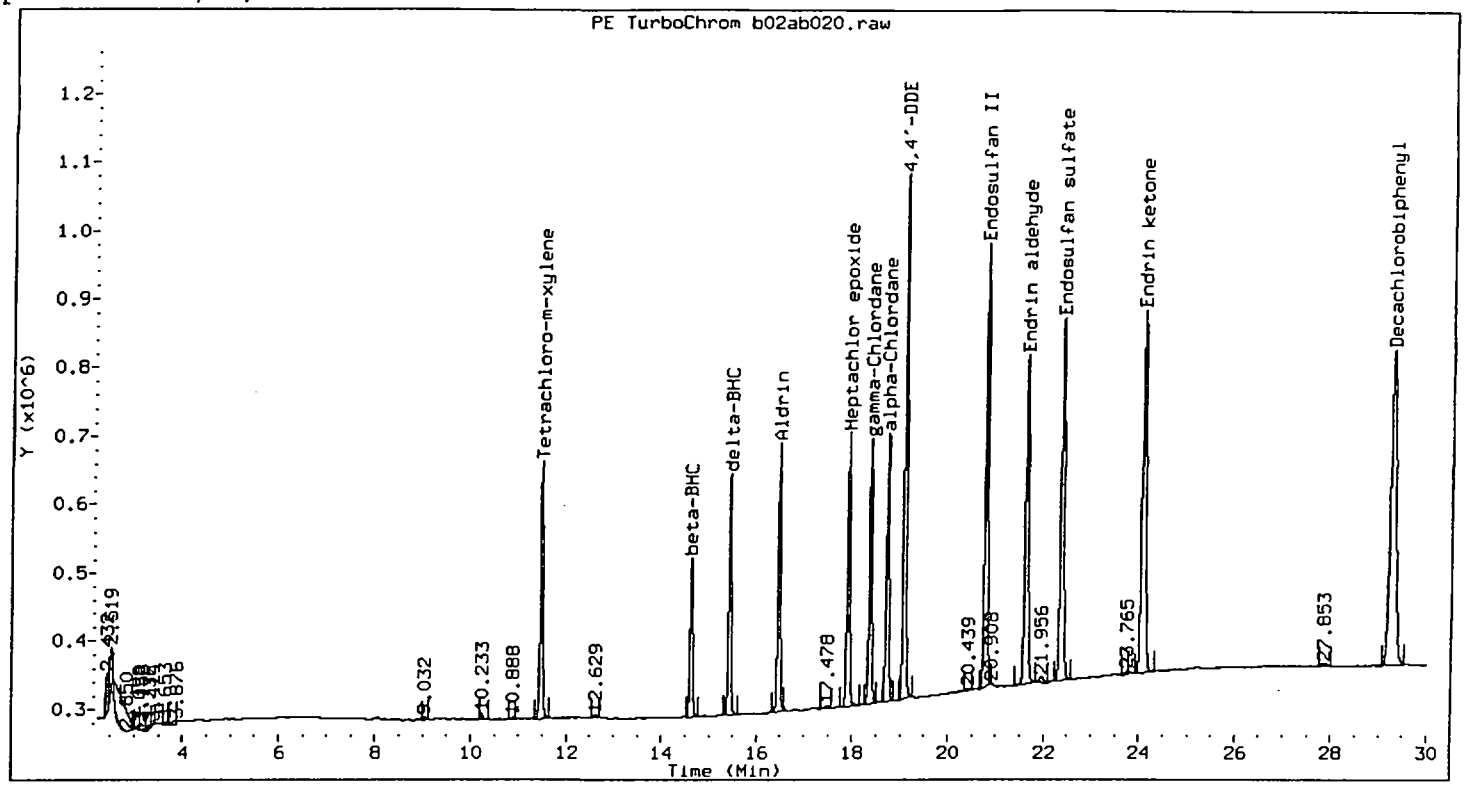


Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDB L3
Lab ID : INDB L3
Inj Date : 27-NOV-1999 06:47
Operator : gds
Cpnd Sublist: INDB

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : OIL
Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Aldrin	16.457	16.457	0.000	721412	20.798	20.798
beta-BHC	14.620	14.620	0.000	463373	21.387	21.387
delta-BHC	15.426	15.426	0.000	616221	20.288	20.288
4,4'-DDE	19.071	19.071	0.000	1449961	43.098	43.098
Endosulfan II	20.776	20.776	0.000	1402983	42.840	42.840
Endosulfan sulfate	22.372	22.372	0.000	1305775	43.053	43.053
Endrin aldehyde	21.622	21.622	0.000	1173338	43.018	43.018
Endrin ketone	24.078	24.078	0.000	1503318	42.130	42.130
Heptachlor epoxide	17.900	17.900	0.000	795567	21.373	21.373

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.359	18.359	0.000	778202	21.389	21.389
alpha-Chlordane	18.716	18.716	0.000	799606	21.696	21.696
Tetrachloro-m-xylene	11.472	11.463	0.009	747847	22.557	22.557
Decachlorobiphenyl	29.266	29.258	0.008	2126180	45.357	45.357



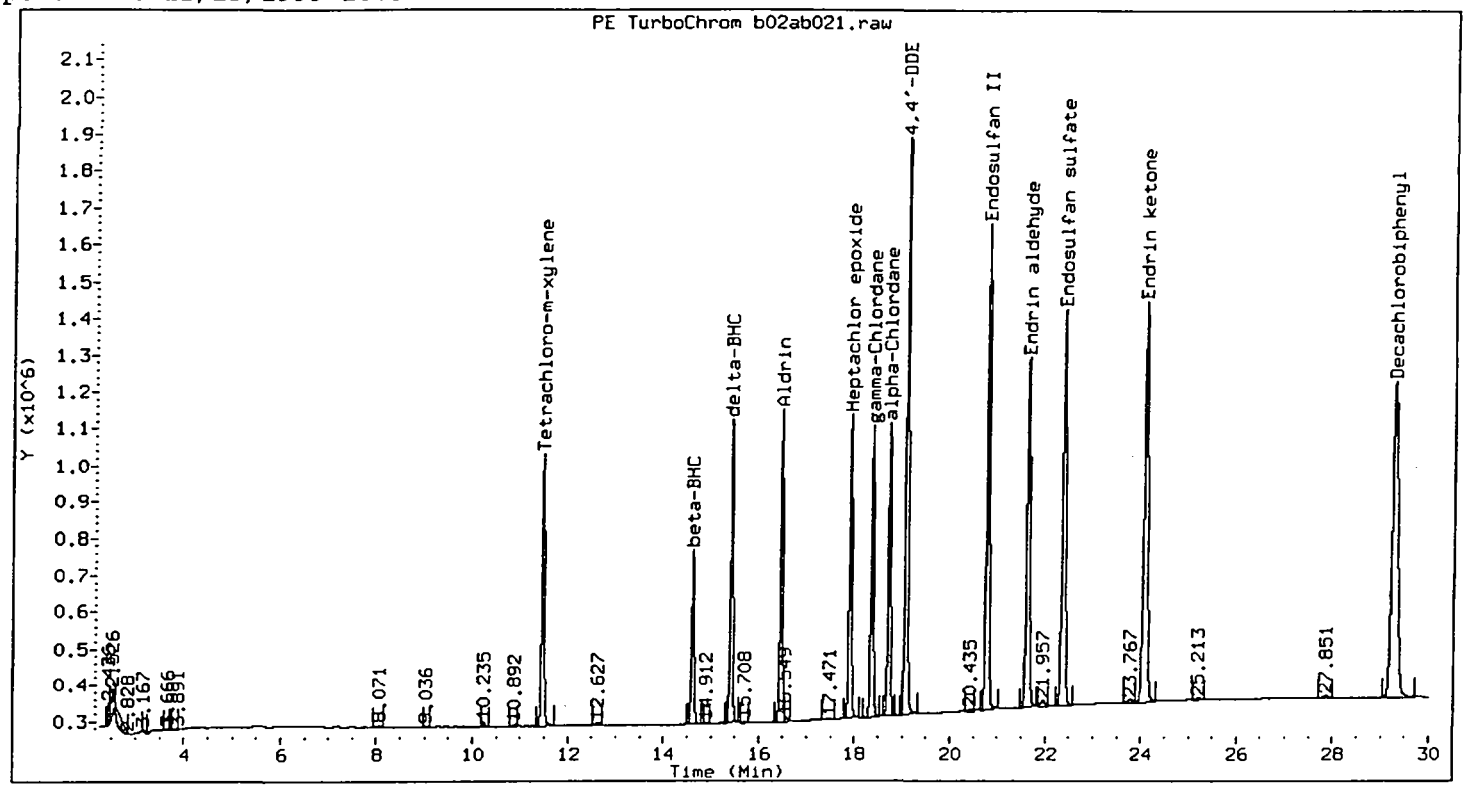
Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDB L4
Lab ID : INDB L4 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 07:26 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDB Sample Type: CALIB_4

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin		16.463	16.457	0.006	1398415	40.723	40.723
beta-BHC		14.623	14.620	0.003	855877	40.200	40.200
delta-BHC		15.432	15.426	0.006	1228682	40.599	40.599
4,4'-DDE	(M)	19.077	19.071	0.006	2744985	81.592	81.592
Endosulfan II	(M)	20.779	20.776	0.003	2626570	80.201	80.201
Endosulfan sulfate		22.374	22.372	0.003	2455969	80.976	80.976
Endrin aldehyde	(M)	21.626	21.622	0.003	2186351	80.158	80.158
Endrin ketone	(M)	24.078	24.078	0.001	2933364	82.207	82.207
Heptachlor epoxide		17.907	17.900	0.008	1515666	40.718	40.718

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane	18.366	18.359	0.007	1444852	39.713	39.713
alpha-Chlordane	18.723	18.716	0.007	1473211	39.973	39.973
Tetrachloro-m-xylene	11.469	11.463	0.007	1362217	39.288	39.288
Decachlorobiphenyl	29.267	29.258	0.009	3776847	78.889	78.889

COMMENTS:

M - Compound response manually integrated.



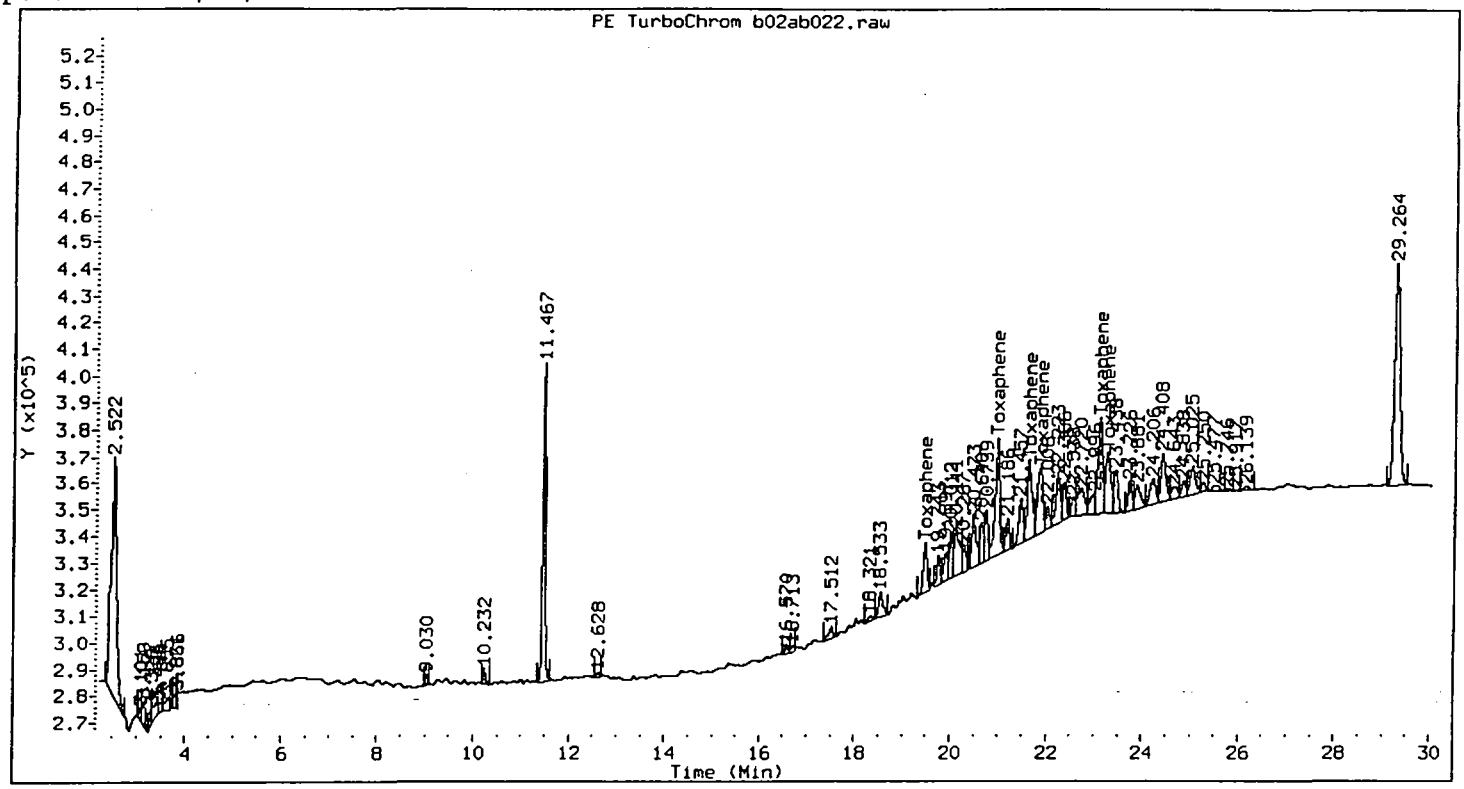
Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : INDB L5
Lab ID : INDB L5 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 08:05 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDB Sample Type: CALIB_5

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	(M)	16.457	16.457	0.000	2998639	87.323	87.323
beta-BHC	(M)	14.617	14.620	0.002	1706571	80.156	80.156
delta-BHC	(M)	15.426	15.426	0.000	2753149	90.971	90.971
4,4'-DDE	(M)	19.073	19.071	0.003	5626606	167.245	167.245
Endosulfan II	(M)	20.777	20.776	0.002	5408930	165.160	165.160
Endosulfan sulfate		22.373	22.372	0.002	4976264	164.073	164.073
Endrin aldehyde	(M)	21.624	21.622	0.002	4259163	156.153	156.153
Endrin ketone		24.079	24.078	0.002	5983675	167.691	167.691
Heptachlor epoxide	(M)	17.902	17.900	0.002	3004784	80.723	80.723

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
gamma-Chlordane	18.362	18.359	0.003	2938720	80.772	80.772
alpha-Chlordane	18.718	18.716	0.003	2982780	80.932	80.932
Tetrachloro-m-xylene	11.467	11.463	0.005	2668870	76.973	76.973
Decachlorobiphenyl	29.269	29.258	0.012	7132028	148.971	148.971

COMMENTS:

M - Compound response manually integrated.



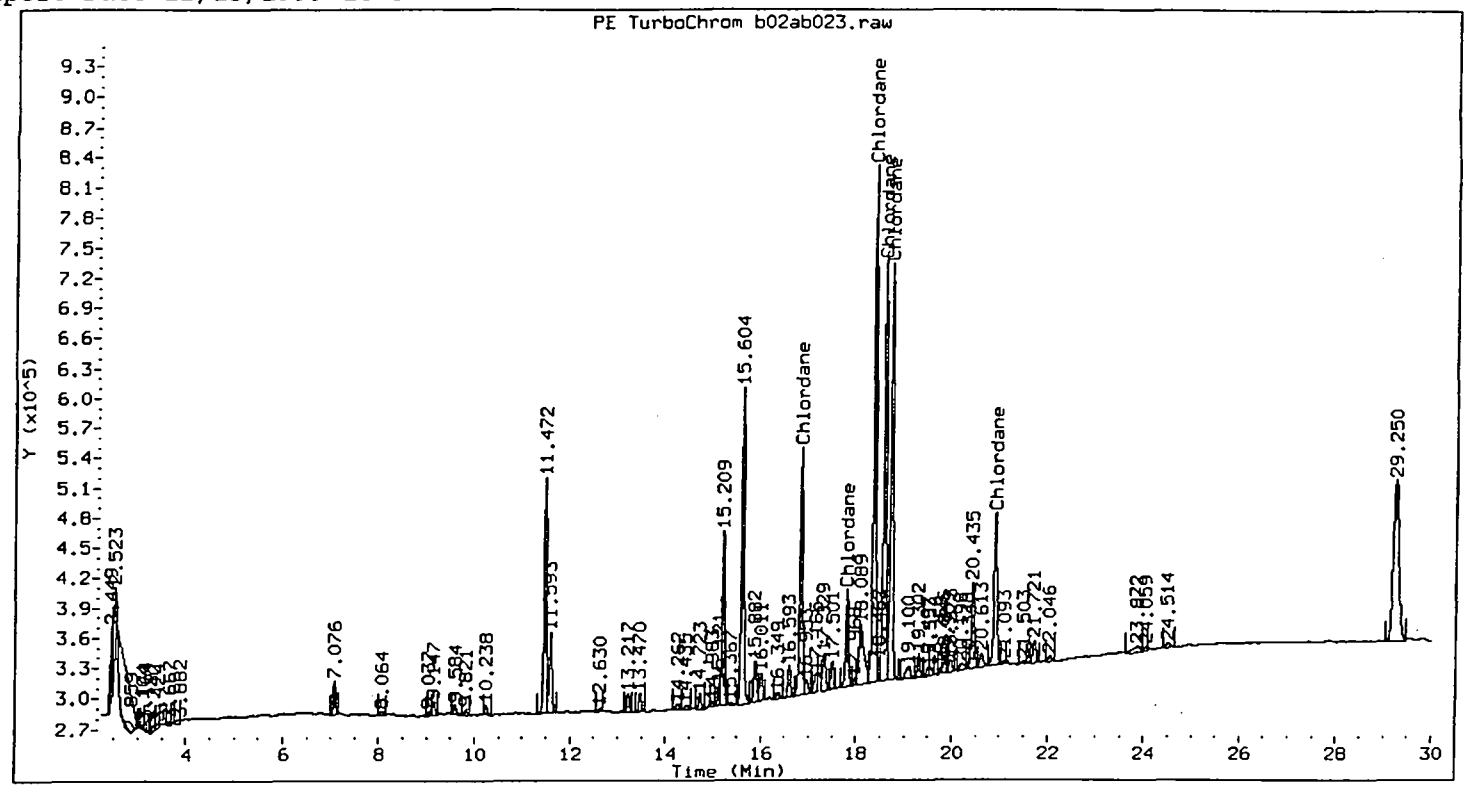
Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : tox 13
Lab ID : tox 13 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 08:44 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: TOXAPH0 Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Toxaphene	(M)	19.475	19.475	0.000	99277	1500.000	1500.000
(2)		20.974	20.974	0.000	279432	1500.000	1500.000
(3)		21.622	21.622	0.000	202153	1500.000	1500.000
(4)		21.868	21.868	0.000	184623	1500.000	1500.000
(5)		23.109	23.109	0.000	256063	1500.000	1500.000
(6)		23.261	23.261	0.000	171460	1500.000	1500.000

Average of peak concentrations: 1500.00

COMMENTS:

M - Compound response manually integrated.



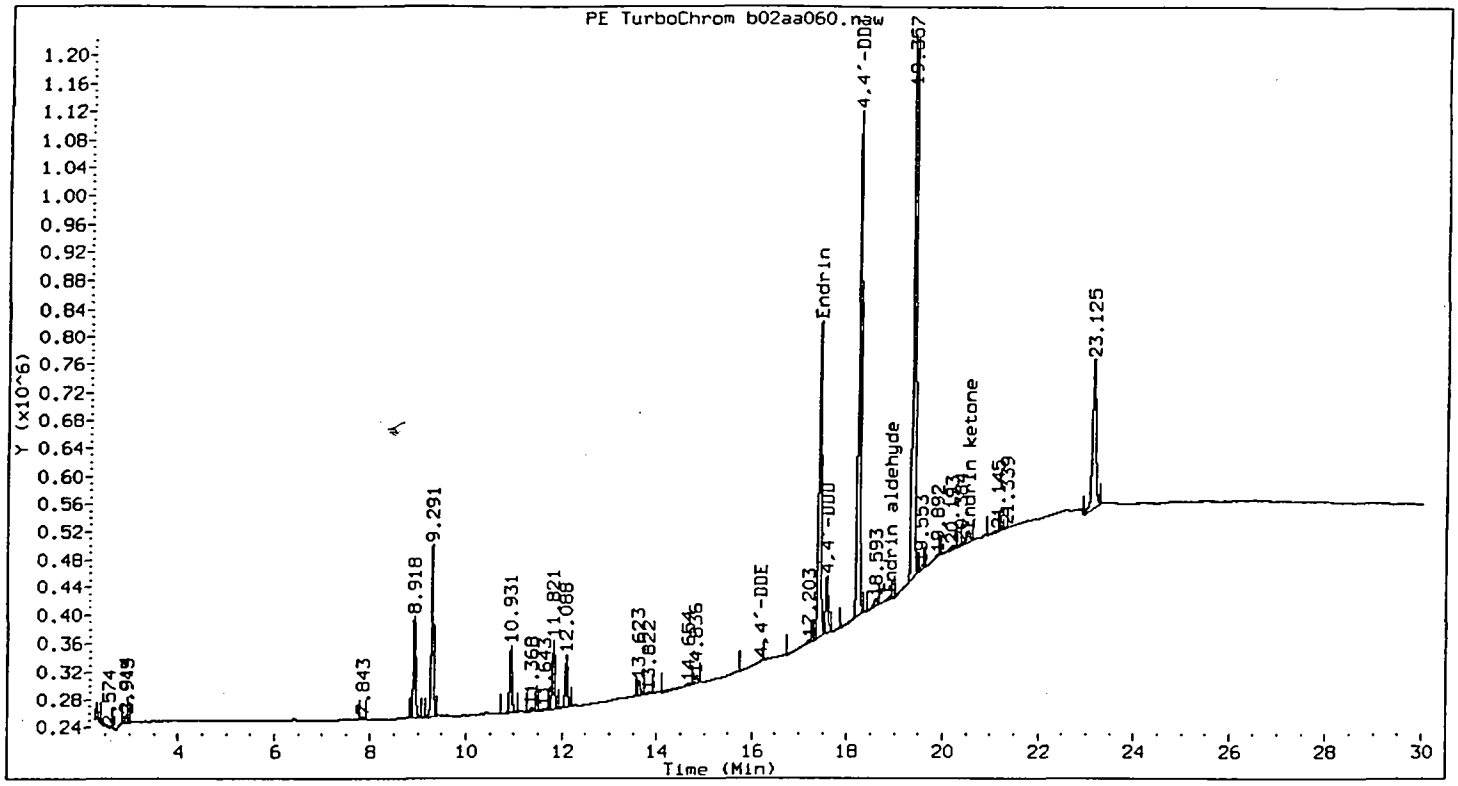
Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99.b/Br8081.m
Sample Info : chlor l3
Lab ID : chlor l3 Inst ID : HP58902.i
Inj Date : 27-NOV-1999 09:23 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: CHLORDANE Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Chlordane	(M)	16.832	16.832	0.000	1005201	500.000	500.000
(2)		17.802	17.802	0.000	384245	500.000	500.000
(3)		18.362	18.362	0.000	1964528	500.000	500.000
(4)		18.580	18.580	0.000	1734593	500.000	500.000
(5)		18.718	18.718	0.000	1568489	500.000	500.000
(6)		20.898	20.898	0.000	660014	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.



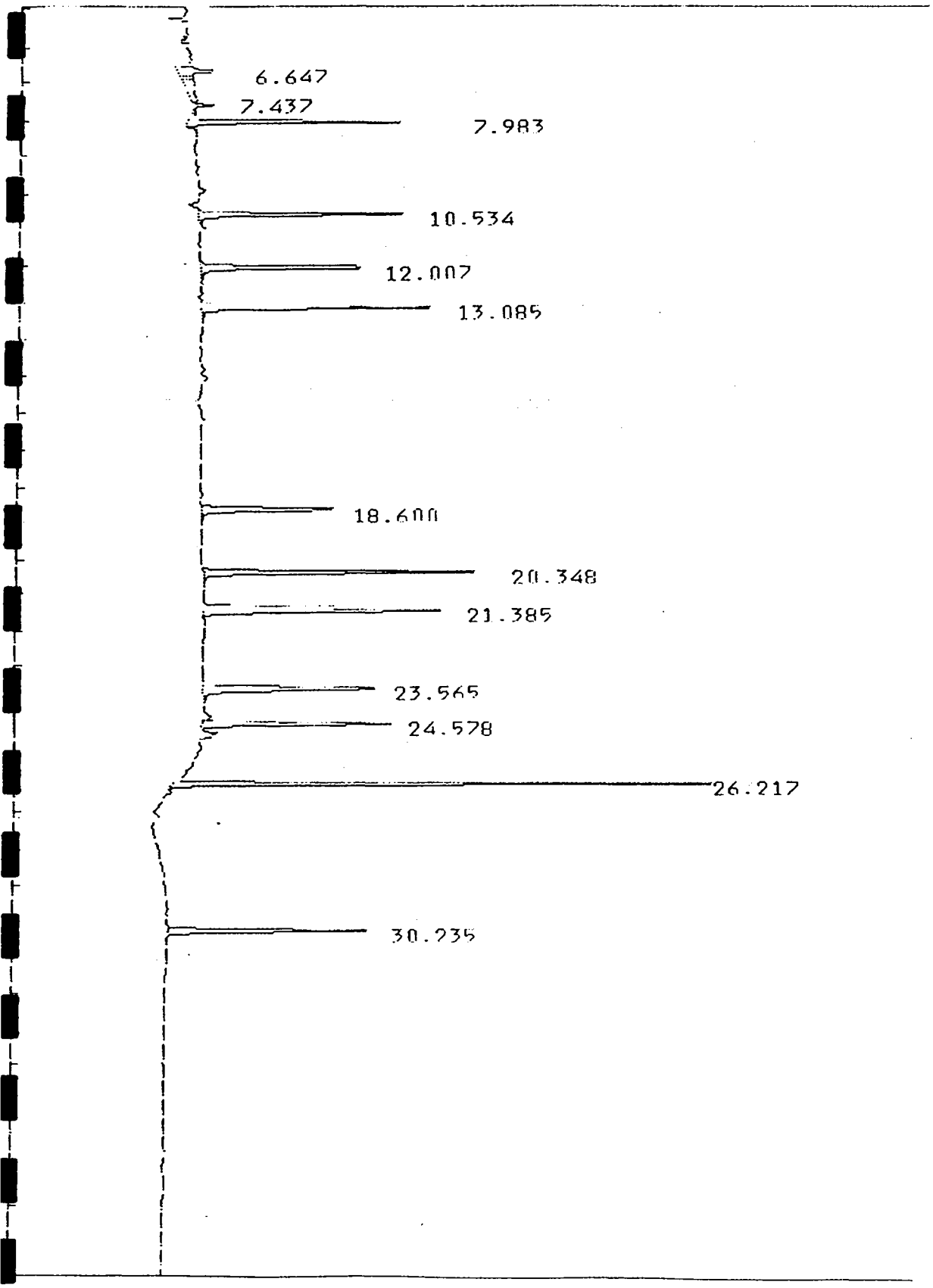
Method : /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/Bf8081.m
Sample Info : evalb
Lab ID : evalb
Inj Date : 28-NOV-1999 09:24
Operator : gds
Cpnd Sublist: END_DDT

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: END/DDT

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/kg)
4,4'-DDD	17.578	17.573	0.006	273213	11.844	3.948
4,4'-DDE	16.205	16.190	0.015	15731	0.452	0.151
4,4'-DDT	18.223	18.216	0.007	2478185	87.041	29.014
Endrin	17.414	17.407	0.008	1600497	62.007	20.669
Endrin aldehyde	18.889	18.886	0.003	30103	1.048	0.349
Endrin ketone	20.532	20.523	0.009	94068	2.593	0.864

IEA Pesticide Standard Report

Sample Name : INDA L1 Inj:1737 09Nov1999
Result : /DATA/LOMP/RESULT/D4A501C 006.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDA L1 Report No : 33.00
Result File : /DATA/LOOP/RESULT/D4AS01C 006.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1737 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 6 Bottle no. : 6

% Dil-Fact
100.00

Run Status : RunStatusOK

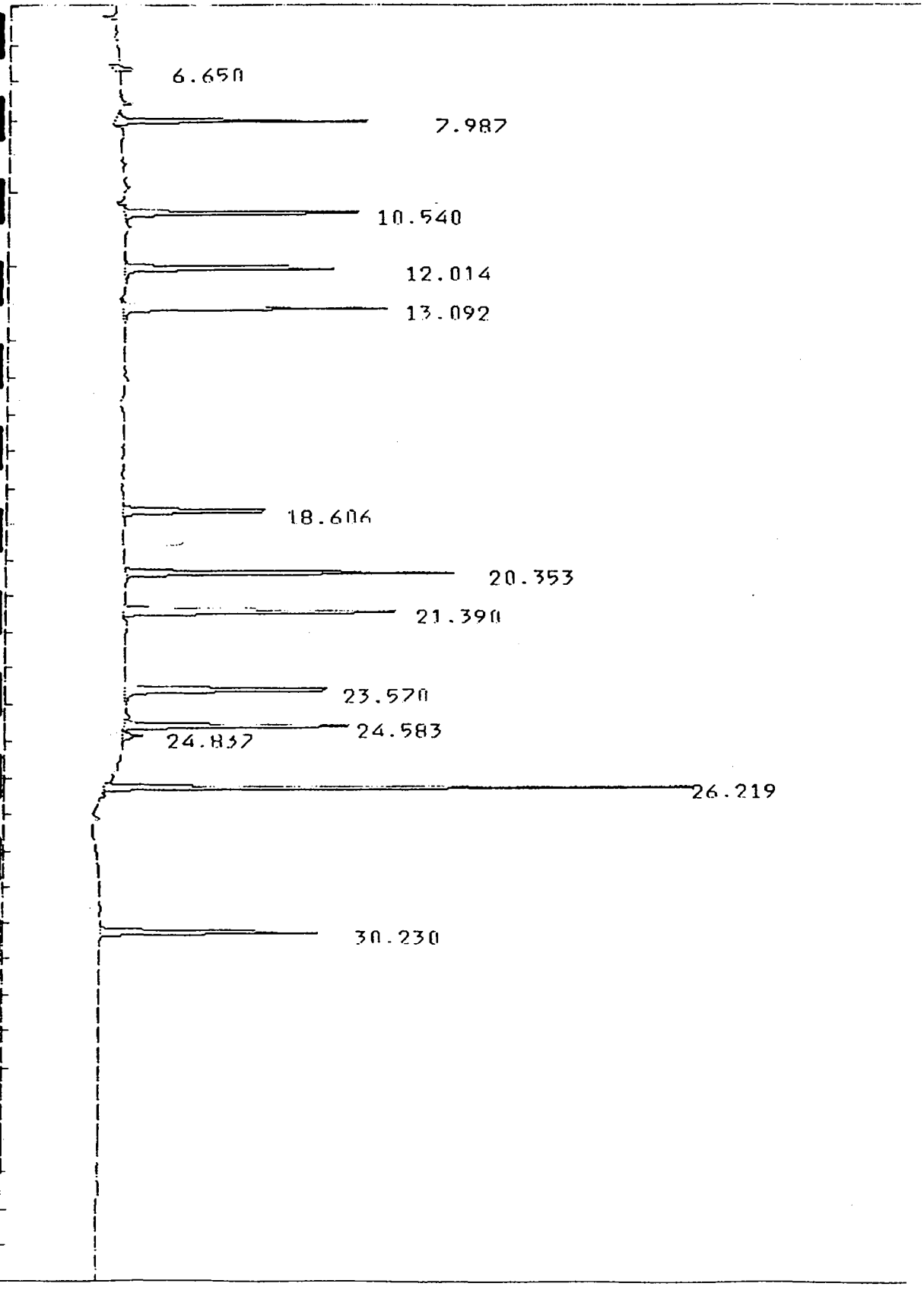
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.65		.152076	39839	PV	0.0000	
2	7.44		.691323	27801	VV	0.0000	
3	7.98	8.01	.070610	105519	BV	6.0325	TCX
4	10.53	10.57	.077571	100380	BV	4.8323	A-BHC
5	12.01	12.04	.086401	103287	PV	4.8607	G-BHC
6	13.09	13.10	.091850	125916	PB	5.0102	HEPTACHLOR
7	18.60	18.65	.109347	90235	BB	5.0751	ENDOSULFAN 1
8	20.35	20.40	.109050	177618	BB	9.6810	DIELDRIN
9	21.39	21.43	.111172	157987	BV	9.8171	ENDRIN
10	23.57	23.61	.117965	126020	BB	9.3709	4,4' DDD
11	24.58	24.61	.091947	108342	VV	8.9995	4,4' DDT
12	26.22	26.24	.062422	222943	VV	49.5980	METHOXYCHLOR
13	30.23	#30.26	.102905	122798	BB	9.5899	DCB

Total Area : 1508686 Total ng inj : 122.797

Report Time : 1818 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 006.RES

IEA Pesticide Standard Report

Sample Name : INDA I 2 Inj:1825 09Nov1999
Result : /DATA/LOOP/RESULT/D4ASO1C 007.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDA 1.2 Report No : 34.00
Result File : /DATA/LOOP/RESULT/D4AS01C 007.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1825 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 7 Bottle no. : 7

% Dil-Fact
100.00

Run Status : RunStatusOK

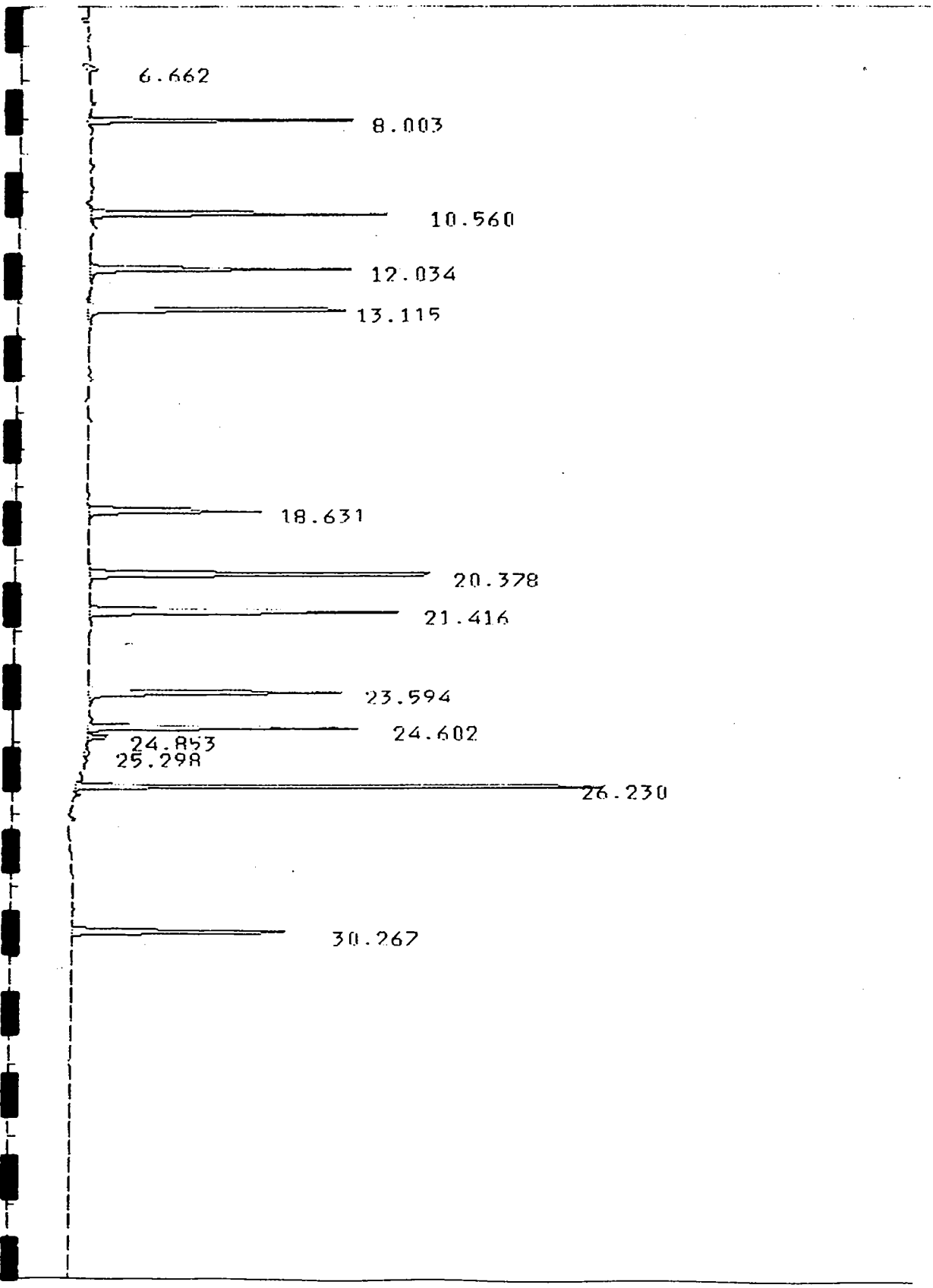
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.65		.122109	28482	BV	0.0000	
2	7.99	8.01	.068620	195283	VV	11.1643	TCX
3	10.54	10.57	.075769	203151	BV	9.7797	A-BHC
4	12.01	12.04	.085536	204901	PV	9.6426	G-BHC
5	13.09	13.10	.096378	254545	BB	10.1284	HEPTACHLOR
6	18.61	18.65	.108737	171856	BV	9.6657	ENDOSULFAN 1
7	20.35	20.40	.108141	351122	BB	19.1378	DIELDRIN
8	21.39	21.43	.110956	313218	BV	19.4630	ENDRIN
9	23.57	23.61	.119540	256833	BB	19.0983	4,4' DDD
10	24.58	24.61	.092531	225820	VV	18.6121	4,4' DDT
11	24.84		.100117	20773	VB	0.0000	
12	26.22	26.24	.063620	420313	VV	93.5066	METHOXYCHLOR
13	30.23	#30.26	.104411	231232	BB	18.0579	DCB

Total Area : 2877531 Total ng inj : 238.257

Report Time : 1907 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 007.RES

IEA Pesticide Standard Report

Sample Name : INDA I 3 Inj:1914 09Nov1999
Result : /DATA/LOOP/RESULT/04A501C.008.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



HA Pesticide Standard Report

Sample Name : INDA L3 Report No : 35.01
Result File : /DATA/LOOP/RESULT/D4AS01C 008.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1914 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 8 Bottle no. : 8

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

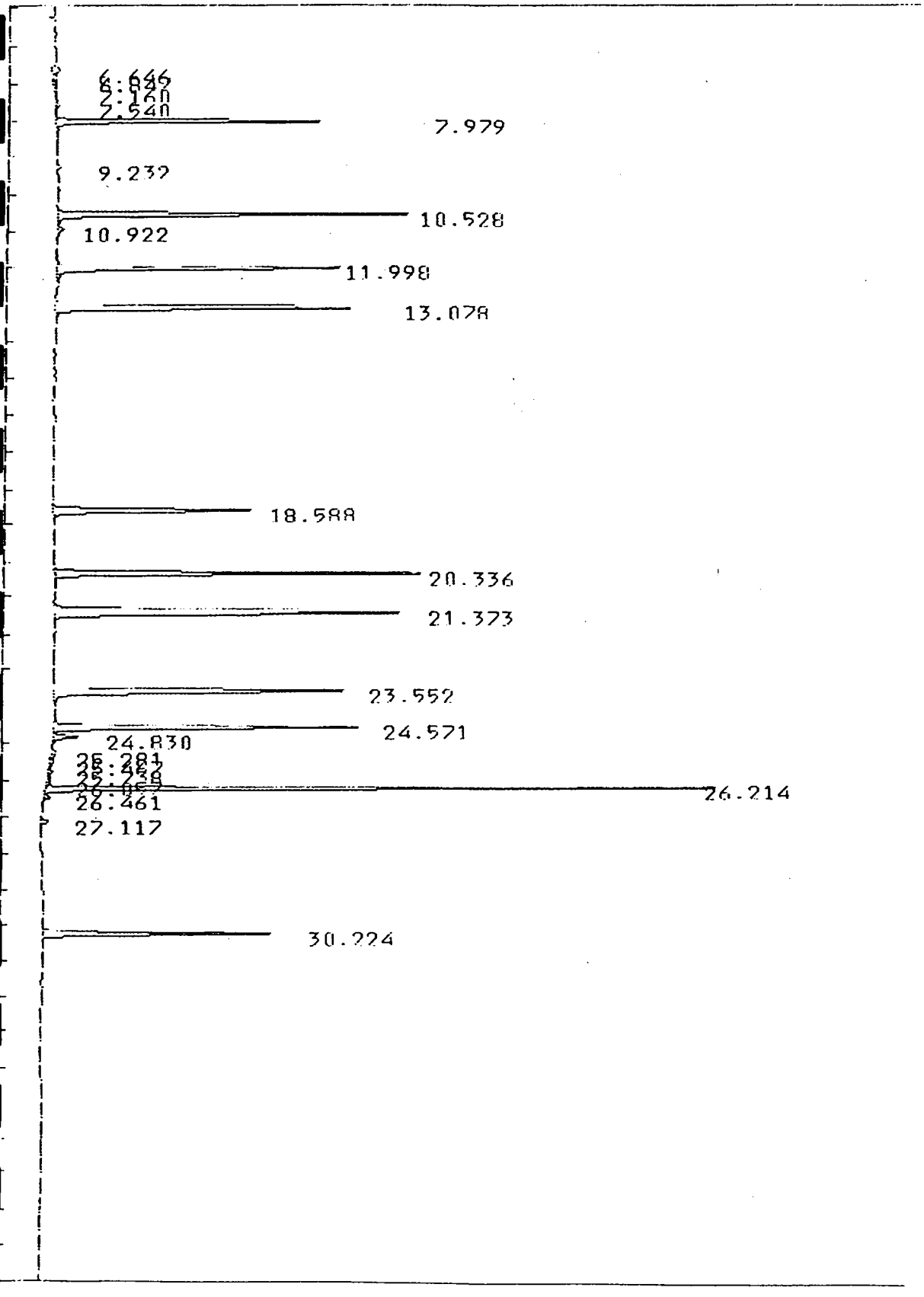
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.66		0.000000	32492	PU	0.0000	
2	8.00	7.99	0.000000	357603	BV	20.4442	TCX
3	10.56	10.54	0.000000	417286	BV	20.0881	A-BHC
4	12.03	12.01	0.000000	417138	BV	19.6305	G-BHC
5	13.12	13.09	0.000000	492272	BV	19.5875	HEPTACHLOR
6	18.63	18.61	0.000000	342307	BV	19.2524	ENDOSULFAN 1
7	20.38	20.35	0.000000	697634	BV	38.0244	DIELDRIN
8	21.42	21.39	0.000000	612866	BV	38.0827	ENDRIN
9	23.59	23.57	0.000000	515227	BH	38.3125	4,4' DDD
10	24.60	24.58	0.000000	447054	VV	36.8461	4,4' DDT
11	24.85		0.000000	36541	VB	0.0000	
12	25.30	25.30	0.000000	13277	BV	1.2762	ENDRIN ALDEHYDE
13	26.23	26.22	0.000000	785438	VV	174.7355	METHOXYCHLOR
14	30.27	#30.23	0.000000	435302	FF	53.9947	DCB

Total Area : 5602436 Total ng inj : 460.275

Report Time : 1457 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 008.RES

IFA Pesticide Standard Report

Sample Name : INDA L4 Inj:2002 09Nov1999
Result : /DATA/LOOP/RESULT/D4ASM1C 009.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDA L4 Report No : 36.00
Result File : /DATA/LOOP/RESULT/D4AS01C 009.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2002 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 9 Bottle no. : 9

% Dil-Fact
100.00

Run Status : RunStatusOK

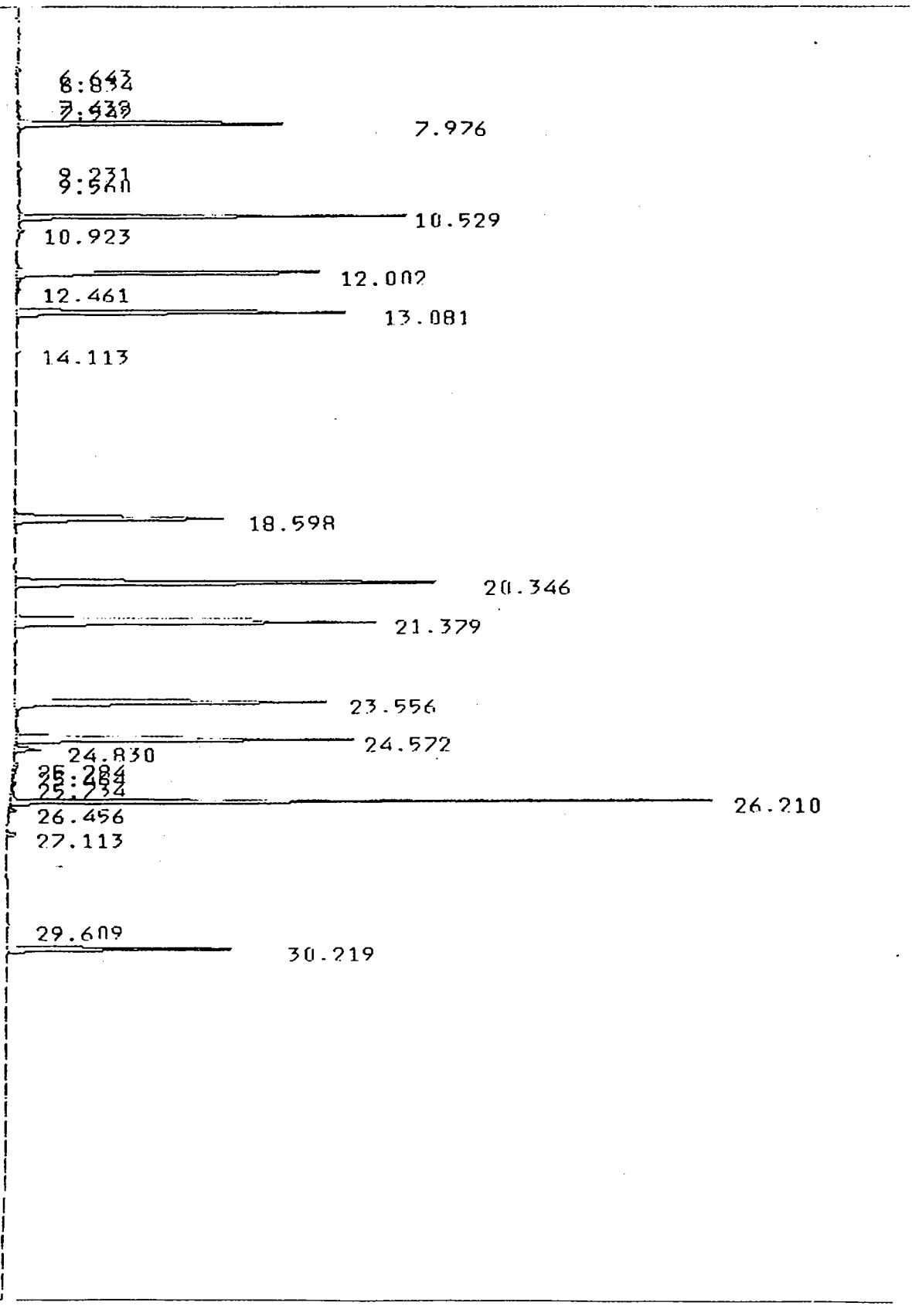
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.65		.143820	41506	PV	0.0000	
2	6.85		.162712	16708	VV	0.0000	
3	7.16		.345653	23083	VV	0.0000	
4	7.54		.070566	10203	VB	0.0000	
5	7.98	8.01	.067147	683601	BV	39.0815	TCX
6	9.23		.086426	10814	BV	0.0000	
7	10.53	10.57	.077006	856017	BV	41.2087	A-BHC
8	10.92		.084721	15610	VV	0.0000	
9	12.00	12.04	.085402	840634	VV	39.5602	G-BHC
10	13.08	13.10	.093137	907364	BV	36.1040	HEPTACHLOR
11	18.59	18.65	.111765	677067	BV	38.0803	ENDOSULFAN 1
12	20.34	20.40	.111142	1386191	BB	75.5541	DIELDRIN
13	21.37	21.43	.113708	1194883	PV	74.2486	ENDRIN
14	23.55	23.61	.117728	1032034	BB	76.7426	4,4' DDD
15	24.57	24.61	.096723	917560	VV	75.6251	4,4' DDT
16	24.83		.084793	67709	VB	0.0000	
17	25.28	25.32	.169554	19221	BV	1.8475	ENDRIN ALDEHYDE
18	25.47		.134671	13537	VV	0.0000	
19	25.74		.092945	14157	VV	0.0000	
20	26.06	26.04	.172217	18418	VV	2.1287	ENDOSULFAN SULFATE
21	26.21	26.24	.065536	1460295	VV	324.8703	METHOXYCHLOR
22	26.46		.060000	15002	VB	0.0000	
23	27.12	27.15	.066247	16633	BV	1.8091	ENDRIN KETONE
24	30.22	#30.26	.107525	784262	BB	61.2466	DCB

Total Area : 11022512 Total ng inj : 888.102

Report Time : 2043 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 009.RES

IEA Pesticide Standard Report

Sample Name : INDA L5 Inj:2053 09Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 010.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDA L5 Report No : 37.00
Result File : /DATA/LOOP/RESULT/D4AS01C 010.RLS
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2053 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 10 Bottle no. : 10

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline

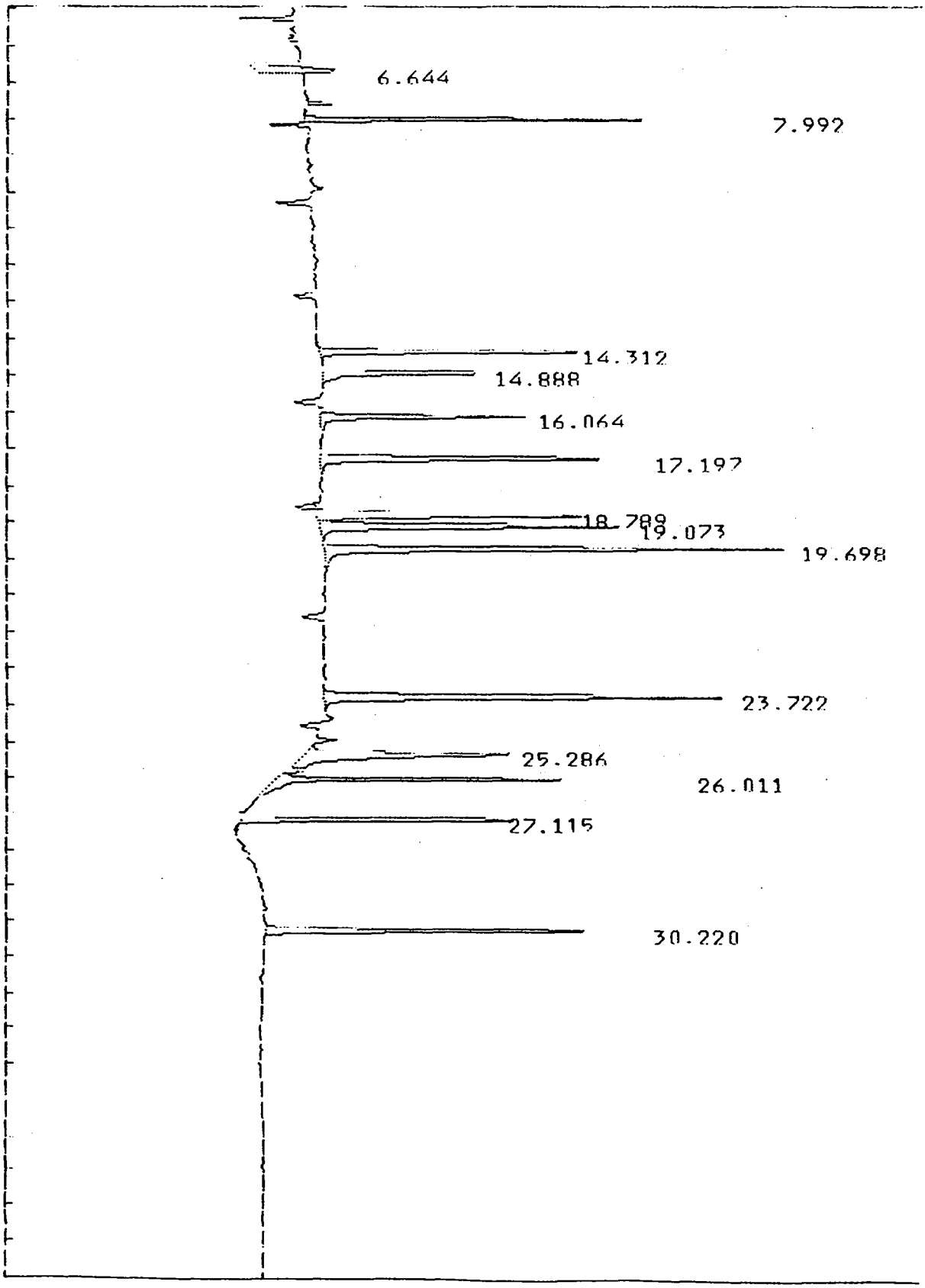
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.64		.157825	44963	PU	0.0000	
2	6.83		.131674	13941	VV	0.0000	
3	7.43		.633264	39233	VV	0.0000	
4	7.54		.068368	12410	VB	0.0000	
5	7.98	8.01	.067571	1239556	BV	70.8654	TCX
6	9.23		.085156	20362	BV	0.0000	
7	9.56		.166193	13818	VV	0.0000	
8	10.53	10.57	.078908	1664575	BV	80.1326	A-BHC
9	10.92		.080361	27629	VV	0.0000	
10	12.00	12.04	.086978	1620097	VV	76.2417	G-BHC
11	12.46		.112747	12824	VB	0.0000	
12	13.08	13.10	.094569	1694921	BV	67.4409	HEPTACHLOR
13	14.11		.099886	15415	VV	0.0000	
14	18.60	18.65	.112071	1284722	BV	72.2566	ENDOSULFAN 1
15	20.35	20.40	.114690	2593856	BB	141.3776	DIELDRIN
16	21.38	21.43	.117788	2207137	PV	137.1489	ENDRIN
17	23.56	23.61	.121769	1982539	PB	147.4226	4,4' DDD
18	24.57	24.61	.098687	1780350	BV	146.7361	4,4' DDT
19	24.83		.081740	126576	VB	0.0000	
20	25.28	25.32	.152533	33369	BV	3.2073	ENDRIN ALDEHYDE
21	25.46		.103449	15367	VV	0.0000	
22	25.73		.065722	15409	VV	0.0000	
23	26.21	26.24	.066255	2599506	HS	578.3097	METHOXYCHLOR
24	26.46		.059669	27437	BT	0.0000	
25	27.11	27.15	.073323	38726	PV	4.2121	ENDRIN KETONE
26	29.61		.095378	13142	BV	0.0000	
27	30.22	#30.26	.109942	1397550	BB	109.1410	DCB

Total Area : 20528428 Total ng inj : 1634.493

Report Time : 2134 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 010.RES

IIA Pesticide Standard Report

Sample Name : INDB 1.1 Inj:2143 09Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 011.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDB 1.1 Report No : 38.01
Result File : /DATA/LOOP/RESULT/D4AS01C 011.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 2143 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 11 Bottle no. : 11

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

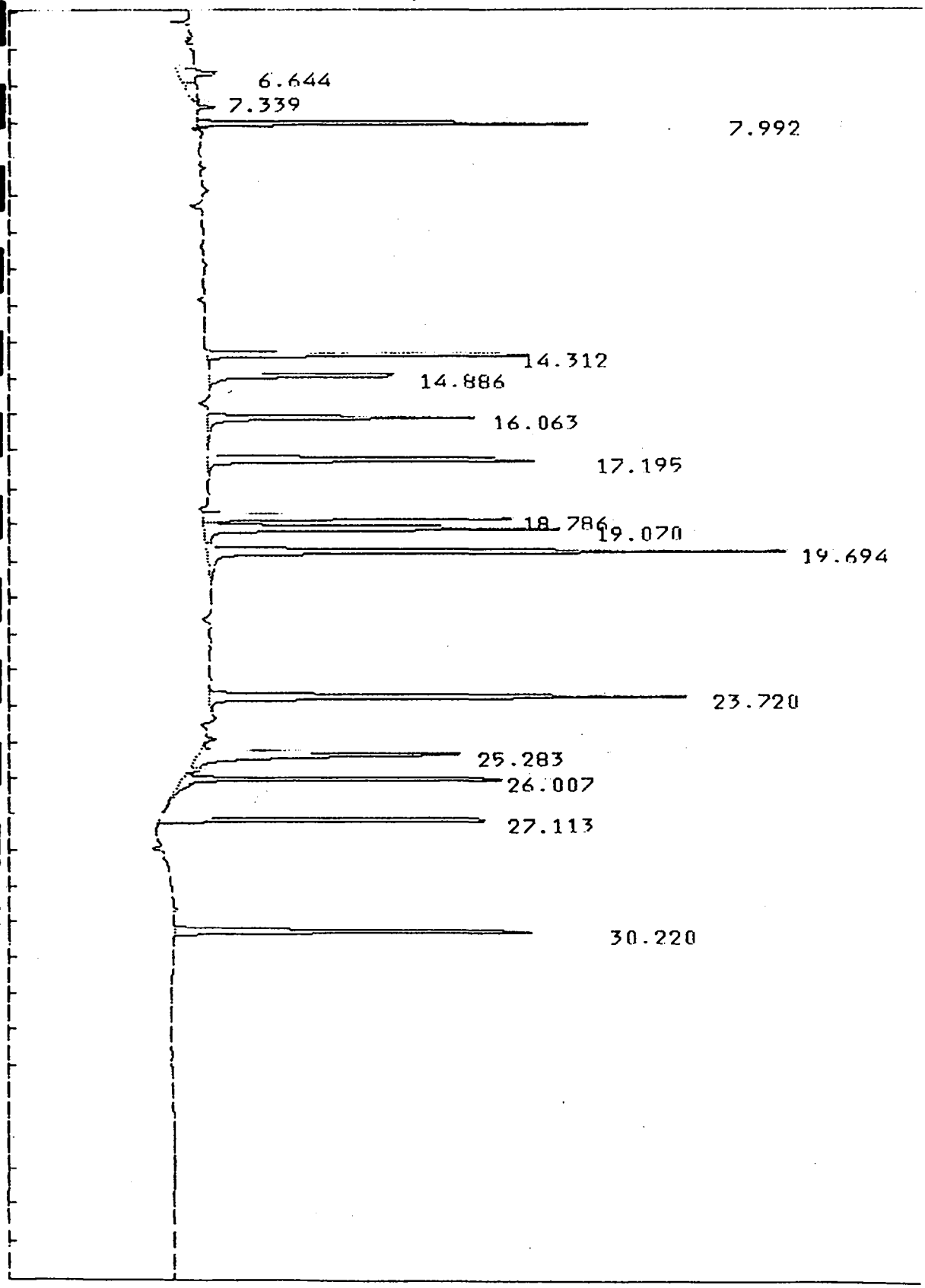
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.64		0.000000	46693	PV	0.0000	
2	7.99	7.99	0.000000	92694	FF	5.2993	TCX
3	14.31	14.33	0.000000	95550	BH	4.6820	ALDRIN
4	14.89	14.91	0.000000	63123	BB	5.2689	B-BHC
5	16.06	16.10	0.000000	74348	BB	4.7280	D-BHC
6	17.20	17.23	0.000000	106910	BB	4.9656	HEPTACHLOR EPOXIDE
7	18.79	18.83	0.000000	100180	BV	4.7255	G-CHLORDANE
8	19.07	19.11	0.000000	113746	VB	4.8871	A-CHLORDANE
9	19.70	19.73	0.000000	177544	BV	9.6612	4,4' DDE
10	23.72	23.75	0.000000	160204	BB	9.5173	ENDOSULFAN II
11	25.29	25.30	0.000000	108519	BV	10.4305	ENDRIN ALDEHYDE
12	26.01	26.02	0.000000	96821	VB	11.1906	ENDOSULFAN SULFATE
13	27.12	27.13	0.000000	78166	BV	8.5019	ENDRIN KETONE
14	30.22	#30.23	0.000000	121181	BB	9.4636	DCB

Total Area : 1435679 Total ng inj : 93.321

Report Time : 1108 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 011.RES

IEA Pesticide Standard Report

Sample Name : INDB L2 Inj:2234 09Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 012.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDB L2 Report No : 39.01
Result File : /DATA/LOOP/RESULT/D4AS01C 012.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 2234 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 12 Bottle no. : 12

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

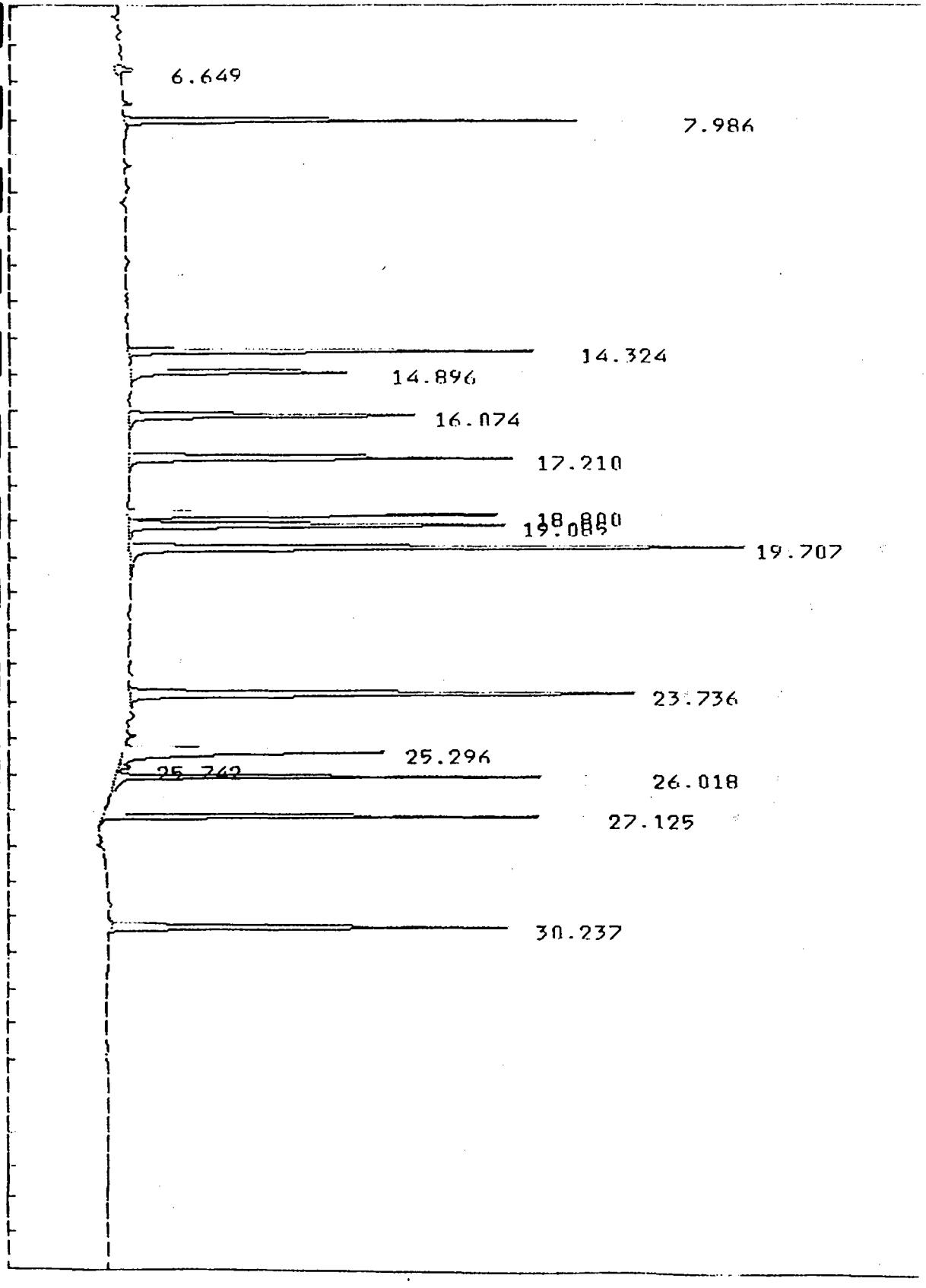
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.64		0.000000	44704	PV	0.0000	
2	7.34		0.000000	23995	VV	0.0000	
3	7.99	7.99	0.000000	180078	FF	10.2951	TCX
4	14.31	14.33	0.000000	190790	BB	9.3487	ALDRIN
5	14.89	14.91	0.000000	119483	BV	9.9733	B-BHC
6	16.06	16.10	0.000000	153945	BB	9.7898	D-BHC
7	17.20	17.23	0.000000	207541	BB	9.6396	HEPTACHLOR EPOXIDE
8	18.79	18.83	0.000000	209675	BV	9.8904	G-CHLORDANE
9	19.07	19.11	0.000000	228789	VV	9.8299	A-CHLORDANE
10	19.69	19.73	0.000000	372313	VB	20.2598	4,4' DDE
11	23.72	23.75	0.000000	318064	PB	18.8953	ENDOSULFAN II
12	25.28	25.30	0.000000	210929	BV	20.2739	ENDRIN ALDEHYDE
13	26.01	26.02	0.000000	178591	VB	20.6415	ENDOSULFAN SULFATE
14	27.11	27.13	0.000000	162512	BV	17.6759	ENDRIN KETONE
15	30.22	#30.23	0.000000	228743	BB	17.8636	DDR

Total Area : 2830152 Total ng inj : 184.377

Report Time : 1114 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 012.RES

IEA Pesticide Standard Report

Sample Name : INDB 13 Inj:2325 09Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 013.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

Sample Name : INDB L3 Report No : 40.00
Result File : /DATA/LOOP/RESULT/D4AS01C 013.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2325 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 13 Bottle no. : 13

% Dil-Fact
100.00

Run Status : RunStatusOK

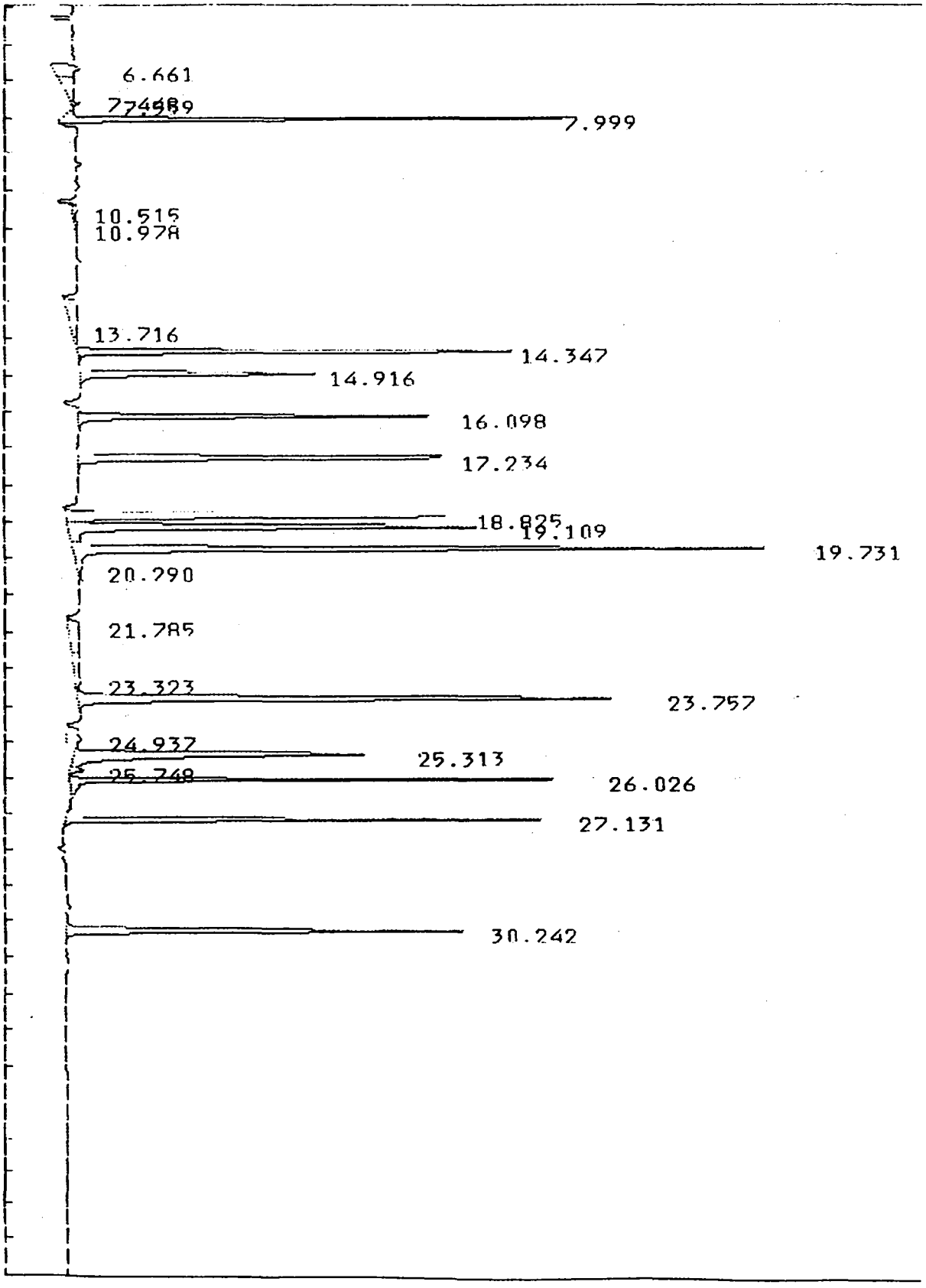
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.65		.136620	28280	PV	0.0000	
2	7.99	7.99	.067117	346224	BV	19.7936	TCX
3	14.32	14.33	.093628	387007	BB	18.9633	ALDRIN
4	14.90	14.91	.102292	227927	BV	19.0250	B-BHC
5	16.07	16.10	.101053	312204	BV	19.8540	D-BHC
6	17.21	17.23	.104596	403063	BV	18.7211	HEPTACHLOR EPOXIDE
7	18.80	18.83	.107064	394829	BV	18.6241	G-CHLORDANE
8	19.08	19.11	.111072	418653	VV	17.9874	A-CHLORDANE
9	19.71	19.73	.113540	722808	VB	39.3323	4,4' DDE
10	23.74	23.75	.123041	616632	PB	36.6323	ENDOSULFAN II
11	25.30	25.30	.141586	393816	BV	37.8524	ENDRIN ALDEHYDE
12	25.74		.098075	12848	VV	0.0000	
13	26.02	26.02	.067360	337281	VB	38.9830	ENDOSULFAN SULFATE
14	27.13	27.13	.070725	327148	BV	35.5829	ENDRIN KETONE
15	30.24	#30.23	.105871	418676	BB	32.6963	DCB

Total Area : 5347397 Total ng inj : 354.048

Report Time : 0006 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 013.RES

ILA Pesticide Standard Report

Sample Name : INDR L4 Inj:0015 10Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 014.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDB L4 Report No : 41.01
Result File : /DATA/LOOP/RESULT/D4AS01C 014.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 0015 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 14 Bottle no. : 14

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

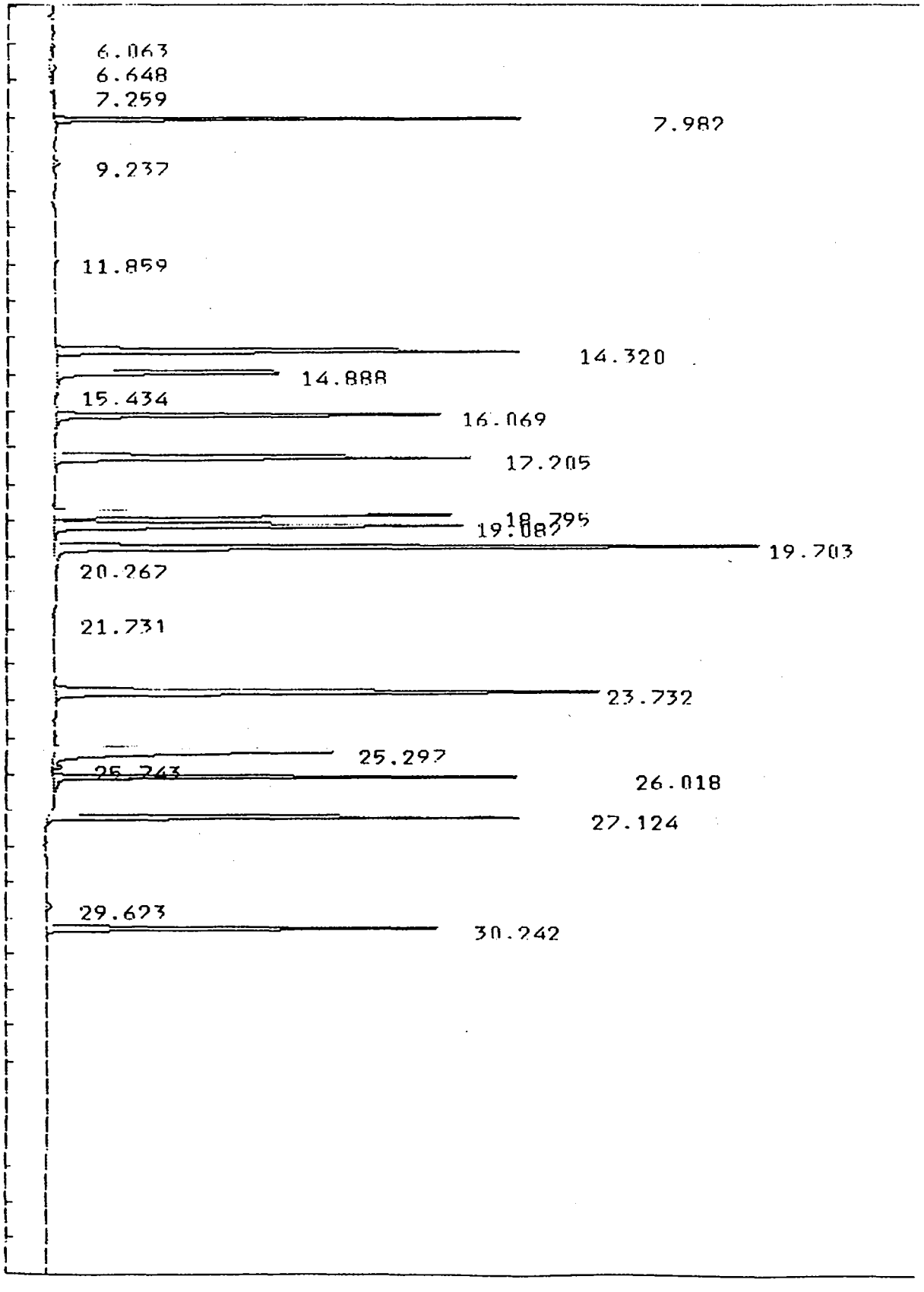
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.66		0.000000	147023	PV	0.0000	
2	7.45		0.000000	104805	VV	0.0000	
3	7.56		0.000000	13386	VB	0.0000	
4	8.00	7.99	0.000000	714808	BV	40.8656	TCX
5	10.51	10.54	0.000000	24138	BV	1.1620	A-BHC
6	10.98		0.000000	11044	VV	0.0000	
7	13.72		0.000000	151966	BV	0.0000	
8	14.35	14.33	0.000000	800668	VB	39.2327	ALDRIN
9	14.92	14.91	0.000000	432871	BB	36.1318	B-BHC
10	16.10	16.10	0.000000	650345	BV	41.3574	D-BHC
11	17.23	17.23	0.000000	778488	PB	36.1584	HEPTACHLOR EPOXIDE
12	18.83	18.83	0.000000	818194	PV	38.5942	G-CHLORDANE
13	19.11	19.11	0.000000	882578	VV	37.9200	A-CHLORDANE
14	19.73	19.73	0.000000	1456143	VV	79.2375	4,4' DDE
15	20.29	20.35	0.000000	15594	VB	.8500	DIELDRIN
16	21.79		0.000000	151681	PV	0.0000	
17	23.32		0.000000	76656	VV	0.0000	
18	23.76	23.75	0.000000	1188188	VB	70.5868	ENDOSULFAN II
19	24.94		0.000000	98408	PB	0.0000	
20	25.31	25.30	0.000000	762340	BV	73.2738	ENDRIN ALDEHYDE
21	25.75		0.000000	26332	VV	0.0000	
22	26.03	26.02	0.000000	665189	PB	76.8825	ENDOSULFAN SULFATE
23	27.13	27.13	0.000000	640522	BV	69.6676	ENDRIN KETONE
24	30.24	#30.23	0.000000	785652	FF	61.3551	DCB

Total Area : 11397020 Total ng inj : 703.275

Report Time : 1128 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 014.RES

IEA Pesticide Standard Report

Sample Name : INDB L5 Inj:0106 10Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 015.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IHA Pesticide Standard Report

Sample Name : INDB 1.5 Report No : 42.01
Result File : /DATA/LOOP/RESULT/D4AS01C 015.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 0106 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 15 Bottle no. : 15

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

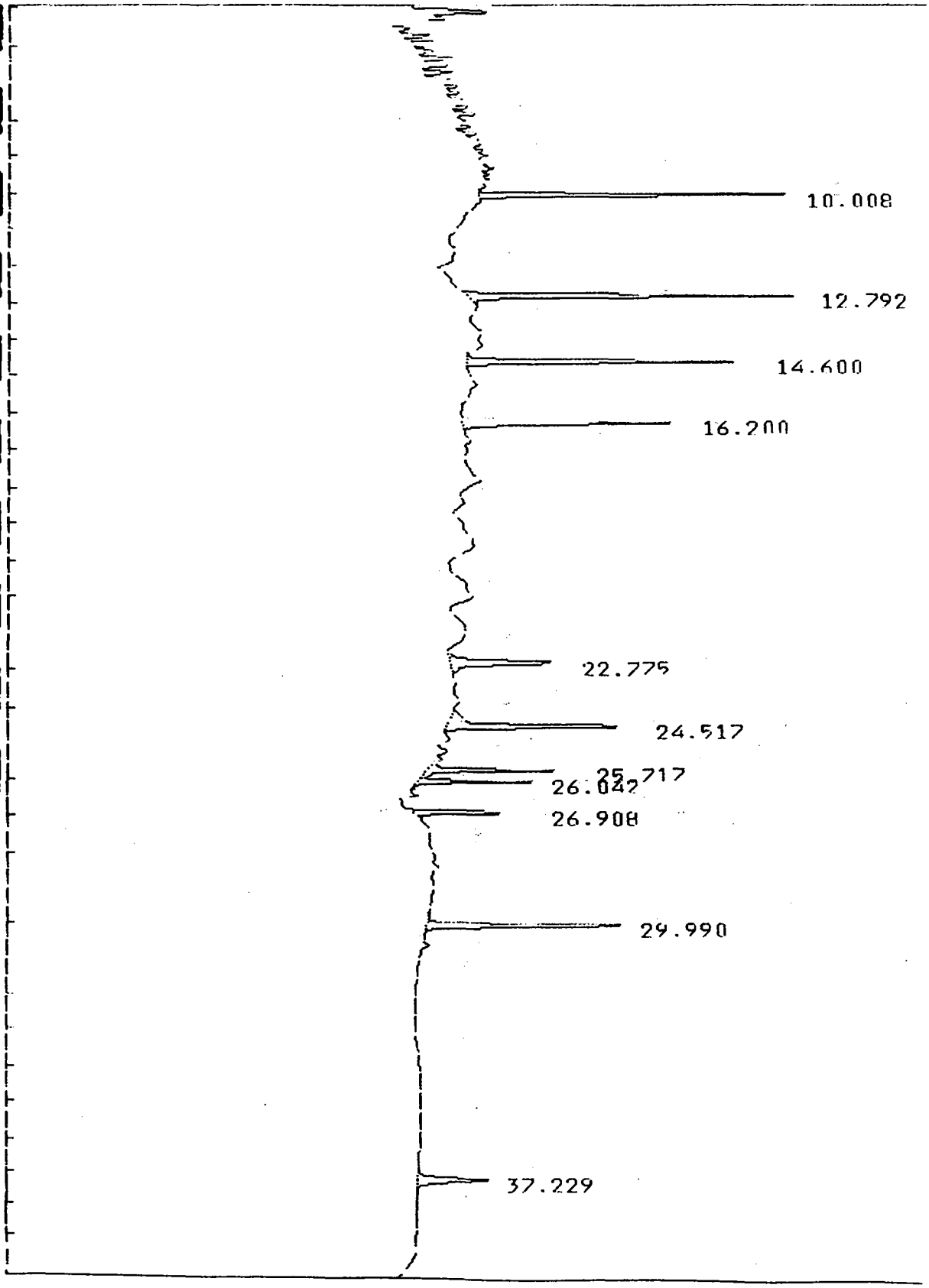
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.06		0.000000	14091	BV	0.0000	
2	6.65		0.000000	43550	PV	0.0000	
3	7.26		0.000000	31413	VV	0.0000	
4	7.98	7.99	0.000000	1232007	PV	70.4339	TCX
5	9.24		0.000000	18438	PV	0.0000	
6	11.86		0.000000	11058	BV	0.0000	
7	14.32	14.33	0.000000	1519687	BB	74.4647	ALDRIN
8	14.89	14.91	0.000000	818168	BB	68.2925	B-BHC
9	15.43		0.000000	10984	BV	0.0000	
10	16.07	16.10	0.000000	1297786	BV	82.5301	D-BHC
11	17.20	17.23	0.000000	1476934	PB	68.5992	HEPTACHLOR EPOXIDE
12	18.80	18.83	0.000000	1468231	BV	69.2564	G-CHLORDANE
13	19.08	19.11	0.000000	1512502	VV	64.9846	A-CHLORDANE
14	19.70	19.73	0.000000	2671501	VV	145.3724	4,4' DDE
15	20.27		0.000000	11512	VB	0.0000	
16	21.73		0.000000	19091	PB	0.0000	
17	23.73	23.75	0.000000	2192521	PB	130.2513	ENDOSULFAN II
18	25.30	25.30	0.000000	1402797	BV	134.8325	ENDRIN ALDEHYDE
19	25.74		0.000000	29076	VV	0.0000	
20	26.02	26.02	0.000000	1207759	PB	139.5928	ENDOSULFAN SULFATE
21	27.12	27.13	0.000000	1225657	VV	133.3110	ENDRIN KETONE
22	29.62		0.000000	16989	BV	0.0000	
23	30.24	#30.23	0.000000	1405226	FF	109.7405	DCB

Total Area : 19636980 Total ng inj : 1291.662

Report Time : 1136 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 015.RES

ILA Pesticide Standard Report

Sample Name : INDA L1 Inj 1648 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 005.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDA L1 Report No : 32.01
Result File : /DATA/LOOP/RESULT/D4RS01C 005.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904R
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1648 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 5 Bottle no. : 6

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline
SpecialInteg

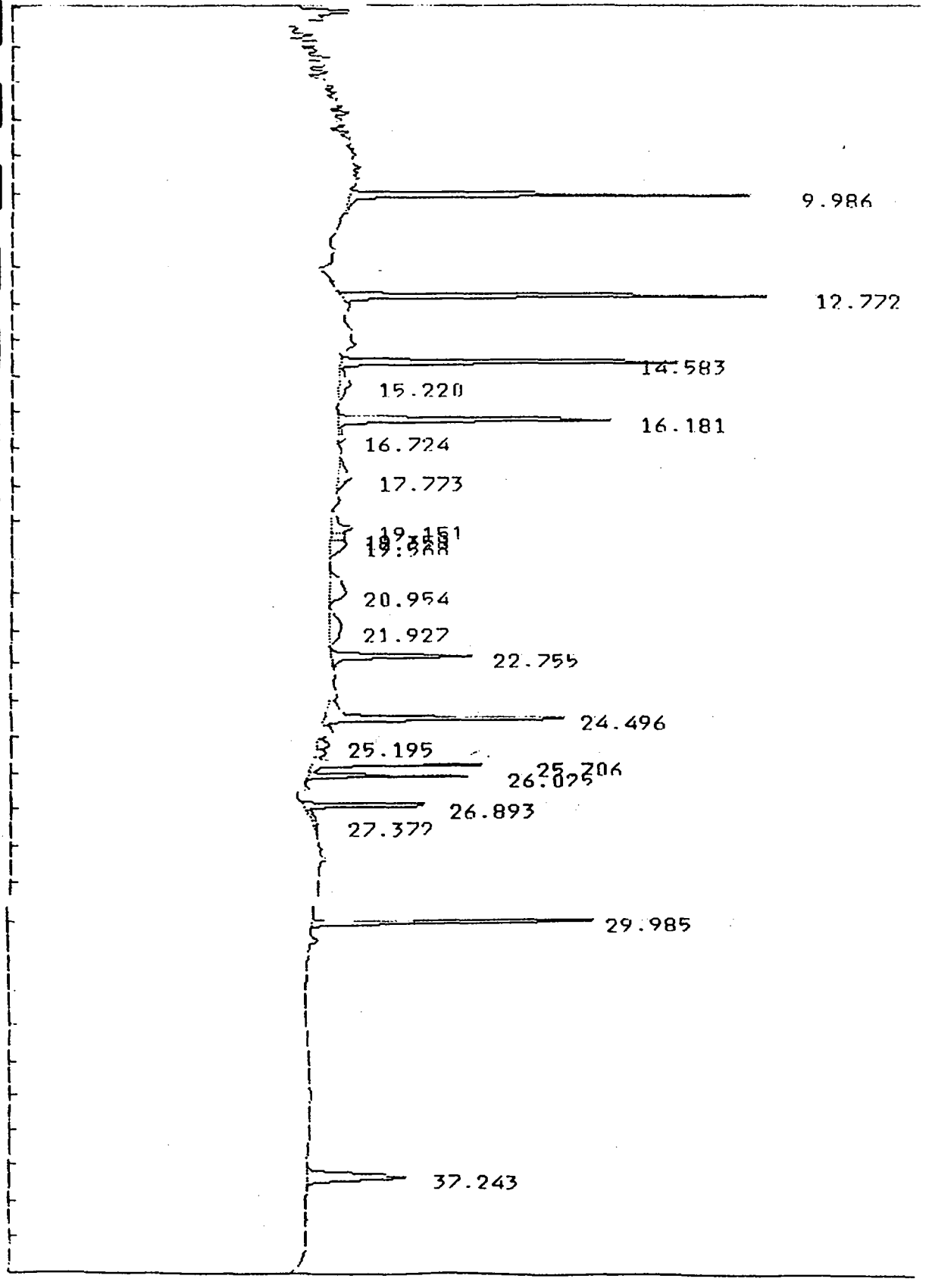
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	10.01	#10.01	0.000000	123898	FF	.0240	TCX
2	12.79	12.76	0.000000	149690	FF	.0233	A-BHC
3	14.60	14.57	0.000000	131036	FF	.0223	G-BHC
4	16.20	16.15	0.000000	115805	FF	.0230	HEPTACHLOR
5	22.78	22.72	0.000000	74749	FF	.0257	ENDOSULFAN I
6	24.52	24.45	0.000000	116660	FF	.0459	DIELDRIN
7	25.72	25.68	0.000000	55581	FF	.0558	ENDRIN
8	26.04	26.02	0.000000	41814	FF	.0422	4,4' DDD
9	26.91	26.87	0.000000	40456	FF	.0404	4,4' DDT
10	29.99	29.94	0.000000	107815	BV	.2011	METHOXYCHLOR
11	37.23		0.000000	62311	BB	0.0000	

Total Area : 1019818 Total ng inj : .504

Report Time : 2153 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904RP*.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 005.RES

IFA Pesticide Standard Report

Sample Name : INDA L2 Inj 1737 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 006.RES GC : HP5890AH
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



HA Pesticide Standard Report

Sample Name : INDA L2 Report No : 33.00
Result File : /DATA/LOOP/RESULT/D4BS01C 006.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1737 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4BS01C.SEQ
Subseq/Sample : 1/ 6 Bottle no. : 7

% Dil-Fact
100.00

Run Status : RunStatusOK

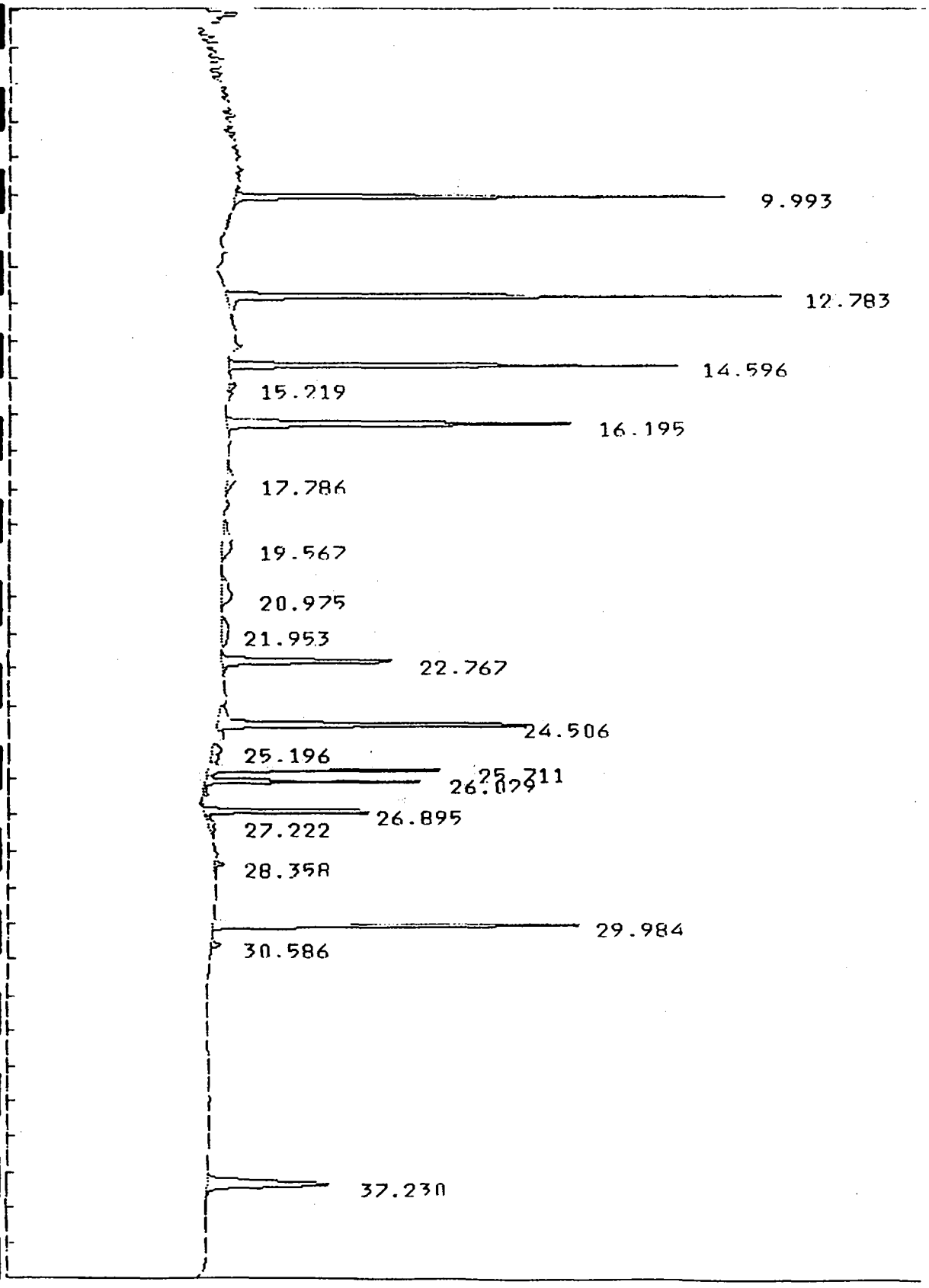
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.01	.082516	241246	BB	.0467	TCX
2	12.77	12.76	.091991	290749	VV	.0452	A-BHC
3	14.58	14.57	.098732	256325	BV	.0436	G-BHC
4	15.22		.506536	39055	VV	0.0000	
5	16.18	16.15	.113670	222364	PV	.0442	HEPTACHLOR
6	16.72	16.74	.275846	10475	VV	.0021	D-BHC
7	17.77		.373035	32200	BV	0.0000	
8	19.15		.211297	32010	BV	0.0000	
9	19.36		.173550	16976	VV	0.0000	
10	19.57		.336638	35055	VV	0.0000	
11	20.95		.574162	65163	VV	0.0000	
12	21.93		.667657	52690	VV	0.0000	
13	22.76	22.72	.131883	130168	PV	.0448	ENDOSULFAN I
14	24.50	24.45	.130278	240009	VV	.0945	DIELDRIN
15	25.20		.203917	16689	VV	0.0000	
16	25.71	25.68	.080362	108438	VV	.1088	ENDRIN
17	26.03	26.02	.065341	83118	VV	.0849	4,4' DDD
18	26.89	26.87	.073004	86016	BV	.0860	4,4' DDT
19	27.37		.375670	14990	VV	0.0000	
20	29.99	29.94	.099962	212672	BV	.3967	METHOXYCHLOR
21	37.24		.181536	123853	BB	0.0000	

Total Area : 2310262 Total ng inj : .998

Report Time : 1820 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4BS01C 006.RES

ICA Pesticide Standard Report

Sample Name : INDA L3 Inj 1825 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 007.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDA L3 Report No : 34.00
Result File : /DATA/LOOP/RESULT/D4BS01C 007.RLS
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1825 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4BS01C.SEQ
Subseq/Sample : 1/ 7 Bottle no. : 8

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline

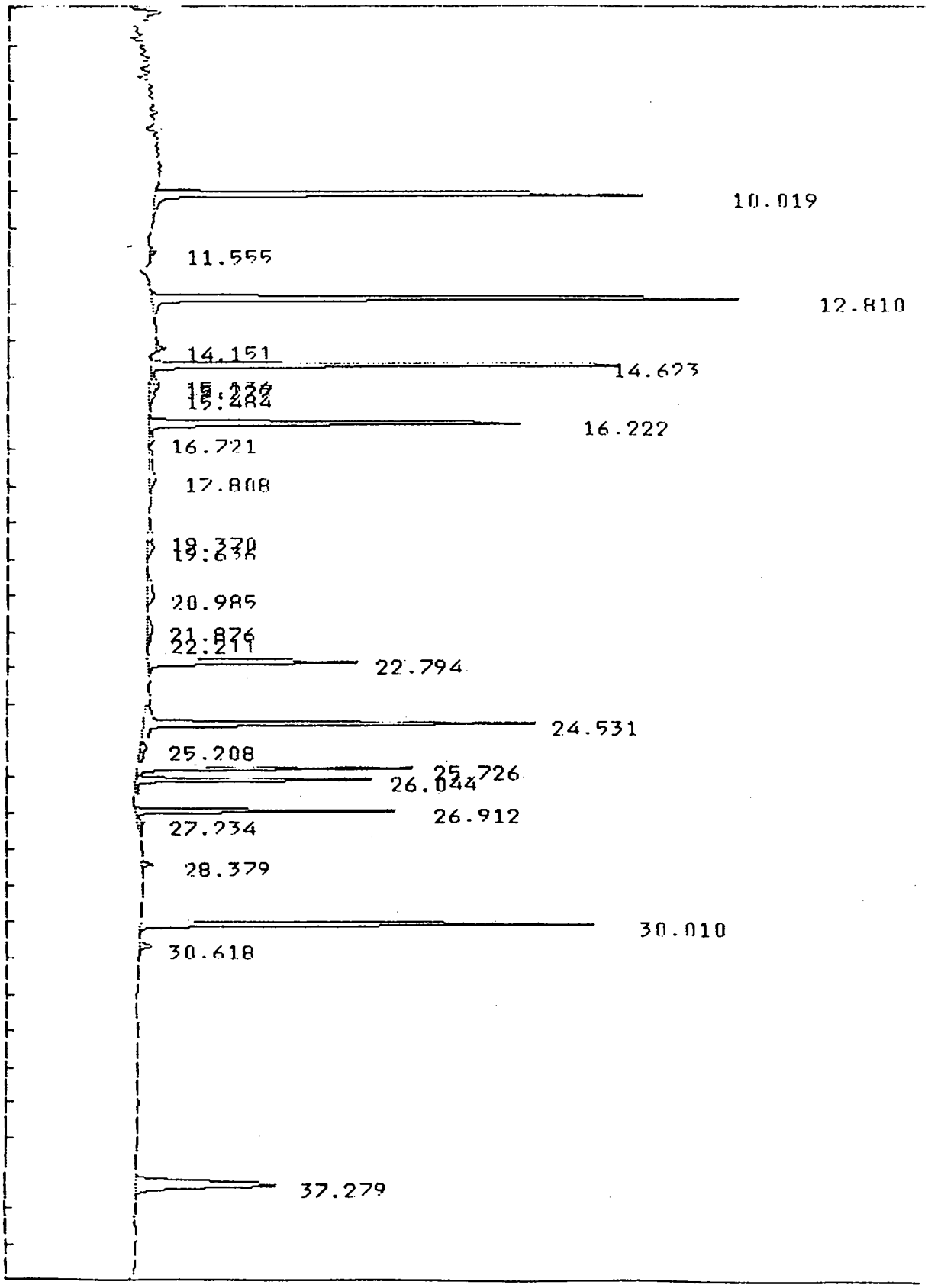
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.01	.082779	446930	BV	.0865	TCX
2	12.78	12.76	.097128	584793	BV	.0909	A-BHC
3	14.60	14.57	.099021	479454	BV	.0816	G-BHC
4	15.22		.164386	11151	VV	0.0000	
5	16.19	16.15	.114766	421787	PV	.0838	HEPTACHLOR
6	17.79		.368669	31314	BV	0.0000	
7	19.57		.661694	64725	BV	0.0000	
8	20.97		.573867	63509	PV	0.0000	
9	21.95		.680092	54588	VV	0.0000	
10	22.77	22.72	.131492	243988	PV	.0839	ENDOSULFAN I
11	24.51	24.45	.122450	441284	VV	.1737	DIELDRIN
12	25.20		.391161	36628	VV	0.0000	
13	25.71	25.68	.077176	204013	VV	.2047	ENDRIN
14	26.03	26.02	.079762	180241	VB	.1842	4,4' DDD
15	26.89	26.87	.079305	173966	BV	.1739	4,4' DDT
16	27.22	27.18	.290134	23562	VV	.0268	ENDRIN ALDEHYDE
17	28.36		.111679	11951	VV	0.0000	
18	29.98	29.94	.100578	419879	BV	.7833	METHOXYCHLOR
19	30.59	30.54	.115230	11673	PB	.0087	ENDRIN KETONE
20	37.23		.187429	239521	BB	0.0000	

Total Area : 4144957 Total ng inj : 1.982

Report Time : 1909 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4BS01C 007.RFS

IEA Pesticide Standard Report

Sample Name : INDA I 4 Inj 1914 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 008.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDA L4 Report No : 35.00
Result File : /DATA/LOOP/RESULT/D4RS01C 008.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP5890AH
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1914 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 8 Bottle no. : 9

% Dil-Fact
100.00

Run Status : RunStatusOK

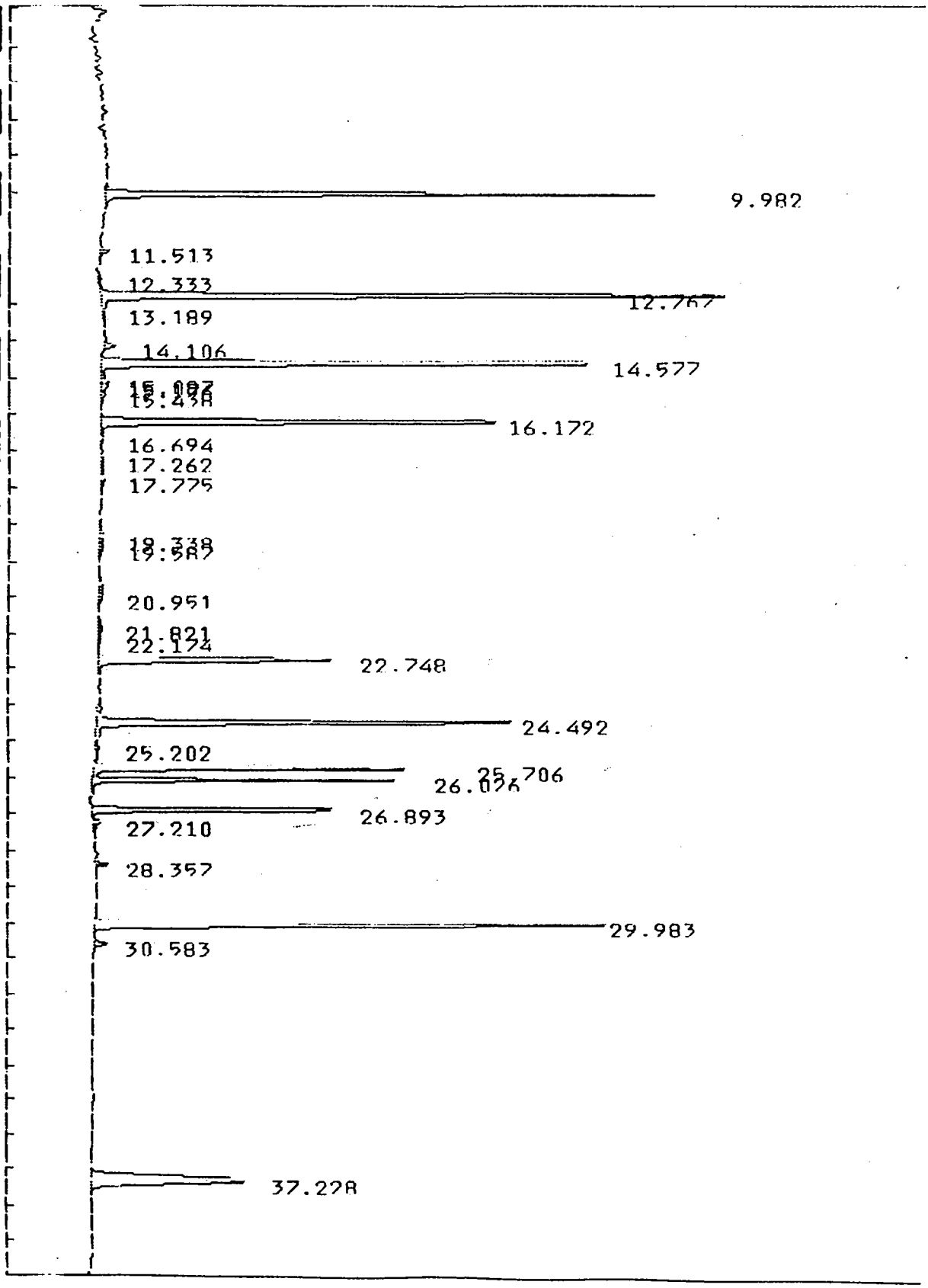
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	10.02	#10.01	.086821	809244	PB	.1567	TCX
2	11.56		.081087	11350	BV	0.0000	
3	12.81		.097072	1065581	BV	0.0000	
4	14.15		.088285	14491	VB	0.0000	
5	14.62		.103307	922661	BV	0.0000	
6	15.14		.197165	31264	VV	0.0000	
7	15.23		.169792	26233	VV	0.0000	
8	15.48		.231046	23719	VV	0.0000	
9	16.22		.118561	805548	VV	0.0000	
10	16.72	16.74	.255292	17658	VV	.0036	D-BHC
11	17.81	17.84	.641368	71546	PV	.0151	ALDRIN
12	19.37		.378814	31479	BV	0.0000	
13	19.64		.315557	29936	VV	0.0000	
14	20.99		.568404	65772	VV	0.0000	
15	21.88		.501649	41468	VV	0.0000	
16	22.21		.219791	13694	VV	0.0000	
17	22.79		.127707	459492	PV	0.0000	
18	24.53		.123794	843001	VV	0.0000	
19	25.21		.368543	35411	VV	0.0000	
20	25.73	25.68	.074458	383391	VV	.3846	ENDRIN
21	26.04	26.02	.069537	353516	VB	.3612	4,4' DDD
22	26.91	26.87	.074055	351937	BV	.3519	4,4' DDT
23	27.23	27.18	.198140	27537	VB	.0313	ENDRIN ALDEHYDE
24	28.38		.085226	18094	VV	0.0000	
25	30.01	29.94	.102223	819924	BV	1.5295	METHOXYCHLOR
26	30.62		.118578	23898	PB	0.0000	
27	37.28		.191586	458190	BB	0.0000	

Total Area : 7756040 Total ng inj : 2.834

Report Time : 1957 09Nov1999
Method : /DATA/LOOP/METHOD/HP5890AP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 008.RES

IEA Pesticide Standard Report

Sample Name : INDA L5 Inj 2002 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 009.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDA 1.5 Report No : 36.00
Result File : /DATA/LOOP/RESULT/D4RS01C 009.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2002 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 9 Bottle no. : 10

% Dil-Fact
100.00

Run Status : RunStatusOK

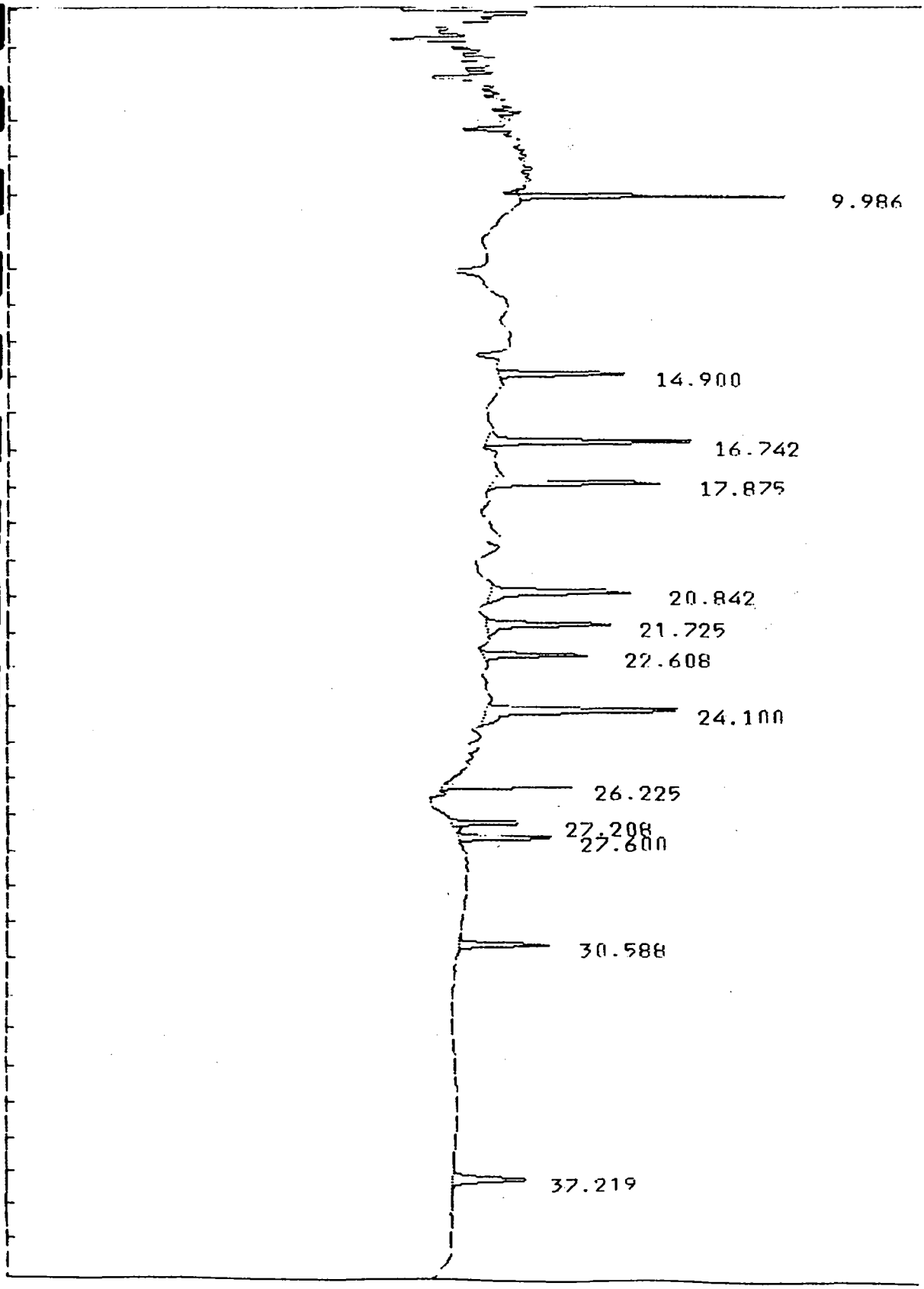
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.98	#10.01	.084963	1423485	BB	.2756	TOX
2	11.51		.086860	25368	BV	0.0000	
3	12.33		.176967	13727	BV	0.0000	
4	12.77	12.76	.099103	1940536	VV	.3018	A-BHC
5	13.19		.152355	11208	VV	0.0000	
6	14.11		.098391	34678	VB	0.0000	
7	14.58	14.57	.104899	1690329	BV	.2878	G-BHC
8	15.09		.176800	38887	VV	0.0000	
9	15.18		.135400	26940	VV	0.0000	
10	15.44		.178591	24805	VV	0.0000	
11	16.17	16.15	.119809	1447803	VV	.2875	HEPTACHLOR
12	16.69	16.74	.228993	12746	VV	.0026	D-BHC
13	17.26		.221173	10201	VV	0.0000	
14	17.78		.408269	41622	VV	0.0000	
15	19.34		.399049	36041	BV	0.0000	
16	19.59		.331105	33099	VV	0.0000	
17	20.95		.571433	66889	VV	0.0000	
18	21.82		.454178	39597	PV	0.0000	
19	22.17		.220835	15244	VV	0.0000	
20	22.75	22.72	.128350	852597	PB	.2931	ENDOSULFAN I
21	24.49	24.45	.124733	1546541	VV	.6088	DIELDRIN
22	25.20		.204877	19819	VV	0.0000	
23	25.71	25.68	.072842	735326	VV	.7377	ENDRIN
24	26.03	26.02	.069437	672918	VB	.6876	4,4' DDD
25	26.89	26.87	.072916	677586	BV	.6774	4,4' DDT
26	27.21	27.18	.157396	32913	VV	.0374	ENDRIN ALDEHYDE
27	28.36		.083722	35492	VV	0.0000	
28	29.98	29.94	.101270	1571945	BV	2.9324	METHOXYCHLOR
29	30.58	30.54	.119822	45526	PB	.0338	ENDRIN KETONE
30	37.23		.191486	835244	BV	0.0000	

Total Area : 13959112 Total ng inj : 7.164

Report Time : 2046 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 009.RES

IEA Pesticide Standard Report

Sample Name : INDR L1 Inj 2053 09Nov1999
Result : /DATA/LOOP/RESULT/D4RS01C 010.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDB L1 Report No : 37.01
Result File : /DATA/LOOP/RESULT/D4RS01C 010.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2053 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 10 Bottle no. : 11

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

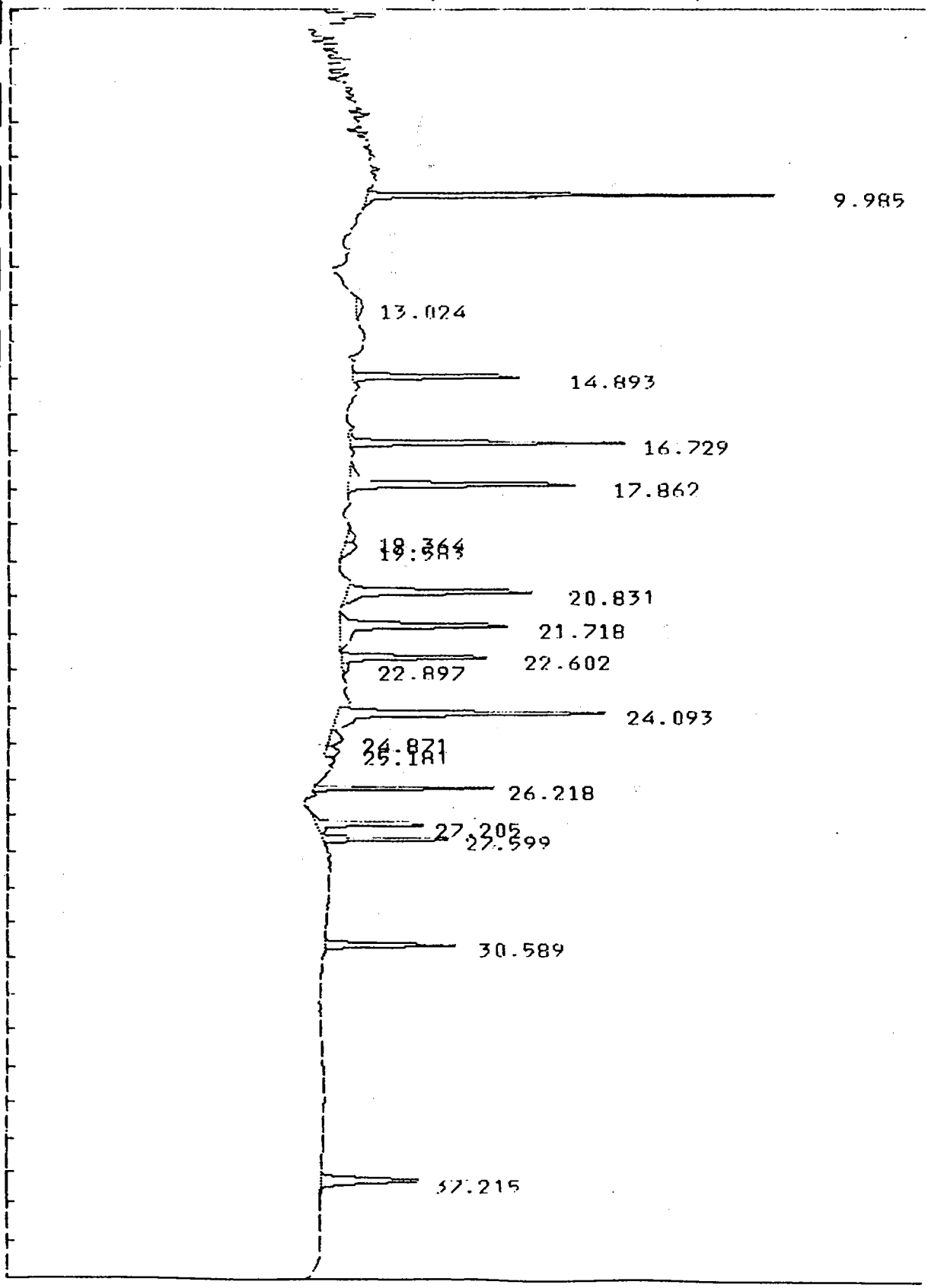
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.01	0.000000	93807	BV	.0182	TCX
2	14.90	14.91	0.000000	60156	FF	.0207	B-BHC
3	16.74	16.74	0.000000	98709	FF	.0202	D-BHC
4	17.88	17.84	0.000000	98478	FF	.0207	ALDRIN
5	20.84	20.81	0.000000	90203	FF	.0232	HEPTACHLOR EPOXIDE
6	21.72	21.69	0.000000	81723	FF	.0247	G-CHLORDANE
7	22.61	22.57	0.000000	62776	FF	.0212	A-CHLORDANE
8	24.10	24.10	0.000000	127869	FF	.0449	4,4' DDE
9	26.22	26.20	0.000000	45319	FF	.0374	ENDOSULFAN II
10	27.21	27.18	0.000000	32124	FF	.0365	ENDRIN ALDEHYDE
11	27.60	27.57	0.000000	41630	FF	.0391	ENDOSULFAN SULFATE
12	30.59	30.54	0.000000	44842	BB	.0333	ENDRIN KETONE
13	37.22	37.12	0.000000	62355	BB	.0380	DCB

Total Area : 939992 Total ng inj : .378

Report Time : 2156 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP*.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 010.RES

ILA Pesticide Standard Report

Sample Name : INDB L2 Inj 2143 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 011.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



TLA Pesticide Standard Report

Sample Name : INDB L2 Report No : 38.00
Result File : /DATA/LOOP/RESULT/D4RS01C 011.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904R
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 2143 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 11 Bottle no. : 12

% Dil-Fact
100.00

Run Status : RunStatusOK

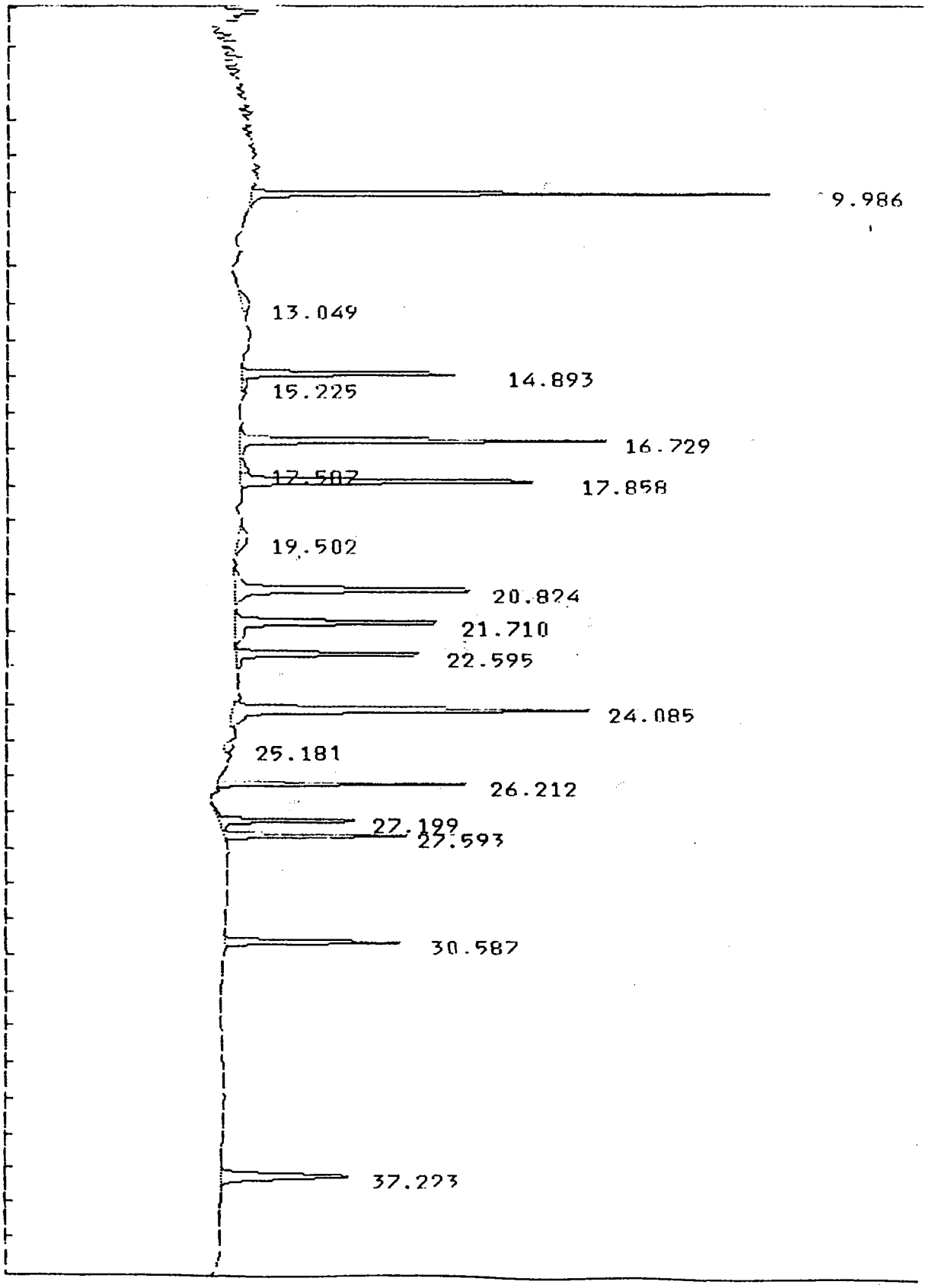
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.98	#10.00	.081863	234934	BV	.0455	TCX
2	13.02		.395483	15732	BV	0.0000	
3	14.89	14.91	.097344	120145	BV	.0413	B-BHC
4	16.73	16.75	.103761	193500	VV	.0396	D-BHC
5	17.86	17.87	.134535	210553	BV	.0443	ALDRIN
6	19.36		.218823	11631	BV	0.0000	
7	19.58		.302299	22914	VV	0.0000	
8	20.83	20.84	.135236	175123	BV	.0450	HEPTACHLOR EPOXIDE
9	21.72	21.72	.158244	186306	PV	.0564	G-CHLORDANE
10	22.60	22.60	.123609	125047	PV	.0422	A-CHLORDANE
11	22.90		.235736	10244	VV	0.0000	
12	24.09	24.11	.145686	270765	VV	.0951	4,4' DDE
13	24.87		.312644	25807	VV	0.0000	
14	25.18		.210752	18245	VV	0.0000	
15	26.22	26.22	.070644	93512	VV	.0772	ENDOSULFAN II
16	27.20	27.20	.096185	86077	BV	.0979	ENDRIN ALDEHYDE
17	27.60	27.59	.080765	84766	VV	.0796	ENDOSULFAN SULFATE
18	30.59	30.58	.106412	93192	BB	.0693	ENDRIN KETONE
19	37.22	37.24	.184707	123874	BB	.0756	DCB

Total Area : 2102367 Total ng inj : .809

Report Time : 2227 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 011.RES

IEA Pesticide Standard Report

Sample Name : INDR L3 Inj 2234 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 012.RES GC : HP5890A
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

Sample Name : INDB L3 Report No : 39.00
Result File : /DATA/LOOP/RESULT/D4RS01C 012.RLS
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 2234 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 12 Bottle no. : 13

% Dil-Fact
100.00

Run Status : RunStatusOK

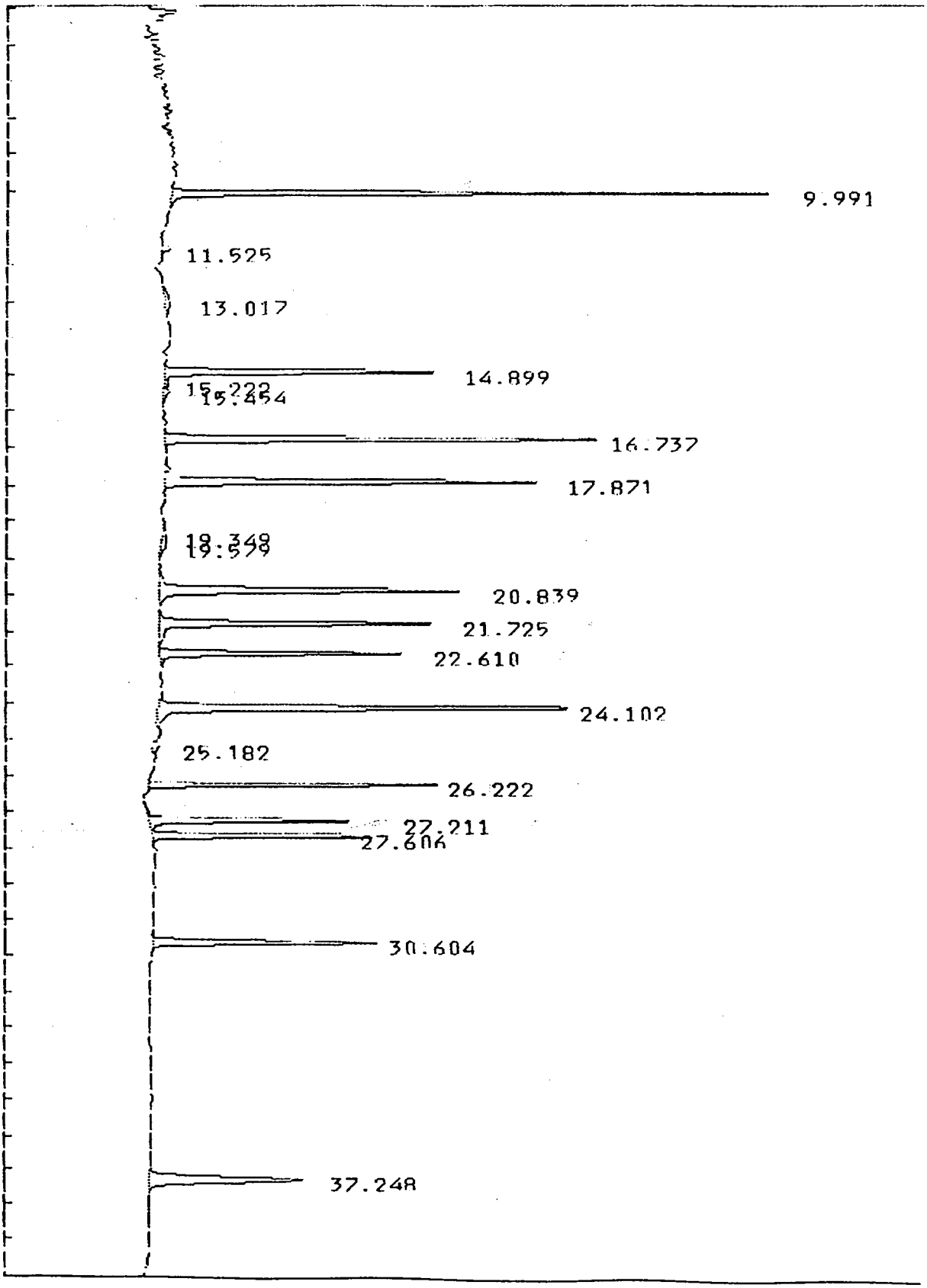
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.00	.084756	453676	BB	.0878	TCX
2	13.05		.466442	30122	BV	0.0000	
3	14.89	14.91	.100031	231127	BV	.0794	B-BHC
4	15.22		.244038	13757	VV	0.0000	
5	16.73	16.75	.108456	396587	VV	.0811	D-BHC
6	17.59		.260935	18523	VV	0.0000	
7	17.86	17.87	.123271	375561	VV	.0791	ALDRIN
8	19.50		.511865	43406	BV	0.0000	
9	20.82	20.84	.144410	365817	VV	.0940	HEPTACHLOR EPOXIDE
10	21.71	21.72	.146117	321136	VV	.0972	G-CHLORDANE
11	22.59	22.60	.130010	251735	PV	.0850	A-CHLORDANE
12	24.09	24.11	.136815	489967	VV	.1721	4,4' DDE
13	25.18		.213655	17955	VV	0.0000	
14	26.21	26.22	.070737	186367	PV	.1540	ENDOSULFAN II
15	27.20	27.20	.089417	153882	BV	.1750	ENDRIN ALDEHYDE
16	27.59	27.59	.079990	166941	VV	.1567	ENDOSULFAN SULFATE
17	30.59	30.58	.107648	188208	BB	.1399	ENDRIN KETONE
18	37.22	37.24	.188763	239767	BB	.1463	DCB

Total Area : 3944532 Total ng inj : 1.548

Report Time : 2317 09Nov1999
Method : /DATA/LOOP/METHOD/HP589048P.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 012.RLS

IEA Pesticide Standard Report

Sample Name : INDR L4 Inj 2325 09Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 013.RES GC : HP5890A
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

Sample Name : INDB L4 Report No : 40.00
Result File : /DATA/LOOP/RESULT/D4BS01C 013.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2325 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4BS01C.SEQ
Subseq/Sample : 1/ 13 Bottle no. : 14

% Dil-Fact
100.00

Run Status : RunStatusOK

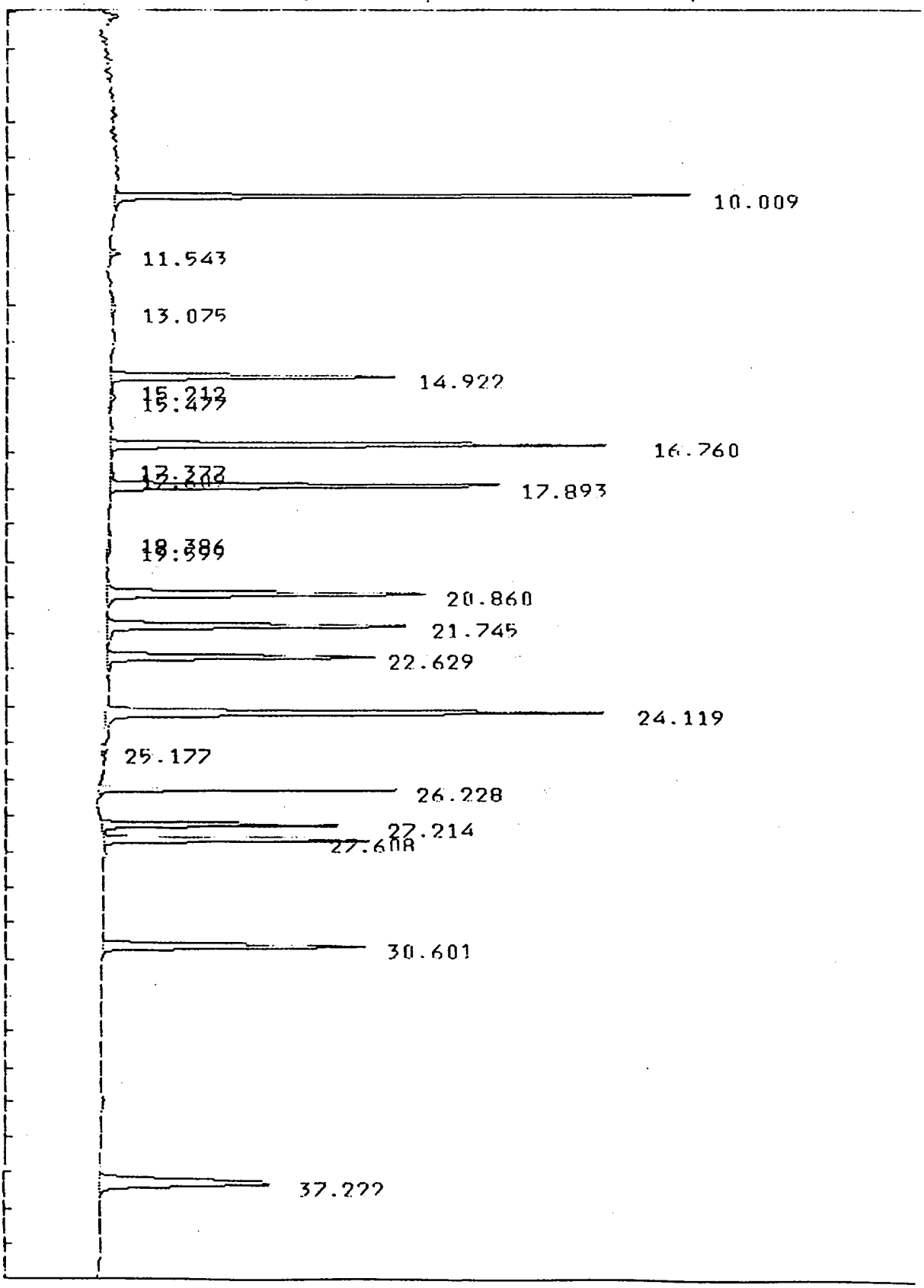
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.00	.084532	808447	BB	.1565	TCX
2	11.52		.087365	12805	BV	0.0000	
3	13.02		.534720	36956	PV	0.0000	
4	14.90	14.91	.102375	439894	VV	.1511	B-BHC
5	15.22		.202709	14028	VV	0.0000	
6	15.45		.179494	15312	VV	0.0000	
7	16.74	16.75	.104053	728459	VV	.1490	D-BHC
8	17.87	17.87	.121320	701393	VV	.1477	ALDRIN
9	19.35		.231197	13167	BV	0.0000	
10	19.58		.309161	23718	VV	0.0000	
11	20.84	20.84	.133034	631119	VV	.1622	HEPTACHLOR EPOXIDE
12	21.73	21.72	.134395	566859	VV	.1717	G-CHLORDANE
13	22.61	22.60	.127656	478799	PV	.1617	A-CHLORDANE
14	24.10	24.11	.131952	913402	VV	.3209	4,4' DDE
15	25.18		.217733	17869	VV	0.0000	
16	26.22	26.22	.071196	377371	PV	.3117	ENDOSULFAN II
17	27.21	27.20	.084538	292563	BV	.3328	ENDRIN ALDEHYDE
18	27.61	27.59	.082275	336571	VV	.3160	ENDOSULFAN SULFATE
19	30.60	30.58	.108861	393904	PB	.2929	ENDRIN KETONE
20	37.25	37.24	.192988	455600	BB	.2780	DCB

Total Area : 7258236 Total ng inj : 2.959

Report Time : 0008 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4BS01C 013.RES

IEA Pesticide Standard Report

Sample Name : INDR L5 Inj 0015 10Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 014.RFS GC : HP5890A
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDB 15 Report No : 41.00
Result File : /DATA/LOOP/RESULT/D4RS01C 014.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 0015 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 14 Bottle no. : 15

% Dil-Fact
100.00

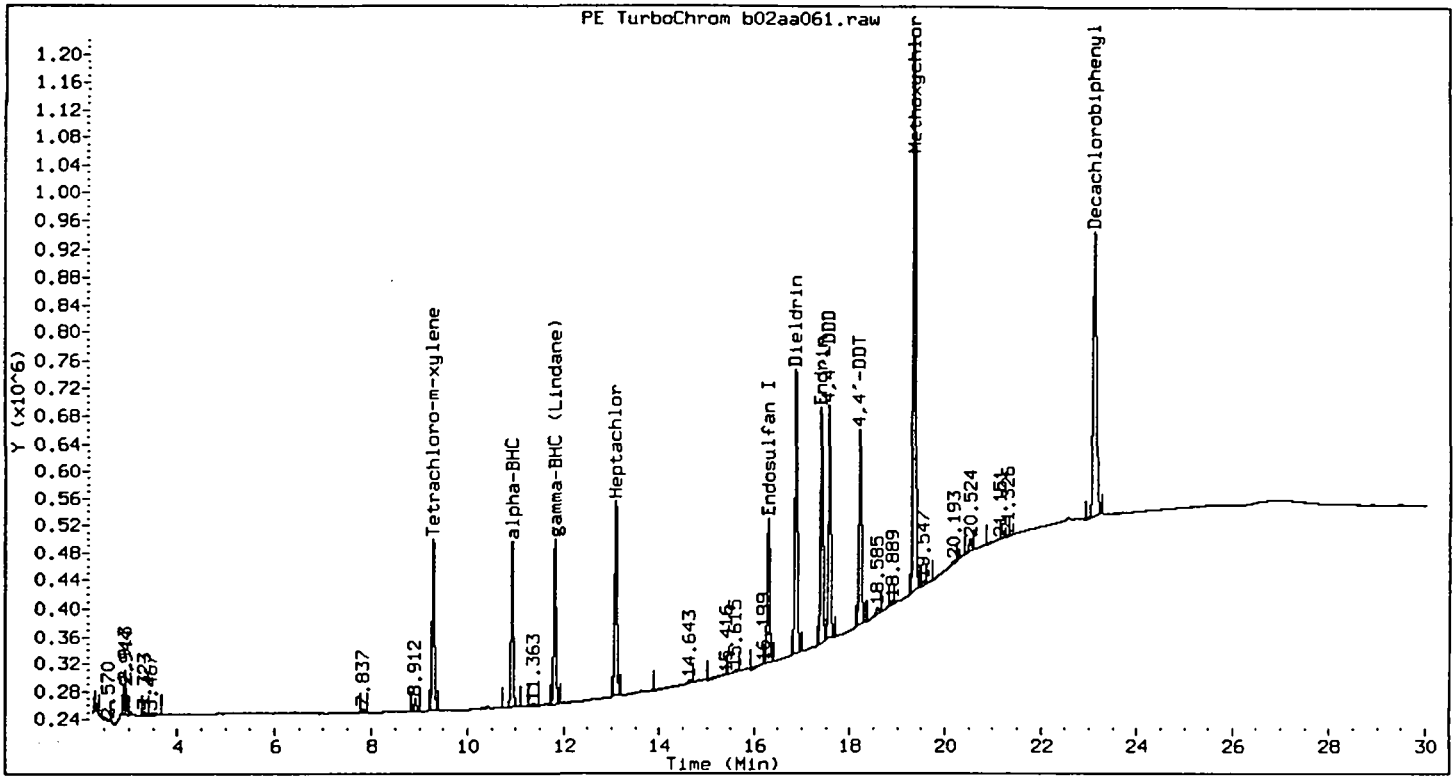
Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	10.01	#10.00	.086347	1459840	PB	.2827	TCX
2	11.54		.087502	24758	BV	0.0000	
3	13.07		.557640	36616	PV	0.0000	
4	14.92	14.91	.102377	789498	BV	.2712	B-BHC
5	15.21		.165310	10668	VV	0.0000	
6	15.48		.159672	21483	VV	0.0000	
7	16.76	16.75	.107629	1371774	VV	.2806	D-BHC
8	17.38		.195247	10258	VV	0.0000	
9	17.61		.144798	15958	VV	0.0000	
10	17.89	17.87	.123057	1293646	VV	.2725	ALDRIN
11	19.39		.204479	12727	BV	0.0000	
12	19.60		.321303	25454	VV	0.0000	
13	20.86	20.84	.131196	1113850	VV	.2862	HEPTACHLOR EPOXIDE
14	21.75	21.72	.131326	1019720	VV	.3088	G-CHLORDANE
15	22.63	22.60	.127980	888823	PV	.3001	A-CHLORDANE
16	24.12	24.11	.132306	1661849	VV	.5838	4,4' DDE
17	25.18		.222917	21611	VV	0.0000	
18	26.23	26.22	.074048	728827	VV	.6021	ENDOSULFAN II
19	27.21	27.20	.082508	536764	BV	.6105	ENDRIN ALDEHYDE
20	27.61	27.59	.082919	641848	VV	.6026	ENDOSULFAN SULFATE
21	30.60	30.58	.112301	762575	PB	.5669	ENDRIN KETONE
22	37.22	37.24	.192446	833428	BB	.5085	DCB

Total Area : 13281978 Total ng inj : 5.476

Report Time : 0058 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 014.RES

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/b02aa061.d Page 1
Report Date 12/13/1999 16:45



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/Bf8081.m
Sample Info : inda 13
Lab ID : inda 13
Inj Date : 28-NOV-1999 10:03
Operator : gds
Cpnd Sublist: INDA

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : OIL
Sample Type: CCALIB_3

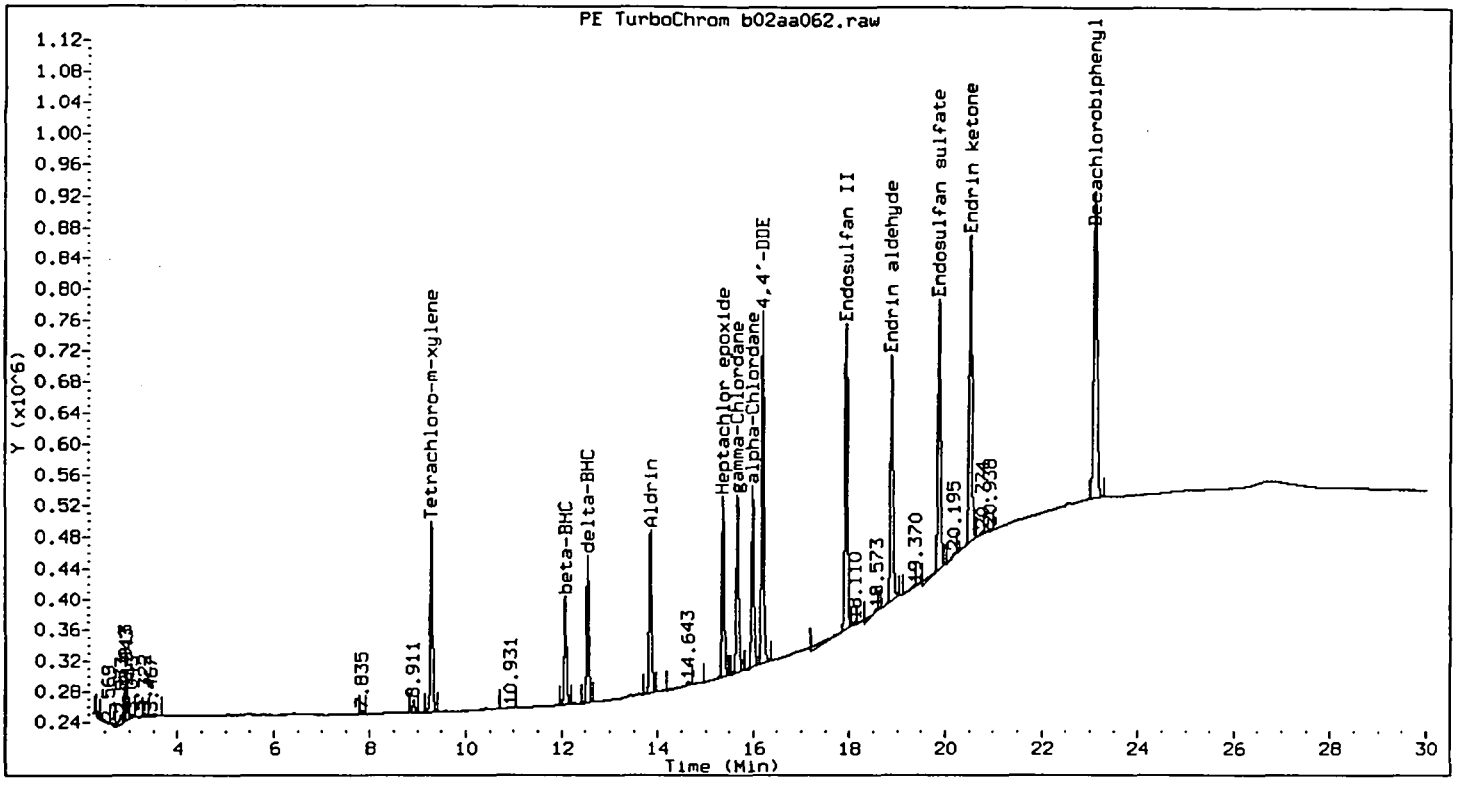
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		10.925	10.925	0.000	742498	22.620	22.620
gamma-BHC (Lindane)		11.815	11.815	0.000	751598	22.570	22.570
4,4'-DDD	(M)	17.573	17.573	0.000	1099919	47.684	47.684
4,4'-DDT	(M)	18.216	18.216	0.000	984450	34.577	34.577
Dieldrin	(M)	16.873	16.873	0.000	1421620	44.983	44.983
Endosulfan I		16.297	16.297	0.000	739891	22.379	22.379
Endrin	(M)	17.407	17.407	0.000	1206269	46.734	46.734
Heptachlor	(M)	13.090	13.090	0.000	956491	22.162	22.162
Methoxychlor	(M)	19.350	19.350	0.000	3147209	189.828	189.828

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	9.284	9.284	0.000	796814	22.867	22.867
Decachlorobiphenyl		23.119	23.119	0.000	1988600	45.474	45.474

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/b02aa062.d Page 1
Report Date 12/13/1999 16:45

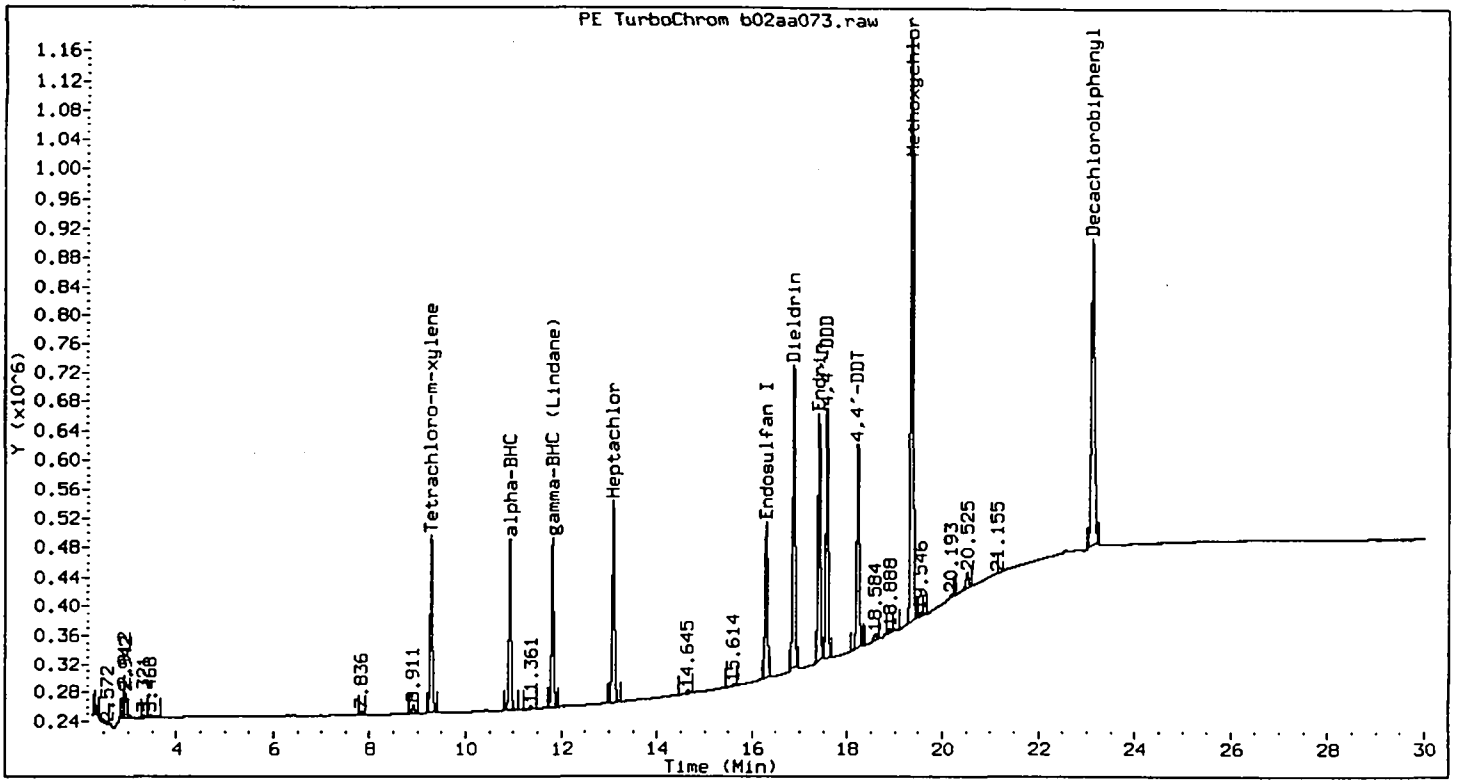


Method : /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/Bf8081.m
Sample Info : indb 13
Lab ID : indb 13
Inj Date : 28-NOV-1999 10:42
Operator : gds
Cpnd Sublist: INDB
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : OIL
Sample Type: CCALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	13.851	13.851	0.000	716365	20.765	20.765
beta-BHC	12.078	12.078	0.000	478092	21.487	21.487
delta-BHC	12.547	12.547	0.000	617228	20.344	20.344
4,4'-DDE	16.190	16.190	0.000	1495134	42.947	42.947
Endosulfan II	17.933	17.933	0.000	1552869	43.155	43.155
Endosulfan sulfate	19.875	19.875	0.000	1350653	41.818	41.818
Endrin aldehyde	18.886	18.886	0.000	1221039	42.513	42.513
Endrin ketone	20.523	20.523	0.000	1538782	42.418	42.418
Heptachlor epoxide	15.363	15.363	0.000	822506	21.217	21.217

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane	15.665	15.665	0.000	813796	20.786	20.786
alpha-Chlordane	15.982	15.982	0.000	820860	21.209	21.209
Tetrachloro-m-xylene	9.283	9.284	0.002	801270	22.995	22.995
Decachlorobiphenyl	23.113	23.119	0.007	1916273	43.820	43.820

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99e.b/b02aa073.d Page 1 **000539**
Report Date 12/13/1999 16:44



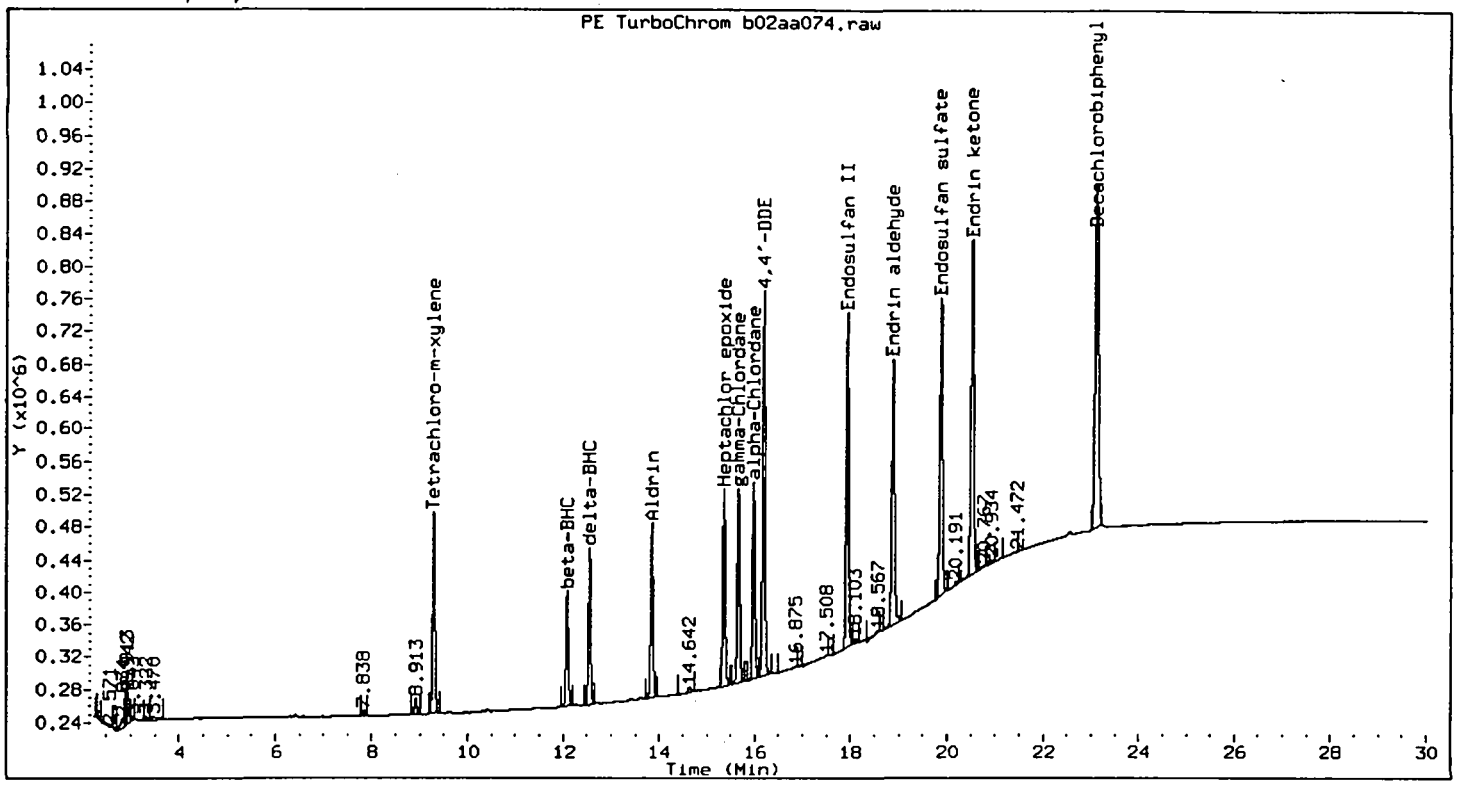
Method : /chem/HP58902.i/8081/front/11-26-99/26nov99e.b/Bf8081.m
Sample Info : inda 13
Lab ID : inda 13 Inst ID : HP58902.i
Inj Date : 28-NOV-1999 17:52 Dil Factor : 1
Operator : gds Sample Matrix : OIL
Cpnd Sublist: INDA Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		10.924	10.924	0.000	732437	22.314	22.314
gamma-BHC (Lindane)		11.814	11.814	0.000	746520	22.417	22.417
4,4'-DDD	(M)	17.572	17.572	0.000	1111740	48.197	48.197
4,4'-DDT	(M)	18.216	18.216	0.000	982112	34.494	34.494
Dieldrin	(M)	16.872	16.872	0.000	1415628	44.793	44.793
Endosulfan I	(M)	16.297	16.297	0.000	746784	22.588	22.588
Endrin	(M)	17.406	17.406	0.000	1188571	46.048	46.048
Heptachlor		13.089	13.089	0.000	956109	22.153	22.153
Methoxychlor		19.351	19.351	0.000	3144344	189.655	189.655

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	9.283	9.286	0.002	786622	22.575	22.575
Decachlorobiphenyl	(M)	23.117	23.112	0.006	2006405	45.882	45.882

COMMENTS:

M - Compound response manually integrated.



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99e.b/Bf8081.m
Sample Info : indb 13
Lab ID : indb 13 Inst ID : HP58902.i
Inj Date : 28-NOV-1999 18:31 Dil Factor : 1
Operator : gds Sample Matrix : WATER
Cpnd Sublist: INDB Sample Type: CCALIB_3

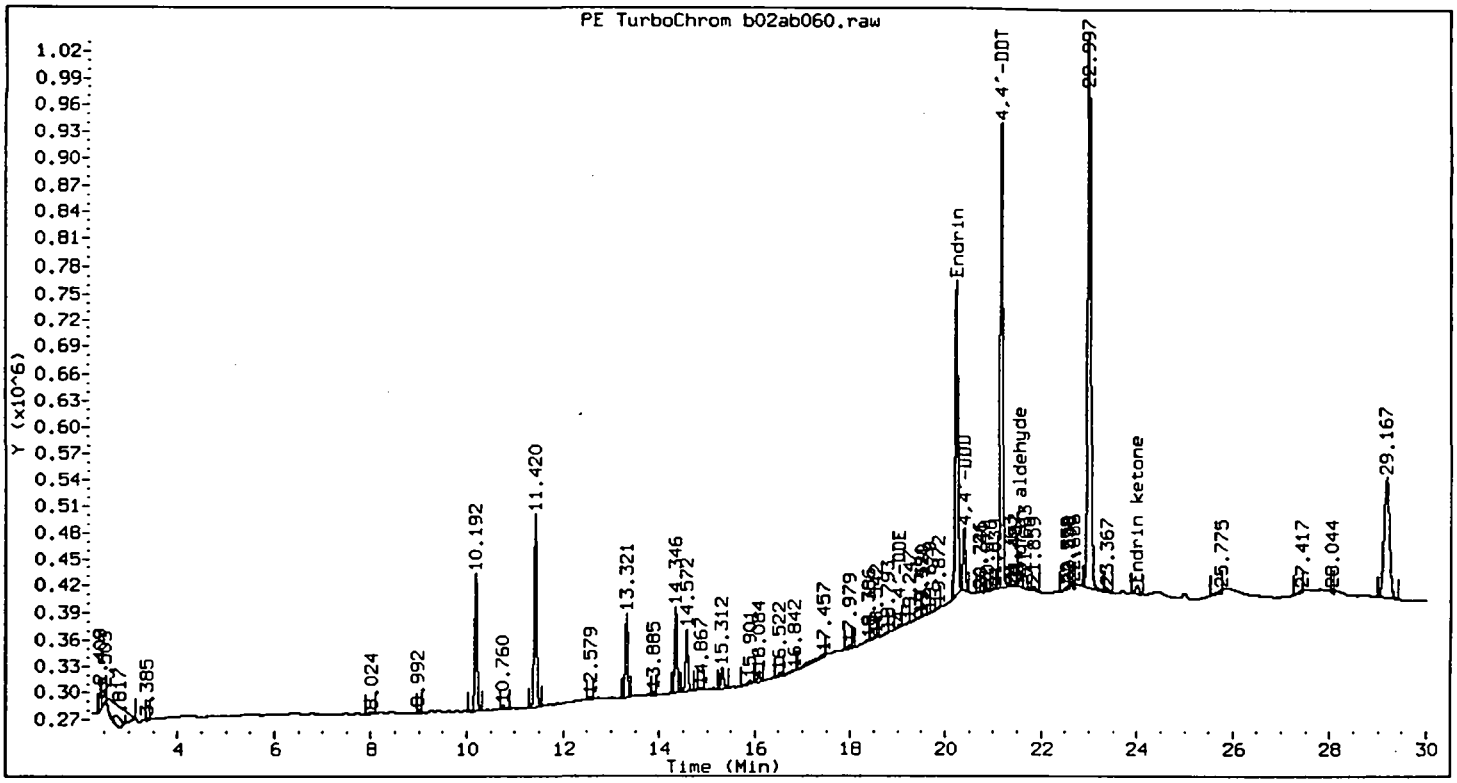
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Aldrin		13.854	13.854	0.000	731633	21.207	21.207
beta-BHC		12.083	12.083	0.000	484900	21.793	21.793
delta-BHC		12.552	12.552	0.000	628880	20.728	20.728
4,4'-DDE		16.188	16.188	0.000	1552297	44.589	44.589
Endosulfan II		17.931	17.931	0.000	1509310	41.945	41.945
Endosulfan sulfate	(M)	19.874	19.874	0.000	1368544	42.372	42.372
Endrin aldehyde		18.884	18.884	0.000	1266584	44.098	44.098
Endrin ketone		20.523	20.523	0.000	1599870	44.102	44.102
Heptachlor epoxide		15.362	15.362	0.000	847929	21.872	21.872

Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99e.b/b02aa074.d Page 2
Report Date 12/13/1999 16:44

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
gamma-Chlordane		15.664	15.664	0.000	857051	21.891	21.891
alpha-Chlordane		15.982	15.982	0.000	858293	22.176	22.176
Tetrachloro-m-xylene	(M)	9.286	9.286	0.000	794712	22.807	22.807
Decachlorobiphenyl	(M)	23.112	23.112	0.000	2000684	45.751	45.751

COMMENTS:

M - Compound response manually integrated.



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/Br8081.m
Sample Info : evalb
Lab ID : evalb
Inj Date : 28-NOV-1999 09:24
Operator : gds
Cpnd Sublist: END_DDT

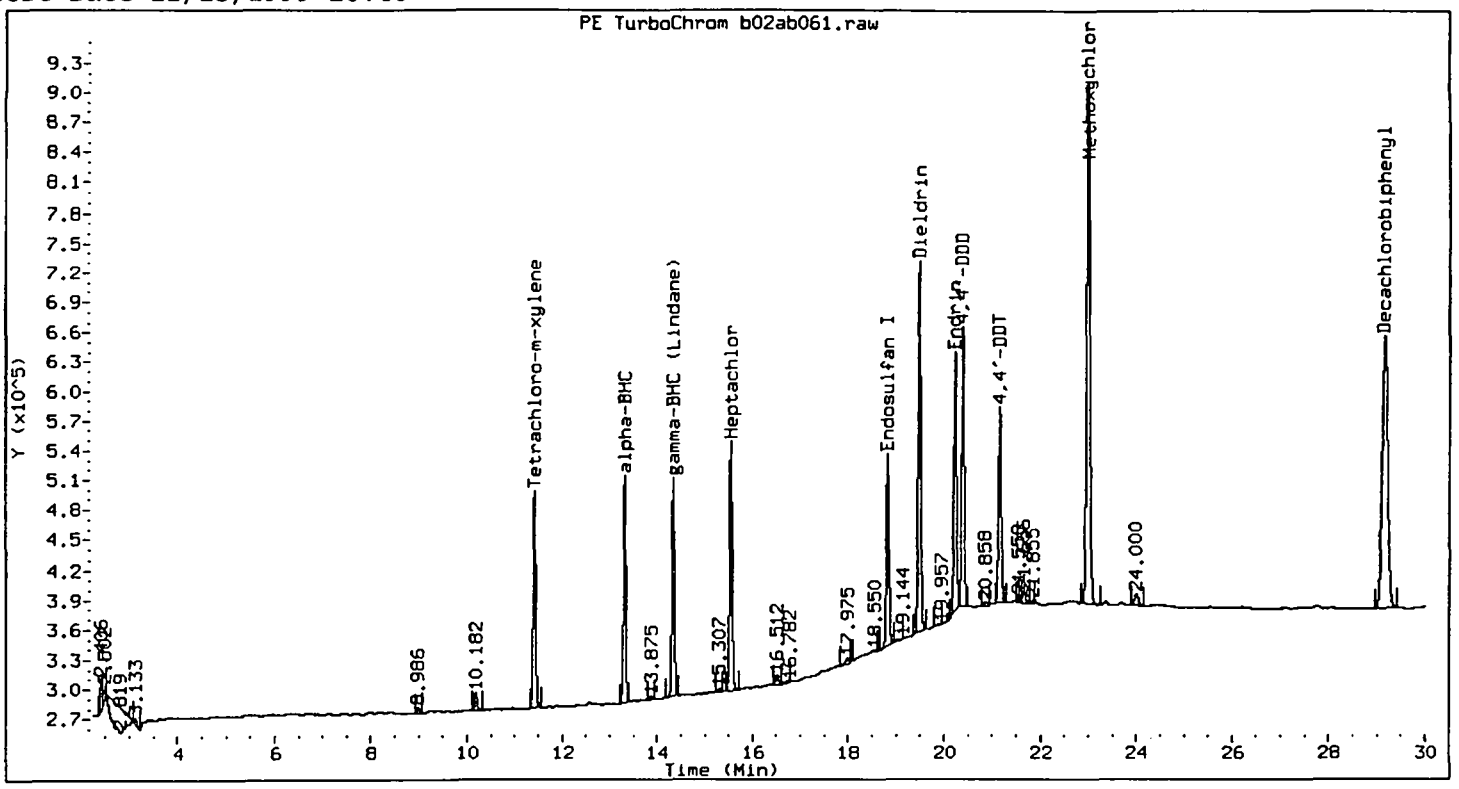
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: END/DDT

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
4,4'-DDD	(M)	20.392	20.387	0.005	256718	12.056	4.019
4,4'-DDE	(M)	19.027	19.017	0.010	10760	0.320	0.107
4,4'-DDT		21.167	21.158	0.008	2057989	96.489	32.163
Endrin	(M)	20.233	20.225	0.008	1368767	61.768	20.589
Endrin aldehyde	(M)	21.567	21.558	0.008	40332	1.479	0.493
Endrin ketone	(M)	24.006	23.994	0.012	54135	1.517	0.506

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/b02ab061.d Page 1
Report Date 12/13/1999 16:46



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/Br8081.m
Sample Info : inda 13
Lab ID : inda 13
Inj Date : 28-NOV-1999 10:03
Operator : gds
Cpnd Sublist: INDA

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : OIL
Sample Type: CCALIB_3

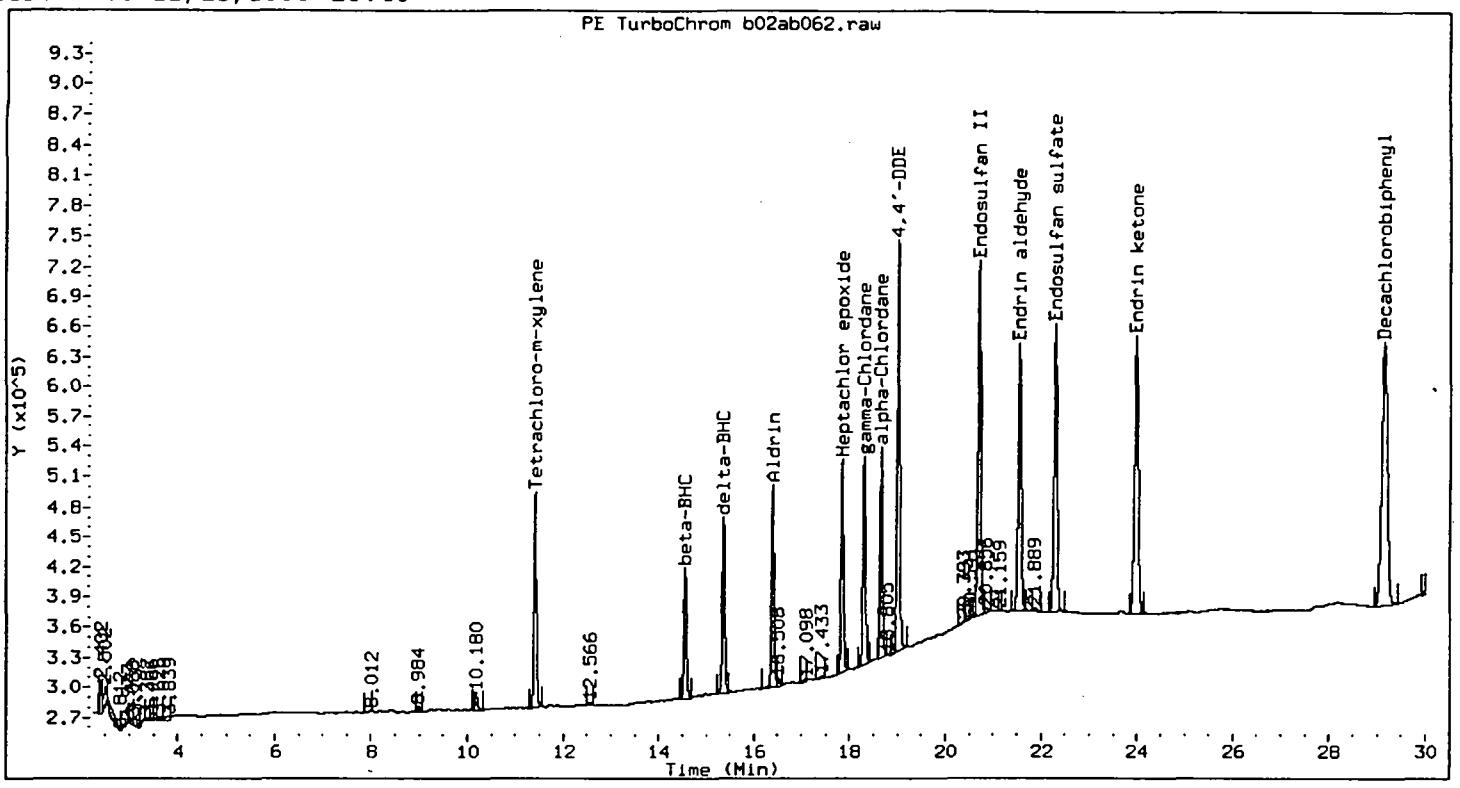
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC		13.316	13.316	0.000	750060	22.877	22.877
gamma-BHC (Lindane)	(M)	14.339	14.339	0.000	755095	22.488	22.488
4,4'-DDD	(M)	20.387	20.387	0.000	1003552	47.130	47.130
4,4'-DDT	(M)	21.158	21.158	0.000	774416	36.309	36.309
Dieldrin	(M)	19.483	19.483	0.000	1392966	45.067	45.067
Endosulfan I	(M)	18.821	18.821	0.000	727986	22.383	22.383
Endrin	(M)	20.225	20.225	0.000	1010688	45.609	45.609
Heptachlor	(M)	15.545	15.545	0.000	909262	22.963	22.963
Methoxychlor	(M)	22.992	22.992	0.000	2432392	202.354	202.354

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	11.412	11.409	0.003	764972	22.953	22.953
Decachlorobiphenyl	(M)	29.156	29.147	0.009	2164102	45.835	45.835

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/b02ab062.d Page 1
Report Date 12/13/1999 16:46



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/Br8081.m
Sample Info : indb 13
Lab ID : indb 13
Inj Date : 28-NOV-1999 10:42
Operator : gds
Cpnd Sublist: INDB
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : OIL
Sample Type: CCALIB_3

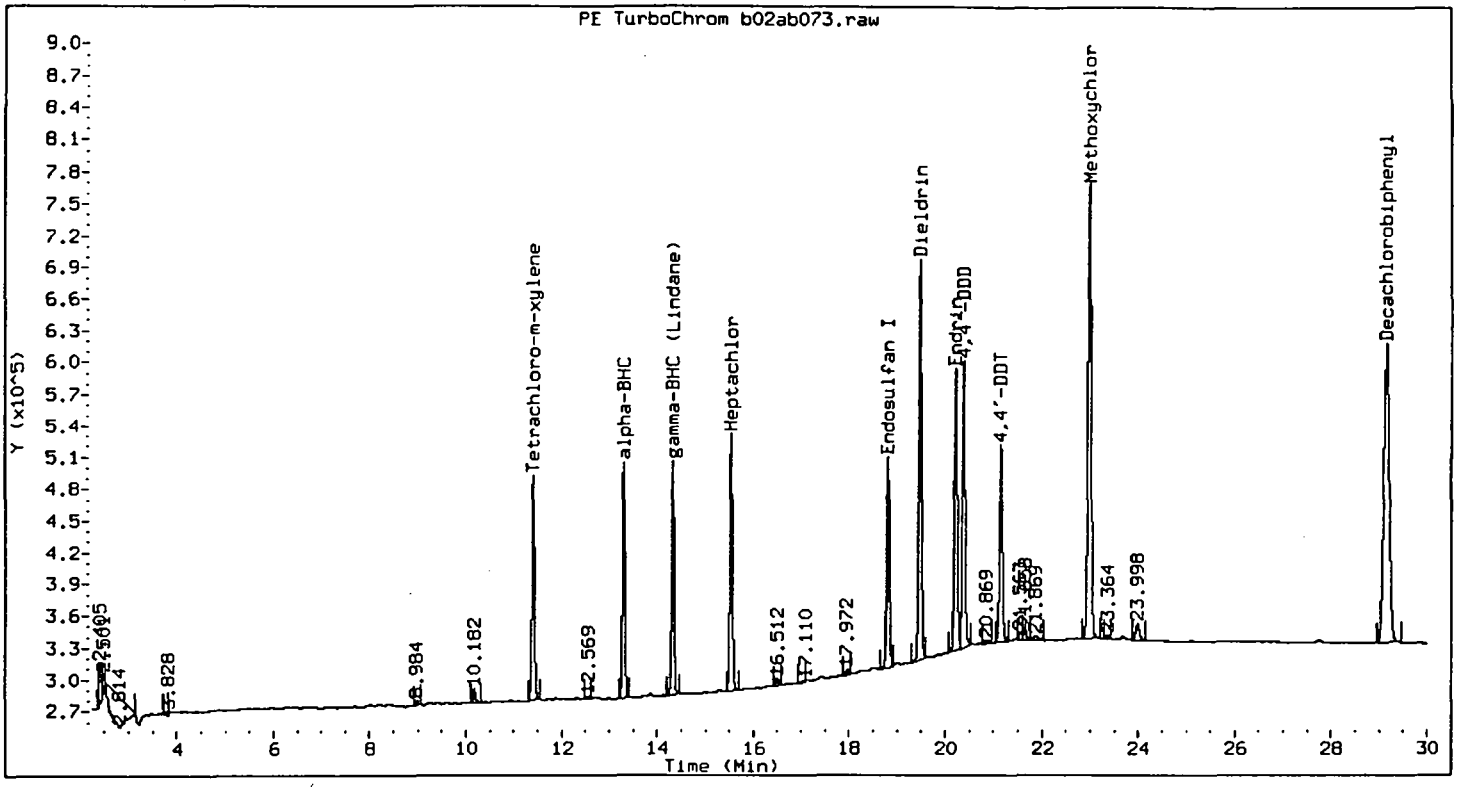
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Aldrin	(M)	16.398	16.398	0.000	745566	21.495	21.495
beta-BHC	(M)	14.561	14.561	0.000	483442	22.313	22.313
delta-BHC	(M)	15.367	15.367	0.000	631134	20.779	20.779
4,4'-DDE	(M)	19.017	19.017	0.000	1469805	43.688	43.688
Endosulfan II		20.716	20.716	0.000	1430619	43.683	43.683
Endosulfan sulfate		22.302	22.302	0.000	1314726	43.348	43.348
Endrin aldehyde		21.558	21.558	0.000	1185740	43.473	43.473
Endrin ketone	(M)	23.994	23.994	0.000	1507661	42.252	42.252
Heptachlor epoxide	(M)	17.846	17.846	0.000	780997	20.981	20.981

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
gamma-Chlordane	(M)	18.304	18.304	0.000	775411	21.313	21.313
alpha-Chlordane	(M)	18.661	18.661	0.000	775335	21.037	21.037
Tetrachloro-m-xylene	(M)	11.409	11.409	0.000	772894	23.191	23.191
Decachlorobiphenyl		29.147	29.147	0.000	2091282	44.293	44.293

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP58902.i/8081/rear/11-26-99/26nov99e.b/b02ab073.d Page 1
Report Date 12/13/1999 16:43



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99e.b/Br8081.m
Sample Info : inda 13
Lab ID : inda 13
Inj Date : 28-NOV-1999 17:52
Operator : gds
Cpnd Sublist: INDA

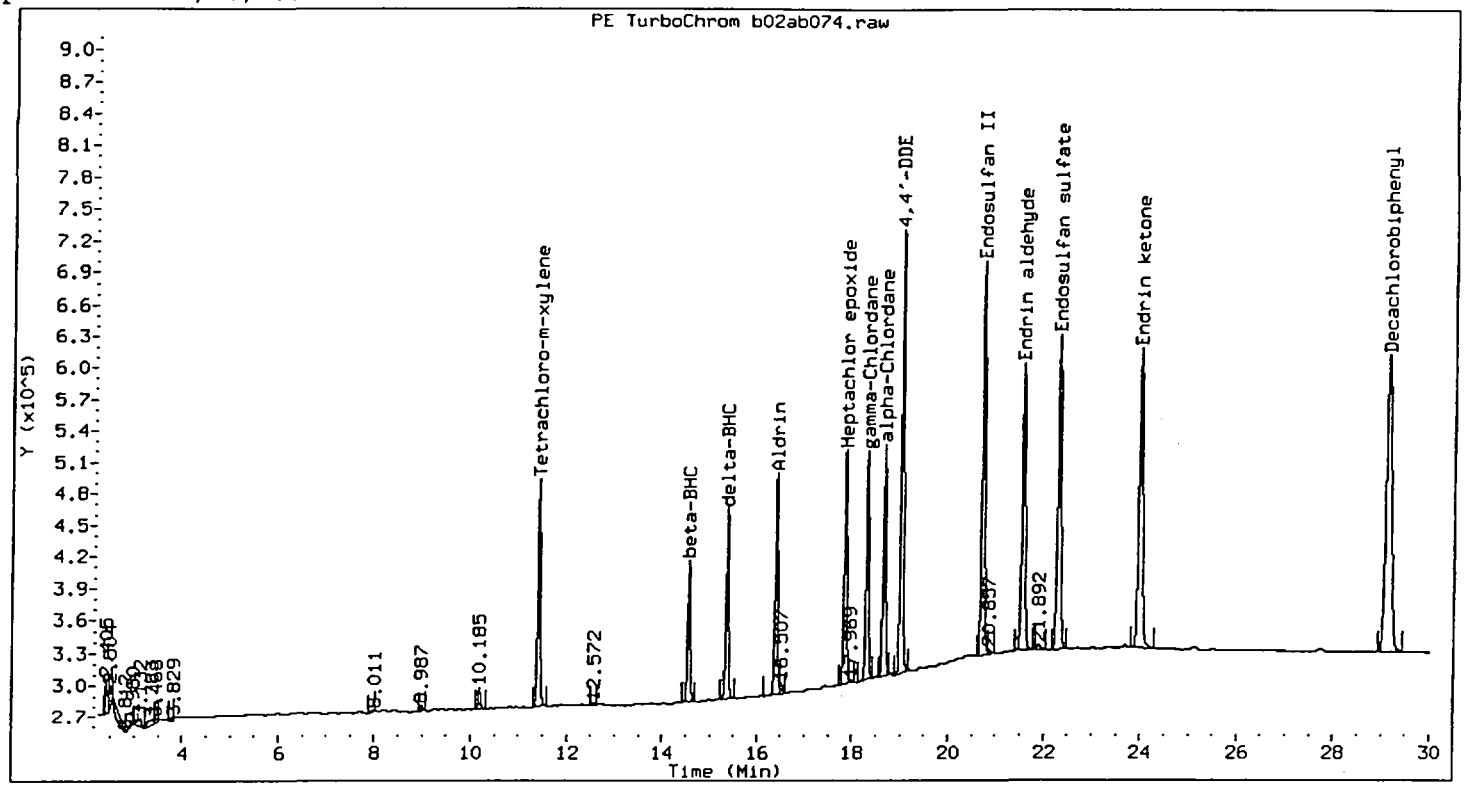
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : OIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
alpha-BHC	(M)	13.316	13.316	0.000	743442	22.675	22.675
gamma-BHC (Lindane)	(M)	14.340	14.340	0.000	756552	22.532	22.532
4,4'-DDD	(M)	20.389	20.389	0.000	1016892	47.756	47.756
4,4'-DDT	(M)	21.160	21.160	0.000	738503	34.625	34.625
Dieldrin		19.483	19.483	0.000	1433583	46.381	46.381
Endosulfan I		18.822	18.822	0.000	767640	23.603	23.603
Endrin	(M)	20.226	20.226	0.000	1045934	47.199	47.199
Heptachlor	(M)	15.545	15.545	0.000	885059	22.352	22.352
Methoxychlor	(M)	22.992	22.992	0.000	1976906	164.462	164.462

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	11.412	11.416	0.003	762353	22.874	22.874
Decachlorobiphenyl	(M)	29.152	29.131	0.021	2241451	47.474	47.474

COMMENTS:

M - Compound response manually integrated.



Method : /chem/HP58902.i/8081/rear/11-26-99/26nov99e.b/Br8081.m
Sample Info : indb 13
Lab ID : indb 13
Inj Date : 28-NOV-1999 18:31
Operator : gds
Cpnd Sublist: INDB
Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Aldrin	(M)	16.398	16.398	0.000	753673	21.729	21.729
beta-BHC	(M)	14.563	14.563	0.000	478625	22.091	22.091
delta-BHC	(M)	15.368	15.368	0.000	639310	21.048	21.048
4,4'-DDE	(M)	19.017	19.017	0.000	1509229	44.860	44.860
Endosulfan II	(M)	20.717	20.717	0.000	1500836	45.827	45.827
Endosulfan sulfate	(M)	22.303	22.303	0.000	1376718	45.392	45.392
Endrin aldehyde	(M)	21.559	21.559	0.000	1229145	45.064	45.064
Endrin ketone	(M)	23.993	23.993	0.000	1552614	43.512	43.512
Heptachlor epoxide	(M)	17.844	17.844	0.000	825288	22.171	22.171

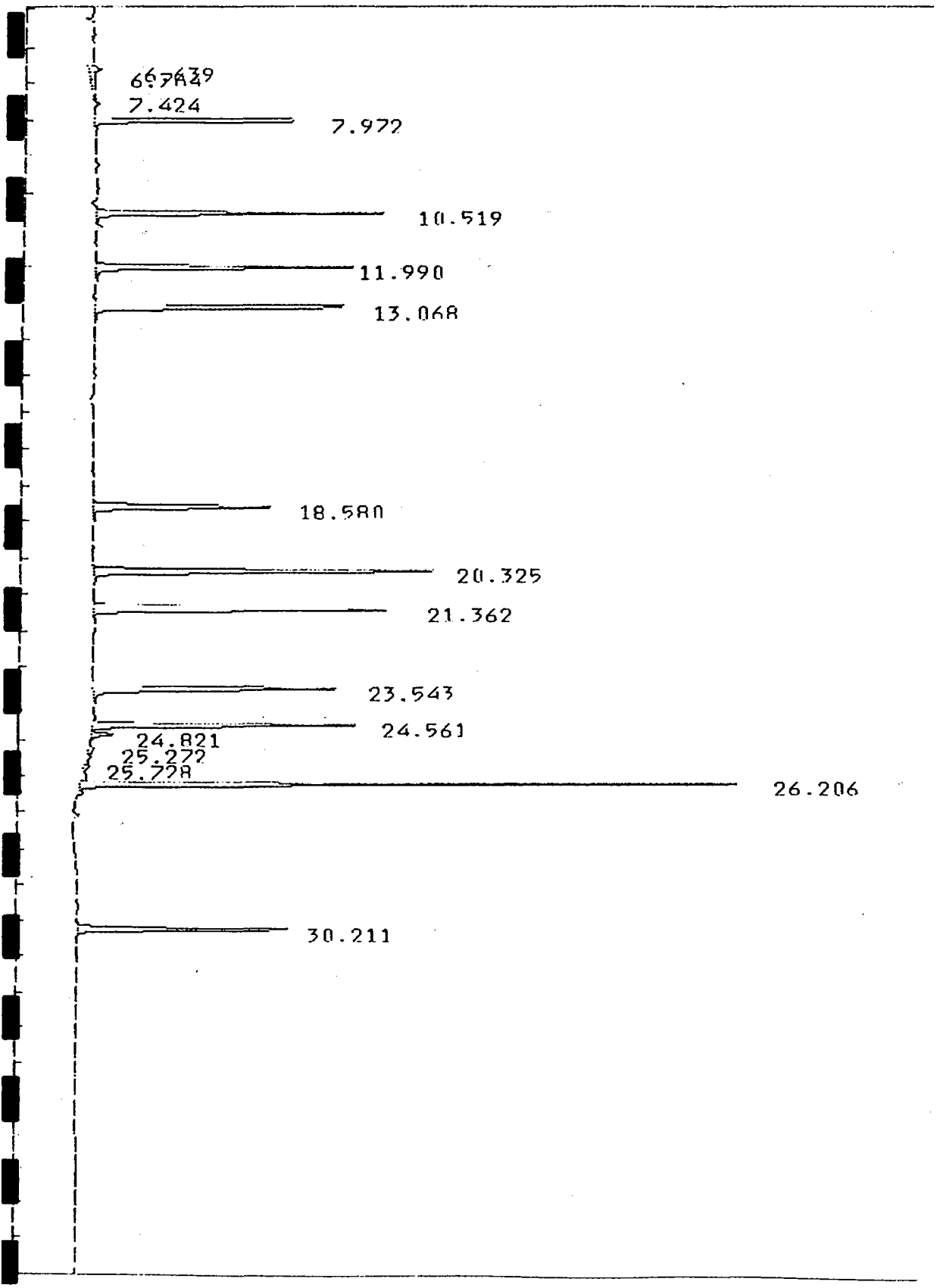
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
gamma-Chlordane	(M)	18.303	18.303	0.000	801168	22.021	22.021
alpha-Chlordane	(M)	18.661	18.661	0.000	813319	22.068	22.068
Tetrachloro-m-xylene	(M)	11.416	11.416	0.000	770662	23.124	23.124
Decachlorobiphenyl	(M)	29.131	29.131	0.000	2226212	47.151	47.151

COMMENTS:

M - Compound response manually integrated.

IEA Pesticide Standard Report

Sample Name : INDA L3 Inj:0156 10Nov1999
Result : /DATA/LOOP/RESULT/D4A501C 016.RFS GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDA L3 Report No : 43.00
Result File : /DATA/LOOP/RESULT/D4AS01C 016.RCS
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 0156 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 16 Bottle no. : 16

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline

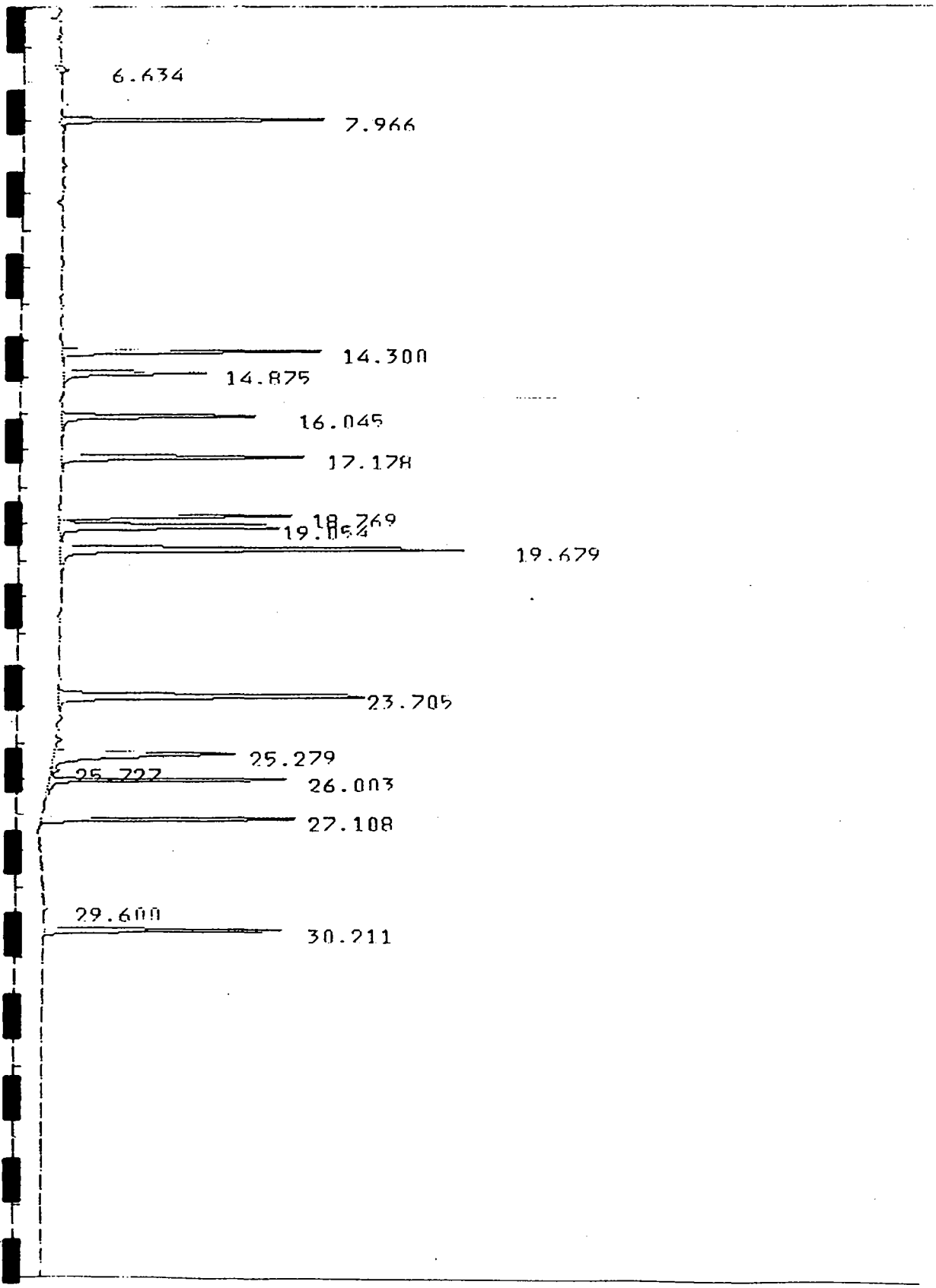
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.64		.144033	36721	PV	0.0000	
2	6.76		.148319	14969	VV	0.0000	
3	7.42		.762907	33549	VV	0.0000	
4	7.97	7.99	.068236	359446	BV	20.5495	TCX
5	10.52	10.54	.075655	419090	BV	20.1750	A-BHC
6	11.99	12.01	.085221	421397	VV	19.8309	G-BHC
7	13.07	13.09	.093130	477430	BB	18.9969	HEPTACHLOR
8	18.58	18.61	.111162	359515	BB	20.2202	ENDOSULFAN 1
9	20.33	20.35	.109029	717266	BV	39.0945	DIELDRIN
10	21.36	21.39	.112731	621429	BV	38.6148	ENDRIN
11	23.54	23.57	.119217	529600	BB	39.3813	4,4' DDD
12	24.56	24.58	.096397	471285	VV	38.8432	4,4' DDT
13	24.82		.094436	39529	VB	0.0000	
14	25.27	25.30	.179801	13548	BV	1.3022	ENDRIN ALDEHYDE
15	25.73		.107859	10433	VV	0.0000	
16	26.21	26.22	.064503	827757	VV	184.1504	METHOXYCHLOR
17	30.21	#30.23	.106979	447443	BB	34.9428	DCB

Total Area : 5800410 Total ng inj : 476.102

Report Time : 0237 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 016.RCS

HA Pesticide Standard Report

Sample Name : INDB L3 Inj:0247 10Nov1999
Result : /DATA/LOOP/RESULT/D4A501C 017.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

Sample Name : INDB L3 Report No : 44.01
Result File : /DATA/LOOP/RESULT/D4AS01C 017.RFS
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1.00
Instrument : HP5890A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 0247 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 17 Bottle no. : 17

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

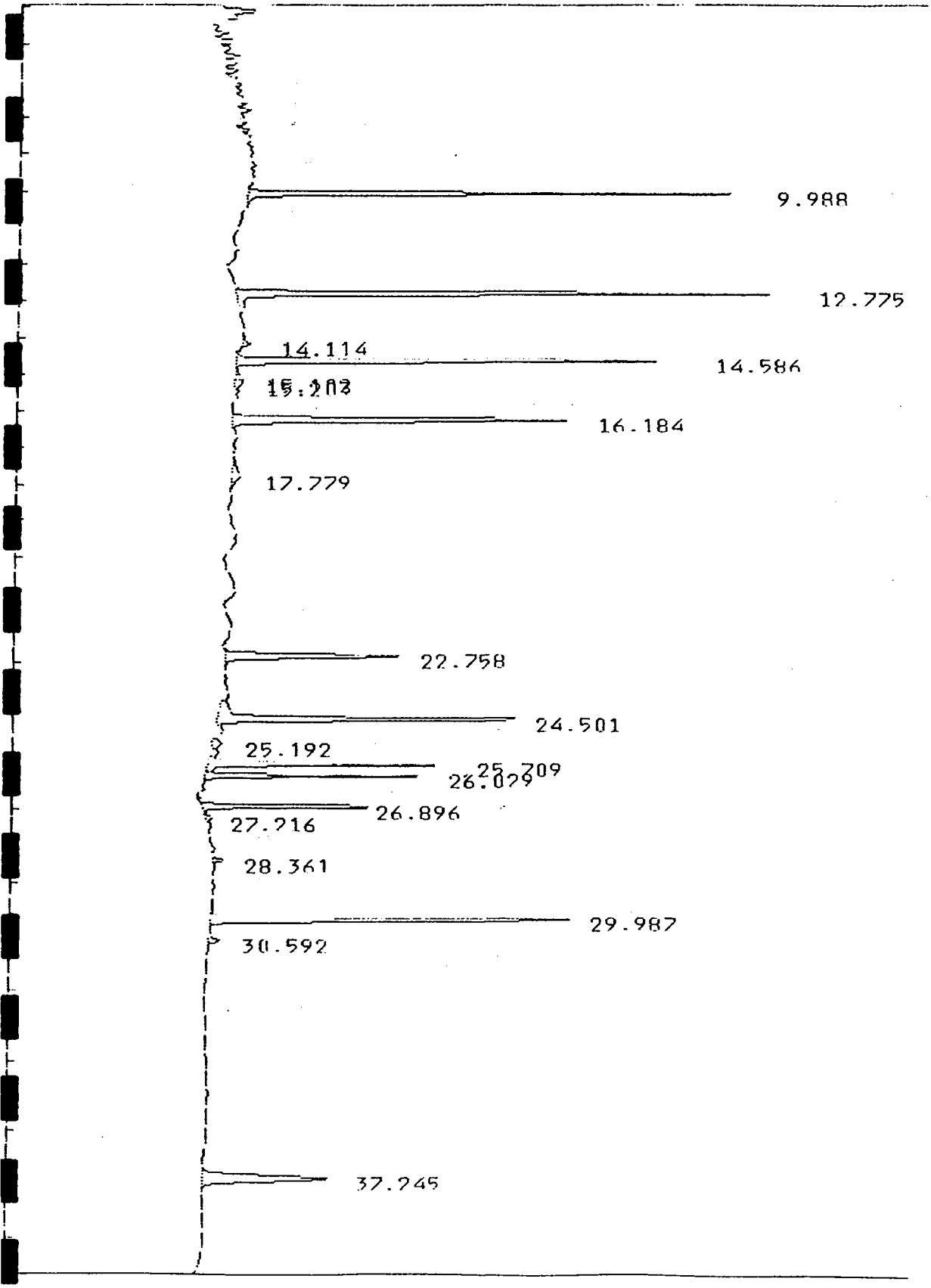
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.63		0.000000	28667	PB	0.0000	
2	7.97	7.99	0.000000	359895	BV	19.7538	TCX
3	14.30	14.32	0.000000	400354	FF	20.7330	ALDRIN
4	14.88	14.90	0.000000	231795	FF	20.3258	B-BHC
5	16.05	16.07	0.000000	325095	BB	20.7450	D-BHC
6	17.18	17.21	0.000000	414292	BB	20.6702	HEPTACHLOR EPOXIDE
7	18.77	18.80	0.000000	410752	BV	20.6294	G-CHLORDANE
8	19.05	19.08	0.000000	438811	VV	20.4042	A-CHLORDANE
9	19.68	19.71	0.000000	750079	VB	41.9789	4,4' DDE
10	23.70	23.73	0.000000	634150	PB	41.7781	ENDOSULFAN II
11	25.28	25.30	0.000000	408259	BV	44.6166	ENDRIN ALDEHYDE
12	25.73		0.000000	12615	VV	0.0000	
13	26.00	26.02	0.000000	350532	VB	40.8496	ENDOSULFAN SULFATE
14	27.11	27.12	0.000000	338304	BV	42.5113	ENDRIN KETONE
15	29.60		0.000000	31604	BV	0.0000	
16	30.21	#30.23	0.000000	439242	BB	41.2318	DCB

Total Area : 5574448 Total ng inj : 396.228

Report Time : 1702 10Nov1999
Method : /DATA/LOOP/METHOD/HP5890AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 017.RFS

IPA Pesticide Standard Report

Sample Name : INDA L3 Inj 0106 10Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 015.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



HP Pesticide Standard Report

Sample Name : INDA L3 Report No : 42.00
Result File : /DATA/LOOP/RESULT/D4RS01C 015.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 0106 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 15 Bottle no. : 16

% Dil-Fact
100.00

Run Status : RunStatusOK

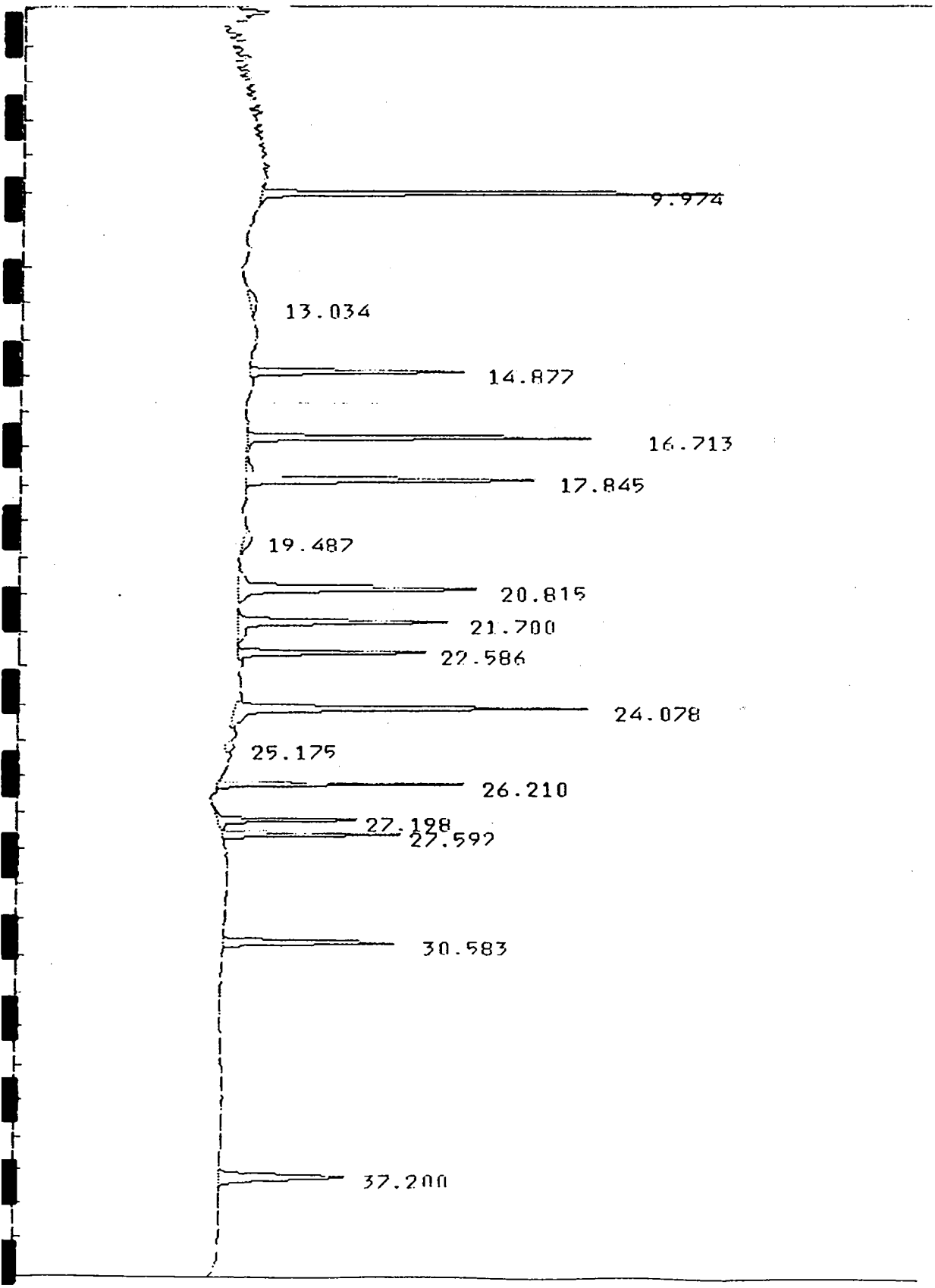
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.00	.082557	453379	BV	.0878	TCX
2	12.77	12.78	.097186	592154	BV	.0921	A-BHC
3	14.11		.118861	11417	BB	0.0000	
4	14.59	14.60	.100259	492255	BV	.0838	G-BHC
5	15.10		.155650	12253	VV	0.0000	
6	15.20		.174163	15264	VV	0.0000	
7	16.18	16.19	.114646	426154	PV	.0846	HEPTACHLOR
8	17.78		.375608	34146	BV	0.0000	
9	22.76	22.77	.122266	233490	BV	.0803	ENDOSULFAN I
10	24.50	24.51	.124659	456351	VV	.1796	DIELDRIN
11	25.19		.209622	19630	VV	0.0000	
12	25.71	25.72	.076082	208132	VV	.2088	ENDRIN
13	26.03	26.03	.067028	175066	VV	.1789	4,4' DDD
14	26.90	26.90	.070491	173208	BV	.1732	4,4' DDT
15	27.22	27.20	.138058	10180	VV	.0116	ENDRIN ALDEHYDE
16	28.36		.090688	10078	VB	0.0000	
17	29.99	29.99	.099942	440258	BV	.8213	METHOXYCHLOR
18	30.59	30.58	.120325	13641	VB	.0101	ENDRIN KETONE
19	37.24	37.24	.184438	248073	BB	.1514	DCB

Total Area : 4025130 Total ng inj : 2.163

Report Time : 0149 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 015.RES

IEA Pesticide Standard Report

Sample Name : INDR L3 Inj 0156 10Nov1999
Result : /DATA/LOOP/RESULT/D48S01C 016.RES GC : HP589004B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDB L3 Report No : 43.00
Result File : /DATA/LOOP/RESULT/D4BS01C 016.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 0156 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4BS01C.SEQ
Subseq/Sample : 1/ 16 Bottle no. : 17

% Oil-Fact
100.00

Run Status : RunStatusOK

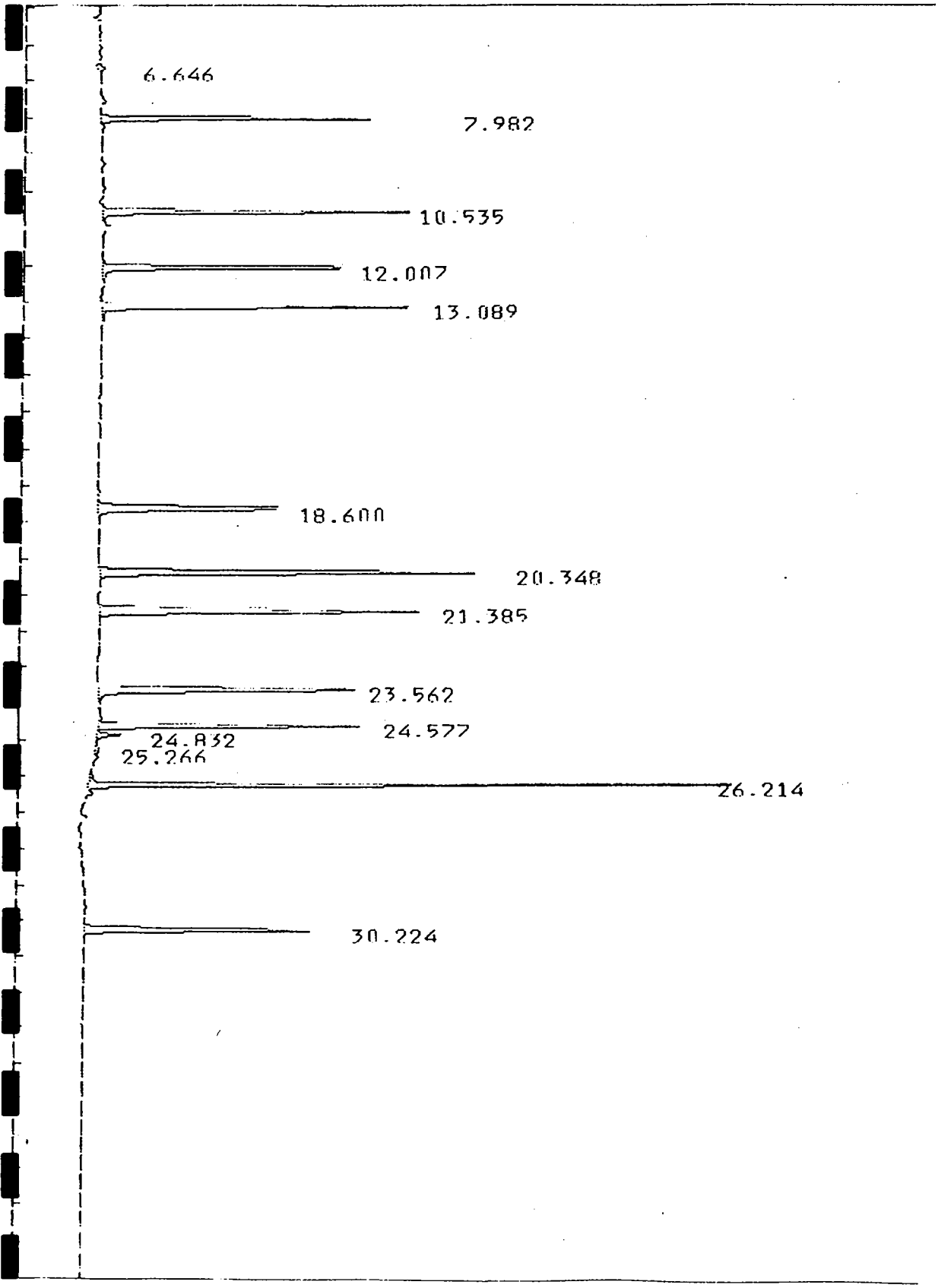
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.97	#10.00	.082769	465275	BV	.0901	TCX
2	13.03		.559002	37716	PV	0.0000	
3	14.88	14.91	.099454	236009	BV	.0811	B-BHC
4	16.71	16.75	.105667	399316	BV	.0817	D-BHC
5	17.84	17.87	.128315	399841	VV	.0842	ALDRIN
6	19.49		.463728	35949	BV	0.0000	
7	20.82	20.84	.141994	371797	VV	.0955	HEPTACHLOR EPOXIDE
8	21.70	21.72	.141822	326849	VV	.0990	G-CHLORDANE
9	22.59	22.60	.124022	250231	PV	.0845	A-CHLORDANE
10	24.08	24.11	.135877	508633	VV	.1787	4,4' DDE
11	25.17		.212828	18345	VV	0.0000	
12	26.21	26.22	.071312	194146	VV	.1604	ENDOSULFAN II
13	27.20	27.20	.090469	163215	BV	.1856	ENDRIN ALDEHYDE
14	27.59	27.59	.081362	175139	VV	.1644	ENDOSULFAN SULFATE
15	30.58	30.58	.107608	200056	PB	.1487	ENDRIN KETONE
16	37.20	37.24	.186415	244296	BB	.1491	DCB

Total Area : 4026810 Total ng inj : 1.603

Report Time : 0239 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4BS01C 016.RES

IEA Pesticide Standard Report

Sample Name : INDA L3 Inj:1249 10Nov1999
Result : /DATA/LDDP/RESULT/D4ASD1C 029.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDA L3 Report No : 56.00
Result File : /DATA/LOOP/RESULT/D4AS01C 029.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1249 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 29 Bottle no. : 29

% Dil-Fact
100.00

Run Status : RunStatusOK

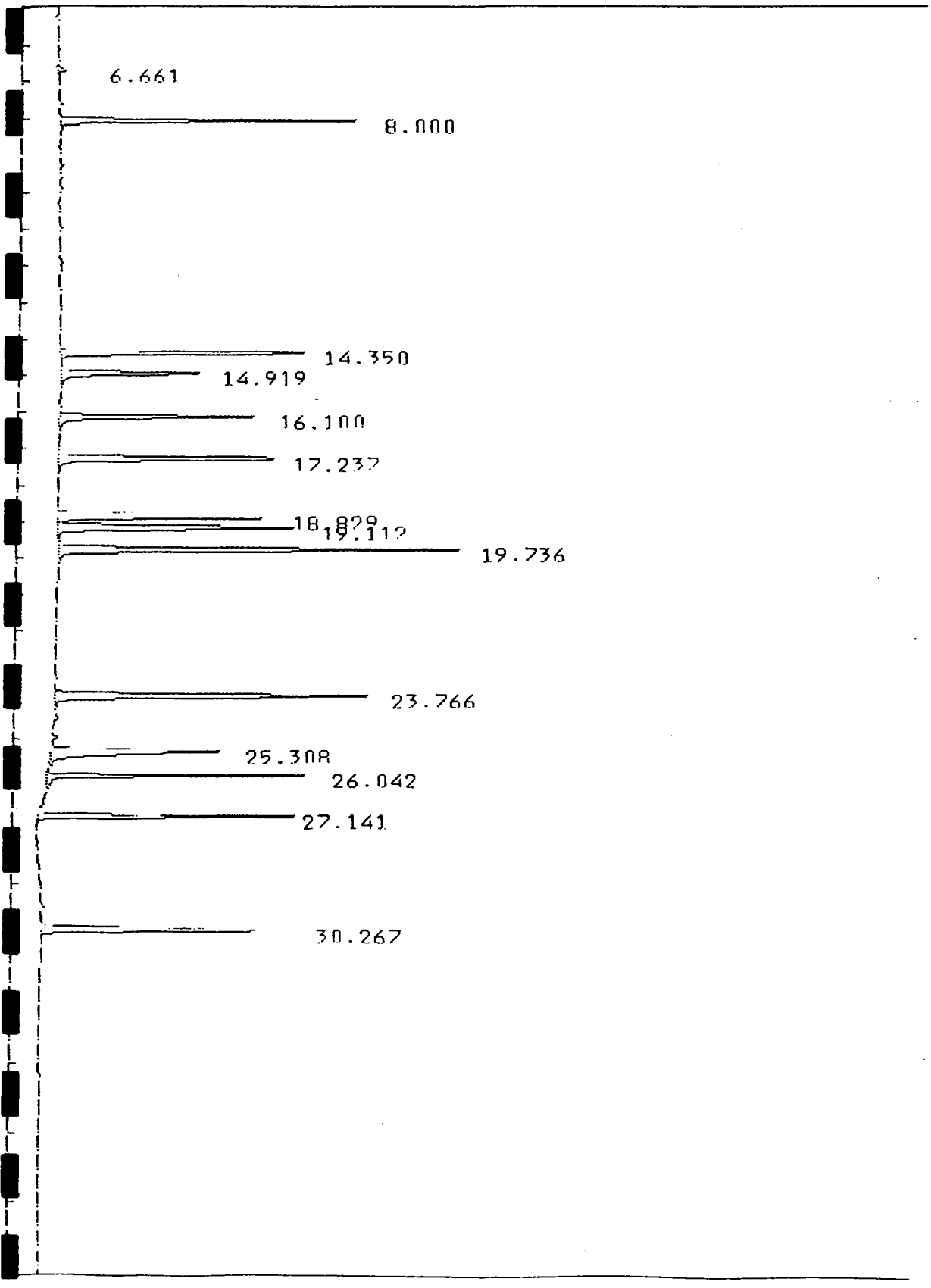
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.65		.142035	21175	PB	0.0000	
2	7.98	7.99	.066638	357185	BV	20.4203	TCX
3	10.54	10.54	.075729	416490	BV	20.0498	A-BHC
4	12.01	12.01	.086510	417771	VV	19.6603	G-BHC
5	13.09	13.09	.093594	475081	BB	18.9035	HEPTACHLOR
6	18.60	18.61	.109075	345393	BH	19.4259	ENDOSULFAN 1
7	20.35	20.35	.107329	675921	BB	36.8409	DIELDRIN
8	21.38	21.39	.110654	592213	BV	36.7994	ENDRIN
9	23.56	23.57	.118039	505566	BB	37.5941	4,4' DDD
10	24.58	24.58	.093330	416955	VV	34.3653	4,4' DDT
11	24.83		.084468	32629	VB	0.0000	
12	25.27	25.30	.189047	10491	BV	1.0083	ENDRIN ALDEHYDE
13	26.21	26.22	.064886	738718	PV	164.3418	METHOXYCHLOR
14	30.22	#30.23	.106137	410939	BB	32.0921	DCB

Total Area : 5416527 Total ng inj : 441.502

Report Time : 1330 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 029.RES

IEA Pesticide Standard Report

Sample Name : INDB 13 Inj:1337 10Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 030.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



73. /DATA/LOOP/RESULT/D4AS01C 073.RES
74. /DATA/LOOP/RESULT/D4AS01C 074.RES

IEA Pesticide Standard Report

Sample Name : INDB 13 Report No : 57.02
Result File : /DATA/LOOP/RESULT/D4AS01C 030.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.02 Mins. Injected on 1337 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 30 Bottle no. : 30

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

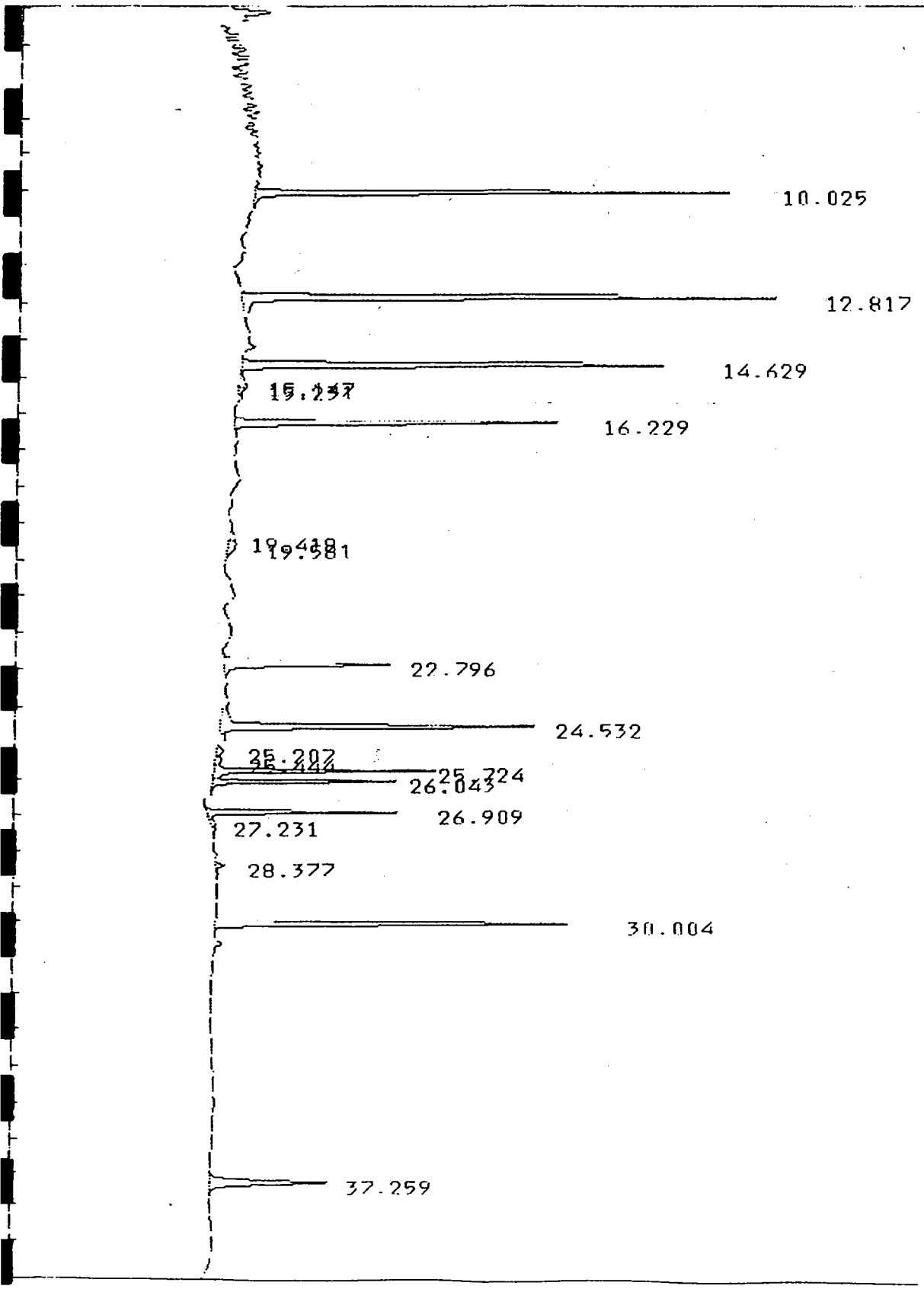
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.66		0.000000	16651	PB	0.0000	
2	8.00	7.99	0.000000	350294	BV	19.2269	TCX
3	14.35	14.32	0.000000	390811	BB	20.2388	ALDRIN
4	14.92	14.90	0.000000	232457	BB	20.3838	B-BHC
5	16.10	16.07	0.000000	324542	BB	20.7097	D-BHC
6	17.24	17.21	0.000000	404074	BB	20.1603	HEPTACHLOR EPOXIDE
7	18.83	18.80	0.000000	388805	BV	19.5271	G-CHLORDANE
8	19.11	19.08	0.000000	405600	VV	18.8599	A-CHLORDANE
9	19.74	19.71	0.000000	696444	PV	38.9772	4,4' DDE
10	23.77	23.73	0.000000	595228	PB	39.2139	ENDOSULFAN II
11	25.31	25.30	0.000000	368061	BV	40.2236	ENDRIN ALDEHYDE
12	26.04	26.02	0.000000	305201	FF	35.5669	ENDOSULFAN SULFATE
13	27.14	27.12	0.000000	309031	BV	38.8328	ENDRIN KETONE
14	30.27	#30.23	0.000000	414203	FF	38.8813	DCB

Total Area : 5201401 Total ng inj : 370.802

Report Time : 1624 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 030.RES

IIA Pesticide Standard Report

Sample Name : INDA L3 Inj 1200 10Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 028.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IIA Pesticide Standard Report

Sample Name : INDA L3 Report No : 55.00
Result File : /DATA/LOOP/RESULT/D4RS01C 028.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1200 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 28 Bottle no. : 29

% Dil-Fact
100.00

Run Status : RunStatusOK

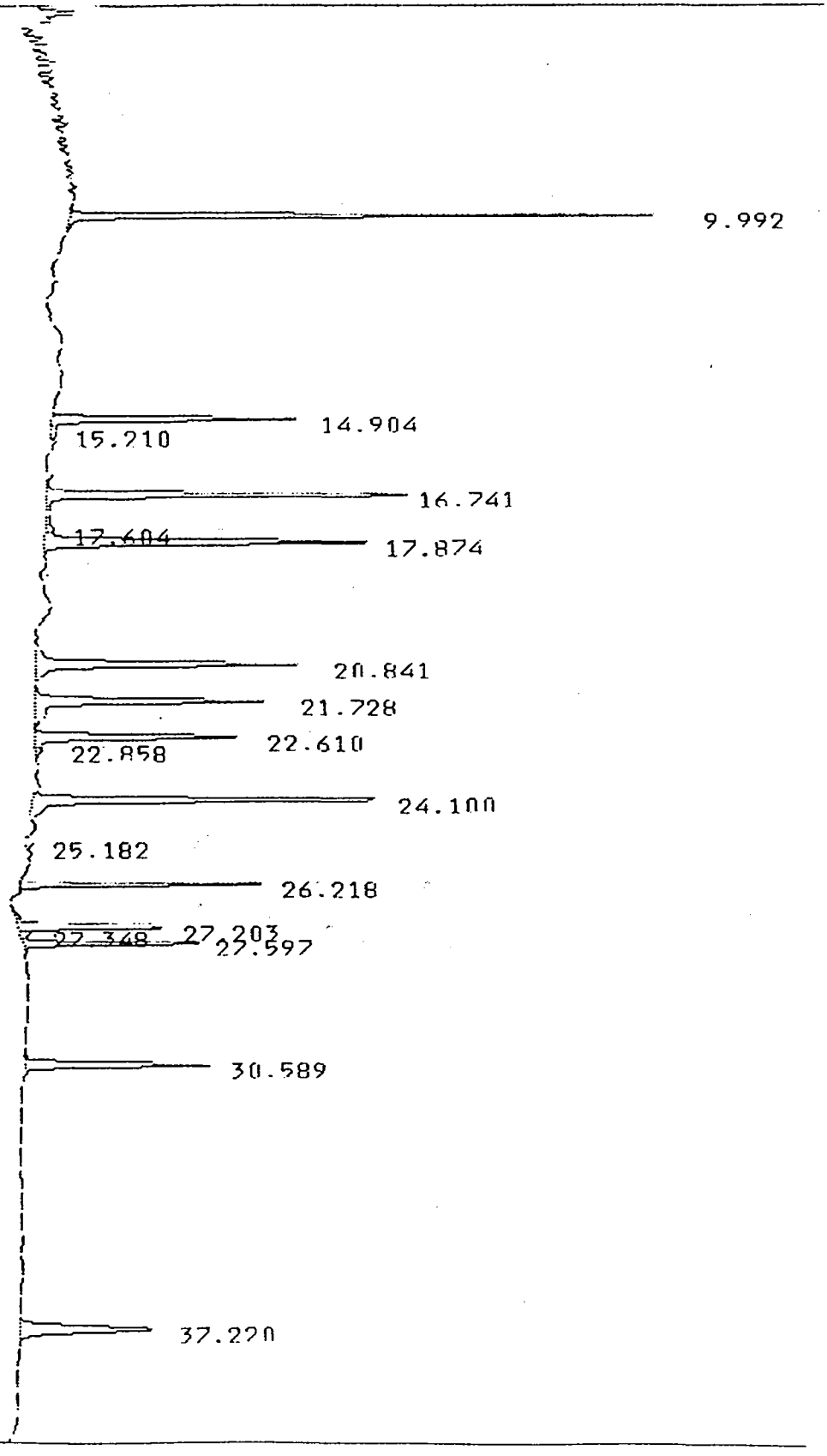
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	10.02	#10.00	.083249	469138	PB	.0908	TCX
2	12.82	12.78	.098258	610968	BV	.0950	A-BHC
3	14.63	14.60	.100068	496377	BV	.0845	G-BHC
4	15.15		.183471	14056	VV	0.0000	
5	15.23		.150580	11380	VV	0.0000	
6	16.23	16.19	.114221	426630	PV	.0847	HEPTACHLOR
7	19.42		.194471	12672	BV	0.0000	
8	19.58		.321553	25644	VV	0.0000	
9	22.80	22.77	.128459	240168	PV	.0826	ENDOSULFAN I
10	24.53	24.51	.119536	427252	VV	.1682	DIELDRIN
11	25.21		.191591	13555	VV	0.0000	
12	25.44		.176250	12062	VV	0.0000	
13	25.72	25.72	.076477	210520	VV	.2112	ENDRIN
14	26.04	26.03	.067597	175173	VV	.1790	4,4' DDD
15	26.91	26.90	.069975	164040	BV	.1640	4,4' DDT
16	27.23	27.20	.193137	11830	VV	.0135	ENDRIN ALDEHYDE
17	28.38		.091932	10453	VV	0.0000	
18	30.00	29.99	.101121	424062	BV	.7911	METHOXYCHLOR
19	37.26	37.24	.184706	248139	BB	.1514	DCB

Total Area : 4004117 Total ng inj : 2.116

Report Time : 1244 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 028.RES

IEA Pesticide Standard Report

Sample Name : INDR L3 Inj 1249 10Nov1999
Result : /DATA/LNDP/RESULT/D4BS01C 029.RFS GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

Sample Name : INDB L3 Report No : 56.00
Result File : /DATA/LOOP/RESULT/D4RS01C 029.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1249 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 29 Bottle no. : 30

% Dil-Fact
100.00

Run Status : RunStatusOK

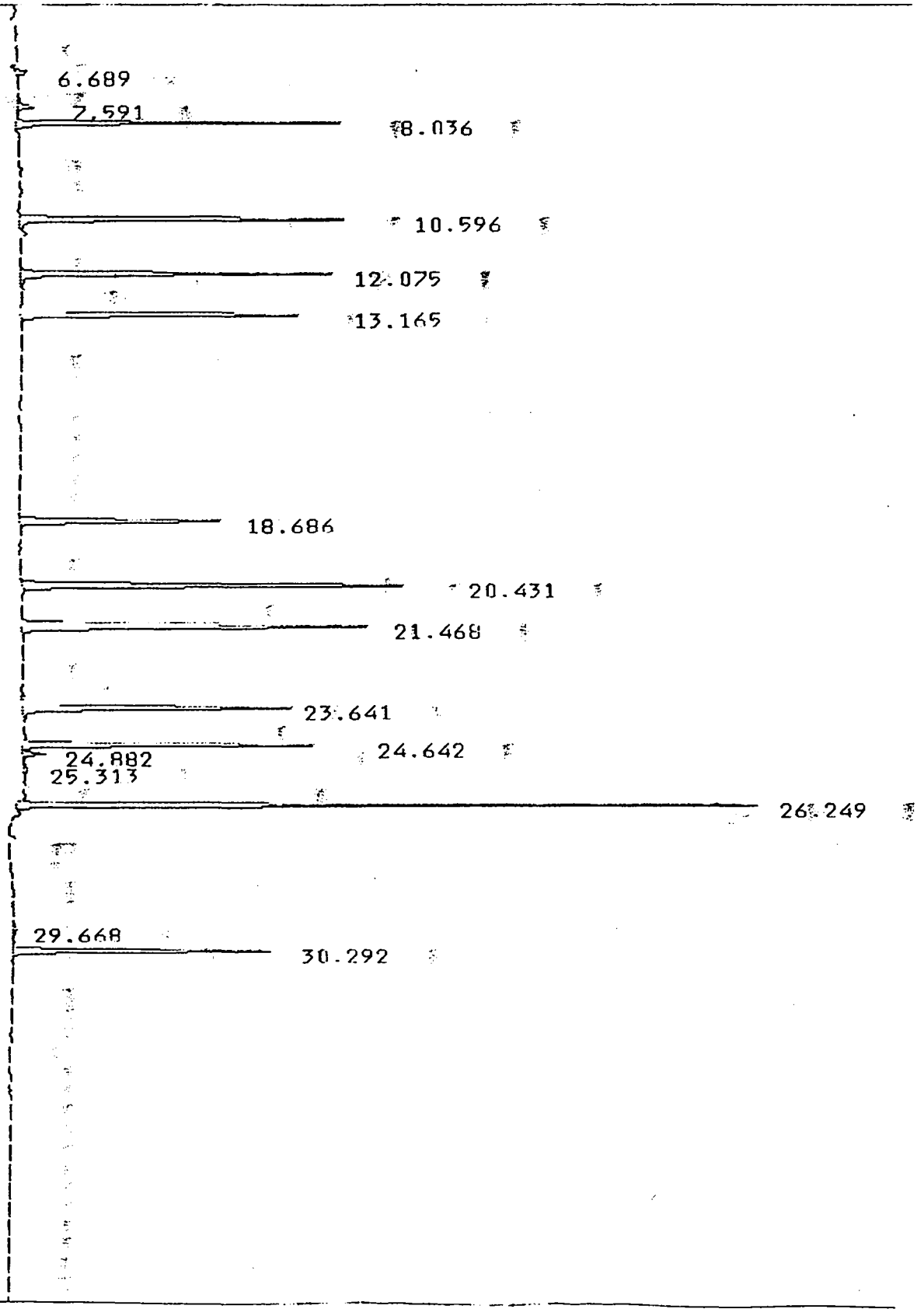
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.00	.081898	466968	BV	.0904	TCX
2	14.90	14.91	.100233	236518	BV	.0813	B-BHC
3	15.21		.234564	13704	VV	0.0000	
4	16.74	16.75	.107630	401358	VV	.0821	D-BHC
5	17.60		.316155	23729	VV	0.0000	
6	17.87	17.87	.123872	377907	VV	.0796	ALDRIN
7	20.84	20.84	.141128	356408	VV	.0916	HEPTACHLOR EPOXIDE
8	21.73	21.72	.146489	320218	VV	.0970	G-CHLORDANE
9	22.61	22.60	.124834	240470	PV	.0812	A-CHLORDANE
10	22.86		.192541	11266	VV	0.0000	
11	24.10	24.11	.134604	478649	VV	.1681	4,4' DDE
12	25.18		.187367	12384	VV	0.0000	
13	26.22	26.22	.071348	181282	PV	.1498	ENDOSULFAN II
14	27.20	27.20	.087960	151572	BV	.1724	ENDRIN ALDEHYDE
15	27.35		.115190	11405	VV	0.0000	
16	27.60	27.59	.083199	170231	VB	.1598	ENDOSULFAN SULFATE
17	30.59	30.58	.108621	191982	PB	.1427	ENDRIN KETONE
18	37.22	37.24	.189147	240796	BB	.1469	DCB

Total Area : 3886849 Total ng inj : 1.543

Report Time : 1332 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 029.RES

IEA Pesticide Standard Report

Sample Name : INDA L3 Inj:0917 24Nov1999
Result : /DATA/LOOP/RESULT/D4A501J 020.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDA L3 Report No : 558.01
Result File : /DATA/LOOP/RESULT/D4AS01J 020.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 0917 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
Subseq/Sample : 1/ 20 Bottle no. : 20

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

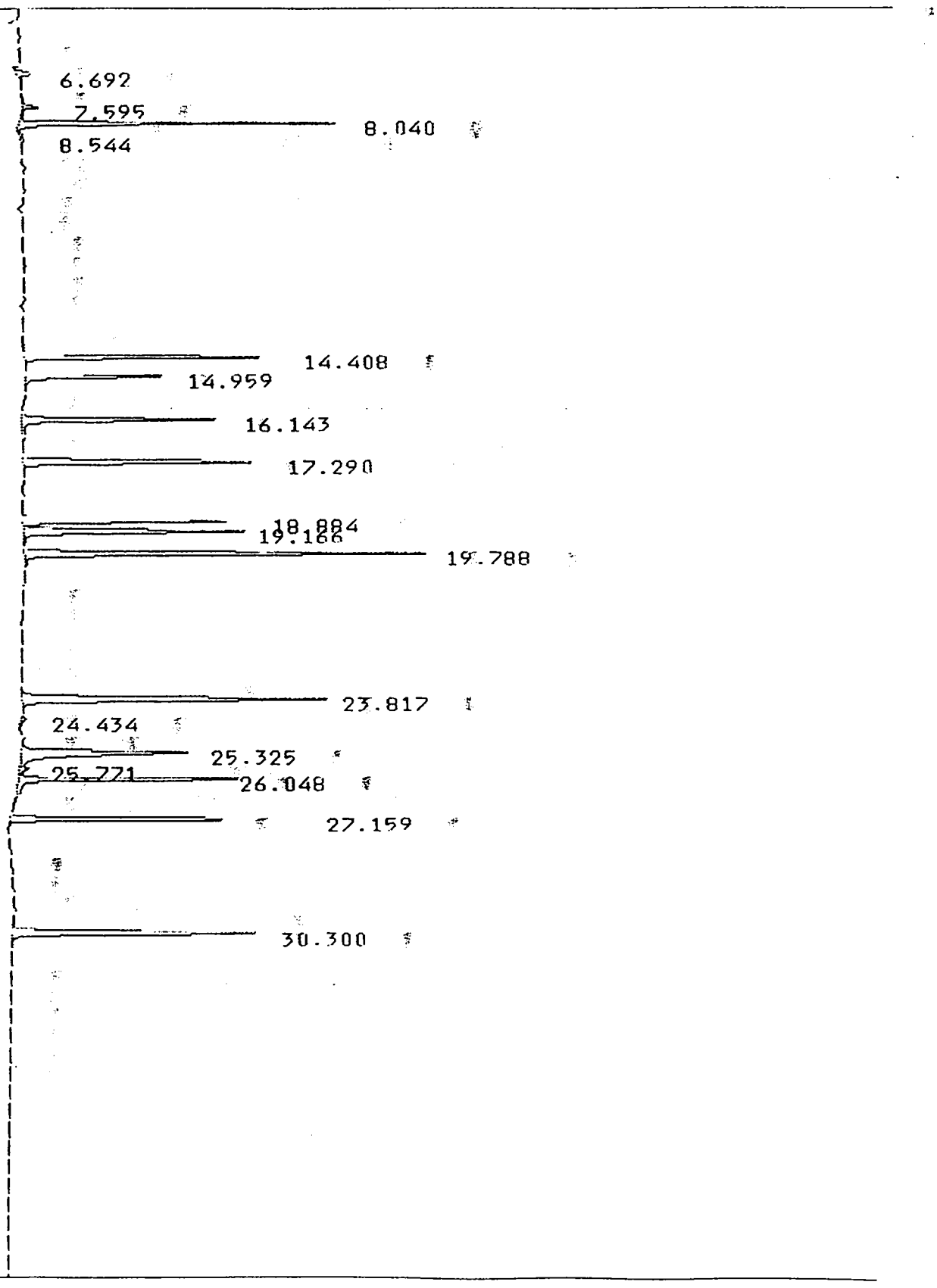
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.69		0.000000	21713	PB	0.0000	
2	7.59		0.000000	23534	VB	0.0000	
3	8.04	7.99	0.000000	364530	BB	20.0083	TCX
4	10.60	10.54	0.000000	417839	BV	20.1933	A-BHC
5	12.07		0.000000	414405	BV	0.0000	
6	13.17		0.000000	430667	BV	0.0000	
7	18.69	18.61	0.000000	337387	PV	19.7684	ENDOSULFAN 1
8	20.43		0.000000	667890	PB	0.0000	
9	21.47	21.39	0.000000	591932	BV	39.1930	ENDRIN
10	23.64	23.57	0.000000	483313	BV	37.9873	4,4' DDD
11	24.64	24.58	0.000000	436873	VV	39.0763	4,4' DDT
12	24.88		0.000000	31139	PV	0.0000	
13	25.31	25.30	0.000000	10991	BV	1.2011	ENDRIN ALDEHYDE
14	26.25	26.22	0.000000	778091	VV	199.6131	METHOXYCHLOR
15	29.67		0.000000	17355	VB	0.0000	
16	30.29	#30.23	0.000000	427031	FF	40.0855	DCB

Total Area : 5454691 Total ng inj : 417.126

Report Time : 1044 24Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01J 020.RES

IEA Pesticide Standard Report

Sample Name : INDB L3 Inj:1005 24Nov1999
Result : /DATA/LOOP/RESULT/D4AS01J 021.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDB L3 Report No :359.01
Result File : /DATA/LOOP/RESULT/D4AS01J 021.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1005 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
Subseq/Sample : 1/ 21 Bottle no. : 21

% Dil-Fact
100.00

Run Status : RunStatusOK
SpecialInteg

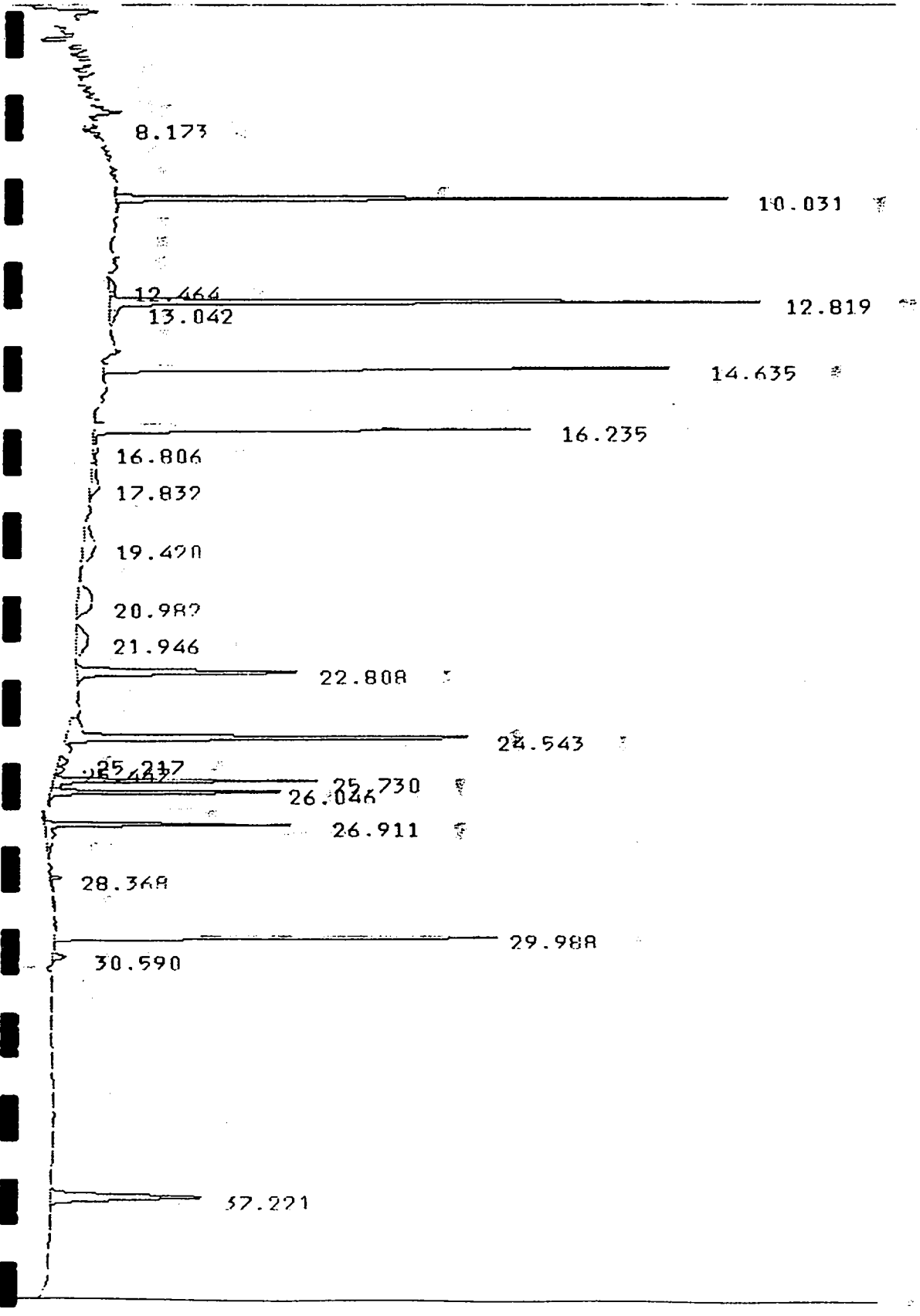
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.69		0.000000	25356	BV	0.0000	
2	7.59		0.000000	23312	BB	0.0000	
3	8.04	7.99	0.000000	360495	BB	19.7868	TCX
4	8.54		0.000000	14564	BB	0.0000	
5	14.41		0.000000	365815	BB	0.0000	
6	14.96	14.90	0.000000	220187	PB	19.3079	B-BHC
7	16.14		0.000000	328653	BV	0.0000	
8	17.29	17.21	0.000000	382572	VB	19.0876	HEPTACHLOR EPOXIDE
9	18.88		0.000000	361891	BV	0.0000	
10	19.17		0.000000	389260	VV	0.0000	
11	19.79	19.71	0.000000	680772	VV	38.1001	4,4' DDE
12	23.82		0.000000	585762	BB	0.0000	
13	24.43		0.000000	11446	BV	0.0000	
14	25.33	25.30	0.000000	373957	BV	40.8679	ENDRIN ALDEHYDE
15	25.77		0.000000	16953	VV	0.0000	
16	26.05	26.02	0.000000	321555	VB	37.4727	ENDOSULFAN SULFATE
17	27.16	27.12	0.000000	312957	BV	39.3262	ENDRIN KETONE
18	30.30	#30.23	0.000000	419082	FF	39.3394	DCB

Total Area : 5194591 Total ng inj : 253.289

Report Time : 1131 24Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01J 021.RES

IEA Pesticide Standard Report

mple Name : INDA L3 Inj 0825 24Nov1999
sult : /DATA/LOOP/RESULT/D4BS01J 019.RLS GC : HP58904U
olumn : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IFA Pesticide Standard Report

nple Name : INDA I 3 Report No :355.00
sult File : /DATA/LOOP/RESULT/D4RS01J 019.RES
umn Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
trument : HP58904B
lculation : ExternalSTD
n Time : 40.00 Mins. Injected on 0825 24Nov1999
uence File : /DATA/LOOP/SEQUENCE/S4RS01J.SFQ
mseq/Sample : 1/ 19 Bottle no. : 20

il-Fact
100.00

Status : RunStatusOK

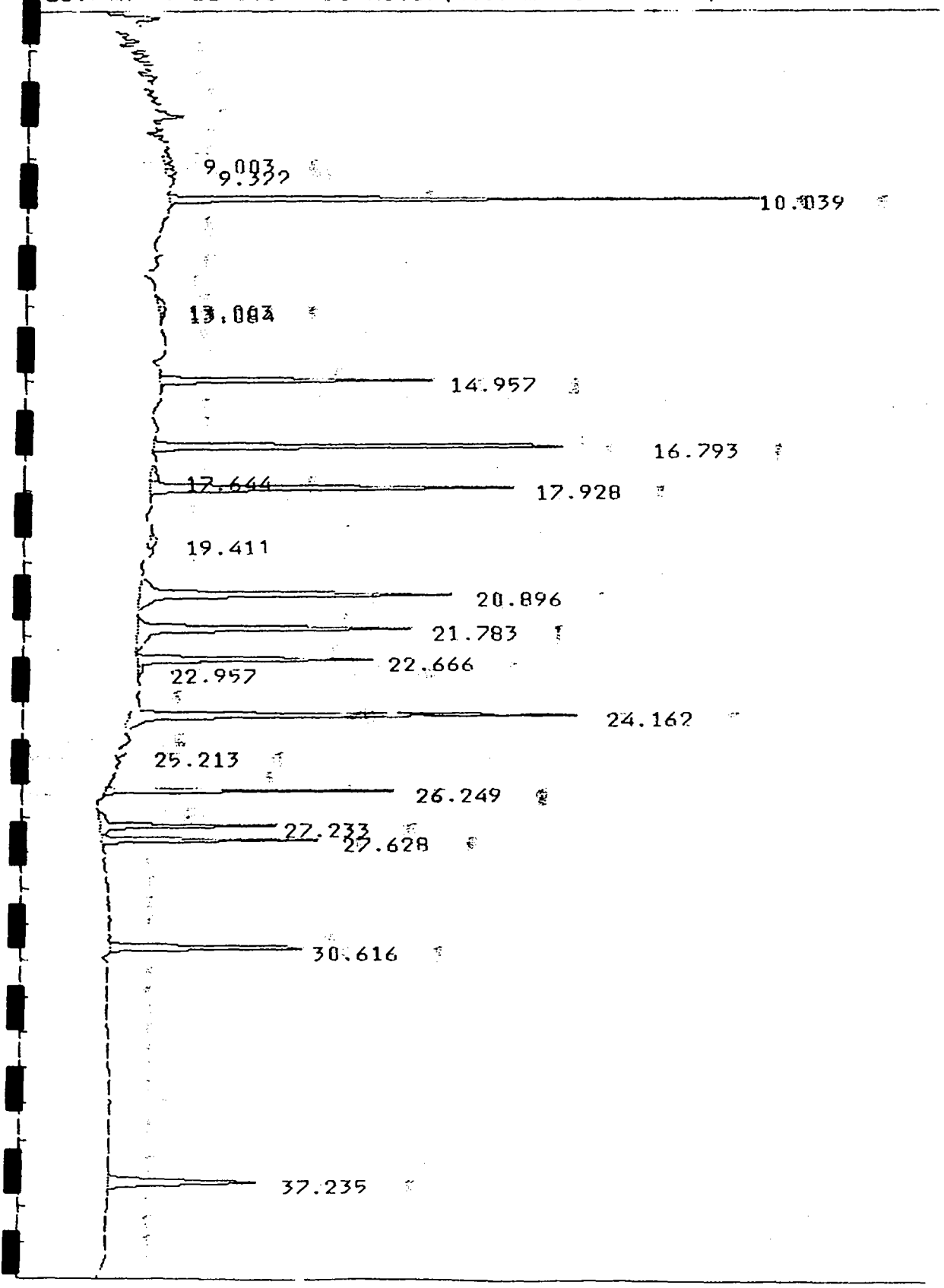
#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
	8.17		.086658	10226	BV	0.0000	
2	10.03	#10.00	.079952	478620	PV	21.8998	TCX
3	12.46		.255790	15003	BV	0.0000	
	12.82	12.78	.094653	635476	VV	22.8728	A-BHC
	13.04		.234217	20932	VV	0.0000	
6	14.63	14.60	.099527	541432	BV	22.5578	G-BHC
7	16.24	16.19	.116470	486993	BV	23.2511	HEPTACHLOR
	16.81		.222353	11553	VV	0.0000	
9	17.83	17.87	.562855	48224	VV	2.5862	ALDRIN
10	19.42		.704867	83783	BV	0.0000	
	20.98		.672210	91426	PV	0.0000	
	21.95		.629258	70591	PV	0.0000	
13	22.81	22.77	.127077	275619	PV	22.1167	ENDOSULFAN I
14	24.54	24.51	.119535	489666	VV	44.5962	DIELDRIN
	25.22		.174590	14191	VV	0.0000	
16	25.45		.152538	11156	VV	0.0000	
17	25.73	25.72	.083661	213875	VV	41.9857	ENDRIN
	26.05	26.03	.067783	189522	VB	44.1364	4,4' DDD
19	26.91	26.90	.089534	222470	BB	52.1496	4,4' DDT
20	28.37		.161602	17576	PV	0.0000	
	29.99	29.99	.103074	478309	BV	230.0668	METHOXYCHLOR
	30.59	30.59	.153947	17223	VB	3.6583	ENDRIN KETONE
23	37.22	37.24	.182808	262765	BB	44.7490	DCB

tal Area : 4686634 Total ng inj : 576.626

ort Time : 0908 24Nov1999
hod : /DATA/LOOP/METHOD/HP58904BP.MTH
sult File : /DATA/LOOP/RESULT/D4RS01J 019.RES

ICA Pesticide Standard Report

Sample Name : INDB L3 Inj 0917 24Nov1999
Result : /DATA/LOOP/RESULT/D4RS01J 020.RES GC : HP5890B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ICA Pesticide Standard Report

Sample Name : INDB L3 Report No : 356.00
Result File : /DATA/LOOP/RESULT/D4RS01J 020.RLS
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 0917 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01J.SEQ
Subseq/Sample : 1/ 20 Bottle no. : 21

% Dil-Fact
100.00

Run Status : RunStatusOK

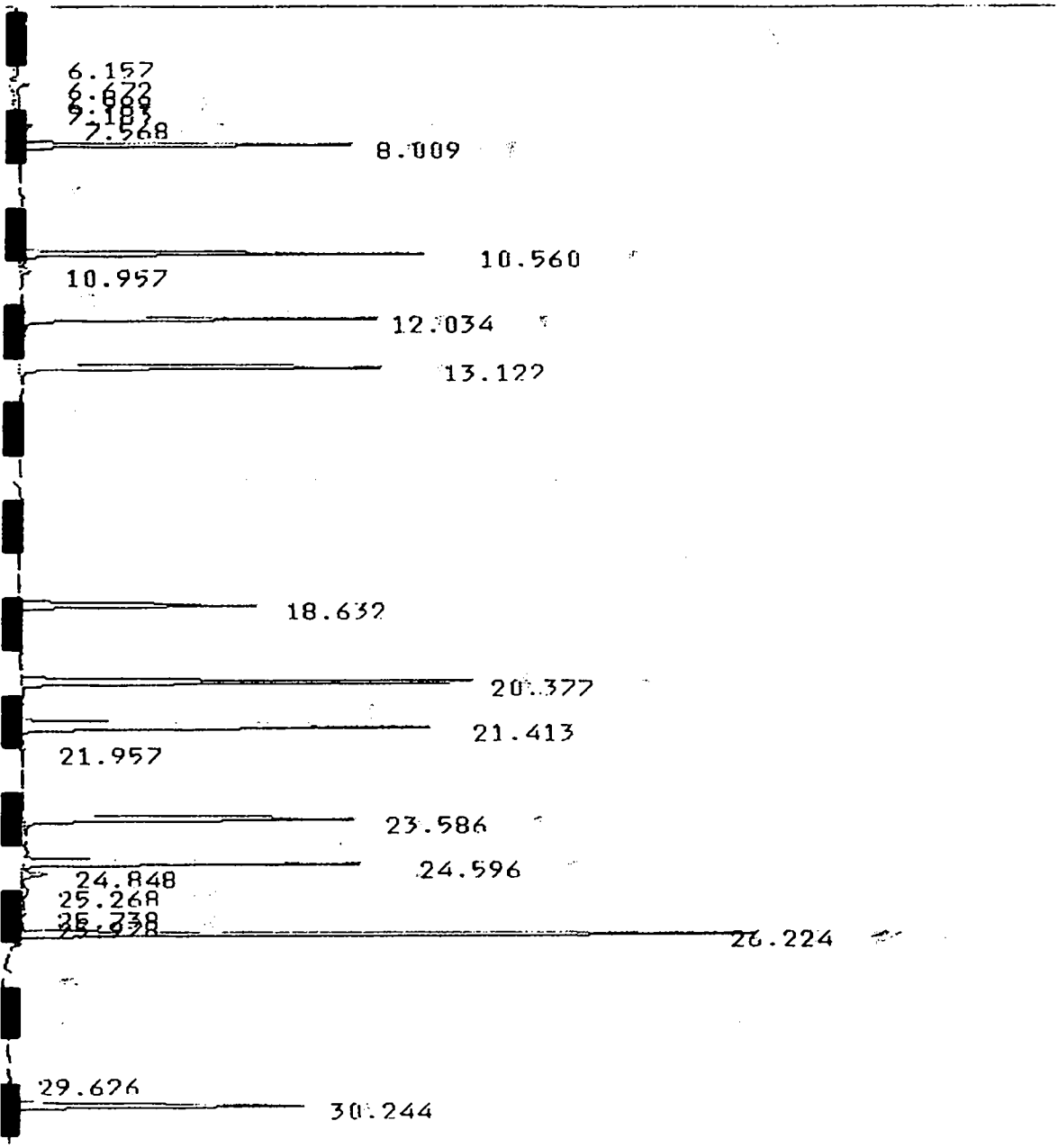
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.00		.122842	11263	VV	0.0000	
2	9.32		.114637	11400	VV	0.0000	
3	10.04	#10.00	.080287	477214	PV	21.8355	TCX
4	13.00		.238593	14875	BV	0.0000	
5	13.08		.220786	12757	VB	0.0000	
6	14.96	14.90	.097111	261895	PV	23.1889	B-BHC
7	16.79	16.74	.101758	452217	BV	23.9827	D-BHC
8	17.64		.281389	21360	VV	0.0000	
9	17.93	17.87	.122119	435724	VV	23.3670	ALDRIN
10	19.41		.271848	19005	BV	0.0000	
11	20.90	20.84	.143511	430514	PV	25.7654	HEPTACHLOR EPOXIDE
12	21.78	21.73	.141849	377225	PV	24.1966	G-CHLORDANE
13	22.67	22.61	.124090	284890	PV	23.4574	A-CHLORDANE
14	22.96		.213569	10597	VV	0.0000	
15	24.16	24.10	.136579	583971	VV	48.3580	4,4' DDE
16	25.21		.167456	12506	VV	0.0000	
17	26.25	26.22	.071523	209015	VV	45.1632	ENDOSULFAN II
18	27.23	27.21	.097286	175970	BV	47.8829	ENDRIN ALDEHYDE
19	27.63	27.60	.082345	177099	VV	42.5821	ENDOSULFAN SULFATE
20	30.62	30.59	.107272	213557	PB	45.3603	ENDRIN KETONE
21	37.23	37.24	.183565	257871	BB	43.9155	DCB

Total Area : 4450926 Total ng inj : 439.055

Report Time : 1000 24Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01J 020.RES

IEA Pesticide Standard Report

mple Name : INDA L3 Inj:2108 24Nov1999
sult : /DATA/LOOP/RESULT/D4AS01J 034.RES GC: HP58904A
olumn : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

mple Name : INDA L3 Report No :372.00
esult File : /DATA/LOOP/RESULT/D4AS01J 034.RES
lumn Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
strument : HP58904A
alculation : ExternalSTD
un Time : 40.00 Mins. Injected on 2108 24Nov1999
quence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
ubseq/Sample : 1/ 34 Bottle no. : 34

Dil-Fact
100.00

un Status : RunStatusOK

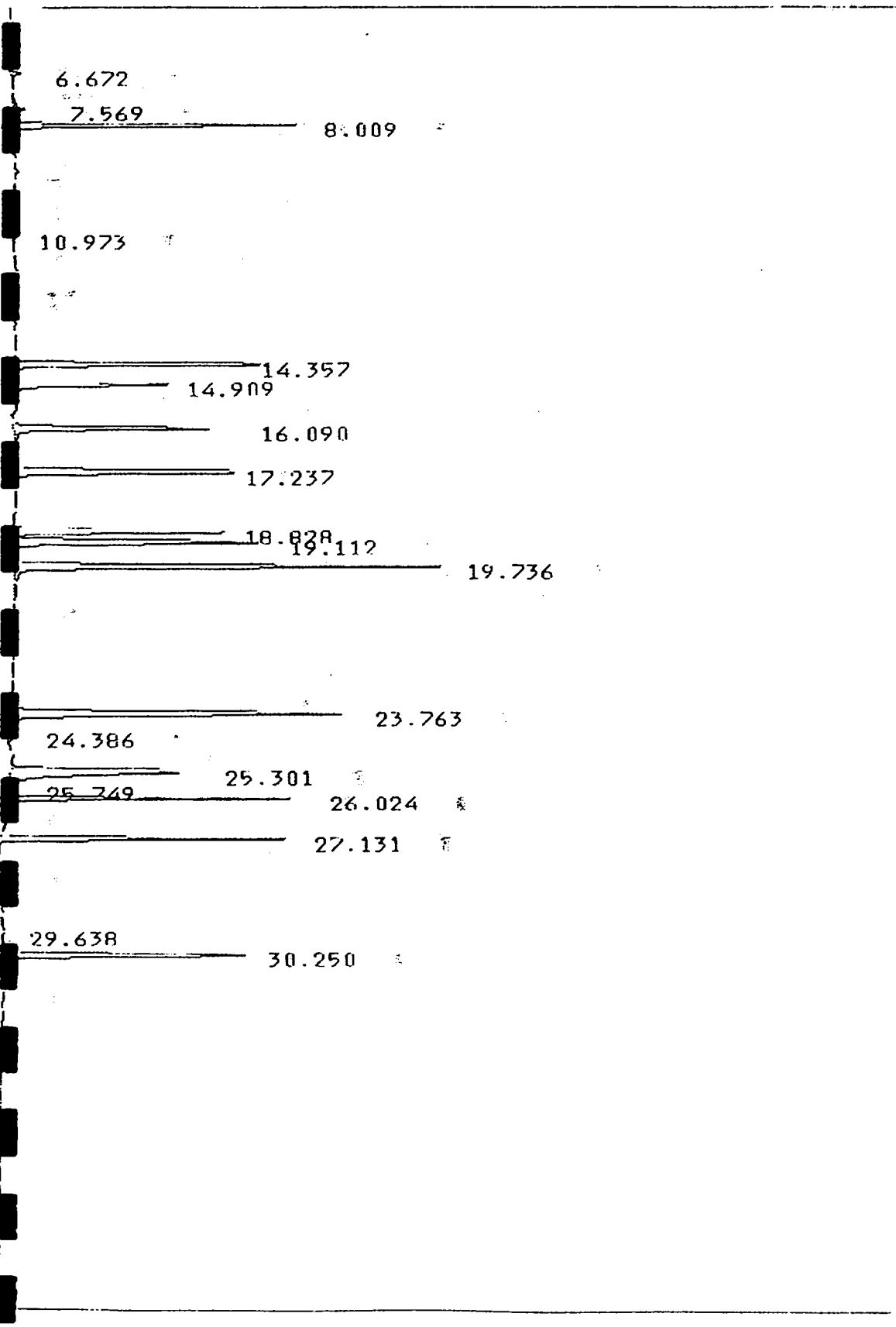
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.16		.172987	12628	VV	0.0000	
2	6.67		.144678	36081	PV	0.0000	
3	6.99		.209823	15357	VV	0.0000	
4	7.18		.203003	11045	VV	0.0000	
5	7.57		.119964	28985	VB	0.0000	
6	8.01	7.99	.067052	372003	BV	20.6929	TCX
7	10.56	10.54	.078500	453939	BV	21.9379	A-BHC
8	10.96		.102451	13323	VV	0.0000	
9	12.03	12.01	.085381	431985	BV	20.9153	G-BHC
10	13.12	13.09	.093018	473865	BV	19.8894	HEPTACHLOR
11	18.63	18.61	.104460	336977	BV	19.7444	ENDOSULFAN 1
12	20.38	20.35	.107414	698789	PB	40.4860	DIELDRIN
13	21.41	21.39	.112107	621891	BV	41.1767	ENDRIN
14	21.96		.257515	10445	PV	0.0000	
15	23.59	23.57	.115020	508697	BV	39.9825	4,4' DDD
16	24.60	24.58	.091350	434091	VV	38.8275	4,4' DDT
17	24.85		.089045	35377	PV	0.0000	
18	25.27	25.30	.195945	16437	BV	1.7963	ENDRIN ALDEHYDE
19	25.74		.169567	19980	VV	0.0000	
20	25.98	26.02	.115079	10018	VV	1.1675	ENDOSULFAN SULFATE
21	26.22	26.22	.064202	791036	VV	202.9341	METHOXYCHLOR
22	29.63		.386889	16386	BB	0.0000	
23	30.24	#30.23	.106499	422544	BB	39.6644	DCB

otal Area : 5776881 Total ng inj : 509.215

port Time : 2149 24Nov1999
thod : /DATA/LOOP/METHOD/HP58904AP.MTH
esult File : /DATA/LOOP/RESULT/D4AS01J 034.RES

IEA Pesticide Standard Report

ample Name : INDB L3 Inj:2156 24Nov1999
esult : /DATA/LOOP/RESULT/D4AS01J 035.RES GC: HP5890A
olumn : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

mple Name : IND8 L3 Report No :373.00
Result File : /DATA/LOOP/RESULT/D4AS01J 035.RES
olumn Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
strument : HP58904A
alculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2156 24Nov1999
quence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
hseq/Sample : 1/ 35 Bottle no. : 35

Dil-Fact
100.00

Run Status : RunStatusOK

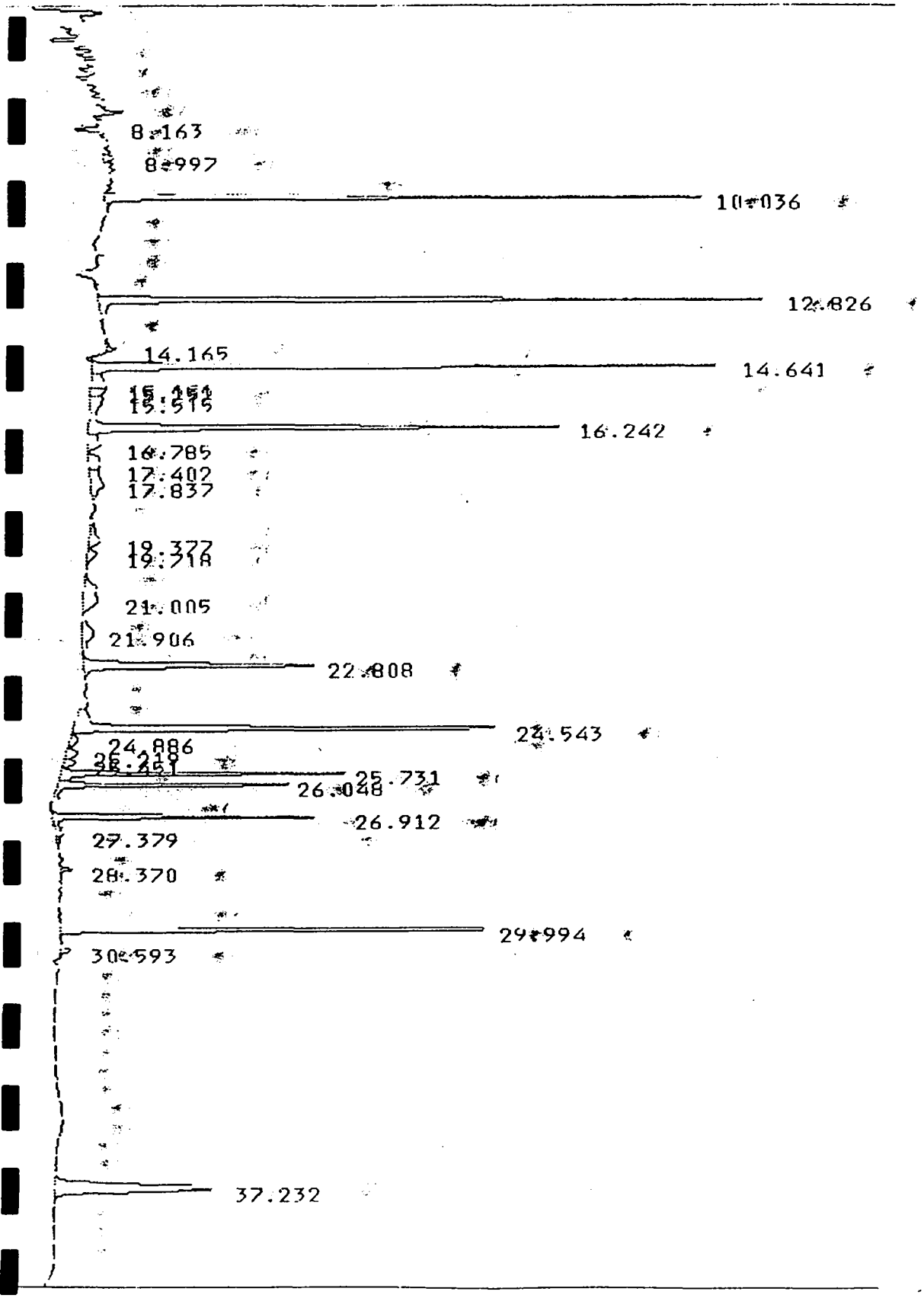
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.67		.102546	18890	PB	0.0000	
2	7.57		.082469	19760	BB	0.0000	
3	8.01	7.99	.066903	369060	BV	20.2569	TCX
4	10.97		.974142	22615	BV	0.0000	
5	14.36	14.32	.092493	389634	BV	20.1778	ALDRIN
6	14.91	14.90	.098048	229100	BB	20.0894	B-BHC
7	16.09	16.07	.103242	342352	BB	21.8462	D-BHC
8	17.24	17.21	.104614	402741	BB	20.0938	HEPTACHLOR EPOXIDE
9	18.83	18.80	.106182	380940	BV	19.1322	G-CHLORDANE
10	19.11	19.08	.111958	419717	VV	19.5163	A-CHLORDANE
11	19.74	19.71	.110720	731334	VB	40.9299	4,4' DDE
12	23.76	23.73	.122470	612277	PB	40.3371	ENDOSULFAN II
13	24.39		.185669	14331	BV	0.0000	
14	25.30	25.30	.139853	382392	BV	41.7897	ENDRIN ALDEHYDE
15	25.75		.114727	15451	VV	0.0000	
16	26.02	26.02	.065421	325621	VB	37.9466	ENDOSULFAN SULFATE
17	27.13	27.12	.070298	321562	BV	40.4075	ENDRIN KETONE
18	29.64		.530069	25893	BB	0.0000	
19	30.25	#30.23	.103697	402108	BB	37.7460	DCB

tal Area : 5425778 Total ng inj : 380.269

port Time : 2237 24Nov1999
thod : /DATA/LOOP/METHOD/HP58904AP.MTH
sult File : /DATA/LOOP/RESULT/D4AS01J 035.RES

ILA Pesticide Standard Report

mple Name : INDA L3 Inj 2020 24Nov1999
sult : /DATA/LOOP/RESULT/D4BS010 033.RES GC : HP58904B
olumn : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

mple Name : INDA L3 Report No :369.00
esult File : /DATA/LOOP/RESULT/D4BS01J 033.RLS
lumn Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
strument : HP58904B
alculation : ExternalSTD
un Time : 40.00 Mins. Injected on 2020 24Nov1999
quence File : /DATA/LOOP/SEQUENCE/S4BS01J.SEQ
nseq/Sample : 1/ 33 Bottle no. : 34

Dil-Fact
100.00

n Status : RunStatusOK
EndOffBaseline

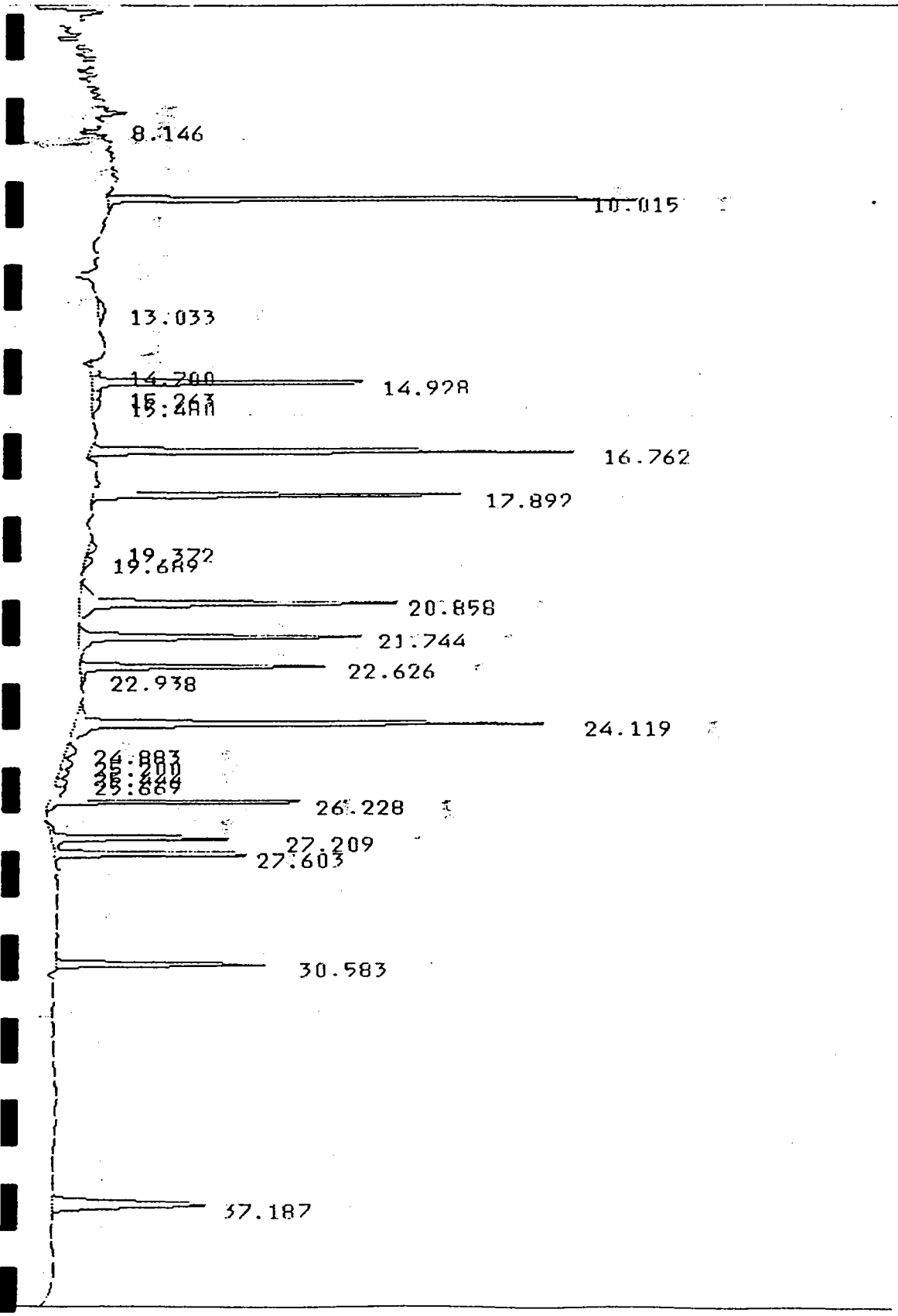
#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.16		.086502	10978	BV	0.0000	
2	9.00		.119437	10678	VV	0.0000	
3	10.04	$10.00	.080539	476919	PV	21.8220	TCX
4	12.83	12.78	.095936	699804	BV	25.1882	A-BHC
5	14.17		.131988	14726	BB	0.0000	
6	14.64	14.60	.102654	618429	BV	25.7657	G-BHC
7	15.15		.251547	38959	VV	0.0000	
8	15.25		.199149	29153	VV	0.0000	
9	15.51		.336589	42632	VV	0.0000	
10	16.24	16.19	.120494	552626	VV	26.3846	HEPTACHLOR
11	16.78	16.74	.190432	22416	VV	1.1888	D-BHC
12	17.40		.422012	39533	PV	0.0000	
13	17.84	17.87	.519581	64408	VV	3.4540	ALDRIN
14	19.38		.374463	35725	BV	0.0000	
15	19.72		.281074	22102	VV	0.0000	
16	21.01		.661243	89210	VV	0.0000	
17	21.91		.541962	59787	PV	0.0000	
18	22.81	22.77	.126568	293516	PV	23.5528	ENDOSULFAN I
19	24.54	24.51	.118369	518982	VV	47.2661	DIELDRIN
20	24.89		.253161	19053	VV	0.0000	
21	25.22		.187495	19254	VV	0.0000	
22	25.45		.166871	17156	VV	0.0000	
23	25.73	25.72	.076769	240854	VV	47.2817	ENDRIN
24	26.05	26.03	.071616	212032	VB	49.3785	4,4' DDD
25	26.91	26.90	.073451	197475	BV	46.2906	4,4' DDT
26	27.38		.315023	22941	VV	0.0000	
27	28.37		.085382	10793	PV	0.0000	
28	29.99	29.99	.100345	482270	BV	231.9719	METHOXYCHLOR
29	30.59	30.59	.159609	16027	VB	3.4041	ENDRIN KETONE
30	37.23	37.24	.184265	271614	BB	46.2558	DCB

otal Area : 5150050 Total ng inj : 599.205

port Time : 2104 24Nov1999
thod : /DATA/LOOP/METHOD/HP58904BP.MTH
esult File : /DATA/LOOP/RESULT/D4BS01J 033.RFS

IEA Pesticide Standard Report

mple Name : INDB L3 Inj 2108 24Nov1999
sult : /DATA/LOOP/RESULT/D4BS01J 034.RES GC : HP58904B
olumn : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : INDB L3 Report No :370.00
Result File : /DATA/LOOP/RESULT/D4BS01J 034.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 2108 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4BS01J.SEQ
Subseq/Sample : 1/ 34 Bottle no. : 35

Dil-Fact
100.00

Run Status : RunStatusOK

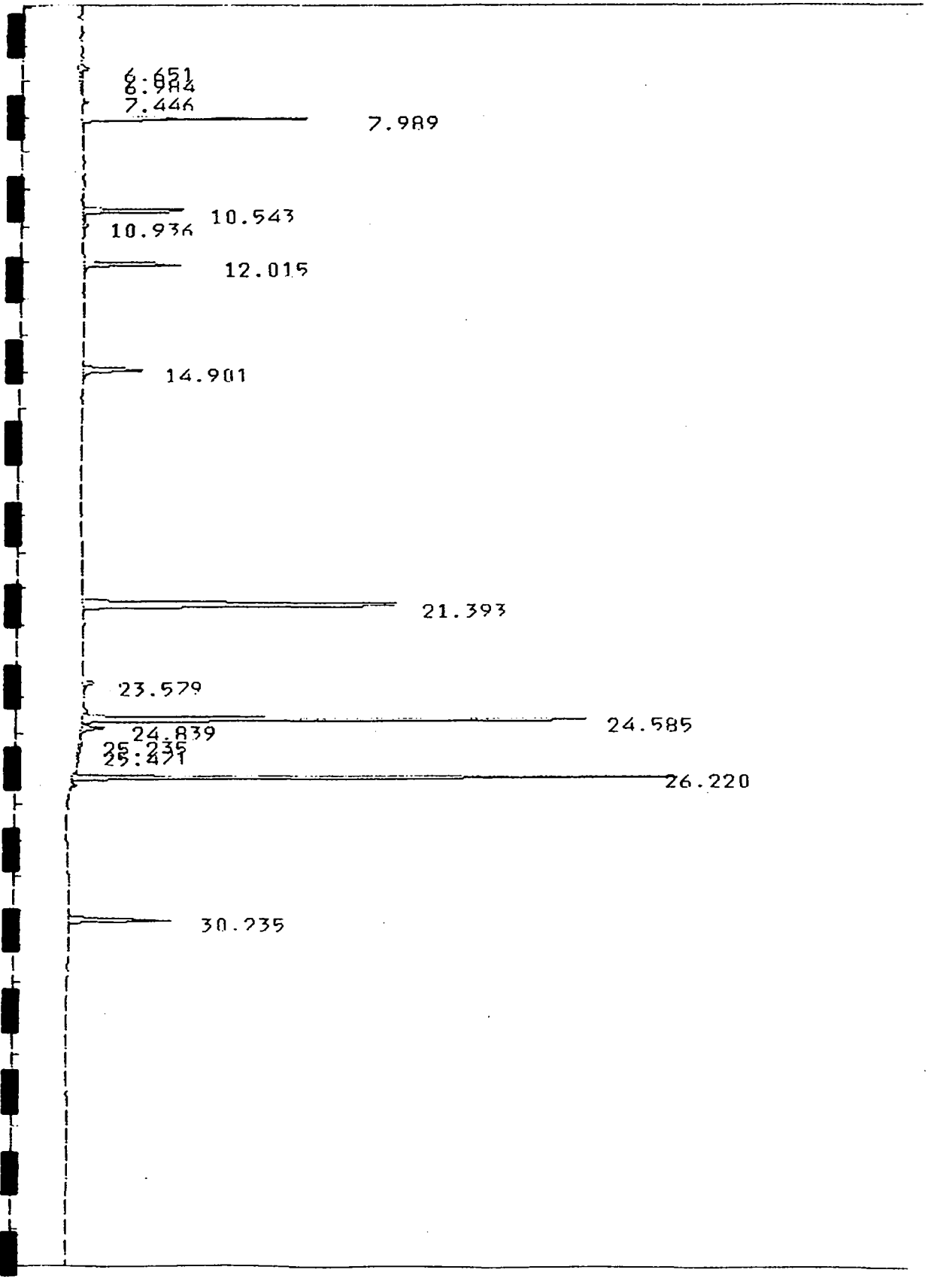
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.15		.090864	11540	BV	0.0000	
2	10.02	#10.00	.080911	475528	PV	21.7583	TCX
3	13.03		.429448	24428	BV	0.0000	
4	14.70		.167624	14374	BV	0.0000	
5	14.93	14.90	.105638	302973	VV	26.8260	B-BHC
6	15.26		.197356	15665	VV	0.0000	
7	15.48		.240160	20364	VV	0.0000	
8	16.76	16.74	.101341	467678	BV	24.8026	D-BHC
9	17.89	17.87	.120653	440175	VV	23.6057	ALDRIN
10	19.37		.201079	14019	BV	0.0000	
11	19.69		.250647	16475	PV	0.0000	
12	20.86	20.84	.142351	439786	VV	26.3203	HEPTACHLOR EPOXIDE
13	21.74	21.73	.135053	363925	PV	23.3435	G-CHLORDANE
14	22.63	22.61	.124570	290622	PV	23.9294	A-CHLORDANE
15	22.94		.225650	10212	VV	0.0000	
16	24.12	24.10	.138804	611535	BV	50.6406	4,4' DDE
17	24.88		.265873	23134	VV	0.0000	
18	25.20		.197522	19967	VV	0.0000	
19	25.44		.169892	16051	VV	0.0000	
20	25.67	25.72	.209774	20933	VV	4.1093	ENDRIN
21	26.23	26.22	.076185	230864	VV	49.8842	ENDOSULFAN II
22	27.21	27.21	.091602	176106	BV	47.9201	ENDRIN ALDEHYDE
23	27.60	27.60	.080817	185899	VV	44.6978	ENDOSULFAN SULFATE
24	30.58	30.59	.108751	219510	PB	46.6248	ENDRIN KETONE
25	37.19	37.24	.183705	259214	BB	44.1442	DCB

Total Area : 4670979 Total ng inj : 458.607

Report Time : 2152 24Nov1999
Method : /DATA/LOOP/METHOD/HP58904B.MTH
Result File : /DATA/LOOP/RESULT/D4BS01J 034.RES

IEA Pesticide Standard Report

Sample Name : EVAL B Inj:1648 09Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C 005.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : EVAL 8 Report No : 32.00
Result File : /DATA/LOOP/RESULT/D4AS01C 005.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1648 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 5 Bottle no. : 5

% Oil-Fact
100.00

Run Status : RunStatusOK

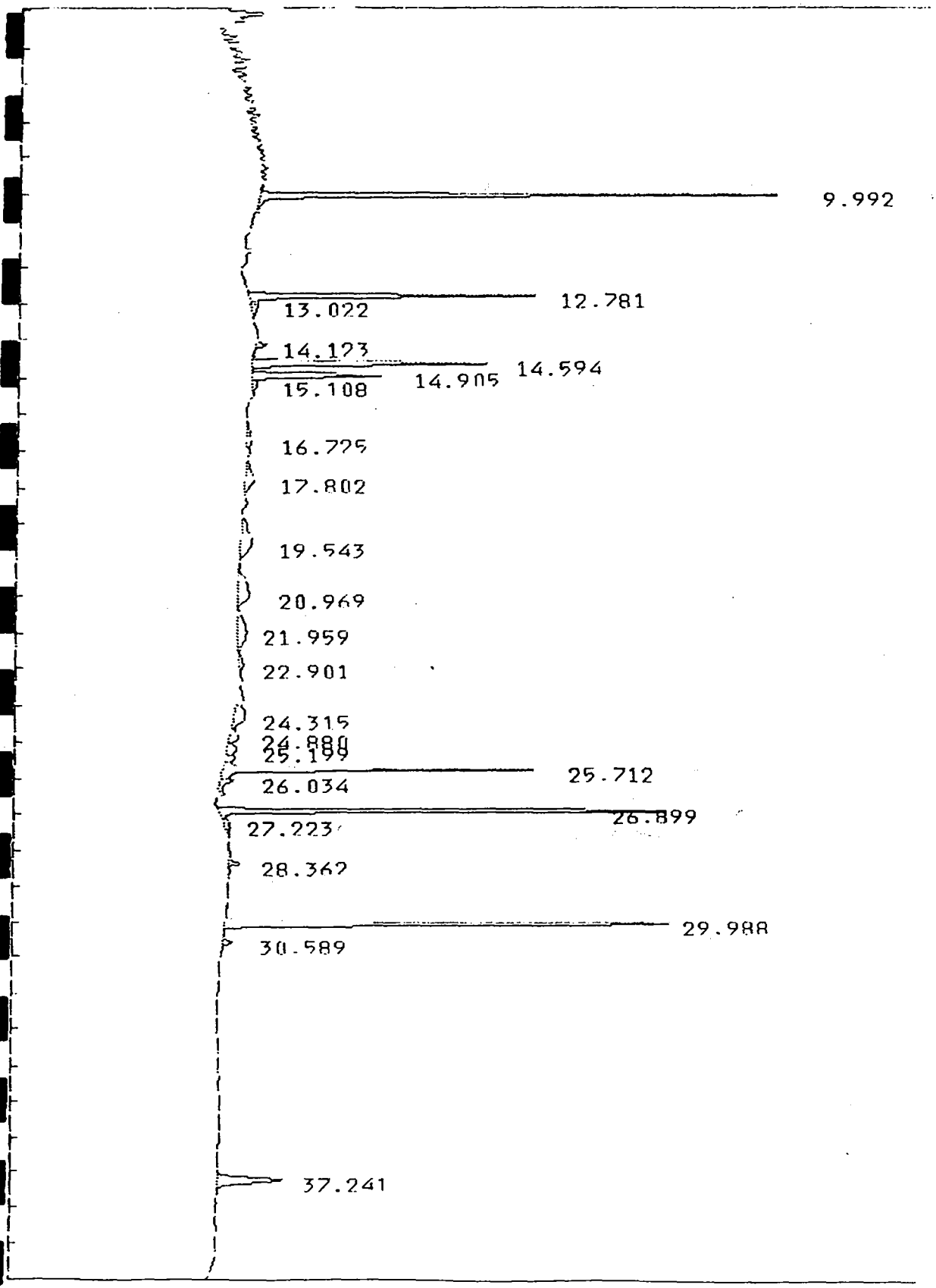
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.65		.147118	36663	PV	0.0000	
2	6.98		.195388	11528	VV	0.0000	
3	7.45		.286051	11417	VV	0.0000	
4	7.99	8.01	.066600	355194	BV	20.3064	TCX
5	10.54	10.57	.076348	191817	BV	9.2341	A-BHC
6	10.94		.093021	11127	VB	0.0000	
7	12.01	12.04	.086144	202505	VV	9.5299	G-BHC
8	14.90	14.93	.102801	132549	BV	11.0639	D-BHC
9	21.39	21.43	.112294	786981	BV	48.9021	ENDRIN
10	23.58	23.61	.150553	31710	BB	2.3580	4,4' DDD
11	24.58	24.61	.095622	1124228	VV	92.6586	4,4' DDT
12	24.84		.087180	43977	VB	0.0000	
13	25.24		.187330	10467	BV	0.0000	
14	25.47		.165162	11472	VV	0.0000	
15	26.22	26.24	.064266	947433	VV	210.7746	METHOXYCHLOR
16	30.24	#30.26	.105189	229148	BB	17.8952	DCB

Total Area : 4138218 Total ng inj : 422.723

Report Time : 1729 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 005.RES

IEA Pesticide Standard Report

Sample Name : EVAI B Inj 1600 09Nov1999
Result : /DATA/LOOP/RESULT/D4RS01C 004.RES GC : HP58904A
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : EVAL B
Report No : 31.00
Result File : /DATA/LOOP/RESULT/D4RS01C 004.RES
Column Type : DB-608 30 Meter,0.53mm ID
Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1600 09Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 4 Bottle no. : 5

% Dil-Fact
100.00

Run Status : RunStatusOK

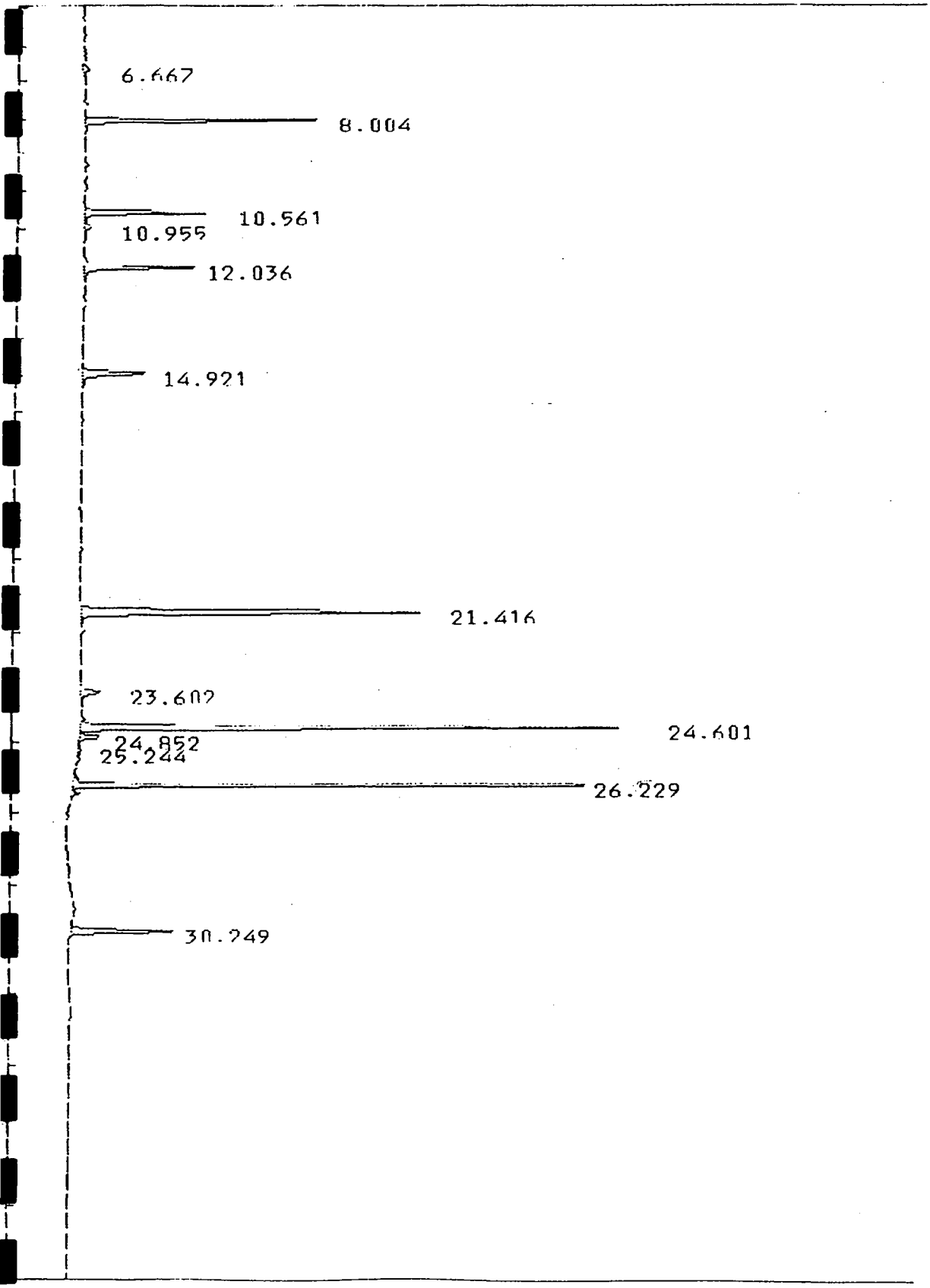
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	9.99	#10.01	.082038	445556	BB	.0863	TCX
2	12.78	12.76	.093367	277951	BV	.0432	A-BHC
3	13.02		.212144	15172	VV	0.0000	
4	14.12		.092391	10182	PB	0.0000	
5	14.59	14.57	.096732	234628	BV	.0399	G-BHC
6	14.90	14.91	.097431	129407	PV	.0445	B-BHC
7	15.11		.189247	10385	VV	0.0000	
8	16.73	16.74	.425814	21310	BV	.0044	D-BHC
9	17.80	17.84	.507405	47510	VV	.0100	ALDRIN
10	19.54		.675108	73119	BV	0.0000	
11	20.97		.571260	64108	VV	0.0000	
12	21.96		.668908	55147	PV	0.0000	
13	22.90		.396675	14072	PV	0.0000	
14	24.32		.438195	49703	VV	0.0000	
15	24.88		.312284	25567	VV	0.0000	
16	25.20		.222003	21783	VV	0.0000	
17	25.71	25.68	.077856	261724	VV	.2626	ENDRIN
18	26.03	26.02	.164179	24917	VV	.0255	4,4' DDD
19	26.90	26.87	.074114	422487	BV	.4224	4,4' DDT
20	27.22	27.18	.213737	16550	VV	.0188	ENDRIN ALDEHYDE
21	28.36		.089223	11073	VV	0.0000	
22	29.99	29.94	.100978	506570	BV	.9450	METHOXYCHLOR
23	30.59	30.54	.118210	11304	PB	.0084	ENDRIN KETONE
24	37.24		.184483	119200	BB	0.0000	

Total Area : 2869425 Total ng inj : 1.911

Report Time : 1644 09Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 004.RES

IEA Pesticide Standard Report

Sample Name : EVAL B Inj:1200 10Nov1999
Result : /DATA/LOOP/RESULT/D4A501C 028.RES GC: HP58904A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

Sample Name : EVAL B Report No : 55.00
Result File : /DATA/LOOP/RESULT/D4AS01C 028.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1200 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 28 Bottle no. : 28

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline

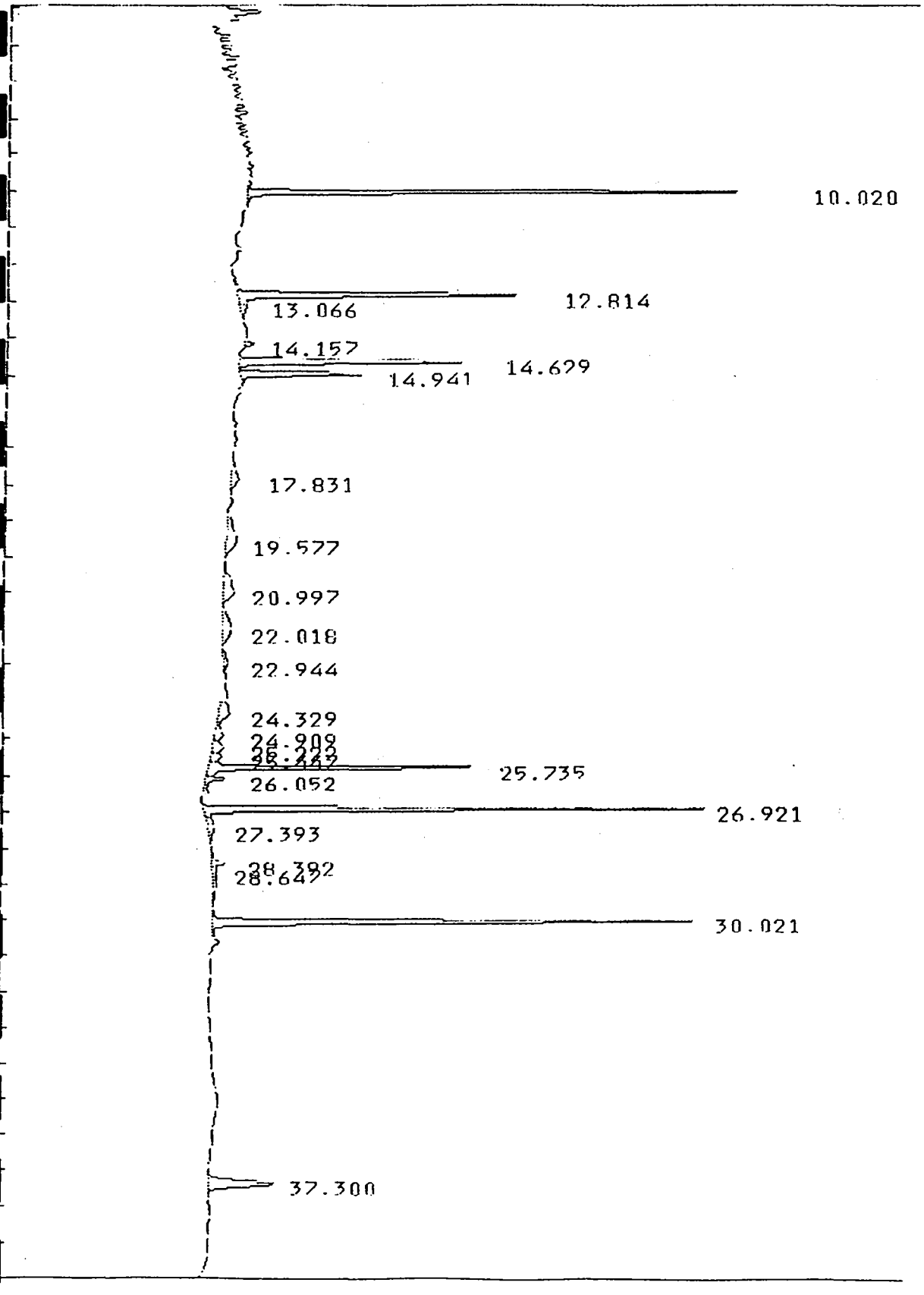
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.67		.144630	25042	PV	0.0000	
2	8.00	7.99	.066444	355653	BV	20.3327	TCX
3	10.56	10.54	.077286	194850	BV	9.3801	A-BHC
4	10.96		.093329	11927	VB	0.0000	
5	12.04	12.01	.087932	203823	VV	9.5919	G-BHC
6	14.92	14.91	.102655	130870	BB	10.9238	B-BHC
7	21.42	21.39	.113740	766913	BV	47.6550	ENDRIN
8	23.60	23.57	.135237	51216	BV	3.8084	4,4' DDD
9	24.60	24.58	.094838	1028819	VV	84.7950	4,4' DDT
10	24.85		.082763	37563	VV	0.0000	
11	25.24	25.30	.177744	10040	BV	.9650	ENDRIN ALDEHYDE
12	26.23	26.22	.064335	900297	PV	200.2881	METHOXYCHLOR
13	30.25	#30.23	.103360	215248	BB	16.8097	DCB

Total Area : 3932259 Total ng inj : 404.550

Report Time : 1241 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904AP.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C 028.RES

IEA Pesticide Standard Report

Sample Name : EVAL B Inj 1112 10Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C 027.RES GC : HP58904B
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



HA Pesticide Standard Report

Sample Name : EVAL B Report No : 54.00
Result File : /DATA/LOOP/RESULT/D4RS01C 027.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1112 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01C.SEQ
Subseq/Sample : 1/ 27 Bottle no. : 28

% Dil-Fact
100.00

Run Status : RunStatusOK
EndOffBaseline

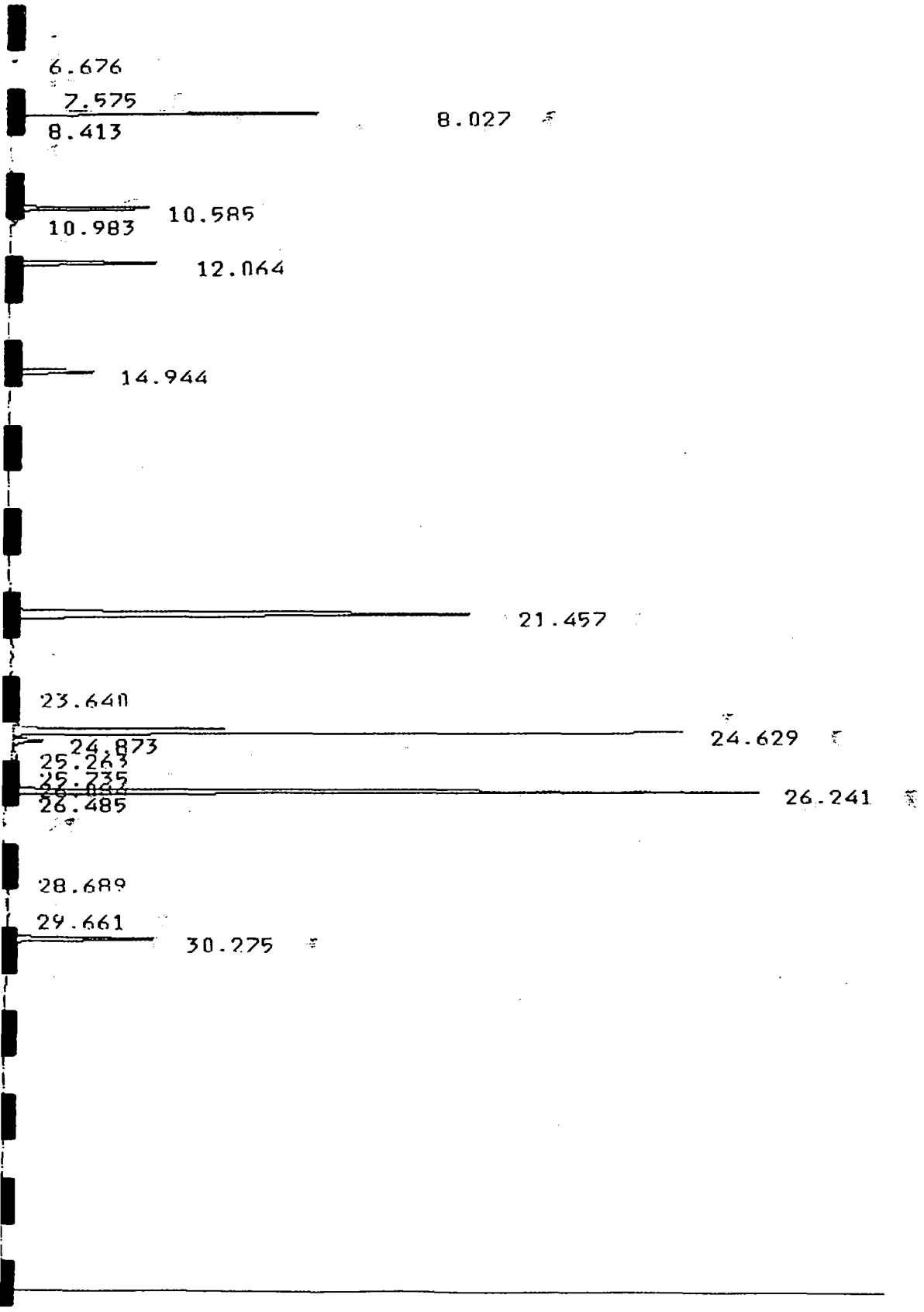
Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	10.02	#10.00	.081856	468226	PV	.0907	TCX
2	12.81	12.78	.097427	300999	VV	.0468	A-BHC
3	13.07		.223038	17040	VV	0.0000	
4	14.16		.091365	10080	PB	0.0000	
5	14.63	14.60	.096878	242579	BV	.0413	G-BHC
6	14.94	14.91	.095303	128610	PV	.0442	B-BHC
7	17.83	17.87	.401135	31358	BV	.0066	ALDRIN
8	19.58		.645223	67971	BV	0.0000	
9	21.00		.577723	62833	PV	0.0000	
10	22.02		.706354	56744	PV	0.0000	
11	22.94		.375644	14357	PV	0.0000	
12	24.33		.414533	44438	VV	0.0000	
13	24.91		.287877	24247	VV	0.0000	
14	25.22		.224817	23838	VV	0.0000	
15	25.45		.195907	21159	VV	0.0000	
16	25.74	25.72	.083626	262855	VV	.2637	ENDRIN
17	26.05	26.03	.130870	31059	VB	.0317	4,4' DDD
18	26.92	26.90	.076422	412886	BV	.4128	4,4' DDT
19	27.39		.379423	29088	VV	0.0000	
20	28.39		.142721	23125	BV	0.0000	
21	28.65		.586408	27963	VB	0.0000	
22	30.02	29.99	.103804	527660	BV	.9843	METHOXYCHLOR
23	37.30	37.24	.180814	122379	BV	.0747	DCB

Total Area : 2951496 Total ng inj : 1.997

Report Time : 1156 10Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01C 027.RES

IEA Pesticide Standard Report

mple Name : EVAL B Inj:0825 24Nov1999
sult : /DATA/LOOP/RESULT/D4AS01J 019.RES GC: HP58904A
lumn : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



ILA Pesticide Standard Report

mple Name : EVAL B Report No :357.00
sult File : /DATA/LOOP/RESULT/D4AS01J 019.RES
umn Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
trument : HP58904A
lculation : ExternalSTD
Time : 40.00 Mins. Injected on 0825 24Nov1999
uence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
hseq/Sample : 1/ 19 Bottle no. : 19

Dil-Fact
100.00

Status : RunStatusOK

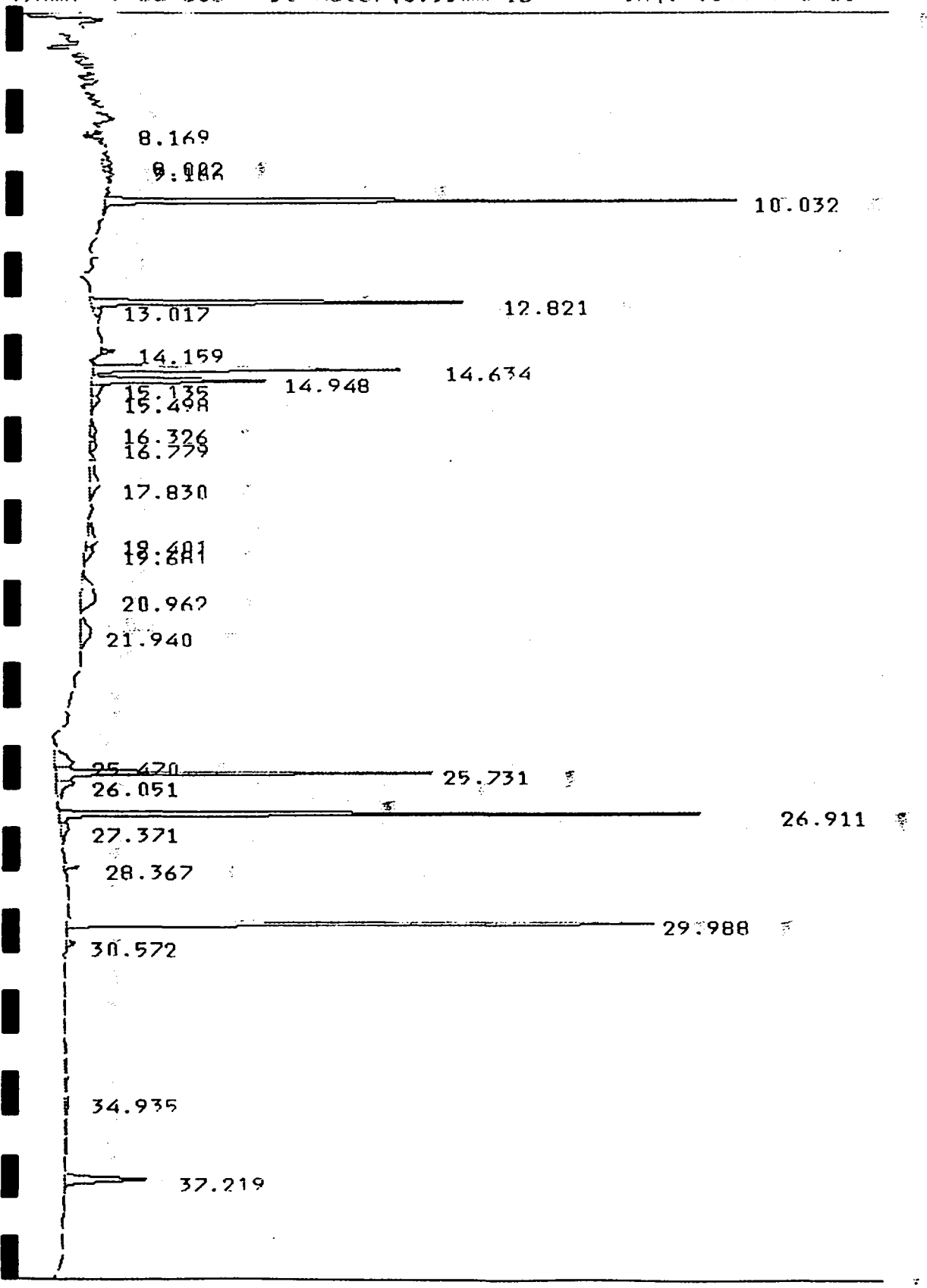
#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.68		.105923	25087	PB	0.0000	
2	7.57		.089892	17938	VB	0.0000	
3	8.03	7.99	.067524	387248	BV	21.2552	TCX
4	8.41		.187918	10310	BV	0.0000	
5	10.58	10.54	.077348	205840	BV	9.9478	A-BHC
6	10.98		.096131	12711	VB	0.0000	
7	12.06	12.01	.085575	207213	VV	10.0326	G-BHC
8	14.94	14.90	.100329	130374	BB	11.4323	B-BHC
9	21.46	21.39	.111168	796390	BV	52.7306	ENDRIN
10	23.64	23.57	.179388	20412	PV	1.6044	4,4' DDD
11	24.63	24.58	.091467	1100510	VV	98.4356	4,4' DDT
12	24.87		.084083	40531	PV	0.0000	
13	25.26	25.30	.219393	15684	BV	1.7140	ENDRIN ALDEHYDE
14	25.74		.286575	35837	VV	0.0000	
15	26.08	26.02	.185756	25586	VV	2.9817	ENDOSULFAN SULFATE
16	26.24	26.22	.063635	1003526	VV	257.4466	METHOXYCHLOR
17	26.48		.066573	11193	VB	0.0000	
18	28.69		.385580	12933	BV	0.0000	
19	29.66		.855807	23013	VB	0.0000	
20	30.27	#30.23	.101404	226197	PB	21.2332	DCB

tal Area : 4308531 Total ng inj : 488.814

port Time : 0906 24Nov1999
thod : /DATA/LOOP/METHOD/HP58904AP.MTH
sult File : /DATA/LOOP/RESULT/D4AS01J 019.RES

IEA Pesticide Standard Report

mple Name : EVAL B Inj 0733 24Nov1999
sult : /DATA/LOOP/RESULT/D4BS01J 018.RES GC : HP58904A
lumn : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

ample Name : EVAL 8 Report No :354.00
esult File : /DATA/LOOP/RESULT/D4BS01J 018.RES
lumn Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
strument : HP58904B
alculation : ExternalSTD
n Time : 40.00 Mins. Injected on 0733 24Nov1999
quence File : /DATA/LOOP/SEQUENCE/S4BS01J.SEQ
ubseq/Sample : 1/ 18 Bottle no. : 19

Dil-Fact
100.00

n Status : RunStatusOK

#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.17		.085764	10435	BV	0.0000	
2	9.00		.115872	10506	VV	0.0000	
3	9.17		.116239	10387	VV	0.0000	
4	10.03	#10.00	.080617	503574	PV	23.0416	TCX
5	12.82	12.78	.093773	341564	VV	12.2940	A-BHC
6	13.02		.191412	15793	VV	0.0000	
7	14.16		.086224	11219	VB	0.0000	
8	14.63	14.60	.098440	297882	BV	12.4107	G-BHC
9	14.95	14.90	.101138	168816	VV	14.9474	B-BHC
10	15.13		.227582	25666	VV	0.0000	
11	15.50		.207839	16996	VV	0.0000	
12	16.33		.292159	16464	PV	0.0000	
13	16.78	16.74	.202406	12474	VV	.6615	D-BHC
14	17.83	17.87	.617947	52469	VV	2.8138	ALDRIN
15	19.40		.398559	38783	BV	0.0000	
16	19.68		.282908	22090	VV	0.0000	
17	20.96		.661295	85816	VV	0.0000	
18	21.94		.592461	57622	PV	0.0000	
19	25.47		.357000	60839	PV	0.0000	
20	25.73	25.72	.080643	332839	VV	65.3394	ENDRIN
21	26.05	26.03	.247550	45651	VV	10.6314	4,4' DDD
22	26.91	26.90	.073496	485285	BV	113.7567	4,4' DDT
23	27.37		.337314	27081	VB	0.0000	
24	28.37		.082912	12329	PV	0.0000	
25	29.99	29.99	.101098	629080	VV	302.5876	METHOXYCHLOR
26	30.57	30.59	.147813	11445	VB	2.4309	ENDRIN KETONE
27	34.93		1.940251	53275	BB	0.0000	
28	37.22	37.24	.180794	141828	BB	24.1533	DCB

tal Area : 3498210 Total ng inj : 585.068

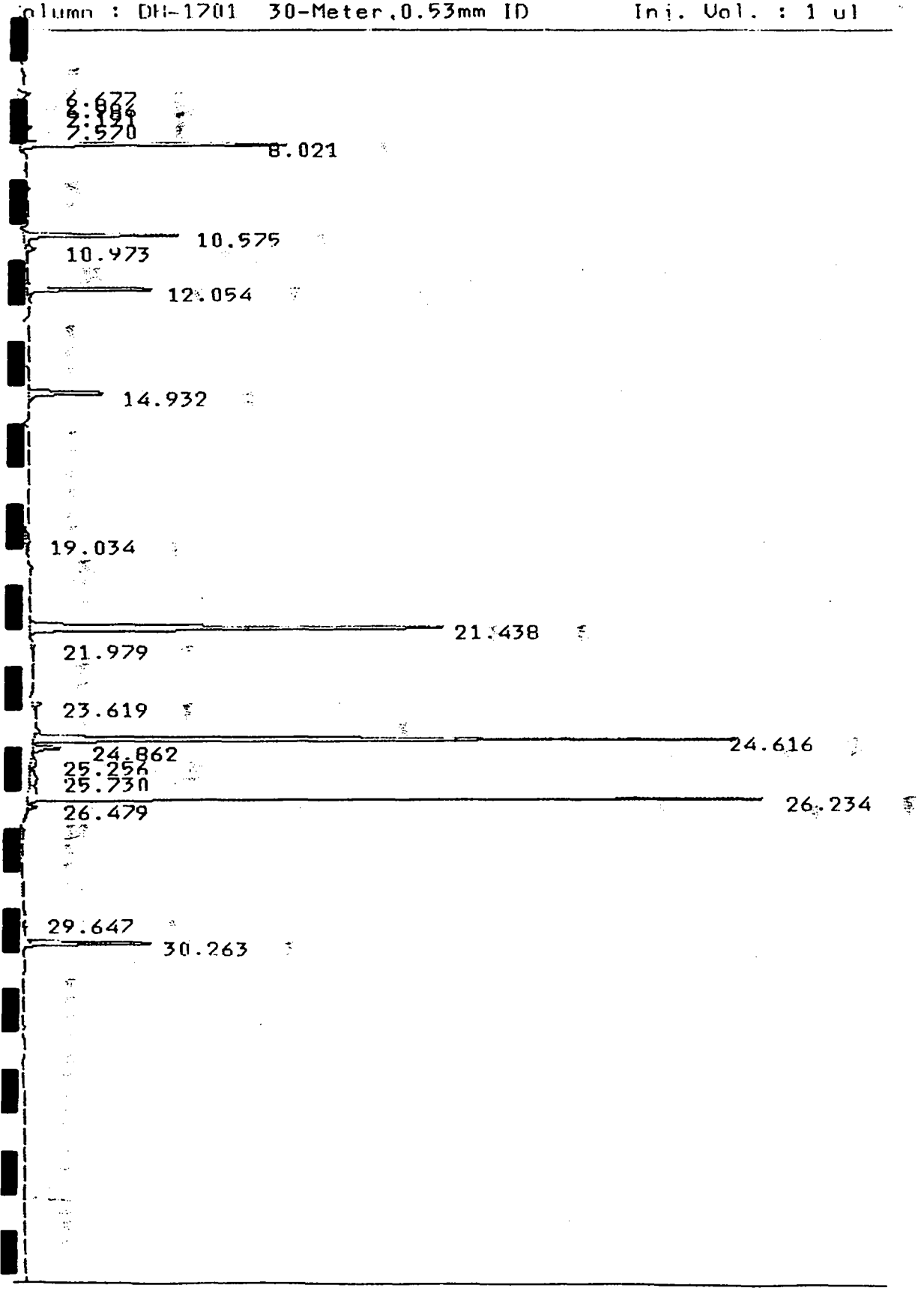
port Time : 0816 24Nov1999
thod : /DATA/LOOP/METHOD/HP58904BP.MTH
sult File : /DATA/LOOP/RESULT/D4BS01J 018.RES

IEA Pesticide Standard Report

ample Name : EVAL B Inj:2020 24Nov1999

[illegible] 033.RES GC: HP58904A

olumn : DH-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

ample Name : EVAL 8 Report No :371.00
esult File : /DATA/LOOP/RESULT/D4AS01J 033.RES
lumn Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
strument : HP5890A
alculation : ExternalSTD
n Time : 40.00 Mins. Injected on 2020 24Nov1999
quence File : /DATA/LOOP/SEQUENCE/S4AS01J.SEQ
ubseq/Sample : 1/ 33 Bottle no. : 33

Dil-Fact
100.00

n Status : RunStatusOK
EndOffBaseline

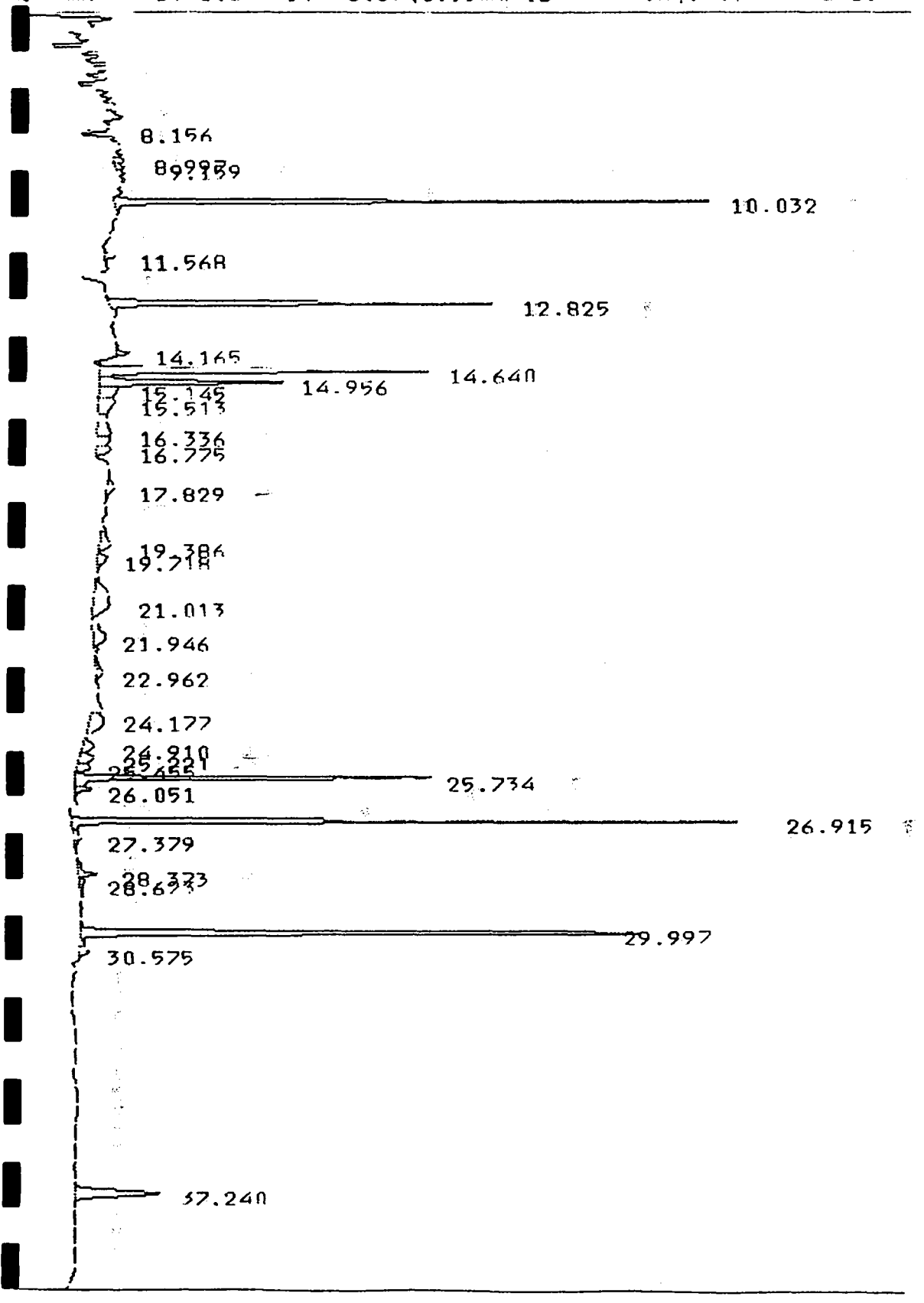
#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.68		.163253	39650	PV	0.0000	
2	6.99		.119909	10734	VV	0.0000	
3	7.19		.226704	15146	VV	0.0000	
4	7.57		.073685	11046	VB	0.0000	
5	8.02	7.99	.067923	385878	BV	21.1800	TCX
6	10.58	10.54	.081992	218448	BV	10.5571	A-BHC
7	10.97		.113857	16646	VB	0.0000	
8	12.05	12.01	.086277	211713	PV	10.2505	G-BHC
9	14.93	14.90	.100870	131919	BB	11.5678	B-BHC
10	19.03	19.08	.396030	21787	PV	1.0131	A-CHLORDANE
11	21.44	21.39	.113341	797604	BV	52.8110	ENDRIN
12	21.98		.181654	11304	PB	0.0000	
13	23.62	23.57	.109406	15165	BV	1.1919	4,4' DDD
14	24.62	24.58	.092412	1061807	VV	94.9738	4,4' DDT
15	24.86		.090165	42476	PV	0.0000	
16	25.26	25.30	.217313	19794	BV	2.1632	ENDRIN ALDEHYDE
17	25.73		.320798	40194	PV	0.0000	
18	26.23	26.22	.064701	995216	VV	255.3146	METHOXYCHLOR
19	26.48		.066625	10858	VB	0.0000	
20	29.65		.957622	24428	VB	0.0000	
21	30.26	#30.23	.099572	212624	BB	19.9591	DCB

tal Area : 4294438 Total ng inj : 480.982

eport Time : 2101 24Nov1999
ethod : /DATA/LOOP/METHOD/HP58904AP.MTH
esult File : /DATA/LOOP/RESULT/D4AS01J 033.RES

IEA Pesticide Standard Report

mple Name : EVAL B Inj 1932 24Nov1999
esult : /DATA/LOOP/RESULT/D4BS01J 032.RES GC : HP5890A
olumn : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : EVAL 8 Report No :368.00
Result File : /DATA/LOOP/RESULT/D4RS01J 032.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP58904B
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 1932 24Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4RS01J.SEQ
Subseq/Sample : 1/ 32 Bottle no. : 33

Dil-Fact
100.00

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.16		.085157	12478	BV	0.0000	
2	9.00		.114260	11148	VV	0.0000	
3	9.16		.118764	11053	VV	0.0000	
4	10.03	#10.00	.081552	475644	PV	21.7636	TCX
5	11.57		.110916	10908	BB	0.0000	
6	12.83	12.78	.091564	339215	PV	12.2095	A-BHC
7	14.16		.089712	12418	VB	0.0000	
8	14.64	14.60	.102452	321202	BV	13.3823	G-BHC
9	14.96	14.90	.107808	191408	VV	16.9478	B-BHC
10	15.15		.267784	48849	VV	0.0000	
11	15.51		.330732	51685	VV	0.0000	
12	16.34		.354402	45654	VV	0.0000	
13	16.78	16.74	.198031	26859	VV	1.4244	D-BHC
14	17.83	17.87	.308624	19531	BV	1.0474	ALDRIN
15	19.39		.309896	29926	VV	0.0000	
16	19.72		.302479	25168	PV	0.0000	
17	21.01		.673657	100961	VV	0.0000	
18	21.95		.541105	59772	PV	0.0000	
19	22.96		.392506	18557	VV	0.0000	
20	24.18	24.10	.482496	56582	VV	4.6855	~~4,4' DDE~~
21	24.91		.251056	23825	VV	0.0000	
22	25.22		.212298	26225	VV	0.0000	
23	25.45		.174100	21598	VV	0.0000	
24	25.73	25.72	.075918	309765	PV	60.8097	ENDRIN
25	26.05	26.03	.106625	18866	VV	4.3936	4,4' DDD
26	26.91	26.90	.074182	486735	BV	114.0965	4,4' DDT
27	27.38		.268083	20817	VV	0.0000	
28	28.37		.158877	29709	BV	0.0000	
29	28.62		.398275	17245	VB	0.0000	
30	30.00	29.99	.102499	614322	BV	295.4891	METHOXYCHLOR
31	30.57	30.59	.165817	14514	VB	3.0829	ENDRIN KETONE
32	37.24	37.24	.182477	141383	BB	24.0776	DCB

Total Area : 3594026 Total ng inj : 573.410

Report Time : 2016 24Nov1999
Method : /DATA/LOOP/METHOD/HP58904BP.MTH
Result File : /DATA/LOOP/RESULT/D4RS01J 032.RES

Severn Trent Laboratories - Whippany

Client ID: **method blank**
Site:

Lab Sample ID: **wg41689 mb**
Lab Job No: 94127

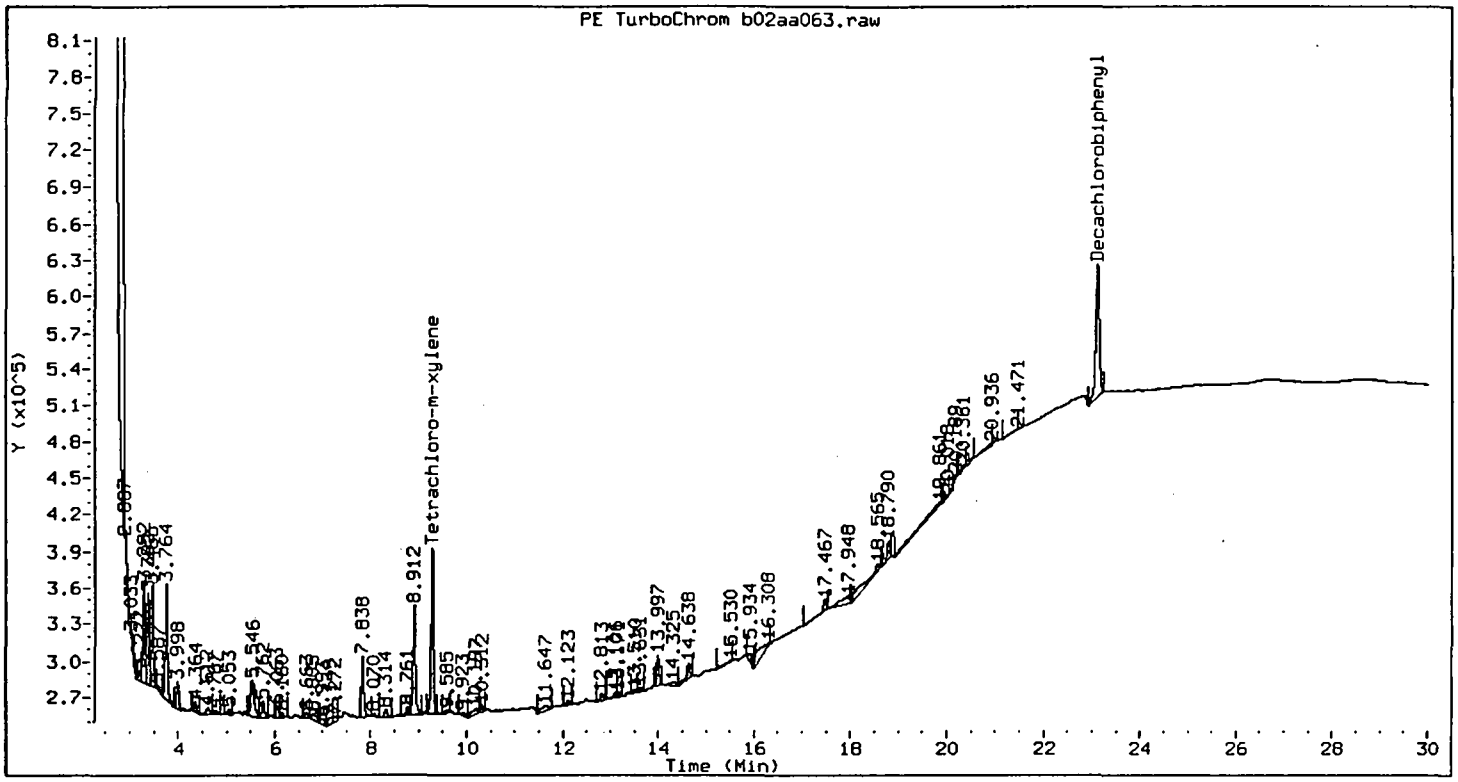
Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/19/99
Date Analyzed: 11/28/99
GC Front Column: Rtx-CLPest
GC Rear Column: Rtx-CLPestII
Instrument ID: HP58902.i

Matrix: WATER
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: b02aa063.d
Rear File ID: b02ab063.d

ORGANOCHLORINE PESTICIDES - GC/ECD
METHOD 8081A

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aldrin	ND	0.0100	R
alpha-BHC	ND	0.0100	R
beta-BHC	ND	0.0100	R
delta-BHC	ND	0.0100	R
gamma-BHC (Lindane)	ND	0.0100	R
4,4'-DDD	ND	0.0200	R
4,4'-DDE	ND	0.0200	R
4,4'-DDT	ND	0.0200	R
Dieldrin	ND	0.0200	R
Endosulfan I	ND	0.0100	R
Endosulfan II	ND	0.0200	R
Endosulfan sulfate	ND	0.0200	R
Endrin	ND	0.0200	R
Endrin aldehyde	ND	0.0200	R
Endrin ketone	ND	0.0200	R
Heptachlor	ND	0.0100	R
Heptachlor epoxide	ND	0.0100	R
Methoxychlor	ND	0.100	R
Toxaphene	ND	0.500	R
gamma-Chlordane	ND	0.0100	R
alpha-Chlordane	ND	0.0100	R

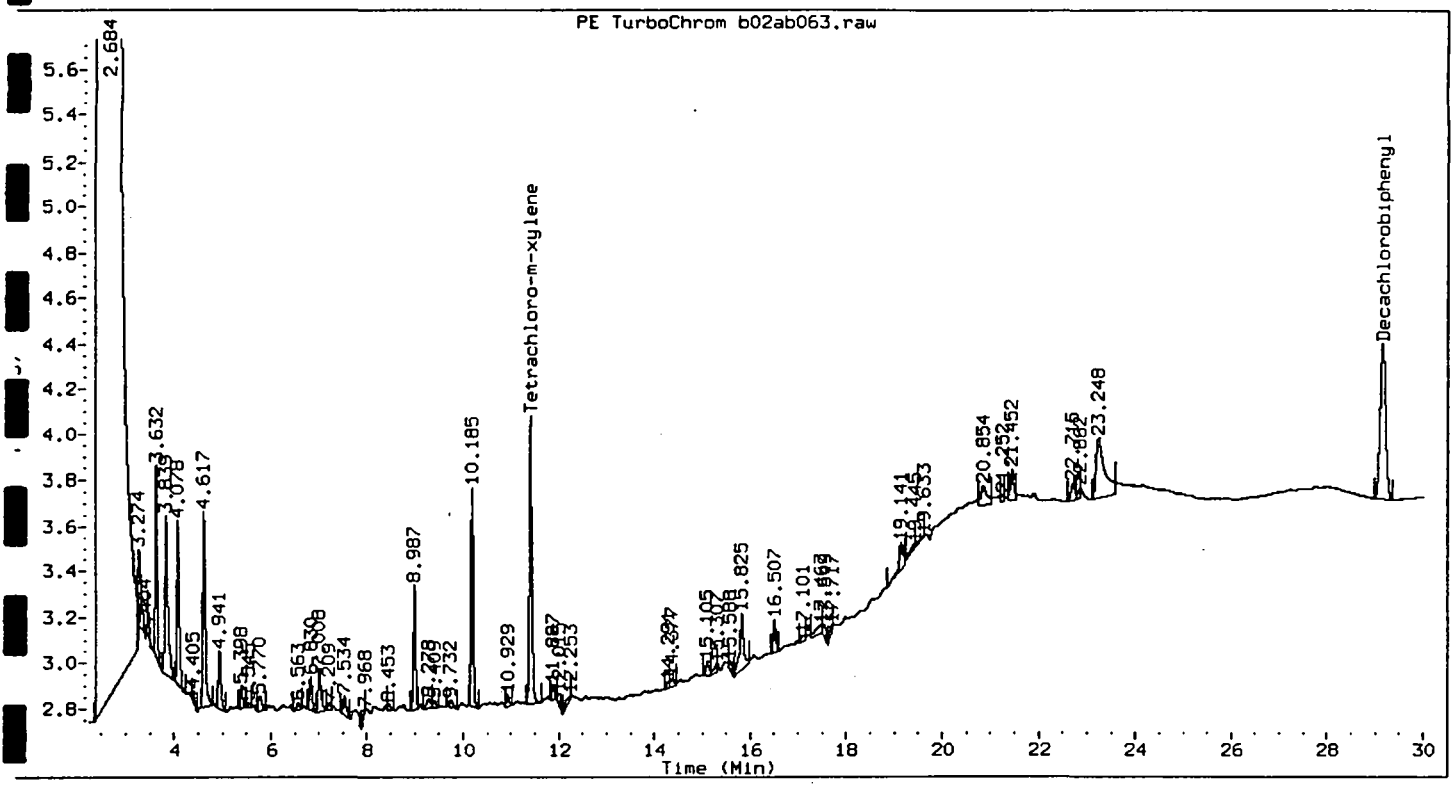
Data File: /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/b02aa063.d Page 1
Report Date 12/13/1999 14:54



Method : /chem/HP58902.i/8081/front/11-26-99/26nov99d.b/Bf8081.m
Sample Info : wg41689 mb
Lab ID : wg41689 mb
Inj Date : 28-NOV-1999 11:22
Operator : gds
Cpnd Sublist: TCLpest+

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
Tetrachloro-m-xylene	9.285	9.284	0.001	456458	13.100	0.026
Decachlorobiphenyl	23.117	23.119	0.003	560595	12.819	0.026



d : /chem/HP58902.i/8081/rear/11-26-99/26nov99d.b/Br8081.m
le Info : wg41689 mb
ID : wg41689 mb
Date : 28-NOV-1999 11:22
tor : gds
Sublist: TCLpest+

Inst ID : HP58902.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

nds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/l)
hloro-m-xylene	11.412	11.409	0.003	466966	14.011	0.028
lorobiphenyl	29.156	29.147	0.009	531654	11.260	0.023

FORM 1
PEST ORGANICS ANALYSIS DATA SHEET

CLIENT ID

Method Blank

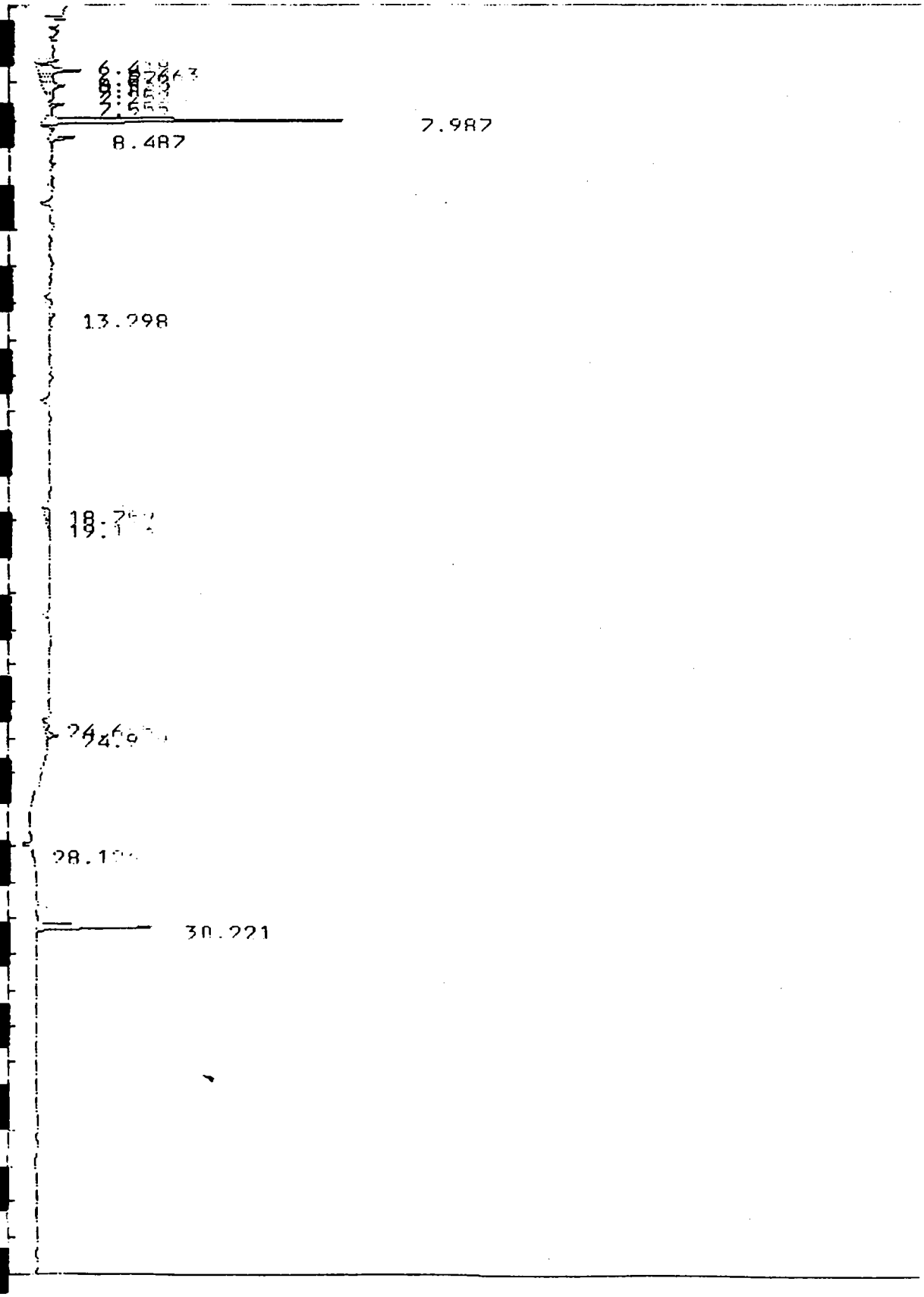
Lab Name: STL - Whippany
Matrix: (soil/water): Soil
Sample wt/vol: 30 (g/ml) g
%Moisture: 0
Extraction: (SepF/Cont/Sonc) Sonc
Concentrated Extract Volume: 10000(µl)
Injection Volume: 1 (µl)
GPC Cleanup: (Y/N) N pH:_____

Client: OGDEN
Lab Sample ID: 10/20/99 MB
Lab File ID: D4AS01C_018
Date Received: NA
Date Extracted: 10/20/99
Date Analyzed: 11/10/99
Dilution Factor: 1
Sulfur Cleanup: Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/Kg	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
3098-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor Epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	3.3	U
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan Sulfate	3.3	U
50-29-3	4,4'-DDT	3.3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin Ketone	3.3	U
7421-93-4	Endrin Aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	83	U

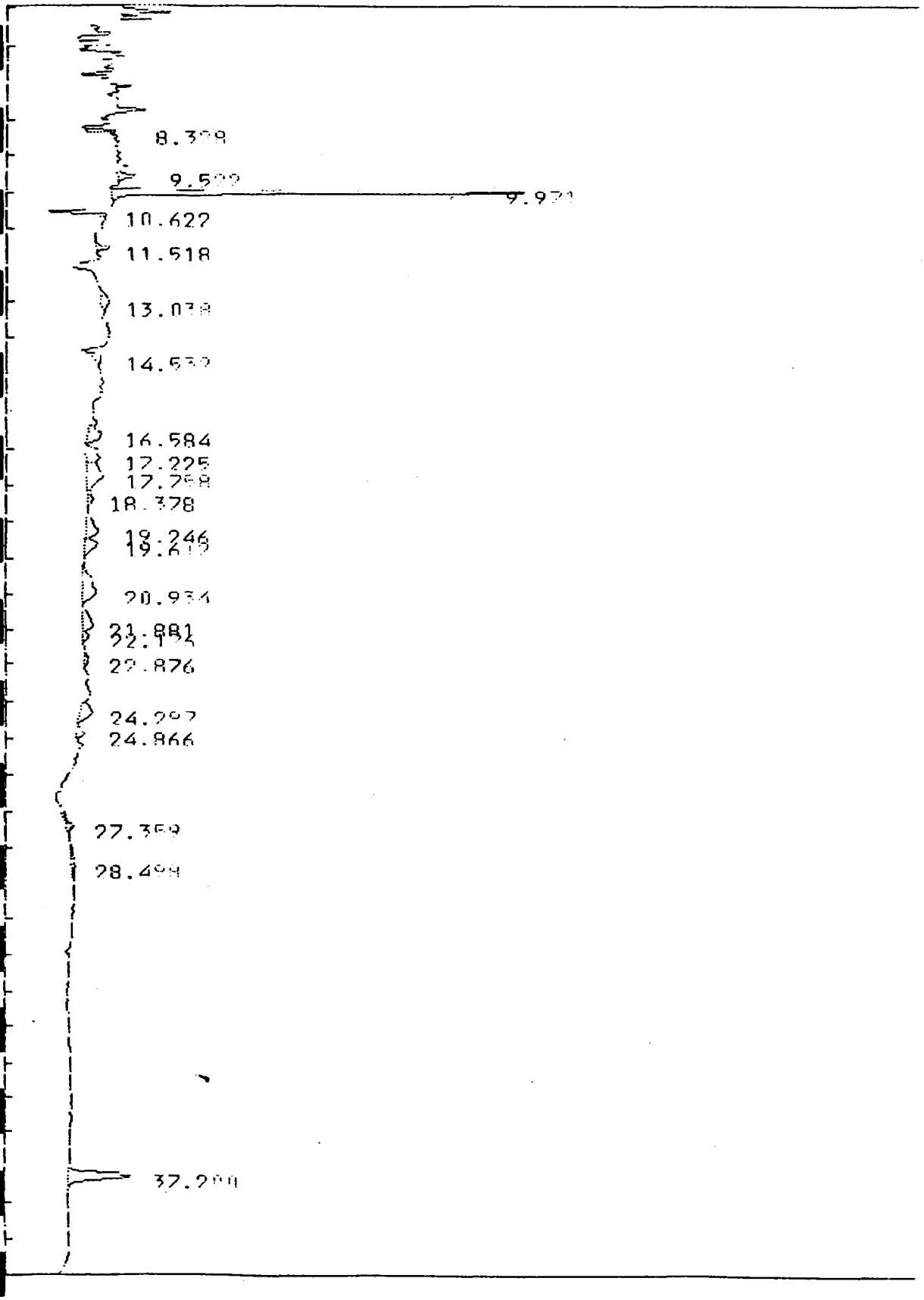
IEA Pesticide Standard Report

Sample Name : 10/20/99 METHOD BLANK Inj:0337 10Nov1999
Result : /DATA/LOOP/RESULT/D4AS01C.018.RES GC: HP5890A
Column : DB-1701 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IEA Pesticide Standard Report

Sample Name : 10/20/99 METHOD BLANK Inj 0247 10Nov1999
Result : /DATA/LOOP/RESULT/D4BS01C.017.RES GC : HP5890A
Column : DB-608 30-Meter,0.53mm ID Inj. Vol. : 1 ul



IFA Pesticide Standard Report

Sample Name : 10/20/99 METHOD BLANK Report No : 45.00
Result File : /DATA/LOOP/RESULT/D4AS01C.018.RES
Column Type : DB-1701 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP5890A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 0337 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4AS01C.SEQ
Subseq/Sample : 1/ 18 Bottle no. : 18

% Dil-Fact
100.00

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	6.42		.059591	22076	VV	0.0000	
2	6.66		.117809	83818	PV	0.0000	
3	6.77		.090399	19714	VV	0.0000	
4	6.93		.129407	25827	VV	0.0000	
5	7.07		.144160	52551	VV	0.0000	
6	7.25		.080369	11495	VV	0.0000	
7	7.55		.069756	19090	PB	0.0000	
8	7.99	7.99	.069501	321222	VV	20.3755	TCX
9	8.49		.099363	42471	PV	0.0000	
10	13.30		.126622	10659	VV	0.0000	
11	18.76	18.80	.260471	24380	PV	1.2244	~~G-CHLORDANE~~
12	19.11	19.08	.260051	11611	VV	.5399	~~A-CHLORDANE~~
13	24.66		.190798	12979	PV	0.0000	
14	24.92		.097525	21028	VV	0.0000	
15	28.13		.235448	13425	BV	0.0000	
16	30.22	#30.23	.104612	201385	BB	18.9041	DCB

ck 11/12/99

Total Area : 943732 Total ng inj : 41.044

Report Time : 1111 12Nov1999
Method : /DATA/LOOP/METHOD/HP5890AP*.MTH
Result File : /DATA/LOOP/RESULT/D4AS01C.018.RES

IEA Pesticide Standard Report

Sample Name : 10/20/99 METHOD BLANK Report No : 44.00
Result File : /DATA/LOOP/RESULT/D4BS01C 017.RES
Column Type : DB-608 30 Meter,0.53mm ID Inj. Vol. : 1 ul
Instrument : HP5890A
Calculation : ExternalSTD
Run Time : 40.00 Mins. Injected on 0247 10Nov1999
Sequence File : /DATA/LOOP/SEQUENCE/S4BS01C.SEQ
Subseq/Sample : 1/ 17 Bottle no. : 18

% Dil-Fact
100.00

Run Status : RunStatusOK

Pk#	RT	ID-tm	Peak Width	Area	Code	ng inj	Name
1	8.33		.083962	25561	PB	0.0000	
2	9.52		.127972	23631	VV	0.0000	
3	9.97	#10.00	.079564	385476	BV	17.6379	TCX
4	10.62		.102660	30073	HB	0.0000	
5	11.52		.098914	13987	VV	0.0000	
6	13.04		.266924	18943	VV	0.0000	
7	14.53		.207733	16624	BV	0.0000	
8	16.58		.297743	36605	VV	0.0000	
9	17.22		.319455	41160	PV	0.0000	
10	17.76		.523871	81996	VV	0.0000	
11	18.38		.267191	13320	VB	0.0000	
12	19.25		.378621	41359	BV	0.0000	
13	19.61		.309225	34158	VV	0.0000	
14	20.93		.520581	66974	VV	0.0000	
15	21.88		.455702	38180	PV	0.0000	
16	22.18		.216140	11742	VV	0.0000	
17	22.88		.382944	12283	PV	0.0000	
18	24.30		.372976	38914	VV	0.0000	
19	24.87		.232287	14451	PV	0.0000	
20	27.36		.297395	23705	BV	0.0000	
21	28.50		.686104	21890	BV	0.0000	
22	37.20	37.24	.186493	108077	BB	18.4055	DDE

Total Area : 1099110 Total ng inj : 36.043

Report Time : 1135 12Nov1999
Method : /DATA/LOOP/METHOD/HP5890BP*.MTH
Result File : /DATA/LOOP/RESULT/D4BS01C 017.RES

EXTRACTIONS LOG

PEST

Box #007

John K.

Extraction date	Spike witness	Concentration date	Cleanup
10.20.99	Troy	10.22.99	florisil, copper

KAH

Surrogate	Blank spike	MS	MSD
SS1319E 1ml	SS1327E 1ml	SS1338E 1ml	SS1338E 1ml

Sample #	Initial volume	Initial pH	BN pH	AE pH	Final volume	Comments	
94091.1	30.2g				10ml		
94091.2	30.4						
94091.3	30.5						
94127.18	30.0						
94127.25	30.0						
94143.9	30.1						
94143.10	30.2						
94091.3MS	30.1						
94091.3MSD	30.1						
MB	30.0						
BS	30.0						

AEN/NJ
Organic Extractions -AQUEOUS / Matrix

Batch: 17640 Extract File#: 1128 Extraction Method: SEP FUNNEL Date: 19-OCT-99 Analyst: John M. Kopinski JK 10/19/99

Luis Batch: WG41689 Relinquished To Storage(Init/Date): J.K. 10/28/99 Concentration (Finish) Date: _____ Analyst: KAM 10/28/99 cut

Analysis: PST-8081-T Removed From Storage(Init/Date): _____

Returned To Storage(Init/Date): _____

BS LOT #: SS1327E MS LOT #: SS1327E MSD LOT #: SS1327E
BS LOT VOLUME: .2ml MS LOT VOLUME: .2ml MSD LOT VOLUME: .2ml Spike witnessed by: Stephen Bambrick

Lab ID	Client ID	Sample Vol	Int. pH	BN pH	AE pH	Initial Vol.	Split Aliquot	Final Vol.	Surr. Lot	Vol	Comments
94127019	SW2-2-01	1000	7					2ml	SS1319E	.2 ml	
94127020	SW2-2-03	950	6						SS1319E	.2 ml	
94127021	FB-101499	900	6						SS1319E	.2 ml	
94127026	SW2-3-01	970	6						SS1319E	.2 ml	
QE-17640E	BLANK	1000	5						SS1319E	.2 ml	
QE-17640ES	BL.SP.	1000	5						SS1319E	.2 ml	
MS-127126		500	6								
MSD-127126		500	6								

JK
10/28/99

000009

PCB's

Severn Trent Laboratories - Whippany
GC ORGANICS SURROGATE RECOVERY

Matrix: WATER Level: LOW Lab Job No: 94127

	LABORATORY SAMPLE NO.	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	WG41688-MB	58	60	0
02	WG41688-BS	62	59	0
03	94127-019	54	58	0
04	94127-020	52	60	0
05	94127-020MS	61	60	0
06	94127-020MSD	59	55	0
07	94127-021	51	47	0
08	94127-026	53	52	0
09				
10				
11				
12				
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	ADVISORY QC LIMITS
S1 (DCB) = Decachlorobiphenyl	(35-155)

Column to be used to flag recovery values
* Values outside of advisory QC limits
D Surrogate diluted out
R Surrogate removed during H2SO4 cleanup procedure
** Not detected due to coeluting interference

Severn Trent Laboratories - Whippany
GC ORGANICS SURROGATE RECOVERY

Matrix: SOIL Level: LOW Lab Job No: 94127

	LABORATORY SAMPLE NO.	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	102099S-MB	64	54	0
02	102099-BS	68	60	0
03	94143-011	64	56	0
04	94143-011MS	67	56	0
05	94143-011MSD	64	57	0
06	94127-018	65	64	0
07	94127-025	68	59	0
08				
09				
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	ADVISORY QC LIMITS
S1 (DCB) = Decachlorobiphenyl	(38-157)

Column to be used to flag recovery values
* Values outside of advisory QC limits
D Surrogate diluted out
R Surrogate removed during H2SO4 cleanup procedure
** Not detected due to coeluting interference

SEVERN TRENT LABORATORIES - WHIPPANY
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix: WATER

Level: LOW

Matrix Spike - Lab Sample No.: 94127-020

MS Sample from Lab Job No: 94127

QA Batch: WG41688

Compound	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Aroclor-1016	4.0	0.00	3.6	90	72-129
Aroclor-1260	4.0	0.00	3.7	93	55-134

Compound	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	4.0	3.6	90	1	22	72-129
Aroclor-1260	4.0	3.9	97	4	19	55-134

Column to be used to flag recovery and RPD values with an asterik
* Values outside of QC limits
RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

SEVERN TRENT LABORATORIES - WHIPPANY
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix: SOIL

Level: LOW

Matrix Spike - Lab Sample No.: 94143-011

MS Sample from Lab Job No: 94143

QA Batch: 102099

Compound	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS % REC #	QC. LIMITS REC.
Aroclor-1016	360	0.00	300	83	75-135
Aroclor-1260	360	0.00	307	85	61-139

Compound	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	360	324	90	8	20	75-135
Aroclor-1260	360	328	91	7	24	61-139

Column to be used to flag recovery and RPD values with an asterik
* Values outside of QC limits
RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

SEVERN TRENT LABORATORIES - WHIPPANY
BLANK SPIKE RECOVERY

QA Batch: WG41688

Compound	SPIKE ADDED (ug/L)	BS CONCENTRATION (ug/L)	BS % REC.	QC. LIMITS REC.
Aroclor-1016	2.0	1.8	92	72-129
Aroclor-1260	2.0	1.8	92	55-134

Column to be used to flag recovery values with an asterik

Spike Recovery: 0 out of 2 outside limits

SEVERN TRENT LABORATORIES - WHIPPANY
BLANK SPIKE RECOVERY

QA Batch: 102099

Compound	SPIKE ADDED (ug/kg)	BS CONCENTRATION (ug/kg)	BS % REC.	QC. LIMITS REC.
Aroclor-1016	330	286	87	75-135
Aroclor-1260	330	316	96	61-139

Column to be used to flag recovery values with an asterik

Spike Recovery: 0 out of 2 outside limits

Severn Trent Laboratories - Whippany
GC ORGANICS METHOD BLANK SUMMARY

LAB SAMPLE NO: 000017

Method Blk-W

Matrix: WATER

Date Analyzed: 11/09/99

Level: LOW

Time Analyzed: 0023

Instrument ID: HP68906

Lab File ID: PCB6A2081

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

	CLIENT ID.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	Blank Spk-W	WG41688-BS	pcb6a2082.d	11/09/99
02	SW2-2-01	94127-019	pcb6a2083.d	11/09/99
03	SW2-3-03	94127-020	pcb6a2084.d	11/09/99
04	SW2-2-03MS	94127-020MS	pcb6a2085.d	11/09/99
05	SW2-2-03MSD	94127-020MSD	pcb6a2086.d	11/09/99
06	FB-101499	94127-021	pcb6a2087.d	11/09/99
07	SW2-3-01	94127-026	pcb6a2088.d	11/09/99
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09				
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COMMENTS:

Severn Trent Laboratories - Whippany
GC ORGANICS METHOD BLANK SUMMARY

LAB SAMPLE NO. 000618

Method Blk-S

Matrix: SOIL

Date Analyzed: 10/22/99

Level: LOW

Time Analyzed: 0108

Instrument ID: HP68906

Lab File ID: PCB6A1804

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

	CLIENT ID.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	Blank Spk-S	102099-BS	pcb6a1805.d	10/22/99
02	SO-11	94143-011	pcb6a1806.d	10/22/99
03	SO-11MS	94143-011MS	pcb6a1816.d	10/22/99
04	SO-11MSD	94143-011MSD	pcb6a1817.d	10/22/99
05	S2-2-01	94127-018	pcb6a1920.d	10/29/99
06	S2-3-01	94127-025	pcb6a1921.d	10/29/99
07				
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COMMENTS:

Severn Trent Laboratories - Whippany

Client ID: **S2-2-01**
Site:

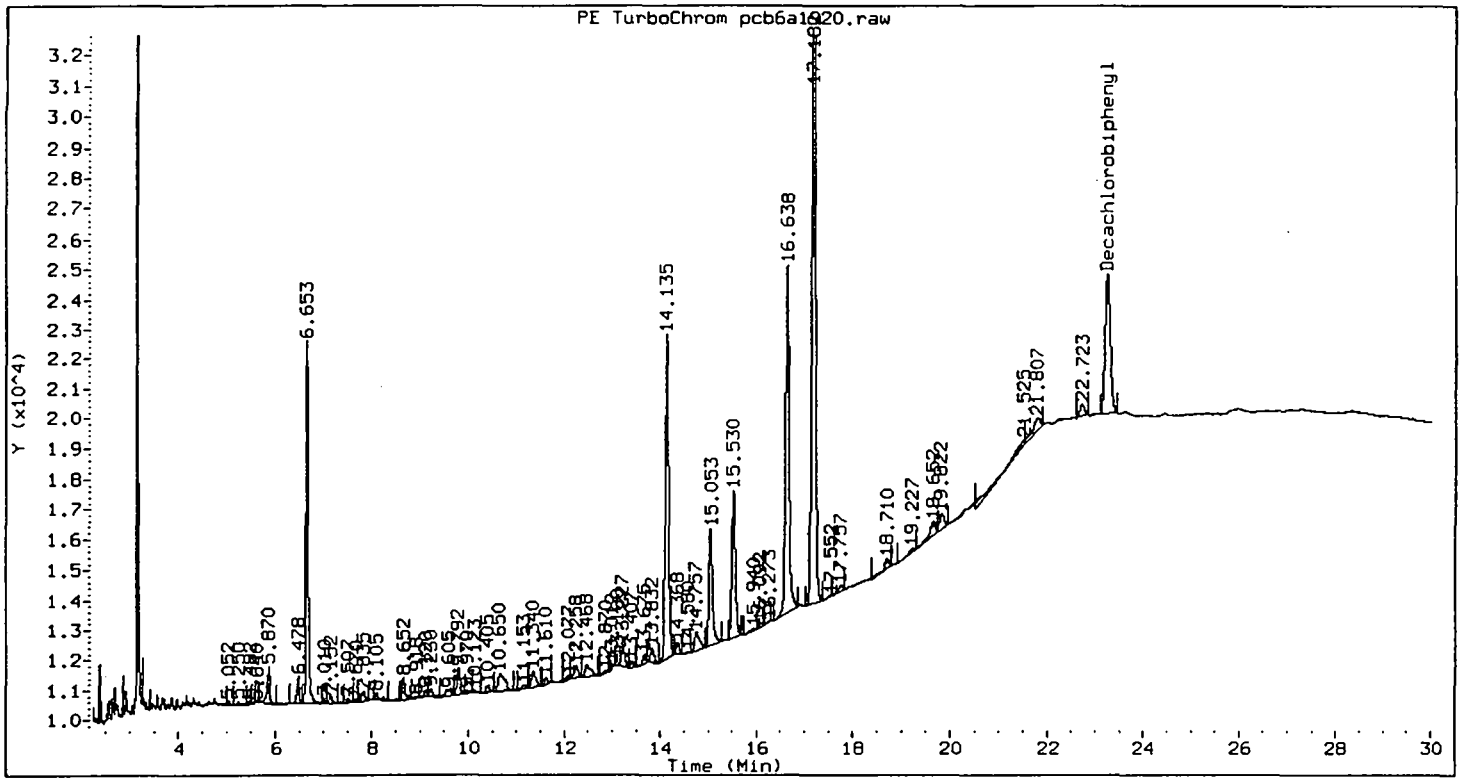
Lab Sample ID: **94127-018**
Lab Job No: 94127

Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/20/99
Date Analyzed: 10/29/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1920.d
Rear File ID: pcb6b1920.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 20

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	ND	41.1	R
Aroclor-1221	ND	41.1	R
Aroclor-1232	ND	41.1	R
Aroclor-1242	ND	41.1	R
Aroclor-1248	ND	41.1	R
Aroclor-1254	ND	41.1	R
Aroclor-1260	ND	41.1	R

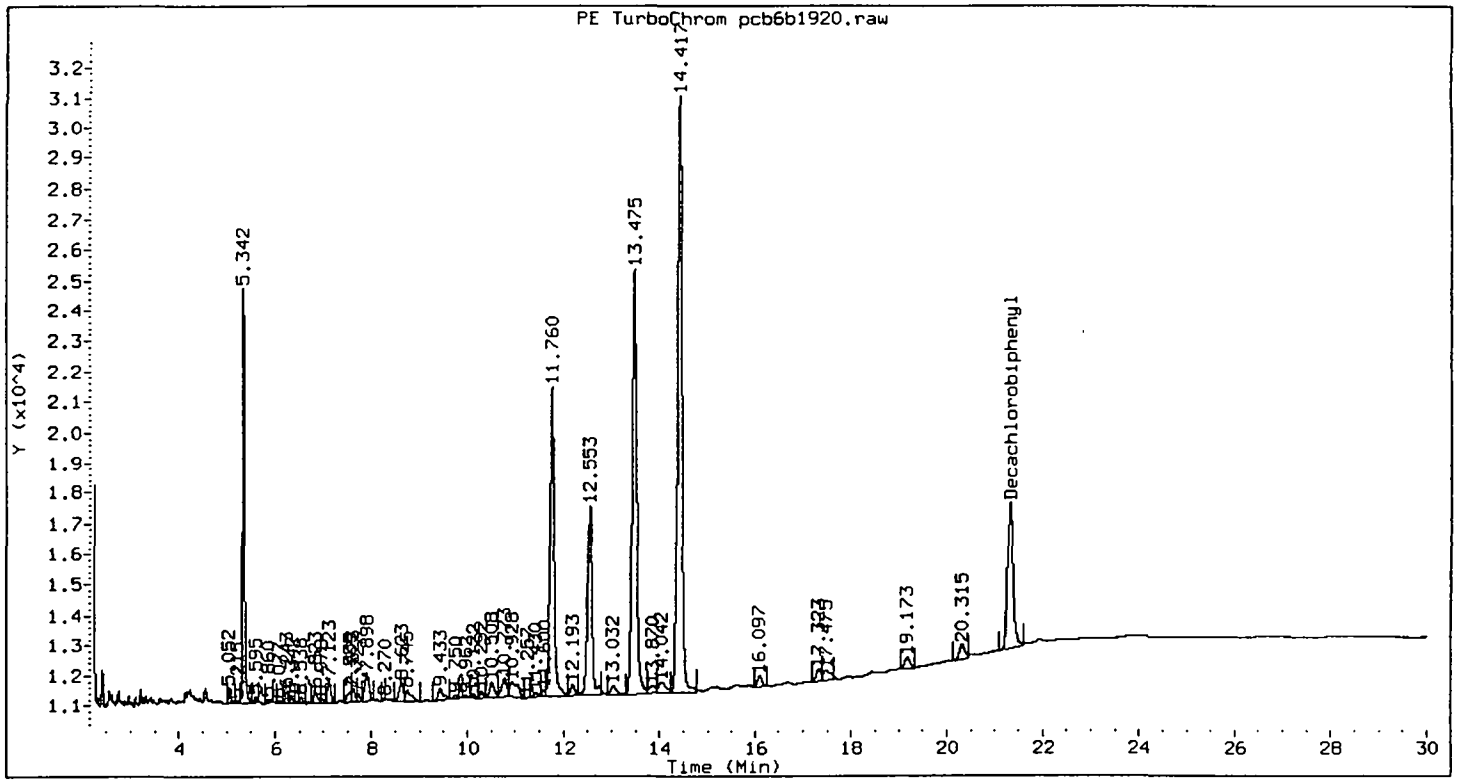


Method : /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/Xf8082.m
Sample Info : 94127-018;;;;19.7
Lab ID : 94127-018 Inst ID : HP68906.i
Inj Date : 29-OCT-1999 01:27 Dil Factor : 1
Operator : DavidW Sample Matrix : SOIL
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	23.250	23.247	0.003	35601	13.053	5.419

11/8/99

000621



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/Xr8082.m
Sample Info : 94127-018;;;;19.7
Lab ID : 94127-018 Inst ID : HP68906.i
Inj Date : 29-OCT-1999 01:27 Dil Factor : 1
Operator : DavidW Sample Matrix : SOIL
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/kg)
Decachlorobiphenyl	(M)	21.327	21.325	0.002	38671	12.804	5.315

COMMENTS:

M - Compound response manually integrated.

11/5/99

Severn Trent Laboratories - Whippany

Client ID: **SW2-2-01**
Site:

Lab Sample ID: **94127-019**
Lab Job No: 94127

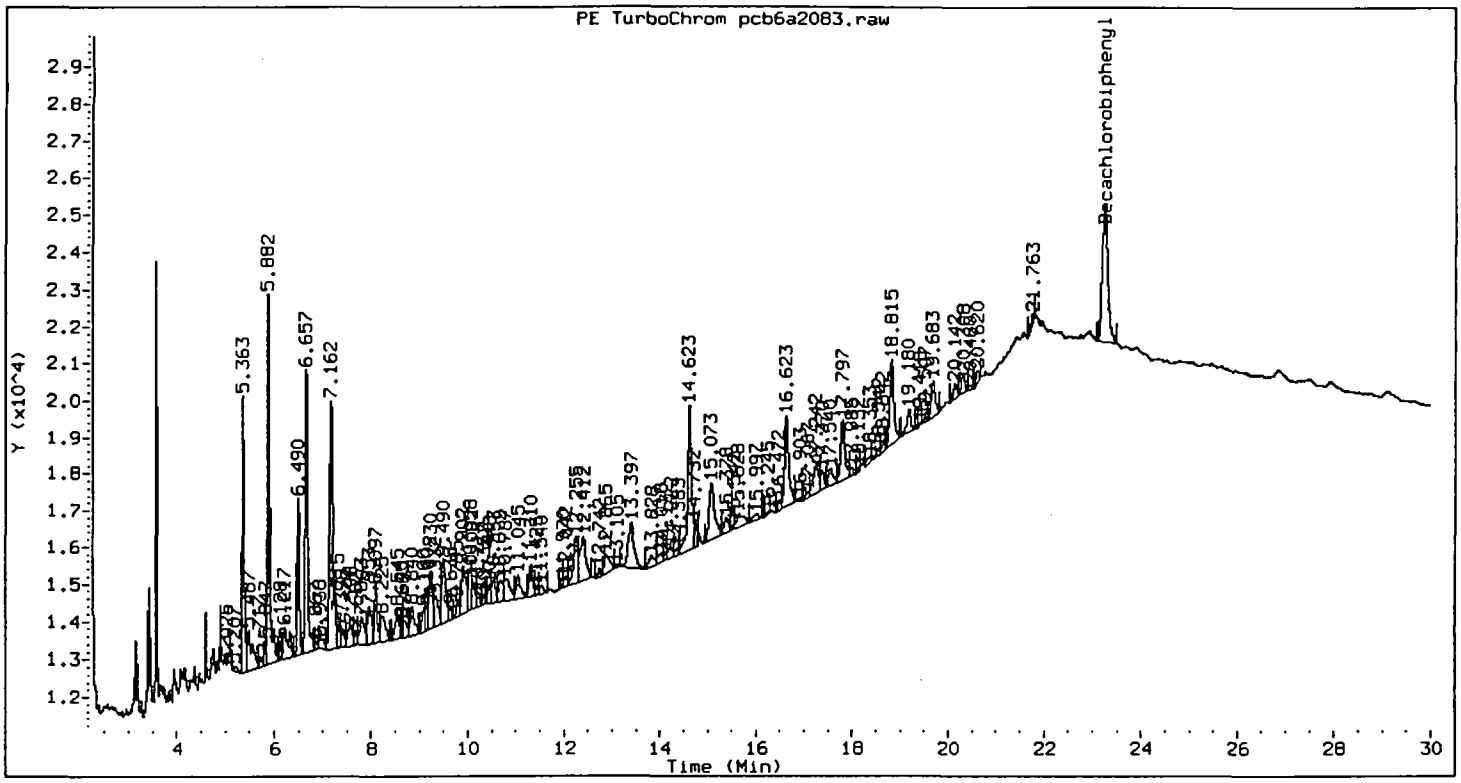
Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/19/99
Date Analyzed: 11/09/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

Matrix: WATER
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2083.d
Rear File ID: pcb6b2083.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	ND	0.200	R
Aroclor-1221	ND	0.200	R
Aroclor-1232	ND	0.200	R
Aroclor-1242	ND	0.200	R
Aroclor-1248	ND	0.200	R
Aroclor-1254	ND	0.200	R
Aroclor-1260	ND	0.200	R

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2083.d Page 1
Report Date 11/30/1999 15:48



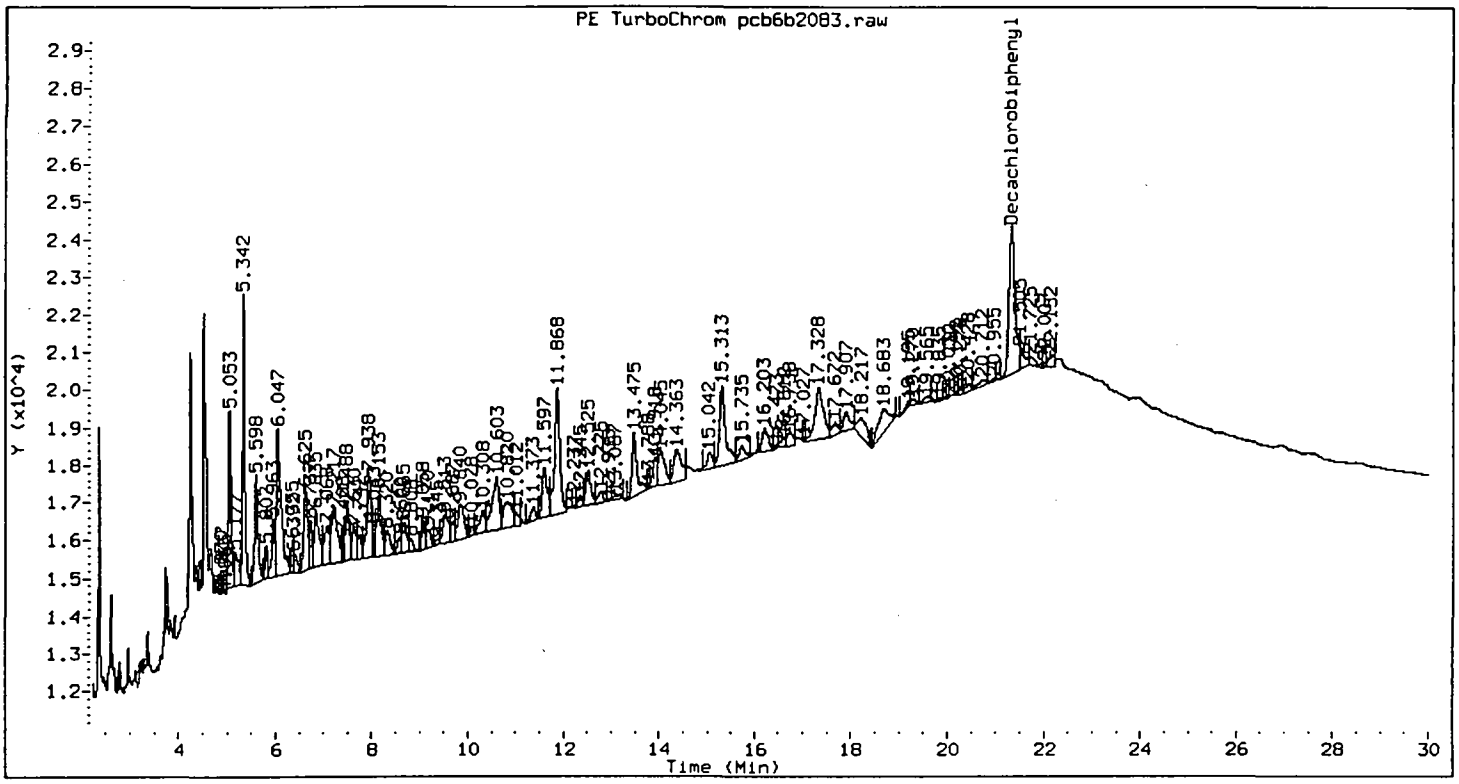
Method : /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/Xf8082.m
Sample Info : 94127-019
Lab ID : 94127-019 Inst ID : HP68906.i
Inj Date : 09-NOV-1999 01:39 Dil Factor : 1
Operator : DavidW Sample Matrix : WATER
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	23.233	23.240	0.007	29288	10.739	0.021

COMMENTS:

M - Compound response manually integrated.

12/6/99



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/Xr8082.m
Sample Info : 94127-019
Lab ID : 94127-019 Inst ID : HP68906.i
Inj Date : 09-NOV-1999 01:39 Dil Factor : 1
Operator : DavidW Sample Matrix : WATER
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.327	21.327	0.000	34815	11.527	0.023

COMMENTS:

M - Compound response manually integrated.

12/6/99

Severn Trent Laboratories - Whippany

Client ID: **SW2-2-03**
Site:

Lab Sample ID: **94127-020**
Lab Job No: 94127

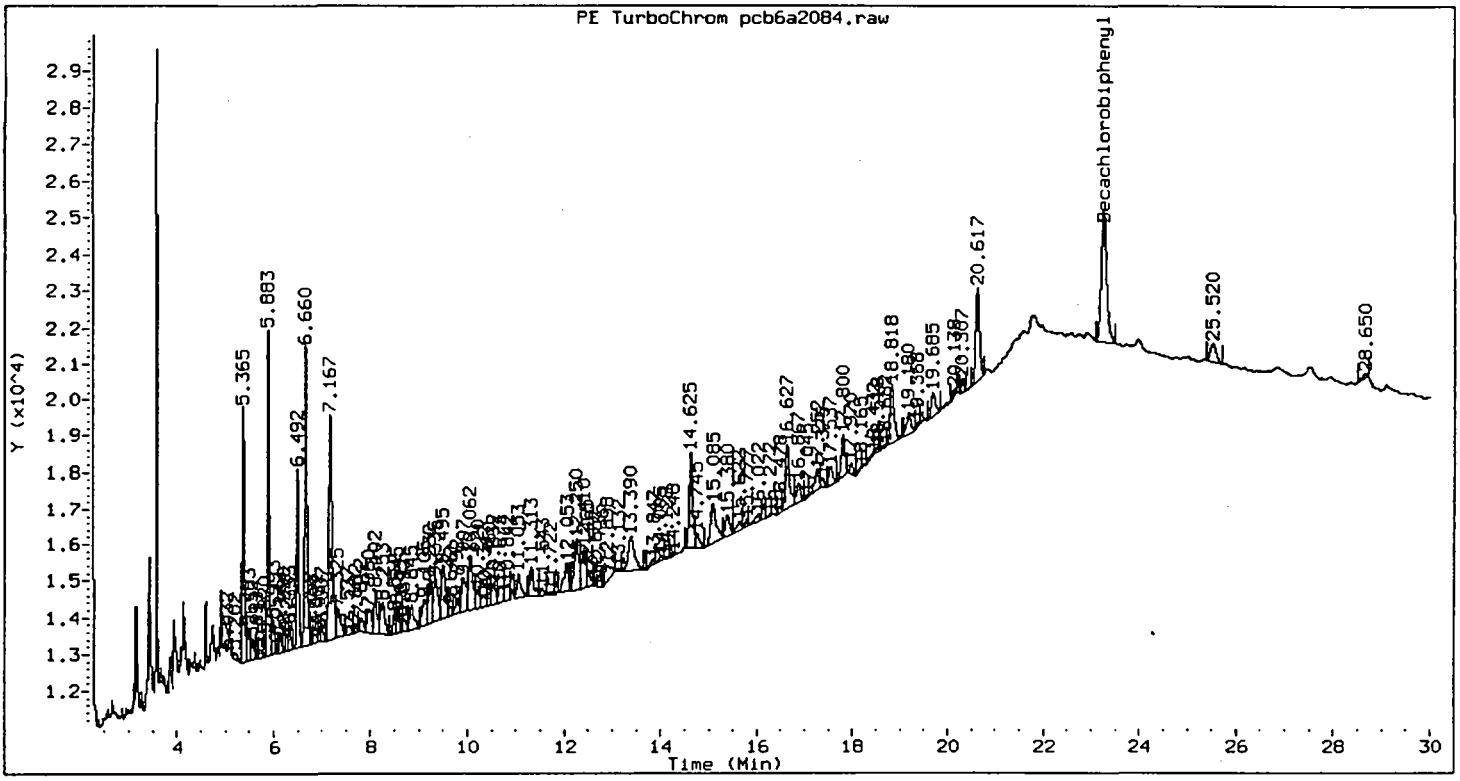
Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/19/99
Date Analyzed: 11/09/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

Matrix: WATER
Sample Volume: 950 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2084.d
Rear File ID: pcb6b2084.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	ND	0.210	R
Aroclor-1221	ND	0.210	R
Aroclor-1232	ND	0.210	R
Aroclor-1242	ND	0.210	R
Aroclor-1248	ND	0.210	R
Aroclor-1254	ND	0.210	R
Aroclor-1260	ND	0.210	R

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2084.d Page 1
Report Date 11/30/1999 15:48



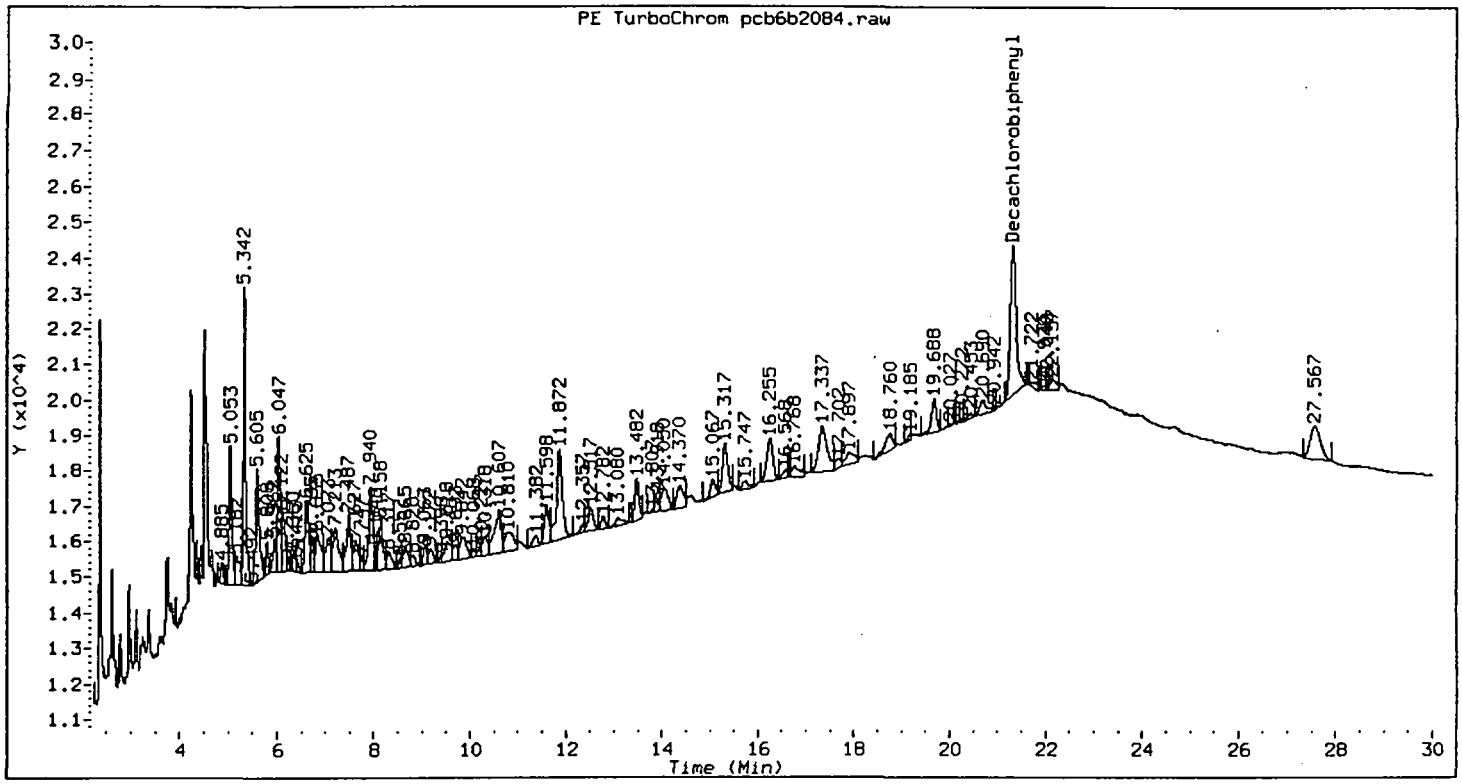
Method : /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/Xf8082.m
Sample Info : 94127-020;950;2;
Lab ID : 94127-020 Inst ID : HP68906.i
Inj Date : 09-NOV-1999 02:17 Dil Factor : 1
Operator : DavidW Sample Matrix : WATER
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds		RT	EXP. RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	23.243	23.240	0.003	28369	10.402	0.022

COMMENTS:

M - Compound response manually integrated.

12/6/99



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/Xr8082.m
Sample Info : 94127-020;950;2;
Lab ID : 94127-020 Inst ID : HP68906.i
Inj Date : 09-NOV-1999 02:17 Dil Factor : 1
Operator : DavidW Sample Matrix : WATER
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.322	21.327	0.005	36034	11.931	0.025

COMMENTS:

M - Compound response manually integrated.

12/6/99

Severn Trent Laboratories - Whippany

Client ID: **FB-101499**
Site:

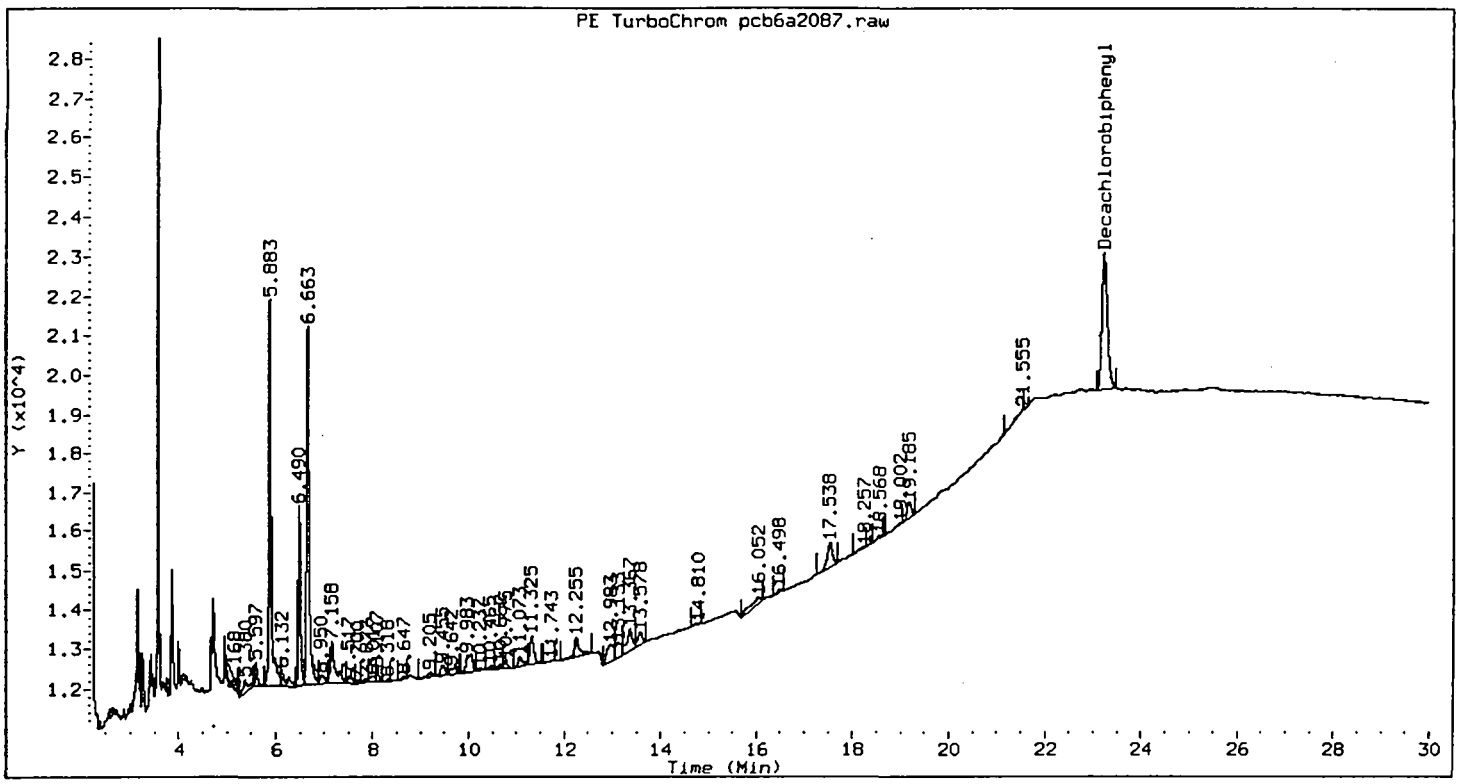
Lab Sample ID: **94127-021**
Lab Job No: 94127

Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/19/99
Date Analyzed: 11/09/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

Matrix: WATER
Sample Volume: 900 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2087.d
Rear File ID: pcb6b2087.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

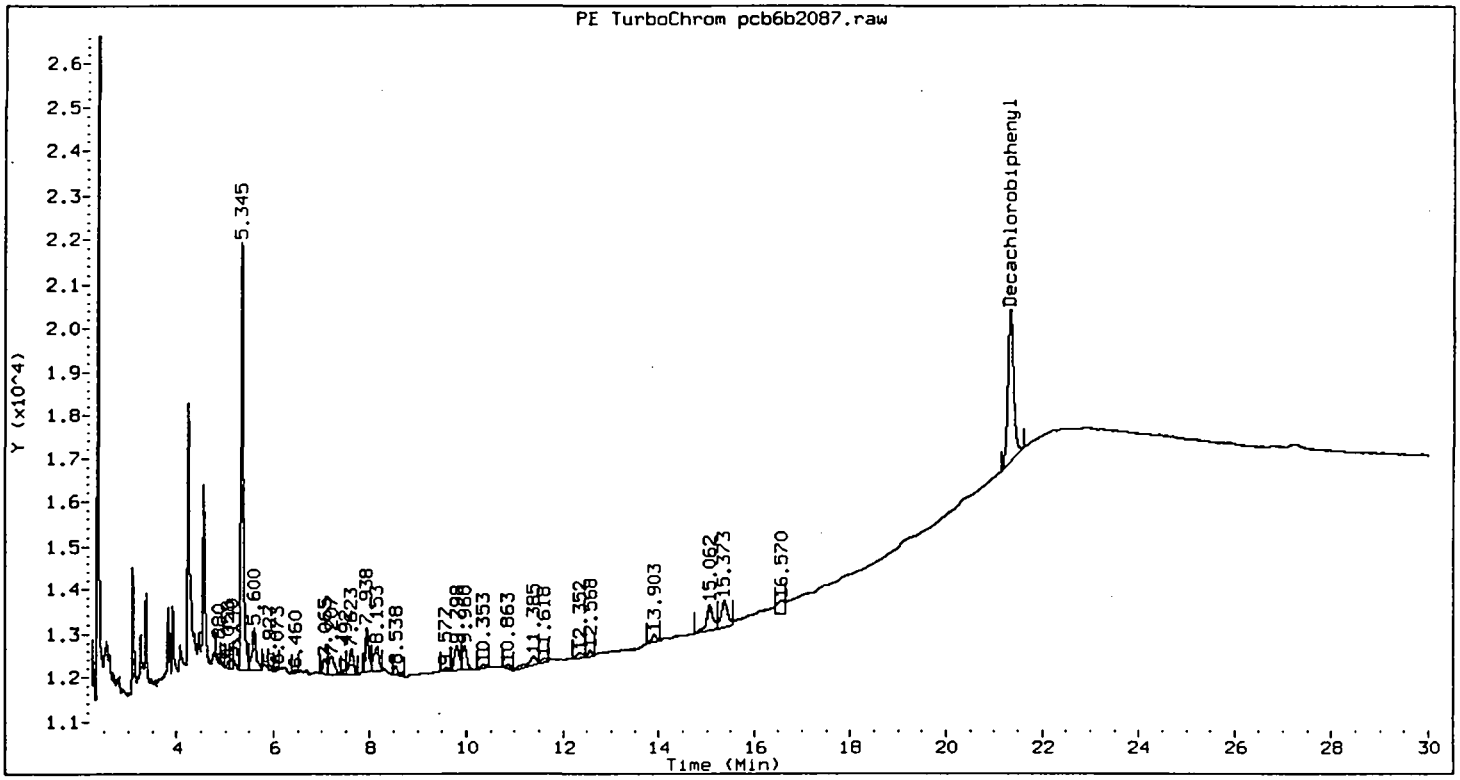
Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	ND	0.222	R
Aroclor-1221	ND	0.222	R
Aroclor-1232	ND	0.222	R
Aroclor-1242	ND	0.222	R
Aroclor-1248	ND	0.222	R
Aroclor-1254	ND	0.222	R
Aroclor-1260	ND	0.222	R



Method : /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/Xf8082.m
Sample Info : 94127-021;900;2;
Lab ID : 94127-021 Inst ID : HP68906.i
Inj Date : 09-NOV-1999 04:10 Dil Factor : 1
Operator : DavidW Sample Matrix : WATER
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	23.235	23.240	0.005	27914	10.235	0.023

12/6/99



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/Xr8082.m
Sample Info : 94127-021;900;2;
Lab ID : 94127-021 Inst ID : HP68906.i
Inj Date : 09-NOV-1999 04:10 Dil Factor : 1
Operator : DavidW Sample Matrix : WATER
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.327	21.327	0.000	28552	9.454	0.021

COMMENTS:

M - Compound response manually integrated.

12/2/99

Severn Trent Laboratories - Whippany

Client ID: **S2-3-01**
Site:

Lab Sample ID: **94127-025**
Lab Job No: 94127

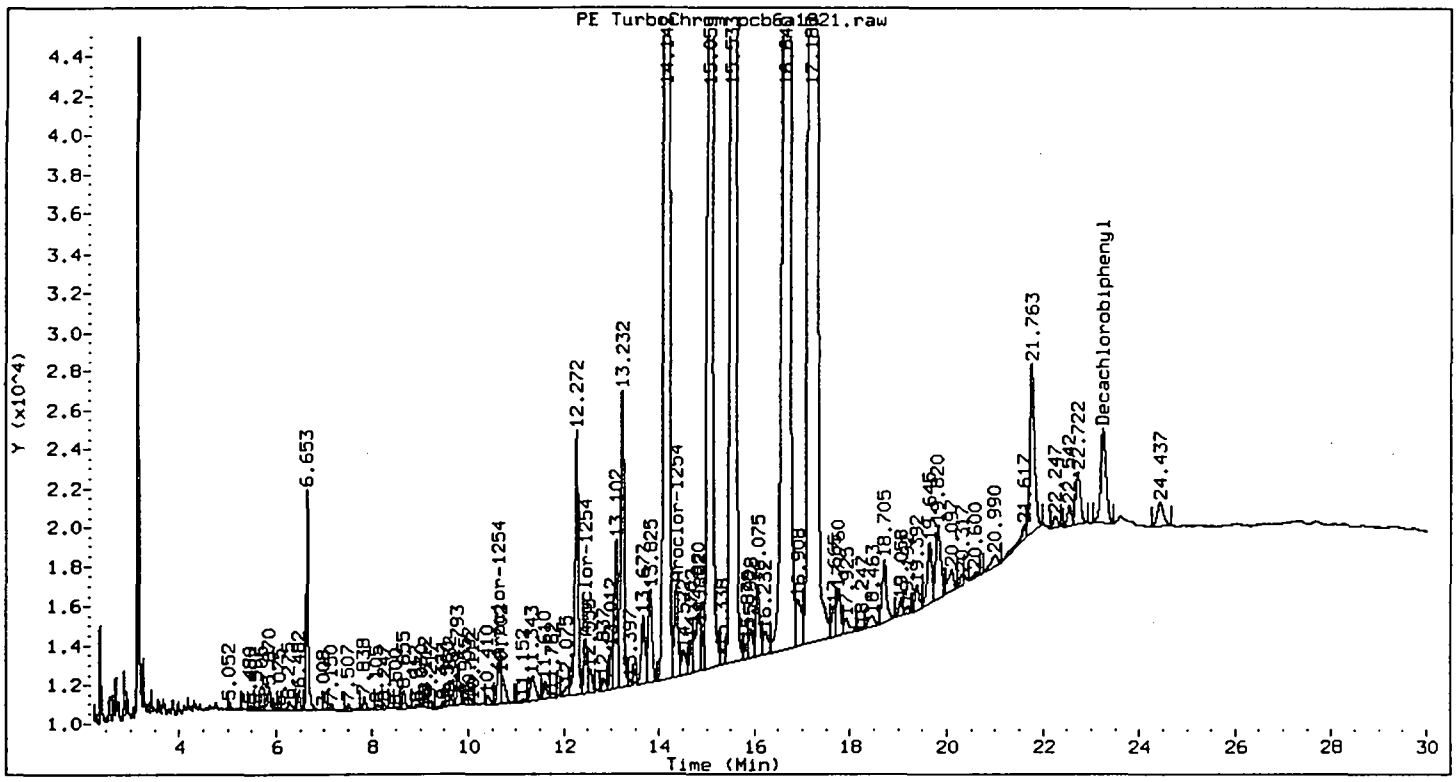
Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/06/93
Date Analyzed: 10/29/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1921.d
Rear File ID: pcb6b1921.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 56

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	ND	74.9	R
Aroclor-1221	ND	74.9	R
Aroclor-1232	ND	74.9	R
Aroclor-1242	ND	74.9	R
Aroclor-1248	ND	74.9	R
Aroclor-1254	121	74.9	R
Aroclor-1260	ND	74.9	R

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/pcb6a1921.d Page 1
Report Date 11/22/1999 16:21



Method : /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/Xf8082.m
Sample Info : 94127-025;30.1;;;56.0
Lab ID : 94127-025 Inst ID : HP68906.i
Inj Date : 29-OCT-1999 02:04 Dil Factor : 1
Operator : DavidW Sample Matrix : SOIL
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

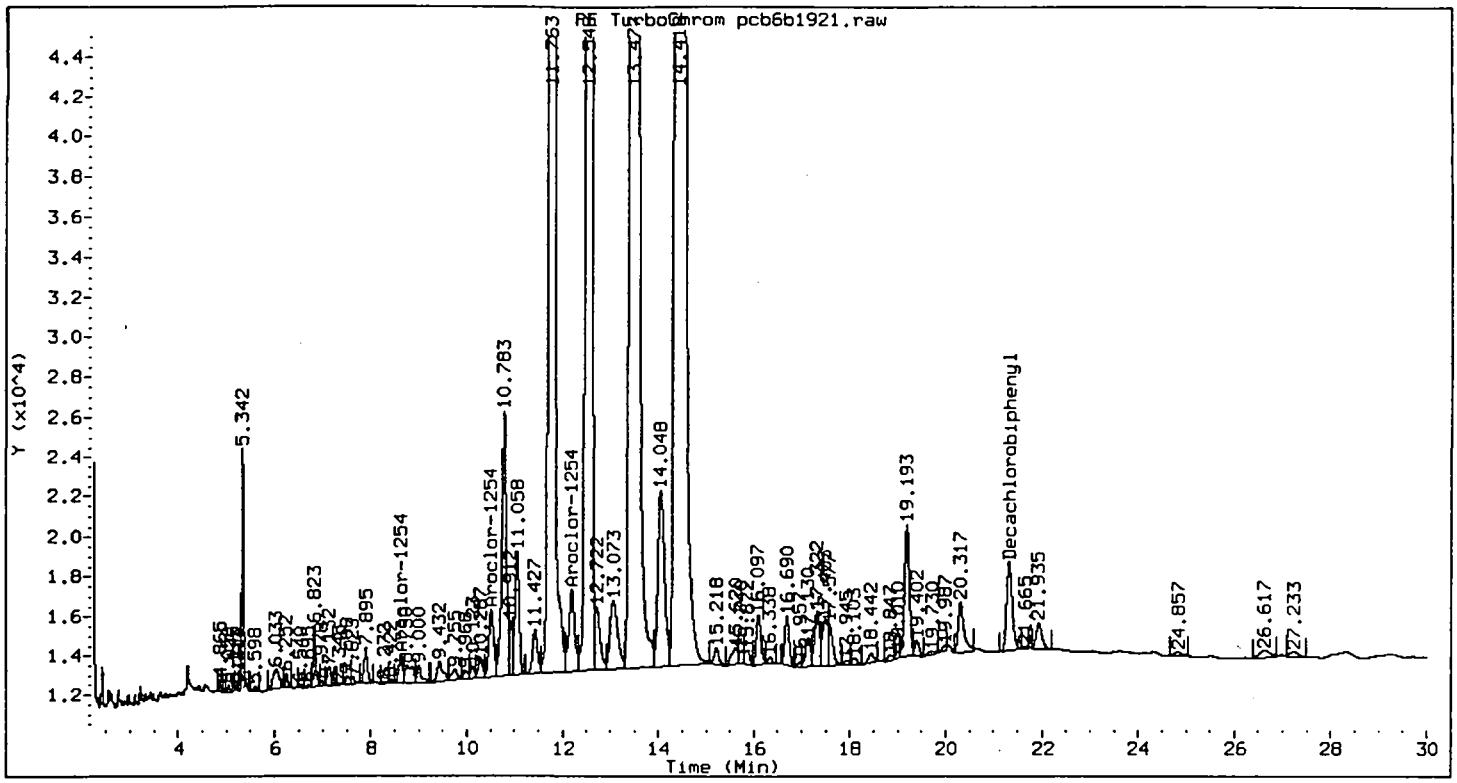
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1254	(M)	10.642	10.647	0.005	11792	147.080	111.307
(2)		12.460	12.470	0.010	14701	90.375	68.394
(3)		14.370	14.373	0.003	26366	163.630	123.832
(4)		------	15.158	------	------	------	------ (*)
(5)		------	15.550	------	------	------	------ (*)
(6)		------	16.653	------	------	------	------ (*)
Average of peak concentrations:							101.00
Decachlorobiphenyl		23.247	23.247	0.000	37010	13.570	10.270

COMMENTS:

* - Mutlicomponent peak not used in quantitation of compound.
M - Compound response manually integrated.

12/5/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/pcb6b1921.d Page 1
Report Date 11/22/1999 16:21



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/Xr8082.m
Sample Info : 94127-025;30.1;;;56.0
Lab ID : 94127-025 Inst ID : HP68906.i
Inj Date : 29-OCT-1999 02:04 Dil Factor : 1
Operator : DavidW Sample Matrix : SOIL
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1254	(M)	8.627	8.630	0.003	8089	113.035	85.542
(2)		10.512	10.513	0.002	24618	189.136	143.134
(3)		------	10.700	------	------	------	------ (*)
(4)		12.198	12.195	0.003	35585	179.253	135.655
(5)		------	12.565	------	------	------	------ (*)
(6)		------	14.355	------	------	------	------ (*)
Average of peak concentrations:							121.00
Decachlorobiphenyl		21.328	21.325	0.003	35928	11.896	9.002

COMMENTS:

* - Mutlicomponent peak not used in quantitation of compound.
M - Compound response manually integrated.

12/5/99

Severn Trent Laboratories - Whippany

Client ID: **SW2-3-01**
Site:

Lab Sample ID: **94127-026**
Lab Job No: 94127

Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/19/99
Date Analyzed: 11/09/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

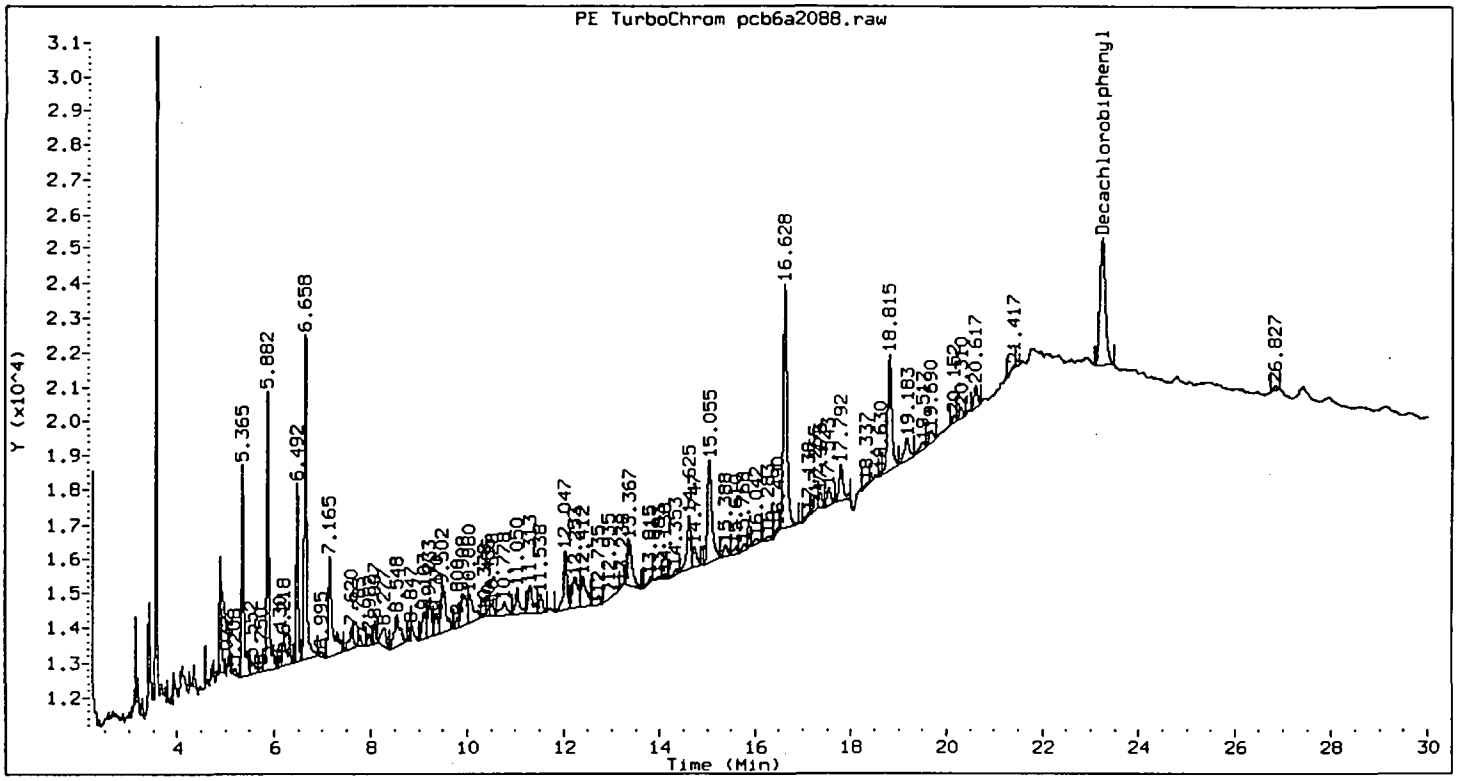
Matrix: WATER
Sample Volume: 970 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2088.d
Rear File ID: pcb6b2088.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	ND	0.206	R
Aroclor-1221	ND	0.206	R
Aroclor-1232	ND	0.206	R
Aroclor-1242	ND	0.206	R
Aroclor-1248	ND	0.206	R
Aroclor-1254	ND	0.206	R
Aroclor-1260	ND	0.206	R

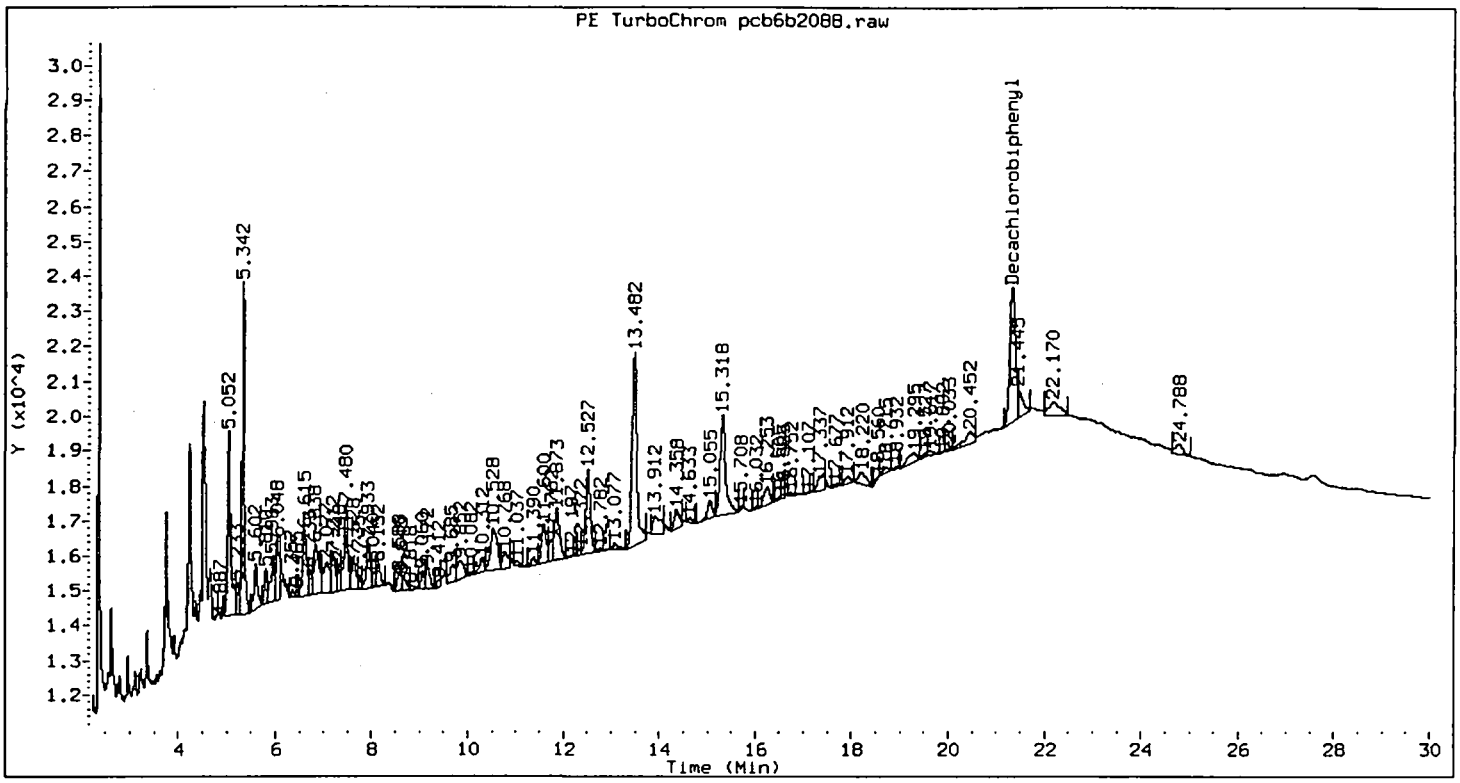
Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2088.d Page 1
Report Date 11/30/1999 15:50

000035



Method : /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/Xf8082.m
Sample Info : 94127-026;970;2;
Lab ID : 94127-026 Inst ID : HP68906.i
Inj Date : 09-NOV-1999 04:48 Dil Factor : 1
Operator : DavidW Sample Matrix : WATER
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/L)
Decachlorobiphenyl	23.243	23.240	0.003	29048	10.651	0.022



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/Xr8082.m
Sample Info : 94127-026;970;2;
Lab ID : 94127-026 Inst ID : HP68906.i
Inj Date : 09-NOV-1999 04:48 Dil Factor : 1
Operator : DavidW Sample Matrix : WATER
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.322	21.327	0.005	31664	10.484	0.022

COMMENTS:

M - Compound response manually integrated.

12/6/99

GC ORGANICS INITIAL CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Calibration Files:

/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1755.d
/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1756.d
/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d
/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1757.d
/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1758.d

Compound		Level 1	Level 2	Level 3	Level 4	Level 5	Coefficients a0	a1	a2	%RSD or R^2
Aroclor-1016	1	57.93	51.95	51.85	47.32	46.15		51.04		9.12138
	2	123.14	114.36	113.07	99.88	94.35		108.96		10.69276
	3	214.43	201.58	205.37	187.23	181.93		198.11		6.73070
	4	86.59	81.31	82.81	75.30	71.08		79.42		7.78433
	5	64.04	59.72	61.55	57.30	57.47		60.01		4.75141
	6	104.34	91.97	93.91	84.06	82.07		91.27		9.72088
Aroclor-1260	1	142.14	134.20	134.18	119.16	114.60		128.85		8.93834
	2	161.05	154.25	159.76	141.68	136.40		150.63		7.33175
	3	112.03	105.94	110.78	100.89	99.93		105.91		5.21546
	4	220.78	217.66	228.52	211.76	210.41		217.83		3.36401
	5	162.92	159.91	169.83	157.22	157.30		161.44		3.24773
	6	56.12	62.52	61.84	56.30	56.60		58.68		5.47537
Tetrachloro-m-xylene		1983.00	1886.00	2018.32	1951.28	2042.34		1976.19		3.09378
Decachlorobiphenyl		2917.20	2709.92	2911.16	2562.82	2535.57		2727.33		6.71052

Comments:

* = %RSD exceeded maximum upper limit. Linear regression used for quantitation.

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS INITIAL CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Calibration Files:

/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1755.d
/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1756.d
/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d
/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1757.d
/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1758.d/pcb6b1758.raw

Compound		Level 1	Level 2	Level 3	Level 4	Level 5	Coefficients a0	a1	a2	%RSD or R^2
Aroclor-1016	1	59.23	56.06	54.80	48.14	44.35		52.52		11.60958
	2	151.48	134.92	129.61	111.91	101.11		125.81		15.69525
	3	61.63	57.29	57.24	51.44	48.51		55.22		9.44421
	4	255.59	238.24	237.32	212.60	198.29		228.41		9.96446
	5	99.09	90.37	89.60	79.91	74.82		86.76		10.97335
	6	96.21	88.88	90.05	80.06	74.72		85.99		9.92787
Aroclor-1260	1	206.72	189.23	187.88	163.80	151.90		179.91		12.15579
	2	222.82	195.19	194.24	170.41	159.03		188.34		13.14365
	3	141.62	132.12	133.75	120.22	117.11		128.97		7.85041
	4	312.56	301.16	309.97	284.22	276.84		296.95		5.31791
	5	190.28	175.44	180.39	167.78	163.95		175.57		5.94204
	6	76.81	72.16	73.41	67.36	66.11		71.17		6.20214
Tetrachloro-m-xylene		2092.20	2114.24	2290.80	2208.22	2230.42		2187.18		3.78346
Decachlorobiphenyl		3290.80	3039.92	3179.96	2847.94	2742.61		3020.25		7.51139

Comments:

* = %RSD exceeded maximum upper limit. Linear regression used for quantitation.

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Midpoint Calibration File:

/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1759.d/pcb6a1759.raw

Compound	Midpoint Standard Response Factor
Aroclor-1221	29.49
2	9.83
3	26.01
4	19.64
5	70.36
6	14.35

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Midpoint Calibration File:

/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1759.d/pcb6b1759.raw

Compound	Midpoint Standard Response Factor
Aroclor-1221	27.52
2	30.13
3	21.64
4	67.65
5	22.24
6	9.88

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Midpoint Calibration File:

/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1760.d/pcb6a1760.raw

Compound	Midpoint Standard Response Factor
Aroclor-1232	17.96
2	60.49
3	50.40
4	85.12
5	24.48
6	38.31

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Midpoint Calibration File:

/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1760.d/pcb6b1760.raw

Compound	Midpoint Standard Response Factor
Aroclor-1232	21.28
2	17.09
3	59.76
4	62.87
5	24.85
6	98.74

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Midpoint Calibration File:

/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1761.d/pcb6a1761.raw

Compound	Midpoint Standard Response Factor
Aroclor-1242	44.17
2	80.93
3	147.19
4	59.21
5	43.64
6	71.58

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Midpoint Calibration File:

/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1761.d/pcb6b1761.raw

Compound	Midpoint Standard Response Factor
Aroclor-1242	44.84
2	94.01
3	169.83
4	64.69
5	75.63
6	74.04

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Midpoint Calibration File:

/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1762.d/pcb6a1762.raw

Compound	Midpoint Standard Response Factor
Aroclor-1248	43.19
2	97.49
3	114.68
4	84.38
5	52.41
6	98.42

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Midpoint Calibration File:

/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1762.d/pcb6b1762.raw

Compound	Midpoint Standard Response Factor
Aroclor-1248	47.74
2	112.86
3	105.28
4	110.45
5	120.01
6	88.73

Comments:

= Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Midpoint Calibration File:

/chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1763.d/pcb6a1763.raw

Compound	Midpoint Standard Response Factor
Aroclor-1254	80.17
2	162.67
3	161.13
4	117.93
5	71.79
6	152.20

Comments:

+ = Multi-component peak not used in calibration of compound.

GC ORGANICS SINGLE POINT CALIBRATION SUMMARY

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Midpoint Calibration File:

/chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1763.d/pcb6b1763.raw

Compound	Midpoint Standard Response Factor
Aroclor-1254	71.56
2	130.16
3	156.13
4	198.52
5	140.36
6	152.21

Comments:

+ = Multi-component peak not used in calibration of compound.

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/front/10-19-99/21oct99a.b/pcb6a1802.d
Method: /chem/HP68906.i/8082/front/10-19-99/21oct99a.b/Xf8082.m

Sample Information: AR1660-500 ppb
Injection Date: 21-OCT-1999 23:52

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	7.812	500	550.82	10.16
Aroclor-1016	2	8.667	500	533.94	6.79
Aroclor-1016	3	9.807	500	527.20	5.44
Aroclor-1016	4	10.140	500	525.95	5.19
Aroclor-1016	5	10.417	500	515.79	3.16
Aroclor-1016	6	11.360	500	561.84	12.37
Aroclor-1260	1	14.845	500	520.36	4.07
Aroclor-1260	2	15.575	500	526.64	5.33
Aroclor-1260	3	17.780	500	556.17	11.23
Aroclor-1260	4	18.727	500	534.96	6.99
Aroclor-1260	5	19.862	500	544.48	8.90
Aroclor-1260	6	21.842	500	536.71	7.34

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	6.663	25	26.95	7.79
Decachlorobiphenyl	23.280	25	27.11	8.44

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b/pcb6b1802.d
Method: /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b/Xr8082.m

Sample Information: AR1660-500 ppb
Injection Date: 21-OCT-1999 23:52

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	6.350	500	542.41	8.48
Aroclor-1016	2	7.130	500	518.96	3.79
Aroclor-1016	3	7.738	500	521.08	4.22
Aroclor-1016	4	7.900	500	524.62	4.92
Aroclor-1016	5	8.270	500	514.39	2.88
Aroclor-1016	6	9.445	500	514.22	2.84
Aroclor-1260	1	12.750	500	479.24	4.15
Aroclor-1260	2	13.035	500	477.82	4.44
Aroclor-1260	3	15.640	500	442.44	11.51
Aroclor-1260	4	16.112	500	455.99	8.80
Aroclor-1260	5	17.605	500	442.40	11.52
Aroclor-1260	6	19.182	500	427.74	14.45

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	5.348	25	27.34	9.34
Decachlorobiphenyl	21.347	25	22.21	11.15

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/front/10-19-99/21oct99a.b/pcb6a1802.d
Injection Date: 21-OCT-1999 23:52

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	7.802	(7.732 - 7.872)	7.812	
	8.655	(8.585 - 8.725)	8.667	
	9.793	(9.723 - 9.863)	9.807	
	10.125	(10.055 - 10.195)	10.140	
	10.402	(10.332 - 10.472)	10.417	
	11.347	(11.277 - 11.417)	11.360	
Aroclor-1260	14.823	(14.753 - 14.893)	14.845	
	15.552	(15.482 - 15.622)	15.575	
	17.755	(17.685 - 17.825)	17.780	
	18.702	(18.632 - 18.772)	18.727	
	19.835	(19.765 - 19.905)	19.862	
	21.813	(21.743 - 21.883)	21.842	
Tetrachloro-m-xylene	6.653	(6.603 - 6.703)	6.663	
Decachlorobiphenyl	23.243	(23.143 - 23.343)	23.280	

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b/pcb6b1802.d
Injection Date: 21-OCT-1999 23:52

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	6.342	(6.272 - 6.412)	6.350	
	7.120	(7.050 - 7.190)	7.130	
	7.728	(7.658 - 7.798)	7.738	
	7.885	(7.815 - 7.955)	7.900	
	8.257	(8.187 - 8.327)	8.270	
	9.432	(9.362 - 9.502)	9.445	
Aroclor-1260	12.728	(12.658 - 12.798)	12.750	
	13.012	(12.942 - 13.082)	13.035	
	15.615	(15.545 - 15.685)	15.640	
	16.088	(16.018 - 16.158)	16.112	
	17.575	(17.505 - 17.645)	17.605	
	19.150	(19.080 - 19.220)	19.182	
Tetrachloro-m-xylene	5.338	(5.288 - 5.388)	5.348	
Decachlorobiphenyl	21.318	(21.218 - 21.418)	21.347	

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/front/10-19-99/21oct99b.b/pcb6a1821.d
Method: /chem/HP68906.i/8082/front/10-19-99/21oct99b.b/Xf8082.m

Sample Information: AR1660-500 ppb
Injection Date: 22-OCT-1999 11:52

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	7.815	500	545.23	9.05
Aroclor-1016	2	8.670	500	527.83	5.57
Aroclor-1016	3	9.810	500	525.32	5.06
Aroclor-1016	4	10.145	500	528.91	5.78
Aroclor-1016	5	10.420	500	519.66	3.93
Aroclor-1016	6	11.362	500	586.89	17.38<-
Aroclor-1260	1	14.847	500	528.60	5.72
Aroclor-1260	2	15.577	500	535.15	7.03
Aroclor-1260	3	17.783	500	574.37	14.87
Aroclor-1260	4	18.732	500	521.10	4.22
Aroclor-1260	5	19.867	500	530.64	6.13
Aroclor-1260	6	21.847	500	567.14	13.43

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	6.665	25	25.57	2.30
Decachlorobiphenyl	23.285	25	25.14	0.55

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/rear/10-19-99/21oct99b.b/pcb6b1821.d
Method: /chem/HP68906.i/8082/rear/10-19-99/21oct99b.b/Xr8082.m

Sample Information: AR1660-500 ppb
Injection Date: 22-OCT-1999 11:52

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	6.347	500	514.78	2.96
Aroclor-1016	2	7.127	500	504.69	0.94
Aroclor-1016	3	7.735	500	513.13	2.63
Aroclor-1016	4	7.895	500	511.95	2.39
Aroclor-1016	5	8.267	500	506.97	1.39
Aroclor-1016	6	9.442	500	505.52	1.10
Aroclor-1260	1	12.745	500	498.24	0.35
Aroclor-1260	2	13.030	500	492.35	1.53
Aroclor-1260	3	15.638	500	480.94	3.81
Aroclor-1260	4	16.110	500	488.33	2.33
Aroclor-1260	5	17.603	500	474.92	5.02
Aroclor-1260	6	19.177	500	470.74	5.85

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	5.343	25	24.95	0.20
Decachlorobiphenyl	21.347	25	22.52	9.91

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/front/10-19-99/21oct99b.b/pcb6a1821.d
Injection Date: 22-OCT-1999 11:52

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	7.802	(7.732 - 7.872)	7.815	
	8.655	(8.585 - 8.725)	8.670	
	9.793	(9.723 - 9.863)	9.810	
	10.125	(10.055 - 10.195)	10.145	
	10.402	(10.332 - 10.472)	10.420	
	11.347	(11.277 - 11.417)	11.362	
Aroclor-1260	14.823	(14.753 - 14.893)	14.847	
	15.552	(15.482 - 15.622)	15.577	
	17.755	(17.685 - 17.825)	17.783	
	18.702	(18.632 - 18.772)	18.732	
	19.835	(19.765 - 19.905)	19.867	
	21.813	(21.743 - 21.883)	21.847	
Tetrachloro-m-xylene	6.653	(6.603 - 6.703)	6.665	
Decachlorobiphenyl	23.243	(23.143 - 23.343)	23.285	

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/rear/10-19-99/21oct99b.b/pcb6b1821.d
Injection Date: 22-OCT-1999 11:52

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	6.342	(6.272 - 6.412)	6.347	
	7.120	(7.050 - 7.190)	7.127	
	7.728	(7.658 - 7.798)	7.735	
	7.885	(7.815 - 7.955)	7.895	
	8.257	(8.187 - 8.327)	8.267	
	9.432	(9.362 - 9.502)	9.442	
Aroclor-1260	12.728	(12.658 - 12.798)	12.745	
	13.012	(12.942 - 13.082)	13.030	
	15.615	(15.545 - 15.685)	15.638	
	16.088	(16.018 - 16.158)	16.110	
	17.575	(17.505 - 17.645)	17.603	
	19.150	(19.080 - 19.220)	19.177	
Tetrachloro-m-xylene	5.338	(5.288 - 5.388)	5.343	
Decachlorobiphenyl	21.318	(21.218 - 21.418)	21.347	

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/pcb6a1918.d
Method: /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/Xf8082.m

Sample Information: AR1660-500 ppb
Injection Date: 29-OCT-1999 00:11

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	7.803	500	549.21	9.84
Aroclor-1016	2	8.655	500	530.24	6.05
Aroclor-1016	3	9.795	500	524.66	4.93
Aroclor-1016	4	10.128	500	530.04	6.01
Aroclor-1016	5	10.405	500	518.39	3.68
Aroclor-1016	6	11.347	500	506.06	1.21
Aroclor-1260	1	14.825	500	520.33	4.07
Aroclor-1260	2	15.553	500	524.88	4.98
Aroclor-1260	3	17.757	500	519.18	3.84
Aroclor-1260	4	18.703	500	517.25	3.45
Aroclor-1260	5	19.837	500	516.57	3.31
Aroclor-1260	6	21.818	500	534.35	6.87

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	6.655	25	24.51	1.94
Decachlorobiphenyl	23.247	25	24.49	2.05

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/pcb6b1918.d
Method: /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/Xr8082.m

Sample Information: AR1660-500 ppb
Injection Date: 29-OCT-1999 00:11

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	6.347	500	514.23	2.85
Aroclor-1016	2	7.123	500	505.37	1.07
Aroclor-1016	3	7.733	500	518.31	3.66
Aroclor-1016	4	7.893	500	515.95	3.19
Aroclor-1016	5	8.265	500	511.32	2.26
Aroclor-1016	6	9.435	500	507.66	1.53
Aroclor-1260	1	12.737	500	501.42	0.28
Aroclor-1260	2	13.020	500	497.76	0.45
Aroclor-1260	3	15.623	500	486.35	2.73
Aroclor-1260	4	16.097	500	504.46	0.89
Aroclor-1260	5	17.585	500	492.06	1.59
Aroclor-1260	6	19.162	500	493.06	1.39

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	5.342	25	24.34	2.66
Decachlorobiphenyl	21.325	25	23.84	4.65

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/pcb6a1918.d
Injection Date: 29-OCT-1999 00:11

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	7.802	(7.732 - 7.872)	7.803	
	8.655	(8.585 - 8.725)	8.655	
	9.793	(9.723 - 9.863)	9.795	
	10.125	(10.055 - 10.195)	10.128	
	10.402	(10.332 - 10.472)	10.405	
	11.347	(11.277 - 11.417)	11.347	
Aroclor-1260	14.823	(14.753 - 14.893)	14.825	
	15.552	(15.482 - 15.622)	15.553	
	17.755	(17.685 - 17.825)	17.757	
	18.702	(18.632 - 18.772)	18.703	
	19.835	(19.765 - 19.905)	19.837	
	21.813	(21.743 - 21.883)	21.818	
Tetrachloro-m-xylene	6.653	(6.603 - 6.703)	6.655	
Decachlorobiphenyl	23.243	(23.143 - 23.343)	23.247	

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/pcb6b1918.d
Injection Date: 29-OCT-1999 00:11

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	6.342	(6.272 - 6.412)	6.347	
	7.120	(7.050 - 7.190)	7.123	
	7.728	(7.658 - 7.798)	7.733	
	7.885	(7.815 - 7.955)	7.893	
	8.257	(8.187 - 8.327)	8.265	
	9.432	(9.362 - 9.502)	9.435	
Aroclor-1260	12.728	(12.658 - 12.798)	12.737	
	13.012	(12.942 - 13.082)	13.020	
	15.615	(15.545 - 15.685)	15.623	
	16.088	(16.018 - 16.158)	16.097	
	17.575	(17.505 - 17.645)	17.585	
	19.150	(19.080 - 19.220)	19.162	
Tetrachloro-m-xylene	5.338	(5.288 - 5.388)	5.342	
Decachlorobiphenyl	21.318	(21.218 - 21.418)	21.325	

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99b.b/pcb6a1934.d
Method: /chem/HP68906.i/8082/front/10-19-99/28oct99b.b/Xf8082.m

Sample Information: AR1660-500 ppb
Injection Date: 29-OCT-1999 10:36

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	7.802	500	553.46	10.69
Aroclor-1016	2	8.653	500	531.27	6.25
Aroclor-1016	3	9.793	500	524.25	4.85
Aroclor-1016	4	10.127	500	528.51	5.70
Aroclor-1016	5	10.400	500	516.43	3.29
Aroclor-1016	6	11.345	500	511.05	2.21
Aroclor-1260	1	14.823	500	520.55	4.11
Aroclor-1260	2	15.552	500	531.94	6.39
Aroclor-1260	3	17.755	500	544.52	8.90
Aroclor-1260	4	18.702	500	520.34	4.07
Aroclor-1260	5	19.835	500	535.59	7.12
Aroclor-1260	6	21.817	500	542.50	8.50

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	6.653	25	24.75	1.00
Decachlorobiphenyl	23.243	25	24.83	0.67

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99b.b/pcb6b1934.d
Method: /chem/HP68906.i/8082/rear/10-19-99/28oct99b.b/Xr8082.m

Sample Information: AR1660-500 ppb
Injection Date: 29-OCT-1999 10:36

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	6.347	500	507.70	1.54
Aroclor-1016	2	7.123	500	503.36	0.67
Aroclor-1016	3	7.730	500	512.90	2.58
Aroclor-1016	4	7.892	500	512.90	2.58
Aroclor-1016	5	8.263	500	503.38	0.68
Aroclor-1016	6	9.435	500	496.32	0.74
Aroclor-1260	1	12.737	500	489.01	2.20
Aroclor-1260	2	13.020	500	484.75	3.05
Aroclor-1260	3	15.625	500	472.61	5.48
Aroclor-1260	4	16.097	500	487.60	2.48
Aroclor-1260	5	17.585	500	472.81	5.44
Aroclor-1260	6	19.158	500	463.18	7.36

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	5.343	25	23.77	4.93
Decachlorobiphenyl	21.325	25	23.40	6.41

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/front/10-19-99/28oct99b.b/pcb6a1934.d
Injection Date: 29-OCT-1999 10:36

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	7.802	(7.732 - 7.872)	7.802	
	8.655	(8.585 - 8.725)	8.653	
	9.793	(9.723 - 9.863)	9.793	
	10.125	(10.055 - 10.195)	10.127	
	10.402	(10.332 - 10.472)	10.400	
	11.347	(11.277 - 11.417)	11.345	
Aroclor-1260	14.823	(14.753 - 14.893)	14.823	
	15.552	(15.482 - 15.622)	15.552	
	17.755	(17.685 - 17.825)	17.755	
	18.702	(18.632 - 18.772)	18.702	
	19.835	(19.765 - 19.905)	19.835	
	21.813	(21.743 - 21.883)	21.817	
Tetrachloro-m-xylene	6.653	(6.603 - 6.703)	6.653	
Decachlorobiphenyl	23.243	(23.143 - 23.343)	23.243	

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/rear/10-19-99/28oct99b.b/pcb6b1934.d
Injection Date: 29-OCT-1999 10:36

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	6.342	(6.272 - 6.412)	6.347	
	7.120	(7.050 - 7.190)	7.123	
	7.728	(7.658 - 7.798)	7.730	
	7.885	(7.815 - 7.955)	7.892	
	8.257	(8.187 - 8.327)	8.263	
	9.432	(9.362 - 9.502)	9.435	
Aroclor-1260	12.728	(12.658 - 12.798)	12.737	
	13.012	(12.942 - 13.082)	13.020	
	15.615	(15.545 - 15.685)	15.625	
	16.088	(16.018 - 16.158)	16.097	
	17.575	(17.505 - 17.645)	17.585	
	19.150	(19.080 - 19.220)	19.158	
Tetrachloro-m-xylene	5.338	(5.288 - 5.388)	5.343	
Decachlorobiphenyl	21.318	(21.218 - 21.418)	21.325	

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2080.d
Method: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/Xf8082.m

Sample Information: AR1660-500 ppb
Injection Date: 08-NOV-1999 23:45

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	7.822	500	559.89	11.98
Aroclor-1016	2	8.662	500	543.86	8.77
Aroclor-1016	3	9.810	500	515.96	3.19
Aroclor-1016	4	10.142	500	553.71	10.74
Aroclor-1016	5	10.415	500	538.22	7.64
Aroclor-1016	6	11.352	500	521.79	4.36
Aroclor-1260	1	14.822	500	554.73	10.95
Aroclor-1260	2	15.553	500	555.29	11.06
Aroclor-1260	3	17.755	500	536.49	7.30
Aroclor-1260	4	18.700	500	535.48	7.10
Aroclor-1260	5	19.833	500	534.09	6.82
Aroclor-1260	6	21.813	500	489.84	2.03

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	6.668	25	25.05	0.19
Decachlorobiphenyl	23.240	25	24.75	1.02

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/pcb6b2080.d
Method: /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/Xr8082.m

Sample Information: AR1660-500 ppb
Injection Date: 08-NOV-1999 23:45

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	6.355	500	557.22	11.44
Aroclor-1016	2	7.127	500	494.27	1.15
Aroclor-1016	3	7.735	500	511.76	2.35
Aroclor-1016	4	7.902	500	506.02	1.20
Aroclor-1016	5	8.273	500	475.28	4.94
Aroclor-1016	6	9.440	500	470.97	5.81
Aroclor-1260	1	12.737	500	503.42	0.68
Aroclor-1260	2	13.020	500	496.63	0.67
Aroclor-1260	3	15.627	500	485.83	2.83
Aroclor-1260	4	16.098	500	506.89	1.38
Aroclor-1260	5	17.590	500	496.40	0.72
Aroclor-1260	6	19.165	500	478.27	4.35

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	5.347	25	23.29	6.82
Decachlorobiphenyl	21.327	25	23.50	6.00

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2080.d
Injection Date: 08-NOV-1999 23:45

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	7.802	(7.732 - 7.872)	7.822	
	8.655	(8.585 - 8.725)	8.662	
	9.793	(9.723 - 9.863)	9.810	
	10.125	(10.055 - 10.195)	10.142	
	10.402	(10.332 - 10.472)	10.415	
	11.347	(11.277 - 11.417)	11.352	
Aroclor-1260	14.823	(14.753 - 14.893)	14.822	
	15.552	(15.482 - 15.622)	15.553	
	17.755	(17.685 - 17.825)	17.755	
	18.702	(18.632 - 18.772)	18.700	
	19.835	(19.765 - 19.905)	19.833	
	21.813	(21.743 - 21.883)	21.813	
Tetrachloro-m-xylene	6.653	(6.603 - 6.703)	6.668	
Decachlorobiphenyl	23.243	(23.143 - 23.343)	23.240	

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/pcb6b2080.d
Injection Date: 08-NOV-1999 23:45

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	6.342	(6.272 - 6.412)	6.355	
	7.120	(7.050 - 7.190)	7.127	
	7.728	(7.658 - 7.798)	7.735	
	7.885	(7.815 - 7.955)	7.902	
	8.257	(8.187 - 8.327)	8.273	
	9.432	(9.362 - 9.502)	9.440	
Aroclor-1260	12.728	(12.658 - 12.798)	12.737	
	13.012	(12.942 - 13.082)	13.020	
	15.615	(15.545 - 15.685)	15.627	
	16.088	(16.018 - 16.158)	16.098	
	17.575	(17.505 - 17.645)	17.590	
	19.150	(19.080 - 19.220)	19.165	
Tetrachloro-m-xylene	5.338	(5.288 - 5.388)	5.347	
Decachlorobiphenyl	21.318	(21.218 - 21.418)	21.327	

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99b.b/pcb6a2093.d
Method: /chem/HP68906.i/8082/front/10-19-99/08nov99b.b/Xf8082.m

Sample Information: AR1660-500 ppb
Injection Date: 09-NOV-1999 08:37

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	7.823	500	560.20	12.04
Aroclor-1016	2	8.663	500	550.96	10.19
Aroclor-1016	3	9.812	500	526.50	5.30
Aroclor-1016	4	10.147	500	564.45	12.89
Aroclor-1016	5	10.415	500	545.92	9.18
Aroclor-1016	6	11.352	500	533.06	6.61
Aroclor-1260	1	14.822	500	566.29	13.26
Aroclor-1260	2	15.555	500	567.12	13.42
Aroclor-1260	3	17.750	500	537.41	7.48
Aroclor-1260	4	18.702	500	551.97	10.39
Aroclor-1260	5	19.830	500	540.79	8.16
Aroclor-1260	6	21.810	500	489.69	2.06

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	6.670	25	25.20	0.81
Decachlorobiphenyl	23.235	25	24.89	0.46

MULTICOMPONENT COMPOUND CONTINUING CALIBRATION REPORT

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99b.b/pcb6b2093.d
Method: /chem/HP68906.i/8082/rear/10-19-99/08nov99b.b/Xr8082.m

Sample Information: AR1660-500 ppb
Injection Date: 09-NOV-1999 08:37

Compound	Signal No.	RT	Exp Conc	Actual Conc	Percent Diff.
Aroclor-1016	1	6.362	500	522.34	4.47
Aroclor-1016	2	7.132	500	482.88	3.42
Aroclor-1016	3	7.742	500	494.90	1.02
Aroclor-1016	4	7.910	500	496.84	0.63
Aroclor-1016	5	8.278	500	466.33	6.73
Aroclor-1016	6	9.445	500	450.43	9.91
Aroclor-1260	1	12.743	500	492.39	1.52
Aroclor-1260	2	13.032	500	489.05	2.19
Aroclor-1260	3	15.628	500	476.52	4.70
Aroclor-1260	4	16.105	500	498.58	0.28
Aroclor-1260	5	17.593	500	484.28	3.14
Aroclor-1260	6	19.172	500	495.40	0.92

Surrogate	RT	Exp Conc	Actual Conc	Percent Diff.
Tetrachloro-m-xylene	5.352	25	22.83	8.69
Decachlorobiphenyl	21.333	25	23.20	7.20

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/front/10-19-99/08nov99b.b/pcb6a2093.d
Injection Date: 09-NOV-1999 08:37

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	7.802	(7.732 - 7.872)	7.823	
	8.655	(8.585 - 8.725)	8.663	
	9.793	(9.723 - 9.863)	9.812	
	10.125	(10.055 - 10.195)	10.147	
	10.402	(10.332 - 10.472)	10.415	
	11.347	(11.277 - 11.417)	11.352	
Aroclor-1260	14.823	(14.753 - 14.893)	14.822	
	15.552	(15.482 - 15.622)	15.555	
	17.755	(17.685 - 17.825)	17.750	
	18.702	(18.632 - 18.772)	18.702	
	19.835	(19.765 - 19.905)	19.830	
	21.813	(21.743 - 21.883)	21.810	
Tetrachloro-m-xylene	6.653	(6.603 - 6.703)	6.670	
Decachlorobiphenyl	23.243	(23.143 - 23.343)	23.235	

GC ORGANICS RETENTION TIME CHECK

Instrument ID: HP68906.i

Midpoint Calibration File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d
Injection Date: 19-OCT-1999 20:40

Continuing Calibration File: /chem/HP68906.i/8082/rear/10-19-99/08nov99b.b/pcb6b2093.d
Injection Date: 09-NOV-1999 08:37

Compound	Init Cal RT	RT Range	Cont Cal RT	Flags
Aroclor-1016	6.342	(6.272 - 6.412)	6.362	
	7.120	(7.050 - 7.190)	7.132	
	7.728	(7.658 - 7.798)	7.742	
	7.885	(7.815 - 7.955)	7.910	
	8.257	(8.187 - 8.327)	8.278	
	9.432	(9.362 - 9.502)	9.445	
Aroclor-1260	12.728	(12.658 - 12.798)	12.743	
	13.012	(12.942 - 13.082)	13.032	
	15.615	(15.545 - 15.685)	15.628	
	16.088	(16.018 - 16.158)	16.105	
	17.575	(17.505 - 17.645)	17.593	
	19.150	(19.080 - 19.220)	19.172	
Tetrachloro-m-xylene	5.338	(5.288 - 5.388)	5.352	
Decachlorobiphenyl	21.318	(21.218 - 21.418)	21.333	

Severn Trent Laboratories - Whippany
GC ORGANICS ANALYTICAL SEQUENCE SUMMARY

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

	Lab Sample ID	Client Sample ID	Lab File ID	Sample Type	Inj. Date	Inj. Time
1	AR1660-500 ppb		pcb6a1754.d	CALIB_3	10/19/99	2040
2	AR1660-100 ppb		pcb6a1755.d	CALIB_1	10/19/99	2118
3	AR1660-250 ppb		pcb6a1756.d	CALIB_2	10/19/99	2155
4	AR1660-1000 ppb		pcb6a1757.d	CALIB_4	10/19/99	2233
5	AR1660-2000 ppb		pcb6a1758.d	CALIB_5	10/19/99	2311
6	AR1221-500 ppb		pcb6a1759.d	CALIB_3	10/19/99	2349
7	AR1232-500 ppb		pcb6a1760.d	CALIB_3	10/20/99	0027
8	AR1242-500 ppb		pcb6a1761.d	CALIB_3	10/20/99	0104
9	AR1248-500 ppb		pcb6a1762.d	CALIB_3	10/20/99	0142
10	AR1254-500 ppb		pcb6a1763.d	CALIB_3	10/20/99	0220
11	AR1660-500 ppb		pcb6a1802.d	CCALIB_3	10/21/99	2352
12	102099S-MB		pcb6a1804.d	BLANK	10/22/99	0108
13	102099-BS		pcb6a1805.d	BS	10/22/99	0146
14	94143-011	SO-11	pcb6a1806.d	SAMPLE	10/22/99	0224
15	94143-011MS	SO-11MS	pcb6a1816.d	MS	10/22/99	0843
16	94143-011MSD	SO-11MSD	pcb6a1817.d	MSD	10/22/99	0921
17	AR1660-500 ppb		pcb6a1821.d	CCALIB_3	10/22/99	1152
18	AR1660-500 ppb		pcb6a1918.d	CCALIB_3	10/29/99	0011
19	94127-018	S2-2-01	pcb6a1920.d	SAMPLE	10/29/99	0127
20	94127-025	S2-3-01	pcb6a1921.d	SAMPLE	10/29/99	0204
21	AR1660-500 ppb		pcb6a1934.d	CCALIB_3	10/29/99	1036
22	AR1660-500 ppb		pcb6a2080.d	CCALIB_3	11/08/99	2345
23	WG41688-MB		pcb6a2081.d	BLANK	11/09/99	0023
24	WG41688-BS		pcb6a2082.d	BS	11/09/99	0101
25	94127-019	SW2-2-01	pcb6a2083.d	SAMPLE	11/09/99	0139
26	94127-020	SW2-3-03	pcb6a2084.d	SAMPLE	11/09/99	0217
27	94127-020MS	SW2-2-03MS	pcb6a2085.d	MS	11/09/99	0255
28	94127-020MSD	SW2-2-03MSD	pcb6a2086.d	MSD	11/09/99	0332
29	94127-021	FB-101499	pcb6a2087.d	SAMPLE	11/09/99	0410
30	94127-026	SW2-3-01	pcb6a2088.d	SAMPLE	11/09/99	0448
31	AR1660-500 ppb		pcb6a2093.d	CCALIB_3	11/09/99	0837

Severn Trent Laboratories - Whippany
Pesticide/PCB Retention Time Shift Summary

(for databatch - /chem/HP68906.i/8082/front/10-19-99/21oct99a.b,
as of 12/05/1999 11:03)

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Dates of Analysis: 10/22/99 to 10/22/99

Retention Time Shift Marker - Decachlorobiphenyl
QC Limit for RT Shift is 0.10 min

Absolute Surrogate RT From Cal. Standard Level 3: DCB = 23.280

Lab Sample ID	Data File	Injection Time	RT	DLT RT
102099S-MB	pcb6a1804.d	22-OCT-1999 01:08	23.282	0.002
102099-BS	pcb6a1805.d	22-OCT-1999 01:46	23.278	0.002
94143-011	pcb6a1806.d	22-OCT-1999 02:24	23.282	0.002
94143-011MS	pcb6a1816.d	22-OCT-1999 08:43	23.280	0.000
94143-011MSD	pcb6a1817.d	22-OCT-1999 09:21	23.282	0.002

D = Surrogate diluted out.

Severn Trent Laboratories - Whippany
Pesticide/PCB Retention Time Shift Summary

(for databatch - /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b,
as of 12/05/1999 11:03)

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Dates of Analysis: 10/22/99 to 10/22/99

Retention Time Shift Marker - Decachlorobiphenyl
QC Limit for RT Shift is 0.10 min

Absolute Surrogate RT From Cal. Standard Level 3: DCB = 21.347

Lab Sample ID	Data File	Injection Time	RT	DLT RT
102099S-MB	pcb6b1804.d	22-OCT-1999 01:08	21.347	0.000
102099-BS	pcb6b1805.d	22-OCT-1999 01:46	21.347	0.000
94143-011	pcb6b1806.d	22-OCT-1999 02:24	21.348	0.002
94143-011MS	pcb6b1816.d	22-OCT-1999 08:43	21.348	0.002
94143-011MSD	pcb6b1817.d	22-OCT-1999 09:21	21.345	0.002

D = Surrogate diluted out.

Severn Trent Laboratories - Whippany
Pesticide/PCB Retention Time Shift Summary

(for databatch - /chem/HP68906.i/8082/front/10-19-99/28oct99a.b,
as of 12/05/1999 11:03)

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Dates of Analysis: 10/29/99 to 10/29/99

Retention Time Shift Marker - Decachlorobiphenyl
QC Limit for RT Shift is 0.10 min

Absolute Surrogate RT From Cal. Standard Level 3: DCB = 23.247

Lab Sample ID	Data File	Injection Time	RT	DLT RT
94127-018	pcb6a1920.d	29-OCT-1999 01:27	23.250	0.003
94127-025	pcb6a1921.d	29-OCT-1999 02:04	23.247	0.000

D = Surrogate diluted out.

Severn Trent Laboratories - Whippany
Pesticide/PCB Retention Time Shift Summary

(for databatch - /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b,
as of 12/05/1999 11:03)

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Dates of Analysis: 10/29/99 to 10/29/99

Retention Time Shift Marker - Decachlorobiphenyl
QC Limit for RT Shift is 0.10 min

Absolute Surrogate RT From Cal. Standard Level 3: DCB = 21.325

Lab Sample ID	Data File	Injection Time	RT	DLT RT
94127-018	pcb6b1920.d	29-OCT-1999 01:27	21.327	0.002
94127-025	pcb6b1921.d	29-OCT-1999 02:04	21.328	0.003

D = Surrogate diluted out.

Severn Trent Laboratories - Whippany
Pesticide/PCB Retention Time Shift Summary

(for databatch - /chem/HP68906.i/8082/front/10-19-99/08nov99a.b,
as of 12/05/1999 11:03)

Instrument ID: HP68906.i Column ID: DB-1701 Primary Column

Dates of Analysis: 11/09/99 to 11/09/99

Retention Time Shift Marker - Decachlorobiphenyl
QC Limit for RT Shift is 0.10 min

Absolute Surrogate RT From Cal. Standard Level 3: DCB = 23.240

Lab Sample ID	Data File	Injection Time	RT	DLT RT
WG41688-MB	pcb6a2081.d	09-NOV-1999 00:23	23.238	0.002
WG41688-BS	pcb6a2082.d	09-NOV-1999 01:01	23.242	0.002
94127-019	pcb6a2083.d	09-NOV-1999 01:39	23.233	0.007
94127-020	pcb6a2084.d	09-NOV-1999 02:17	23.243	0.003
94127-020MS	pcb6a2085.d	09-NOV-1999 02:55	23.238	0.002
94127-020MSD	pcb6a2086.d	09-NOV-1999 03:32	23.230	0.010
94127-021	pcb6a2087.d	09-NOV-1999 04:10	23.235	0.005
94127-026	pcb6a2088.d	09-NOV-1999 04:48	23.243	0.003

D = Surrogate diluted out.

Severn Trent Laboratories - Whippany
Pesticide/PCB Retention Time Shift Summary

(for databatch - /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b,
as of 12/05/1999 11:03)

Instrument ID: HP68906.i Column ID: DB-608 Confirmatory Column

Dates of Analysis: 11/09/99 to 11/09/99

Retention Time Shift Marker - Decachlorobiphenyl
QC Limit for RT Shift is 0.10 min

Absolute Surrogate RT From Cal. Standard Level 3: DCB = 21.327

Lab Sample ID	Data File	Injection Time	RT	DLT RT
WG41688-MB	pcb6b2081.d	09-NOV-1999 00:23	21.328	0.002
WG41688-BS	pcb6b2082.d	09-NOV-1999 01:01	21.328	0.002
94127-019	pcb6b2083.d	09-NOV-1999 01:39	21.327	0.000
94127-020	pcb6b2084.d	09-NOV-1999 02:17	21.322	0.005
94127-020MS	pcb6b2085.d	09-NOV-1999 02:55	21.327	0.000
94127-020MSD	pcb6b2086.d	09-NOV-1999 03:32	21.328	0.002
94127-021	pcb6b2087.d	09-NOV-1999 04:10	21.327	0.000
94127-026	pcb6b2088.d	09-NOV-1999 04:48	21.322	0.005

D = Surrogate diluted out.

GC ORGANICS RPD SUMMARY

Lab ID:94127-025
Instrument ID:HP68906.i
Column(1) ID:pcb6a1921.d

Client ID: S2-3-01
Injection Date: 29-OCT-1999 02:04
Column(2) ID:pcb6b1921.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1254	1	101.00	
	2	121.00	18.02

GC ORGANICS RPD SUMMARY

Lab ID:102099-BS
Instrument ID:HP68906.i
Column(1) ID:pcb6a1805.d

Client ID: Blank Spk-S
Injection Date: 22-OCT-1999 01:46
Column(2) ID:pcb6b1805.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1016	1	286.00	
	2	282.00	1.41
Aroclor-1260	1	316.00	
	2	280.00	12.08

GC ORGANICS RPD SUMMARY

Lab ID:94143-011MS
Instrument ID:HP68906.i
Column(1) ID:pcb6a1816.d

Client ID: SO-11MS
Injection Date: 22-OCT-1999 08:43
Column(2) ID:pcb6b1816.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1016	1	300.00	
	2	278.00	7.61
Aroclor-1260	1	307.00	
	2	268.00	13.57

GC ORGANICS RPD SUMMARY

Lab ID:94143-011MSD
Instrument ID:HP68906.i
Column(1) ID:pcb6a1817.d

Client ID: SO-11MSD
Injection Date: 22-OCT-1999 09:21
Column(2) ID:pcb6b1817.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1016	1	324.00	
	2	301.00	7.36
Aroclor-1260	1	328.00	
	2	288.00	12.99

GC ORGANICS RPD SUMMARY

Lab ID:WG41688-BS
Instrument ID:HP68906.i
Column(1) ID:pcb6a2082.d

Client ID: Blank Spk-W
Injection Date: 09-NOV-1999 01:01
Column(2) ID:pcb6b2082.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1016	1	1.85	
	2	1.67	10.23
Aroclor-1260	1	1.83	
	2	1.74	5.04

GC ORGANICS RPD SUMMARY

Lab ID:94127-020MS
Instrument ID:HP68906.i
Column(1) ID:pcb6a2085.d

Client ID: SW2-2-03MS
Injection Date: 09-NOV-1999 02:55
Column(2) ID:pcb6b2085.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1016	1	3.62	
	2	3.03	17.74
Aroclor-1260	1	3.72	
	2	3.15	16.59

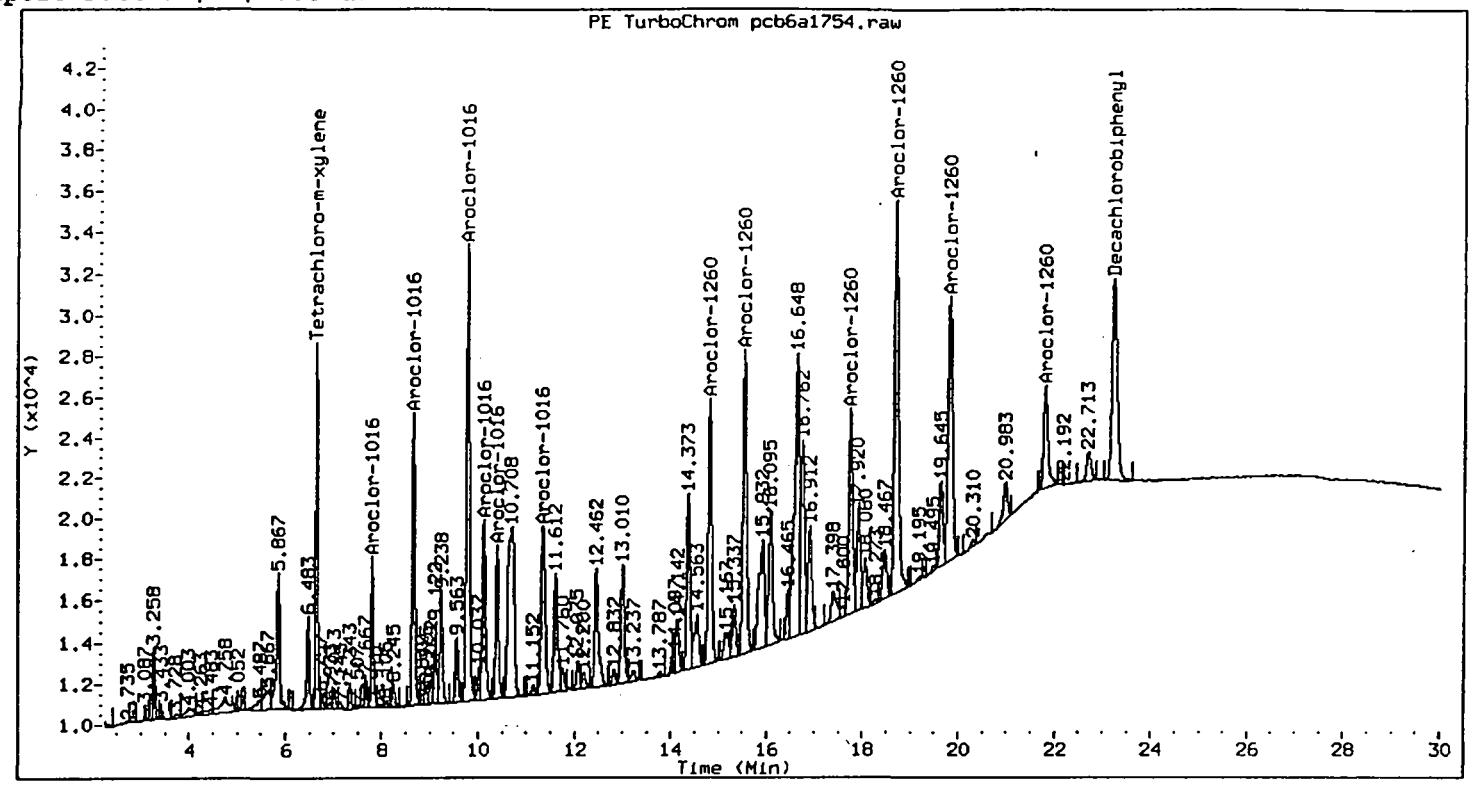
GC ORGANICS RPD SUMMARY

Lab ID:94127-020MSD
Instrument ID:HP68906.i
Column(1) ID:pcb6a2086.d

Client ID: SW2-2-03MSD
Injection Date: 09-NOV-1999 03:32
Column(2) ID:pcb6b2086.d

ANALYTE	COLUMN	FINAL CONCENTRATION	%RPD
Aroclor-1016	1	3.59	
	2	3.09	14.97
Aroclor-1260	1	3.88	
	2	3.16	20.45

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d Page 1
Report Date 10/20/1999 11:32



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 19-OCT-1999 20:40
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.802	7.802	0.000	25923	507.909	507.909
(2)		8.655	8.655	0.000	56535	518.858	518.858
(3)		9.793	9.793	0.000	102685	518.325	518.325
(4)		10.125	10.125	0.000	41403	521.329	521.329
(5)		10.402	10.402	0.000	30773	512.762	512.762
(6)		11.347	11.347	0.000	46957	514.479	514.479
Average of peak concentrations:							516.00
Aroclor-1260	(M)	14.823	14.823	0.000	67090	520.664	520.664
(2)		15.552	15.552	0.000	79882	530.330	530.330
(3)		17.755	17.755	0.000	55389	522.959	522.959
(4)		18.702	18.702	0.000	114258	524.540	524.540
(5)		19.835	19.835	0.000	84917	526.008	526.008
(6)		21.813	21.813	0.000	30921	526.975	526.975
Average of peak concentrations:							525.00

10/21/99

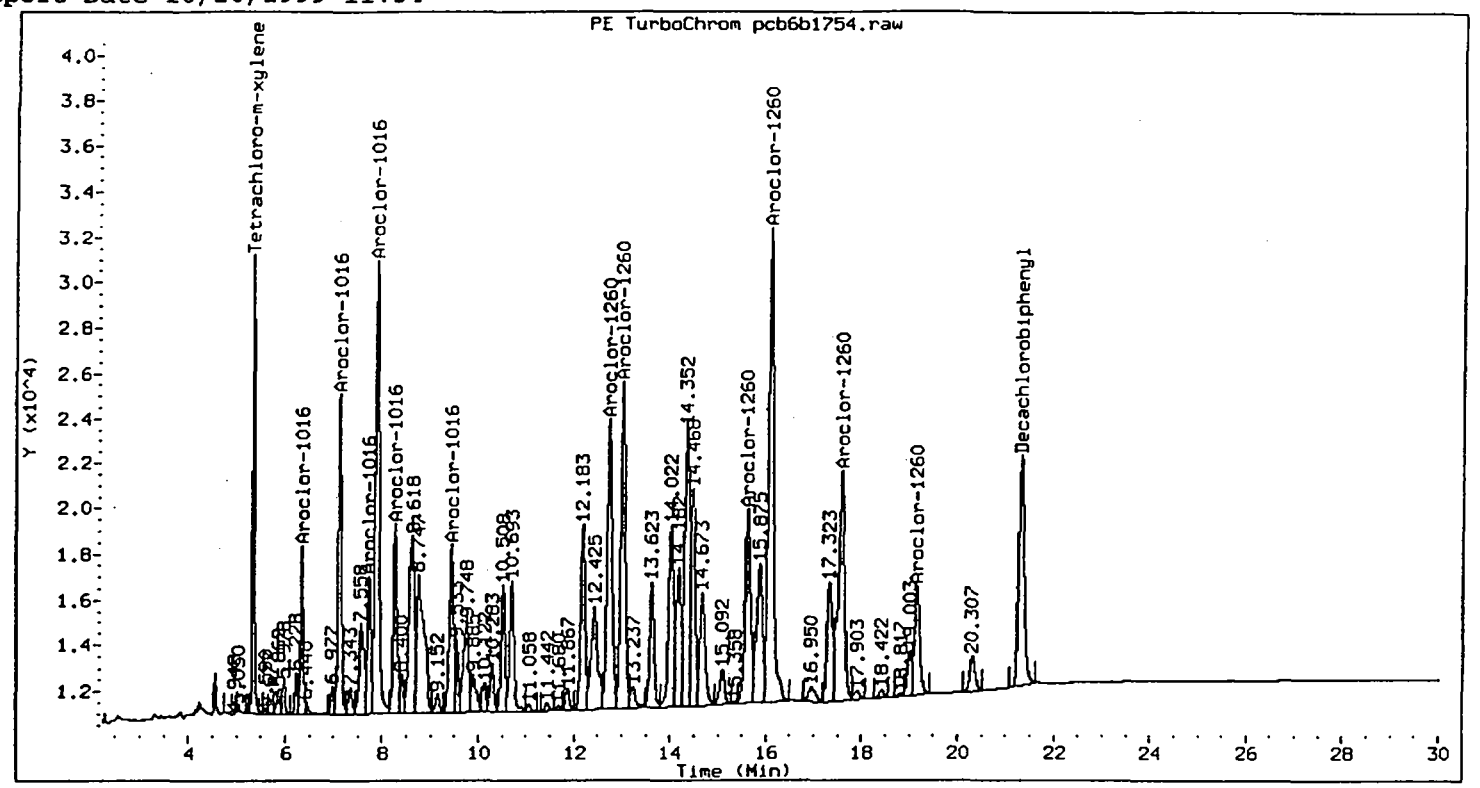
Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1754.d Page 2
Report Date 10/20/1999 11:32

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	6.653	6.653	0.000	50458	25.533	25.533
Decachlorobiphenyl	(M)	23.243	23.243	0.000	72779	26.685	26.685

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d Page 1
Report Date 10/20/1999 11:34



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 19-OCT-1999 20:40
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.342	6.342	0.000	27399	521.731	521.731
(2)		7.120	7.120	0.000	64803	515.101	515.101
(3)		7.728	7.728	0.000	28621	518.295	518.295
(4)		7.885	7.885	0.000	118659	519.508	519.508
(5)		8.257	8.257	0.000	44802	516.396	516.396
(6)		9.432	9.432	0.000	45027	523.654	523.654
Average of peak concentrations:							519.00
Aroclor-1260	(M)	12.728	12.728	0.000	93939	522.156	522.156
(2)		13.012	13.012	0.000	97119	515.663	515.663
(3)		15.615	15.615	0.000	66875	518.551	518.551
(4)		16.088	16.088	0.000	154987	521.930	521.930
(5)		17.575	17.575	0.000	90196	513.736	513.736
(6)		19.150	19.150	0.000	36706	515.741	515.741
Average of peak concentrations:							518.00

10/21/99

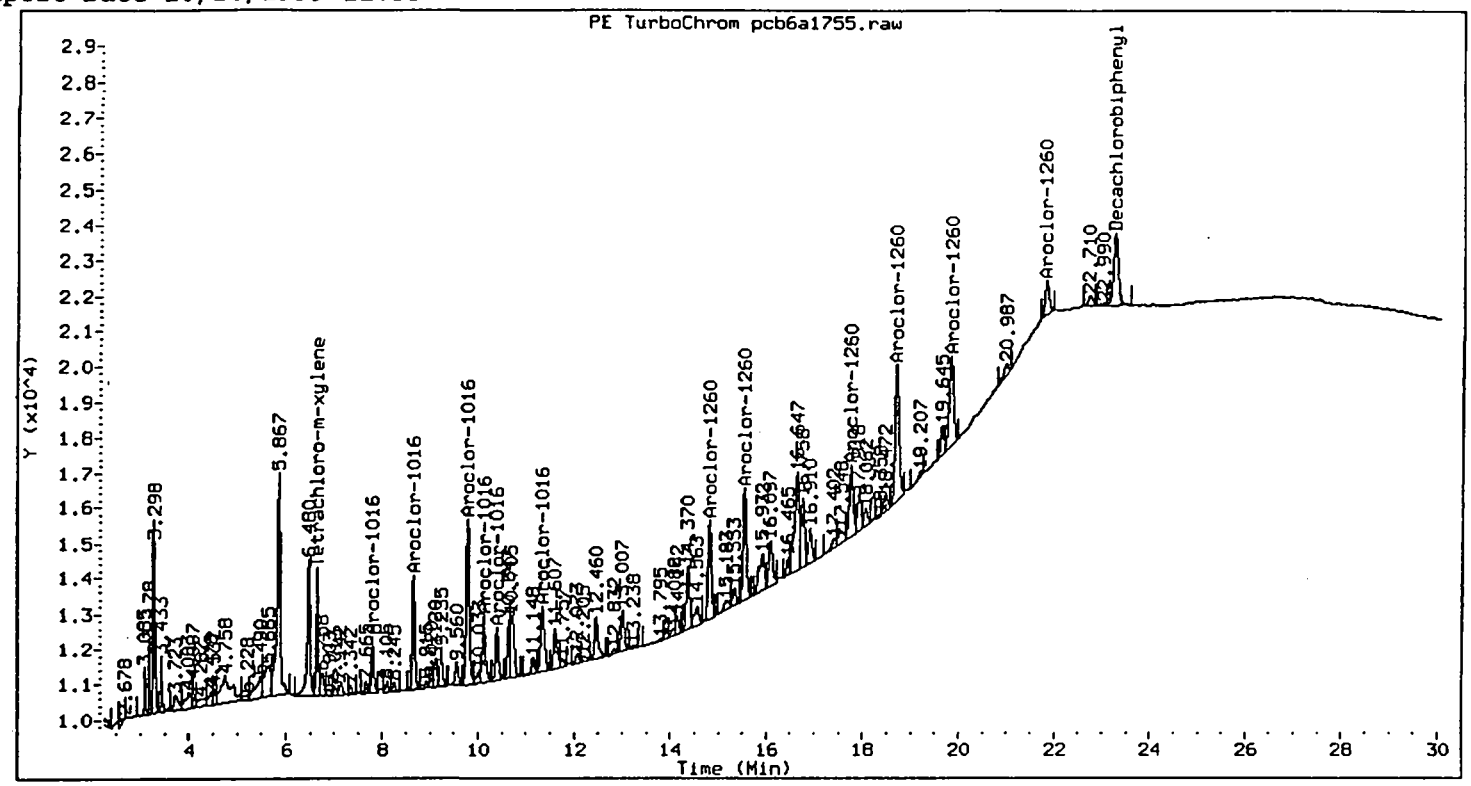
Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1754.d Page 2
Report Date 10/20/1999 11:34

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	5.338	5.338	0.000	57270	26.184	26.184
Decachlorobiphenyl	(M)	21.318	21.318	0.000	79499	26.322	26.322

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1755.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1660-100 ppb
Lab ID : AR1660-100 ppb
Inj Date : 19-OCT-1999 21:18
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_1

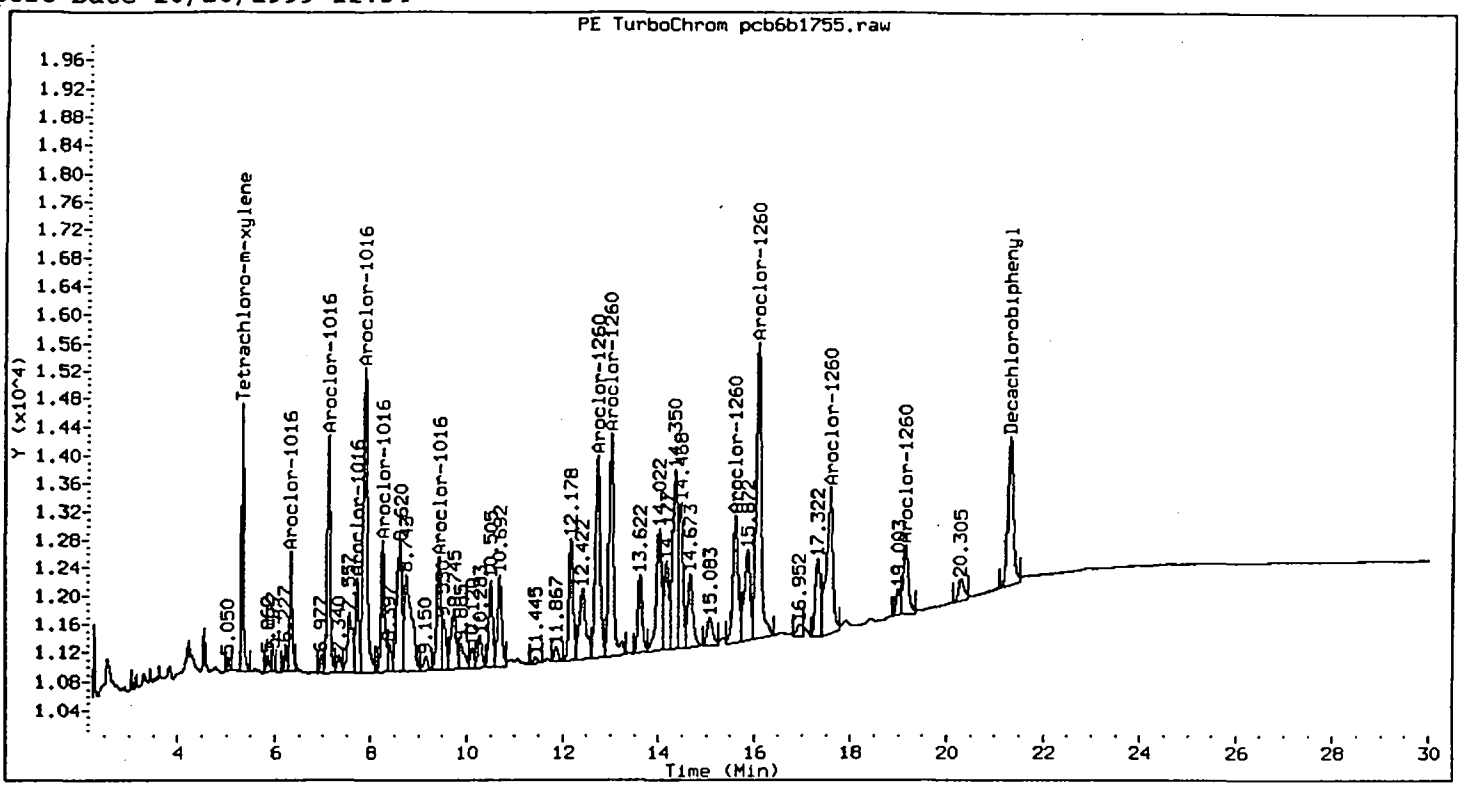
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.800	7.802	0.002	5793	113.502	113.502
(2)		8.653	8.655	0.002	12314	113.013	113.013
(3)		9.788	9.793	0.005	21443	108.238	108.238
(4)		10.123	10.125	0.002	8659	109.030	109.030
(5)		10.400	10.402	0.002	6404	106.708	106.708
(6)		11.342	11.347	0.005	10434	114.319	114.319
Average of peak concentrations:							111.00
Aroclor-1260	(M)	14.822	14.823	0.002	14214	110.310	110.310
(2)		15.547	15.552	0.005	16105	106.920	106.920
(3)		17.752	17.755	0.003	11203	105.774	105.774
(4)		18.698	18.702	0.003	22078	101.357	101.357
(5)		19.833	19.835	0.002	16292	100.919	100.919
(6)		21.810	21.813	0.003	5612	95.643	95.643
Average of peak concentrations:							103.00

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	6.648	6.653	0.005	9915	5.017	5.017
Decachlorobiphenyl	(M)	23.238	23.243	0.005	14586	5.348	5.348

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1755.d Page 1
Report Date 10/20/1999 11:34



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1660-100 ppb
Lab ID : AR1660-100 ppb
Inj Date : 19-OCT-1999 21:18
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_1

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	6.338	6.342	0.003	5923	112.786	112.786
(2)		7.118	7.120	0.002	15148	120.407	120.407
(3)		7.725	7.728	0.003	6163	111.605	111.605
(4)		7.883	7.885	0.002	25559	111.901	111.901
(5)		8.255	8.257	0.002	9909	114.213	114.213
(6)		9.428	9.432	0.003	9621	111.890	111.890
Average of peak concentrations:							114.00
Aroclor-1260	(M)	12.727	12.728	0.002	20672	114.905	114.905
(2)		13.010	13.012	0.002	22282	118.308	118.308
(3)		15.612	15.615	0.003	14162	109.813	109.813
(4)		16.083	16.088	0.005	31256	105.257	105.257
(5)		17.573	17.575	0.002	19028	108.379	108.379
(6)		19.152	19.150	0.002	7681	107.923	107.923
Average of peak concentrations:							111.00

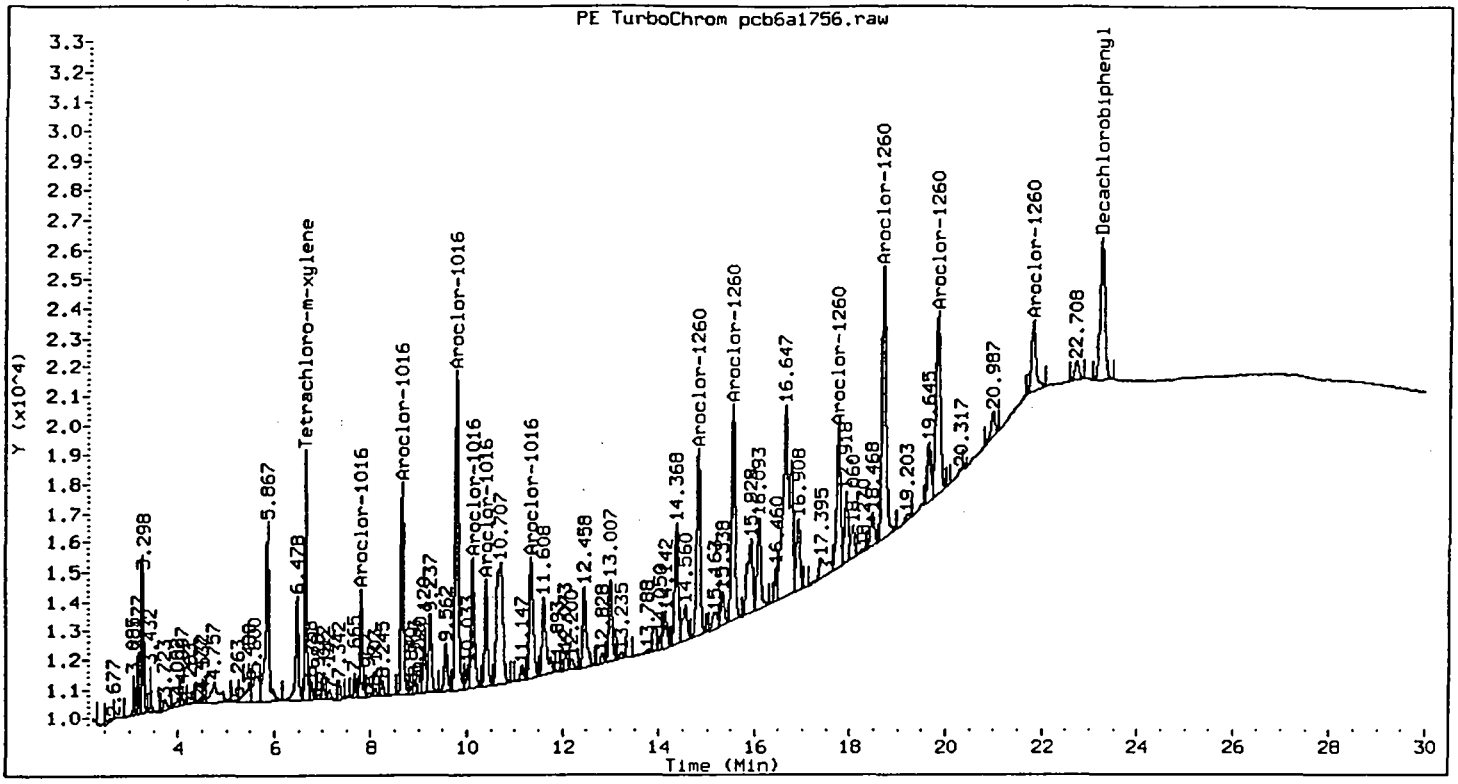
10/21/99

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	5.335	5.338	0.003	10461	4.783	4.783
Decachlorobiphenyl	21.318	21.318	0.000	16454	5.448	5.448

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1756.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1660-250 ppb
Lab ID : AR1660-250 ppb
Inj Date : 19-OCT-1999 21:55
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_2

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.800	7.802	0.002	12987	254.454	254.454
(2)		8.653	8.655	0.002	28590	262.389	262.389
(3)		9.790	9.793	0.003	50396	254.385	254.385
(4)		10.123	10.125	0.002	20327	255.949	255.949
(5)		10.400	10.402	0.002	14931	248.791	248.791
(6)		11.342	11.347	0.005	22992	251.909	251.909
Average of peak concentrations:							255.00
Aroclor-1260	(M)	14.820	14.823	0.003	33549	260.363	260.363
(2)		15.550	15.552	0.002	38562	256.010	256.010
(3)		17.753	17.755	0.002	26485	250.060	250.060
(4)		18.698	18.702	0.003	54414	249.806	249.806
(5)		19.835	19.835	0.000	39978	247.639	247.639
(6)		21.813	21.813	0.000	15630	266.376	266.376
Average of peak concentrations:							255.00

10/21/99

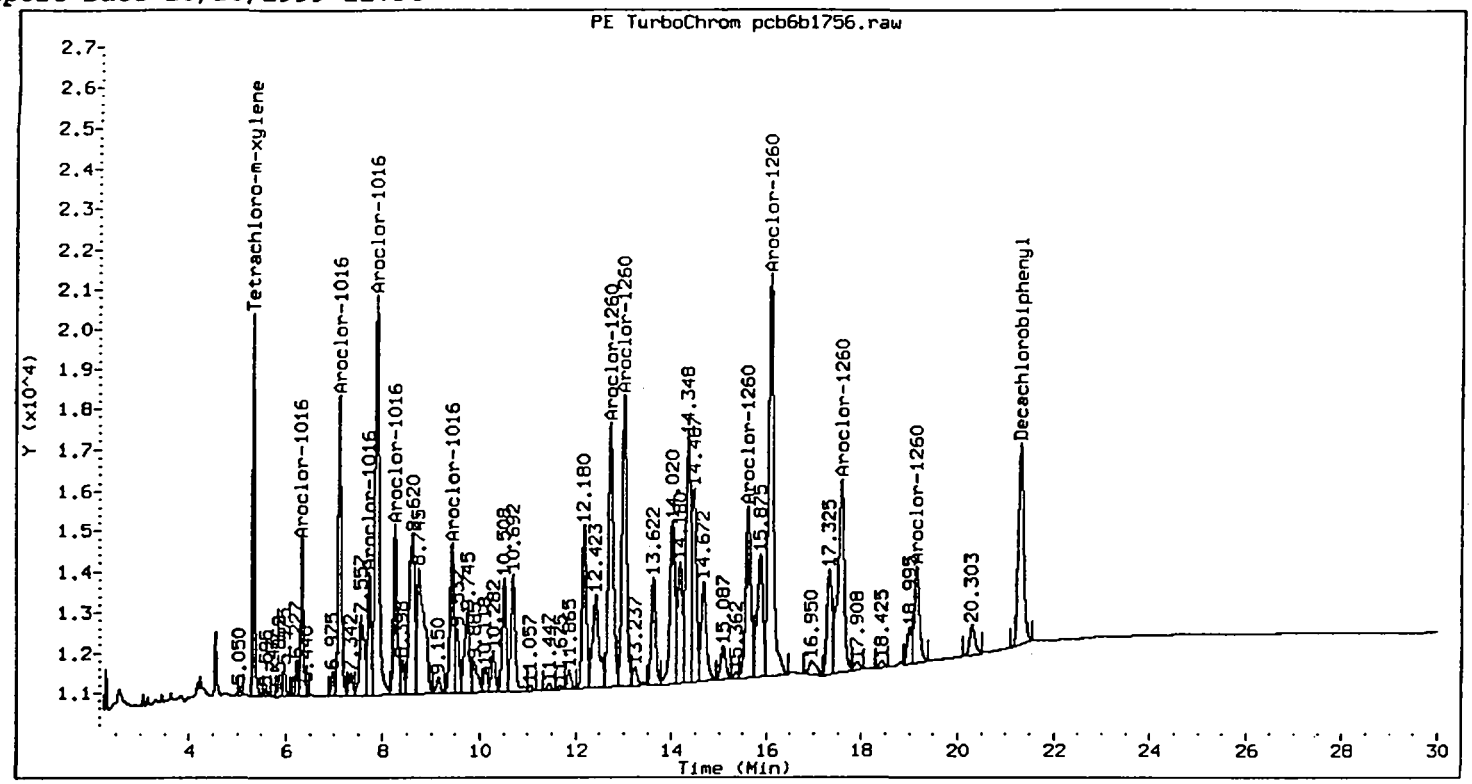
Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1756.d Page 2
Report Date 10/20/1999 11:33

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	6.650	6.653	0.003	23575	11.930	11.930
Decachlorobiphenyl		23.238	23.243	0.005	33874	12.420	12.420

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1756.d Page 1
Report Date 10/20/1999 11:34



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1660-250 ppb
Lab ID : AR1660-250 ppb
Inj Date : 19-OCT-1999 21:55
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_2

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.338	6.342	0.003	14015	266.873	266.873
(2)		7.118	7.120	0.002	33731	268.118	268.118
(3)		7.725	7.728	0.003	14322	259.356	259.356
(4)		7.882	7.885	0.003	59559	260.759	260.759
(5)		8.255	8.257	0.002	22592	260.399	260.399
(6)		9.428	9.432	0.003	22221	258.425	258.425
Average of peak concentrations:							262.00
Aroclor-1260	(M)	12.727	12.728	0.002	47307	262.954	262.954
(2)		13.010	13.012	0.002	48798	259.098	259.098
(3)		15.615	15.615	0.000	33031	256.124	256.124
(4)		16.083	16.088	0.005	75289	253.541	253.541
(5)		17.578	17.575	0.003	43860	249.817	249.817
(6)		19.148	19.150	0.002	18041	253.487	253.487
Average of peak concentrations:							256.00

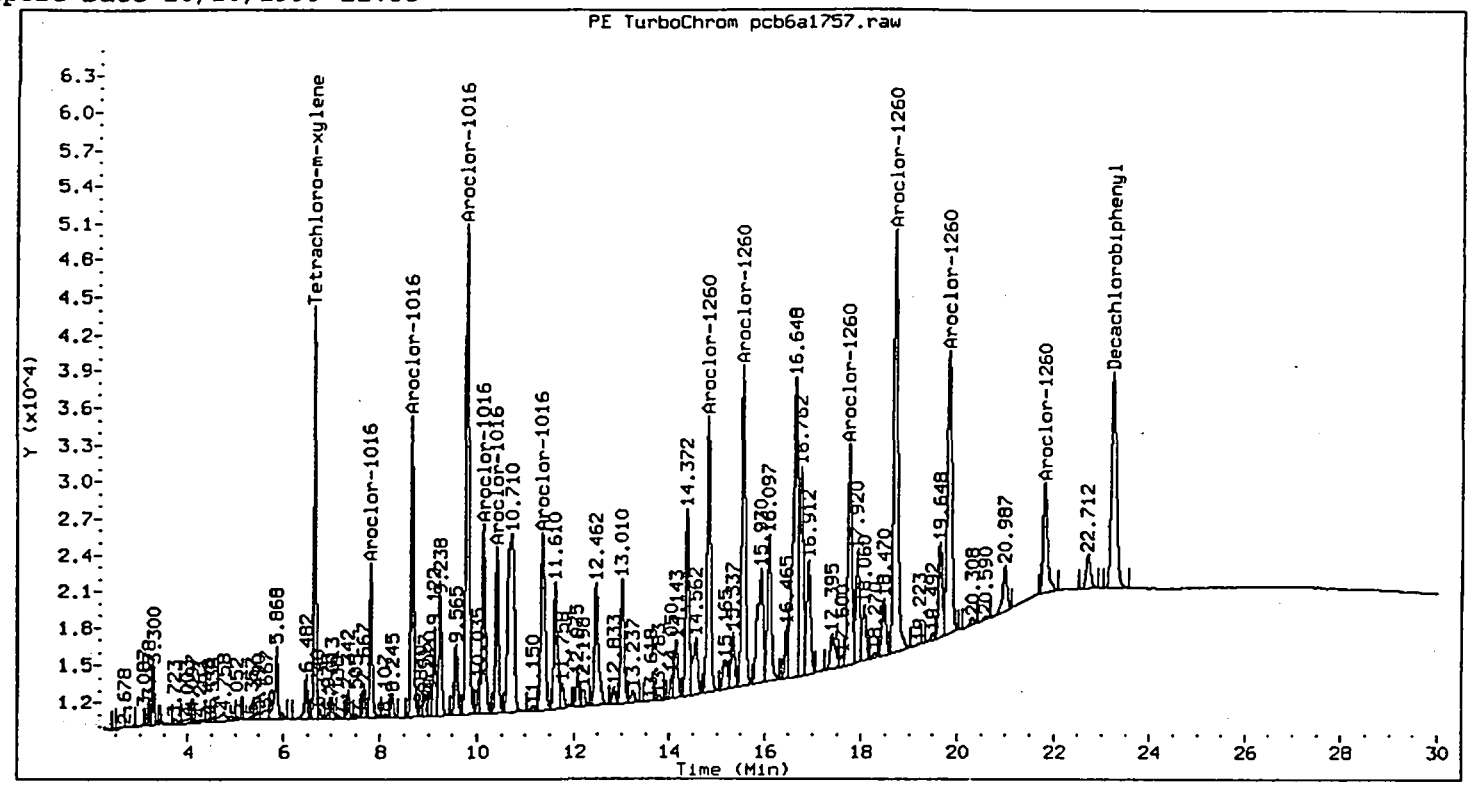
1/21/99

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene		5.337	5.338	0.002	26428	12.083	12.083
Decachlorobiphenyl	(M)	21.318	21.318	0.000	37999	12.581	12.581

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1757.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1660-1000 ppb
Lab ID : AR1660-1000 ppb
Inj Date : 19-OCT-1999 22:33
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_4

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.802	7.802	0.000	47316	927.061	927.061
(2)		8.655	8.655	0.000	99882	916.681	916.681
(3)		9.792	9.793	0.002	187231	945.089	945.089
(4)		10.127	10.125	0.002	75303	948.183	948.183
(5)		10.403	10.402	0.002	57296	954.707	954.707
(6)		11.347	11.347	0.000	84058	920.973	920.973
Average of peak concentrations:							935.00
Aroclor-1260	(M)	14.823	14.823	0.000	119158	924.746	924.746
(2)		15.552	15.552	0.000	141677	940.581	940.581
(3)		17.757	17.755	0.002	100891	952.569	952.569
(4)		18.702	18.702	0.000	211762	972.165	972.165
(5)		19.837	19.835	0.002	157221	973.887	973.887
(6)		21.813	21.813	0.000	56302	959.534	959.534
Average of peak concentrations:							954.00

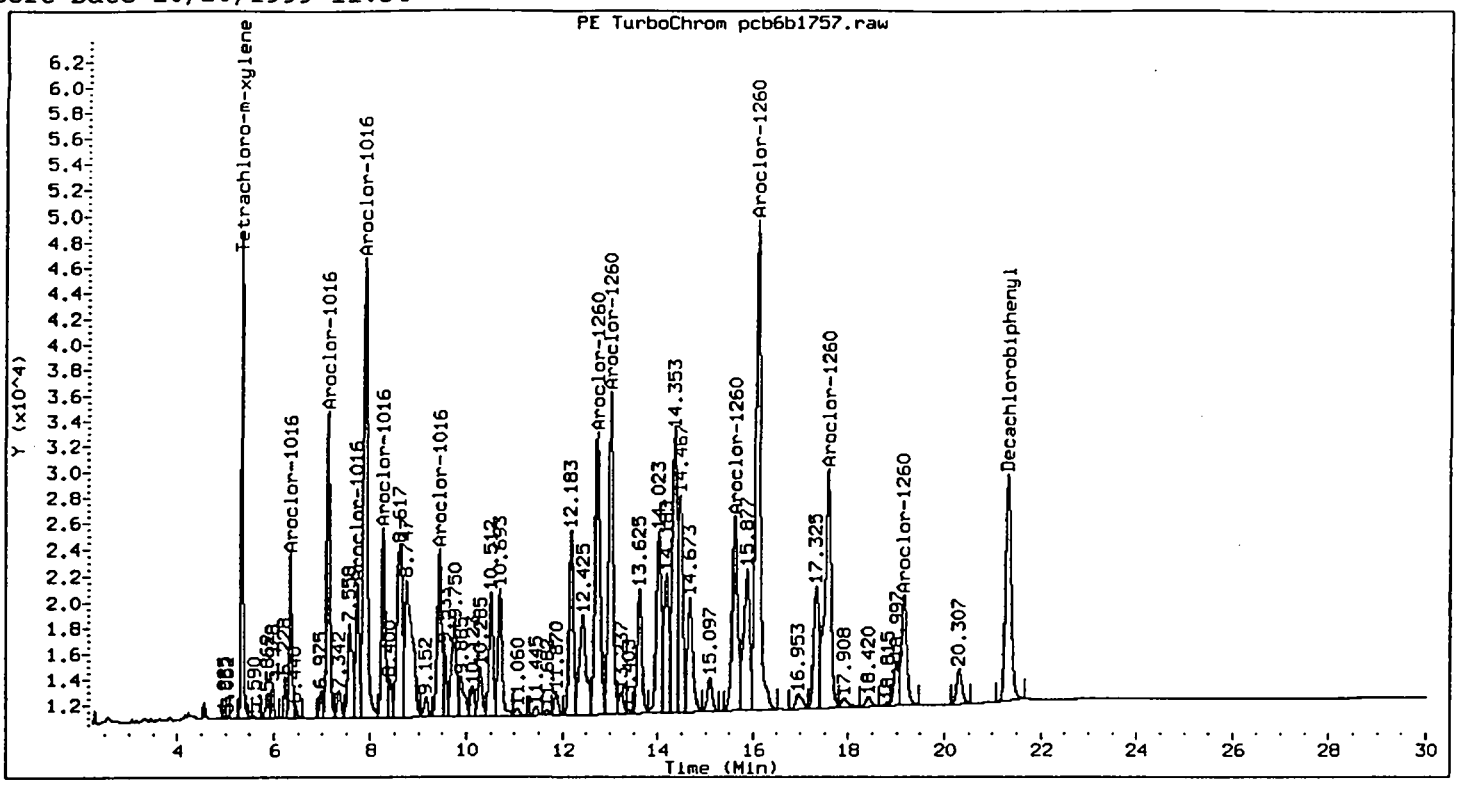
Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1757.d Page 2
Report Date 10/20/1999 11:33

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	6.653	6.653	0.000	97564	49.370	49.370
Decachlorobiphenyl		23.245	23.243	0.002	128141	46.984	46.984

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1757.d Page 1
Report Date 10/20/1999 11:34



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1660-1000 ppb
Lab ID : AR1660-1000 ppb
Inj Date : 19-OCT-1999 22:33
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_4

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	6.342	6.342	0.000	48141	916.699	916.699
(2)		7.120	7.120	0.000	111907	889.518	889.518
(3)		7.728	7.728	0.000	51438	931.487	931.487
(4)		7.885	7.885	0.000	212602	930.805	930.805
(5)		8.258	8.257	0.002	79910	921.057	921.057
(6)		9.433	9.432	0.002	80063	931.116	931.116
Average of peak concentrations:							920.00
Aroclor-1260	(M)	12.730	12.728	0.002	163801	910.482	910.482
(2)		13.012	13.012	0.000	170413	904.824	904.824
(3)		15.617	15.615	0.002	120220	932.190	932.190
(4)		16.088	16.088	0.000	284217	957.122	957.122
(5)		17.578	17.575	0.003	167783	955.654	955.654
(6)		19.153	19.150	0.003	67362	946.476	946.476
Average of peak concentrations:							934.00

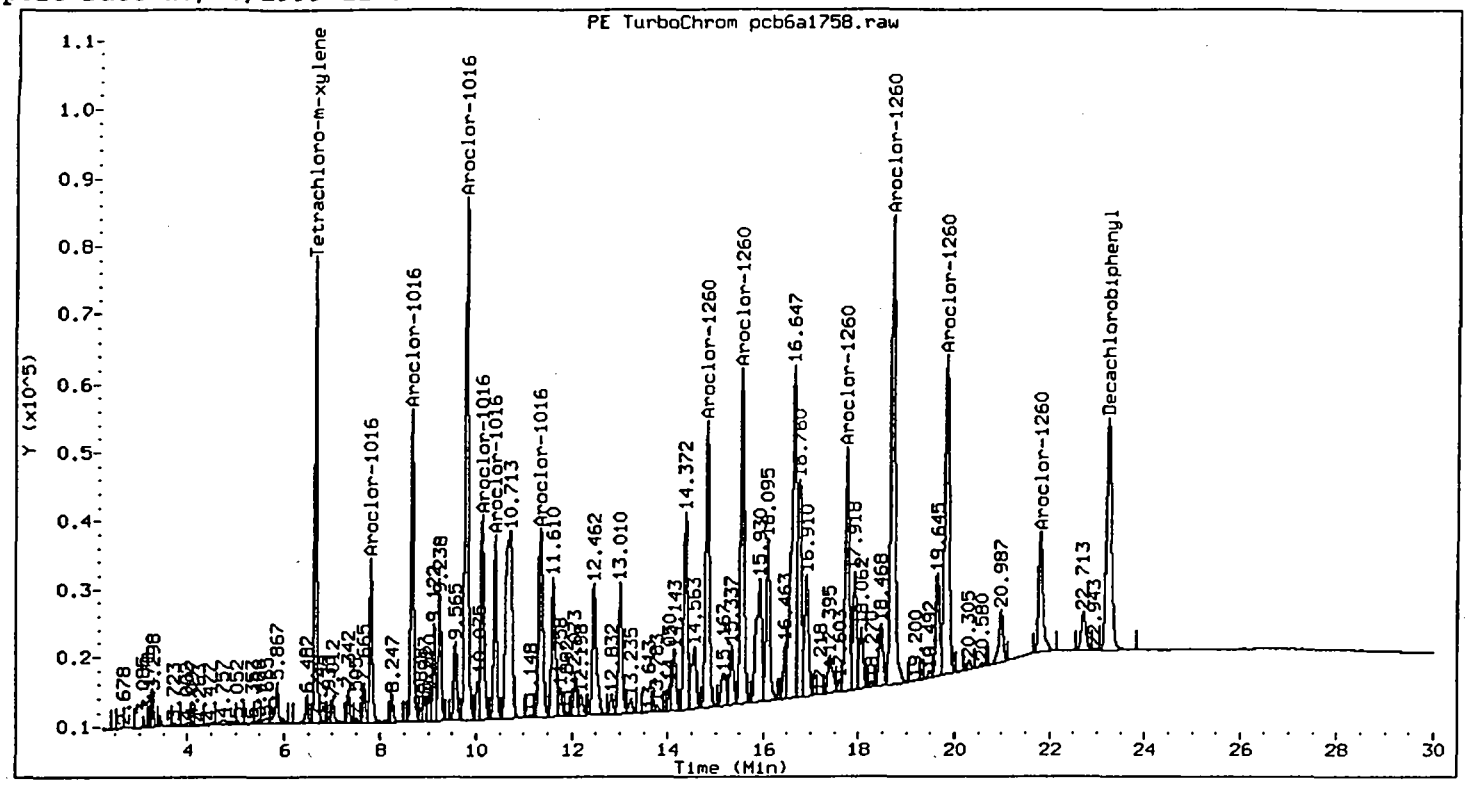
Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1757.d Page 2
Report Date 10/20/1999 11:34

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene		5.338	5.338	0.000	110411	50.481	50.481
Decachlorobiphenyl	(M)	21.318	21.318	0.000	142397	47.147	47.147

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1758.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1660-2000 ppb
Lab ID : AR1660-2000 ppb
Inj Date : 19-OCT-1999 23:11
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_5

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.802	7.802	0.000	92307	1808.569	1808.569
(2)		8.655	8.655	0.000	188701	1731.829	1731.829
(3)		9.792	9.793	0.002	363864	1836.682	1836.682
(4)		10.127	10.125	0.002	142168	1790.119	1790.119
(5)		10.402	10.402	0.000	114930	1915.047	1915.047
(6)		11.345	11.347	0.002	164149	1798.481	1798.481
Average of peak concentrations:							1810.00
Aroclor-1260	(M)	14.823	14.823	0.000	229200	1778.746	1778.746
(2)		15.550	15.552	0.002	272793	1811.049	1811.049
(3)		17.757	17.755	0.002	199868	1887.068	1887.068
(4)		18.702	18.702	0.000	420823	1931.931	1931.931
(5)		19.837	19.835	0.002	314592	1948.703	1948.703
(6)		21.812	21.813	0.002	113196	1929.157	1929.157
Average of peak concentrations:							1880.00

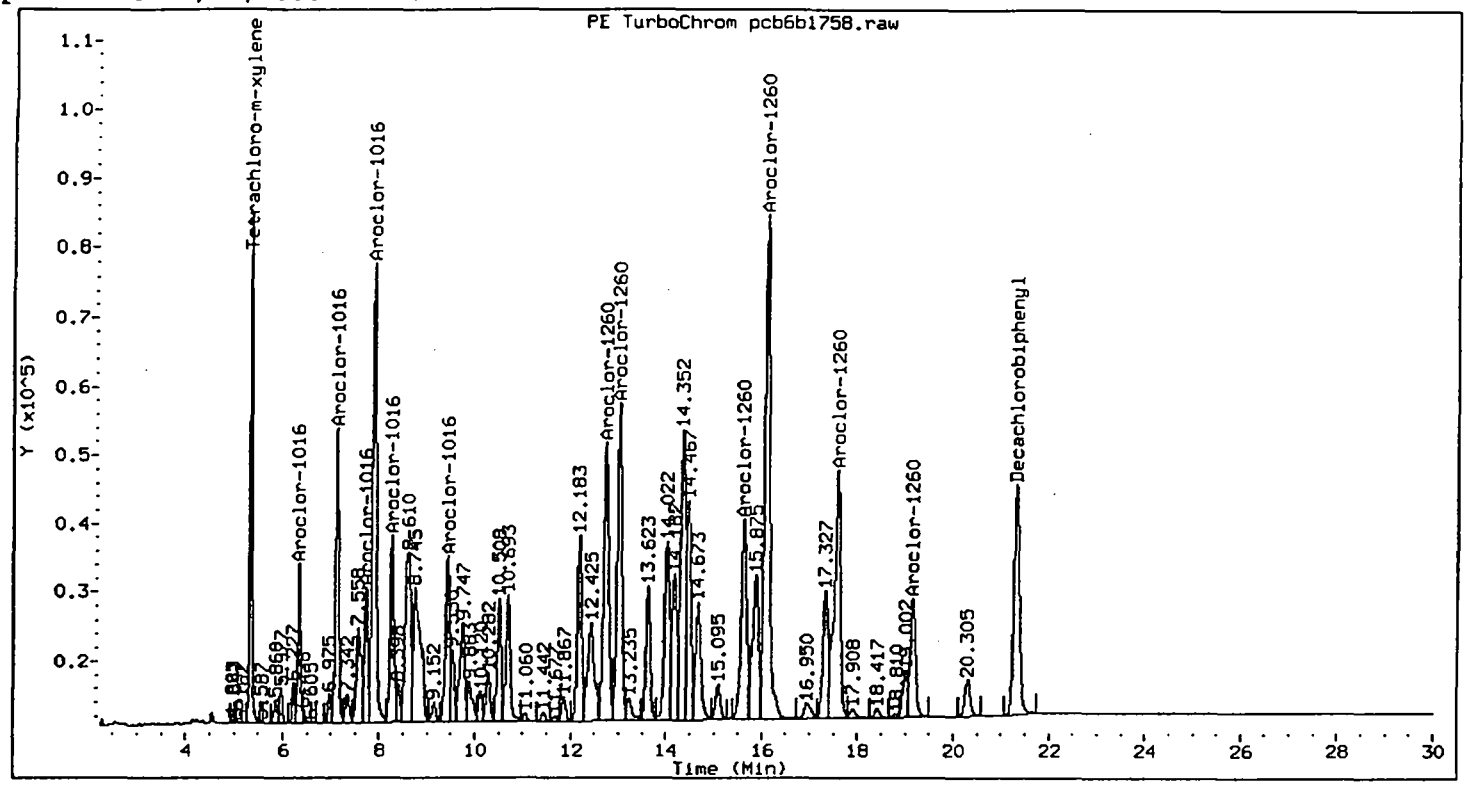
Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1758.d Page 2
Report Date 10/20/1999 11:33

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	6.652	6.653	0.002	204234	103.347	103.347
Decachlorobiphenyl		23.245	23.243	0.002	253557	92.969	92.969

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1758.d Page 1
Report Date 10/20/1999 11:34



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1660-2000 ppb
Lab ID : AR1660-2000 ppb
Inj Date : 19-OCT-1999 23:11
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_5

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	6.340	6.342	0.002	88698	1688.984	1688.984
(2)		7.118	7.120	0.002	202230	1607.470	1607.470
(3)		7.727	7.728	0.002	97018	1756.891	1756.891
(4)		7.883	7.885	0.002	396573	1736.260	1736.260
(5)		8.253	8.257	0.003	149646	1724.847	1724.847
(6)		9.430	9.432	0.002	149439	1737.944	1737.944
Average of peak concentrations:							1710.00
Aroclor-1260	(M)	12.728	12.728	0.000	303805	1688.688	1688.688
(2)		13.012	13.012	0.000	318057	1688.754	1688.754
(3)		15.615	15.615	0.000	234223	1816.174	1816.174
(4)		16.087	16.088	0.002	553682	1864.566	1864.566
(5)		17.577	17.575	0.002	327898	1867.633	1867.633
(6)		19.153	19.150	0.003	132218	1857.741	1857.741
Average of peak concentrations:							1800.00

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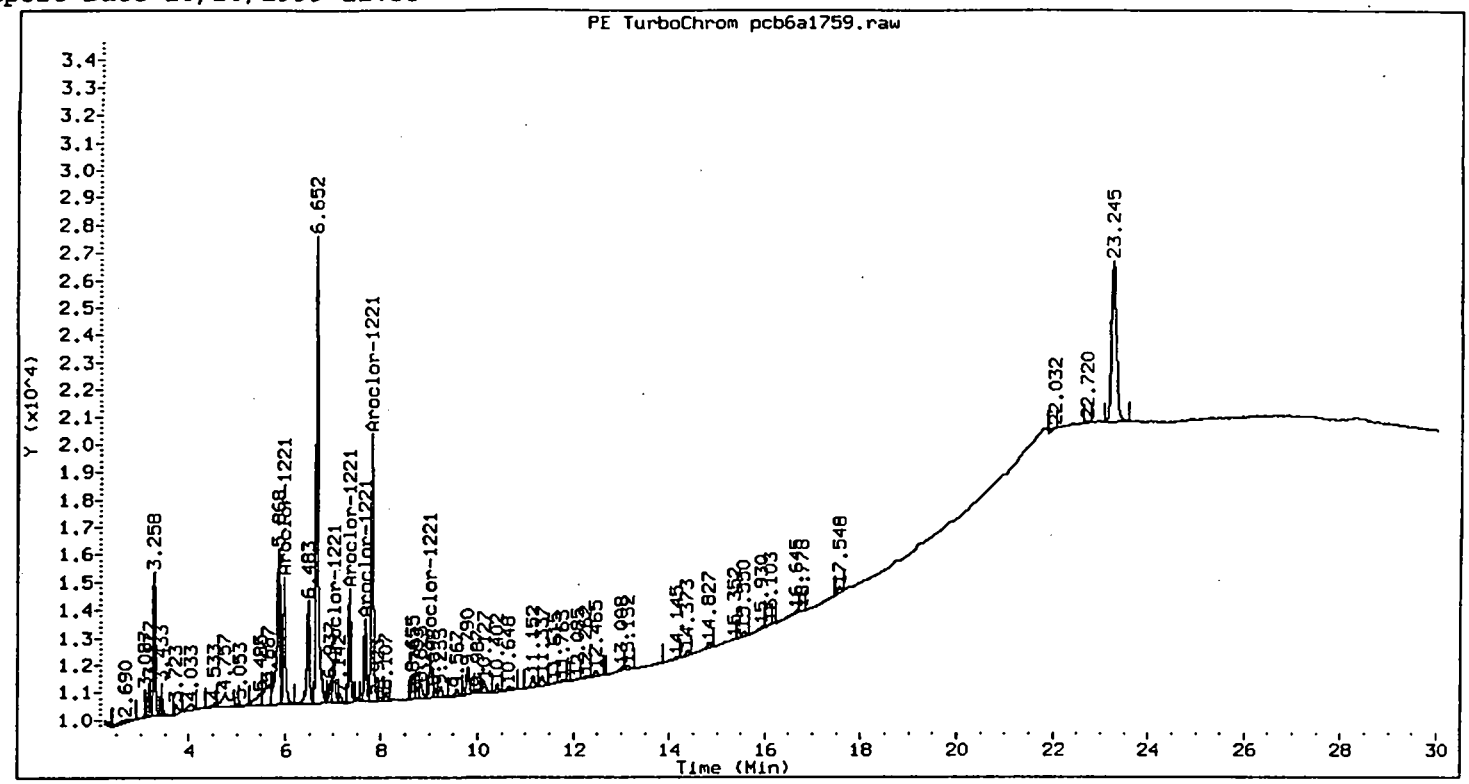
Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1758.d Page 2
Report Date 10/20/1999 11:34

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Tetrachloro-m-xylene	(M)	5.337	5.338	0.002	223042	101.977	101.977
Decachlorobiphenyl	(M)	21.318	21.318	0.000	274261	90.808	90.808

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1759.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1221-500 ppb
Lab ID : AR1221-500 ppb
Inj Date : 19-OCT-1999 23:49
Operator : DavidW
Cpnd Sublist: AR12210

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

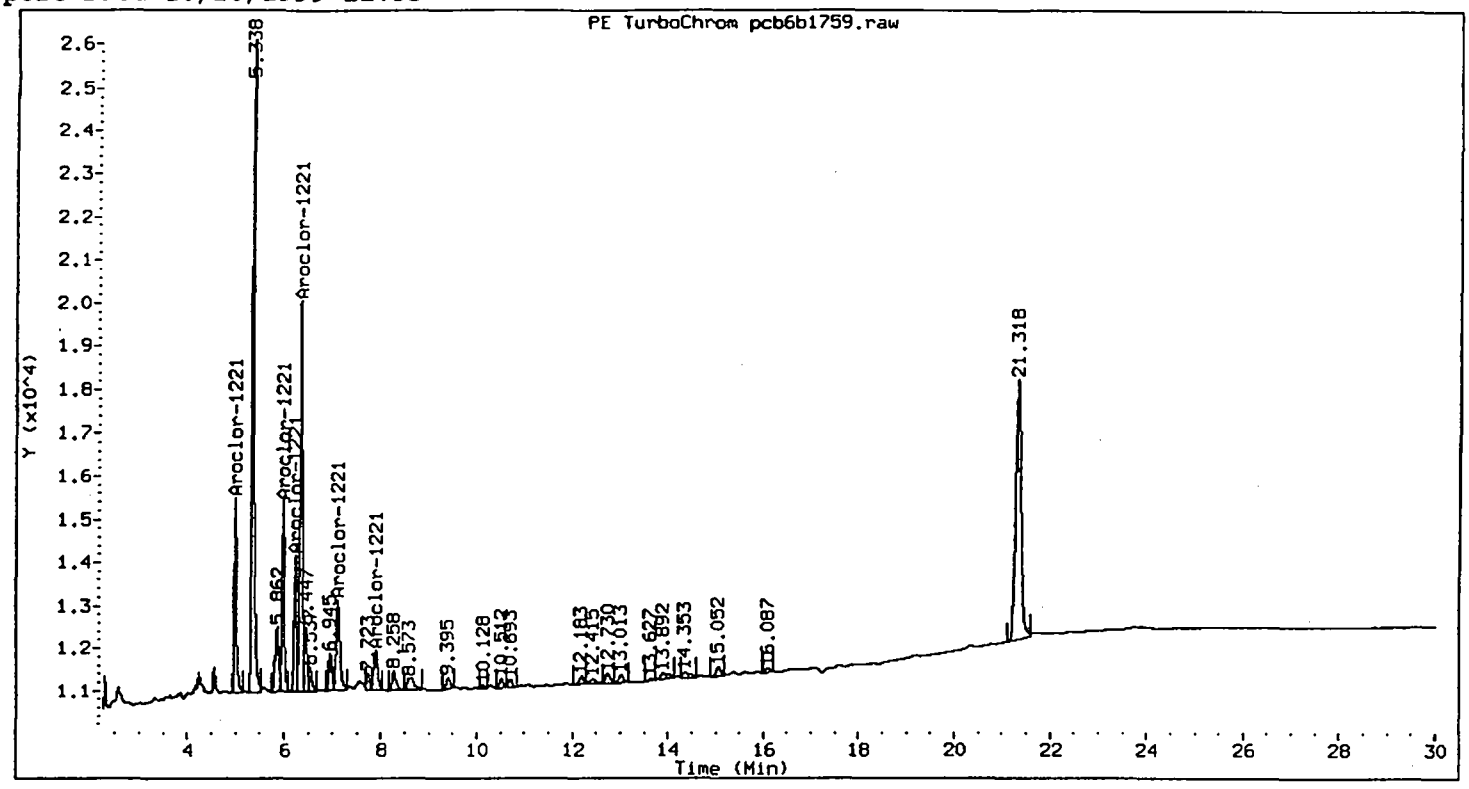
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1221	(M)	5.977	5.977	0.000	14743	500.000	500.000
(2)		7.012	7.012	0.000	4914	500.000	500.000
(3)		7.342	7.342	0.000	13004	500.000	500.000
(4)		7.667	7.667	0.000	9821	500.000	500.000
(5)		7.803	7.803	0.000	35179	500.000	500.000
(6)		9.020	9.020	0.000	7174	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1759.d Page 1
Report Date 10/20/1999 11:35



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1221-500 ppb
Lab ID : AR1221-500 ppb
Inj Date : 19-OCT-1999 23:49
Operator : DavidW
Cpnd Sublist: AR12210

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1221	(M)	4.985	4.985	0.000	13760	500.000	500.000
(2)		5.977	5.977	0.000	15065	500.000	500.000
(3)		6.228	6.228	0.000	10822	500.000	500.000
(4)		6.342	6.342	0.000	33827	500.000	500.000
(5)		7.102	7.102	0.000	11118	500.000	500.000
(6)		7.885	7.885	0.000	4939	500.000	500.000

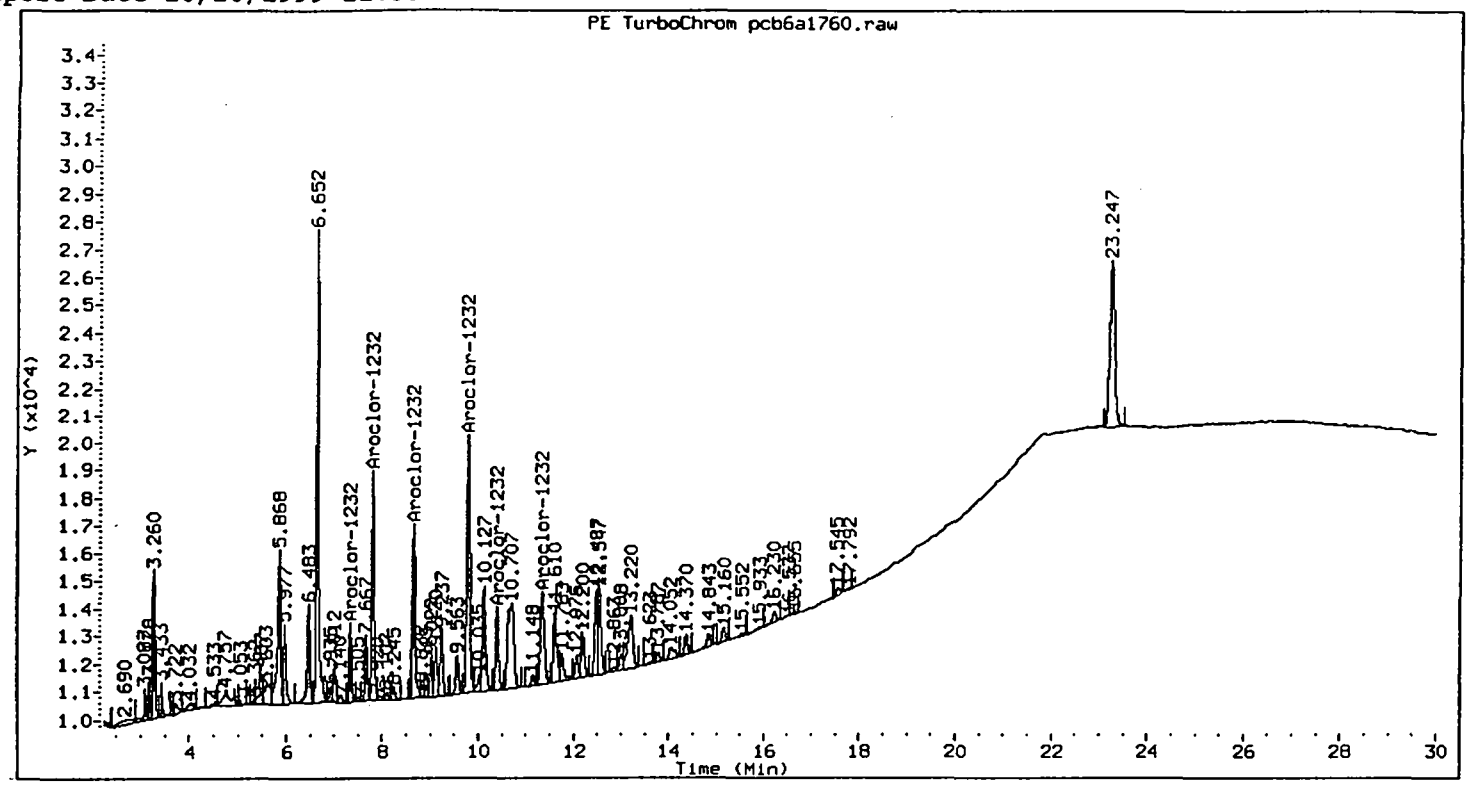
Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

1-199

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1760.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1232-500 ppb
Lab ID : AR1232-500 ppb
Inj Date : 20-OCT-1999 00:27
Operator : DavidW
Cpnd Sublist: AR12320

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

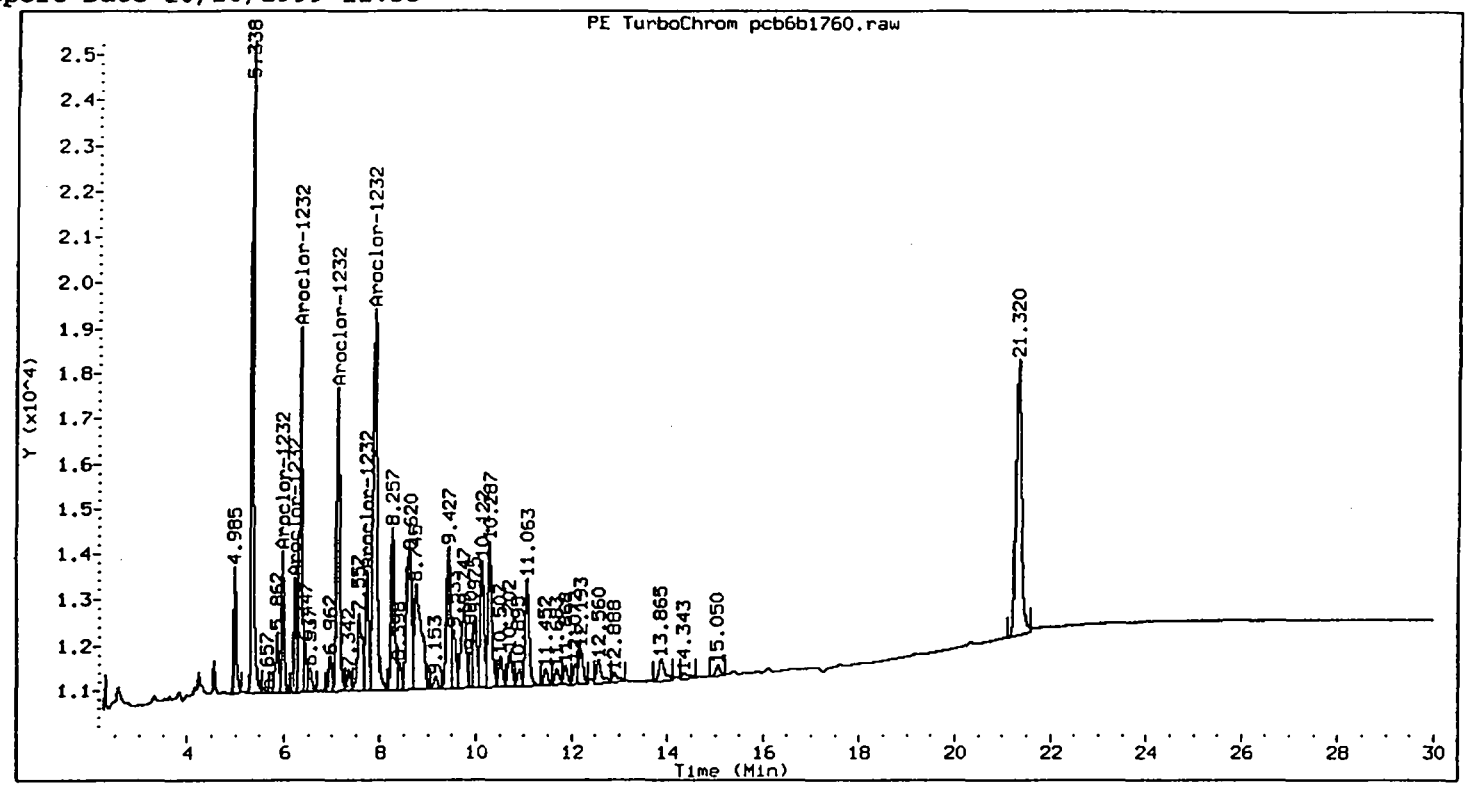
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1232	(M)	7.340	7.340	0.000	8979	500.000	500.000
(2)		7.803	7.803	0.000	30246	500.000	500.000
(3)		8.655	8.655	0.000	25200	500.000	500.000
(4)		9.790	9.790	0.000	42558	500.000	500.000
(5)		10.402	10.402	0.000	12240	500.000	500.000
(6)		11.347	11.347	0.000	19156	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1760.d Page 1
Report Date 10/20/1999 11:35



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1232-500 ppb
Lab ID : AR1232-500 ppb
Inj Date : 20-OCT-1999 00:27
Operator : DavidW
Cpnd Sublist: AR12320
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1232	(M)	5.977	5.977	0.000	10638	500.000	500.000
(2)		6.228	6.228	0.000	8546	500.000	500.000
(3)		6.342	6.342	0.000	29878	500.000	500.000
(4)		7.117	7.117	0.000	31436	500.000	500.000
(5)		7.728	7.728	0.000	12426	500.000	500.000
(6)		7.885	7.885	0.000	49369	500.000	500.000

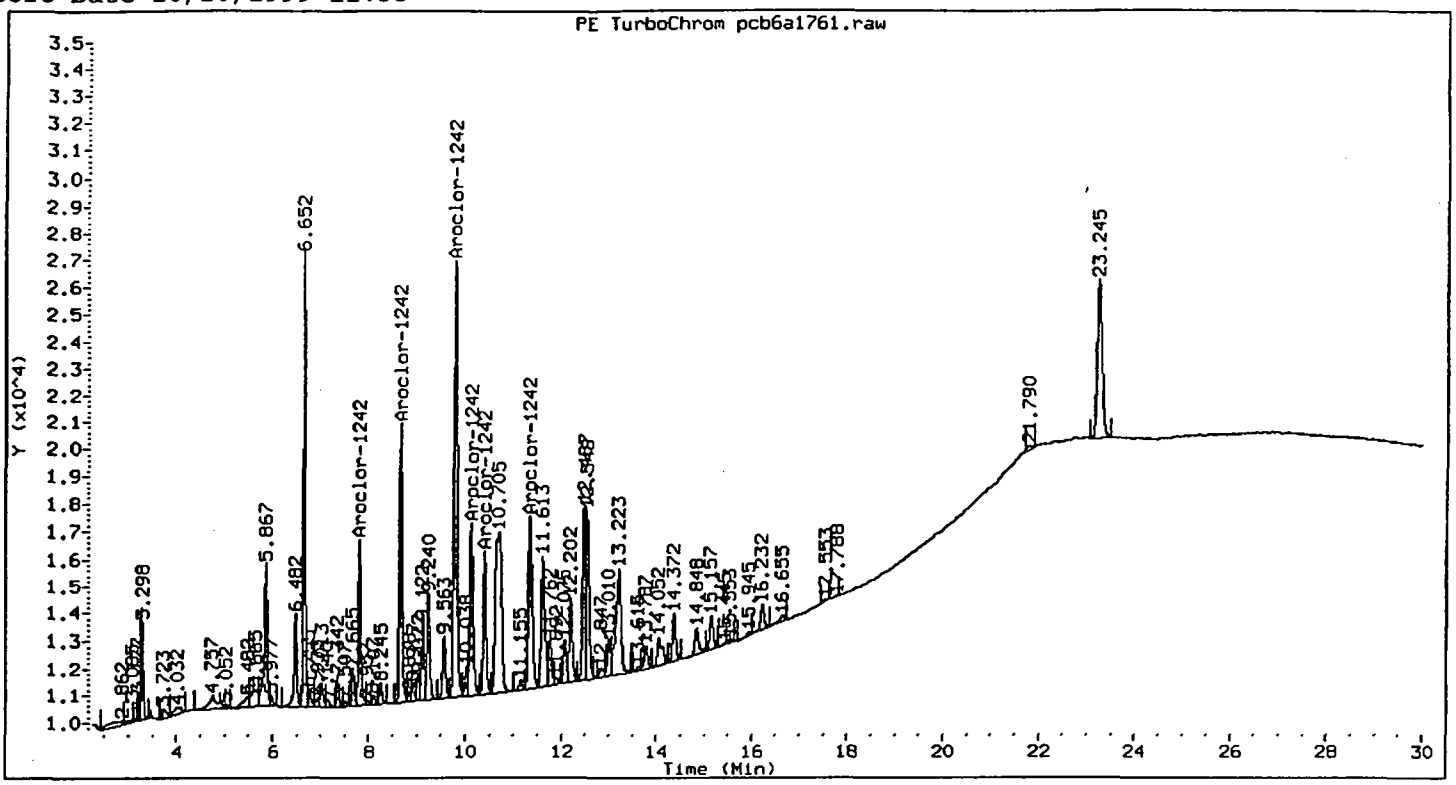
Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

10/21/99

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1761.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1242-500 ppb
Lab ID : AR1242-500 ppb
Inj Date : 20-OCT-1999 01:04
Operator : DavidW
Cpnd Sublist: AR12420

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1242	(M)	7.802	7.802	0.000	22084	500.000	500.000
(2)		8.655	8.655	0.000	40463	500.000	500.000
(3)		9.793	9.793	0.000	73595	500.000	500.000
(4)		10.127	10.127	0.000	29605	500.000	500.000
(5)		10.403	10.403	0.000	21821	500.000	500.000
(6)		11.347	11.347	0.000	35792	500.000	500.000

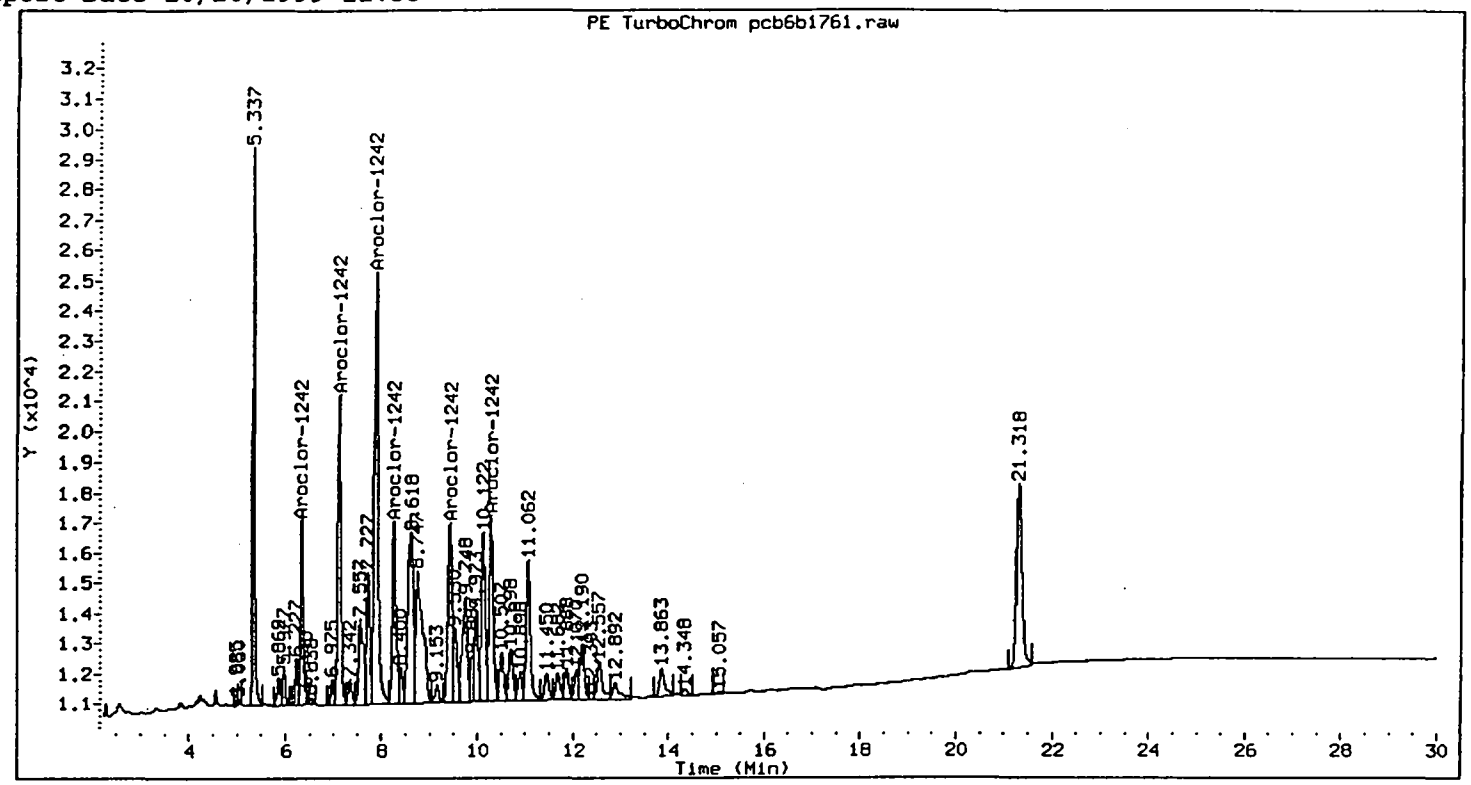
Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

10/21/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1761.d Page 1
Report Date 10/20/1999 11:35



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1242-500 ppb
Lab ID : AR1242-500 ppb
Inj Date : 20-OCT-1999 01:04
Operator : DavidW
Cpnd Sublist: AR12420

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1242	(M)	6.340	6.340	0.000	22421	500.000	500.000
(2)		7.118	7.118	0.000	47004	500.000	500.000
(3)		7.885	7.885	0.000	84916	500.000	500.000
(4)		8.257	8.257	0.000	32343	500.000	500.000
(5)		9.428	9.428	0.000	37816	500.000	500.000
(6)		10.287	10.287	0.000	37021	500.000	500.000

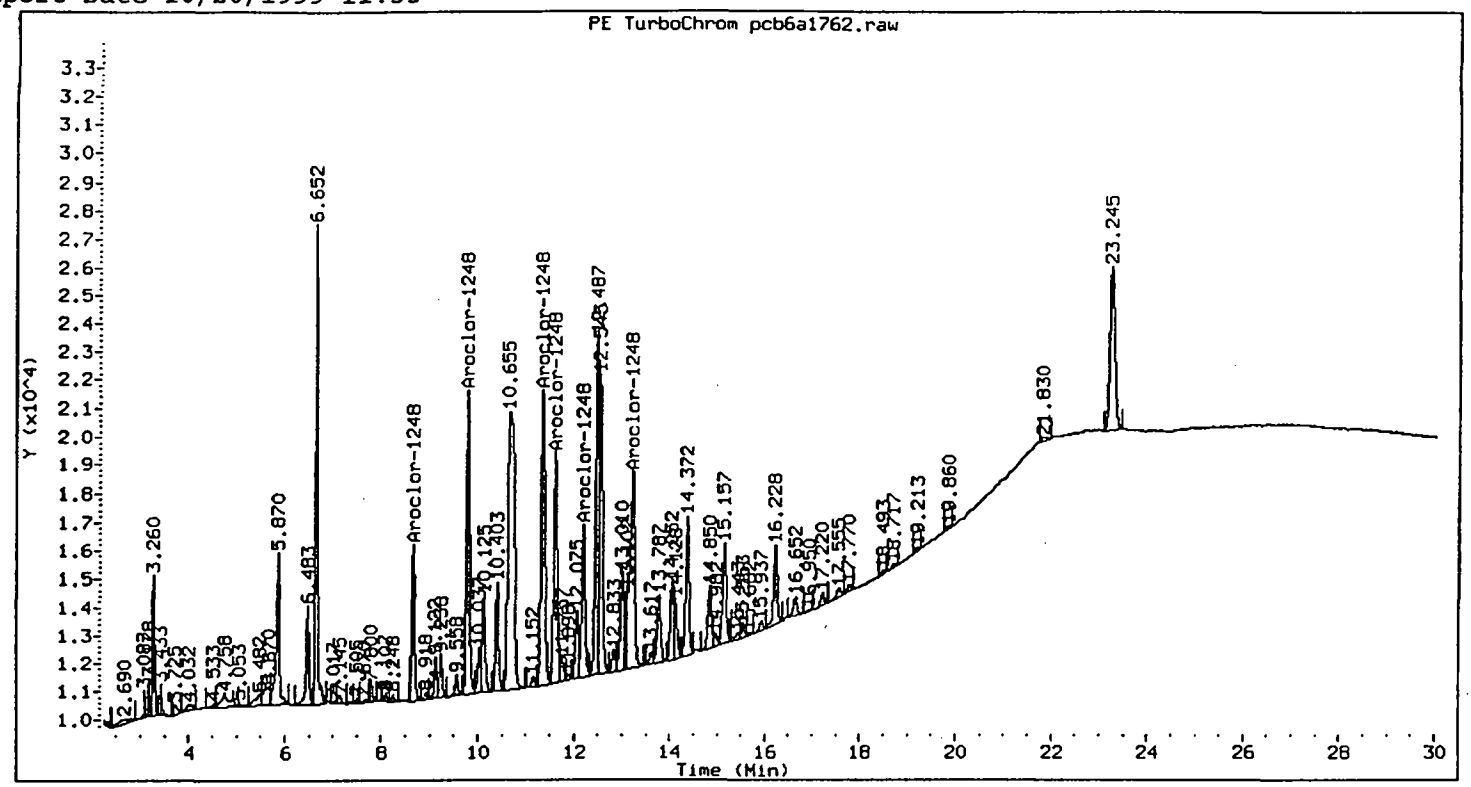
Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

1..105

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1762.d Page 1
Report Date 10/20/1999 11:33



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1248-500 ppb
Lab ID : AR1248-500 ppb
Inj Date : 20-OCT-1999 01:42
Operator : DavidW
Cpnd Sublist: AR12480

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

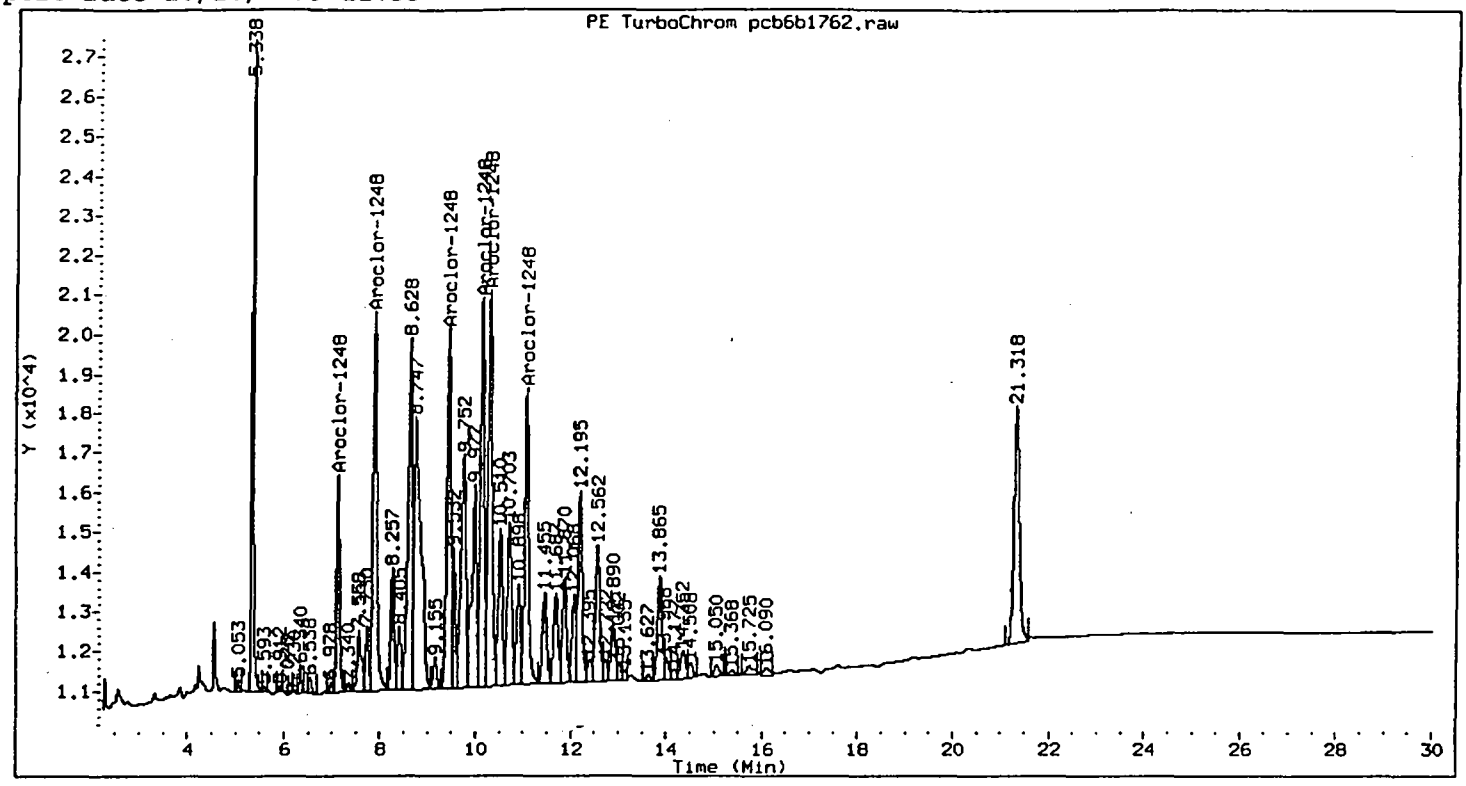
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1248	(M)	8.655	8.655	0.000	21597	500.000	500.000
(2)		9.790	9.790	0.000	48744	500.000	500.000
(3)		11.347	11.347	0.000	57340	500.000	500.000
(4)		11.612	11.612	0.000	42190	500.000	500.000
(5)		12.200	12.200	0.000	26204	500.000	500.000
(6)		13.225	13.225	0.000	49208	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1762.d Page 1
Report Date 10/20/1999 11:35



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1248-500 ppb
Lab ID : AR1248-500 ppb
Inj Date : 20-OCT-1999 01:42
Operator : DavidW
Cpnd Sublist: AR12480

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

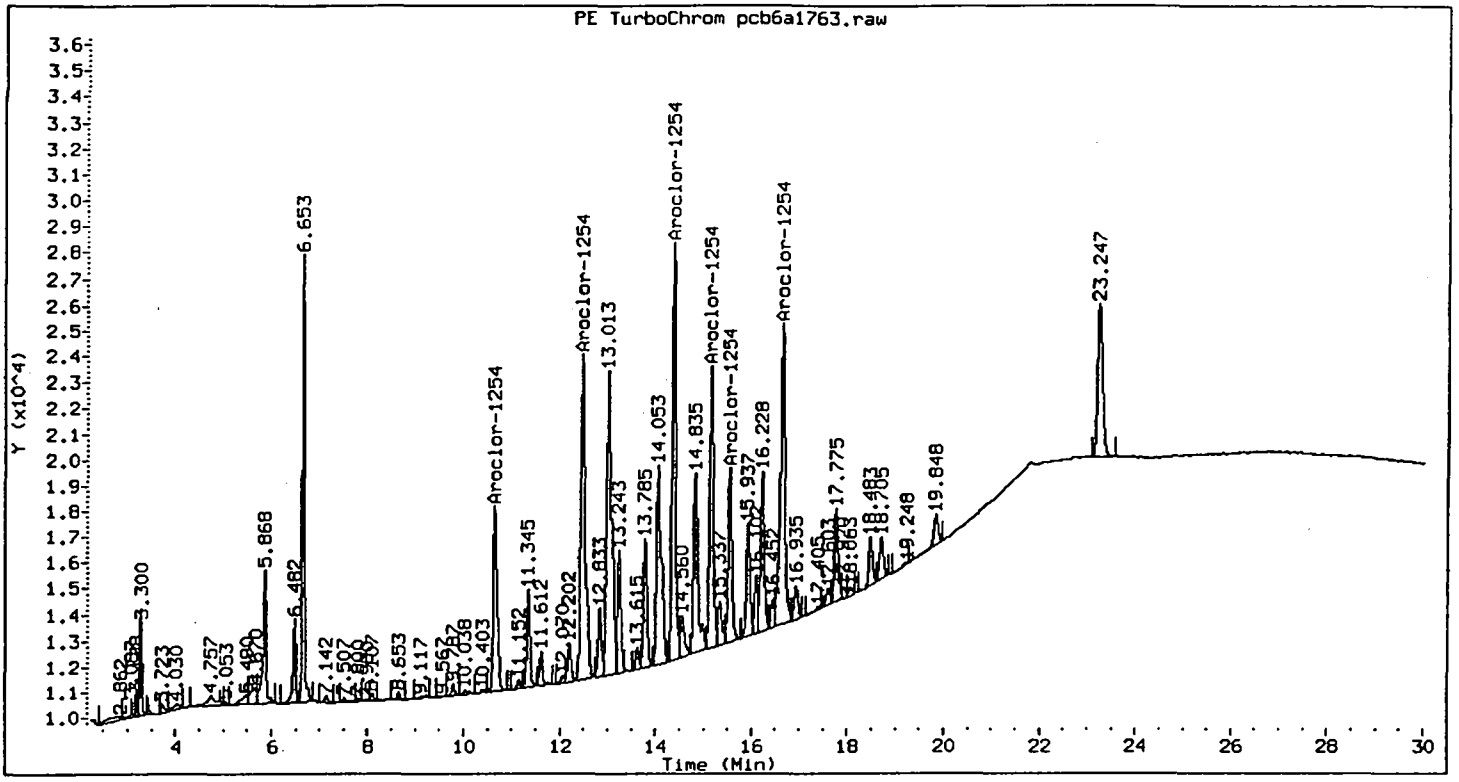
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1248	(M)	7.118	7.118	0.000	23870	500.000	500.000
(2)		7.880	7.880	0.000	56431	500.000	500.000
(3)		9.435	9.435	0.000	52639	500.000	500.000
(4)		10.125	10.125	0.000	55223	500.000	500.000
(5)		10.290	10.290	0.000	60005	500.000	500.000
(6)		11.065	11.065	0.000	44366	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/19oct99.b/pcb6a1763.d Page 1
Report Date 10/20/1999 11:34



Method : /chem/HP68906.i/8082/front/10-19-99/19oct99.b/Xf8082.m
Sample Info : AR1254-500 ppb
Lab ID : AR1254-500 ppb
Inj Date : 20-OCT-1999 02:20
Operator : DavidW
Cpnd Sublist: AR12540

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

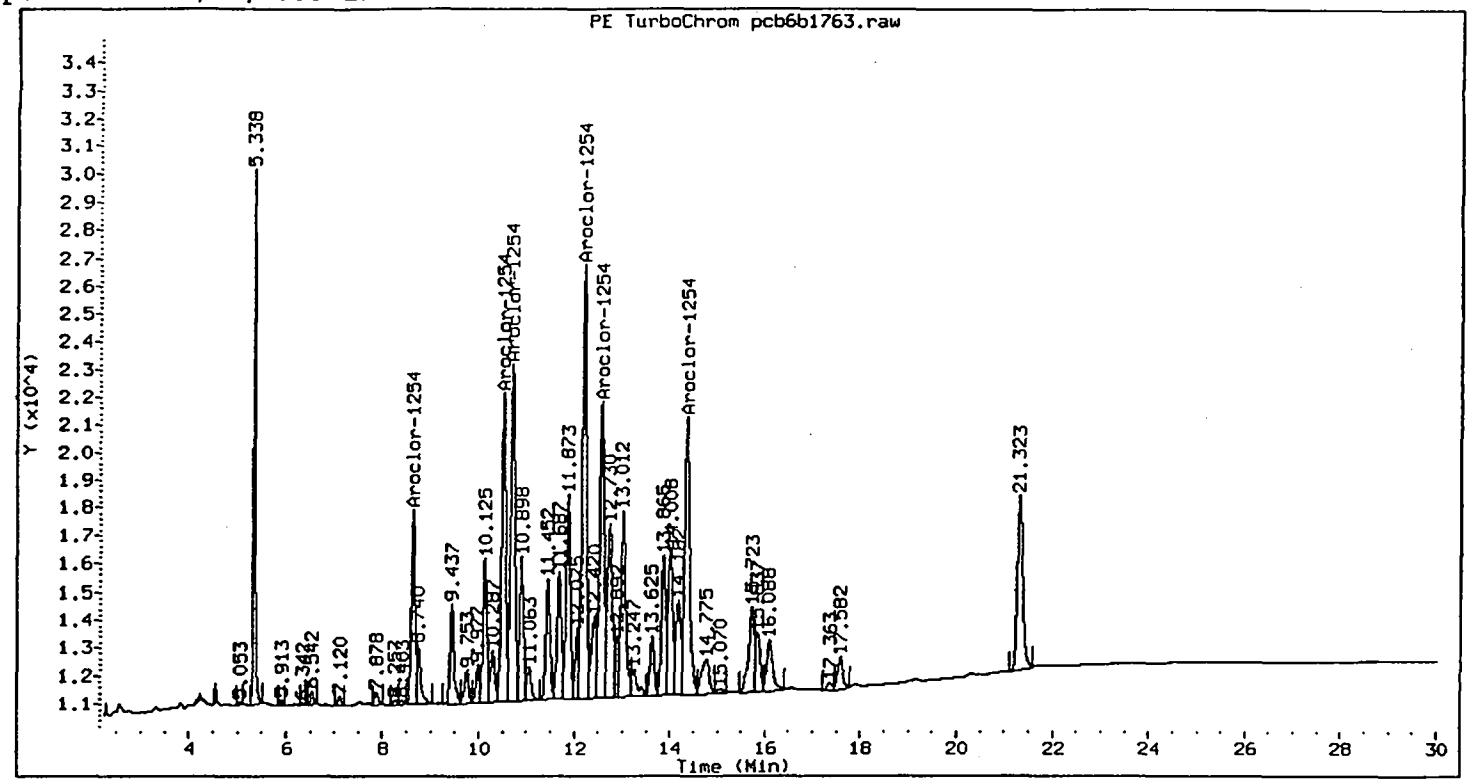
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1254	(M)	10.647	10.647	0.000	40087	500.000	500.000
(2)		12.470	12.470	0.000	81333	500.000	500.000
(3)		14.373	14.373	0.000	80566	500.000	500.000
(4)		15.158	15.158	0.000	58963	500.000	500.000
(5)		15.550	15.550	0.000	35893	500.000	500.000
(6)		16.653	16.653	0.000	76101	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/pcb6b1763.d Page 1
Report Date 10/20/1999 11:35



Method : /chem/HP68906.i/8082/rear/10-19-99/19oct99.b/Xr8082.m
Sample Info : AR1254-500 ppb
Lab ID : AR1254-500 ppb
Inj Date : 20-OCT-1999 02:20
Operator : DavidW
Cpnd Sublist: AR12540

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

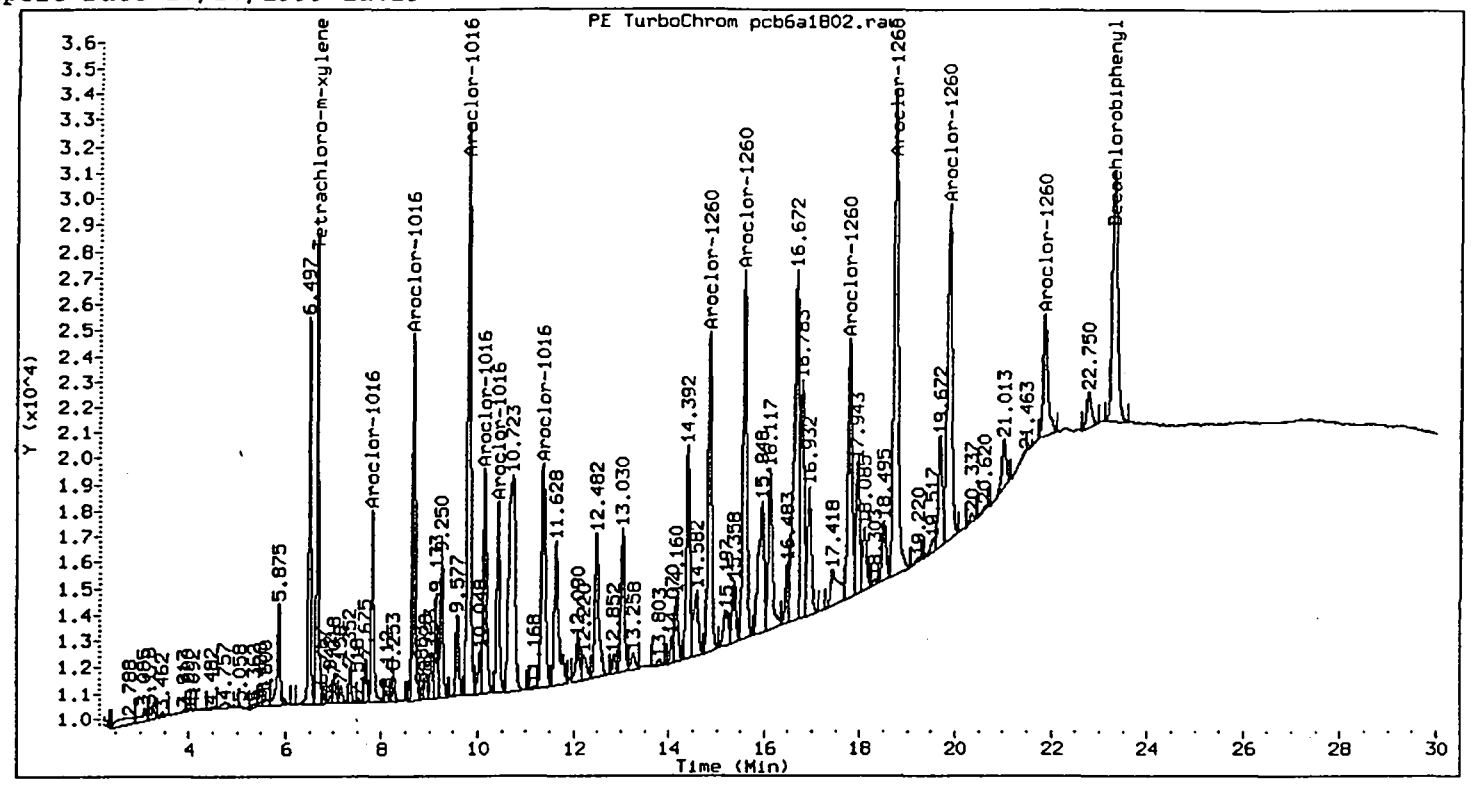
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1254	(M)	8.630	8.630	0.000	35781	500.000	500.000
(2)		10.513	10.513	0.000	65080	500.000	500.000
(3)		10.700	10.700	0.000	78064	500.000	500.000
(4)		12.195	12.195	0.000	99259	500.000	500.000
(5)		12.565	12.565	0.000	70180	500.000	500.000
(6)		14.355	14.355	0.000	76105	500.000	500.000

Average of peak concentrations: 500.00

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/21oct99a.b/pcb6a1802.d Page 1
Report Date 10/27/1999 11:29



Method : /chem/HP68906.i/8082/front/10-19-99/21oct99a.b/Xf8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 21-OCT-1999 23:52
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.812	7.812	0.000	28113	550.817	550.817
(2)		8.667	8.667	0.000	58178	533.937	533.937
(3)		9.807	9.807	0.000	104444	527.204	527.204
(4)		10.140	10.140	0.000	41770	525.950	525.950
(5)		10.417	10.417	0.000	30955	515.795	515.795
(6)		11.360	11.360	0.000	51280	561.844	561.844
Aroclor-1260	(M)	14.845	14.845	0.000	67051	520.361	520.361
(2)		15.575	15.575	0.000	79327	526.645	526.645
(3)		17.780	17.780	0.000	58906	556.165	556.165
(4)		18.727	18.727	0.000	116527	534.957	534.957
(5)		19.862	19.862	0.000	87899	544.480	544.480
(6)		21.842	21.842	0.000	31492	536.706	536.706
Tetrachloro-m-xylene	(M)	6.663	6.663	0.000	53253	26.947	26.947
Decachlorobiphenyl		23.280	23.280	0.000	73936	27.109	27.109

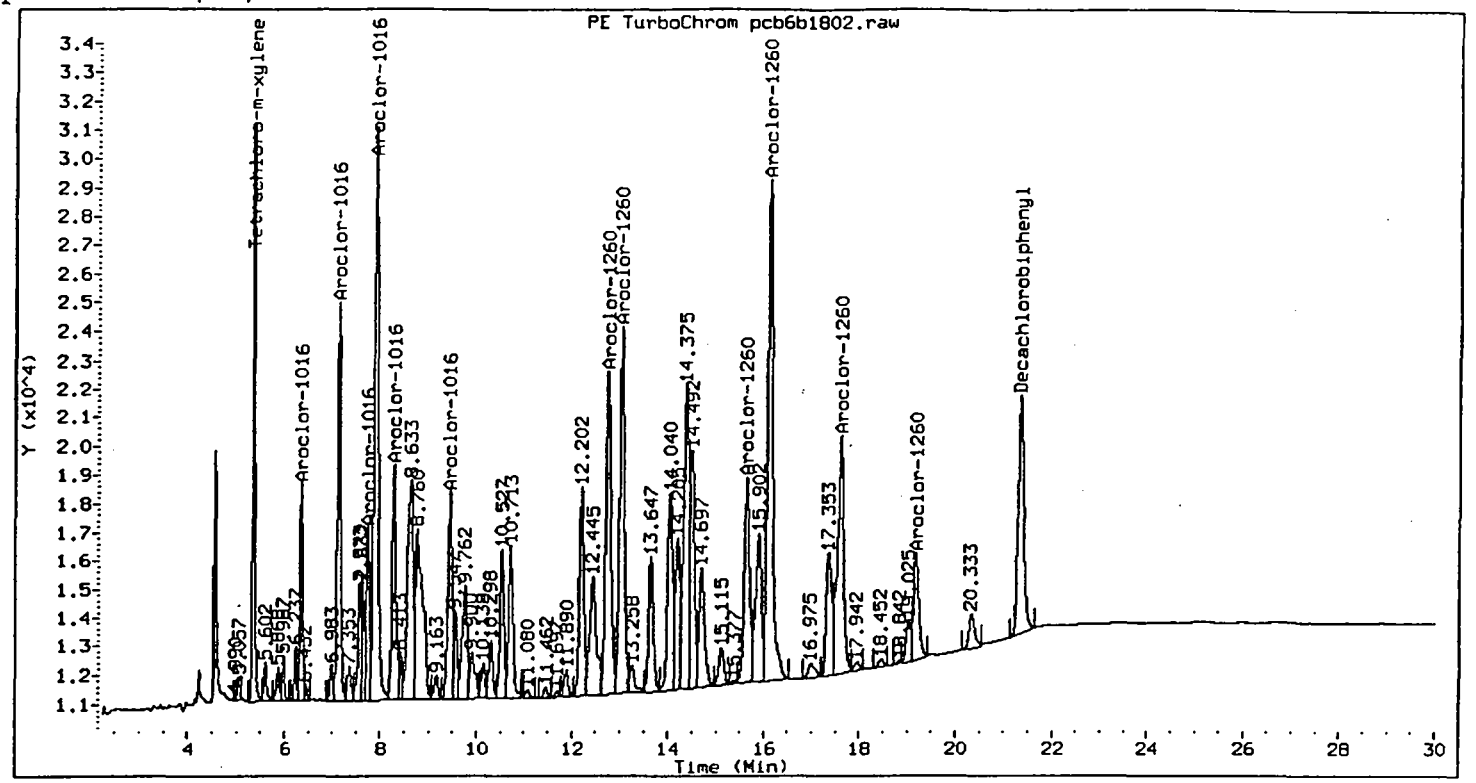
10/27/99

Data File: /chem/HP68906.i/8082/front/10-19-99/21oct99a.b/pcb6a1802.d Page 2
Report Date 10/27/1999 11:29

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:
M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b/pcb6b1802.d Page 1
Report Date 10/27/1999 11:29



Method : /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b/Xr8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 21-OCT-1999 23:52
Operator : DavidW
Cpnd Sublist: AR16600S
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.350	6.350	0.000	28485	542.410	542.410
(2)		7.130	7.130	0.000	65288	518.956	518.956
(3)		7.738	7.738	0.000	28775	521.084	521.084
(4)		7.900	7.900	0.000	119826	524.617	524.617
(5)		8.270	8.270	0.000	44628	514.390	514.390
(6)		9.445	9.445	0.000	44216	514.223	514.223
Aroclor-1260	(M)	12.750	12.750	0.000	86219	479.245	479.245
(2)		13.035	13.035	0.000	89991	477.816	477.816
(3)		15.640	15.640	0.000	57059	442.438	442.438
(4)		16.112	16.112	0.000	135406	455.990	455.990
(5)		17.605	17.605	0.000	77672	442.402	442.402
(6)		19.182	19.182	0.000	30443	427.742	427.742
Tetrachloro-m-xylene	(M)	5.348	5.348	0.000	59788	27.336	27.336
Decachlorobiphenyl	(M)	21.347	21.347	0.000	67084	22.211	22.211

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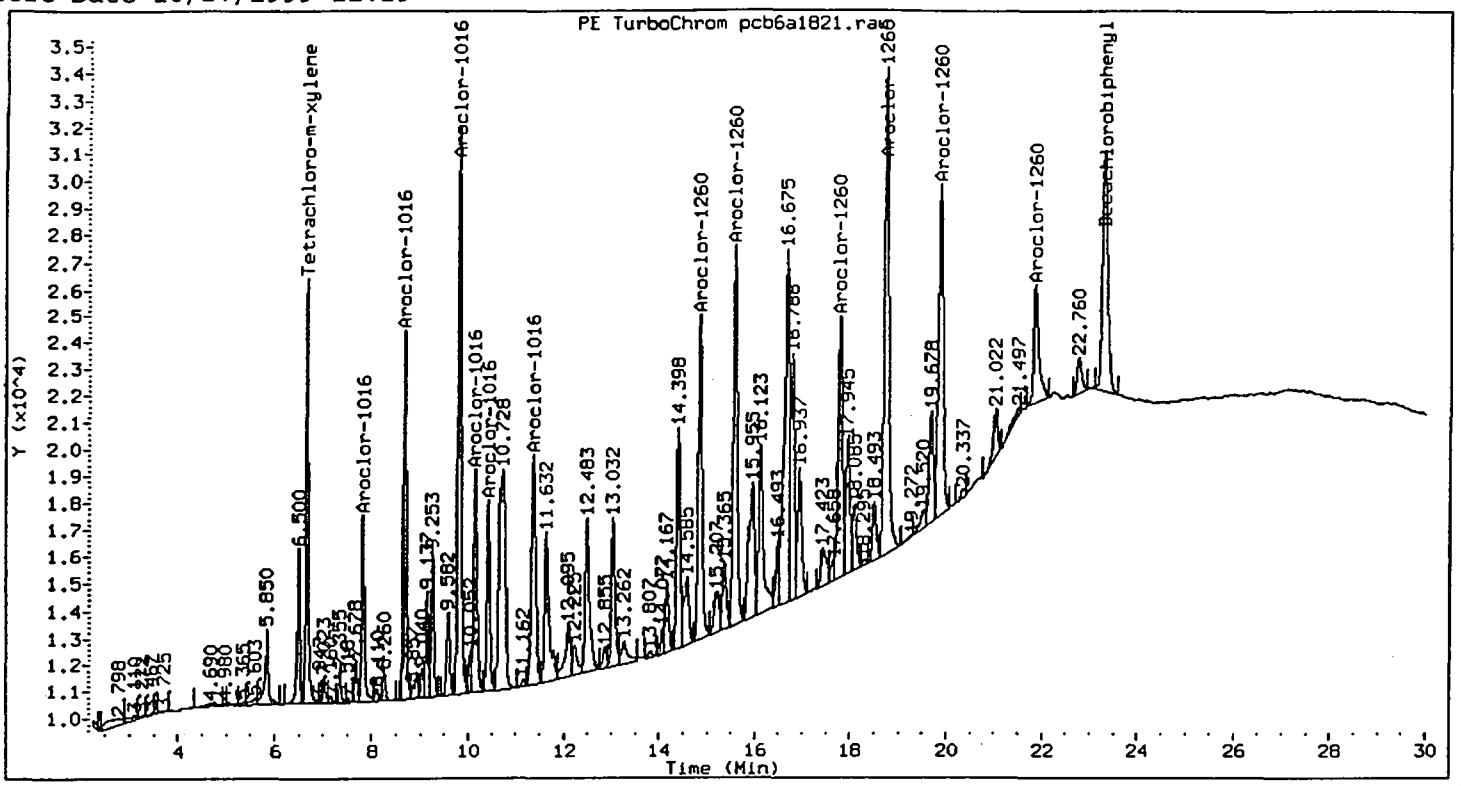
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/21oct99b.b/pcb6a1821.d Page 1
Report Date 10/27/1999 11:29



Method : /chem/HP68906.i/8082/front/10-19-99/21oct99b.b/Xf8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 22-OCT-1999 11:52
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.815	7.815	0.000	27828	545.233	545.233
(2)		8.670	8.670	0.000	57513	527.833	527.833
(3)		9.810	9.810	0.000	104070	525.316	525.316
(4)		10.145	10.145	0.000	42005	528.909	528.909
(5)		10.420	10.420	0.000	31187	519.660	519.660
(6)		11.362	11.362	0.000	53566	586.890	586.890
Aroclor-1260	(M)	14.847	14.847	0.000	68113	528.603	528.603
(2)		15.577	15.577	0.000	80608	535.149	535.149
(3)		17.783	17.783	0.000	60834	574.368	574.368
(4)		18.732	18.732	0.000	113508	521.097	521.097
(5)		19.867	19.867	0.000	85665	530.642	530.642
(6)		21.847	21.847	0.000	33278	567.145	567.145
Tetrachloro-m-xylene	(M)	6.665	6.665	0.000	50539	25.574	25.574
Decachlorobiphenyl		23.285	23.285	0.000	68561	25.138	25.138

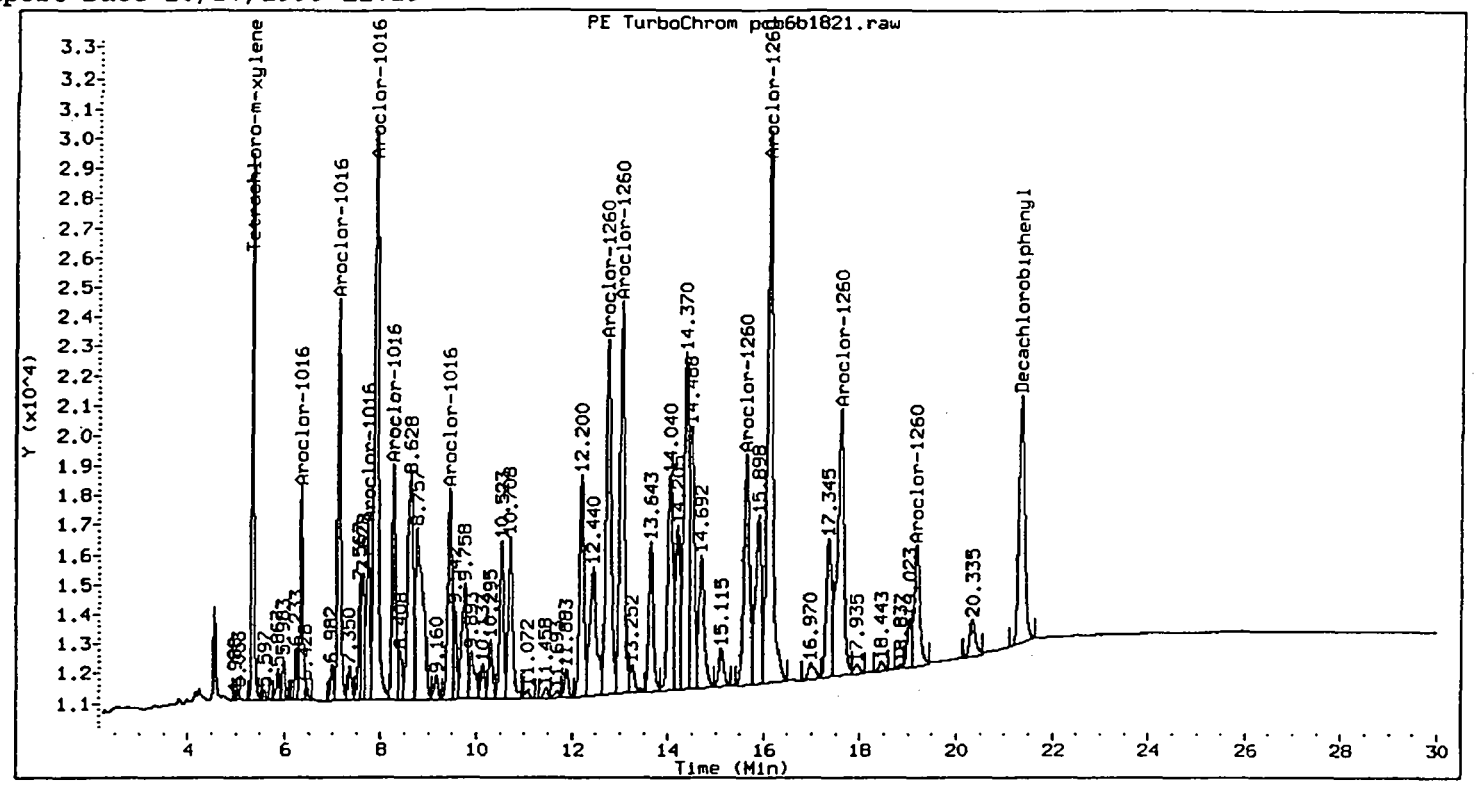
10/27/99

Data File: /chem/HP68906.i/8082/front/10-19-99/21oct99b.b/pcb6a1821.d Page 2
Report Date 10/27/1999 11:29

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)

COMMENTS:
M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/21oct99b.b/pcb6b1821.d Page 1
Report Date 10/27/1999 11:29



Method : /chem/HP68906.i/8082/rear/10-19-99/21oct99b.b/Xr8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 22-OCT-1999 11:52
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	6.347	6.347	0.000	27034	514.780	514.780
(2)		7.127	7.127	0.000	63493	504.688	504.688
(3)		7.735	7.735	0.000	28336	513.134	513.134
(4)		7.895	7.895	0.000	116932	511.947	511.947
(5)		8.267	8.267	0.000	43984	506.968	506.968
(6)		9.442	9.442	0.000	43468	505.524	505.524
Aroclor-1260	(M)	12.745	12.745	0.000	89636	498.238	498.238
(2)		13.030	13.030	0.000	92728	492.348	492.348
(3)		15.638	15.638	0.000	62025	480.944	480.944
(4)		16.110	16.110	0.000	145008	488.325	488.325
(5)		17.603	17.603	0.000	83382	474.925	474.925
(6)		19.177	19.177	0.000	33503	470.737	470.737
Tetrachloro-m-xylene		5.343	5.343	0.000	54569	24.950	24.950
Decachlorobiphenyl	(M)	21.347	21.347	0.000	68024	22.523	22.523

10/27/99

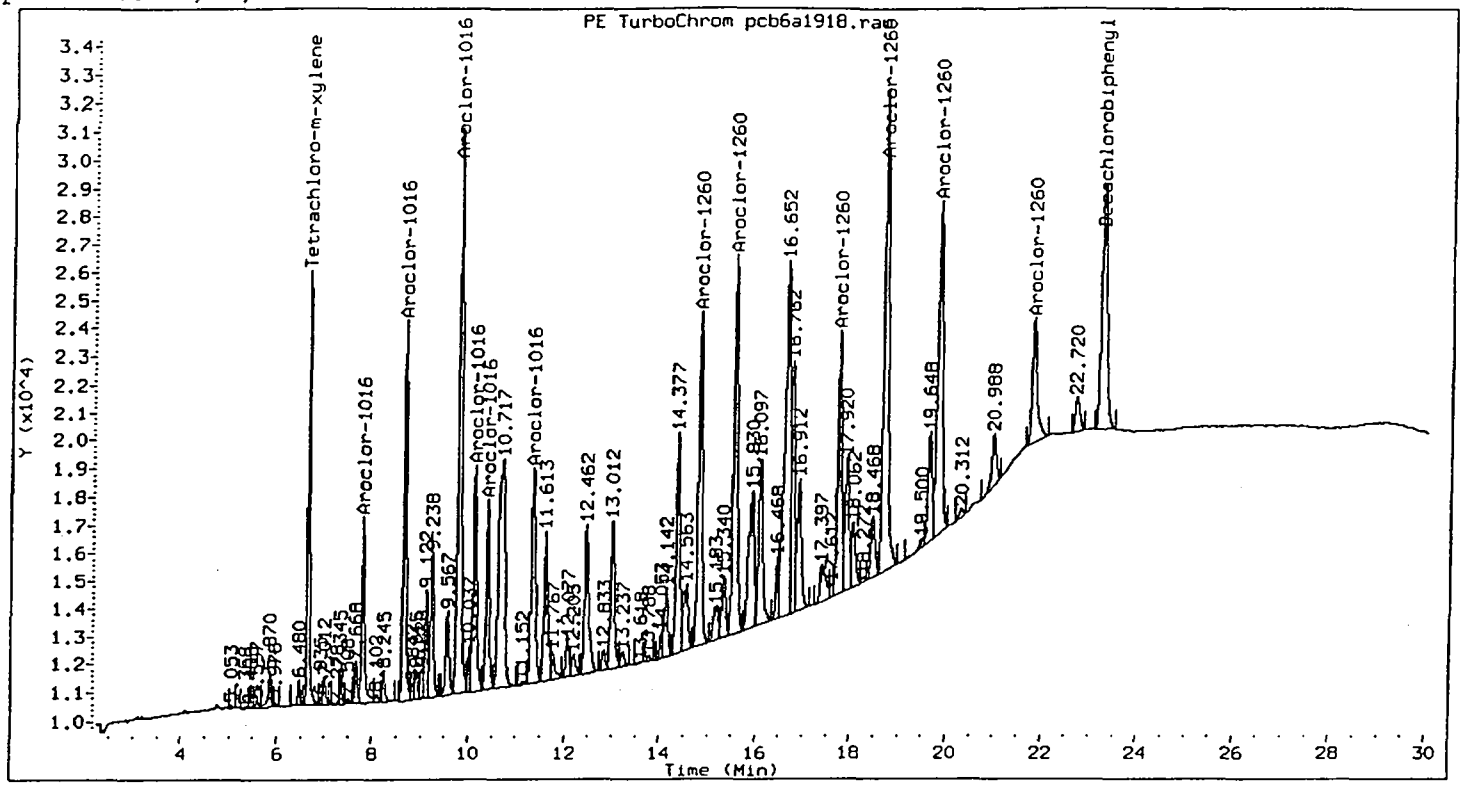
Data File: /chem/HP68906.i/8082/rear/10-19-99/21oct99b.b/pcb6b1821.d Page 2
Report Date 10/27/1999 11:29

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/pcb6a1918.d Page 1
Report Date 11/08/1999 11:55



Method : /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/Xf8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 29-OCT-1999 00:11
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	7.803	7.803	0.000	28031	549.211	549.211
(2)		8.655	8.655	0.000	57775	530.238	530.238
(3)		9.795	9.795	0.000	103940	524.660	524.660
(4)		10.128	10.128	0.000	42095	530.042	530.042
(5)		10.405	10.405	0.000	31111	518.394	518.394
(6)		11.347	11.347	0.000	46189	506.065	506.065
Aroclor-1260	(M)	14.825	14.825	0.000	67047	520.330	520.330
(2)		15.553	15.553	0.000	79061	524.879	524.879
(3)		17.757	17.757	0.000	54989	519.182	519.182
(4)		18.703	18.703	0.000	112671	517.254	517.254
(5)		19.837	19.837	0.000	83393	516.568	516.568
(6)		21.818	21.818	0.000	31354	534.355	534.355
Tetrachloro-m-xylene	(M)	6.655	6.655	0.000	48444	24.514	24.514
Decachlorobiphenyl		23.247	23.247	0.000	66788	24.488	24.488

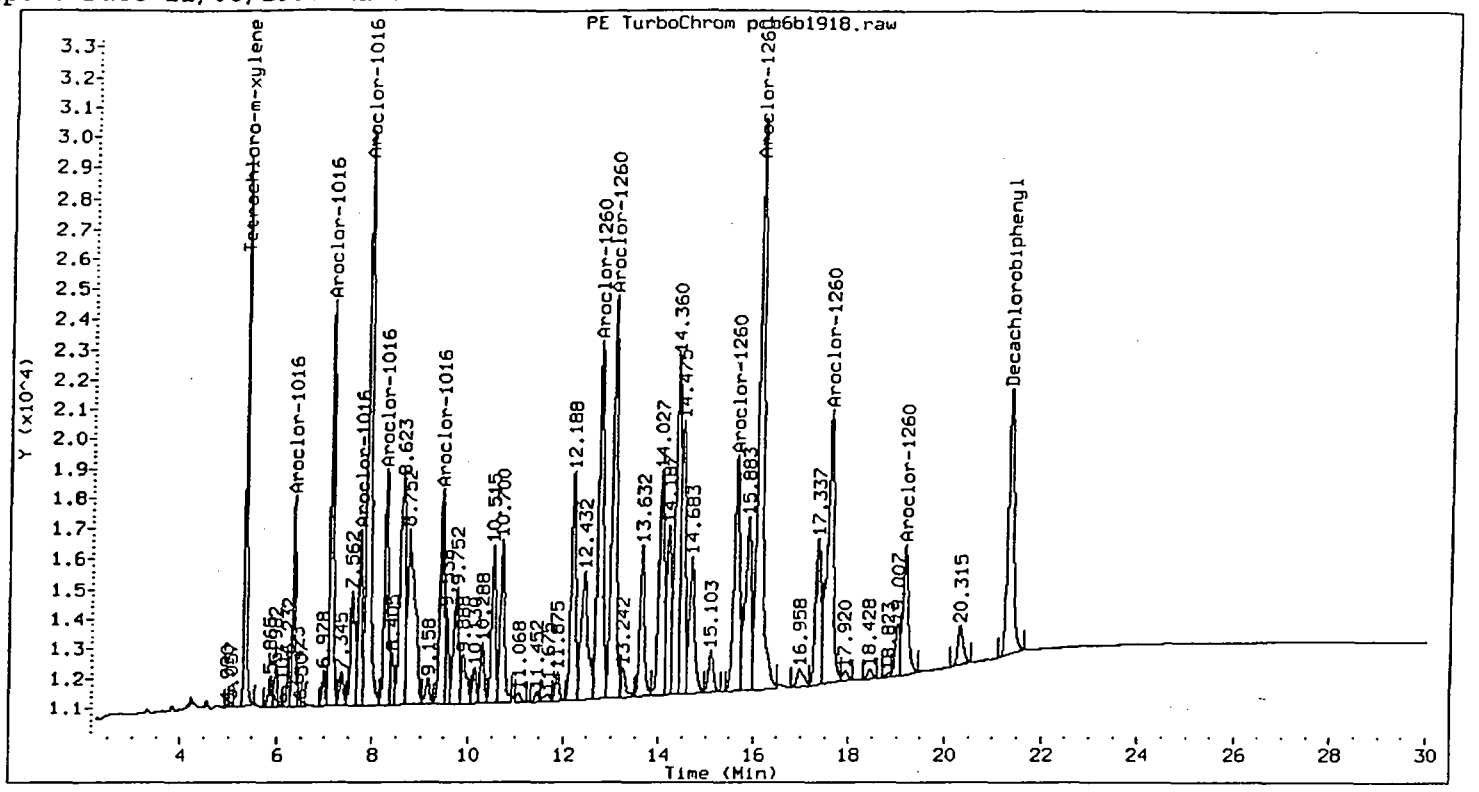
Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99a.b/pcb6a1918.d Page 2
Report Date 11/08/1999 11:55

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/pcb6b1918.d Page 1
Report Date 11/08/1999 11:55



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/Xr8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 29-OCT-1999 00:11
Operator : DavidW
Cpnd Sublist: AR16600S
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.347	6.347	0.000	27005	514.228	514.228
(2)		7.123	7.123	0.000	63579	505.372	505.372
(3)		7.733	7.733	0.000	28622	518.314	518.314
(4)		7.893	7.893	0.000	117846	515.949	515.949
(5)		8.265	8.265	0.000	44362	511.324	511.324
(6)		9.435	9.435	0.000	43652	507.663	507.663
Aroclor-1260	(M)	12.737	12.737	0.000	90209	501.423	501.423
(2)		13.020	13.020	0.000	93747	497.759	497.759
(3)		15.623	15.623	0.000	62722	486.349	486.349
(4)		16.097	16.097	0.000	149800	504.463	504.463
(5)		17.585	17.585	0.000	86390	492.058	492.058
(6)		19.162	19.162	0.000	35092	493.063	493.063
Tetrachloro-m-xylene		5.342	5.342	0.000	53225	24.335	24.335
Decachlorobiphenyl	(M)	21.325	21.325	0.000	71998	23.838	23.838

11/8/99

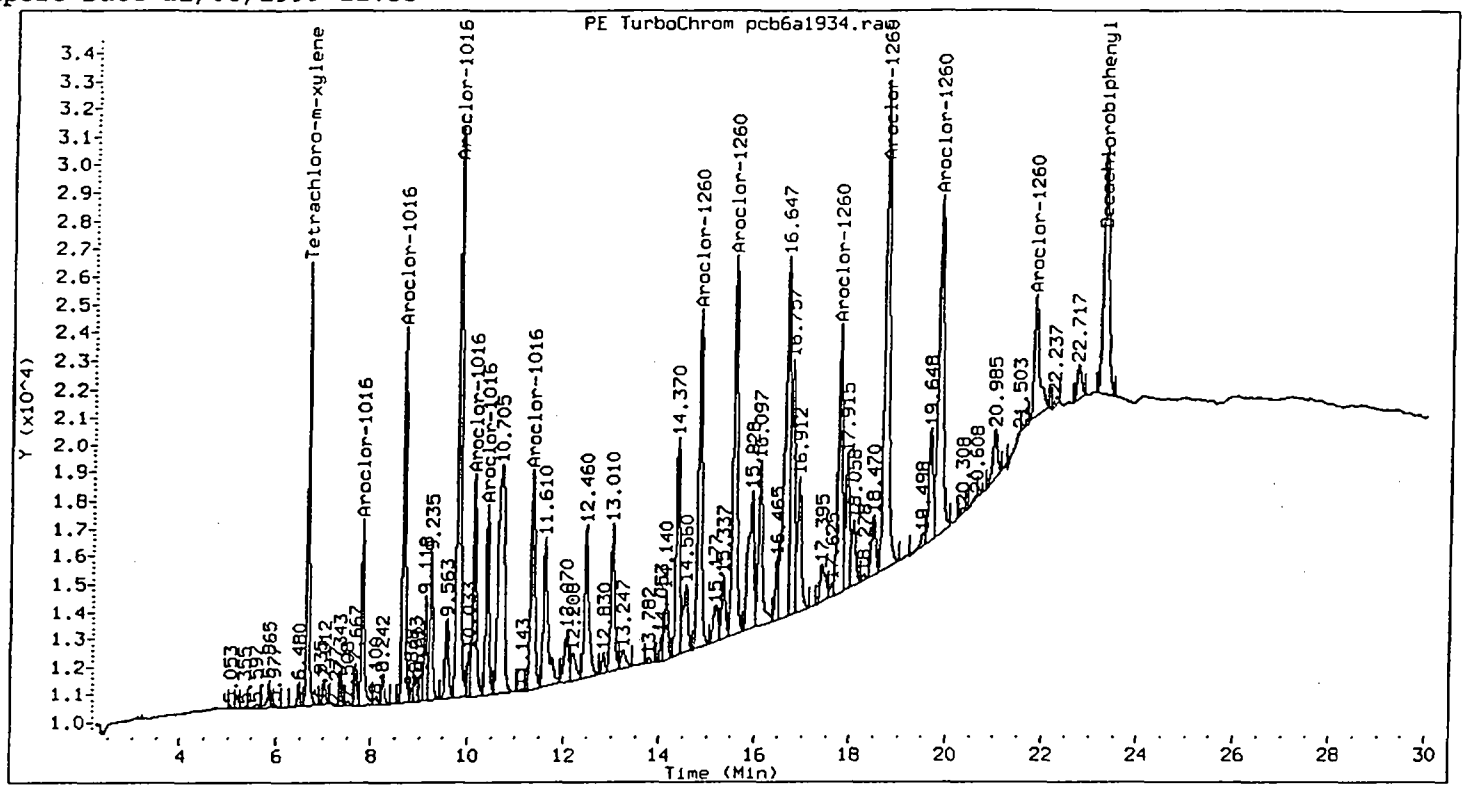
Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99a.b/pcb6b1918.d Page 2
Report Date 11/08/1999 11:55

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/28oct99b.b/pcb6a1934.d Page 1
Report Date 11/08/1999 11:55



Method : /chem/HP68906.i/8082/front/10-19-99/28oct99b.b/Xf8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 29-OCT-1999 10:36
Operator : DavidW
Cpnd Sublist: AR16600S
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	7.802	7.802	0.000	28248	553.462	553.462
(2)		8.653	8.653	0.000	57887	531.266	531.266
(3)		9.793	9.793	0.000	103859	524.251	524.251
(4)		10.127	10.127	0.000	41973	528.506	528.506
(5)		10.400	10.400	0.000	30993	516.428	516.428
(6)		11.345	11.345	0.000	46644	511.050	511.050
Aroclor-1260	(M)	14.823	14.823	0.000	67075	520.547	520.547
(2)		15.552	15.552	0.000	80125	531.943	531.943
(3)		17.755	17.755	0.000	57673	544.524	544.524
(4)		18.702	18.702	0.000	113343	520.339	520.339
(5)		19.835	19.835	0.000	86464	535.591	535.591
(6)		21.817	21.817	0.000	31832	542.501	542.501
Tetrachloro-m-xylene		6.653	6.653	0.000	48909	24.749	24.749
Decachlorobiphenyl		23.243	23.243	0.000	67729	24.833	24.833

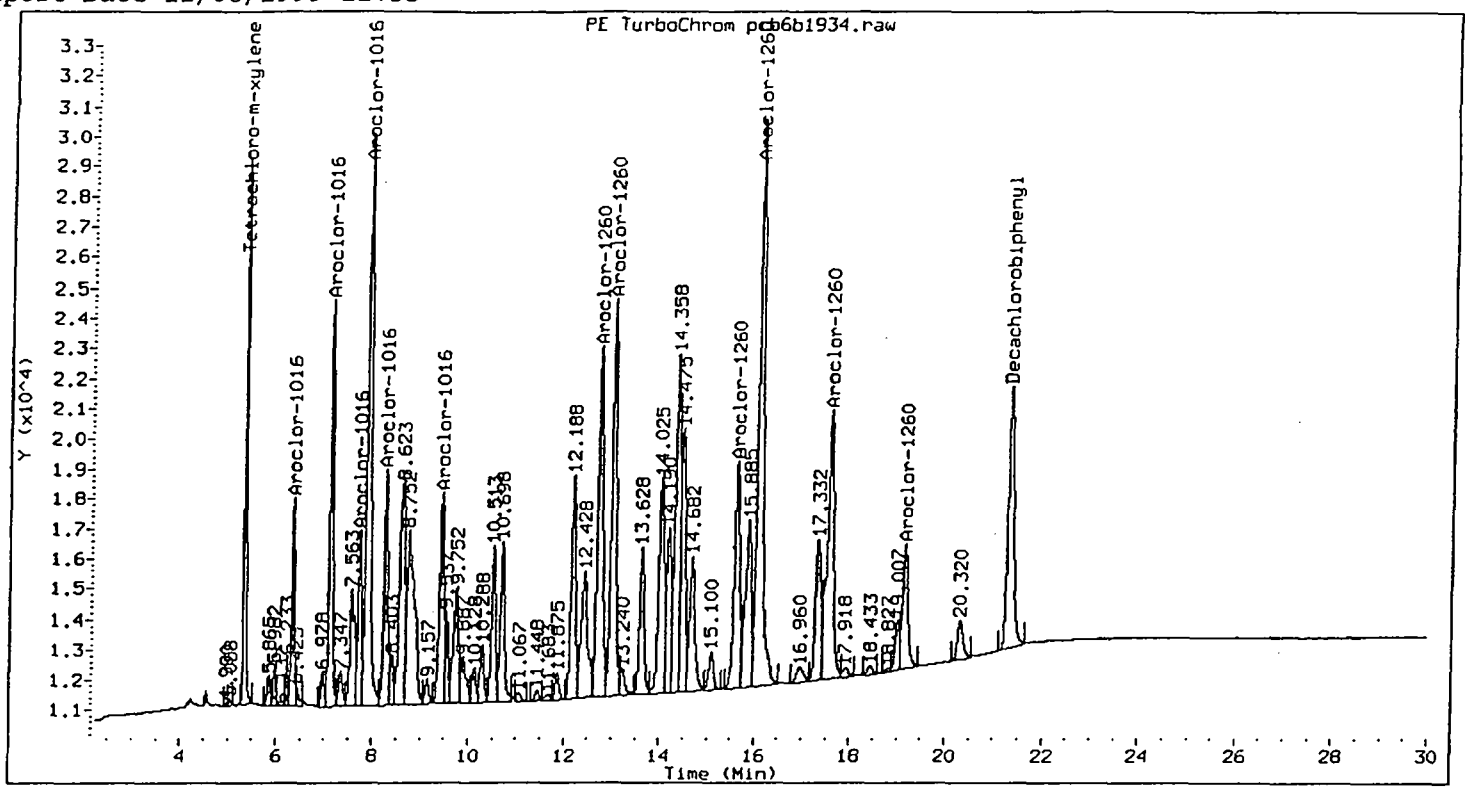
11/8/99

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/28oct99b.b/pcb6b1934.d Page 1
Report Date 11/08/1999 11:55



Method : /chem/HP68906.i/8082/rear/10-19-99/28oct99b.b/Xr8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 29-OCT-1999 10:36
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.347	6.347	0.000	26662	507.697	507.697
(2)		7.123	7.123	0.000	63326	503.361	503.361
(3)		7.730	7.730	0.000	28323	512.899	512.899
(4)		7.892	7.892	0.000	117149	512.897	512.897
(5)		8.263	8.263	0.000	43673	503.383	503.383
(6)		9.435	9.435	0.000	42677	496.324	496.324
Aroclor-1260	(M)	12.737	12.737	0.000	87976	489.011	489.011
(2)		13.020	13.020	0.000	91297	484.750	484.750
(3)		15.625	15.625	0.000	60950	472.608	472.608
(4)		16.097	16.097	0.000	144793	487.601	487.601
(5)		17.585	17.585	0.000	83011	472.812	472.812
(6)		19.158	19.158	0.000	32965	463.178	463.178
Tetrachloro-m-xylene		5.343	5.343	0.000	51984	23.768	23.768
Decachlorobiphenyl	(M)	21.325	21.325	0.000	70669	23.398	23.398

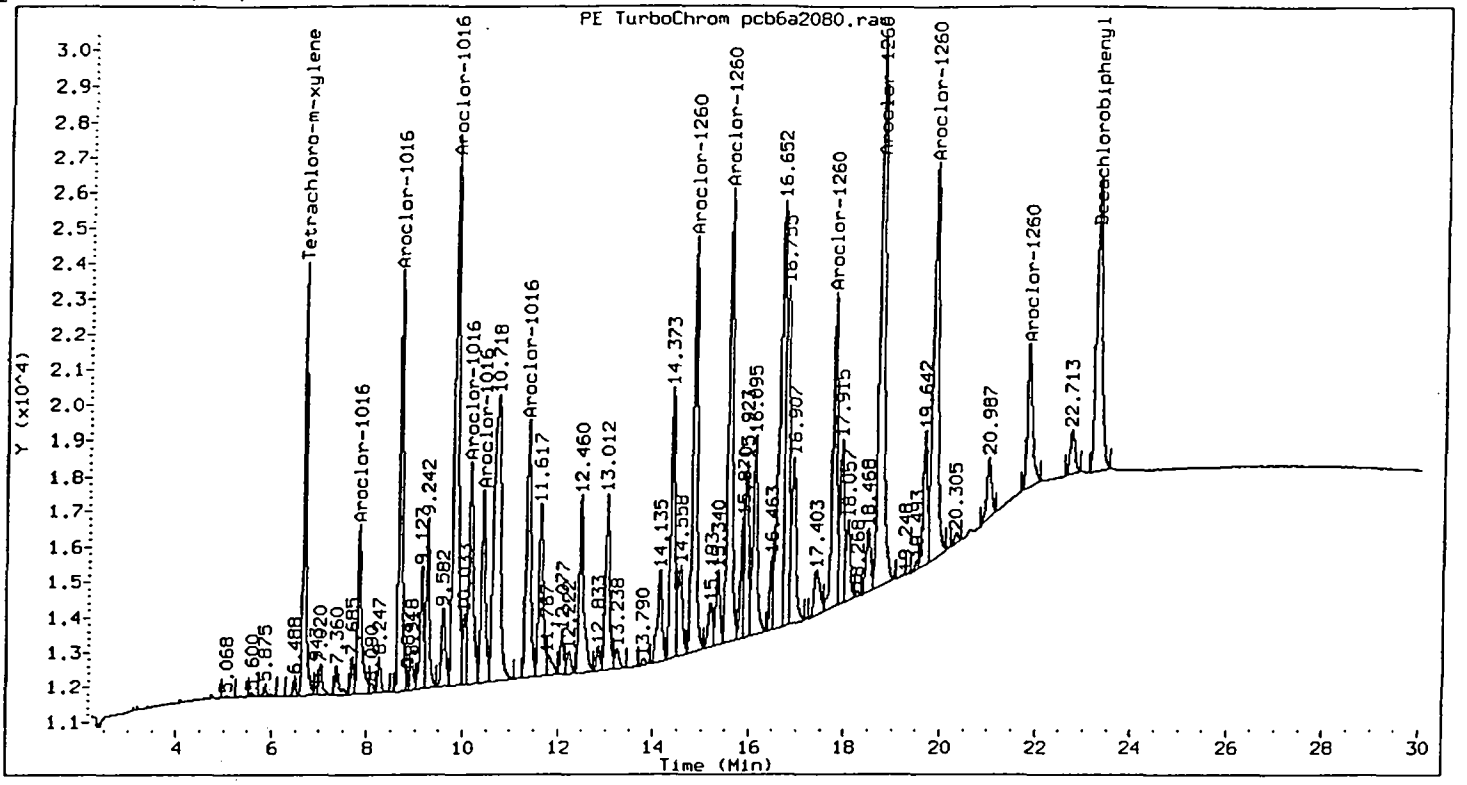
11/8/99

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2080.d Page 1
Report Date 11/09/1999 17:45



Method : /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/Xf8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 08-NOV-1999 23:45
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	7.822	7.822	0.000	28576	559.889	559.889
(2)		8.662	8.662	0.000	59259	543.858	543.858
(3)		9.810	9.810	0.000	102216	515.957	515.957
(4)		10.142	10.142	0.000	43975	553.714	553.714
(5)		10.415	10.415	0.000	32301	538.223	538.223
(6)		11.352	11.352	0.000	47624	521.787	521.787
Aroclor-1260	(M)	14.822	14.822	0.000	71480	554.733	554.733
(2)		15.553	15.553	0.000	83642	555.292	555.292
(3)		17.755	17.755	0.000	56822	536.489	536.489
(4)		18.700	18.700	0.000	116641	535.480	535.480
(5)		19.833	19.833	0.000	86222	534.092	534.092
(6)		21.813	21.813	0.000	28742	489.839	489.839
Tetrachloro-m-xylene		6.668	6.668	0.000	49497	25.047	25.047
Decachlorobiphenyl		23.240	23.240	0.000	67491	24.746	24.746

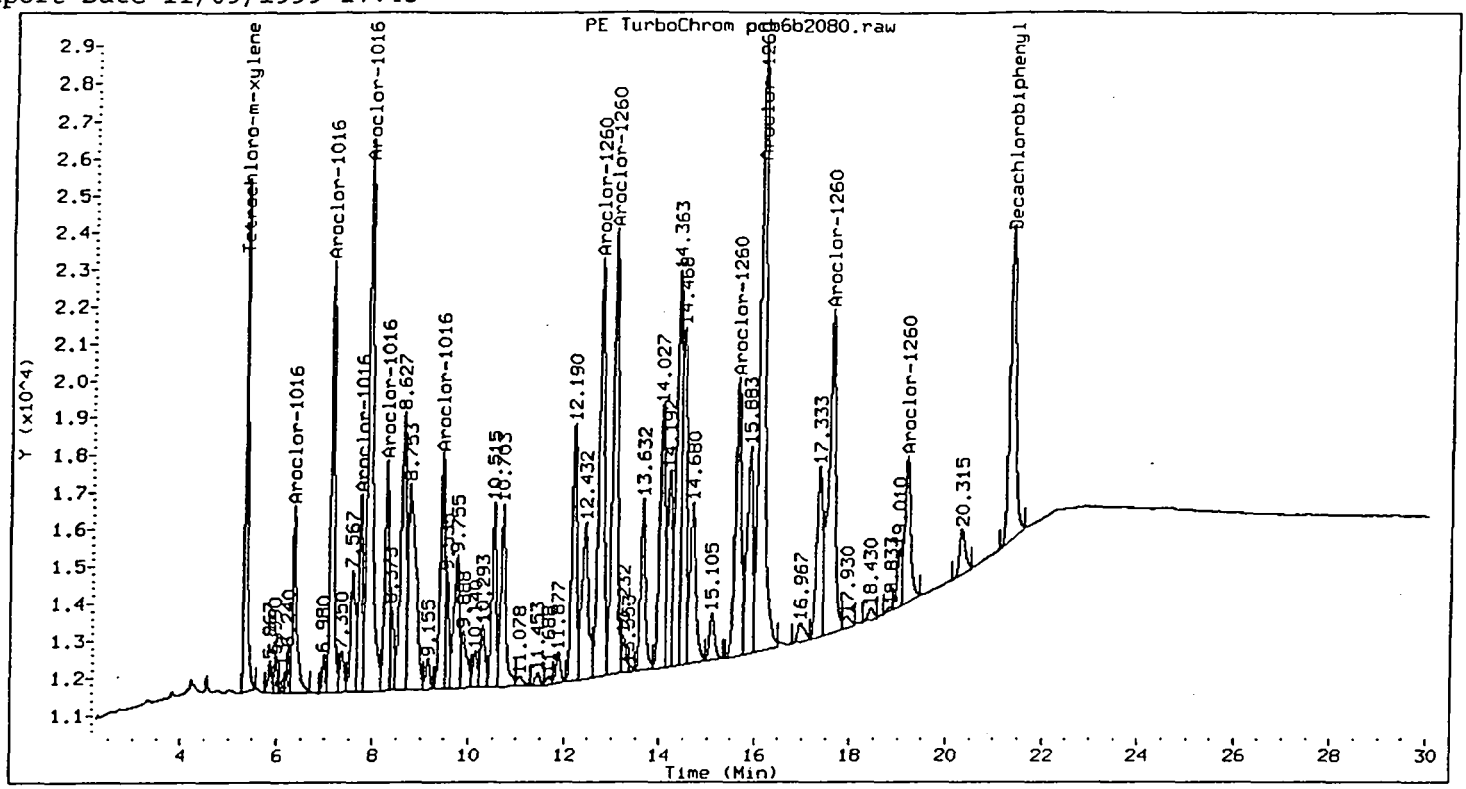
11/10/99

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/pcb6b2080.d Page 1
Report Date 11/09/1999 17:45



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/Xr8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 08-NOV-1999 23:45
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.355	6.355	0.000	29263	557.225	557.225
(2)		7.127	7.127	0.000	62182	494.267	494.267
(3)		7.735	7.735	0.000	28260	511.758	511.758
(4)		7.902	7.902	0.000	115578	506.019	506.019
(5)		8.273	8.273	0.000	41235	475.282	475.282
(6)		9.440	9.440	0.000	40497	470.971	470.971
Aroclor-1260	(M)	12.737	12.737	0.000	90568	503.419	503.419
(2)		13.020	13.020	0.000	93534	496.628	496.628
(3)		15.627	15.627	0.000	62655	485.829	485.829
(4)		16.098	16.098	0.000	150520	506.887	506.887
(5)		17.590	17.590	0.000	87153	496.404	496.404
(6)		19.165	19.165	0.000	34039	478.268	478.268
Tetrachloro-m-xylene		5.347	5.347	0.000	50950	23.295	23.295
Decachlorobiphenyl	(M)	21.327	21.327	0.000	70975	23.500	23.500

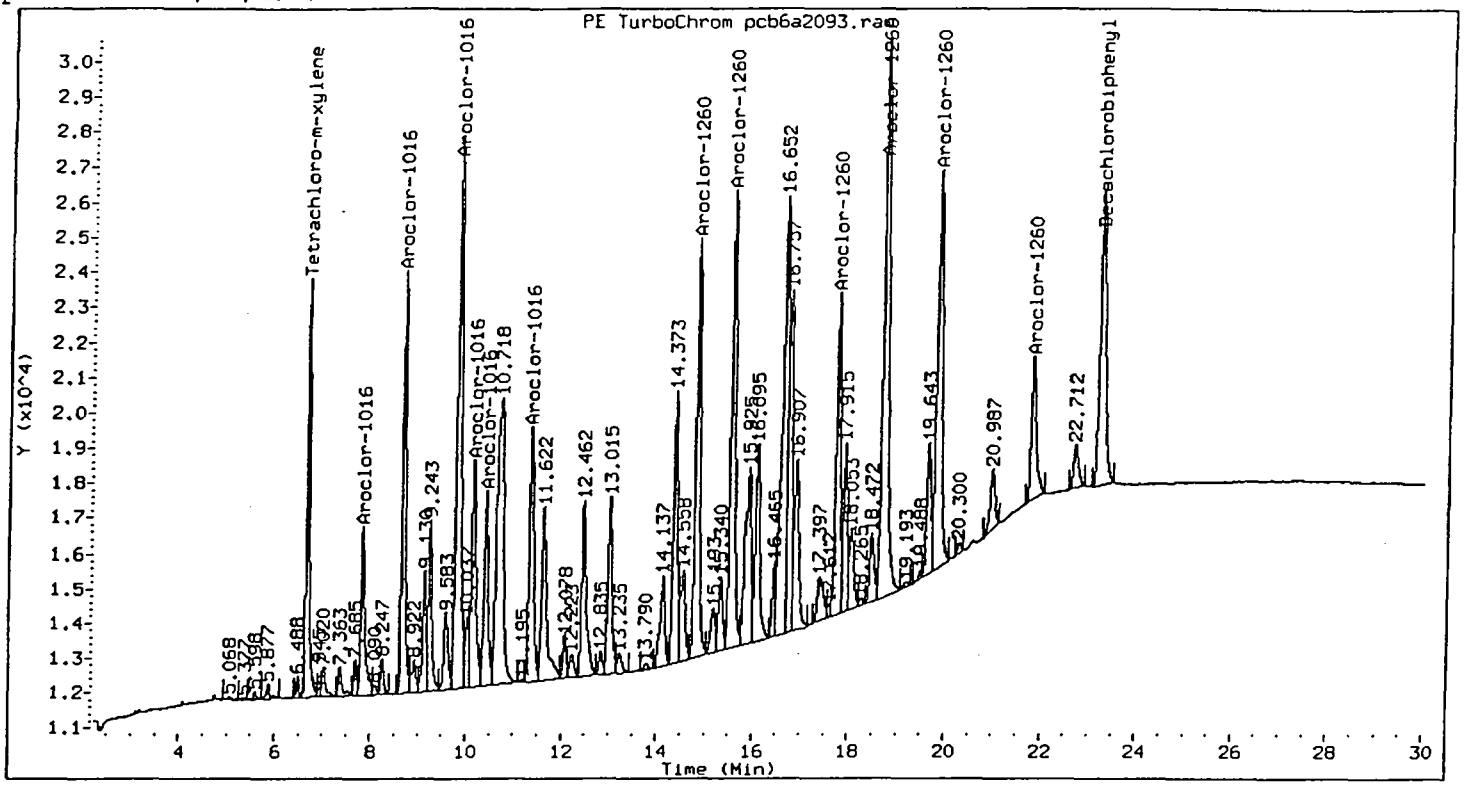
11/10/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/pcb6b2080.d Page 2
Report Date 11/09/1999 17:45

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:
M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99b.b/pcb6a2093.d Page 1
Report Date 11/10/1999 14:49



Method : /chem/HP68906.i/8082/front/10-19-99/08nov99b.b/Xf8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 09-NOV-1999 08:37
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.823	7.823	0.000	28592	560.202	560.202
(2)		8.663	8.663	0.000	60033	550.961	550.961
(3)		9.812	9.812	0.000	104305	526.502	526.502
(4)		10.147	10.147	0.000	44828	564.455	564.455
(5)		10.415	10.415	0.000	32763	545.921	545.921
(6)		11.352	11.352	0.000	48653	533.061	533.061
Aroclor-1260	(M)	14.822	14.822	0.000	72969	566.289	566.289
(2)		15.555	15.555	0.000	85423	567.116	567.116
(3)		17.750	17.750	0.000	56920	537.414	537.414
(4)		18.702	18.702	0.000	120234	551.975	551.975
(5)		19.830	19.830	0.000	87304	540.794	540.794
(6)		21.810	21.810	0.000	28733	489.686	489.686
Tetrachloro-m-xylene		6.670	6.670	0.000	49807	25.204	25.204
Decachlorobiphenyl		23.235	23.235	0.000	67871	24.885	24.885

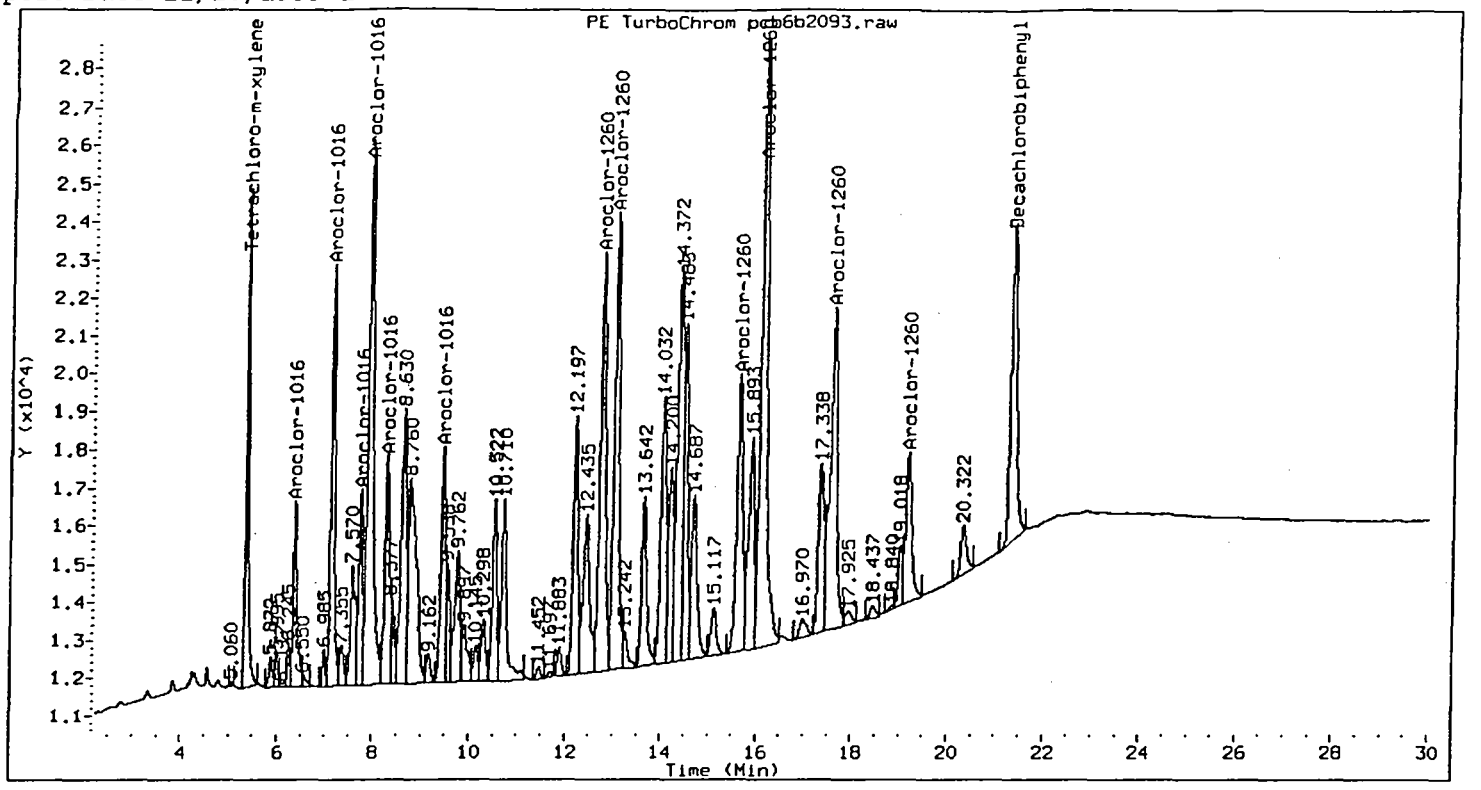
11/10/99

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99b.b/pcb6b2093.d Page 1
Report Date 11/10/1999 14:49



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99b.b/Xr8082.m
Sample Info : AR1660-500 ppb
Lab ID : AR1660-500 ppb
Inj Date : 09-NOV-1999 08:37
Operator : DavidW
Cpnd Sublist: AR16600S

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_3

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.362	6.362	0.000	27431	522.340	522.340
(2)		7.132	7.132	0.000	60750	482.885	482.885
(3)		7.742	7.742	0.000	27329	494.899	494.899
(4)		7.910	7.910	0.000	113481	496.838	496.838
(5)		8.278	8.278	0.000	40458	466.326	466.326
(6)		9.445	9.445	0.000	38731	450.433	450.433
Aroclor-1260	(M)	12.743	12.743	0.000	88583	492.385	492.385
(2)		13.032	13.032	0.000	92107	489.051	489.051
(3)		15.628	15.628	0.000	61455	476.524	476.524
(4)		16.105	16.105	0.000	148053	498.580	498.580
(5)		17.593	17.593	0.000	85025	484.283	484.283
(6)		19.172	19.172	0.000	35258	495.396	495.396
Tetrachloro-m-xylene		5.352	5.352	0.000	49928	22.828	22.828
Decachlorobiphenyl	(M)	21.333	21.333	0.000	70073	23.201	23.201

11/10/99

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)

COMMENTS:

M - Compound response manually integrated.

Severn Trent Laboratories - Whippany

Client ID: **Method Blk-W**
Site:

Lab Sample ID: **WG41688-MB**
Lab Job No: 94127

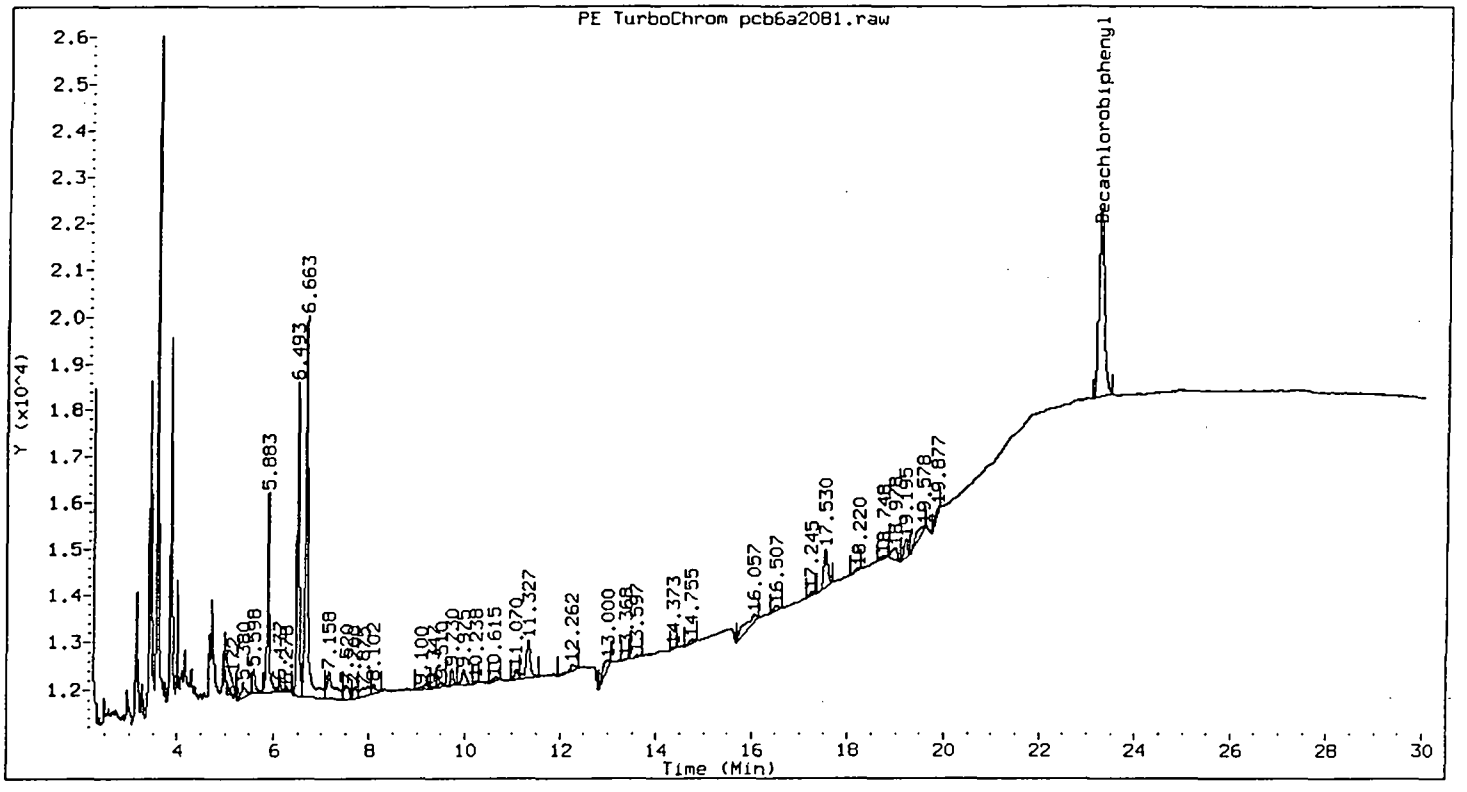
Date Sampled: _____
Date Received: _____
Date Extracted: 10/19/99
Date Analyzed: 11/09/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

Matrix: WATER
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2081.d
Rear File ID: pcb6b2081.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	ND	0.200	R
Aroclor-1221	ND	0.200	R
Aroclor-1232	ND	0.200	R
Aroclor-1242	ND	0.200	R
Aroclor-1248	ND	0.200	R
Aroclor-1254	ND	0.200	R
Aroclor-1260	ND	0.200	R

000742



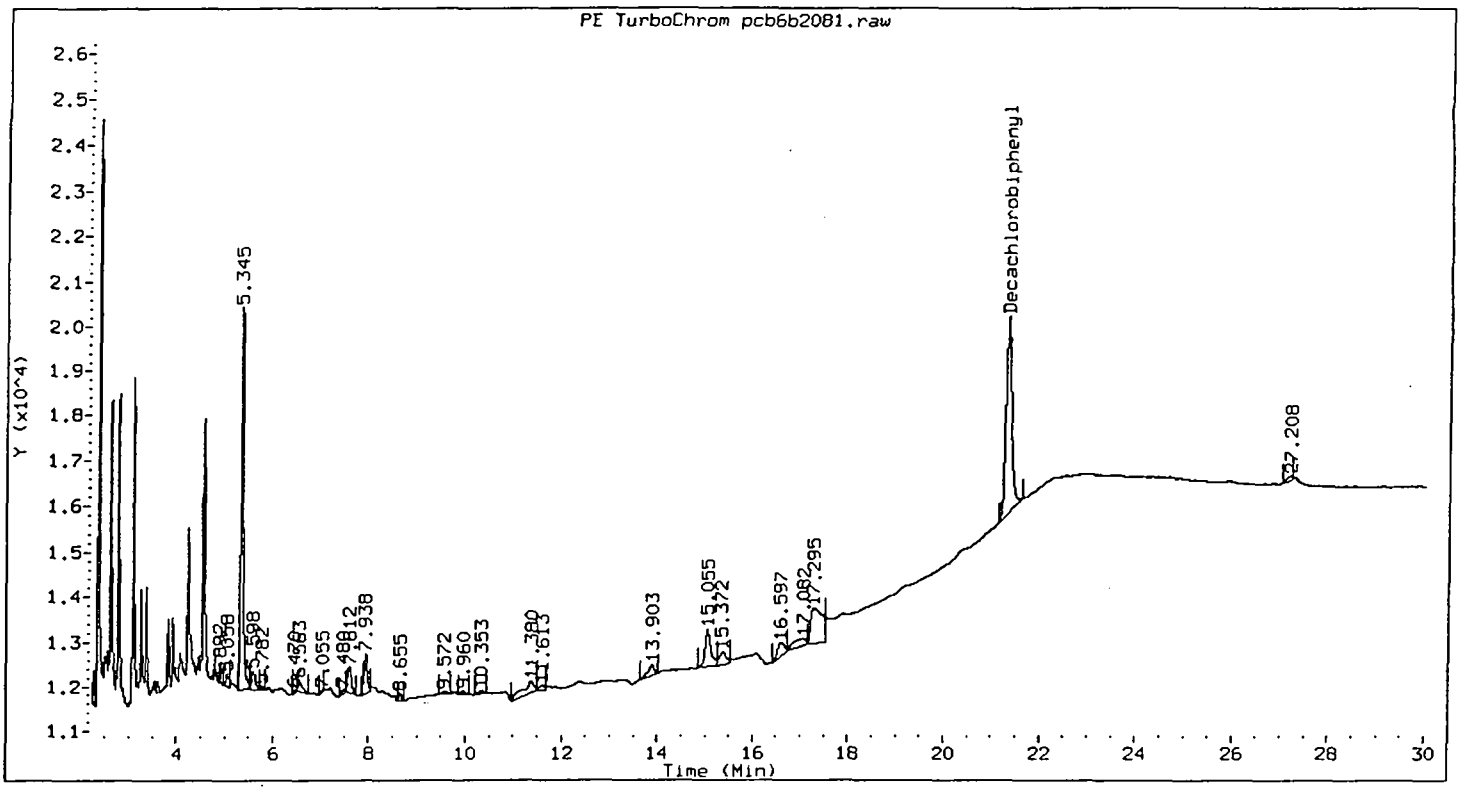
Method : /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/Xf8082.m
Sample Info : WG41688-MB
Lab ID : WG41688-MB
Inj Date : 09-NOV-1999 00:23
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/L)
Decachlorobiphenyl	23.238	23.240	0.002	31885	11.691	0.023

11/30/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/pcb6b2081.d Page 1
Report Date 11/30/1999 15:35



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/Xr8082.m
Sample Info : WG41688-MB
Lab ID : WG41688-MB
Inj Date : 09-NOV-1999 00:23
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.328	21.327	0.002	36147	11.968	0.024

COMMENTS:

M - Compound response manually integrated.

11/2019

Severn Trent Laboratories - Whippany

Client ID: **Method Blk-S**
Site:

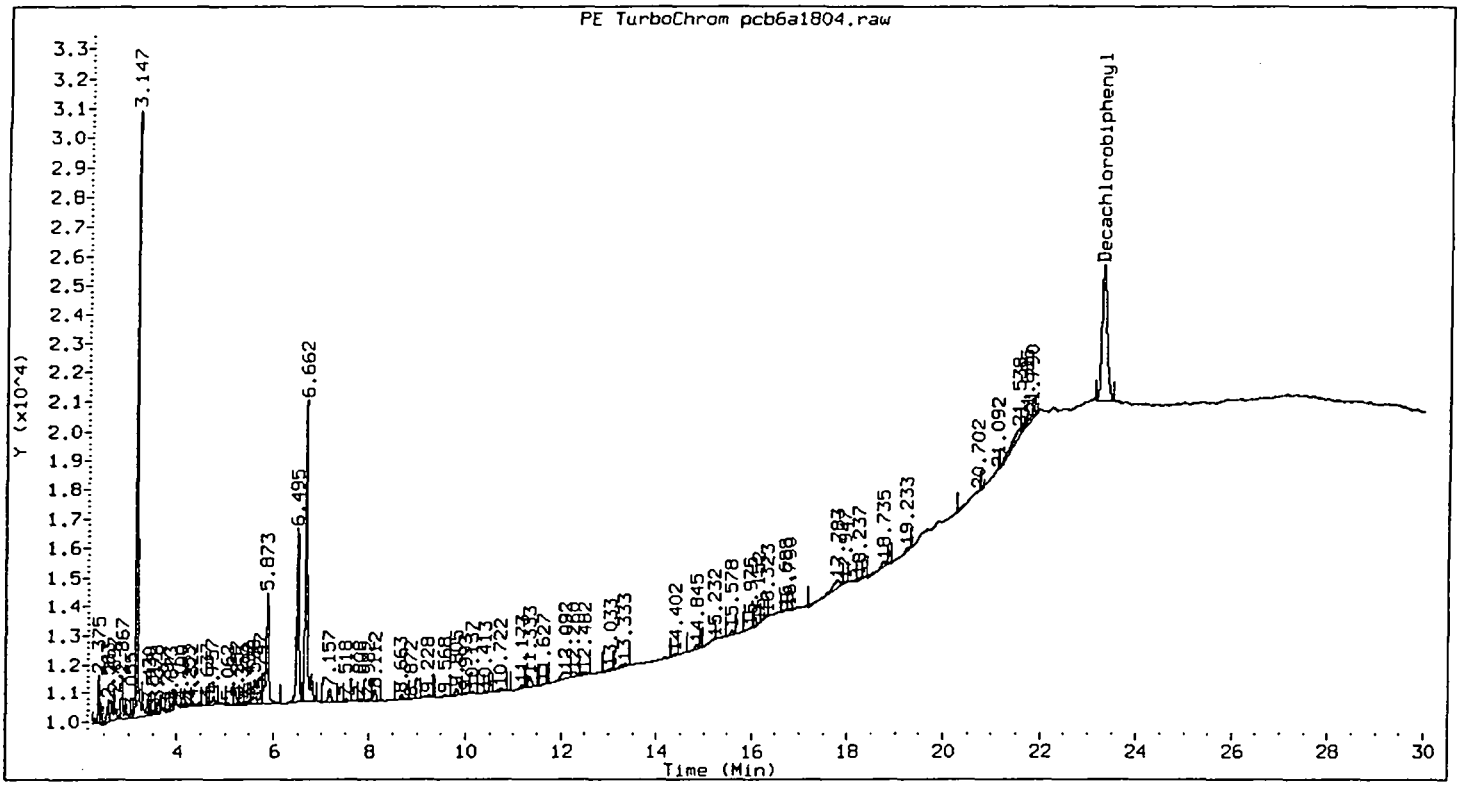
Lab Sample ID: **102099S-MB**
Lab Job No: 94127

Date Sampled: _____
Date Received: _____
Date Extracted: 10/20/99
Date Analyzed: 10/22/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1804.d
Rear File ID: pcb6b1804.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 0

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	ND	33.0	R
Aroclor-1221	ND	33.0	R
Aroclor-1232	ND	33.0	R
Aroclor-1242	ND	33.0	R
Aroclor-1248	ND	33.0	R
Aroclor-1254	ND	33.0	R
Aroclor-1260	ND	33.0	R



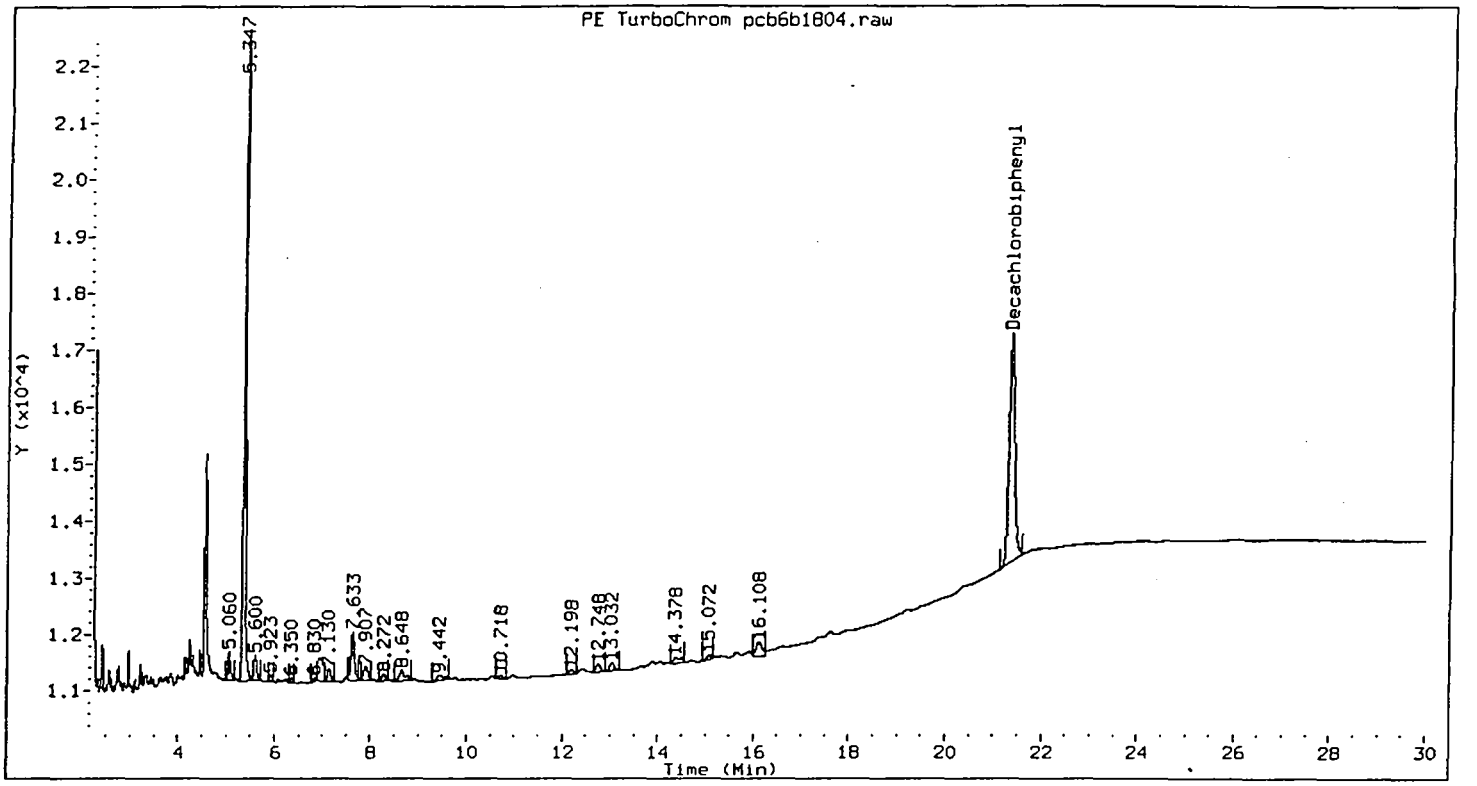
Method : /chem/HP68906.i/8082/front/10-19-99/21oct99a.b/Xf8082.m
Sample Info : Method Blank
Lab ID : 102099S-MB
Inj Date : 22-OCT-1999 01:08
Operator : DavidW
Cpnd Sublist: PCB8082
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: BLANK

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	(M)	23.282	23.280	0.002	34758	12.744	4.248

COMMENTS:

M - Compound response manually integrated.

12/5/99



Method : /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b/Xr8082.m
Sample Info : Method Blank
Lab ID : 102099S-MB
Inst ID : HP68906.i
Inj Date : 22-OCT-1999 01:08
Dil Factor : 1
Operator : DavidW
Sample Matrix : SOIL
Cpnd Sublist: PCB8082
Sample Type: BLANK

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	(M)	21.347	21.347	0.000	32403	10.729	3.576

COMMENTS:

M - Compound response manually integrated.

12/5/99

Severn Trent Laboratories - Whippany

Client ID: **Blank Spk-W**
Site:

Lab Sample ID: **WG41688-BS**
Lab Job No: 94127

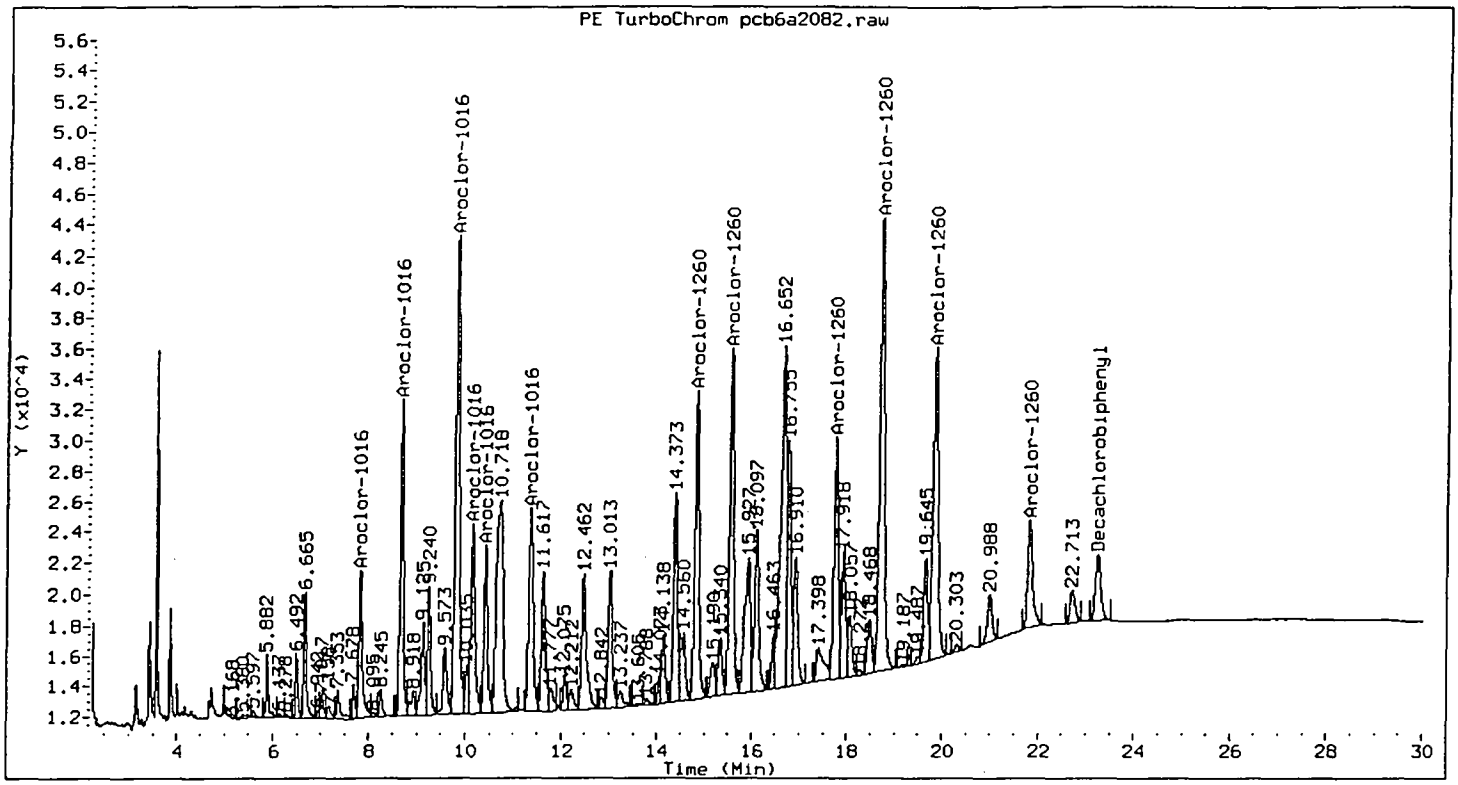
Date Sampled: _____
Date Received: _____
Date Extracted: 10/19/99
Date Analyzed: 11/09/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

Matrix: WATER
Sample Volume: 1000 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2082.d
Rear File ID: pcb6b2082.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	1.85	0.200	F
Aroclor-1221	ND	0.200	R
Aroclor-1232	ND	0.200	R
Aroclor-1242	ND	0.200	R
Aroclor-1248	ND	0.200	R
Aroclor-1254	ND	0.200	R
Aroclor-1260	1.83	0.200	F

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2082.d Page 1
Report Date 11/30/1999 15:35



Method : /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/Xf8082.m
Sample Info : WG41688-BS
Lab ID : WG41688-BS
Inj Date : 09-NOV-1999 01:01
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BS

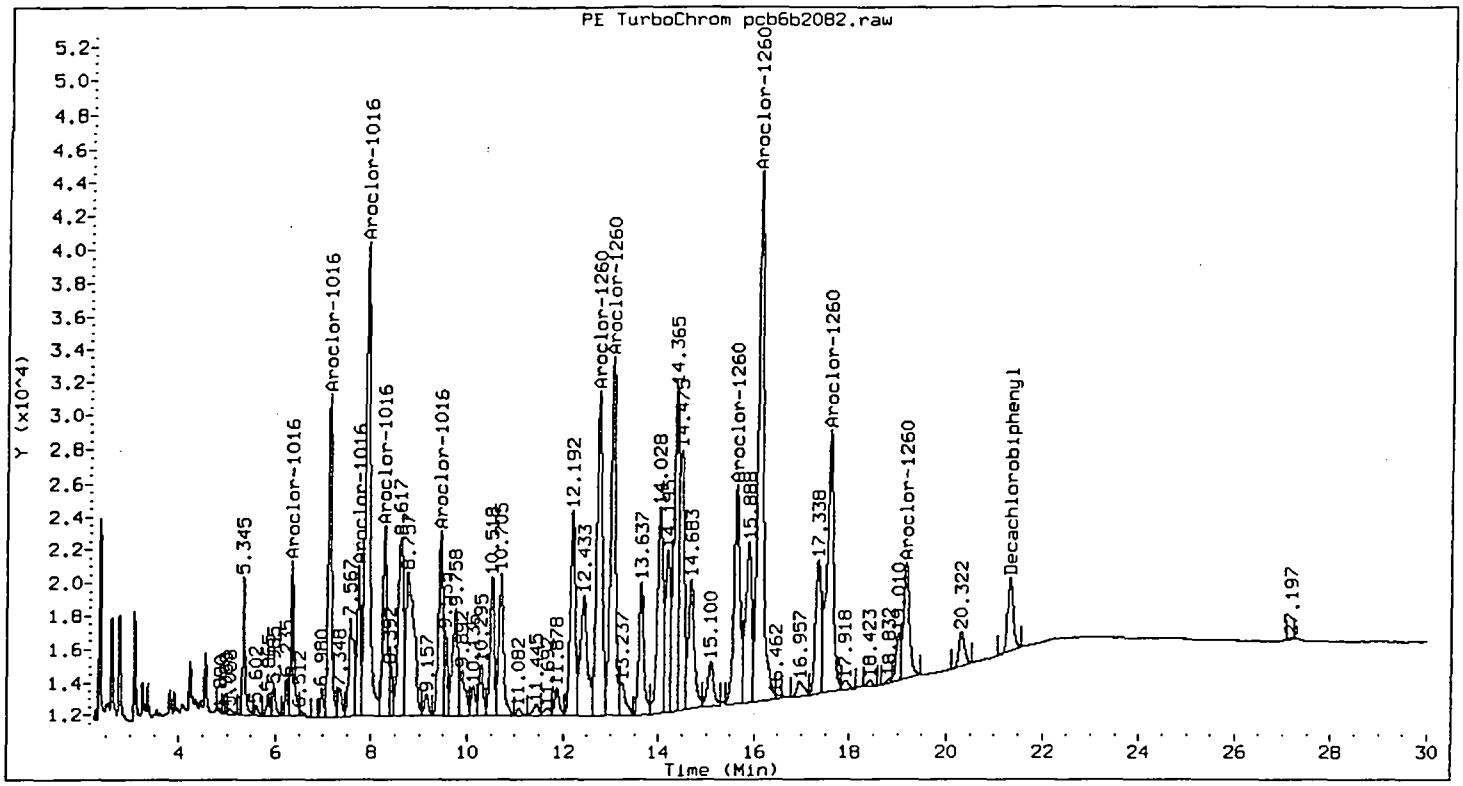
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/L)
Aroclor-1016	(M)	7.813	7.822	0.008	47117	923.162	1.846
(2)		8.658	8.662	0.003	95031	872.160	1.744
(3)		9.802	9.810	0.008	180794	912.597	1.825
(4)		10.137	10.142	0.005	75090	945.501	1.891
(5)		10.408	10.415	0.007	56660	944.110	1.888
(6)		11.348	11.352	0.003	86103	943.378	1.887
Average of peak concentrations:							1.85
Aroclor-1260	(M)	14.822	14.822	0.000	122148	947.951	1.896
(2)		15.555	15.553	0.002	141285	937.979	1.876
(3)		17.757	17.755	0.002	97378	919.401	1.839
(4)		18.703	18.700	0.003	199316	915.028	1.830
(5)		19.838	19.833	0.005	151403	937.848	1.876
(6)		21.817	21.813	0.003	49609	845.468	1.691
Average of peak concentrations:							1.83

12/6/99

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/L)
Decachlorobiphenyl	23.242	23.240	0.002	33837	12.407	0.025

COMMENTS:

M - Compound response manually integrated.



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/Xr8082.m
Sample Info : WG41688-BS
Lab ID : WG41688-BS
Inj Date : 09-NOV-1999 01:01
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BS

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/L)
Aroclor-1016	(M)	6.350	6.355	0.005	44843	853.899	1.708
(2)		7.125	7.127	0.002	100165	796.184	1.592
(3)		7.733	7.735	0.002	46117	835.129	1.670
(4)		7.900	7.902	0.002	200431	877.519	1.755
(5)		8.270	8.273	0.003	72363	834.069	1.668
(6)		9.442	9.440	0.002	70397	818.702	1.637
Average of peak concentrations:							1.67
Aroclor-1260	(M)	12.738	12.737	0.002	157946	877.937	1.756
(2)		13.027	13.020	0.007	164681	874.389	1.749
(3)		15.627	15.627	0.000	111211	862.334	1.725
(4)		16.098	16.098	0.000	263039	885.804	1.772
(5)		17.590	17.590	0.000	151483	862.813	1.726
(6)		19.167	19.165	0.002	60808	854.388	1.709
Average of peak concentrations:							1.74

12/6/99

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.328	21.327	0.002	35445	11.736	0.023

COMMENTS:

M - Compound response manually integrated.

Severn Trent Laboratories - Whippany

Client ID: **Blank Spk-S**
Site:

Lab Sample ID: **102099-BS**
Lab Job No: 94127

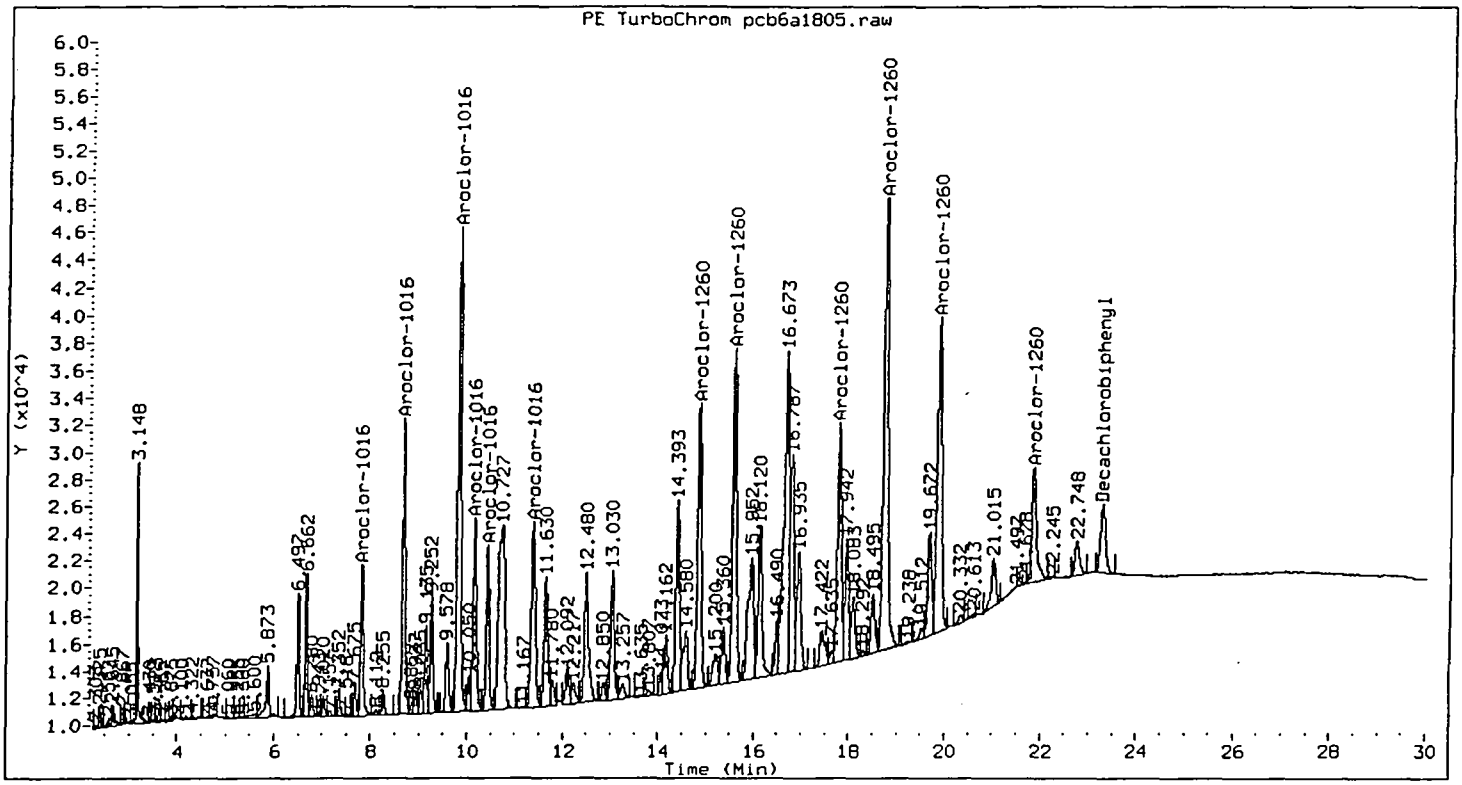
Date Sampled: _____
Date Received: _____
Date Extracted: 10/06/93
Date Analyzed: 10/22/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1805.d
Rear File ID: pcb6b1805.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 0

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	286	33.0	F
Aroclor-1221	ND	33.0	R
Aroclor-1232	ND	33.0	R
Aroclor-1242	ND	33.0	R
Aroclor-1248	ND	33.0	R
Aroclor-1254	ND	33.0	R
Aroclor-1260	316	33.0	F

Data File: /chem/HP68906.i/8082/front/10-19-99/21oct99a.b/pcb6a1805.d Page 1
Report Date 12/05/1999 10:55



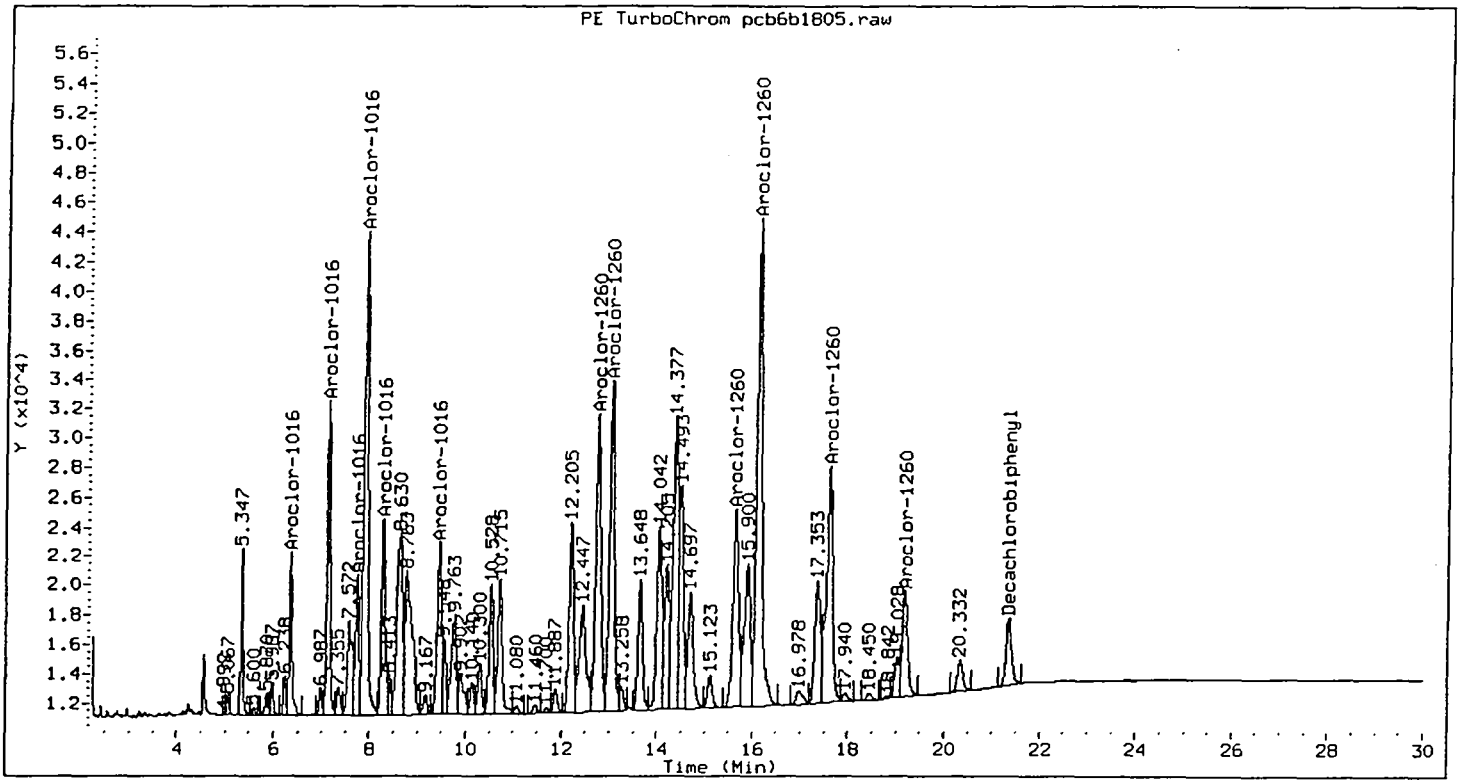
Method : /chem/HP68906.i/8082/front/10-19-99/21oct99a.b/Xf8082.m
Sample Info : Blank Spike
Lab ID : 102099-BS
Inj Date : 22-OCT-1999 01:46
Operator : DavidW
Cpnd Sublist: PCB8082
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: BS

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	7.813	7.812	0.002	42577	834.210	278.070
(2)		8.667	8.667	0.000	89662	822.885	274.295
(3)		9.808	9.807	0.002	171581	866.092	288.697
(4)		10.142	10.140	0.002	69223	871.626	290.542
(5)		10.418	10.417	0.002	52476	874.393	291.464
(6)		11.363	11.360	0.003	80283	879.612	293.204
Average of peak concentrations:							286.00
Aroclor-1260	(M)	14.843	14.845	0.002	115325	895.000	298.333
(2)		15.575	15.575	0.000	138494	919.449	306.483
(3)		17.778	17.780	0.002	101920	962.285	320.762
(4)		18.728	18.727	0.002	206956	950.102	316.701
(5)		19.860	19.862	0.002	157038	972.753	324.251
(6)		21.845	21.842	0.003	57824	985.473	328.491
Average of peak concentrations:							316.00

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	23.278	23.280	0.002	37350	13.695	4.565

COMMENTS:

M - Compound response manually integrated.



Method : /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b/Xr8082.m
Sample Info : Blank Spike
Lab ID : 102099-BS
Inj Date : 22-OCT-1999 01:46
Operator : DavidW
Cpnd Sublist: PCB8082
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: BS

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	6.352	6.350	0.002	45183	860.373	286.791
(2)		7.130	7.130	0.000	100793	801.175	267.058
(3)		7.740	7.738	0.002	46684	845.397	281.799
(4)		7.900	7.900	0.000	196885	861.994	287.331
(5)		8.272	8.270	0.002	73776	850.356	283.452
(6)		9.447	9.445	0.002	72942	848.300	282.767
Average of peak concentrations:							282.00
Aroclor-1260	(M)	12.752	12.750	0.002	152617	848.316	282.772
(2)		13.037	13.035	0.002	160242	850.820	283.607
(3)		15.642	15.640	0.002	106901	828.914	276.305
(4)		16.115	16.112	0.003	257514	867.198	289.066
(5)		17.603	17.605	0.002	146529	834.596	278.199
(6)		19.182	19.182	0.000	57114	802.485	267.495
Average of peak concentrations:							280.00

12/5/99

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Decachlorobiphenyl	(M)	21.347	21.347	0.000	36110	11.956	3.985

COMMENTS:

M - Compound response manually integrated.

Severn Trent Laboratories - Whippany

Client ID: **SW2-2-03MS**
Site:

Lab Sample ID: **94127-020MS**
Lab Job No: 94127

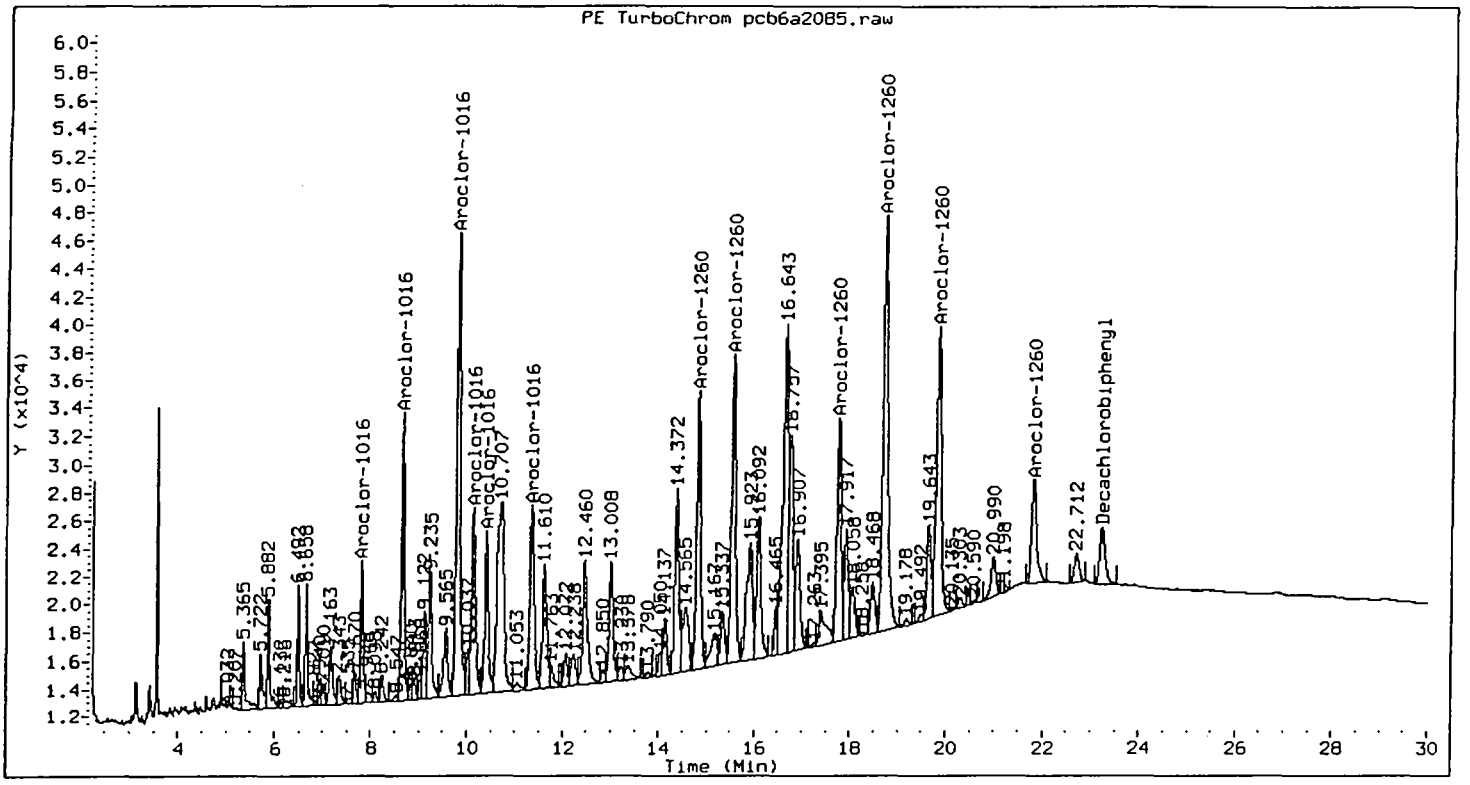
Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/19/99
Date Analyzed: 11/09/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

Matrix: WATER
Sample Volume: 500 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2085.d
Rear File ID: pcb6b2085.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	3.62	0.400	F
Aroclor-1221	ND	0.400	R
Aroclor-1232	ND	0.400	R
Aroclor-1242	ND	0.400	R
Aroclor-1248	ND	0.400	R
Aroclor-1254	ND	0.400	R
Aroclor-1260	3.72	0.400	F

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2085.d Page 1
Report Date 11/30/1999 15:49



Method : /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/Xf8082.m
Sample Info : 94127-020MS;500;2;
Lab ID : 94127-020MS
Inj Date : 09-NOV-1999 02:55
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: MS

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Aroclor-1016	(M)	7.805	7.822	0.017	43045	843.380	3.374
(2)		8.655	8.662	0.007	90819	833.504	3.334
(3)		9.795	9.810	0.015	182156	919.472	3.678
(4)		10.127	10.142	0.015	75656	952.628	3.811
(5)		10.403	10.415	0.012	58273	970.987	3.884
(6)		11.343	11.352	0.008	83876	918.979	3.676
Average of peak concentrations:							3.62
Aroclor-1260	(M)	14.818	14.822	0.003	117576	912.469	3.650
(2)		15.552	15.553	0.002	136641	907.148	3.629
(3)		17.752	17.755	0.003	98406	929.107	3.716
(4)		18.698	18.700	0.002	213291	979.185	3.917
(5)		19.837	19.833	0.003	151803	940.326	3.761
(6)		21.813	21.813	0.000	53874	918.154	3.673
Average of peak concentrations:							3.72

12/6/99

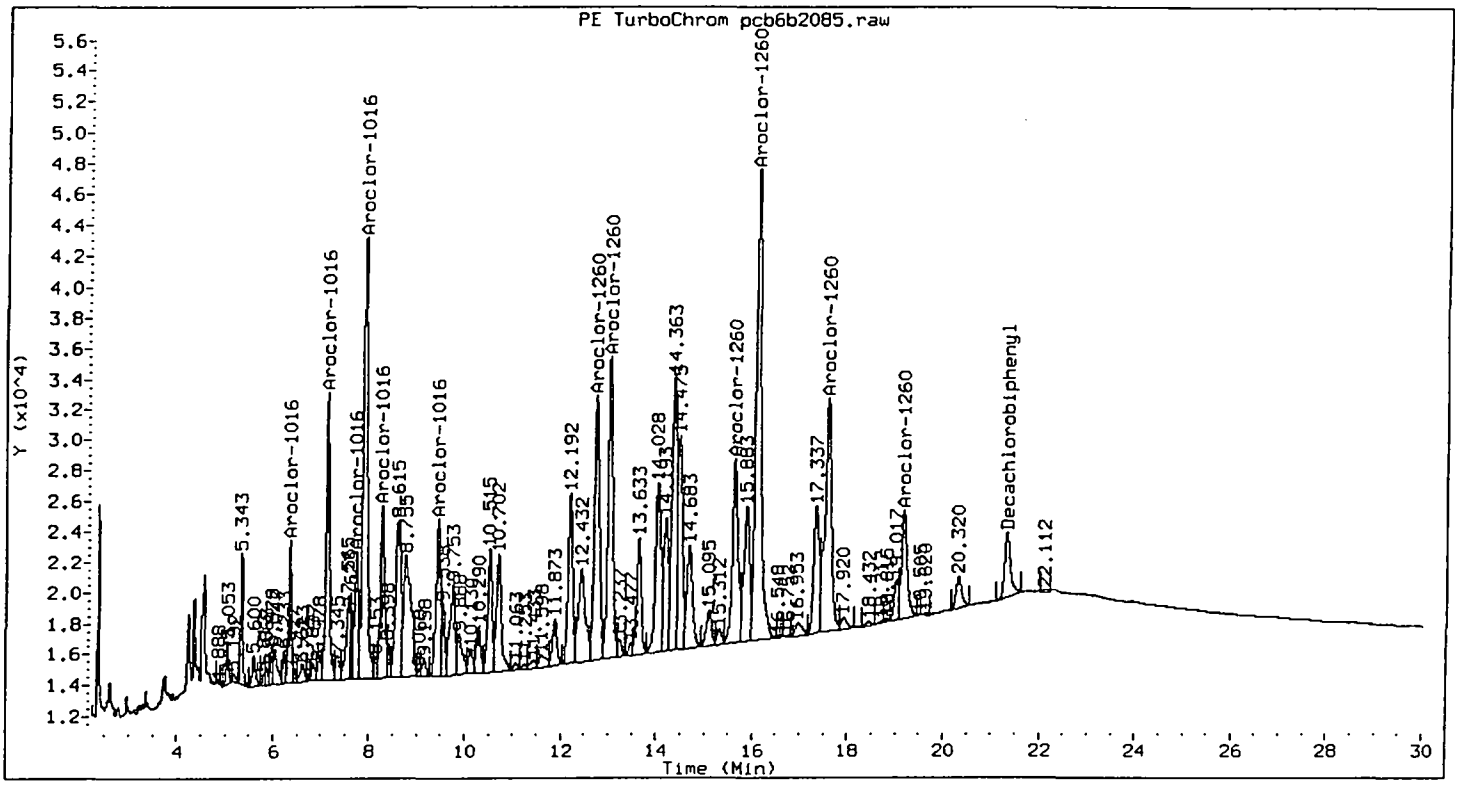
Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2085.d Page 2
Report Date 11/30/1999 15:49

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	23.238	23.240	0.002	33281	12.203	0.049

COMMENTS:

M - Compound response manually integrated.

000760



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/Xr8082.m
Sample Info : 94127-020MS;500;2;
Lab ID : 94127-020MS
Inj Date : 09-NOV-1999 02:55
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: MS

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Aroclor-1016	(M)	6.347	6.355	0.008	37100	706.466	2.826
(2)		7.123	7.127	0.003	95375	758.114	3.032
(3)		7.732	7.735	0.003	41510	751.712	3.007
(4)		7.895	7.902	0.007	187122	819.253	3.277
(5)		8.265	8.273	0.008	65982	760.529	3.042
(6)		9.437	9.440	0.003	63948	743.707	2.975
Average of peak concentrations:							3.03
Aroclor-1260	(M)	12.737	12.737	0.000	133532	742.234	2.969
(2)		13.022	13.020	0.002	140525	746.131	2.985
(3)		15.625	15.627	0.002	98048	760.272	3.041
(4)		16.097	16.098	0.002	245979	828.356	3.313
(5)		17.587	17.590	0.003	143872	819.462	3.278
(6)		19.165	19.165	0.000	59424	834.949	3.340
Average of peak concentrations:							3.15

12/6/99

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	(M)	21.327	21.327	0.000	36570	12.109	0.048

COMMENTS:

M - Compound response manually integrated.

Severn Trent Laboratories - Whippany

Client ID: **SW2-2-03MSD**
Site:

Lab Sample ID: **94127-020MSD**
Lab Job No: 94127

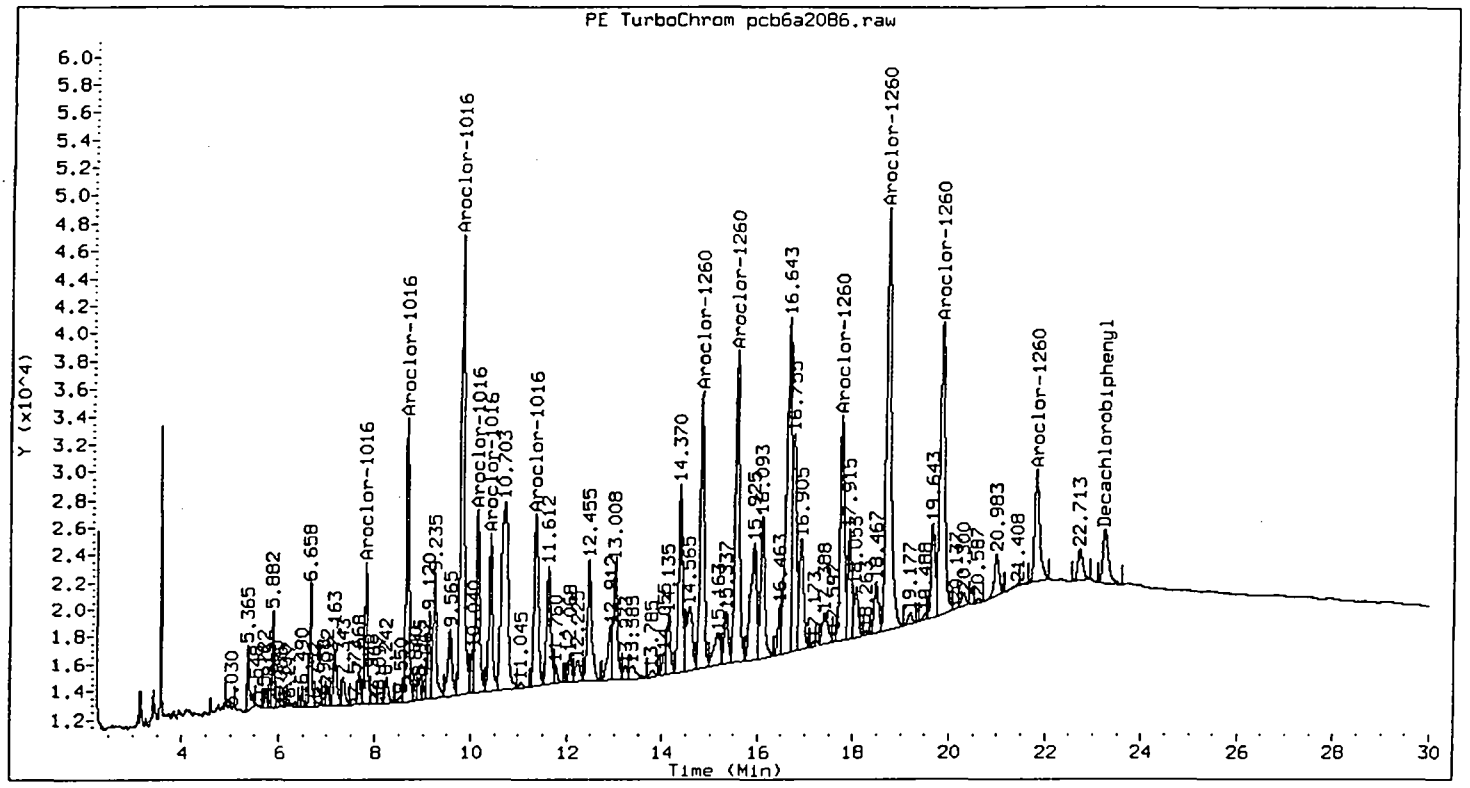
Date Sampled: 10/14/99
Date Received: 10/14/99
Date Extracted: 10/19/99
Date Analyzed: 11/09/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i

Matrix: WATER
Sample Volume: 500 ml
Extract Final Volume: 2.0 ml
Dilution Factor: 1.0
Front File ID: pcb6a2086.d
Rear File ID: pcb6b2086.d

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/l	Method Detection Limit Units: ug/l	Quant. Column
Aroclor-1016	3.59	0.400	F
Aroclor-1221	ND	0.400	R
Aroclor-1232	ND	0.400	R
Aroclor-1242	ND	0.400	R
Aroclor-1248	ND	0.400	R
Aroclor-1254	ND	0.400	R
Aroclor-1260	3.88	0.400	F

Data File: /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/pcb6a2086.d Page 1
Report Date 11/30/1999 15:49



Method : /chem/HP68906.i/8082/front/10-19-99/08nov99a.b/Xf8082.m
Sample Info : 94127-020MSD;500;2;
Lab ID : 94127-020MSD
Inj Date : 09-NOV-1999 03:32
Operator : DavidW
Cpnd Sublist: PCB8082
Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: MSD

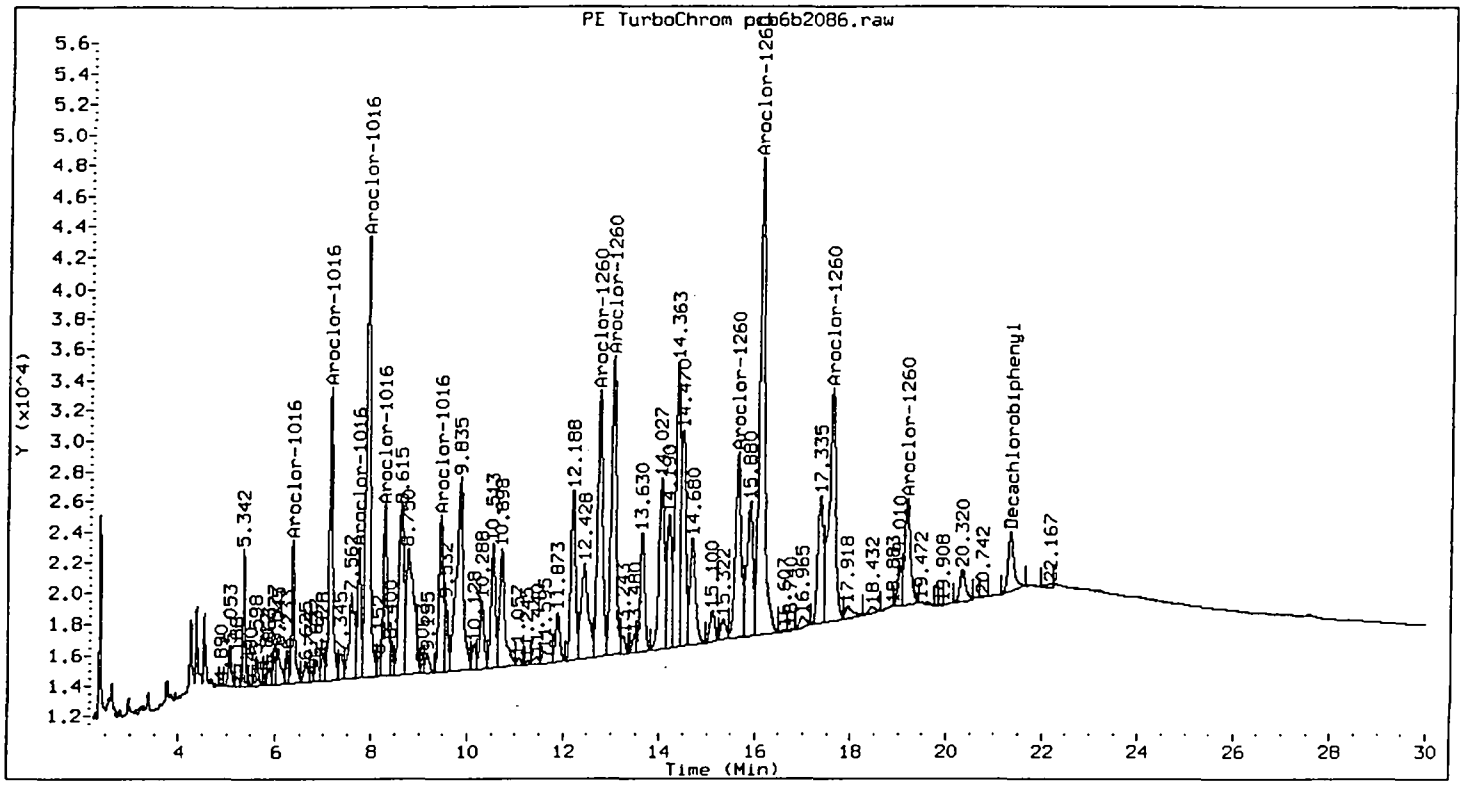
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Aroclor-1016	(M)	7.805	7.822	0.017	43009	842.674	3.371
(2)		8.653	8.662	0.008	92012	844.453	3.378
(3)		9.795	9.810	0.015	183976	928.659	3.715
(4)		10.128	10.142	0.013	76031	957.350	3.829
(5)		10.402	10.415	0.013	57139	952.091	3.808
(6)		11.345	11.352	0.007	79032	865.906	3.464
Average of peak concentrations:							3.59
Aroclor-1260	(M)	14.818	14.822	0.003	120881	938.118	3.752
(2)		15.550	15.553	0.003	143649	953.673	3.815
(3)		17.752	17.755	0.003	100667	950.454	3.802
(4)		18.698	18.700	0.002	219524	1007.799	4.031
(5)		19.832	19.833	0.002	159432	987.583	3.950
(6)		21.810	21.813	0.003	57385	977.991	3.912
Average of peak concentrations:							3.88

12/6/99

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Decachlorobiphenyl	23.230	23.240	0.010	32393	11.877	0.048

COMMENTS:

S - Compound response manually integrated.



Method : /chem/HP68906.i/8082/rear/10-19-99/08nov99a.b/Xr8082.m
Sample Info : 94127-020MSD;500;2;
Lab ID : 94127-020MSD
Inj Date : 09-NOV-1999 03:32
Operator : DavidW
Spnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: MSD

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	FINAL (ug/L)
Aroclor-1016	(M)	6.347	6.355	0.008	40829	777.464	3.110
(2)		7.123	7.127	0.003	97715	776.709	3.107
(3)		7.732	7.735	0.003	42393	767.692	3.071
(4)		7.895	7.902	0.007	185641	812.766	3.251
(5)		8.263	8.273	0.010	66340	764.647	3.059
(6)		9.435	9.440	0.005	62861	731.060	2.924
Average of peak concentrations:							3.09
Aroclor-1260	(M)	12.733	12.737	0.003	133429	741.660	2.967
(2)		13.022	13.020	0.002	140720	747.166	2.989
(3)		15.623	15.627	0.003	97131	753.157	3.013
(4)		16.095	16.098	0.003	245954	828.269	3.313
(5)		17.585	17.590	0.005	146617	835.097	3.340
(6)		19.163	19.165	0.002	59630	837.837	3.351
Average of peak concentrations:							3.16

12/6/99

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (none)	CONCENTRATIONS FINAL (ug/L)
Decachlorobiphenyl	(M)	21.328	21.327	0.002	33046	10.941	0.044

COMMENTS:

M - Compound response manually integrated.

Severn Trent Laboratories - Whippany

Client ID: **SO-11**
Site:

Lab Sample ID: **94143-011**
Lab Job No: 94127

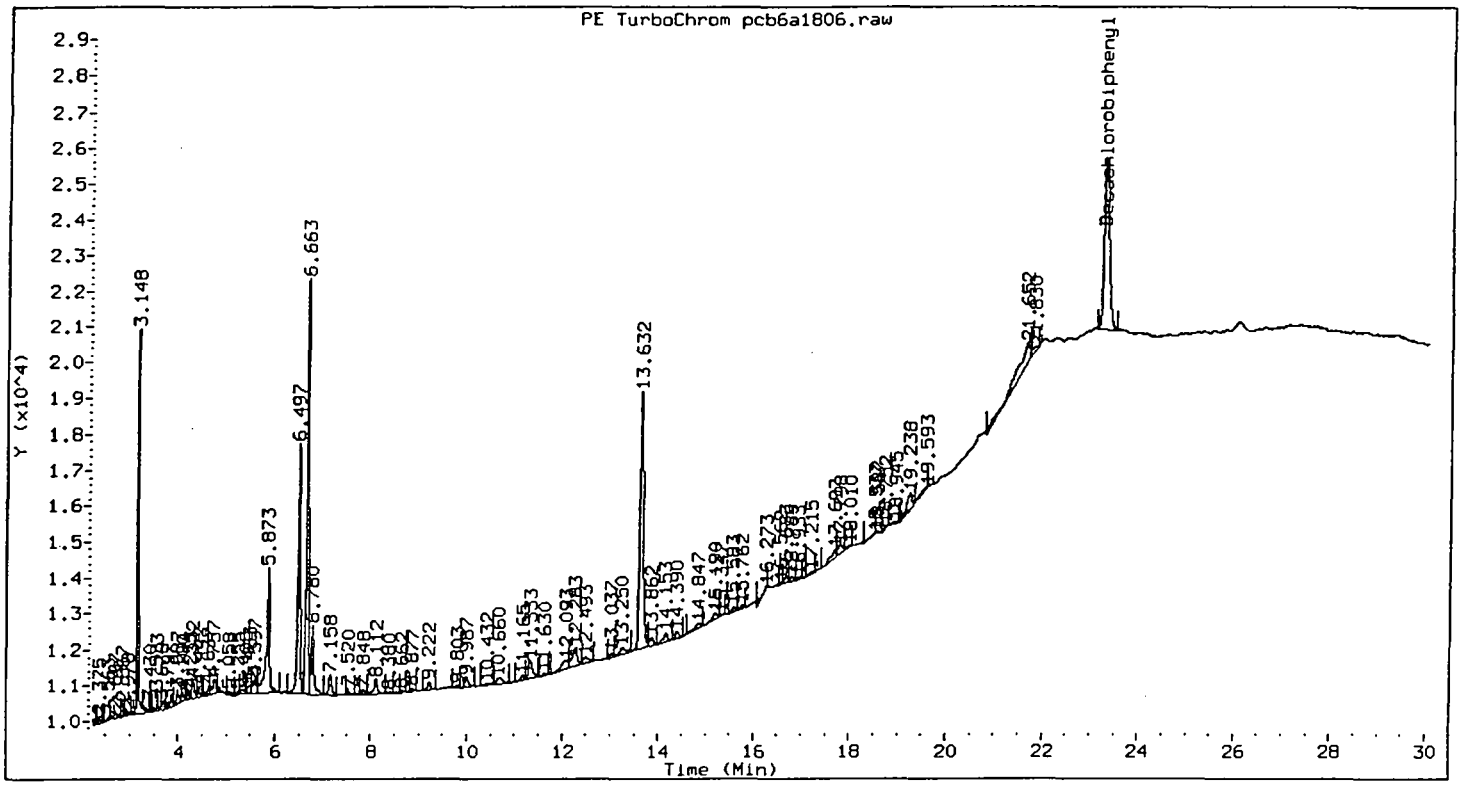
Date Sampled: 10/14/99
Date Received: 10/15/99
Date Extracted: 10/20/99
Date Analyzed: 10/22/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1806.d
Rear File ID: pcb6b1806.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 10

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	ND	36.5	R
Aroclor-1221	ND	36.5	R
Aroclor-1232	ND	36.5	R
Aroclor-1242	ND	36.5	R
Aroclor-1248	ND	36.5	R
Aroclor-1254	ND	36.5	R
Aroclor-1260	ND	36.5	R

Data File: /chem/HP68906.i/8082/front/10-19-99/21oct99a.b/pcb6a1806.d Page 1
Report Date 12/05/1999 11:01

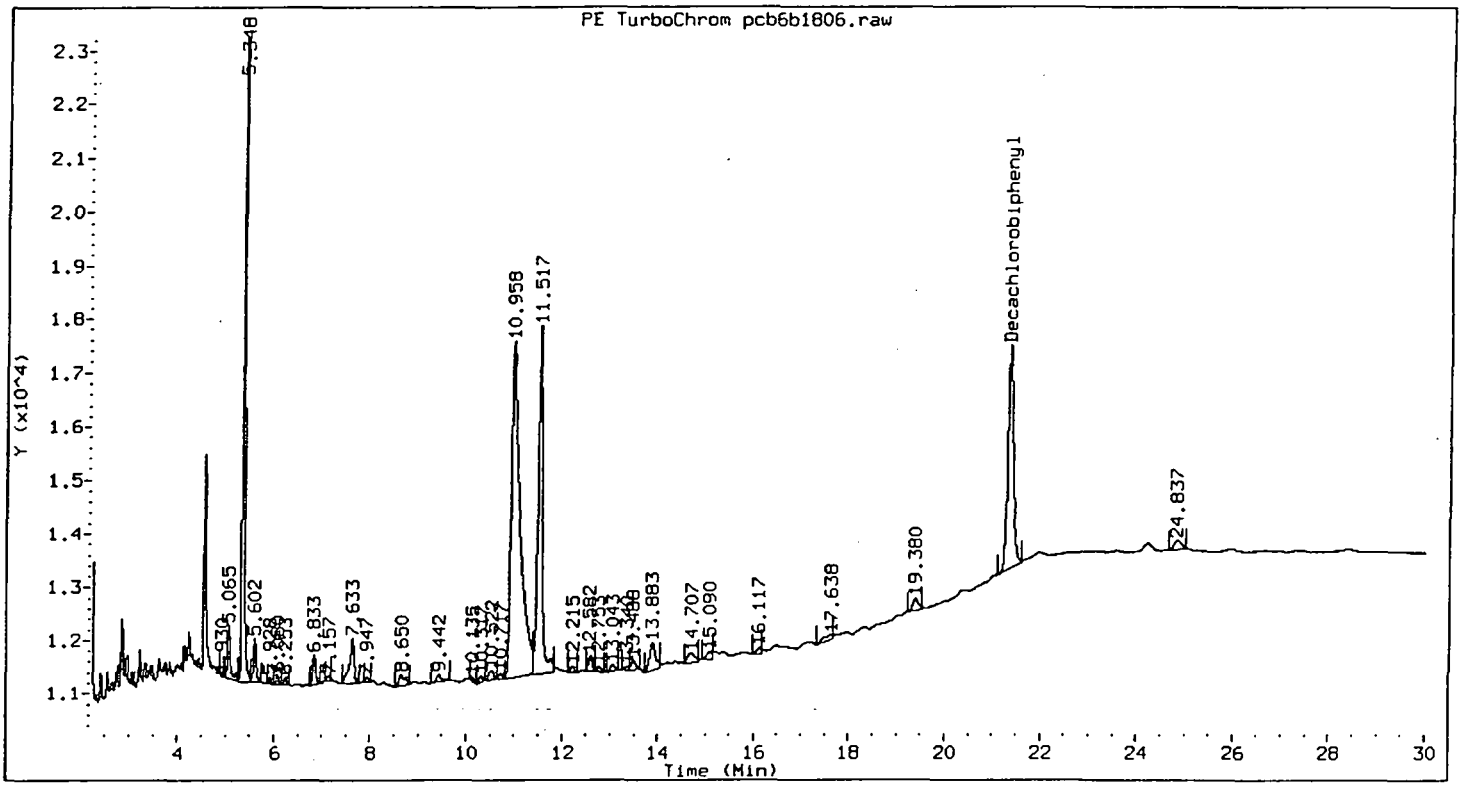


Method : /chem/HP68906.i/8082/front/10-19-99/21oct99a.b/Xf8082.m
Sample Info : 94143-011
Lab ID : 94143-011 Inst ID : HP68906.i
Inj Date : 22-OCT-1999 02:24 Dil Factor : 1
Operator : DavidW Sample Matrix : SOIL
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Decachlorobiphenyl	23.282	23.280	0.002	35194	12.904	4.758

12/7/99

Data File: /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b/pcb6b1806.d Page 1
Report Date 12/05/1999 11:01



Method : /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b/Xr8082.m
Sample Info : 94143-011
Lab ID : 94143-011 Inst ID : HP68906.i
Inj Date : 22-OCT-1999 02:24 Dil Factor : 1
Operator : DavidW Sample Matrix : SOIL
Cpnd Sublist: PCB8082 Sample Type: SAMPLE

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Decachlorobiphenyl	(M)	21.348	21.347	0.002	34151	11.307	4.169

COMMENTS:

M - Compound response manually integrated.

12/5/99

Severn Trent Laboratories - Whippany

ient ID: **SO-11MS**
ite:

Lab Sample ID: **94143-011MS**
Lab Job No: 94127

ate Sampled: 10/14/99
ate Received: 10/15/99
te Extracted: 10/20/99
te Analyzed: 10/22/99
C Front Column: DB-1701
Rear Column: DB-608
strument ID: HP68906.i
ront File ID: pcb6a1816.d
ear File ID: pcb6b1816.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 9

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

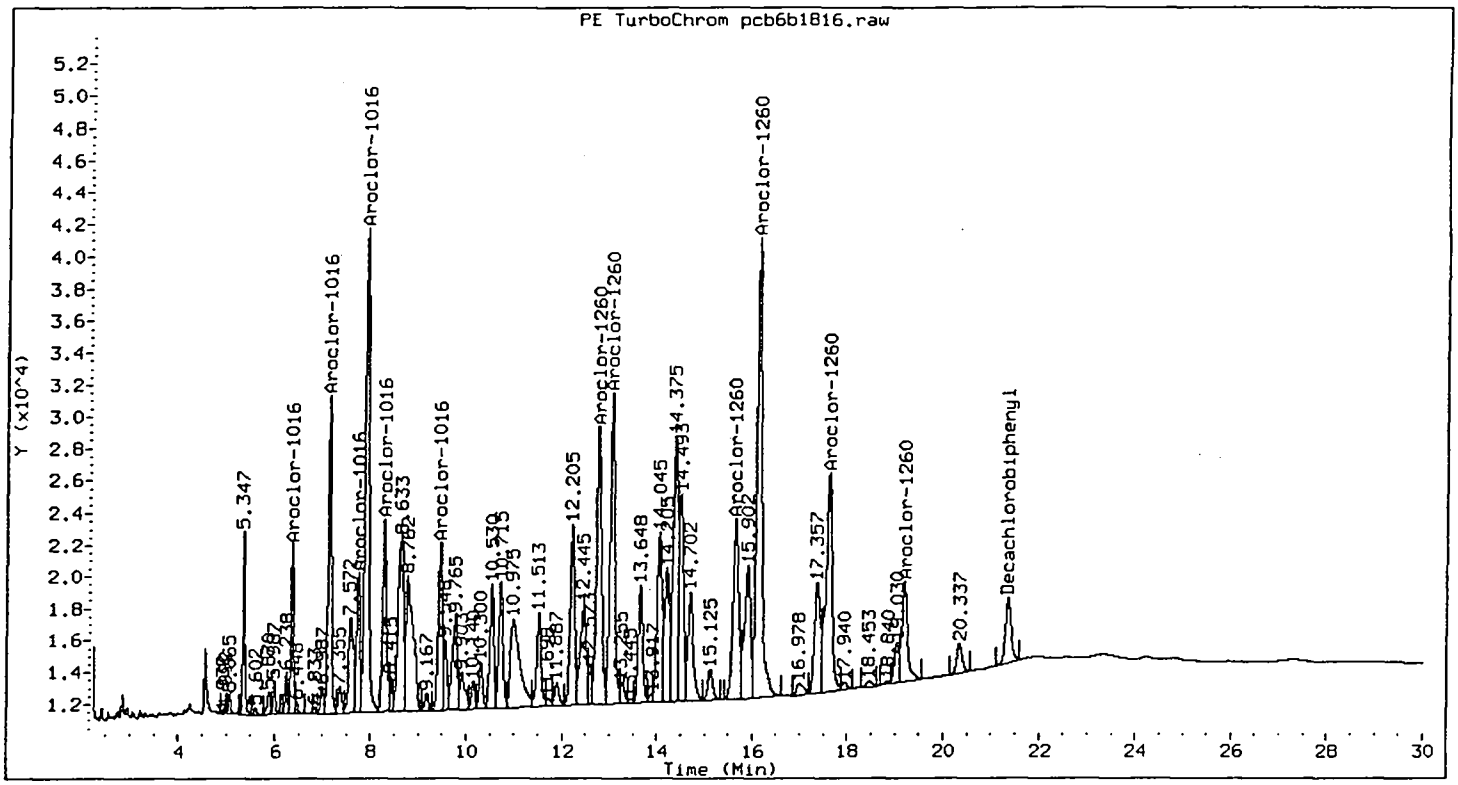
arameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
roclor-1016	300	36.1	F
roclor-1221	ND	36.1	R
oclor-1232	ND	36.1	R
oclor-1242	ND	36.1	R
roclor-1248	ND	36.1	R
oclor-1254	ND	36.1	R
oclor-1260	307	36.1	F

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Decachlorobiphenyl	23.280	23.280	0.000	36650	13.438	4.895

COMMENTS:

M - Compound response manually integrated.

Data File: /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b/pcb6b1816.d Page 1
Report Date 12/05/1999 10:55



Method : /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b/Xr8082.m
Sample Info : 94143-011MS
Lab ID : 94143-011MS
Inj Date : 22-OCT-1999 08:43
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: MS

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	6.352	6.350	0.002	40364	768.610	279.985
(2)		7.132	7.130	0.002	93855	746.027	271.759
(3)		7.740	7.738	0.002	42310	766.188	279.103
(4)		7.902	7.900	0.002	178520	781.589	284.713
(5)		8.272	8.270	0.002	65283	752.464	274.104
(6)		9.448	9.445	0.003	65194	758.192	276.190
Average of peak concentrations:							278.00
Aroclor-1260	(M)	12.750	12.750	0.000	132489	736.435	268.265
(2)		13.037	13.035	0.002	137657	730.903	266.250
(3)		15.640	15.640	0.000	92075	713.953	260.075
(4)		16.113	16.112	0.002	222333	748.723	272.741
(5)		17.607	17.605	0.002	128213	730.272	266.020
(6)		19.182	19.182	0.000	53477	751.383	273.710
Average of peak concentrations:							268.00

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Decachlorobiphenyl	(M)	21.348	21.347	0.002	34162	11.311	4.120

COMMENTS:

M - Compound response manually integrated.

Severn Trent Laboratories - Whippany

Client ID: **SO-11MSD**
Site:

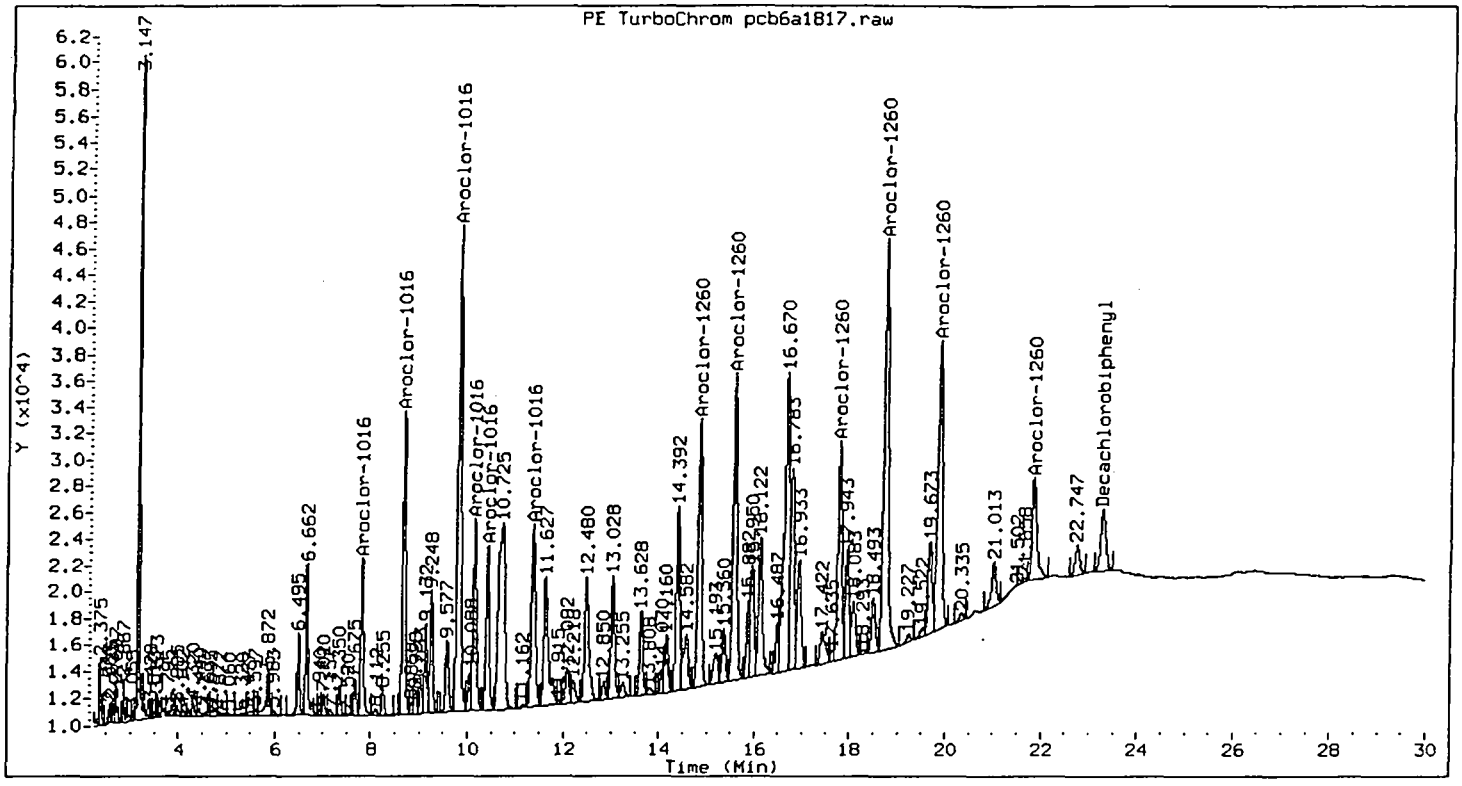
Lab Sample ID: **94143-011MSD**
Lab Job No: 94127

Date Sampled: 10/14/99
Date Received: 10/15/99
Date Extracted: 10/20/99
Date Analyzed: 10/22/99
GC Front Column: DB-1701
GC Rear Column: DB-608
Instrument ID: HP68906.i
Front File ID: pcb6a1817.d
Rear File ID: pcb6b1817.d

Matrix: SOIL
Level: LOW
Sample Weight: 30 g
Extract Final Volume: 10.0 ml
Dilution Factor: 1.0
% Moisture: 9

ORGANOCHLORINE PCBs - GC/ECD
METHOD 8082

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg	Column
Aroclor-1016	324	35.9	F
Aroclor-1221	ND	35.9	R
Aroclor-1232	ND	35.9	R
Aroclor-1242	ND	35.9	R
Aroclor-1248	ND	35.9	R
Aroclor-1254	ND	35.9	R
Aroclor-1260	328	35.9	F



Method : /chem/HP68906.i/8082/front/10-19-99/21oct99a.b/Xf8082.m
Sample Info : 94143-011MSD
Lab ID : 94143-011MSD
Inj Date : 22-OCT-1999 09:21
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: MSD

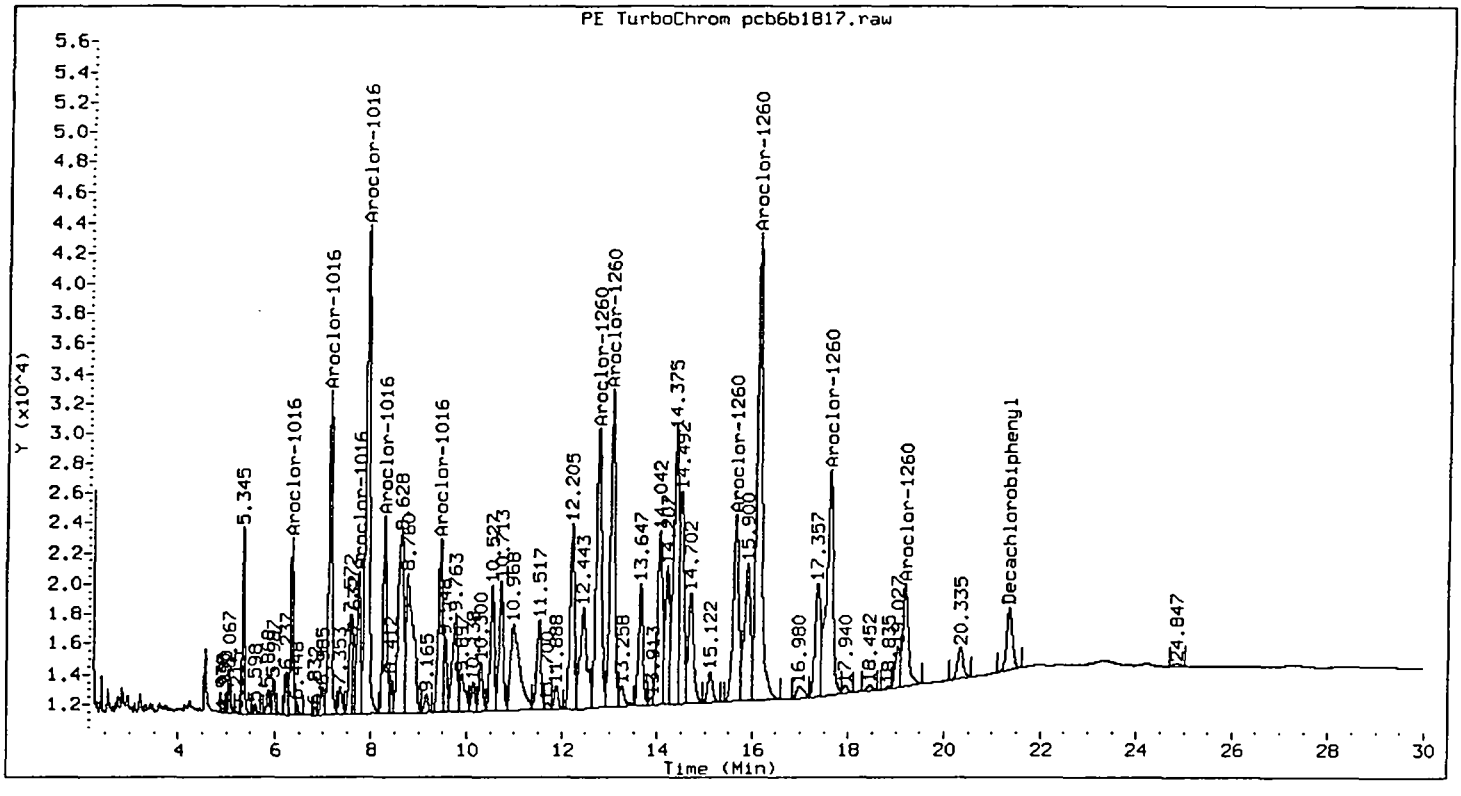
Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Aroclor-1016	(M)	7.810	7.812	0.002	45879	898.906	326.368
(2)		8.665	8.667	0.002	95175	873.482	317.137
(3)		9.807	9.807	0.000	179095	904.021	328.225
(4)		10.142	10.140	0.002	69320	872.848	316.907
(5)		10.417	10.417	0.000	54495	908.035	329.683
(6)		11.362	11.360	0.002	81865	896.945	325.656
Average of peak concentrations:							324.00
Aroclor-1260	(M)	14.843	14.845	0.002	112850	875.792	317.976
(2)		15.573	15.575	0.002	134701	894.268	324.684
(3)		17.778	17.780	0.002	98235	927.493	336.747
(4)		18.727	18.727	0.000	199555	916.125	332.620
(5)		19.860	19.862	0.002	147736	915.133	332.260
(6)		21.842	21.842	0.000	52708	898.283	326.142
Average of peak concentrations:							328.00

12/5/99

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Decachlorobiphenyl	23.282	23.280	0.002	35030	12.844	4.663

COMMENTS:

M - Compound response manually integrated.



Method : /chem/HP68906.i/8082/rear/10-19-99/21oct99a.b/Xr8082.m
Sample Info : 94143-011MSD
Lab ID : 94143-011MSD
Inj Date : 22-OCT-1999 09:21
Operator : DavidW
Cpnd Sublist: PCB8082

Inst ID : HP68906.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: MSD

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ug/kg)
Aroclor-1016	(M)	6.350	6.350	0.000	44194	841.540	305.540
(2)		7.130	7.130	0.000	101864	809.689	293.976
(3)		7.738	7.738	0.000	46264	837.791	304.179
(4)		7.900	7.900	0.000	193184	845.790	307.083
(5)		8.270	8.270	0.000	71367	822.589	298.660
(6)		9.447	9.445	0.002	70301	817.586	296.843
Average of peak concentrations:							301.00
Aroclor-1260	(M)	12.752	12.750	0.002	142313	791.041	287.205
(2)		13.035	13.035	0.000	148701	789.542	286.661
(3)		15.645	15.640	0.005	99341	770.294	279.673
(4)		16.113	16.112	0.002	241205	812.276	294.915
(5)		17.607	17.605	0.002	140928	802.694	291.436
(6)		19.183	19.182	0.002	56942	800.069	290.483
Average of peak concentrations:							288.00

12/5/99

Compounds		RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ug/kg)
Decachlorobiphenyl	(M)	21.345	21.347	0.002	34356	11.375	4.130

COMMENTS:

M - Compound response manually integrated.

EXTRACTIONS LOG

PCB

BOX # 137

000779

John K.

Extraction date	Spike witness	Concentration date	Cleanup
10.20.99	Steve B.	10.21.99	acid, copper

KAH

Surrogate	Blank spike	MS	MSD
SS1319E 1ml	SS1334E 1ml	SS1334E 1ml	SS1334E 1ml

Sample #	Initial volume	Initial pH	BN pH	AE pH	Final volume	Comments	% SOLIDS
94127.18	30.0				10ml		80.3
94127.25	30.1						43.9
94143.11	30.1						
94143.12	30.0						
94143.13	30.2						
94143.14	30.4						
94143.15	30.0						
94143.16	30.5						
94143.17	30.0						
94143.18	30.4						
94143.19	30.2						
94143.20	30.1						
94143.11MS	30.2						
94143.11MSD	30.3						
MB	30.0						
BS	30.0						

(11/2/99

AEN/NJ

Organic Extractions -AQUEOUS / Matrix

Batch: 17639 Extract File#: 1128 Extraction Method: SEP FUNNEL Date: 19-OCT-99 Analyst: John M. Kopinski

Luis Batch: WG41688 Relinquished To Storage(Init/Date): _____ Concentration (Finish) Date: _____ Analyst:

Analysis: PCB-8082-8 Removed From Storage(Init/Date): _____ 10/28/99 1411 [redacted] cut

Returned To Storage(Init/Date): _____

BS LOT #: SS1334E MS LOT #: SS1334E MSD LOT #: SS1334E

BS LOT VOLUME: .2ml MS LOT VOLUME: .2ml MSD LOT VOLUME: .2ml Spike witnessed by: Stephen Barnhart

Lab ID	Client ID	Sample Vol	Int. pH	BN pH	AE pH	Initial Vol.	Split Aliquot	Final Vol.	Surr. Lot	Vol	Comments
94127019	SW2-2-01	1000	7					2ml	SS1319E	.2 ml	PCB + ~~PCB~~
94127020	SW2-2-03	950	6						SS1319E	.2 ml	
94127021	FB-101499	900	6						SS1319E	.2 ml	
94127026	SW2-3-01	970	6						SS1319E	.2 ml	
94128036	FB101299	1000	6						SS1319E	.2 ml	PCB only
QE-17639E	BLANK	1000	5						SS1319E	.2 ml	
QE-17639ES	BL.SP.	1000	5						SS1319E	.2 ml	
MS-127120		500	6								
MSD-127120		500	6								

Pest + PCB

000780

NORTHERN ECOLOGICAL ASSOCIATES INC

New York Office:
33 Park Street
Canton, New York 13617

Corporate Headquarters:
451 Presumpscot Street
Portland, Maine 04103

APPENDIX D, VOLUME VI OF VI

FINAL
FORMER STEWART AIR FORCE BASE (AFB)
HTRW INVESTIGATION

NEWBURGH, NEW YORK

Contract Number: DACW51-97-D-0010
Delivery Order No. 61

Prepared for:

U.S. Army Corps of Engineers
New York District
26 Federal Plaza
New York, New York 10278-0090

Prepared by:

Ogden Environmental and Energy Services Co., Inc.
Northern Ecological Associates, Inc.

MARCH 2000

Committed To *Your* Success

Severn Trent Laboratories
628 Route 10
Whippany, NJ 07981

Tel: (973) 428-8181
Fax: (973) 428-5222

NYSDEC CATEGORY B

SAMPLING DATE OCTOBER 14, 1999

OGDEN ENVIRONMENTAL

PROJECT: STEWART AFB 770760061

PREPARED BY:

SEVERN TRENT LABORATORIES, INC.

(CERTIFICATION NUMBER 10997)

STL JOB NO: 20990-94127

VOLUME III OF III

METALS

Metals Analysis Results

Prepared For:
Ogden Environmental

STL Sample No.: 94127018
Matrix: Soil
Percent Solids: 80.3

Units: mg/kg

Client ID: S2-2-01
Sample Date: 10/14/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	11/04/99 16:54	**3,350**		1.36	24.9	1.00	WG50025
7440-36-0	Antimony	ICP-TR	11/04/99 16:54	**0.173**	U	0.173	1.24	1.00	WG50025
7440-38-2	Arsenic	ICP-TR	11/03/99 18:46	**2.73**		0.396	0.996	1.00	WG50025
7440-39-3	Barium	ICP-TR	11/04/99 16:54	**14.1**		0.0890	1.24	1.00	WG50025
7440-41-7	Beryllium	ICP-TR	11/04/99 16:54	**0.188**	B	0.0270	0.498	1.00	WG50025
7440-43-9	Cadmium	ICP-TR	11/04/99 16:54	**0.638**		0.0320	0.498	1.00	WG50025
7440-70-2	Calcium	ICP-TR	11/05/99 12:40	**87,900**		40.7	3,110	5.00	WG50025
7440-47-3	Chromium	ICP-TR	11/04/99 16:54	**10.2**		0.144	3.11	1.00	WG50025
7440-48-4	Cobalt	ICP-TR	11/04/99 16:54	**2.76**	B	0.0436	6.23	1.00	WG50025
7440-50-8	Copper	ICP-TR	11/04/99 16:54	**9.72**		0.0555	3.11	1.00	WG50025
7439-89-6	Iron	ICP-TR	11/04/99 16:54	**9,970**		10.1	12.4	1.00	WG50025
7439-92-1	Lead	ICP-TR	11/04/99 16:54	**26.5**		0.152	0.374	1.00	WG50025
7439-95-4	Magnesium	ICP-TR	11/04/99 16:54	**44,400**		1.88	623	1.00	WG50025
7439-96-5	Manganese	ICP-TR	11/04/99 16:54	**285**		0.0564	1.87	1.00	WG50025
7439-97-6	Mercury	CV	12/01/99 13:33	**0.0415**	U	0.0415	0.0415	1.00	WG60134
7440-02-0	Nickel	ICP-TR	11/04/99 16:54	**7.83**		0.0768	1.24	1.00	WG50025
7440-09-7	Potassium	ICP-TR	11/04/99 16:54	**267**	B	6.33	623	1.00	WG50025
7782-49-2	Selenium	ICP-TR	11/04/99 16:54	**0.530**	U	0.530	0.623	1.00	WG50025
7440-22-4	Silver	ICP-TR	11/04/99 16:54	**0.0838**	U	0.0838	1.24	1.00	WG50025
7440-23-5	Sodium	ICP-TR	11/04/99 16:54	**50.6**	U	50.6	623	1.00	WG50025
7440-28-0	Thallium	ICP-TR	11/04/99 16:54	**0.315**	U	0.315	1.24	1.00	WG50025
7440-62-2	Vanadium	ICP-TR	11/04/99 16:54	**6.44**		0.0332	6.23	1.00	WG50025
7440-66-6	Zinc	ICP-TR	11/04/99 16:54	**35.1**		1.03	3.74	1.00	WG50025

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:

Ogden Environmental

STL Sample No.: 94127019
Matrix: Water

Units: ug/l

Client ID: SW2-2-01
Sample Date: 10/14/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	11/01/99 20:34	**457**		9.82	200	1.00	WG50021
7440-36-0	Antimony	ICP-TR	11/01/99 20:34	**2.39**	U	2.39	10.0	1.00	WG50021
7440-38-2	Arsenic	ICP-TR	11/01/99 20:34	**4.18**	U	4.18	8.00	1.00	WG50021
7440-39-3	Barium	ICP-TR	11/01/99 20:34	**115**		0.631	10.0	1.00	WG50021
7440-41-7	Beryllium	ICP-TR	11/01/99 20:34	**0.360**	B	0.177	4.00	1.00	WG50021
7440-43-9	Cadmium	ICP-TR	11/01/99 20:34	**0.480**	B	0.190	4.00	1.00	WG50021
7440-70-2	Calcium	ICP-TR	11/01/99 20:34	**140,000**		33.6	5,000	1.00	WG50021
7440-47-3	Chromium	ICP-TR	11/01/99 20:34	**1.23**	B	0.239	25.0	1.00	WG50021
7440-48-4	Cobalt	ICP-TR	11/01/99 20:34	**2.21**	B	0.347	50.0	1.00	WG50021
7440-50-8	Copper	ICP-TR	11/01/99 20:34	**4.82**	B	0.603	25.0	1.00	WG50021
7439-89-6	Iron	ICP-TR	11/01/99 20:34	**20,300**		52.5	100.0	1.00	WG50021
7439-92-1	Lead	ICP-TR	11/01/99 20:34	**1.31**	B	0.957	3.00	1.00	WG50021
7439-95-4	Magnesium	ICP-TR	11/01/99 20:34	**15,200**		11.9	5,000	1.00	WG50021
7439-96-5	Manganese	ICP-TR	11/01/99 20:34	**9,370**		0.373	15.0	1.00	WG50021
7439-97-6	Mercury	CV	11/03/99 14:56	**0.200**	U	0.200	0.200	1.00	WG60011
7440-02-0	Nickel	ICP-TR	11/01/99 20:34	**5.76**	B	0.443	10.0	1.00	WG50021
7440-09-7	Potassium	ICP-TR	11/01/99 20:34	**3,520**	B	40.7	5,000	1.00	WG50021
7782-49-2	Selenium	ICP-TR	11/01/99 20:34	**4.10**	B	2.04	5.00	1.00	WG50021
7440-22-4	Silver	ICP-TR	11/01/99 20:34	**0.303**	U	0.303	10.0	1.00	WG50021
7440-23-5	Sodium	ICP-TR	11/01/99 20:34	**12,700**		283	5,000	1.00	WG50021
7440-28-0	Thallium	ICP-TR	11/01/99 20:34	**2.80**	U	2.80	10.0	1.00	WG50021
7440-62-2	Vanadium	ICP-TR	11/01/99 20:34	**0.890**	B	0.189	50.0	1.00	WG50021
7440-66-6	Zinc	ICP-TR	11/01/99 20:34	**62.6**		8.66	30.0	1.00	WG50021

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:
Ogden Environmental

STL Sample No.: 94127020
Matrix: Water

Units: ug/l

Client ID: SW2-2-03
Sample Date: 10/14/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	11/01/99 20:40	**191**	B	9.82	200	1.00	WG50021
7440-36-0	Antimony	ICP-TR	11/01/99 20:40	**2.39**	U	2.39	10.0	1.00	WG50021
7440-38-2	Arsenic	ICP-TR	11/01/99 20:40	**4.18**	U	4.18	8.00	1.00	WG50021
7440-39-3	Barium	ICP-TR	11/01/99 20:40	**103**		0.631	10.0	1.00	WG50021
7440-41-7	Beryllium	ICP-TR	11/01/99 20:40	**0.370**	B	0.177	4.00	1.00	WG50021
7440-43-9	Cadmium	ICP-TR	11/01/99 20:40	**0.190**	U	0.190	4.00	1.00	WG50021
7440-70-2	Calcium	ICP-TR	11/01/99 20:40	**136,000**		33.6	5,000	1.00	WG50021
7440-47-3	Chromium	ICP-TR	11/01/99 20:40	**0.900**	B	0.239	25.0	1.00	WG50021
7440-48-4	Cobalt	ICP-TR	11/01/99 20:40	**2.05**	B	0.347	50.0	1.00	WG50021
7440-50-8	Copper	ICP-TR	11/01/99 20:40	**2.98**	B	0.603	25.0	1.00	WG50021
7439-89-6	Iron	ICP-TR	11/01/99 20:40	**15,100**		52.5	100.0	1.00	WG50021
7439-92-1	Lead	ICP-TR	11/01/99 20:40	**0.957**	U	0.957	3.00	1.00	WG50021
7439-95-4	Magnesium	ICP-TR	11/01/99 20:40	**14,700**		11.9	5,000	1.00	WG50021
7439-96-5	Manganese	ICP-TR	11/01/99 20:40	**9,170**		0.373	15.0	1.00	WG50021
7439-97-6	Mercury	CV	11/03/99 14:58	**0.200**	U	0.200	0.200	1.00	WG60011
7440-02-0	Nickel	ICP-TR	11/01/99 20:40	**4.78**	B	0.443	10.0	1.00	WG50021
7440-09-7	Potassium	ICP-TR	11/01/99 20:40	**3,320**	B	40.7	5,000	1.00	WG50021
7782-49-2	Selenium	ICP-TR	11/01/99 20:40	**2.04**	U	2.04	5.00	1.00	WG50021
7440-22-4	Silver	ICP-TR	11/01/99 20:40	**0.303**	U	0.303	10.0	1.00	WG50021
7440-23-5	Sodium	ICP-TR	11/01/99 20:40	**12,500**		283	5,000	1.00	WG50021
7440-28-0	Thallium	ICP-TR	11/01/99 20:40	**2.80**	U	2.80	10.0	1.00	WG50021
7440-62-2	Vanadium	ICP-TR	11/01/99 20:40	**0.360**	B	0.189	50.0	1.00	WG50021
7440-66-6	Zinc	ICP-TR	11/01/99 20:40	**36.8**		8.66	30.0	1.00	WG50021

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:
Ogden Environmental

STL Sample No.: 94127021
Matrix: Water

Units: ug/l

Client ID: FB-101499
Sample Date: 10/14/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	11/01/99 20:46	**13.6**	B	9.82	200	1.00	WG50021
7440-36-0	Antimony	ICP-TR	11/01/99 20:46	**2.39**	U	2.39	10.0	1.00	WG50021
7440-38-2	Arsenic	ICP-TR	11/01/99 20:46	**4.18**	U	4.18	8.00	1.00	WG50021
7440-39-3	Barium	ICP-TR	11/01/99 20:46	**0.631**	U	0.631	10.0	1.00	WG50021
7440-41-7	Beryllium	ICP-TR	11/01/99 20:46	**0.230**	B	0.177	4.00	1.00	WG50021
7440-43-9	Cadmium	ICP-TR	11/01/99 20:46	**0.190**	U	0.190	4.00	1.00	WG50021
7440-70-2	Calcium	ICP-TR	11/01/99 20:46	**131**	B	33.6	5,000	1.00	WG50021
7440-47-3	Chromium	ICP-TR	11/01/99 20:46	**0.239**	U	0.239	25.0	1.00	WG50021
7440-48-4	Cobalt	ICP-TR	11/01/99 20:46	**0.347**	U	0.347	50.0	1.00	WG50021
7440-50-8	Copper	ICP-TR	11/01/99 20:46	**0.730**	B	0.603	25.0	1.00	WG50021
7439-89-6	Iron	ICP-TR	11/01/99 20:46	**52.5**	U	52.5	100.0	1.00	WG50021
7439-92-1	Lead	ICP-TR	11/01/99 20:46	**0.957**	U	0.957	3.00	1.00	WG50021
7439-95-4	Magnesium	ICP-TR	11/01/99 20:46	**34.9**	B	11.9	5,000	1.00	WG50021
7439-96-5	Manganese	ICP-TR	11/01/99 20:46	**1.37**	B	0.373	15.0	1.00	WG50021
7439-97-6	Mercury	CV	11/03/99 15:00	**0.200**	U	0.200	0.200	1.00	WG60011
7440-02-0	Nickel	ICP-TR	11/01/99 20:46	**0.730**	B	0.443	10.0	1.00	WG50021
7440-09-7	Potassium	ICP-TR	11/01/99 20:46	**47.5**	B	40.7	5,000	1.00	WG50021
7782-49-2	Selenium	ICP-TR	11/01/99 20:46	**2.04**	U	2.04	5.00	1.00	WG50021
7440-22-4	Silver	ICP-TR	11/01/99 20:46	**0.303**	U	0.303	10.0	1.00	WG50021
7440-23-5	Sodium	ICP-TR	11/01/99 20:46	**283**	U	283	5,000	1.00	WG50021
7440-28-0	Thallium	ICP-TR	11/01/99 20:46	**2.80**	U	2.80	10.0	1.00	WG50021
7440-62-2	Vanadium	ICP-TR	11/01/99 20:46	**0.189**	U	0.189	50.0	1.00	WG50021
7440-66-6	Zinc	ICP-TR	11/01/99 20:46	**30.8**		8.66	30.0	1.00	WG50021

All Concentrations,RL's, and MDL's are corrected for Percent Solids

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:
Ogden Environmental

STL Sample No.: 94127025
Matrix: Soil
Percent Solids: 43.9

Units: mg/kg

Client ID: S2-3-01
Sample Date: 10/14/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	11/04/99 17:00	**7,270**		2.48	45.6	1.00	WG50025
7440-36-0	Antimony	ICP-TR	11/04/99 17:00	**0.317**	U	0.317	2.28	1.00	WG50025
7440-38-2	Arsenic	ICP-TR	11/03/99 18:52	**10.2**		0.724	1.82	1.00	WG50025
7440-39-3	Barium	ICP-TR	11/04/99 17:00	**178**		0.163	2.28	1.00	WG50025
7440-41-7	Beryllium	ICP-TR	11/04/99 17:00	**0.0494**	U	0.0494	0.911	1.00	WG50025
7440-43-9	Cadmium	ICP-TR	11/04/99 17:00	**0.756**	B	0.0585	0.911	1.00	WG50025
7440-70-2	Calcium	ICP-TR	11/04/99 17:00	**6,780**		14.9	1,140	1.00	WG50025
7440-47-3	Chromium	ICP-TR	11/04/99 17:00	**15.7**		0.264	5.69	1.00	WG50025
7440-48-4	Cobalt	ICP-TR	11/04/99 17:00	**5.90**	B	0.0797	11.4	1.00	WG50025
7440-50-8	Copper	ICP-TR	11/04/99 17:00	**33.0**		0.102	5.69	1.00	WG50025
7439-89-6	Iron	ICP-TR	11/04/99 17:00	**90,300**		18.4	22.8	1.00	WG50025
7439-92-1	Lead	ICP-TR	11/04/99 17:00	**50.7**		0.278	0.683	1.00	WG50025
7439-95-4	Magnesium	ICP-TR	11/04/99 17:00	**3,450**		3.44	1,140	1.00	WG50025
7439-96-5	Manganese	ICP-TR	11/04/99 17:00	**4,600**		0.103	3.42	1.00	WG50025
7439-97-6	Mercury	CV	12/01/99 13:35	**0.107**		0.0759	0.0759	1.00	WG60134
7440-02-0	Nickel	ICP-TR	11/04/99 17:00	**21.4**		0.140	2.28	1.00	WG50025
7440-09-7	Potassium	ICP-TR	11/04/99 17:00	**751**	B	11.6	1,140	1.00	WG50025
7782-49-2	Selenium	ICP-TR	11/04/99 17:00	**5.42**		0.970	1.14	1.00	WG50025
7440-22-4	Silver	ICP-TR	11/04/99 17:00	**0.153**	U	0.153	2.28	1.00	WG50025
7440-23-5	Sodium	ICP-TR	11/04/99 17:00	**92.5**	U	92.5	1,140	1.00	WG50025
7440-28-0	Thallium	ICP-TR	11/04/99 17:00	**5.37**		0.576	2.28	1.00	WG50025
7440-62-2	Vanadium	ICP-TR	11/04/99 17:00	**31.1**		0.0608	11.4	1.00	WG50025
7440-66-6	Zinc	ICP-TR	11/04/99 17:00	**234**		1.89	6.83	1.00	WG50025

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:
Ogden Environmental

STL Sample No.: 94127026
Matrix: Water

Units: ug/l

Client ID: SW2-3-01
Sample Date: 10/14/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	11/01/99 20:52	**655**		9.82	200	1.00	WG50021
7440-36-0	Antimony	ICP-TR	11/01/99 20:52	**2.39**	U	2.39	10.0	1.00	WG50021
7440-38-2	Arsenic	ICP-TR	11/01/99 20:52	**4.18**	U	4.18	8.00	1.00	WG50021
7440-39-3	Barium	ICP-TR	11/01/99 20:52	**198**		0.631	10.0	1.00	WG50021
7440-41-7	Beryllium	ICP-TR	11/01/99 20:52	**0.177**	U	0.177	4.00	1.00	WG50021
7440-43-9	Cadmium	ICP-TR	11/01/99 20:52	**1.03**	B	0.190	4.00	1.00	WG50021
7440-70-2	Calcium	ICP-TR	11/01/99 20:52	**149,000**		33.6	5,000	1.00	WG50021
7440-47-3	Chromium	ICP-TR	11/01/99 20:52	**1.74**	B	0.239	25.0	1.00	WG50021
7440-48-4	Cobalt	ICP-TR	11/01/99 20:52	**1.41**	B	0.347	50.0	1.00	WG50021
7440-50-8	Copper	ICP-TR	11/01/99 20:52	**5.13**	B	0.603	25.0	1.00	WG50021
7439-89-6	Iron	ICP-TR	11/01/99 20:52	**37,500**		52.5	100.0	1.00	WG50021
7439-92-1	Lead	ICP-TR	11/01/99 20:52	**3.84**		0.957	3.00	1.00	WG50021
7439-95-4	Magnesium	ICP-TR	11/01/99 20:52	**17,200**		11.9	5,000	1.00	WG50021
7439-96-5	Manganese	ICP-TR	11/01/99 20:52	**9,630**		0.373	15.0	1.00	WG50021
7439-97-6	Mercury	CV	11/03/99 15:01	**0.200**	U	0.200	0.200	1.00	WG60011
7440-02-0	Nickel	ICP-TR	11/01/99 20:52	**4.75**	B	0.443	10.0	1.00	WG50021
7440-09-7	Potassium	ICP-TR	11/01/99 20:52	**3,730**	B	40.7	5,000	1.00	WG50021
7782-49-2	Selenium	ICP-TR	11/01/99 20:52	**2.04**	U	2.04	5.00	1.00	WG50021
7440-22-4	Silver	ICP-TR	11/01/99 20:52	**0.303**	U	0.303	10.0	1.00	WG50021
7440-23-5	Sodium	ICP-TR	11/01/99 20:52	**16,400**		283	5,000	1.00	WG50021
7440-28-0	Thallium	ICP-TR	11/01/99 20:52	**2.80**	U	2.80	10.0	1.00	WG50021
7440-62-2	Vanadium	ICP-TR	11/01/99 20:52	**2.63**	B	0.189	50.0	1.00	WG50021
7440-66-6	Zinc	ICP-TR	11/01/99 20:52	**82.2**		8.66	30.0	1.00	WG50021

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Initial and Continuing Calibration Blank Report

STL Job: 94127

Units: ug/l

	11/01/99 15:18	11/01/99 15:54	11/01/99 17:05	11/01/99 17:59	11/01/99 19:11	11/01/99 20:22	11/01/99 21:28
	ICB	CCB	CCB	CCB	CCB	CCB	CCB
Aluminum	32.7 B	23.6 U	23.6 U	23.6 U	23.6 U	23.6 U	23.6 U
Antimony	1.55 U	1.74 B	1.68 B	1.55 U	1.55 U	1.55 U	1.55 U
Arsenic	2.28 B	2.79 B	2.08 B	2.11 B	1.24 U	-3.74 B	3.54 B
Barium	0.880 B	0.170 U	0.420 B	0.270 B	0.180 B	0.310 B	0.290 B
Beryllium	0.630 B	0.370 B	0.580 B	0.470 B	0.590 B	0.490 B	0.440 B
Cadmium	0.750 B	0.250 U	0.430 B	0.260 B	0.250 U	0.290 B	0.250 U
Calcium	61.7 U	61.7 U	61.7 U	61.7 U	61.7 U	61.7 U	61.7 U
Chromium	0.440 B	0.320 U	0.440 B	0.320 U	0.320 U	0.320 U	0.320 U
Cobalt	0.550 B	0.500 B	0.500 B	0.610 B	0.320 U	0.440 B	0.520 B
Copper	0.890 B	0.550 U	0.720 B	0.550 U	0.550 U	0.550 U	0.550 U
Iron	23.4 U	23.4 U	23.4 U	23.4 U	-25.0 B	23.4 U	23.4 U
Lead	1.62 B	0.440 U	0.440 U	0.440 U	0.440 U	0.610 B	0.440 U
Magnesium	29.0 U	29.0 U	29.0 U	29.0 U	29.0 U	29.0 U	29.0 U
Manganese	0.630 B	0.410 U	0.680 B	0.410 U	0.460 B	0.410 U	0.410 U
Nickel	0.880 B	0.690 U	0.690 U	0.690 U	0.690 U	0.690 U	0.690 U
Potassium	57.9 B	80.3 B	85.5 B	76.8 B	60.6 B	55.1 U	55.1 B
Selenium	2.98 B	2.55 U	2.55 U	3.53 B	2.55 U	2.55 U	2.55 U
Silver	0.470 U	0.470 U	0.470 U	0.470 U	0.470 U	0.470 U	0.470 U
Sodium	-460 B	388 U	388 U	388 U	388 U	388 U	-418 B
Thallium	2.01 U	3.08 B	2.01 U	2.01 U	2.01 U	2.01 U	2.31 B
Vanadium	0.580 B	0.320 B	0.400 B	0.310 B	0.320 B	0.460 B	0.260 U
Zinc	2.70 B	3.76 B	4.84 B	3.22 B	3.81 B	3.71 B	2.46 B

Initial and Continuing Calibration Blank Report

STL Job: 94127

Units: ug/l

	11/03/99 14:01	11/03/99 14:25	11/03/99 14:50	11/03/99 15:14
	ICB	CCB	CCB	CCB
Mercury	0.200 U	0.200 U	0.200 U	0.200 U

	11/03/99 15:34	11/03/99 16:09	11/03/99 17:19	11/03/99 18:29	11/03/99 19:27
	ICB	CCB	CCB	CCB	CCB
Aluminum	-51.2 B	-90.2 B	-113 B	-130 B	-160 B
Antimony	2.43 B	1.55 U	1.55 U	-1.64 B	1.55 U
Arsenic	1.48 B	1.24 U	1.24 U	1.24 U	1.24 U
Barium	0.170 U	0.190 B	0.190 B	0.330 B	0.170 U
Beryllium	0.300 U	0.300 U	0.300 U	0.350 B	0.300 U
Cadmium	0.250 U	0.310 B	0.300 B	0.380 B	0.390 B
Calcium	61.7 U	61.7 U	61.7 U	61.7 U	61.7 U
Chromium	1.25 B	0.320 U	0.320 U	0.320 U	0.320 U
Cobalt	1.14 B	0.320 U	-0.610 B	-0.360 B	-0.370 B
Copper	1.42 B	2.18 B	3.59 B	5.37 B	6.83 B
Iron	23.4 U	23.4 U	23.4 U	23.4 U	23.4 U
Lead	0.440 U	-0.570 B	0.440 U	0.440 U	0.440 U
Magnesium	29.0 U	29.0 U	29.0 U	29.0 U	29.0 U
Manganese	0.410 U	0.410 U	0.410 U	0.410 U	0.410 U
Nickel	0.690 U	0.690 U	0.690 U	0.690 U	0.690 U
Potassium	-91.6 B	-83.1 B	-75.2 B	55.1 U	55.1 U
Selenium	2.55 U	2.55 U	2.55 U	2.55 U	2.55 U
Silver	1.75 B	0.820 B	0.470 U	0.470 U	0.780 B
Thallium	2.01 U	2.01 U	2.01 U	6.56 B	2.01 U
Vanadium	1.85 B	1.26 B	1.12 B	1.05 B	0.850 B
Zinc	2.08 B	1.92 B	1.41 B	1.64 B	1.69 B

Initial and Continuing Calibration Blank Report

STL Job: 94127

Units: ug/l

	11/04/99 13:08	11/04/99 13:44	11/04/99 14:55	11/04/99 16:00	11/04/99 17:12	11/04/99 18:23	11/04/99 19:23
	ICB	CCB	CCB	CCB	CCB	CCB	CCB
Aluminum	23.6 U	23.6 U	23.6 U	24.4 B	23.6 U	29.0 B	31.5 B
Antimony	2.46 B	1.58 B	1.87 B	2.21 B	1.55 U	1.55 U	1.55 U
Arsenic	8.18 *	2.82 B	1.57 B	7.14 B	1.48 B	4.32 B	1.96 B
Barium	0.270 B	1.08 B	0.170 U	0.170 U	0.170 U	0.170 U	0.170 U
Beryllium	0.450 B	0.300 U	0.340 B	0.550 B	0.470 B	0.520 B	0.470 B
Cadmium	0.490 B	16.9 *	0.290 B	0.370 B	0.250 U	0.250 U	0.250 B
Calcium	61.7 U	72.0 B	61.7 U	61.7 U	61.7 U	61.7 U	61.7 U
Chromium	0.320 U	0.320 U	0.320 U	0.320 U	0.320 U	0.320 U	0.320 U
Cobalt	0.320 U	0.320 U	0.320 U	0.320 U	0.320 U	0.320 U	0.320 U
Copper	0.610 B	0.550 U	0.550 U	0.550 U	-0.990 B	-1.22 B	-1.01 B
Iron	23.4 U	23.4 U	23.4 U	23.4 U	23.4 U	23.4 U	23.4 U
Lead	0.440 U	0.440 U	0.440 U	0.440 U	0.440 U	0.440 U	0.980 B
Magnesium	29.0 U	29.0 U	29.0 U	29.0 U	29.0 U	29.0 U	29.0 U
Manganese	0.440 B	0.410 U	0.410 U	0.410 B	0.690 B	0.410 U	0.410 U
Nickel	0.690 U	2.45 B	0.690 U	0.690 U	0.690 U	0.690 U	0.690 U
Potassium	88.7 B	85.8 B	55.1 U	70.3 B	55.1 U	55.1 U	55.1 U
Selenium	2.55 U	2.55 U	2.55 U	2.55 B	2.55 U	2.55 U	2.55 U
Silver	0.470 U	0.470 U	0.470 U	0.470 U	0.470 U	0.470 U	0.470 U
Sodium	388 U	388 U	388 U	388 U	388 U	388 U	388 U
Thallium	-4.32 B	2.01 U	2.01 U	2.01 U	2.01 U	2.83 B	5.31 B
Vanadium	0.390 B	0.260 U	0.260 U	0.300 B	0.260 U	0.260 U	0.260 U
Zinc	2.85 B	7.52 B	2.36 B	2.78 B	2.27 B	1.68 B	1.66 B

	12/01/99 13:24	12/01/99 13:50	12/01/99 13:59
	ICB	CCB	CCB
Mercury	0.200 U	0.200 U	0.200 U

Initial and Continuing Calibration Blank Report

STL Job: 94127

Units: ug/l

	11/05/99 11:52	11/05/99 12:28	11/05/99 13:39	11/05/99 14:09
	ICB	CCB	CCB	CCB
Aluminum	23.6 U	23.6 U	23.6 U	23.6 U
Antimony	3.65 B	2.28 B	2.08 B	1.55 U
Arsenic	1.24 U	1.24 U	-1.67 B	1.24 U
Barium	0.170 U	0.170 U	0.170 U	0.170 U
Beryllium	0.440 B	0.300 U	0.340 B	0.370 B
Cadmium	0.410 B	0.250 U	0.250 U	0.250 U
Calcium	61.7 U	61.7 U	61.7 U	61.7 U
Chromium	1.60 B	1.09 B	1.07 B	1.46 B
Cobalt	0.560 B	0.420 B	0.320 U	0.530 B
Copper	-0.790 B	-0.900 B	0.550 U	-0.620 B
Iron	39.6 B	32.3 B	31.0 B	36.5 B
Lead	1.33 B	0.600 B	0.440 U	0.440 U
Magnesium	29.0 U	29.0 U	29.0 U	29.0 U
Manganese	0.410 U	0.410 U	0.410 U	0.410 U
Nickel	0.770 B	0.690 U	0.690 U	0.690 U
Potassium	55.1 U	55.1 U	55.1 U	55.1 U
Selenium	2.55 U	2.55 U	3.36 B	2.55 U
Silver	0.470 U	0.470 U	0.470 U	0.740 B
Sodium	388 U	388 U	388 U	388 U
Thallium	2.01 U	3.52 B	2.01 U	2.01 U
Vanadium	0.550 B	0.260 U	0.260 U	0.260 U
Zinc	1.24 U	1.24 U	1.80 B	1.64 B

Initial Calibration Verification Report

STL Job No.: 94127

Instrument: CV

Units = ug/l

Analyte	Concentration	True Value	% Recovery	Analyze Date
Mercury	3.53	3.50	101.0	12/01/99 13:22

Analyte	Concentration	True Value	% Recovery	Analyze Date
Mercury	3.36	3.50	96.0	11/03/99 13:58

Instrument: ICP-TR

Units = mg/l

Analyte	Concentration	True Value	% Recovery	Analyze Date
Aluminum	500	500	100.0	11/04/99 13:02
Antimony	9.99	10.0	99.9	11/04/99 12:56
Arsenic	9.85	10.0	98.5	11/04/99 12:56
Barium	9.93	10.0	99.3	11/04/99 12:56
Beryllium	10.1	10.0	101.0	11/04/99 12:56
Cadmium	10.1	10.0	101.0	11/04/99 12:56
Calcium	501	500	100.0	11/04/99 13:02
Chromium	10.1	10.0	101.0	11/04/99 12:56
Cobalt	10.1	10.0	101.0	11/04/99 12:56
Copper	9.99	10.0	99.9	11/04/99 12:56
Iron	251	250	100.0	11/04/99 13:02
Lead	10.1	10.0	101.0	11/04/99 12:56
Magnesium	499	500	99.8	11/04/99 13:02
Manganese	9.90	10.0	99.0	11/04/99 12:56
Nickel	10.1	10.0	101.0	11/04/99 12:56
Potassium	250	250	100.0	11/04/99 13:02
Selenium	10.1	10.0	101.0	11/04/99 12:56
Silver	1.02	1.00	102.0	11/04/99 12:56
Sodium	250	250	100.0	11/04/99 13:02
Thallium	10.3	10.0	103.0	11/04/99 12:56
Vanadium	10.2	10.0	102.0	11/04/99 12:56
Zinc	9.96	10.0	99.6	11/04/99 12:56

Analyte	Concentration	True Value	% Recovery	Analyze Date
Aluminum	496	500	99.2	11/01/99 15:12
Antimony	10.1	10.0	101.0	11/01/99 15:06
Arsenic	9.97	10.0	99.7	11/01/99 15:06
Barium	9.89	10.0	98.9	11/01/99 15:06
Beryllium	10.3	10.0	103.0	11/01/99 15:06

Initial Calibration Verification Report

STL Job No.: 94127

Cadmium	10.3	10.0	103.0	11/01/99 15:06
Calcium	495	500	99.0	11/01/99 15:12
Chromium	10.3	10.0	103.0	11/01/99 15:06
Cobalt	10.3	10.0	103.0	11/01/99 15:06
Copper	9.97	10.0	99.7	11/01/99 15:06
Iron	248	250	99.2	11/01/99 15:12
Lead	10.3	10.0	103.0	11/01/99 15:06
Magnesium	496	500	99.2	11/01/99 15:12
Manganese	10.1	10.0	101.0	11/01/99 15:06
Nickel	10.2	10.0	102.0	11/01/99 15:06
Potassium	249	250	99.6	11/01/99 15:12
Selenium	10.0	10.0	100.0	11/01/99 15:06
Silver	1.01	1.00	101.0	11/01/99 15:06
Sodium	249	250	99.6	11/01/99 15:12
Thallium	10.3	10.0	103.0	11/01/99 15:06
Vanadium	10.3	10.0	103.0	11/01/99 15:06
Zinc	10.2	10.0	102.0	11/01/99 15:06

Analyte	Concentration	True Value	% Recovery	Analyze Date
Aluminum	515	500	103.0	11/05/99 11:46
Antimony	10.0	10.0	100.0	11/05/99 11:40
Arsenic	9.92	10.0	99.2	11/05/99 11:40
Barium	9.87	10.0	98.7	11/05/99 11:40
Beryllium	10.1	10.0	101.0	11/05/99 11:40
Cadmium	10.1	10.0	101.0	11/05/99 11:40
Calcium	507	500	101.0	11/05/99 11:46
Chromium	10.1	10.0	101.0	11/05/99 11:40
Cobalt	10.1	10.0	101.0	11/05/99 11:40
Copper	10.0	10.0	100.0	11/05/99 11:40
Iron	255	250	102.0	11/05/99 11:46
Lead	10.1	10.0	101.0	11/05/99 11:40
Magnesium	513	500	103.0	11/05/99 11:46
Manganese	9.93	10.0	99.3	11/05/99 11:40
Nickel	10.0	10.0	100.0	11/05/99 11:40
Potassium	260	250	104.0	11/05/99 11:46
Selenium	9.98	10.0	99.8	11/05/99 11:40
Silver	1.02	1.00	102.0	11/05/99 11:40
Sodium	257	250	103.0	11/05/99 11:46
Thallium	10.3	10.0	103.0	11/05/99 11:40
Vanadium	10.2	10.0	102.0	11/05/99 11:40

Initial Calibration Verification Report

STL Job No.: 94127

Zinc	9.96	10.0	99.6	11/05/99 11:40

Analyte	Concentration	True Value	% Recovery	Analyze Date
Aluminum	499	500	99.8	11/03/99 15:28
Antimony	9.92	10.0	99.2	11/03/99 15:22
Arsenic	9.86	10.0	98.6	11/03/99 15:22
Barium	9.82	10.0	98.2	11/03/99 15:22
Beryllium	9.87	10.0	98.7	11/03/99 15:22
Cadmium	10.1	10.0	101.0	11/03/99 15:22
Calcium	494	500	98.8	11/03/99 15:28
Chromium	9.96	10.0	99.6	11/03/99 15:22
Cobalt	9.94	10.0	99.4	11/03/99 15:22
Copper	9.96	10.0	99.6	11/03/99 15:22
Iron	249	250	99.6	11/03/99 15:28
Lead	10.3	10.0	103.0	11/03/99 15:22
Magnesium	497	500	99.4	11/03/99 15:28
Manganese	9.75	10.0	97.5	11/03/99 15:22
Nickel	9.93	10.0	99.3	11/03/99 15:22
Potassium	251	250	100.0	11/03/99 15:28
Selenium	10.1	10.0	101.0	11/03/99 15:22
Silver	0.997	1.00	99.7	11/03/99 15:22
Thallium	10.1	10.0	101.0	11/03/99 15:22
Vanadium	9.90	10.0	99.0	11/03/99 15:22
Zinc	9.80	10.0	98.0	11/03/99 15:22

Continuing Calibration Verification Report

STL Job No.: 94127

Units: mg/l

Instrument: ICP-TR

Analyte	True Value	Concentration	% Recovery
Analyze Date: 11/01/99 15:48			
Aluminum	50.00	48.3	96.6
Antimony	5.00	5.04	101.0
Arsenic	5.00	4.90	98.0
Barium	5.00	4.82	96.4
Beryllium	5.00	4.86	97.2
Cadmium	5.00	4.88	97.6
Calcium	50.00	49.2	98.4
Chromium	5.00	4.91	98.2
Cobalt	5.00	4.81	96.2
Copper	5.00	4.96	99.2
Iron	50.00	47.1	94.2
Lead	5.00	5.04	101.0
Magnesium	50.00	47.7	95.4
Manganese	5.00	4.88	97.6
Nickel	5.00	4.94	98.8
Potassium	50.00	52.7	105.0
Selenium	5.00	5.02	100.0
Silver	0.50	0.508	102.0
Sodium	50.00	48.5	97.0
Thallium	5.00	4.93	98.6
Vanadium	5.00	4.86	97.2
Zinc	5.00	4.96	99.2
Analyze Date: 11/01/99 17:00			
Aluminum	50.00	48.3	96.6
Antimony	5.00	5.04	101.0
Arsenic	5.00	4.90	98.0
Barium	5.00	4.84	96.8
Beryllium	5.00	4.83	96.6
Cadmium	5.00	4.88	97.6
Calcium	50.00	48.9	97.8
Chromium	5.00	4.90	98.0
Cobalt	5.00	4.80	96.0
Copper	5.00	4.96	99.2
Iron	50.00	47.1	94.2
Lead	5.00	5.05	101.0
Magnesium	50.00	47.6	95.2
Manganese	5.00	4.85	97.0
Nickel	5.00	4.95	99.0
Potassium	50.00	52.7	105.0
Selenium	5.00	5.06	101.0
Silver	0.50	0.509	102.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94127

Units: mg/l

Sodium	50.00	48.5	97.0
Thallium	5.00	4.91	98.2
Vanadium	5.00	4.85	97.0
Zinc	5.00	4.95	99.0
Analyze Date: 11/01/99 17:53			
Aluminum	50.00	48.5	97.0
Antimony	5.00	5.10	102.0
Arsenic	5.00	5.02	100.0
Barium	5.00	4.89	97.8
Beryllium	5.00	4.91	98.2
Cadmium	5.00	5.03	101.0
Calcium	50.00	50.1	100.0
Chromium	5.00	5.01	100.0
Cobalt	5.00	4.92	98.4
Copper	5.00	4.97	99.4
Iron	50.00	48.1	96.2
Lead	5.00	5.17	103.0
Magnesium	50.00	47.7	95.4
Manganese	5.00	4.94	98.8
Nickel	5.00	5.09	102.0
Potassium	50.00	52.5	105.0
Selenium	5.00	5.12	102.0
Silver	0.50	0.517	103.0
Sodium	50.00	48.7	97.4
Thallium	5.00	4.96	99.2
Vanadium	5.00	4.94	98.8
Zinc	5.00	5.15	103.0
Analyze Date: 11/01/99 19:05			
Aluminum	50.00	48.6	97.2
Antimony	5.00	5.09	102.0
Arsenic	5.00	4.97	99.4
Barium	5.00	4.88	97.6
Beryllium	5.00	4.88	97.6
Cadmium	5.00	4.98	99.6
Calcium	50.00	49.8	99.6
Chromium	5.00	5.00	100.0
Cobalt	5.00	4.89	97.8
Copper	5.00	4.98	99.6
Iron	50.00	47.9	95.8
Lead	5.00	5.15	103.0
Magnesium	50.00	47.9	95.8
Manganese	5.00	4.92	98.4
Nickel	5.00	5.05	101.0
Potassium	50.00	52.7	105.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94127

Units: mg/l

Selenium	5.00	5.10	102.0
Silver	0.50	0.518	104.0
Sodium	50.00	49.0	98.0
Thallium	5.00	4.96	99.2
Vanadium	5.00	4.92	98.4
Zinc	5.00	5.08	102.0
Analyze Date: 11/01/99 20:16			
Aluminum	50.00	48.1	96.2
Antimony	5.00	5.04	101.0
Arsenic	5.00	4.93	98.6
Barium	5.00	4.85	97.0
Beryllium	5.00	4.84	96.8
Cadmium	5.00	4.96	99.2
Calcium	50.00	49.3	98.6
Chromium	5.00	4.94	98.8
Cobalt	5.00	4.84	96.8
Copper	5.00	4.92	98.4
Iron	50.00	47.5	95.0
Lead	5.00	5.10	102.0
Magnesium	50.00	47.3	94.6
Manganese	5.00	4.88	97.6
Nickel	5.00	5.02	100.0
Potassium	50.00	52.1	104.0
Selenium	5.00	5.07	101.0
Silver	0.50	0.511	102.0
Sodium	50.00	48.2	96.4
Thallium	5.00	4.92	98.4
Vanadium	5.00	4.86	97.2
Zinc	5.00	5.05	101.0
Analyze Date: 11/01/99 21:22			
Aluminum	50.00	48.9	97.8
Antimony	5.00	5.11	102.0
Arsenic	5.00	5.01	100.0
Barium	5.00	4.91	98.2
Beryllium	5.00	4.92	98.4
Cadmium	5.00	5.02	100.0
Calcium	50.00	50.1	100.0
Chromium	5.00	5.01	100.0
Cobalt	5.00	4.91	98.2
Copper	5.00	4.99	99.8
Iron	50.00	48.1	96.2
Lead	5.00	5.18	104.0
Magnesium	50.00	48.0	96.0
Manganese	5.00	4.96	99.2

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94127

Units: mg/l

Nickel	5.00	5.09	102.0
Potassium	50.00	52.9	106.0
Selenium	5.00	5.12	102.0
Silver	0.50	0.518	104.0
Sodium	50.00	48.9	97.8
Thallium	5.00	5.00	100.0
Vanadium	5.00	4.93	98.6
Zinc	5.00	5.12	102.0
Analyze Date: 11/03/99 16:03			
Aluminum	50.00	48.5	97.0
Antimony	5.00	5.15	103.0
Arsenic	5.00	5.12	102.0
Barium	5.00	4.94	98.8
Beryllium	5.00	4.81	96.2
Cadmium	5.00	4.96	99.2
Calcium	50.00	48.9	97.8
Chromium	5.00	4.98	99.6
Cobalt	5.00	4.92	98.4
Copper	5.00	4.98	99.6
Iron	50.00	47.5	95.0
Lead	5.00	5.23	105.0
Magnesium	50.00	47.3	94.6
Manganese	5.00	4.94	98.8
Nickel	5.00	5.07	101.0
Potassium	50.00	55.0	110.0
Selenium	5.00	5.27	105.0
Silver	0.50	0.514	103.0
Sodium	50.00		99.0
Thallium	5.00	5.04	101.0
Vanadium	5.00	4.88	97.6
Zinc	5.00	5.10	102.0
Analyze Date: 11/03/99 17:13			
Aluminum	50.00	49.0	98.0
Antimony	5.00	5.20	104.0
Arsenic	5.00	5.15	103.0
Barium	5.00	5.03	101.0
Beryllium	5.00	4.82	96.4
Cadmium	5.00	5.00	100.0
Calcium	50.00	48.7	97.4
Chromium	5.00	4.98	99.6
Cobalt	5.00	4.92	98.4
Copper	5.00	5.01	100.0
Iron	50.00	47.6	95.2
Lead	5.00	5.25	105.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94127

Units: mg/l

Magnesium	50.00	47.4	94.8
Manganese	5.00	4.93	98.6
Nickel	5.00	5.09	102.0
Potassium	50.00	55.6	111.0
Selenium	5.00	5.28	106.0
Silver	0.50	0.519	104.0
Sodium	50.00		101.0
Thallium	5.00	5.08	102.0
Vanadium	5.00	4.92	98.4
Zinc	5.00	5.11	102.0
Analyze Date: 11/03/99 18:23			
Aluminum	50.00	47.7	95.4
Antimony	5.00	5.09	102.0
Arsenic	5.00	5.02	100.0
Barium	5.00	4.92	98.4
Beryllium	5.00	4.70	94.0
Cadmium	5.00	4.89	97.8
Calcium	50.00	47.3	94.6
Chromium	5.00	4.89	97.8
Cobalt	5.00	4.81	96.2
Copper	5.00	4.83	96.6
Iron	50.00	46.7	93.4
Lead	5.00	5.16	103.0
Magnesium	50.00	45.9	91.8
Manganese	5.00	4.80	96.0
Nickel	5.00	4.96	99.2
Potassium	50.00	54.3	109.0
Selenium	5.00	5.18	104.0
Silver	0.50	0.510	102.0
Sodium	50.00		98.6
Thallium	5.00	4.95	99.0
Vanadium	5.00	4.81	96.2
Zinc	5.00	5.04	101.0
Analyze Date: 11/03/99 19:21			
Aluminum	50.00	49.1	98.2
Antimony	5.00	5.26	105.0
Arsenic	5.00	5.16	103.0
Barium	5.00	5.10	102.0
Beryllium	5.00	4.81	96.2
Cadmium	5.00	5.02	100.0
Calcium	50.00	48.0	96.0
Chromium	5.00	5.00	100.0
Cobalt	5.00	4.91	98.2
Copper	5.00	4.96	99.2

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94127

Units: mg/l

Iron	50.00	47.9	95.8
Lead	5.00	5.27	105.0
Magnesium	50.00	46.7	93.4
Manganese	5.00	4.89	97.8
Nickel	5.00	5.07	101.0
Potassium	50.00	56.2	112.0
Selenium	5.00	5.33	107.0
Silver	0.50	0.528	106.0
Sodium	50.00		101.0
Thallium	5.00	5.08	102.0
Vanadium	5.00	4.94	98.8
Zinc	5.00	5.15	103.0

Analyze Date: 11/04/99 13:38

Aluminum	50.00	49.0	98.0
Antimony	5.00	5.01	100.0
Arsenic	5.00	4.94	98.8
Barium	5.00	4.85	97.0
Beryllium	5.00	4.87	97.4
Cadmium	5.00	4.86	97.2
Calcium	50.00	48.8	97.6
Chromium	5.00	4.90	98.0
Cobalt	5.00	4.81	96.2
Copper	5.00	5.00	100.0
Iron	50.00	46.8	93.6
Lead	5.00	5.02	100.0
Magnesium	50.00	48.2	96.4
Manganese	5.00	4.88	97.6
Nickel	5.00	4.93	98.6
Potassium	50.00	53.7	107.0
Selenium	5.00	5.15	103.0
Silver	0.50	0.513	103.0
Sodium	50.00	49.0	98.0
Thallium	5.00	4.95	99.0
Vanadium	5.00	4.88	97.6
Zinc	5.00	4.96	99.2

Analyze Date: 11/04/99 14:49

Aluminum	50.00	49.8	99.6
Antimony	5.00	5.11	102.0
Arsenic	5.00	5.05	101.0
Barium	5.00	4.96	99.2
Beryllium	5.00	4.96	99.2
Cadmium	5.00	5.02	100.0
Calcium	50.00	50.0	100.0
Chromium	5.00	5.03	101.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94127

Units: mg/l

Cobalt	5.00	4.95	99.0
Copper	5.00	5.08	102.0
Iron	50.00	48.0	96.0
Lead	5.00	5.14	103.0
Magnesium	50.00	49.0	98.0
Manganese	5.00	4.97	99.4
Nickel	5.00	5.08	102.0
Potassium	50.00	53.9	108.0
Selenium	5.00	5.26	105.0
Silver	0.50	0.525	105.0
Sodium	50.00	49.8	99.6
Thallium	5.00	5.04	101.0
Vanadium	5.00	4.99	99.8
Zinc	5.00	5.13	103.0
Analyze Date: 11/04/99 15:55			
Aluminum	50.00	49.9	99.8
Antimony	5.00	5.12	102.0
Arsenic	5.00	5.08	102.0
Barium	5.00	4.98	99.6
Beryllium	5.00	4.98	99.6
Cadmium	5.00	5.06	101.0
Calcium	50.00	50.4	101.0
Chromium	5.00	5.08	102.0
Cobalt	5.00	4.99	99.8
Copper	5.00	5.09	102.0
Iron	50.00	48.3	96.6
Lead	5.00	5.22	104.0
Magnesium	50.00	49.1	98.2
Manganese	5.00	5.00	100.0
Nickel	5.00	5.13	103.0
Potassium	50.00	54.0	108.0
Selenium	5.00	5.29	106.0
Silver	0.50	0.529	106.0
Sodium	50.00	50.1	100.0
Thallium	5.00	5.06	101.0
Vanadium	5.00	5.03	101.0
Zinc	5.00	5.18	104.0
Analyze Date: 11/04/99 17:06			
Aluminum	50.00	49.8	99.6
Antimony	5.00	5.08	102.0
Arsenic	5.00	5.03	101.0
Barium	5.00	5.00	100.0
Beryllium	5.00	4.91	98.2
Cadmium	5.00	5.00	100.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94127

Units: mg/l

Calcium	50.00	49.6	99.2
Chromium	5.00	5.03	101.0
Cobalt	5.00	4.93	98.6
Copper	5.00	5.10	102.0
Iron	50.00	47.9	95.8
Lead	5.00	5.16	103.0
Magnesium	50.00	48.9	97.8
Manganese	5.00	4.93	98.6
Nickel	5.00	5.07	101.0
Potassium	50.00	54.6	109.0
Selenium	5.00	5.25	105.0
Silver	0.50	0.528	106.0
Sodium	50.00	50.2	100.0
Thallium	5.00	5.01	100.0
Vanadium	5.00	4.99	99.8
Zinc	5.00	5.08	102.0

Analyze Date: 11/04/99 18:18

Aluminum	50.00	49.5	99.0
Antimony	5.00	5.08	102.0
Arsenic	5.00	5.05	101.0
Barium	5.00	5.02	100.0
Beryllium	5.00	4.91	98.2
Cadmium	5.00	5.06	101.0
Calcium	50.00	49.9	99.8
Chromium	5.00	5.06	101.0
Cobalt	5.00	4.96	99.2
Copper	5.00	5.08	102.0
Iron	50.00	48.1	96.2
Lead	5.00	5.21	104.0
Magnesium	50.00	48.7	97.4
Manganese	5.00	4.95	99.0
Nickel	5.00	5.13	103.0
Potassium	50.00	53.8	108.0
Selenium	5.00	5.23	105.0
Silver	0.50	0.528	106.0
Sodium	50.00	50.0	100.0
Thallium	5.00	4.99	99.8
Vanadium	5.00	5.01	100.0
Zinc	5.00	5.16	103.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94127

Units: mg/l

Instrument: ICP-TR

Analyte	True Value	Concentration	% Recovery
Analyze Date: 11/04/99 19:17			
Aluminum	50.00	50.2	100.0
Antimony	5.00	5.11	102.0
Arsenic	5.00	5.04	101.0
Barium	5.00	5.05	101.0
Beryllium	5.00	4.91	98.2
Cadmium	5.00	5.02	100.0
Calcium	50.00	49.8	99.6
Chromium	5.00	5.06	101.0
Cobalt	5.00	4.96	99.2
Copper	5.00	5.15	103.0
Iron	50.00	48.1	96.2
Lead	5.00	5.19	104.0
Magnesium	50.00	49.3	98.6
Manganese	5.00	4.95	99.0
Nickel	5.00	5.10	102.0
Potassium	50.00	55.1	110.0
Selenium	5.00	5.25	105.0
Silver	0.50	0.533	107.0
Sodium	50.00	50.7	101.0
Thallium	5.00	5.03	101.0
Vanadium	5.00	5.02	100.0
Zinc	5.00	5.08	102.0
Analyze Date: 11/05/99 12:22			
Aluminum	50.00	49.5	99.0
Antimony	5.00	5.06	101.0
Arsenic	5.00	4.97	99.4
Barium	5.00	5.23	105.0
Beryllium	5.00	5.10	102.0
Cadmium	5.00	4.96	99.2
Calcium	50.00	49.8	99.6
Chromium	5.00	5.02	100.0
Cobalt	5.00	5.07	101.0
Copper	5.00	5.07	101.0
Iron	50.00	47.6	95.2
Lead	5.00	5.07	101.0
Magnesium	50.00	48.2	96.4
Manganese	5.00	5.03	101.0
Nickel	5.00	5.09	102.0
Potassium	50.00	51.3	103.0
Selenium	5.00	4.90	98.0
Silver	0.50	0.519	104.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94127

Units: mg/l

Sodium	50.00	49.2	98.4
Thallium	5.00	5.01	100.0
Vanadium	5.00	5.05	101.0
Zinc	5.00	4.94	98.8
Analyze Date: 11/05/99 13:33			
Aluminum	50.00	49.6	99.2
Antimony	5.00	5.08	102.0
Arsenic	5.00	4.97	99.4
Barium	5.00	5.26	105.0
Beryllium	5.00	5.11	102.0
Cadmium	5.00	4.96	99.2
Calcium	50.00	49.7	99.4
Chromium	5.00	5.02	100.0
Cobalt	5.00	5.08	102.0
Copper	5.00	5.10	102.0
Iron	50.00	47.6	95.2
Lead	5.00	5.08	102.0
Magnesium	50.00	48.4	96.8
Manganese	5.00	5.03	101.0
Nickel	5.00	5.09	102.0
Potassium	50.00	51.5	103.0
Selenium	5.00	4.94	98.8
Silver	0.50	0.520	104.0
Sodium	50.00	49.3	98.6
Thallium	5.00	5.01	100.0
Vanadium	5.00	5.06	101.0
Zinc	5.00	4.93	98.6
Analyze Date: 11/05/99 14:03			
Aluminum	50.00	49.2	98.4
Antimony	5.00	5.08	102.0
Arsenic	5.00	5.00	100.0
Barium	5.00	5.25	105.0
Beryllium	5.00	5.12	102.0
Cadmium	5.00	5.03	101.0
Calcium	50.00	50.1	100.0
Chromium	5.00	5.06	101.0
Cobalt	5.00	5.12	102.0
Copper	5.00	5.05	101.0
Iron	50.00	47.9	95.8
Lead	5.00	5.12	102.0
Magnesium	50.00	48.0	96.0
Manganese	5.00	5.05	101.0
Nickel	5.00	5.15	103.0
Potassium	50.00	51.1	102.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94127

Units: mg/l

Selenium	5.00	4.96	99.2
Silver	0.50	0.520	104.0
Sodium	50.00	49.0	98.0
Thallium	5.00	5.00	100.0
Vanadium	5.00	5.08	102.0
Zinc	5.00	5.04	101.0

CCV Limits: 90-110 for all Elements

Continuing Calibration Verification Report

STL Job No.: 94127

Units: mg/l

Instrument: CV

Analyte	True Value	Concentration	% Recovery
Analyze Date: 11/03/99 14:23			
Mercury	4.00	3.75	93.8
Analyze Date: 11/03/99 14:47			
Mercury	4.00	3.66	91.5
Analyze Date: 11/03/99 15:12			
Mercury	4.00	3.65	91.3
Analyze Date: 12/01/99 13:48			
Mercury	4.00	4.19	105.0
Analyze Date: 12/01/99 13:57			
Mercury	4.00	4.23	106.0

CCV Limits: 90-110 for all Elements

Method Blank Report

STL Job No.: 94127

PBWWG60011 — Analyze Date: 11/03/99 14:05 — Instrument: CV — Units: ug/l

Mercury	0.200	U

PBSWG60134 — Analyze Date: 12/01/99 13:28 — Instrument: CV — Units: mg/kg

Mercury	0.0333	U

PBWWG50021 — Analyze Date: 11/01/99 18:05 — Instrument: ICP-TR — Units: ug/l

Aluminum	13.6	B	Antimony	2.39	U	Arsenic	4.18	U	Barium	0.631	U
Beryllium	0.360	B	Cadmium	0.190	U	Calcium	33.6	U	Chromium	0.570	B
Cobalt	0.347	U	Copper	0.603	U	Iron	52.5	U	Lead	0.957	U
Magnesium	11.9	U	Manganese	0.373	U	Nickel	0.443	U	Potassium	65.0	B
Selenium	2.04	U	Silver	0.303	U	Sodium	283	U	Thallium	2.80	U
Vanadium	0.250	B	Zinc	8.66	U						

PBSWG50025 — Analyze Date: 11/03/99 16:15 — Instrument: ICP-TR — Units: mg/kg

Arsenic	0.318	U

PBSWG50025 — Analyze Date: 11/04/99 16:06 — Instrument: ICP-TR — Units: mg/kg

Aluminum	1.61	B	Antimony	0.139	U	Barium	0.0715	U	Beryllium	0.0280	B
Cadmium	0.0257	U	Calcium	6.54	U	Chromium	0.116	U	Cobalt	0.0350	U
Copper	0.0446	U	Iron	8.10	U	Lead	0.122	U	Magnesium	1.51	U
Manganese	0.0453	U	Nickel	0.0617	U	Potassium	6.73	B	Silver	0.0673	U
Sodium	40.6	U	Thallium	0.253	U	Vanadium	0.0267	U	Zinc	0.828	U

PBSWG50025 — Analyze Date: 11/05/99 12:34 — Instrument: ICP-TR — Units: mg/kg

Selenium	0.426	U

Laboratory Control Sample Report

STL Job No.: 94127

Batch: WG50021

Instrument: ICP-TR

Units: ug/l

Analyte	True Value	Concentration	% Recovery	Analyze Date
Aluminum	10,000.00	9,540	95.4	11/01/99 18:11
Antimony	500.00	493	98.6	11/01/99 18:11
Arsenic	500.00	488	97.6	11/01/99 18:11
Barium	500.00	492	98.4	11/01/99 18:11
Beryllium	500.00	507	101.0	11/01/99 18:11
Cadmium	500.00	501	100.0	11/01/99 18:11
Calcium	10,000.00	10,110	101.0	11/01/99 18:11
Chromium	500.00	494	98.8	11/01/99 18:11
Cobalt	500.00	494	98.8	11/01/99 18:11
Copper	500.00	482	96.4	11/01/99 18:11
Iron	10,000.00	10,170	102.0	11/01/99 18:11
Lead	500.00	503	101.0	11/01/99 18:11
Magnesium	10,000.00	9,460	94.6	11/01/99 18:11
Manganese	500.00	505	101.0	11/01/99 18:11
Nickel	500.00	498	99.6	11/01/99 18:11
Potassium	10,000.00	9,400	94.0	11/01/99 18:11
Selenium	500.00	500	100.0	11/01/99 18:11
Silver	50.00	48.7	97.4	11/01/99 18:11
Sodium	10,000.00	9,620	96.2	11/01/99 18:11
Thallium	500.00	491	98.2	11/01/99 18:11
Vanadium	500.00	492	98.4	11/01/99 18:11
Zinc	500.00	515	103.0	11/01/99 18:11

LCS Control Limits: 80 - 120 for all Elements.

Laboratory Control Sample Report

STL Job No.: 94127

Batch: WG50025

Instrument: ICP-TR

Units: mg/kg

Analyte	True Value	Concentration	% Recovery	Analyze Date
Aluminum	1,000.00	981	98.1	11/04/99 16:12
Antimony	50.00	48.7	97.4	11/04/99 16:12
Arsenic	50.00	51.1	102.0	11/03/99 16:21
Barium	50.00	49.6	99.2	11/04/99 16:12
Beryllium	50.00	49.7	99.4	11/04/99 16:12
Cadmium	50.00	49.3	98.6	11/04/99 16:12
Calcium	1,000.00	956	95.6	11/04/99 16:12
Chromium	50.00	49.2	98.4	11/04/99 16:12
Cobalt	50.00	49.3	98.6	11/04/99 16:12
Copper	50.00	49.2	98.4	11/04/99 16:12
Iron	1,000.00	1,010	101.0	11/04/99 16:12
Lead	50.00	49.6	99.2	11/04/99 16:12
Magnesium	1,000.00	961	96.1	11/04/99 16:12
Manganese	50.00	49.1	98.2	11/04/99 16:12
Nickel	50.00	49.1	98.2	11/04/99 16:12
Potassium	1,000.00	989	98.9	11/04/99 16:12
Selenium	50.00	49.4	98.8	11/04/99 16:12
Silver	5.00	4.99	99.8	11/04/99 16:12
Sodium	1,000.00	961	96.1	11/04/99 16:12
Thallium	50.00	48.9	97.8	11/04/99 16:12
Vanadium	50.00	49.4	98.8	11/04/99 16:12
Zinc	50.00	50.8	102.0	11/04/99 16:12

LCS Control Limits: 80 - 120 for all Elements.

Laboratory Control Sample Report

STL Job No.: 94127

Batch: WG60011

Instrument: CV

Units: ug/l

Analyte	True Value	Concentration	% Recovery	Analyze Date
Mercury	2.00	1.78	89.0	11/03/99 14:07

LCS Control Limits: 80 - 120 for all Elements.

Laboratory Control Sample Report

STL Job No.: 94127

Batch: WG60134

Instrument: CV

Units: mg/kg

Analyte	True Value	Concentration	% Recovery	Analyze Date
Mercury	0.33	0.327	98.2	12/01/99 13:30

LCS Control Limits: 80 - 120 for all Elements.

ICP Serial Dilution Form

STL Job No.: 94127

STL Sample No.: 94106006

Units: ug/l

Instrument: ICP-TR

Batch: WG50021

Analyte	Initial Sample Result	Serial Dilution Result	Percent Difference
Aluminum	77.0B	130B	68.8
Antimony	2.39U	12.0U	NA
Arsenic	4.18U	20.9U	NA
Barium	58.6	59.4	1.4
Beryllium	0.530B	1.80B	239.6
Cadmium	0.190U	0.950U	NA
Calcium	134,170	131,745	1.5
Chromium	0.239U	1.20U	NA
Cobalt	0.580B	1.73U	NA
Copper	1.18B	3.02U	NA
Iron	1,384	1,307	5.1
Lead	0.957U	4.79U	NA
Magnesium	16,246	16,487B	1.8
Manganese	4,320	4,402	1.8
Nickel	1.58B	2.22U	NA
Potassium	3,282B	3,162B	3.6
Selenium	2.88B	10.9B	278.5
Silver	0.303U	1.52U	NA
Sodium	16,243	16,921B	4.3
Thallium	2.80U	14.0U	NA
Vanadium	0.200B	0.945U	NA
Zinc	16.4B	58.9B	259.1

Batch: WG50025

Analyte	Initial Sample Result	Serial Dilution Result	Percent Difference
Aluminum	87,941	95,765	9.0
Antimony	1.39U	6.95U	NA
Arsenic	5,878	6,177	5.1
Barium	590	634	7.4
Beryllium	3.42B	4.55B	33.0
Cadmium	13.3	15.7B	18.0
Calcium	7,712	8,476B	10.0
Chromium	128	138	7.8
Cobalt	92.6	101B	9.1
Copper	207	214	3.4
Iron	168,620	172,510	2.4

ICP Serial Dilution Form

STL Job No.: 94127

STL Sample No.: 94121014

Units: ug/l

Lead	200	218	9.0
Magnesium	28,681	31,365	9.4
Manganese	6,510	7,181	10.3
Nickel	419	459	9.5
Potassium	9,038	8,991 B	0.6
Selenium	4.26 U	21.3 U	NA
Silver	0.673 U	3.37 U	NA
Sodium	727 B	2,030 U	NA
Thallium	9.36 B	12.6 U	NA
Vanadium	188	199 B	5.8
Zinc	941	1,046	11.6

ICAP ICSA Report

STL Job No.: 94127

Units: ug/l

	Analyze Date: 11/01/99 15:36		Analyze Date: 11/01/99 21:10	
	Amount Added	Concentration	Amount Added	Concentration
Aluminum	500,000.00	483,830.00	500,000.00	476,730.00
Antimony	0.00	-4.91	0.00	-3.54
Arsenic	0.00	4.73	0.00	-5.45
Barium	0.00	-2.86	0.00	-2.89
Beryllium	0.00	-0.55	0.00	-0.48
Cadmium	0.00	3.31	0.00	2.17
Calcium	500,000.00	481,640.00	500,000.00	475,030.00
Chromium	0.00	-0.54	0.00	-0.82
Cobalt	0.00	3.88	0.00	3.52
Copper	0.00	3.30	0.00	1.37
Iron	250,000.00	243,720.00	250,000.00	240,670.00
Lead	0.00	1.24	0.00	3.07
Magnesium	500,000.00	485,950.00	500,000.00	479,550.00
Manganese	0.00	1.81	0.00	1.75
Nickel	0.00	4.35	0.00	4.89
Potassium	250,000.00	244,940.00	250,000.00	241,640.00
Selenium	0.00	-4.84	0.00	0.95
Silver	0.00	-1.03	0.00	-0.96
Sodium	250,000.00	244,790.00	250,000.00	242,080.00
Thallium	0.00	-1.31	0.00	3.99
Vanadium	0.00	-1.76	0.00	-1.45
Zinc	0.00	8.99	0.00	9.90

ICAP ICSA Report

STL Job No.: 94127

Units: ug/l

	Analyze Date: 11/03/99 15:52		Analyze Date: 11/03/99 19:09	
	Amount Added	Concentration	Amount Added	Concentration
Aluminum	500,000.00	506,380.00	500,000.00	504,430.00
Antimony	0.00	1.96	0.00	-0.16
Arsenic	0.00	-3.46	0.00	-4.18
Barium	0.00	1.94	0.00	1.79
Beryllium	0.00	1.22	0.00	1.17
Cadmium	0.00	2.68	0.00	10.61
Calcium	500,000.00	503,760.00	500,000.00	480,980.00
Chromium	0.00	-3.39	0.00	-3.30
Cobalt	0.00	6.35	0.00	6.55
Copper	0.00	1.12	0.00	2.80
Iron	250,000.00	255,340.00	250,000.00	252,150.00
Lead	0.00	-2.63	0.00	-2.18
Magnesium	500,000.00	503,800.00	500,000.00	491,960.00
Manganese	0.00	9.61	0.00	9.05
Nickel	0.00	4.77	0.00	3.60
Potassium	250,000.00	255,920.00	250,000.00	258,860.00
Selenium	0.00	2.50	0.00	5.40
Silver	0.00	-0.44	0.00	-1.29
Sodium	250,000.00	256,450.00	250,000.00	257,980.00
Thallium	0.00	6.09	0.00	-1.50
Vanadium	0.00	-1.38	0.00	-1.84
Zinc	0.00	27.79	0.00	25.21

ICAP ICSA Report

STL Job No.: 94127

Units: ug/l

	Analyze Date: 11/04/99 13:26		Analyze Date: 11/04/99 19:05	
	Amount Added	Concentration	Amount Added	Concentration
Aluminum	500,000.00	489,350.00	500,000.00	487,310.00
Antimony	0.00	-2.67	0.00	-1.29
Arsenic	0.00	-3.33	0.00	1.59
Barium	0.00	-3.04	0.00	-3.03
Beryllium	0.00	-0.80	0.00	-0.54
Cadmium	0.00	3.21	0.00	0.79
Calcium	500,000.00	489,740.00	500,000.00	482,980.00
Chromium	0.00	-0.99	0.00	-1.12
Cobalt	0.00	3.16	0.00	3.66
Copper	0.00	2.18	0.00	0.65
Iron	250,000.00	246,720.00	250,000.00	245,880.00
Lead	0.00	-0.30	0.00	0.53
Magnesium	500,000.00	490,870.00	500,000.00	489,980.00
Manganese	0.00	1.81	0.00	1.69
Nickel	0.00	4.63	0.00	4.16
Potassium	250,000.00	247,410.00	250,000.00	248,350.00
Selenium	0.00	-2.24	0.00	2.89
Silver	0.00	-0.95	0.00	-0.26
Sodium	250,000.00	245,600.00	250,000.00	249,340.00
Thallium	0.00	2.77	0.00	-4.35
Vanadium	0.00	0.16	0.00	-0.42
Zinc	0.00	8.92	0.00	9.67

ICAP ICSA Report

STL Job No.: 94127

Units: ug/l

	Analyze Date: 11/05/99 12:10		Analyze Date: 11/05/99 13:51	
	Amount Added	Concentration	Amount Added	Concentration
Aluminum	500,000.00	491,030.00	500,000.00	490,200.00
Antimony	0.00	-5.14	0.00	1.03
Arsenic	0.00	4.90	0.00	-0.25
Barium	0.00	-2.90	0.00	-2.90
Beryllium	0.00	-0.60	0.00	-0.53
Cadmium	0.00	0.00	0.00	0.78
Calcium	500,000.00	482,220.00	500,000.00	481,410.00
Chromium	0.00	0.67	0.00	0.27
Cobalt	0.00	3.98	0.00	3.65
Copper	0.00	2.02	0.00	1.73
Iron	250,000.00	244,110.00	250,000.00	243,830.00
Lead	0.00	0.82	0.00	0.38
Magnesium	500,000.00	492,220.00	500,000.00	492,070.00
Manganese	0.00	1.88	0.00	1.77
Nickel	0.00	4.85	0.00	4.97
Potassium	250,000.00	250,880.00	250,000.00	250,600.00
Selenium	0.00	-1.22	0.00	-3.55
Silver	0.00	-0.43	0.00	-0.69
Sodium	250,000.00	248,520.00	250,000.00	248,900.00
Thallium	0.00	2.98	0.00	1.60
Vanadium	0.00	-0.25	0.00	0.18
Zinc	0.00	10.65	0.00	10.17

ICAP ICSAB Report

STL Job No.: 94127

Units: ug/l

	Analyze Date: 11/01/99 15:42			Analyze Date: 11/01/99 21:16		
	Concentration	Amount Added	% Recovery	Concentration	Amount Added	% Recovery
Aluminum	476,920.0	500,000.0	95.4	487,370.0	500,000.0	97.4
Antimony	94.2	100.0	94.2	98.4	100.0	98.4
Arsenic	96.1	100.0	96.1	96.8	100.0	96.8
Barium	95.5	100.0	95.5	98.1	100.0	98.1
Beryllium	96.2	100.0	96.2	95.7	100.0	95.7
Cadmium	91.3	100.0	91.3	91.4	100.0	91.4
Calcium	487,500.0	500,000.0	97.6	484,170.0	500,000.0	96.8
Chromium	91.6	100.0	91.6	91.5	100.0	91.5
Cobalt	91.4	100.0	91.4	91.6	100.0	91.6
Copper	108.1	100.0	108.0	108.2	100.0	108.0
Iron	245,050.0	250,000.0	98.0	245,100.0	250,000.0	98.0
Lead	91.5	100.0	91.5	92.8	100.0	92.8
Magnesium	476,420.0	500,000.0	95.2	485,680.0	500,000.0	97.2
Manganese	95.2	100.0	95.2	94.9	100.0	94.9
Nickel	92.7	100.0	92.7	92.8	100.0	92.8
Potassium	238,090.0	250,000.0	95.2	246,690.0	250,000.0	98.8
Selenium	99.0	100.0	99.0	92.9	100.0	92.9
Silver	10.0	10.0	99.8	10.1	10.0	101.0
Sodium	240,260.0	250,000.0	96.0	246,190.0	250,000.0	98.4
Thallium	85.8	100.0	85.8	88.0	100.0	88.0
Vanadium	93.6	100.0	93.6	93.7	100.0	93.7
Zinc	96.1	100.0	96.1	94.6	100.0	94.6

ICAP ICSAB Report

STL Job No.: 94127

Units: ug/l

	Analyze Date: 11/03/99 15:57			Analyze Date: 11/03/99 19:15		
	Concentration	Amount Added	% Recovery	Concentration	Amount Added	% Recovery
Aluminum	501,420.0	500,000.0	100.0	504,250.0	500,000.0	101.0
Antimony	112.1	100.0	112.0	108.5	100.0	108.0
Arsenic	104.8	100.0	105.0	101.9	100.0	102.0
Barium	111.2	100.0	111.0	114.2	100.0	114.0
Beryllium	100.7	100.0	101.0	100.7	100.0	101.0
Cadmium	106.2	100.0	106.0	113.8	100.0	114.0
Calcium	496,100.0	500,000.0	99.2	486,190.0	500,000.0	97.2
Chromium	100.2	100.0	100.0	99.6	100.0	99.6
Cobalt	110.0	100.0	110.0	108.6	100.0	109.0
Copper	114.2	100.0	114.0	118.1	100.0	118.0
Iron	251,780.0	250,000.0	101.0	252,990.0	250,000.0	101.0
Lead	104.7	100.0	105.0	104.2	100.0	104.0
Magnesium	495,490.0	500,000.0	99.0	488,030.0	500,000.0	97.6
Manganese	113.1	100.0	113.0	111.2	100.0	111.0
Nickel	107.5	100.0	107.0	107.8	100.0	108.0
Potassium	250,040.0	250,000.0	100.0	255,120.0	250,000.0	102.0
Selenium	104.2	100.0	104.0	108.4	100.0	108.0
Silver	10.0	10.0	100.0	10.4	10.0	104.0
Sodium	252,630.0	250,000.0	101.0	258,270.0	250,000.0	103.0
Thallium	114.7	100.0	115.0	106.2	100.0	106.0
Vanadium	101.4	100.0	101.0	101.8	100.0	102.0
Zinc	126.3	100.0	126.0	127.6	100.0	128.0

ICAP ICSAB Report

STL Job No.: 94127

Units: ug/l

	Analyze Date: 11/04/99 13:32			Analyze Date: 11/04/99 19:11		
	Concentration	Amount Added	% Recovery	Concentration	Amount Added	% Recovery
Aluminum	520,740.0	500,000.0	104.0	487,770.0	500,000.0	97.6
Antimony	99.5	100.0	99.5	94.4	100.0	94.4
Arsenic	98.2	100.0	98.2	93.5	100.0	93.5
Barium	101.0	100.0	101.0	97.8	100.0	97.8
Beryllium	101.9	100.0	102.0	94.4	100.0	94.4
Cadmium	96.3	100.0	96.3	89.6	100.0	89.6
Calcium	522,250.0	500,000.0	104.0	481,820.0	500,000.0	96.4
Chromium	96.2	100.0	96.2	91.7	100.0	91.7
Cobalt	96.6	100.0	96.6	90.9	100.0	90.9
Copper	114.9	100.0	115.0	107.9	100.0	108.0
Iron	263,330.0	250,000.0	105.0	244,810.0	250,000.0	98.0
Lead	94.0	100.0	94.0	90.6	100.0	90.6
Magnesium	515,550.0	500,000.0	103.0	487,510.0	500,000.0	97.6
Manganese	101.1	100.0	101.0	93.5	100.0	93.5
Nickel	96.3	100.0	96.3	91.8	100.0	91.8
Potassium	261,160.0	250,000.0	104.0	247,790.0	250,000.0	99.2
Selenium	100.4	100.0	100.0	103.1	100.0	103.0
Silver	10.7	10.0	107.0	9.8	10.0	98.1
Sodium	257,280.0	250,000.0	103.0	249,590.0	250,000.0	100.0
Thallium	99.5	100.0	99.5	83.1	100.0	83.1
Vanadium	101.0	100.0	101.0	94.2	100.0	94.2
Zinc	100.9	100.0	101.0	92.7	100.0	92.7

ICAP ICSAB Report

STL Job No.: 94127

Units: ug/l

	Analyze Date: 11/05/99 12:16			Analyze Date: 11/05/99 13:57		
	Concentration	Amount Added	% Recovery	Concentration	Amount Added	% Recovery
Aluminum	487,070.0	500,000.0	97.4	509,470.0	500,000.0	102.0
Antimony	97.7	100.0	97.7	98.4	100.0	98.4
Arsenic	95.2	100.0	95.2	100.2	100.0	100.0
Barium	96.9	100.0	96.9	100.2	100.0	100.0
Beryllium	96.1	100.0	96.1	98.8	100.0	98.8
Cadmium	89.5	100.0	89.5	91.7	100.0	91.7
Calcium	487,720.0	500,000.0	97.6	499,800.0	500,000.0	100.0
Chromium	92.1	100.0	92.1	94.7	100.0	94.7
Cobalt	92.2	100.0	92.2	93.9	100.0	93.9
Copper	106.2	100.0	106.0	112.1	100.0	112.0
Iron	245,490.0	250,000.0	98.0	252,910.0	250,000.0	101.0
Lead	91.1	100.0	91.1	92.1	100.0	92.1
Magnesium	485,390.0	500,000.0	97.0	505,900.0	500,000.0	101.0
Manganese	95.6	100.0	95.6	97.3	100.0	97.3
Nickel	92.9	100.0	92.9	94.3	100.0	94.3
Potassium	245,240.0	250,000.0	98.0	259,590.0	250,000.0	104.0
Selenium	99.2	100.0	99.2	101.0	100.0	101.0
Silver	10.2	10.0	102.0	10.5	10.0	105.0
Sodium	245,640.0	250,000.0	98.4	256,230.0	250,000.0	102.0
Thallium	90.1	100.0	90.1	98.8	100.0	98.8
Vanadium	95.5	100.0	95.5	98.2	100.0	98.2
Zinc	96.9	100.0	96.9	95.5	100.0	95.5

Batch QC Summary Report

STL Job No.: 94127

Client ID: SW-2-1-01

Units: ug/l

STL Workgroup: WG50021

	MS			MSD				DUP	
Analyte	Spike Added	Sample Result	% Recovery	Spike Added	Sample Result	% Recovery	RPD	Sample Result	RPD
Aluminum	10,000	9,260	91.8	10,000	9,860	97.8	6.3	75.6B	1.8
Antimony	500	466	93.2	500	493	98.6	5.6	2.39U	0.0
Arsenic	500	462	92.4	500	492	98.4	6.3	4.18U	0.0
Barium	500	522	92.7	500	565	101.3	8.9	56.5	3.6
Beryllium	500	470	93.9	500	500	99.9	6.2	0.470B	12.0
Cadmium	500	457	91.4	500	482	96.4	5.3	0.190U	0.0
Calcium	10,000	137,900	40.0	10,000	152,800	190.0	130.4	129,900	3.0
Chromium	500	457	91.4	500	483	96.6	5.5	0.540B	200.0
Cobalt	500	455	90.9	500	480	95.9	5.4	0.720B	21.5
Copper	500	466	93.0	500	498	99.4	6.6	1.15B	2.6
Iron	10,000	10,800	94.2	10,000	11,400	100.2	6.2	1,380	0.0
Lead	500	467	93.4	500	489	97.8	4.6	0.957U	0.0
Magnesium	10,000	24,400	82.0	10,000	26,800	106.0	25.5	15,900	1.9
Manganese	500	4,570	50.0	500	5,060	148.0	99.0	4,180	3.3
Nickel	500	457	91.1	500	484	96.5	5.8	1.74B	9.6
Potassium	10,000	12,800	95.2	10,000	13,600	103.2	8.1	3,290B	0.3
Selenium	500	463	92.0	500	491	97.6	5.9	4.49B	43.7
Silver	50.0	46.3	92.6	50.0	49.0	98.0	5.7	0.303U	0.0
Sodium	10,000	24,400	82.0	10,000	26,800	106.0	25.5	15,900	1.9
Thallium	500	459	91.8	500	481	96.2	4.7	2.80U	0.0
Vanadium	500	463	92.6	500	491	98.2	5.9	0.189U	200.0
Zinc	500	471	90.9	500	491	94.9	4.3	16.3B	0.6

RPD value for MSD compares MS and MSD percent recovery.
RPD value for DUP compares original sample and Dup results.

MS/MSD Limits: 80-120% for all Elements
RPD Limit: 20% for all Elements.

Batch QC Summary Report

STL Job No.: 94127

Client ID: 14457MSD

Units: mg/kg

STL Workgroup: WG50025

Analyte	MS Spike Added	MS Sample Result	MS % Recovery	MSD Spike Added	MSD Sample Result	MSD % Recovery	RPD	DUP Sample Result	DUP RPD
Aluminum	1,270	12,000	63.0	1,270	11,600	31.5	66.7	10,500	6.4
Antimony	63.5	44.5	70.1	63.5	42.2	66.4	5.4	0.177U	0.0
Arsenic	63.5	703	-69.3	63.5	628	-187.4	92.0	584	24.5
Barium	63.5	114	61.4	63.5	104	45.7	29.3	62.1	18.8
Beryllium	63.5	55.5	86.7	63.5	55.0	85.9	0.9	0.421B	3.3
Cadmium	63.5	54.9	83.8	63.5	54.1	82.6	1.4	1.06	45.2
Calcium	1,270	1,870	70.1	1,270	1,730	59.0	17.2	807	19.4
Chromium	63.5	68.3	81.9	63.5	69.5	83.8	2.3	19.4	17.4
Cobalt	63.5	64.8	83.5	63.5	62.8	80.3	3.9	10.2	14.5
Copper	63.5	75.4	77.5	63.5	70.4	69.6	10.7	20.8	23.0
Iron	1,270	19,000	-189.0	1,270	20,000	-110.2	52.7	20,700	3.3
Lead	63.5	70.9	71.6	63.5	66.3	64.4	10.6	17.9	34.6
Magnesium	1,270	4,470	65.4	1,270	4,250	48.0	30.7	3,670	0.8
Manganese	63.5	694	-209.4	63.5	305	-822.0	118.8	474	54.3
Nickel	63.5	97.4	69.6	63.5	88.5	55.6	22.4	50.1	6.0
Potassium	1,270	2,290	89.8	1,270	2,320	92.1	2.5	999	14.0
Selenium	63.5	53.3	83.9	63.5	54.2	85.4	1.8	0.587B	200.0
Silver	6.35	5.40	85.0	6.35	5.39	84.9	0.1	0.0855U	0.0
Sodium	1,270	1,220	88.8	1,270	1,230	89.6	0.9	116B	22.6
Thallium	63.5	54.3	83.6	63.5	54.2	83.5	0.1	1.55	26.3
Vanadium	63.5	74.8	80.2	63.5	76.8	83.3	3.8	23.7	0.8
Zinc	63.5	159	61.4	63.5	130	15.7	118.5	102	16.2

RPD value for MSD compares MS and MSD percent recovery.
RPD value for DUP compares original sample and Dup results.

MS/MSD Limits: 80-120% for all Elements
RPD Limit: 20% for all Elements.

Batch QC Summary Report

STL Job No.: 94127

Client ID: H0448

Units: ug/l

STL Workgroup: WG60011

Analyte	MS Spike Added	MS Sample Result	MS % Recovery	MSD Spike Added	MSD Sample Result	MSD % Recovery	MSD RPD	DUP Sample Result	DUP RPD
Mercury	1.000	0.884	88.4	1.000	0.851	85.1	3.8	0.200U	0.0

RPD value for MSD compares MS and MSD percent recovery.
RPD value for DUP compares original sample and Dup results.

MS/MSD Limits: 80-120% for all Elements
RPD Limit: 20% for all Elements.

000824

Batch QC Summary Report

STL Job No.: 94127

Client ID: 9308300M

Units: mg/kg

STL Workgroup: WG60134

	MS			MSD				DUP	
Analyte	Spike Added	Sample Result	% Recovery	Spike Added	Sample Result	% Recovery	RPD	Sample Result	RPD
Mercury	0.180	0.187	103.9	0.180	0.192	106.7	2.6	0.0725	200.0

RPD value for MSD compares MS and MSD percent recovery.
RPD value for DUP compares original sample and Dup results.

MS/MSD Limits: 80-120% for all Elements
RPD Limit: 20% for all Elements.

Metals Analysis Results

Prepared For:

Ogden Environmental

STL Sample No.: 94106006
Matrix: Water

Units: ug/l

Client ID: SW-2-1-01
Sample Date: 10/13/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	11/01/99 18:17	**77.0**	B	9.82	200	1.00	WG50021
7440-36-0	Antimony	ICP-TR	11/01/99 18:17	**2.39**	U	2.39	10.0	1.00	WG50021
7440-38-2	Arsenic	ICP-TR	11/01/99 18:17	**4.18**	U	4.18	8.00	1.00	WG50021
7440-39-3	Barium	ICP-TR	11/01/99 18:17	**58.6**		0.631	10.0	1.00	WG50021
7440-41-7	Beryllium	ICP-TR	11/01/99 18:17	**0.530**	B	0.177	4.00	1.00	WG50021
7440-43-9	Cadmium	ICP-TR	11/01/99 18:17	**0.190**	U	0.190	4.00	1.00	WG50021
7440-70-2	Calcium	ICP-TR	11/01/99 18:17	**134,000**		33.6	5,000	1.00	WG50021
7440-47-3	Chromium	ICP-TR	11/01/99 18:17	**0.239**	U	0.239	25.0	1.00	WG50021
7440-48-4	Cobalt	ICP-TR	11/01/99 18:17	**0.580**	B	0.347	50.0	1.00	WG50021
7440-50-8	Copper	ICP-TR	11/01/99 18:17	**1.18**	B	0.603	25.0	1.00	WG50021
7439-89-6	Iron	ICP-TR	11/01/99 18:17	**1,380**		52.5	100.0	1.00	WG50021
7439-92-1	Lead	ICP-TR	11/01/99 18:17	**0.957**	U	0.957	3.00	1.00	WG50021
7439-95-4	Magnesium	ICP-TR	11/01/99 18:17	**16,200**		11.9	5,000	1.00	WG50021
7439-96-5	Manganese	ICP-TR	11/01/99 18:17	**4,320**		0.373	15.0	1.00	WG50021
7440-02-0	Nickel	ICP-TR	11/01/99 18:17	**1.58**	B	0.443	10.0	1.00	WG50021
7440-09-7	Potassium	ICP-TR	11/01/99 18:17	**3,280**	B	40.7	5,000	1.00	WG50021
7782-49-2	Selenium	ICP-TR	11/01/99 18:17	**2.88**	B	2.04	5.00	1.00	WG50021
7440-22-4	Silver	ICP-TR	11/01/99 18:17	**0.303**	U	0.303	10.0	1.00	WG50021
7440-23-5	Sodium	ICP-TR	11/01/99 18:17	**16,200**		283	5,000	1.00	WG50021
7440-28-0	Thallium	ICP-TR	11/01/99 18:17	**2.80**	U	2.80	10.0	1.00	WG50021
7440-62-2	Vanadium	ICP-TR	11/01/99 18:17	**0.200**	B	0.189	50.0	1.00	WG50021
7440-66-6	Zinc	ICP-TR	11/01/99 18:17	**16.4**	B	8.66	30.0	1.00	WG50021

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:

Ogden Environmental

STL Sample No.: 94121014
Matrix: Soil
Percent Solids: 78.7

Units: mg/kg

Client ID: 14457
Sample Date: 10/14/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7429-90-5	Aluminum	ICP-TR	11/04/99 16:18	**11,200**		1.38	25.4	1.00	WG50025
7440-36-0	Antimony	ICP-TR	11/04/99 16:18	**0.177**	U	0.177	1.27	1.00	WG50025
7440-38-2	Arsenic	ICP-TR	11/03/99 17:54	**747**		0.404	1.02	1.00	WG50025
7440-39-3	Barium	ICP-TR	11/04/99 16:18	**75.0**		0.0908	1.27	1.00	WG50025
7440-41-7	Beryllium	ICP-TR	11/04/99 16:18	**0.435**	B	0.0276	0.508	1.00	WG50025
7440-43-9	Cadmium	ICP-TR	11/04/99 16:18	**1.68**		0.0326	0.508	1.00	WG50025
7440-70-2	Calcium	ICP-TR	11/04/99 16:18	**980**		8.31	635	1.00	WG50025
7440-47-3	Chromium	ICP-TR	11/04/99 16:18	**16.3**		0.147	3.18	1.00	WG50025
7440-48-4	Cobalt	ICP-TR	11/04/99 16:18	**11.8**		0.0445	6.35	1.00	WG50025
7440-50-8	Copper	ICP-TR	11/04/99 16:18	**26.2**		0.0567	3.18	1.00	WG50025
7439-89-6	Iron	ICP-TR	11/04/99 16:18	**21,400**		10.3	12.7	1.00	WG50025
7439-92-1	Lead	ICP-TR	11/04/99 16:18	**25.4**		0.155	0.381	1.00	WG50025
7439-95-4	Magnesium	ICP-TR	11/04/99 16:18	**3,640**		1.92	635	1.00	WG50025
7439-96-5	Manganese	ICP-TR	11/04/99 16:18	**827**		0.0576	1.90	1.00	WG50025
7440-02-0	Nickel	ICP-TR	11/04/99 16:18	**53.2**		0.0784	1.27	1.00	WG50025
7440-09-7	Potassium	ICP-TR	11/04/99 16:18	**1,150**		6.45	635	1.00	WG50025
7782-49-2	Selenium	ICP-TR	11/04/99 16:18	**0.541**	U	0.541	0.635	1.00	WG50025
7440-22-4	Silver	ICP-TR	11/04/99 16:18	**0.0855**	U	0.0855	1.27	1.00	WG50025
7440-23-5	Sodium	ICP-TR	11/04/99 16:18	**92.4**	B	51.6	635	1.00	WG50025
7440-28-0	Thallium	ICP-TR	11/04/99 16:18	**1.19**	B	0.321	1.27	1.00	WG50025
7440-62-2	Vanadium	ICP-TR	11/04/99 16:18	**23.9**		0.0339	6.35	1.00	WG50025
7440-66-6	Zinc	ICP-TR	11/04/99 16:18	**120**		1.05	3.81	1.00	WG50025

All Concentrations,RL's, and MDL's are corrected for Percent Solids

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:
Ogden Environmental

STL Sample No.: 94132014
Matrix: Water

Units: ug/l

Client ID: H0448
Sample Date: 10/14/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7439-97-6	Mercury	CV	11/03/99 14:41	**0.200**	U	0.200	0.200	1.00	WG60011

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Metals Analysis Results

Prepared For:
Ogden Environmental

STL Sample No.: 94374001
Matrix: Soil
Percent Solids: 92.7

Units: mg/kg

Client ID: 9308300M
Sample Date: 11/04/99

CAS No.	Analyte	Instrument	AnalyzeDate	Concentration	Qual	MDL	RL*	Dilution	Batch
7439-97-6	Mercury	CV	12/01/99 13:41	**0.0360**	U	0.0360	0.0360	1.00	WG60134

All Concentrations,RL's, and MDL's are corrected for Percent Solids

Qualifiers:
U = Undetected below MDL
B = Detected between MDL and RL*

***RL = Reporting Limit**

Post Spike Report

STL Job No.: 94127

STL Sample No.: 94106006 *Client ID: SW-2-1-01*

Units: ug/l

Batch: WG50021

Analyte	Original Sample Result	Spike Added	Spike Result	% Recovery
Aluminum	77.03B	10,000.00	10,103.00	100.20
Antimony	0.00U	500.00	509.30	101.80
Arsenic	3.75U	500.00	500.08	100.00
Barium	58.60	500.00	566.40	101.50
Beryllium	0.53B	500.00	515.02	102.90
Cadmium	0.00U	500.00	496.02	99.20
Calcium	134,170.00	10,000.00	136,030.00	20.00
Chromium	0.16U	500.00	498.54	99.80
Cobalt	0.58B	500.00	495.40	98.90
Copper	1.18B	500.00	511.34	102.00
Iron	1,383.90	10,000.00	11,529.00	101.20
Lead	0.00U	500.00	504.72	101.00
Magnesium	16,246.00	10,000.00	25,038.00	88.00
Manganese	4,320.40	500.00	4,540.40	44.00
Nickel	1.58B	500.00	499.23	99.50
Potassium	3,282.20B	10,000.00	13,432.00	101.20
Selenium	2.88B	500.00	506.85	100.80
Silver	0.00U	50.00	50.03	100.00
Sodium	16,243.00	10,000.00	25,079.00	89.00
Thallium	1.17U	500.00	499.22	99.80
Vanadium	0.20B	500.00	504.13	100.80
Zinc	16.39B	500.00	499.82	96.70

STL Sample No.: 94121014 *Client ID: 14457*

Units: mg/kg

Batch: WG50025

Analyte	Original Sample Result	Spike Added	Spike Result	% Recovery
Aluminum	11,174.20	1,270.64	12,007.62	63.00
Antimony	0.10U	63.53	60.90	95.90
Arsenic	746.83	63.53	782.59	56.70
Barium	75.03	63.53	135.78	96.10
Beryllium	0.43B	63.53	61.51	96.20
Cadmium	1.68	63.53	62.63	95.90
Calcium	979.86	1,270.64	2,140.53	91.30
Chromium	16.31	63.53	77.11	95.70
Cobalt	11.77	63.53	72.48	95.60
Copper	26.24	63.53	88.20	97.60

Post Spike Report

STL Job No.: 94127

Iron	21,425.66	1,270.64	22,152.47	63.00
Lead	25.39	63.53	85.81	95.10
Magnesium	3,644.34	1,270.64	4,714.99	84.20
Manganese	827.23	63.53	859.16	50.40
Nickel	53.19	63.53	112.59	94.20
Potassium	1,148.46	1,270.64	2,426.93	100.80
Selenium	0.40U	63.53	63.34	99.70
Silver	0.00U	6.35	5.99	94.50
Sodium	92.40B	1,270.64	1,348.41	99.00
Thallium	1.18B	63.53	61.53	95.00
Vanadium	23.92	63.53	84.77	95.90
Zinc	119.57	63.53	175.99	88.20

Detection Limit Report

STL Job No.: 94127

Protocol: SW846

Matrix: Water
Units: ug/L

Analyte	Wavelength	MDL	RL	Instrument
Aluminum	308.2	9.82	200	ICP-TR
Antimony	206.8	2.39	10.0	ICP-TR
Arsenic	189.0	4.18	8.00	ICP-TR
Barium	493.4	0.631	10.0	ICP-TR
Beryllium	313.0	0.177	4.00	ICP-TR
Cadmium	226.5	0.190	4.00	ICP-TR
Calcium	317.9	33.6	5,000	ICP-TR
Chromium	267.7	0.239	25.0	ICP-TR
Cobalt	228.6	0.347	50.0	ICP-TR
Copper	324.7	0.603	25.0	ICP-TR
Iron	271.4	52.5	100	ICP-TR
Lead	220.3	0.957	3.00	ICP-TR
Magnesium	383.2	11.9	5,000	ICP-TR
Manganese	257.6	0.373	15.0	ICP-TR
Mercury	253.7	0.200	0.200	CV
Nickel	231.6	0.443	10.0	ICP-TR
Potassium	766.4	40.7	5,000	ICP-TR
Selenium	196.0	2.04	5.00	ICP-TR
Silver	328.0	0.303	10.0	ICP-TR
Sodium	330.2	283	5,000	ICP-TR
Thallium	190.8	2.80	10.0	ICP-TR
Vanadium	292.4	0.189	50.0	ICP-TR
Zinc	206.2	8.66	30.0	ICP-TR

Matrix: Soil
Units: ug/L

Analyte	Wavelength	MDL	RL	Instrument
Aluminum	308.2	10.9	200	ICP-TR
Antimony	206.8	1.39	10.0	ICP-TR
Arsenic	189.0	3.18	8.00	ICP-TR
Barium	493.4	0.715	10.0	ICP-TR
Beryllium	313.0	0.217	4.00	ICP-TR
Cadmium	226.5	0.257	4.00	ICP-TR
Calcium	317.9	65.4	5,000	ICP-TR
Chromium	267.7	1.16	25.0	ICP-TR
Cobalt	228.6	0.350	50.0	ICP-TR
Copper	324.7	0.446	25.0	ICP-TR
Iron	271.4	81.0	100	ICP-TR
Lead	220.3	1.22	3.00	ICP-TR
Magnesium	383.2	15.1	5,000	ICP-TR
Manganese	257.6	0.453	15.0	ICP-TR

Detection Limit Report

STL Job No.: 94127

Mercury	253.7	0.200	0.200	CV
Nickel	231.6	0.617	10.0	ICP-TR
Potassium	766.4	50.8	5,000	ICP-TR
Selenium	196.0	4.26	5.00	ICP-TR
Silver	328.0	0.673	10.0	ICP-TR
Sodium	330.2	406	5,000	ICP-TR
Thallium	190.8	2.53	10.0	ICP-TR
Vanadium	292.4	0.267	50.0	ICP-TR
Zinc	206.2	8.28	30.0	ICP-TR

Preparation Log Report

STL Job No.: 94127

Batch: WG50021 **Instrument: ICP-TR** **Digestion Method: 3010A**

STL Sample ID	Client ID	Initial Weight/Volume	Final Volume	Prep Date
94106006	SW-2-1-01	50.00 ml	50.00 ml	10/28/99
94106006DUP	SW-2-1-01	50.00 ml	50.00 ml	10/28/99
94106006MS	SW-2-1-01	50.00 ml	50.00 ml	10/28/99
94106006MSD	SW-2-1-01	50.00 ml	50.00 ml	10/28/99
94127019	SW2-2-01	50.00 ml	50.00 ml	10/28/99
94127020	SW2-2-03	50.00 ml	50.00 ml	10/28/99
94127021	FB-101499	50.00 ml	50.00 ml	10/28/99
94127026	SW2-3-01	50.00 ml	50.00 ml	10/28/99
PBW			50.00 ml	10/28/99
LCSW			50.00 ml	10/28/99

Preparation Log Report

STL Job No.: 94127

Batch: WG50025 **Instrument: ICP-TR** **Digestion Method: 3050B**

STL Sample ID	Client ID	Initial Weight/Volume	Final Volume	Prep Date
94121014	14457	1.00 g	100.00 ml	10/29/99
94121014MSD	14457	1.00 g	100.00 ml	10/29/99
94121015MS	14457MS	1.00 g	100.00 ml	10/29/99
94121016DUP	14457MSD	1.00 g	100.00 ml	10/29/99
94127018	S2-2-01	1.00 g	100.00 ml	10/29/99
94127025	S2-3-01	1.00 g	100.00 ml	10/29/99
PBS			100.00ml	10/29/99
LCSS			100.00ml	10/29/99

Preparation Log Report

000836

STL Job No.: 94127

Batch: WG60011 **Instrument: CV** **Digestion Method: 7470 A**

STL Sample ID	Client ID	Initial Weight/Volume	Final Volume	Prep Date
94127019	SW2-2-01	100.00 ml	100.00 ml	11/30/99
94127020	SW2-2-03	100.00 ml	100.00 ml	11/30/99
94127021	FB-101499	100.00 ml	100.00 ml	11/30/99
94127026	SW2-3-01	100.00 ml	100.00 ml	11/30/99
94132014	H0448	100.00 ml	100.00 ml	11/30/99
94132014MSD	H0448	100.00 ml	100.00 ml	11/30/99
PBW			100.00ml	11/30/99
LCSW			100.00ml	11/30/99
94132014 Dup		100.00 mL	100.00 mL	11/30/99
94132014 ms		100.00 mL	100.00 mL	11/30/99

Preparation Log Report

STL Job No.: 94127

Batch: WG60134 **Instrument: CV** **Digestion Method: 7471A**

STL Sample ID	Client ID	Initial Weight/Volume	Final Volume	Prep Date
94127018	S2-2-01	0.60 g	100.00 ml	12/02/99
94127025	S2-3-01	0.60 g	100.00 ml	12/02/99
94374001	9308300M	0.60 g	100.00 ml	12/02/99
94374001MSD	9308300M	0.60 g	100.00 ml	12/02/99
PBS			100.00ml	12/02/99
LCSS			100.00ml	12/02/99
94374001 Dup		0.6g	100.00mL	12/02/99
94374001 ms		0.6g	100.00mL	12/02/99

Run Log Report

000038

STL Job No.: 94127
ICP-TR

AEN Sample No.:	Client ID:	Analyze Date:	Al	Sb	As	Ba	Be	Bd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	Ag	Na	Sn	Tl	V	Zn
ICV 2C		11/01/99 15:06		X	X	X	X	X		X	X	X		X		X			X		X	X			X	X	X
ICV 3D		11/01/99 15:12	X						X				X		X					X			X				
ICB		11/01/99 15:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
ICSA		11/01/99 15:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
ICSAB		11/01/99 15:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
CCV		11/01/99 15:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
CCB		11/01/99 15:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
CCV		11/01/99 17:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
CCB		11/01/99 17:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
CCV		11/01/99 17:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
CCB		11/01/99 17:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
PBWWG5002		11/01/99 18:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
LCSWWG500		11/01/99 18:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
94106006	SW-2-1-01	11/01/99 18:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
94106006DUP	SW-2-1-01	11/01/99 18:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
94106006MS	SW-2-1-01	11/01/99 18:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
94106006MS	SW-2-1-01	11/01/99 18:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
94106006L	SW-2-1-01	11/01/99 18:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
94106006P	SW-2-1-01	11/01/99 18:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
CCV		11/01/99 19:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
CCB		11/01/99 19:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
CCV		11/01/99 20:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
CCB		11/01/99 20:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
94127019	SW2-2-01	11/01/99 20:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
94127020	SW2-2-03	11/01/99 20:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
94127021	FB-101499	11/01/99 20:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
94127026	SW2-3-01	11/01/99 20:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
ICSA		11/01/99 21:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
ICSAB		11/01/99 21:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
CCV		11/01/99 21:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X
CCB		11/01/99 21:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X

Run Log Report

STL Job No.: 94127
ICP-TR

AEN Sample No.:	Client ID:	Analyze Date:	Al	Sb	As	Ba	Be	Bi	Ca	Cd	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	Ag	Na	Sn	Tl	V	Zn
ICV 2C		11/03/99 15:22		X	X	X	X		X		X	X	X		X		X			X		X	X				X	X
ICV 3D		11/03/99 15:28	X							X				X		X					X							
ICB		11/03/99 15:34	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X				X	X
ICSA		11/03/99 15:52	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X
ICSAB		11/03/99 15:57	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X
CCV		11/03/99 16:03	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X				X	X
CCB		11/03/99 16:09	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X				X	X
PBSWG50025		11/03/99 16:15			X																							
LCSSWG5002		11/03/99 16:21			X																							
CCV		11/03/99 17:13	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X				X	X
CCB		11/03/99 17:19	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X				X	X
94121014	14457	11/03/99 17:54			X																							
94121016DUP	14457MSD	11/03/99 17:59			X																							
94121015MS	14457MS	11/03/99 18:05			X																							
94121014MS	14457	11/03/99 18:11			X																							
94121014L	14457	11/03/99 18:17			X																							
CCV		11/03/99 18:23	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X				X	X
CCB		11/03/99 18:29	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X				X	X
94121014P	14457	11/03/99 18:34			X																							
94127018	S2-2-01	11/03/99 18:46			X																							
94127025	S2-3-01	11/03/99 18:52			X																							
ICSA		11/03/99 19:09	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X
ICSAB		11/03/99 19:15	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X
CCV		11/03/99 19:21	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X				X	X
CCB		11/03/99 19:27	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X				X	X

Run Log Report

AEN Sample No.:	Client ID:	Analyze Date:	Al	Sb	As	Ba	Be	Bd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	Ag	Na	Sn	Ti	Tl	V	Zn
ICV 2C		11/04/99 12:56		X	X	X	X	X		X	X	X		X		X			X		X	X				X	X	
ICV 3D		11/04/99 13:02	X						X				X		X					X			X					
ICB		11/04/99 13:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
ICSA		11/04/99 13:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
ICSAB		11/04/99 13:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCV		11/04/99 13:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCB		11/04/99 13:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCV		11/04/99 14:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCB		11/04/99 14:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCV		11/04/99 15:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCB		11/04/99 16:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
PBSWG50025		11/04/99 16:06	X	X		X	X	X	X	X	X	X	X	X	X	X			X	X		X	X			X	X	X
LCSSWG50025		11/04/99 16:12	X	X		X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94121014		11/04/99 16:18	X	X		X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94121016	DUP	11/04/99 16:24	X	X		X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94121015	MS	11/04/99 16:30	X	X		X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94121014	MSD	11/04/99 16:36	X	X		X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94121014	L	11/04/99 16:42	X	X		X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94121014	P	11/04/99 16:48	X	X		X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94127018	S2-2-01	11/04/99 16:54	X	X		X	X	X		X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
94127025	S2-3-01	11/04/99 17:00	X	X		X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCV		11/04/99 17:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCB		11/04/99 17:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCV		11/04/99 18:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCB		11/04/99 18:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
ICSA		11/04/99 19:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
ICSAB		11/04/99 19:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCV		11/04/99 19:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCB		11/04/99 19:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X

Run Log Report

STL Job No.: 94127
ICP-TR

AEN Sample No.:	Client ID:	Analyze Date:	Al	Sb	As	Ba	Be	Bd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	Ag	Na	Sn	Ti	Tl	V	Zn
ICV 2C		11/05/99 11:40		X	X	X	X		X		X	X	X		X		X			X		X	X				X	X	X
ICV 3D		11/05/99 11:46	X							X				X		X					X			X					
ICB		11/05/99 11:52	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
ICSA		11/05/99 12:10	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
ICSAB		11/05/99 12:16	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCV		11/05/99 12:22	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCB		11/05/99 12:28	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
PBSWG50025		11/05/99 12:34																				X							
94127018	S2-2-01	11/05/99 12:40								X																			
CCV		11/05/99 13:33	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCB		11/05/99 13:39	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
ICSA		11/05/99 13:51	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
ICSAB		11/05/99 13:57	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCV		11/05/99 14:03	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X
CCB		11/05/99 14:09	X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X			X	X	X

Run Log Report

STL Job No.: 94127

CV

AEN Sample No.:	Client ID:	Analyze Date:	Alb	Sbs	Aae	Bd	Bar	Cro	Cue	Cef	Pbg	Mgn	Hgo	Mi	Nk	Se	Sag	Ani	Ti	Tl	Vn	Zn
Ck2		11/03/99 13:58											X									
Ck1		11/03/99 14:01											X									
PBWWG6001		11/03/99 14:05											X									
LCSWWG600		11/03/99 14:07											X									
Ck2		11/03/99 14:23											X									
Ck1		11/03/99 14:25											X									
94132014	H0448	11/03/99 14:41											X									
94132014DUP	H0448	11/03/99 14:43											X									
94132014MS	H0448	11/03/99 14:45											X									
Ck2		11/03/99 14:47											X									
Ck1		11/03/99 14:50											X									
94132014MSD	H0448	11/03/99 14:52											X									
94127019	SW2-2-01	11/03/99 14:56											X									
94127020	SW2-2-03	11/03/99 14:58											X									
94127021	FB-101499	11/03/99 15:00											X									
94127026	SW2-3-01	11/03/99 15:01											X									
Ck2		11/03/99 15:12											X									
Ck1		11/03/99 15:14											X									

Run Log Report

AEN Sample No.:	Client ID:	Analyze Date:	A l	S b	A s	B a	B e	B	C d	C a	C r	C o	C u	F e	P b	M g	M n	H g	M o	N i	K	S e	A g	N a	S n	T i	T l	V	Z n
CK2		12/01/99 13:22																|X|											
CK1		12/01/99 13:24																|X|											
PBSWG60134		12/01/99 13:28																|X|											
LCSSWG60134		12/01/99 13:30																|X|											
94127018	S2-2-01	12/01/99 13:33																|X|											
94127025	S2-3-01	12/01/99 13:35																|X|											
94374001		12/01/99 13:41																|X|											
94374001	DUP	12/01/99 13:43																|X|											
94374001	MS	12/01/99 13:45																|X|											
CK2		12/01/99 13:48																|X|											
CK1		12/01/99 13:50																|X|											
94374001	MSD	12/01/99 13:52																|X|											
CK2		12/01/99 13:57																|X|											
CK1		12/01/99 13:59																|X|											

000814 11/1/99

Calibration Report 11/01/99 02:17:25 PM page 1

Method: TAL Standard Name: BLANK-STD1 Operator: pdc
Run Time: 11/01/99 14:14:04
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.0143543	.0047725	-.000589	.0005030	.4039195	.1666320
SDev	.0001140	.0000541	.000073	.0000556	.0011820	.0003445
%RSD	.7943078	1.133295	12.45572	11.06038	.2926268	.2067719
#1	.0144818	.0047904	-.000516	.0004422	.4052326	.1665592
#2	.0143191	.0047117	-.000663	.0005153	.4035853	.1670072
#3	.0142621	.0048153	-.000588	.0005514	.4029406	.1663297
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

✓= CHECKED
u=USE
@= RERUN

Calibration Report 11/01/99 02:21:35 PM page 1

Method: TAL Standard Name: STD3A Operator: pdc
Run Time: 11/01/99 14:18:14
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.1005755	.0815914	.0318044	.0483957	.8123252	.1886978
SDev	.0000610	.0002137	.0003544	.0001043	.0022511	.0006477
%RSD	.0606538	.2619100	1.114419	.2154500	.2771179	.3432348
#1	.1006280	.0813495	.0314006	.0483058	.8097342	.1887688
#2	.1005900	.0817545	.0320642	.0483711	.8134413	.1893071
#3	.1005086	.0816701	.0319483	.0485100	.8138002	.1880176
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/01/99 02:25:33 PM page 1

Method: TAL Standard Name: STD3B Operator: pdc
Run Time: 11/01/99 14:22:12
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.8963159	.7700275	.3224919	.4909262	4.509289	.4110534
SDev	.0008556	.0010807	.0000857	.0003457	.008948	.0010549
%RSD	.0954528	.1403466	.0265910	.0704081	.1984434	.2566265
#1	.8953536	.7706289	.3224855	.4909871	4.503191	.4098526
#2	.8966033	.7706738	.3224095	.4912373	4.519562	.4118307
#3	.8969907	.7687799	.3225806	.4905541	4.505115	.4114770
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/01/99 02:29:18 PM page 1

Method: TAL Standard Name: STD3C Operator: pdc
Run Time: 11/01/99 14:25:57
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	9.019983	7.533678	3.148701	5.133581	35.04348	2.933174
SDev	.001776	.012733	.002578	.004215	.07589	.002827
%RSD	.0196858	.1690177	.0818728	.0821072	.2165528	.0963699
#1	9.021545	7.545085	3.151012	5.138399	34.98110	2.936168
#2	9.018052	7.536008	3.149170	5.131770	35.02139	2.930551
#3	9.020352	7.519940	3.145921	5.130575	35.12797	2.932804
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/01/99 02:33:36 PM page 1

Method: TAL Standard Name: STD3D Operator: pdc
Run Time: 11/01/99 14:30:16
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	41.68891	34.21807	7.329130	26.38297	76.91770	7.863784
SDev	.01369	.12351	.021299	.00552	.28639	.005181
%RSD	.0328364	.3609505	.2906106	.0209194	.3723352	.0658800
#1	41.67310	34.08098	7.305412	26.38187	76.64705	7.863005
#2	41.69680	34.32066	7.346623	26.37808	77.21759	7.859037
#3	41.69682	34.25257	7.335354	26.38896	76.88847	7.869310
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Standardization Rpt. 11/01/99 02:48:48 PM page 1

Method: TAL Standard: STD1-BLANK
Run Time: 11/01/99 14:42:58

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.00118	-.00080	.00032	.00628	.00119	-.00012	-.00015
SDev	.00029	.00056	.00002	.00001	.00061	.00007	.00007
%RSD	24.245	70.305	6.6403	.12359	51.858	63.838	50.094
#1	.00144	-.00073	.00029	.00628	.00071	-.00020	-.00015
#2	.00122	-.00139	.00033	.00628	.00188	-.00007	-.00022
#3	.00087	-.00027	.00033	.00627	.00097	-.00007	-.00007

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.00119	.00010	-.00092	-.00000	-.00133	.00016	.00031
SDev	.00002	.00002	.00057	.00004	.00043	.00002	.00010
%RSD	1.6597	21.572	61.368	123630.	32.710	13.423	31.166
#1	.00119	.00011	-.00033	.00000	-.00102	.00015	.00042
#2	.00121	.00007	-.00099	-.00004	-.00113	.00018	.00027
#3	.00117	.00011	-.00146	.00004	-.00182	.00015	.00024

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.01785	.00187	-.00019	.00009	.00311	-.00056	-.00381
SDev	.00030	.00094	.00059	.00002	.00052	.00162	.00011
%RSD	1.6882	50.049	311.05	24.770	16.838	289.86	2.9703
#1	.01767	.00274	.00047	.00011	.00252	-.00241	-.00372
#2	.01819	.00088	-.00064	.00007	.00351	.00062	-.00376
#3	.01768	.00200	-.00040	.00007	.00332	.00011	-.00394

Elem	1960/2
Avge	.00151
SDev	.00091
%RSD	60.569
#1	.00058
#2	.00241
#3	.00153

Standardization Rpt. 11/01/99 02:54:42 PM page 1

Method: TAL Standard: STD2A
Run Time: 11/01/99 14:48:57

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.04297	.02784	.05024	.15527	.34376	.05656	.02110
SDev	.00075	.00079	.00011	.00012	.00056	.00030	.00006
%RSD	1.7516	2.8351	.21581	.07737	.16294	.52197	.30390
#1	.04228	.02744	.05036	.15537	.34421	.05687	.02117
#2	.04377	.02875	.05023	.15514	.34314	.05653	.02104
#3	.04286	.02733	.05014	.15531	.34394	.05628	.02108

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.02030	.04915	.08566	.00546	.01704	.02826	.01410
SDev	.00003	.00008	.00026	.00033	.00065	.00006	.00001
%RSD	.12660	.15553	.30049	6.1167	3.7913	.20334	.04257
#1	.02032	.04923	.08576	.00585	.01652	.02832	.01411
#2	.02027	.04911	.08537	.00528	.01776	.02822	.01411
#3	.02031	.04909	.08585	.00526	.01684	.02823	.01410

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.06585	.12269	.02926	.07926	.09905	.09112	.01297
SDev	.00018	.00086	.00060	.00010	.00126	.00058	.00020
%RSD	.27400	.69919	2.0462	.13022	1.2675	.63502	1.5705
#1	.06599	.12330	.02994	.07916	.09766	.09056	.01280
#2	.06564	.12307	.02899	.07926	.09940	.09107	.01292
#3	.06591	.12171	.02884	.07936	.10010	.09171	.01320

Elem	1960/2
Avge	.01203
SDev	.00033
%RSD	2.7732
#1	.01192
#2	.01240
#3	.01176

Standardization Rpt. 11/01/99 03:00:36 PM page 1

Method: TAL Standard: STD2B
Run Time: 11/01/99 14:54:52

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.42956	.27788	.50904	1.5302	3.5087	.58443	.21815
SDev	.00130	.00424	.00134	.0038	.0034	.00134	.00027
%RSD	.30167	1.5271	.26237	.24913	.09576	.22999	.12575
#1	.42845	.27510	.50847	1.5262	3.5052	.58296	.21791
#2	.42926	.27578	.50809	1.5337	3.5119	.58560	.21845
#3	.43099	.28277	.51057	1.5308	3.5091	.58472	.21809

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.19543	.50476	.88858	.05455	.19138	.29014	.13871
SDev	.00039	.00106	.00032	.00014	.00211	.00044	.00055
%RSD	.19907	.21064	.03643	.24706	1.1035	.15293	.39309
#1	.19517	.50363	.88822	.05446	.18931	.28964	.13809
#2	.19524	.50574	.88866	.05470	.19132	.29031	.13891
#3	.19588	.50491	.88885	.05449	.19353	.29048	.13912

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.50839	1.2311	.30951	.80936	.99674	.95307	.15634
SDev	.00169	.0032	.00259	.00109	.00236	.00264	.00075
%RSD	.33259	.25837	.83625	.13508	.23671	.27642	.47864
#1	.50692	1.2335	.31219	.80810	.99523	.95424	.15594
#2	.50801	1.2275	.30703	.80985	.99946	.95006	.15588
#3	.51024	1.2322	.30931	.81011	.99554	.95493	.15721

Elem	1960/2
Avge	.10729
SDev	.00089
%RSD	.82889
#1	.10629
#2	.10800
#3	.10757

Standardization Rpt. 11/01/99 03:06:31 PM page 1

Method: TAL Standard: STD2C
Run Time: 11/01/99 15:00:46

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	4.3024	2.7811	4.9851	14.691	34.663	5.9293	2.2134
SDev	.0032	.0037	.0050	.005	.013	.0021	.0018
%RSD	.07418	.13195	.10066	.03430	.03734	.03576	.08076
#1	4.2993	2.7788	4.9903	14.686	34.672	5.9300	2.2153
#2	4.3057	2.7791	4.9803	14.696	34.648	5.9270	2.2133
#3	4.3023	2.7853	4.9847	14.691	34.669	5.9310	2.2117

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	1.9289	4.9654	8.9897	.55402	1.9571	2.9479	1.3926
SDev	.0025	.0008	.0050	.00047	.0015	.0014	.0013
%RSD	.12749	.01584	.05552	.08495	.07780	.04673	.09229
#1	1.9315	4.9650	8.9948	.55456	1.9554	2.9487	1.3921
#2	1.9267	4.9649	8.9848	.55382	1.9574	2.9463	1.3941
#3	1.9286	4.9663	8.9895	.55368	1.9584	2.9487	1.3916

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	5.0018	12.366	3.1511	8.1165	10.065	9.6523	1.6114
SDev	.0033	.027	.0046	.0043	.011	.0181	.0020
%RSD	.06597	.21585	.14558	.05340	.10441	.18714	.12519
#1	4.9994	12.395	3.1554	8.1158	10.077	9.6333	1.6121
#2	5.0005	12.342	3.1463	8.1126	10.058	9.6692	1.6129
#3	5.0056	12.363	3.1517	8.1211	10.060	9.6543	1.6091

Elem	1960/2
Avge	1.0624
SDev	.0016
%RSD	.14759
#1	1.0609
#2	1.0640
#3	1.0624

Analysis Report 11/01/99 03:12:26 PM page 1

Method: TAL Sample Name: icv 2c Operator: tjn
Run Time: 11/01/99 15:06:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06466	10.145	9.9712	9.8947	10.292	10.342	.03362
SDev	.00262	.010	.0160	.0151	.034	.045	.00161
%RSD	4.0579	.09883	.16074	.15262	.32802	.43864	4.7864
#1	.06204	10.148	9.9702	9.9079	10.328	10.393	.03327
#2	.06729	10.153	9.9878	9.8980	10.288	10.327	.03538
#3	.06464	10.134	9.9558	9.8782	10.260	10.306	.03222

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.294	10.255	9.9670	9.8544	-.02993	10.050	10.244
SDev	.030	.030	.0090	.0299	.00135	.026	.041
%RSD	.29356	.29384	.09077	.30377	4.4978	.26211	.39629
#1	10.327	10.288	9.9683	9.8867	-.02917	10.078	10.291
#2	10.286	10.248	9.9754	9.8489	-.02913	10.045	10.226
#3	10.269	10.229	9.9574	9.8276	-.03148	10.026	10.217

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07971	1.0125	10.281	10.037	.71995	10.342	10.298
SDev	.00185	.0025	.019	.012	.01341	.042	.020
%RSD	2.3174	.24712	.18258	.11592	1.8626	.40409	.19287
#1	.08082	1.0153	10.303	10.044	.73401	10.390	10.318
#2	.07758	1.0108	10.271	10.043	.71852	10.317	10.297
#3	.08074	1.0113	10.270	10.023	.70730	10.319	10.278

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.204	10.222	10.155	10.357	10.160	10.254	10.295
SDev	.052	.012	.028	.050	.015	.010	.027
%RSD	.50629	.11653	.27671	.48345	.14936	.09727	.26222
#1	10.262	10.232	10.187	10.415	10.175	10.258	10.325
#2	10.184	10.224	10.134	10.324	10.161	10.243	10.286
#3	10.164	10.209	10.143	10.333	10.144	10.261	10.274

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	9.9283	10.091
SDev	.0293	.011
%RSD	.29522	.10528
#1	9.9598	10.085
#2	9.9231	10.103
#3	9.9019	10.084

Analysis Report 11/01/99 03:18:25 PM page 1

Method: TAL Sample Name: icv 3d Operator: tjn
Run Time: 11/01/99 15:12:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	495.79	-.00133	-.00146	-.00180	.00075	.00478	494.53
SDev	2.08	.00564	.00528	.00097	.00074	.00074	1.91
%RSD	.41939	422.17	360.92	54.014	99.227	15.543	.38721
#1	494.31	-.00622	.00444	-.00237	.00020	.00419	494.42
#2	494.89	-.00261	-.00306	-.00235	.00045	.00454	492.68
#3	498.17	.00483	-.00577	-.00068	.00159	.00561	496.50

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00027	.00490	.00403	248.20	495.84	.00311	.00605
SDev	.00113	.00074	.00061	.99	1.51	.00074	.00107
%RSD	413.93	15.189	15.198	.39705	.30446	23.850	17.761
#1	-.00047	.00450	.00396	247.99	494.74	.00259	.00531
#2	-.00029	.00443	.00345	247.34	495.22	.00279	.00556
#3	.00158	.00575	.00467	249.27	497.56	.00396	.00728

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	248.76	-.00117	.00391	.00297	249.35	.00104	-.00030
SDev	1.60	.00012	.00352	.00649	.79	.00527	.00076
%RSD	.64430	10.552	90.068	218.78	.31565	507.17	255.66
#1	247.65	-.00124	.00495	.00059	248.70	-.00382	-.00053
#2	248.03	-.00124	-.00001	-.00200	249.12	.00029	-.00091
#3	250.60	-.00103	.00679	.01031	250.23	.00664	.00055

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01086	.00015	.00226	.00329	-.00248	-.00719	.00931
SDev	.00016	.00007	.00175	.00293	.00073	.00522	.00331
%RSD	1.4430	47.756	77.282	89.220	29.648	72.607	35.561
#1	.01077	.00024	.00357	.00190	-.00304	-.00288	.00880
#2	.01077	.00010	.00028	.00131	-.00275	-.01299	.00628
#3	.01104	.00013	.00293	.00666	-.00165	-.00569	.01284

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00722	.00763
SDev	.00308	.00942
%RSD	42.639	123.47
#1	-.00429	.00260
#2	-.01043	.00179
#3	-.00693	.01849

Analysis Report 11/01/99 03:24:22 PM page 1

Method: TAL Sample Name: icb Operator: tjn
Run Time: 11/01/99 15:18:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03270	.00085	.00228	.00088	.00063	.00075	.04412
SDev	.01610	.00131	.00212	.00059	.00033	.00049	.01517
%RSD	49.227	154.81	93.184	66.727	52.738	65.219	34.388
#1	.04851	.00086	.00021	.00142	.00100	.00132	.05944
#2	.03326	.00215	.00445	.00098	.00056	.00040	.04383
#3	.01633	-.00047	.00217	.00025	.00034	.00055	.02910

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00044	.00055	.00089	-.00503	.02702	.00063	.00088
SDev	.00076	.00026	.00032	.00716	.02055	.00037	.00085
%RSD	172.43	46.552	36.458	142.39	76.064	59.548	96.448
#1	.00129	.00078	.00127	.00279	.04947	.00103	.00181
#2	-.00019	.00027	.00070	-.00660	.02246	.00055	.00067
#3	.00022	.00061	.00070	-.01127	.00913	.00030	.00015

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05794	-.00013	.00162	.00298	-.46045	.00109	.00058
SDev	.00524	.00042	.00101	.00381	.01709	.00206	.00027
%RSD	9.0434	313.45	62.017	128.14	3.7116	188.98	46.081
#1	.05827	-.00060	.00055	.00413	-.44849	.00219	.00087
#2	.06301	.00020	.00178	-.00128	-.45284	.00238	.00049
#3	.05255	.00000	.00254	H.00608	-.48003	-.00129	.00036

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00270	.00220	.00087	.00099	.00076	.00025	.00214
SDev	.00122	.00077	.00089	.00236	.00034	.00111	.00103
%RSD	45.093	34.836	103.14	238.53	44.137	437.56	48.214
#1	.00411	.00307	.00070	.00089	.00114	-.00103	.00117
#2	.00200	.00161	.00184	.00340	.00064	.00095	.00202
#3	.00200	.00193	.00007	-.00132	.00050	.00084	.00322

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00781	.00018
SDev	.00586	.00291
%RSD	74.970	1623.8
#1	.00827	.00168
#2	.00174	-.00317
#3	.01342	.00204

Analysis Report 11/01/99 03:30:20 PM page 1

Method: TAL Sample Name: qcs Operator:
Run Time: 11/01/99 15:24:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.58066	.02300	.02023	.02262	.02251	.02293	.22452
SDev	.00185	.00039	.00278	.00004	.00011	.00019	.00244
%RSD	.31855	1.7107	13.719	.17503	.47396	.83425	1.0868
#1	.58141	.02255	.02336	.02266	.02255	.02313	.22415
#2	.58202	.02313	.01931	.02259	.02259	.02291	.22713
#3	.57855	.02331	.01804	.02260	.02239	.02275	.22229

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02141	.02189	.02297	.53450	.22111	.02175	.02297
SDev	.00002	.00030	.00006	.00528	.00977	.00013	.00019
%RSD	.09250	1.3752	.25039	.98797	4.4178	.59293	.82002
#1	.02140	.02191	.02293	.53401	.21946	.02187	.02317
#2	.02143	.02217	.02304	.54000	.23160	.02176	.02294
#3	.02140	.02157	.02294	.52948	.21227	.02161	.02280

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0783	.02191	.02211	.02093	.89210	.02346	.02178
SDev	.0013	.00095	.00058	.00212	.01382	.00108	.00034
%RSD	.12010	4.3485	2.6154	10.148	1.5491	4.6137	1.5723
#1	1.0794	.02286	.02228	.02280	.89004	.02294	.02191
#2	1.0786	.02191	.02146	.02137	.90684	.02274	.02204
#3	1.0769	.02096	.02258	.01862	.87943	.02471	.02139

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02647	.03641	.02331	.02460	.02206	.02239	.02180
SDev	.00054	.00027	.00079	.00030	.00014	.00173	.00079
%RSD	2.0245	.73065	3.4027	1.2336	.62878	7.7090	3.6343
#1	.02700	.03638	.02406	.02492	.02221	.02426	.02112
#2	.02647	.03670	.02339	.02456	.02203	.02085	.02160
#3	.02593	.03617	.02248	.02431	.02194	.02207	.02267

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.02438	.01881
SDev	.00529	.00408
%RSD	21.680	21.678
#1	.02056	.02352
#2	.03042	.01646
#3	.02217	.01646

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Method: TAL Sample Name: qcs 600 Operator:
Run Time: 11/01/99 15:30:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0111	.98470	.95487	.96093	1.0349	.99735	9.6712
SDev	.0047	.00345	.01000	.00271	.0017	.00365	.0286
%RSD	.46844	.35029	1.0474	.28165	.16109	.36614	.29549
#1	1.0098	.98801	.95697	.96387	1.0348	.99806	9.6554
#2	1.0163	.98495	.96365	.96038	1.0367	1.0006	9.7042
#3	1.0071	.98113	.94398	.95854	1.0334	.99340	9.6540

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99830	.96945	.99454	.99005	9.4546	.97857	.99792
SDev	.00262	.00254	.00258	.00897	.0079	.00156	.00379
%RSD	.26204	.26197	.25972	.90607	.08311	.15981	.37990
#1	.99763	.97036	.99629	.99987	9.4603	.97863	.99943
#2	1.0012	.97140	.99577	.98796	9.4579	.98011	1.0007
#3	.99608	.96658	.99157	.98230	9.4456	.97698	.99361

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.3125	1.0801	1.0050	.95297	9.7435	.98189	.98352
SDev	.0238	.0011	.0027	.01320	.0205	.00259	.00175
%RSD	.25584	.09758	.26966	1.3849	.21089	.26403	.17771
#1	9.3087	1.0801	1.0044	.94399	9.7213	.98411	.98480
#2	9.2909	1.0812	1.0080	.96812	9.7618	.98251	.98422
#3	9.3381	1.0791	1.0027	.94680	9.7475	.97904	.98153

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0103	1.0246	.99852	1.1061	1.0055	1.0024	1.0062
SDev	.0040	.0014	.00293	.0075	.0014	.0044	.0053
%RSD	.39261	.13484	.29292	.68219	.13847	.44319	.52613
#1	1.0093	1.0262	1.0010	1.0975	1.0069	1.0075	1.0028
#2	1.0146	1.0243	.99924	1.1112	1.0056	.99907	1.0123
#3	1.0069	1.0235	.99530	1.1098	1.0041	1.0007	1.0035

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.94823	.95495
SDev	.01141	.01994
%RSD	1.2037	2.0878
#1	.95789	.93667
#2	.95115	.97621
#3	.93563	.95198

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Method: TAL Sample Name: icsa Operator:
Run Time: 11/01/99 15:36:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	483.83	-.00491	.00473	-.00286	-.00055	.00331	481.64
SDev	4.88	.00307	.00437	.00002	.00004	.00031	4.90
%RSD	1.0093	62.501	92.393	.59031	6.9147	9.4279	1.0173
#1	486.73	-.00269	-.00011	-.00285	-.00059	.00315	484.17
#2	486.57	-.00841	.00591	-.00286	-.00052	.00367	484.76
#3	478.19	-.00363	.00840	-.00288	-.00053	.00311	475.99

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00054	.00388	.00330	243.72	485.95	.00181	.00435
SDev	.00009	.00033	.00051	2.40	4.70	.00005	.00043
%RSD	15.934	8.5408	15.476	.98377	.96630	2.5137	9.9766
#1	-.00062	.00350	.00277	244.98	489.06	.00184	.00453
#2	-.00045	.00403	.00378	245.23	488.25	.00176	.00386
#3	-.00054	.00410	.00336	240.95	480.55	.00183	.00466

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	244.94	-.00103	.00124	-.00484	244.79	-.00131	-.00176
SDev	2.10	.00017	.00025	.01131	1.92	.00473	.00004
%RSD	.85559	16.944	19.901	233.68	.78503	360.07	2.2028
#1	245.67	-.00093	.00117	.00383	246.13	-.00147	-.00177
#2	246.57	-.00123	.00152	L-.01763	245.65	-.00597	-.00172
#3	242.58	-.00092	.00104	-.00072	242.59	.00349	-.00180

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00899	-.00552	.00063	.00260	-.00372	-.01108	.00722
SDev	.00246	.00050	.00148	.00445	.00008	.00256	.00098
%RSD	27.343	9.1207	236.90	171.12	2.0886	23.110	13.644
#1	.00615	-.00504	-.00020	-.00253	-.00379	-.01024	.00668
#2	.01032	-.00604	-.00026	.00539	-.00364	-.00904	.00661
#3	.01049	-.00549	.00234	.00495	-.00372	-.01395	.00835

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00158	-.00846
SDev	.01630	.01440
%RSD	1029.2	170.13
#1	.02014	-.00473
#2	-.00499	-.02436
#3	-.01040	.00370

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Method: TAL Sample Name: icsab Operator:
Run Time: 11/01/99 15:42:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	476.92	.09417	.09605	.09550	.09621	.09134	487.50
SDev	13.77	.00524	.00283	.00235	.00241	.00257	13.27
%RSD	2.8869	5.5675	2.9483	2.4644	2.5011	2.8158	2.7229
#1	485.00	.09709	.09901	.09729	.09743	.09265	493.52
#2	484.73	.09731	.09337	.09639	.09775	.09300	496.70
#3	461.02	.08812	.09576	.09284	.09344	.08838	472.28

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09156	.09144	.10812	245.05	476.42	.09520	.09272
SDev	.00174	.00238	.00339	6.96	12.28	.00231	.00226
%RSD	1.9008	2.6044	3.1384	2.8387	2.5774	2.4307	2.4318
#1	.09263	.09259	.11018	248.36	483.75	.09625	.09349
#2	.09249	.09302	.10997	249.73	483.26	.09680	.09449
#3	.08955	.08870	.10420	237.05	462.24	.09255	.09019

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	238.09	.00998	.09146	.09904	240.26	.08578	.09362
SDev	6.07	.00036	.00344	.00191	5.25	.00407	.00280
%RSD	2.5482	3.5597	3.7643	1.9284	2.1846	4.7394	2.9912
#1	241.78	.01023	.09354	.10081	243.79	.08805	.09510
#2	241.41	.01014	.09335	.09702	242.76	.08820	.09536
#3	231.09	.00957	.08748	.09930	234.23	.08108	.09039

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09610	.09362	.09028	.09832	.09334	.08709	.09347
SDev	.00276	.00226	.00451	.00134	.00237	.00134	.00451
%RSD	2.8704	2.4176	4.9980	1.3672	2.5376	1.5382	4.8295
#1	.09819	.09533	.09114	.09734	.09479	.08821	.09602
#2	.09713	.09448	.09431	.09777	.09462	.08746	.09612
#3	.09297	.09106	.08540	.09986	.09061	.08561	.08825

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.10063	.09784
SDev	.01425	.00469
%RSD	14.162	4.7979
#1	.10826	.09668
#2	.08419	.10301
#3	.10945	.09384

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/01/99 15:48:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.328	5.0361	4.9027	4.8248	4.8607	4.8798	49.202
SDev	.124	.0069	.0227	.0084	.0009	.0088	.049
%RSD	.25686	.13702	.46289	.17497	.01789	.18098	.10002
#1	48.186	5.0299	4.8774	4.8151	4.8613	4.8900	49.259
#2	48.382	5.0435	4.9096	4.8288	4.8611	4.8751	49.176
#3	48.416	5.0349	4.9212	4.8305	4.8597	4.8744	49.171

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9072	4.8072	4.9639	47.105	47.663	4.8839	4.9426
SDev	.0059	.0008	.0152	.025	.105	.0004	.0070
%RSD	.11928	.01682	.30606	.05387	.22070	.00804	.14094
#1	4.9126	4.8079	4.9464	47.075	47.542	4.8837	4.9476
#2	4.9010	4.8074	4.9719	47.119	47.708	4.8837	4.9455
#3	4.9080	4.8063	4.9734	47.119	47.737	4.8844	4.9346

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.695	.50754	5.0432	5.0203	48.515	4.9318	4.8634
SDev	.291	.00077	.0029	.0058	.182	.0258	.0014
%RSD	.55311	.15096	.05768	.11495	.37519	.52281	.02858
#1	52.359	.50669	5.0452	5.0141	48.307	4.9415	4.8618
#2	52.848	.50818	5.0399	5.0256	48.648	4.9026	4.8640
#3	52.878	.50775	5.0446	5.0212	48.589	4.9514	4.8643

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9630	5.3118	4.9194	5.1971	5.0033	5.0016	5.0639
SDev	.0146	.0107	.0037	.0157	.0060	.0078	.0009
%RSD	.29353	.20056	.07429	.30256	.11991	.15499	.01830
#1	4.9798	5.3001	4.9233	5.2126	4.9966	5.0081	5.0635
#2	4.9553	5.3142	4.9161	5.1976	5.0053	4.9930	5.0631
#3	4.9538	5.3210	4.9189	5.1812	5.0081	5.0037	5.0649

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	4.9772	5.0415
SDev	.0026	.0089
%RSD	.05254	.17679
#1	4.9787	5.0315
#2	4.9787	5.0486
#3	4.9741	5.0443

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/01/99 15:54:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00925	.00174	.00279	.00003	.00037	.00023	.02129
SDev	.00204	.00036	.00236	.00000	.00003	.00017	.00227
%RSD	21.999	20.998	84.625	5.0530	7.5491	71.230	10.666
#1	.01103	.00205	.00549	.00003	.00038	.00037	.02364
#2	.00970	.00182	.00184	.00003	.00040	.00029	.02112
#3	.00703	.00134	.00106	.00003	.00034	.00005	.01911

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00028	.00050	.00016	-.01552	.00799	.00031	.00021
SDev	.00008	.00026	.00010	.00986	.00194	.00002	.00044
%RSD	28.754	51.820	60.826	63.510	24.320	6.5398	212.78
#1	.00035	.00078	.00021	-.00547	.00905	.00033	.00069
#2	.00019	.00044	.00005	-.01592	.00917	.00030	.00011
#3	.00029	.00027	.00023	-.02517	.00575	.00030	-.00018

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08027	.00009	-.00035	.00248	-.14162	.00308	.00032
SDev	.00340	.00010	.00120	.00096	.03075	.00079	.00020
%RSD	4.2310	113.74	345.06	38.630	21.714	25.589	61.256
#1	.07709	.00020	.00068	.00347	-.13960	.00392	.00049
#2	.08385	.00000	-.00167	.00156	-.17333	.00236	.00036
#3	.07986	.00007	-.00006	.00240	-.11193	.00295	.00011

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00376	.00416	.00297	.00133	.00056	.00048	-.00093
SDev	.00041	.00083	.00042	.00105	.00026	.00165	.00098
%RSD	10.805	20.030	14.131	78.614	47.233	341.79	105.70
#1	.00383	.00502	.00329	.00029	.00086	.00195	-.00011
#2	.00413	.00409	.00313	.00131	.00046	-.00131	-.00202
#3	.00332	.00336	.00250	.00239	.00036	.00081	-.00066

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00353	.00156
SDev	.00789	.00355
%RSD	223.42	226.79
#1	.00359	.00303
#2	-.00439	.00415
#3	.01140	-.00248

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Method: TAL Sample Name: pbswg Operator:
Run Time: 11/01/99 16:00:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00143	.00041	.00361	.00002	.00018	.00006	.01289
SDev	.00322	.00115	.00309	.00000	.00001	.00004	.00157
%RSD	225.48	280.07	85.698	4.5334	3.2137	68.104	12.207
#1	.00243	.00164	.00090	.00002	.00018	.00008	.01406
#2	.00402	.00024	.00697	.00002	.00018	.00009	.01351
#3	-.00217	-.00065	.00295	.00002	.00017	.00001	.01110

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00021	.00034	-.00021	-.02053	-.00081	.00013	.00008
SDev	.00005	.00021	.00011	.00283	.00982	.00006	.00043
%RSD	22.155	61.700	54.033	13.799	1207.7	42.831	555.33
#1	.00025	.00053	-.00008	-.02019	.00529	.00018	.00027
#2	.00022	.00036	-.00027	-.01788	.00442	.00014	-.00042
#3	.00016	.00012	-.00028	-.02351	-.01214	.00007	.00038

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06023	.00000	-.00035	-.00007	-.29805	.00152	.00005
SDev	.00199	.00000	.00106	.00578	.03346	.00104	.00019
%RSD	3.2970	4.2927	304.05	7975.6	11.227	68.497	365.29
#1	.05864	.00000	-.00123	.00043	-.25943	.00246	.00022
#2	.05960	.00000	.00083	L-.00608	-.31637	.00171	.00009
#3	.06246	.00000	-.00065	H.00544	-.31835	.00040	-.00016

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00317	.00154	.00049	.00032	.00018	-.00183	.00023
SDev	.00060	.00025	.00099	.00070	.00008	.00074	.00125
%RSD	18.895	16.015	202.40	218.75	43.713	40.203	545.65
#1	.00283	.00149	-.00055	-.00046	.00013	-.00222	-.00090
#2	.00386	.00180	.00142	.00054	.00027	-.00098	.00157
#3	.00282	.00132	.00059	.00089	.00013	-.00229	.00001

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00312	-.00204
SDev	.00605	.00858
%RSD	193.66	419.59
#1	-.00359	.00206
#2	.00482	-.01190
#3	.00814	.00371

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Method: TAL Sample Name: lcsswg Operator:
Run Time: 11/01/99 16:06:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.6683	.49590	.49624	.49803	.51329	.50116	9.9774
SDev	.0187	.00245	.00347	.00029	.00090	.00138	.0142
%RSD	.19303	.49480	.69827	.05772	.17531	.27534	.14193
#1	9.6471	.49310	.49224	.49783	.51230	.50236	9.9614
#2	9.6756	.49693	.49826	.49836	.51352	.50146	9.9824
#3	9.6822	.49768	.49821	.49791	.51405	.49965	9.9884

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49565	.49405	.48982	10.216	9.5815	.49759	.49907
SDev	.00070	.00073	.00186	.014	.0234	.00067	.00241
%RSD	.14110	.14880	.37946	.13577	.24379	.13500	.48309
#1	.49549	.49490	.48773	10.200	9.5620	.49682	.50185
#2	.49642	.49366	.49044	10.223	9.5750	.49806	.49777
#3	.49505	.49359	.49128	10.225	9.6074	.49789	.49759

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.5143	.04921	.50388	.49424	9.6620	.49955	.49606
SDev	.0097	.00010	.00158	.00211	.0233	.00292	.00020
%RSD	.10176	.20802	.31443	.42772	.24109	.58465	.04004
#1	9.5049	.04928	.50258	.49627	9.6592	.50065	.49583
#2	9.5137	.04927	.50564	.49440	9.6402	.50176	.49616
#3	9.5242	.04910	.50340	.49205	9.6865	.49624	.49618

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.53082	.50465	.50055	.50949	.49703	.49607	.50761
SDev	.00186	.00114	.00097	.00707	.00031	.00074	.00258
%RSD	.35108	.22659	.19278	1.3878	.06263	.15001	.50769
#1	.52956	.50565	.49992	.50180	.49667	.49583	.50579
#2	.53296	.50491	.50166	.51098	.49721	.49547	.51056
#3	.52993	.50340	.50008	.51570	.49721	.49690	.50648

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.48797	.49698
SDev	.00228	.00409
%RSD	.46711	.82252
#1	.48537	.50132
#2	.48960	.49641
#3	.48895	.49321

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Method: TAL Sample Name: 94050001 Operator:
Run Time: 11/01/99 16:12:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02308	-.00039	-.00103	.02699	.00033	.00058	58.570
SDev	.00229	.00132	.00156	.00003	.00002	.00010	.073
%RSD	9.9349	340.20	150.98	.11085	7.1024	16.422	.12405
#1	.02466	.00105	-.00006	.02696	.00036	.00047	58.643
#2	.02045	-.00154	-.00020	.02701	.00032	.00062	58.571
#3	.02413	-.00067	-.00283	.02701	.00032	.00065	58.497

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00067	.00474	.00636	.02823	33.052	7.3719	.01344
SDev	.00006	.00005	.00072	.00720	.038	.0083	.00023
%RSD	9.4438	1.1244	11.340	25.488	.11387	.11208	1.7153
#1	.00073	.00468	.00666	.03498	33.038	7.3807	.01365
#2	.00060	.00477	.00687	.02066	33.023	7.3707	.01319
#3	.00067	.00477	.00553	.02905	33.094	7.3643	.01348

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1859	-.00112	.00045	.00272	41.253	.00171	.00093
SDev	.0017	.00057	.00008	.00492	.092	.00243	.00020
%RSD	.14086	51.016	17.436	181.01	.22236	141.96	20.955
#1	1.1860	-.00047	.00039	.00828	41.358	.00403	.00115
#2	1.1875	-.00154	.00043	-.00106	41.215	-.00081	.00076
#3	1.1842	-.00134	.00054	.00093	41.186	.00191	.00089

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01912	.18270	.00314	.00119	.00037	-.00137	.00120
SDev	.00125	.00024	.00164	.00341	.00010	.00053	.00038
%RSD	6.5366	.12944	52.093	285.53	25.439	38.328	31.726
#1	.01825	.18244	.00134	.00197	.00040	-.00091	.00087
#2	.01856	.18278	.00355	.00415	.00027	-.00127	.00111
#3	.02055	.18289	.00454	-.00254	.00045	-.00194	.00162

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00868	-.00065
SDev	.00816	.00422
%RSD	94.010	653.89
#1	.01773	.00318
#2	.00641	-.00518
#3	.00189	.00007

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Method: TAL Sample Name: 94050001dup Operator:
Run Time: 11/01/99 16:18:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02622	.00035	.00011	.02635	.00034	.00050	54.998
SDev	.00578	.00155	.00306	.00006	.00003	.00009	.147
%RSD	22.059	439.41	2764.6	.21315	10.303	17.639	.26677
#1	.03188	-.00071	.00363	.02635	.00034	.00058	54.958
#2	.02647	.00213	-.00135	.02640	.00038	.00052	55.161
#3	.02032	-.00037	-.00194	.02629	.00031	.00040	54.876

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00078	.00426	.00588	.02535	31.843	6.9999	.01297
SDev	.00027	.00041	.00013	.00073	.073	.0146	.00044
%RSD	34.392	9.5691	2.1807	2.8896	.22949	.20811	3.3976
#1	.00071	.00461	.00584	.02619	31.911	7.0002	.01327
#2	.00107	.00435	.00602	.02496	31.851	7.0143	.01317
#3	.00055	.00381	.00578	.02489	31.766	6.9851	.01246

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1415	-.00062	-.00141	.00547	39.839	-.00018	.00071
SDev	.0018	.00012	.00055	.00154	.070	.00244	.00007
%RSD	.15989	18.947	38.802	28.104	.17528	1353.4	10.197
#1	1.1432	-.00076	-.00151	.00370	39.911	-.00198	.00067
#2	1.1416	-.00056	-.00082	.00627	39.833	.00259	.00066
#3	1.1396	-.00055	-.00189	.00645	39.772	-.00115	.00079

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01747	.17091	.00354	-.00085	.00019	-.00192	-.00128
SDev	.00125	.00045	.00036	.00185	.00007	.00169	.00039
%RSD	7.1464	.26348	10.169	217.84	39.064	87.928	30.190
#1	.01687	.17142	.00322	-.00250	.00020	-.00142	-.00173
#2	.01890	.17069	.00349	.00115	.00025	-.00054	-.00113
#3	.01663	.17060	.00393	-.00119	.00011	-.00380	-.00100

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00817	.00373
SDev	.00360	.00071
%RSD	44.089	18.951
#1	.00420	.00306
#2	.00908	.00447
#3	.01122	.00368

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Method: TAL Sample Name: 94050001ms Operator:
Run Time: 11/01/99 16:24:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.6962	.49667	.48804	.52078	.51003	.49124	66.136
SDev	.0113	.00095	.00247	.00189	.00078	.00004	.181
%RSD	.11669	.19062	.50687	.36293	.15260	.00900	.27342
#1	9.7053	.49758	.48963	.52258	.50952	.49129	66.013
#2	9.6996	.49569	.48519	.52093	.50965	.49120	66.051
#3	9.6835	.49675	.48930	.51881	.51093	.49124	66.343

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48875	.48966	.49707	10.110	41.200	7.5498	.50166
SDev	.00126	.00059	.00080	.010	.039	.0111	.00089
%RSD	.25732	.12005	.16005	.10341	.09486	.14671	.17666
#1	.48802	.48975	.49747	10.106	41.233	7.5418	.50214
#2	.48802	.48903	.49759	10.102	41.210	7.5453	.50220
#3	.49020	.49019	.49615	10.122	41.157	7.5625	.50064

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.998	.04879	.49097	.49548	49.042	.48265	.49374
SDev	.048	.00025	.00151	.00716	.015	.00705	.00024
%RSD	.43664	.52081	.30809	1.4443	.03025	1.4608	.04787
#1	11.052	.04850	.48958	.48869	49.055	.47709	.49357
#2	10.961	.04889	.49258	.49481	49.045	.48027	.49401
#3	10.981	.04897	.49076	.50295	49.025	.49058	.49363

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50467	.66495	.49737	.50413	.49455	.48661	.49299
SDev	.00213	.00189	.00146	.00520	.00042	.00056	.00229
%RSD	.42207	.28446	.29448	1.0318	.08443	.11432	.46347
#1	.50253	.66713	.49861	.50279	.49488	.48700	.49070
#2	.50470	.66394	.49775	.50987	.49469	.48686	.49527
#3	.50679	.66378	.49576	.49973	.49408	.48598	.49299

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.49508	.49531
SDev	.00703	.01110
%RSD	1.4197	2.2400
#1	.49009	.48761
#2	.50312	.49028
#3	.49204	.50802

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Method: TAL Sample Name: 94050001msd Operator:
Run Time: 11/01/99 16:30:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.9215	.51062	.50355	.52779	.52372	.50190	65.106
SDev	.0071	.00100	.00222	.00187	.00069	.00114	.120
%RSD	.07203	.19604	.44070	.35444	.13094	.22660	.18391
#1	9.9278	.51042	.50249	.52987	.52303	.50190	64.974
#2	9.9229	.50973	.50610	.52727	.52440	.50303	65.206
#3	9.9137	.51170	.50205	.52624	.52373	.50076	65.140

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50112	.50330	.50900	10.362	40.689	7.4041	.51107
SDev	.00079	.00050	.00068	.024	.016	.0086	.00053
%RSD	.15812	.10006	.13407	.23426	.03952	.11601	.10469
#1	.50024	.50303	.50975	10.339	40.676	7.3953	.51046
#2	.50176	.50388	.50842	10.360	40.707	7.4124	.51147
#3	.50136	.50298	.50882	10.388	40.685	7.4047	.51128

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.120	.04952	.50390	.50649	48.343	.49844	.50513
SDev	.033	.00030	.00147	.00103	.066	.00515	.00026
%RSD	.29241	.59691	.29141	.20374	.13674	1.0338	.05102
#1	11.124	.04963	.50535	.50630	48.324	.49250	.50486
#2	11.085	.04918	.50394	.50557	48.288	.50111	.50516
#3	11.150	.04974	.50242	.50761	48.416	.50171	.50537

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51975	.67353	.50907	.51303	.50664	.49898	.50619
SDev	.00208	.00060	.00241	.00286	.00028	.00167	.00168
%RSD	.39999	.08942	.47286	.55733	.05442	.33528	.33104
#1	.51736	.67386	.51154	.51624	.50673	.50088	.50742
#2	.52085	.67390	.50895	.51211	.50685	.49773	.50688
#3	.52106	.67284	.50673	.51076	.50633	.49834	.50428

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.50455	.50708
SDev	.00946	.00323
%RSD	1.8745	.63718
#1	.50517	.50648
#2	.49480	.51057
#3	.51369	.50419

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Method: TAL Sample Name: 940500011 Operator:
Run Time: 11/01/99 16:36:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00846	.00124	.00286	.00579	.00017	.00016	11.286
SDev	.00109	.00092	.00462	.00008	.00002	.00019	.007
%RSD	12.917	74.145	161.47	1.4001	10.020	118.70	.06400
#1	.00907	.00071	-.00243	.00580	.00019	.00007	11.278
#2	.00912	.00071	.00492	.00587	.00017	.00038	11.287
#3	.00720	.00230	.00609	.00571	.00016	.00003	11.293

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00022	.00095	-.00098	-.00668	6.6266	1.4805	.00272
SDev	.00056	.00030	.00010	.00404	.0041	.0016	.00038
%RSD	251.44	32.187	9.8089	60.515	.06260	.10857	14.131
#1	-.00079	.00069	-.00108	-.00432	6.6220	1.4786	.00315
#2	-.00019	.00086	-.00088	-.01134	6.6302	1.4810	.00263
#3	.00032	.00129	-.00099	-.00436	6.6275	1.4817	.00239

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24733	-.00013	-.00071	.00334	8.1729	-.00669	.00016
SDev	.00211	.00033	.00147	.00442	.0385	.01033	.00007
%RSD	.85185	262.70	206.34	132.65	.47134	154.53	46.919
#1	.24772	-.00028	.00058	-.00177	8.1718	.00137	.00012
#2	.24922	-.00035	-.00232	.00568	8.1350	-.00309	.00011
#3	.24506	.00025	-.00041	.00609	8.2120	L-.01834	.00024

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01175	.03507	.00165	.00185	.00021	-.00196	-.00026
SDev	.00036	.00033	.00073	.00084	.00016	.00238	.00105
%RSD	3.0390	.94869	44.115	45.340	75.845	121.64	406.12
#1	.01215	.03529	.00180	.00089	.00030	-.00017	.00079
#2	.01149	.03523	.00086	.00222	.00003	-.00466	-.00131
#3	.01159	.03469	.00230	.00245	.00030	-.00104	-.00026

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00254	.00335
SDev	.00198	.00616
%RSD	77.977	184.06
#1	.00140	-.00374
#2	.00139	.00743
#3	.00483	.00634

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Method: TAL Sample Name: 94050001p Operator:
Run Time: 11/01/99 16:42:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.9271	.50725	.50667	.53137	.51918	.50083	64.389
SDev	.0063	.00364	.00196	.00052	.00064	.00049	.108
%RSD	.06311	.71740	.38724	.09767	.12337	.09813	.16735
#1	9.9339	.50965	.50452	.53165	.51944	.50050	64.399
#2	9.9217	.50306	.50837	.53077	.51845	.50060	64.277
#3	9.9255	.50903	.50711	.53168	.51964	.50140	64.492

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49934	.50178	.51011	10.308	40.529	7.3332	.51014
SDev	.00033	.00098	.00085	.017	.037	.0085	.00179
%RSD	.06583	.19639	.16766	.16614	.09179	.11591	.35157
#1	.49972	.50291	.51093	10.322	40.562	7.3355	.51124
#2	.49917	.50135	.51017	10.289	40.489	7.3238	.50807
#3	.49914	.50109	.50922	10.314	40.537	7.3403	.51110

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.203	.04906	.50237	.50282	48.257	.50129	.50257
SDev	.025	.00051	.00219	.00283	.052	.00631	.00084
%RSD	.22605	1.0320	.43597	.56295	.10857	1.2579	.16782
#1	11.189	.04856	.50014	.49963	48.312	.49773	.50264
#2	11.232	.04958	.50247	.50380	48.207	.49757	.50169
#3	11.188	.04903	.50451	.50503	48.253	.50857	.50338

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50999	.67574	.50755	.51387	.50457	.49808	.50436
SDev	.00076	.00165	.00307	.00144	.00058	.00156	.00363
%RSD	.14864	.24437	.60487	.28014	.11427	.31423	.72032
#1	.51084	.67618	.50968	.51553	.50517	.49943	.50033
#2	.50975	.67391	.50403	.51312	.50402	.49636	.50536
#3	.50939	.67712	.50893	.51297	.50451	.49844	.50738

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.50300	.50234
SDev	.00355	.00514
%RSD	.70546	1.0240
#1	.50524	.49644
#2	.49891	.50586
#3	.50484	.50474

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Method: TAL Sample Name: 94050014 Operator:
Run Time: 11/01/99 16:48:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00458	-.00036	.00128	.00889	.00020	-.00023	38.653
SDev	.00224	.00051	.00203	.00000	.00002	.00015	.064
%RSD	48.828	140.84	158.58	.01320	11.756	65.478	.16572
#1	.00630	-.00095	.00282	.00889	.00023	-.00012	38.615
#2	.00205	-.00001	-.00102	.00889	.00021	-.00040	38.727
#3	.00540	-.00013	.00204	.00889	.00018	-.00017	38.616

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00035	.00019	.00011	.00123	16.341	.00213	.00086
SDev	.00006	.00022	.00019	.00184	.007	.00004	.00036
%RSD	18.029	117.66	166.98	150.24	.04194	1.9803	42.187
#1	.00029	.00002	-.00008	-.00077	16.338	.00218	.00084
#2	.00041	.00044	.00011	.00160	16.349	.00210	.00123
#3	.00035	.00010	.00030	.00285	16.336	.00210	.00051

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1587	-.00018	-.00129	.00503	14.828	-.00196	.00028
SDev	.0004	.00062	.00005	.00172	.029	.00375	.00026
%RSD	.03774	346.48	3.5215	34.149	.19594	190.68	94.298
#1	1.1582	-.00053	-.00128	.00693	14.834	.00066	-.00002
#2	1.1591	.00053	-.00133	.00358	14.797	-.00626	.00049
#3	1.1588	-.00053	-.00125	.00459	14.854	-.00030	.00037

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01997	.01747	.00122	-.00098	.00022	-.00156	-.00131
SDev	.00060	.00026	.00089	.00103	.00003	.00113	.00060
%RSD	3.0185	1.4974	72.851	105.03	12.233	72.349	45.713
#1	.02062	.01731	.00075	-.00132	.00020	-.00277	-.00069
#2	.01983	.01777	.00225	-.00179	.00020	-.00054	-.00189
#3	.01944	.01733	.00066	.00018	.00025	-.00136	-.00135

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00219	.00607
SDev	.00579	.00280
%RSD	263.74	46.086
#1	.00698	.00653
#2	.00384	.00307
#3	-.00424	.00861

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Method: TAL Sample Name: 94050017 Operator:
Run Time: 11/01/99 16:54:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01676	.00127	-.00286	.06525	.00027	.00033	55.607
SDev	.00058	.00053	.00110	.00016	.00002	.00011	.248
%RSD	3.4759	41.726	38.654	.24350	6.1683	32.992	.44585
#1	.01734	.00079	-.00387	.06543	.00029	.00021	55.860
#2	.01618	.00118	-.00168	.06515	.00026	.00041	55.364
#3	.01674	.00183	-.00301	.06517	.00026	.00039	55.596

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00074	.00526	.00709	.03131	31.344	5.5763	.01510
SDev	.00015	.00010	.00010	.00070	.031	.0191	.00019
%RSD	19.984	1.9157	1.4248	2.2453	.09915	.34178	1.2877
#1	.00090	.00532	.00719	.03172	31.379	5.5962	.01530
#2	.00070	.00514	.00708	.03049	31.318	5.5583	.01508
#3	.00061	.00532	.00699	.03170	31.336	5.5744	.01491

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1897	.00247	-.00190	.00252	43.693	.00267	.00091
SDev	.0027	.00043	.00054	.00627	.035	.00371	.00013
%RSD	.23070	17.528	28.221	248.35	.07971	139.19	14.294
#1	1.1928	.00221	-.00190	-.00391	43.733	.00631	.00104
#2	1.1888	.00222	-.00136	.00288	43.669	.00281	.00090
#3	1.1876	.00296	-.00243	.00861	43.677	-.00111	.00078

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02808	.18489	.00253	.00033	.00024	-.00272	-.00165
SDev	.00023	.00108	.00148	.00091	.00009	.00153	.00100
%RSD	.82727	.58369	58.414	277.49	38.029	56.264	60.747
#1	.02796	.18613	.00296	-.00020	.00034	-.00446	-.00079
#2	.02794	.18415	.00088	.00138	.00024	-.00159	-.00142
#3	.02835	.18440	.00374	-.00020	.00015	-.00212	-.00276

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00754	-.00037
SDev	.00729	.00776
%RSD	96.802	2104.5
#1	.00608	-.00929
#2	.00108	.00339
#3	.01545	.00480

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/01/99 17:00:00
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.273	5.0376	4.9047	4.8383	4.8311	4.8797	48.878
SDev	.219	.0225	.0216	.0149	.0329	.0345	.395
%RSD	.45346	.44755	.44127	.30714	.68063	.70799	.80897
#1	48.525	5.0627	4.9279	4.8553	4.8663	4.9177	49.292
#2	48.173	5.0311	4.9012	4.8316	4.8257	4.8713	48.840
#3	48.123	5.0190	4.8851	4.8280	4.8012	4.8501	48.504

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9007	4.8006	4.9627	47.118	47.559	4.8499	4.9455
SDev	.0380	.0318	.0166	.355	.231	.0320	.0304
%RSD	.77627	.66182	.33361	.75292	.48529	.66046	.61422
#1	4.9416	4.8336	4.9818	47.499	47.823	4.8839	4.9776
#2	4.8943	4.7980	4.9543	47.060	47.458	4.8454	4.9418
#3	4.8663	4.7702	4.9521	46.796	47.396	4.8203	4.9172

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.700	.50925	5.0495	5.0582	48.549	4.9125	4.8535
SDev	.127	.00374	.0414	.0456	.301	.0325	.0292
%RSD	.24029	.73380	.82053	.90115	.62081	.66217	.60136
#1	52.825	.51316	5.0955	5.1105	48.881	4.9449	4.8862
#2	52.572	.50888	5.0379	5.0375	48.471	4.8799	4.8445
#3	52.704	.50572	5.0151	5.0267	48.294	4.9128	4.8299

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9511	5.3145	4.9466	5.2151	5.0033	4.9799	5.0841
SDev	.0549	.0300	.0331	.0493	.0252	.0378	.0448
%RSD	1.1090	.56366	.66900	.94507	.50425	.75899	.88037
#1	5.0049	5.3487	4.9814	5.2675	5.0316	5.0235	5.1313
#2	4.9533	5.3018	4.9426	5.2079	4.9952	4.9559	5.0787
#3	4.8951	5.2929	4.9156	5.1698	4.9832	4.9604	5.0423

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	4.9761	5.0989
SDev	.0416	.0506
%RSD	.83579	.99263
#1	5.0213	5.1546
#2	4.9395	5.0860
#3	4.9676	5.0559

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/01/99 17:05:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01015	.00168	.00208	.00042	.00058	.00043	.02492
SDev	.00257	.00115	.00148	.00042	.00006	.00015	.00176
%RSD	25.277	68.736	71.264	98.443	9.5228	34.554	7.0723
#1	.01229	.00293	.00065	.00018	.00057	.00032	.02295
#2	.00730	.00144	.00197	.00090	.00064	.00060	.02633
#3	.01085	.00066	.00360	.00018	.00053	.00038	.02549

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00044	.00050	.00072	-.02017	.00407	.00068	.00067
SDev	.00010	.00021	.00004	.00749	.00100	.00005	.00013
%RSD	21.513	42.860	5.9955	37.131	24.450	7.5147	19.570
#1	.00054	.00069	.00075	-.02070	.00506	.00063	.00063
#2	.00044	.00053	.00067	-.02738	.00307	.00073	.00082
#3	.00035	.00027	.00072	-.01243	.00410	.00067	.00057

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08553	.00018	.00040	.00135	-.21755	.00139	.00040
SDev	.00615	.00031	.00011	.00275	.02750	.00391	.00007
%RSD	7.1896	172.74	28.117	203.92	12.643	281.94	16.294
#1	.07847	.00000	.00029	.00050	-.19465	-.00310	.00037
#2	.08839	.00000	.00039	.00442	-.24806	.00316	.00048
#3	.08972	.00054	.00051	-.00088	-.20994	.00410	.00037

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00484	.00284	.00279	.00257	.00058	-.00021	.00061
SDev	.00035	.00055	.00055	.00153	.00005	.00020	.00014
%RSD	7.2740	19.207	19.739	59.568	8.4162	92.833	22.348
#1	.00443	.00334	.00343	.00101	.00055	-.00017	.00047
#2	.00501	.00293	.00251	.00262	.00063	-.00043	.00074
#3	.00507	.00226	.00245	.00407	.00055	-.00004	.00062

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00289	.00019
SDev	.00331	.00247
%RSD	114.59	1274.4
#1	.00203	-.00065
#2	.00654	.00298
#3	.00009	-.00175

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Method: TAL Sample Name: 94050018 Operator:
Run Time: 11/01/99 17:11:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02277	-.00013	.00168	.05455	.00042	-.00010	75.330
SDev	.00425	.00144	.00225	.00025	.00006	.00007	.204
%RSD	18.667	1109.1	133.45	.46071	13.229	73.648	.27033
#1	.02601	.00149	.00357	.05475	.00044	-.00017	75.462
#2	.02435	-.00060	-.00080	.05463	.00046	-.00010	75.433
#3	.01796	-.00127	.00229	.05427	.00036	-.00002	75.095

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00107	.00359	.00043	11.741	18.394	6.9584	.00319
SDev	.00054	.00000	.00011	.035	.046	.0160	.00033
%RSD	50.719	.07070	24.996	.30104	.24827	.22998	10.494
#1	.00169	.00359	.00037	11.761	18.447	6.9705	.00293
#2	.00084	.00359	.00036	11.761	18.368	6.9644	.00356
#3	.00068	.00359	.00055	11.700	18.367	6.9402	.00307

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.3108	-.00111	-.00187	.00460	43.697	-.00024	.00038
SDev	.0209	.00044	.00085	.00187	.093	.00444	.00046
%RSD	.48579	39.931	45.245	40.541	.21294	1835.8	120.72
#1	4.3332	-.00060	-.00239	.00350	43.804	.00366	.00012
#2	4.3072	-.00143	-.00233	.00676	43.634	-.00507	.00091
#3	4.2918	-.00129	-.00089	.00355	43.654	.00069	.00011

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01899	.18357	.00418	-.00091	.00038	-.00107	-.00240
SDev	.00024	.00042	.00103	.00241	.00005	.00048	.00127
%RSD	1.2566	.22645	24.630	264.52	12.208	45.053	52.657
#1	.01887	.18384	.00513	.00102	.00034	-.00074	-.00338
#2	.01926	.18379	.00309	-.00360	.00038	-.00162	-.00286
#3	.01883	.18309	.00431	-.00015	.00043	-.00085	-.00097

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00854	.00224
SDev	.00497	.00449
%RSD	58.153	200.76
#1	.00544	.00214
#2	.00592	.00678
#3	.01428	-.00220

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Method: TAL Sample Name: 94050021 Operator:
Run Time: 11/01/99 17:17:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01919	.00077	-.00150	.03381	.00036	-.00016	55.705
SDev	.00101	.00088	.00149	.00003	.00003	.00005	.039
%RSD	5.2746	113.92	99.466	.07672	8.8733	33.192	.06996
#1	.02012	-.00009	-.00013	.03383	.00040	-.00022	55.667
#2	.01811	.00075	-.00308	.03381	.00034	-.00011	55.745
#3	.01933	.00167	-.00127	.03378	.00034	-.00016	55.702

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00146	-.00000	.00119	-.00429	12.564	.00127	.00135
SDev	.00027	.00023	.00020	.00601	.007	.00009	.00028
%RSD	18.294	460850.	16.740	140.11	.05488	6.9699	20.527
#1	.00168	-.00026	.00119	-.00431	12.566	.00132	.00106
#2	.00152	.00017	.00139	.00173	12.569	.00132	.00162
#3	.00116	.00009	.00099	-.01030	12.556	.00117	.00138

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.4701	-.00016	-.00112	-.00291	16.317	-.00079	.00109
SDev	.0053	.00014	.00132	.00332	.039	.00219	.00007
%RSD	.35863	89.382	117.50	114.03	.23681	277.01	6.6872
#1	1.4666	-.00028	-.00097	L-.00627	16.296	-.00053	.00104
#2	1.4762	-.00021	-.00250	-.00282	16.293	.00126	.00105
#3	1.4675	.00000	.00012	.00036	16.362	-.00309	.00117

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01637	.02356	.00191	-.00029	.00017	-.00087	-.00142
SDev	.00017	.00060	.00065	.00362	.00007	.00008	.00197
%RSD	1.0246	2.5397	34.065	1252.1	41.163	9.0000	139.11
#1	.01656	.02399	.00172	.00385	.00011	-.00096	-.00115
#2	.01628	.02288	.00138	-.00285	.00025	-.00084	-.00350
#3	.01626	.02382	.00264	-.00187	.00016	-.00081	.00041

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00039	-.00495
SDev	.00203	.00432
%RSD	521.48	87.148
#1	-.00186	-.00887
#2	.00208	-.00566
#3	.00095	-.00033

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Method: TAL Sample Name: 94306001;;;as Operator:
Run Time: 11/01/99 17:23:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02382	-.00137	.09413	-.00031	.00023	-.00005	.23616
SDev	.00139	.00071	.00510	.00004	.00002	.00011	.00260
%RSD	5.8177	51.334	5.4177	13.859	9.5152	240.01	1.0996
#1	.02518	-.00209	.09547	-.00026	.00024	-.00014	.23825
#2	.02241	-.00135	.08850	-.00033	.00020	.00008	.23697
#3	.02387	-.00068	.09843	-.00033	.00024	-.00008	.23325

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00012	.00021	.00113	-.02878	.06519	.00018	.00069
SDev	.00027	.00022	.00011	.00277	.00197	.00009	.00023
%RSD	234.84	104.87	9.4111	9.6122	3.0237	52.473	33.760
#1	-.00019	.00044	.00102	-.02559	.06720	.00027	.00096
#2	.00032	.00001	.00123	-.03034	.06326	.00019	.00058
#3	.00022	.00018	.00115	-.03042	.06510	.00008	.00054

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.046	-.00020	.00033	.00559	123.62	.00353	.00068
SDev	.174	.00035	.00124	.00146	.15	.00186	.00015
%RSD	.66983	173.75	378.88	26.216	.12413	52.687	21.801
#1	25.845	-.00061	-.00076	.00726	123.48	.00170	.00076
#2	26.127	.00000	.00168	.00456	123.79	.00346	.00076
#3	26.165	.00000	.00007	.00494	123.60	.00542	.00051

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00145	.14480	.00132	.00372	.00014	.00018	.00023
SDev	.00063	.00026	.00069	.00092	.00005	.00145	.00117
%RSD	43.656	.17997	51.947	24.667	33.431	792.09	503.11
#1	.00072	.14489	.00150	.00418	.00009	-.00082	-.00090
#2	.00181	.14501	.00190	.00267	.00014	.00184	.00143
#3	.00182	.14451	.00056	.00432	.00019	-.00047	.00016

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01383	.00108
SDev	.00145	.00184
%RSD	10.518	170.40
#1	.01469	.00317
#2	.01215	.00037
#3	.01465	-.00030

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Method: TAL Sample Name: 94306002;;;as Operator:
Run Time: 11/01/99 17:29:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02241	-.00155	.06631	-.00019	.00020	.00001	.29381
SDev	.00191	.00045	.00441	.00007	.00002	.00007	.00044
%RSD	8.5186	29.338	6.6466	37.944	9.7799	529.36	.14955
#1	.02300	-.00198	.07092	-.00012	.00018	.00010	.29330
#2	.02027	-.00107	.06586	-.00026	.00021	-.00003	.29407
#3	.02395	-.00159	.06214	-.00019	.00021	-.00003	.29406

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00020	.00027	.00291	-.02591	.08421	.00010	.00069
SDev	.00029	.00022	.00022	.00358	.00552	.00009	.00034
%RSD	141.20	81.304	7.7475	13.807	6.5532	87.135	49.773
#1	-.00006	.00002	.00277	-.02277	.08728	.00015	.00059
#2	.00016	.00044	.00279	-.02981	.08751	-.00000	.00040
#3	.00051	.00036	.00317	-.02516	.07784	.00015	.00106

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.879	-.00047	.00022	.00615	65.245	.00045	.00070
SDev	.066	.00041	.00037	.00124	.037	.00468	.00007
%RSD	.27539	86.997	165.63	20.146	.05597	1032.4	10.559
#1	23.803	-.00073	-.00012	.00667	65.208	.00354	.00074
#2	23.916	-.00067	.00017	.00473	65.281	.00276	.00061
#3	23.918	.00000	.00062	.00704	65.246	-.00494	.00074

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00331	.11759	.00093	.00272	.00012	-.00017	.00033
SDev	.00068	.00070	.00047	.00087	.00003	.00102	.00100
%RSD	20.677	.59771	50.581	31.830	21.677	615.11	306.31
#1	.00256	.11716	.00129	.00274	.00014	.00066	-.00056
#2	.00349	.11721	.00040	.00185	.00014	.00015	.00013
#3	.00389	.11840	.00112	.00358	.00009	-.00130	.00141

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01272	.00248
SDev	.00564	.00260
%RSD	44.302	104.82
#1	.00833	.00546
#2	.01077	.00134
#3	.01908	.00065

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Method: TAL Sample Name: 94306003;;;as Operator:
Run Time: 11/01/99 17:35:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02733	-.00239	.07248	-.00021	.00022	-.00018	.25440
SDev	.00272	.00115	.00262	.00004	.00004	.00005	.00057
%RSD	9.9445	48.041	3.6152	21.087	18.288	29.606	.22478
#1	.02461	-.00162	.07398	-.00026	.00017	-.00013	.25479
#2	.02733	-.00371	.06945	-.00018	.00025	-.00024	.25466
#3	.03004	-.00183	.07400	-.00018	.00023	-.00019	.25374

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00033	.00021	.00103	-.02696	.06040	.00005	.00053
SDev	.00016	.00021	.00025	.01104	.00550	.00006	.00054
%RSD	47.853	100.66	24.145	40.938	9.1088	110.52	102.78
#1	.00022	.00002	.00075	-.03814	.05405	.00004	-.00008
#2	.00025	.00044	.00117	-.01607	.06351	.00011	.00096
#3	.00051	.00018	.00119	-.02667	.06365	.00000	.00071

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.175	.00007	.00074	.00306	125.50	.00168	.00054
SDev	.143	.00018	.00085	.00185	.28	.00276	.00015
%RSD	.59202	261.92	115.05	60.472	.21986	164.75	28.712
#1	24.024	.00000	.00020	.00405	125.18	.00118	.00036
#2	24.192	-.00007	.00030	.00093	125.67	-.00080	.00063
#3	24.309	.00027	.00173	.00421	125.64	.00465	.00063

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00221	.10322	.00118	.00264	.00017	.00172	.00009
SDev	.00165	.00019	.00033	.00166	.00014	.00196	.00031
%RSD	74.829	.18717	27.753	62.876	83.479	113.97	345.51
#1	.00076	.10329	.00104	.00420	.00014	.00040	-.00007
#2	.00185	.10336	.00094	.00283	.00005	.00079	-.00011
#3	.00401	.10300	.00155	.00090	.00032	.00397	.00044

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01358	-.00257
SDev	.00388	.00156
%RSD	28.588	60.575
#1	.01317	-.00088
#2	.00992	-.00395
#3	.01765	-.00288

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Method: TAL Sample Name: icsa Operator:
Run Time: 11/01/99 17:41:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	480.88	-.00140	-.00196	-.00317	-.00052	.00153	490.51
SDev	.70	.00323	.00572	.00004	.00001	.00018	.51
%RSD	.14519	230.37	291.80	1.3162	2.5945	11.646	.10465
#1	481.52	.00063	-.00266	-.00319	-.00050	.00166	489.96
#2	480.98	-.00513	.00408	-.00313	-.00052	.00133	490.98
#3	480.13	.00029	-.00729	-.00320	-.00053	.00161	490.59

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00073	.00348	.00216	248.11	483.44	.00185	.00472
SDev	.00019	.00039	.00031	.21	1.06	.00004	.00038
%RSD	26.830	11.135	14.343	.08296	.22002	2.1421	8.1453
#1	-.00095	.00311	.00205	247.90	484.40	.00185	.00515
#2	-.00061	.00345	.00193	248.32	483.64	.00189	.00442
#3	-.00061	.00388	.00251	248.10	482.30	.00181	.00458

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	238.96	-.00098	.00208	H.01262	242.73	.00198	-.00027
SDev	.72	.00034	.00096	.00286	.37	.00677	.00011
%RSD	.30218	34.602	46.295	22.667	.15235	340.93	40.326
#1	239.51	-.00060	.00097	H.01378	243.12	-.00387	-.00039
#2	239.23	-.00124	.00264	H.01472	242.68	.00939	-.00026
#3	238.15	-.00110	.00264	.00936	242.39	.00043	-.00017

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01067	-.00497	-.00012	.00339	-.00378	-.00184	.00386
SDev	.00096	.00029	.00132	.00241	.00003	.00185	.00219
%RSD	9.0060	5.8444	1117.3	70.981	.92124	100.80	56.770
#1	.01150	-.00518	-.00138	.00607	-.00382	-.00035	.00145
#2	.01090	-.00510	.00125	.00142	-.00376	-.00125	.00440
#3	.00962	-.00464	-.00022	.00269	-.00375	-.00391	.00573

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00669	.01517
SDev	.00331	.00265
%RSD	49.512	17.438
#1	.00836	.01607
#2	.00884	.01724
#3	.00288	.01219

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Method: TAL Sample Name: icsab Operator:
Run Time: 11/01/99 17:47:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	484.78	.09969	.09438	.09777	.09627	.09171	488.51
SDev	.49	.00680	.00984	.00017	.00012	.00026	1.32
%RSD	.10092	6.8209	10.423	.17862	.12190	.28733	.26953
#1	484.79	.09203	.10438	.09758	.09641	.09182	490.03
#2	485.26	.10201	.09404	.09792	.09623	.09141	487.73
#3	484.29	.10502	.08471	.09782	.09618	.09191	487.77

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09252	.09254	.10938	247.03	483.39	.09527	.09349
SDev	.00026	.00060	.00048	.36	.58	.00008	.00020
%RSD	.28073	.65229	.44294	.14388	.11915	.08580	.21316
#1	.09281	.09323	.10887	247.44	483.64	.09533	.09367
#2	.09245	.09211	.10943	246.79	483.81	.09517	.09327
#3	.09230	.09229	.10983	246.87	482.74	.09529	.09352

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	243.96	.01006	.09388	.09804	244.91	.09306	.09442
SDev	.49	.00002	.00199	.00850	.47	.00405	.00025
%RSD	.20081	.17132	2.1226	8.6737	.19316	4.3474	.26171
#1	244.10	.01008	.09501	.09479	244.60	.08951	.09425
#2	244.36	.01006	.09158	.10768	245.46	.09746	.09470
#3	243.41	.01005	.09504	.09163	244.68	.09220	.09429

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09736	.09489	.09602	.10082	.09418	.08606	.09761
SDev	.00094	.00059	.00180	.00390	.00019	.00304	.00417
%RSD	.96606	.62600	1.8703	3.8707	.20101	3.5390	4.2701
#1	.09819	.09454	.09395	.09636	.09433	.08714	.09877
#2	.09634	.09557	.09697	.10359	.09425	.08841	.09298
#3	.09756	.09455	.09714	.10252	.09397	.08262	.10107

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.11059	.09135
SDev	.00984	.01257
%RSD	8.8979	13.759
#1	.09929	.09213
#2	.11520	.10351
#3	.11728	.07841

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/01/99 17:53:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.461	5.1009	5.0154	4.8912	4.9105	5.0328	50.080
SDev	.032	.0075	.0205	.0075	.0067	.0064	.077
%RSD	.06558	.14620	.40909	.15394	.13560	.12809	.15355
#1	48.427	5.0940	5.0174	4.8840	4.9061	5.0342	50.088
#2	48.466	5.1088	5.0349	4.8905	4.9181	5.0385	50.153
#3	48.490	5.1000	4.9940	4.8990	4.9073	5.0258	50.000

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0148	4.9155	4.9664	48.076	47.720	4.9420	5.0896
SDev	.0022	.0025	.0091	.081	.018	.0051	.0034
%RSD	.04394	.05091	.18306	.16794	.03713	.10349	.06736
#1	5.0162	4.9169	4.9572	48.018	47.700	4.9392	5.0925
#2	5.0160	4.9169	4.9666	48.168	47.725	4.9479	5.0905
#3	5.0123	4.9126	4.9753	48.042	47.735	4.9389	5.0858

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.478	.51663	5.1701	5.1218	48.717	4.9644	4.9373
SDev	.186	.00022	.0098	.0282	.032	.0096	.0016
%RSD	.35416	.04178	.18920	.55085	.06540	.19351	.03161
#1	52.355	.51677	5.1760	5.0985	48.742	4.9534	4.9358
#2	52.692	.51674	5.1588	5.1138	48.681	4.9712	4.9389
#3	52.388	.51638	5.1756	5.1532	48.728	4.9686	4.9370

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1520	5.3829	5.0757	5.3532	5.0638	5.0892	5.2104
SDev	.0130	.0078	.0075	.0184	.0043	.0199	.0047
%RSD	.25318	.14522	.14709	.34313	.08491	.39163	.09055
#1	5.1599	5.3742	5.0689	5.3697	5.0590	5.1009	5.2133
#2	5.1592	5.3853	5.0746	5.3334	5.0650	5.0662	5.2049
#3	5.1370	5.3894	5.0837	5.3565	5.0673	5.1005	5.2129

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.0735	5.1456
SDev	.0183	.0347
%RSD	.36108	.67476
#1	5.0679	5.1134
#2	5.0586	5.1409
#3	5.0940	5.1824

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/01/99 17:59:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01784	.00129	.00211	.00027	.00047	.00026	.02010
SDev	.00290	.00205	.00314	.00042	.00007	.00014	.00186
%RSD	16.257	158.58	148.89	156.98	14.120	51.335	9.2253
#1	.02100	.00039	.00398	.00002	.00053	.00035	.02157
#2	.01720	-.00015	.00385	.00075	.00049	.00034	.02072
#3	.01531	.00364	-.00151	.00003	.00040	.00011	.01802

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.00061	-.00009	-.01845	.00464	.00036	.00027
SDev	.00011	.00017	.00005	.00674	.00524	.00010	.00010
%RSD	48.516	27.355	60.642	36.550	113.01	26.398	35.620
#1	.00029	.00078	-.00013	-.01576	.00880	.00040	.00037
#2	.00029	.00061	-.00003	-.01347	-.00125	.00044	.00018
#3	.00010	.00044	-.00011	-.02613	.00637	.00025	.00024

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07679	.00000	-.00033	.00353	-.21534	.00083	.00031
SDev	.00270	.00000	.00187	.00293	.03130	.00236	.00029
%RSD	3.5112	10.749	573.41	83.056	14.535	284.81	94.027
#1	.07368	.00000	.00163	H.00690	-.24328	.00148	.00048
#2	.07823	.00000	-.00051	.00217	-.18151	.00280	.00048
#3	.07845	.00000	-.00210	.00152	-.22122	-.00179	-.00003

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00322	.00325	.00306	-.00039	.00038	.00070	-.00100
SDev	.00081	.00067	.00119	.00272	.00003	.00359	.00108
%RSD	25.038	20.655	38.665	690.46	6.7651	511.91	107.81
#1	.00234	.00368	.00405	.00207	.00040	.00469	-.00006
#2	.00392	.00359	.00340	-.00331	.00036	-.00034	-.00076
#3	.00341	.00248	.00175	.00006	.00036	-.00225	-.00218

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00567	.00208
SDev	.00189	.00396
%RSD	33.389	189.88
#1	.00666	.00664
#2	.00686	-.00054
#3	.00348	.00016

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Method: TAL Sample Name: pbwwg Operator:
Run Time: 11/01/99 18:05:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01363	.00012	-.00124	.00022	.00036	.00009	.01232
SDev	.00215	.00050	.00050	.00004	.00007	.00026	.00057
%RSD	15.815	435.63	40.378	18.230	18.981	285.94	4.6388
#1	.01609	.00042	-.00079	.00020	.00042	-.00021	.01236
#2	.01271	-.00047	-.00178	.00019	.00036	.00029	.01173
#3	.01208	.00040	-.00116	.00026	.00029	.00020	.01287

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00057	.00024	-.00000	-.02483	-.00317	.00027	.00037
SDev	.00018	.00030	.00027	.00068	.00076	.00000	.00016
%RSD	31.077	128.81	8869.5	2.7529	24.049	.65385	44.133
#1	.00038	.00026	-.00031	-.02452	-.00313	.00027	.00022
#2	.00058	-.00008	.00007	-.02562	-.00396	.00027	.00035
#3	.00074	.00052	.00023	-.02437	-.00243	.00027	.00054

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06501	.00009	-.00058	.00111	-.24619	.00077	.00025
SDev	.00329	.00024	.00030	.00137	.00575	.00339	.00013
%RSD	5.0674	262.57	52.078	122.95	2.3371	439.52	51.229
#1	.06738	-.00014	-.00054	.00074	-.24298	-.00286	.00012
#2	.06639	.00034	-.00091	.00263	-.25284	.00385	.00025
#3	.06125	.00007	-.00030	-.00003	-.24277	.00132	.00037

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00208	.00110	.00158	.00051	.00002	.00115	-.00162
SDev	.00094	.00040	.00014	.00228	.00003	.00286	.00121
%RSD	45.260	36.525	8.8258	445.51	155.24	247.40	74.822
#1	.00115	.00105	.00167	.00261	.00000	.00402	-.00299
#2	.00304	.00073	.00142	-.00191	.00005	-.00169	-.00068
#3	.00207	.00152	.00165	.00084	.00000	.00113	-.00119

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00376	-.00060
SDev	.00187	.00167
%RSD	49.780	277.90
#1	.00515	-.00186
#2	.00450	.00130
#3	.00163	-.00125

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Method: TAL Sample Name: lcswwg Operator:
Run Time: 11/01/99 18:11:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.5421	.49320	.48773	.49169	.50651	.50085	10.110
SDev	.0083	.00121	.00331	.00088	.00025	.00077	.008
%RSD	.08684	.24489	.67800	.17879	.04851	.15455	.07941
#1	9.5484	.49206	.48767	.49156	.50638	.50155	10.104
#2	9.5327	.49447	.49106	.49088	.50679	.50002	10.119
#3	9.5452	.49306	.48445	.49262	.50635	.50099	10.107

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49413	.49411	.48249	10.168	9.4623	.50541	.49783
SDev	.00088	.00017	.00093	.021	.0072	.00029	.00067
%RSD	.17745	.03524	.19352	.21101	.07580	.05699	.13448
#1	.49506	.49431	.48307	10.182	9.4705	.50538	.49707
#2	.49400	.49398	.48141	10.179	9.4572	.50572	.49830
#3	.49332	.49404	.48299	10.143	9.4592	.50515	.49813

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.3997	.04870	.50345	.49965	9.6239	.49070	.49171
SDev	.0150	.00023	.00138	.00853	.0290	.00216	.00074
%RSD	.15987	.47095	.27401	1.7065	.30154	.44059	.14981
#1	9.4167	.04845	.50504	.49081	9.5960	.49292	.49256
#2	9.3884	.04876	.50254	.50031	9.6217	.49057	.49131
#3	9.3940	.04889	.50277	.50782	9.6539	.48860	.49126

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51460	.49972	.49682	.51005	.49135	.49785	.50608
SDev	.00233	.00202	.00133	.00387	.00033	.00273	.00072
%RSD	.45384	.40341	.26758	.75896	.06679	.54899	.14324
#1	.51600	.50139	.49659	.50804	.49110	.50101	.50688
#2	.51589	.49748	.49825	.51451	.49172	.49633	.50548
#3	.51190	.50029	.49562	.50759	.49122	.49622	.50588

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.48949	.50434
SDev	.00575	.00992
%RSD	1.1748	1.9666
#1	.48337	.49414
#2	.49029	.50492
#3	.49479	.51395

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Method: TAL Sample Name: 94106006 Operator:
Run Time: 11/01/99 18:17:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07703	-.00007	.00375	.05860	.00053	-.00005	134.17
SDev	.00114	.00082	.00457	.00015	.00001	.00011	.34
%RSD	1.4866	1252.0	121.64	.24936	.91916	224.69	.25261
#1	.07602	-.00011	-.00074	.05876	.00053	-.00004	133.92
#2	.07827	-.00086	.00839	.05847	.00054	.00006	134.56
#3	.07681	.00077	.00362	.05858	.00053	-.00016	134.04

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00016	.00058	.00118	1.3839	16.246	4.3204	.00158
SDev	.00037	.00038	.00001	.0081	.002	.0073	.00015
%RSD	232.56	65.199	.64564	.58725	.01262	.16834	9.4152
#1	.00042	.00075	.00118	1.3759	16.248	4.3172	.00143
#2	.00032	.00084	.00119	1.3921	16.245	4.3288	.00158
#3	-.00026	.00015	.00118	1.3835	16.244	4.3154	.00172

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.2822	-.00094	-.00065	.00288	16.243	.00117	.00020
SDev	.0044	.00016	.00047	.00161	.075	.00278	.00015
%RSD	.13495	17.050	72.143	56.105	.46025	237.50	77.469
#1	3.2842	-.00103	-.00106	.00196	16.171	.00388	.00002
#2	3.2854	-.00103	-.00014	.00193	16.321	-.00168	.00029
#3	3.2772	-.00075	-.00076	.00474	16.237	.00131	.00028

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01639	.12217	.00049	-.00109	.00047	-.00138	-.00046
SDev	.00061	.00028	.00058	.00250	.00010	.00101	.00035
%RSD	3.7467	.22599	119.77	229.17	21.105	72.661	75.845
#1	.01611	.12191	.00094	.00059	.00050	-.00180	-.00086
#2	.01709	.12246	.00069	.00010	.00054	-.00024	-.00026
#3	.01596	.12214	-.00017	-.00396	.00036	-.00211	-.00026

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00243	.00270
SDev	.00621	.00545
%RSD	255.13	201.61
#1	.00375	.00067
#2	.00788	-.00144
#3	-.00433	.00887

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Method: TAL Sample Name: 94106006dup Operator:
Run Time: 11/01/99 18:23:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07559	-.00054	.00214	.05646	.00047	.00001	129.89
SDev	.00072	.00098	.00084	.00014	.00002	.00022	.36
%RSD	.94603	182.41	39.267	.24559	3.9237	1579.6	.27780
#1	.07586	.00059	.00295	.05641	.00049	-.00016	129.98
#2	.07477	-.00117	.00127	.05636	.00046	-.00007	129.49
#3	.07613	-.00103	.00221	.05662	.00047	.00027	130.20

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00054	.00072	.00115	1.3780	15.885	4.1786	.00174
SDev	.00021	.00018	.00014	.0051	.045	.0100	.00036
%RSD	39.313	24.939	11.729	.37261	.28504	.23986	20.397
#1	.00055	.00058	.00116	1.3833	15.848	4.1787	.00215
#2	.00074	.00093	.00128	1.3731	15.871	4.1686	.00155
#3	.00032	.00067	.00101	1.3776	15.935	4.1886	.00151

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.2947	-.00035	-.00026	.00449	15.894	-.00035	.00007
SDev	.0158	.00024	.00039	.00425	.014	.00196	.00020
%RSD	.47815	68.783	150.98	94.751	.08995	553.83	304.72
#1	3.2784	-.00058	-.00065	.00316	15.889	-.00238	-.00011
#2	3.2958	-.00037	.00012	.00925	15.883	-.00022	.00002
#3	3.3098	-.00010	-.00024	.00106	15.910	.00154	.00028

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01625	.13035	.00142	-.00001	.00064	-.00113	.00001
SDev	.00006	.00098	.00072	.00120	.00013	.00194	.00056
%RSD	.34581	.75139	50.705	22825.	19.591	171.98	8897.8
#1	.01620	.12939	.00198	.00133	.00050	-.00227	-.00002
#2	.01625	.13033	.00168	-.00101	.00073	.00111	-.00054
#3	.01631	.13135	.00061	-.00033	.00069	-.00222	.00058

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00745	.00261
SDev	.00710	.00287
%RSD	95.278	109.70
#1	.00450	.00209
#2	.01555	.00571
#3	.00230	.00004

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Method: TAL Sample Name: 94106006ms Operator:
Run Time: 11/01/99 18:29:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.2554	.46571	.46176	.52184	.46951	.45722	137.88
SDev	.4032	.02066	.02020	.02334	.01930	.01777	5.58
%RSD	4.3560	4.4364	4.3746	4.4727	4.1104	3.8874	4.0502
#1	9.5207	.47717	.47312	.53728	.47748	.46368	139.84
#2	9.4540	.47810	.47372	.53325	.48356	.47086	142.22
#3	8.7915	.44186	.43843	.49499	.44751	.43712	131.58

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.45671	.45502	.46607	10.765	24.416	4.5702	.45737
SDev	.01804	.01726	.02063	.448	1.084	.1848	.01935
%RSD	3.9490	3.7930	4.4252	4.1593	4.4409	4.0430	4.2296
#1	.46408	.46199	.48052	10.979	25.117	4.6516	.46546
#2	.46989	.46770	.47524	11.066	24.964	4.7004	.47134
#3	.43615	.43536	.44245	10.251	23.167	4.3587	.43529

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.792	.04626	.46720	.46330	24.370	.45941	.46308
SDev	.529	.00210	.01452	.01299	1.138	.02232	.01912
%RSD	4.1347	4.5466	3.1083	2.8027	4.6713	4.8584	4.1295
#1	13.184	.04745	.47152	.46909	25.037	.47254	.47228
#2	13.001	.04749	.47907	.47239	25.018	.47206	.47587
#3	12.190	.04383	.45101	.44843	23.056	.43364	.44110

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47056	.59353	.46611	.47261	.46530	.46161	.46982
SDev	.01865	.02343	.01685	.01803	.01965	.01081	.01641
%RSD	3.9628	3.9476	3.6150	3.8157	4.2232	2.3411	3.4921
#1	.47604	.60592	.47596	.47974	.47607	.46360	.47530
#2	.48585	.60816	.47573	.48599	.47721	.47129	.48279
#3	.44978	.56651	.44666	.45210	.44262	.44995	.45138

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.46839	.46038
SDev	.01009	.01442
%RSD	2.1534	3.1316
#1	.47282	.46683
#2	.47550	.47045
#3	.45684	.44386

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Method: TAL Sample Name: 94106006msd Operator:
Run Time: 11/01/99 18:35:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.8562	.49269	.49180	.56458	.50024	.48234	152.83
SDev	.0282	.00259	.00249	.00113	.00111	.00058	.33
%RSD	.28593	.52653	.50710	.19975	.22117	.11978	.21647
#1	9.8880	.49552	.49134	.56588	.50062	.48173	152.71
#2	9.8461	.49042	.48957	.56392	.50110	.48241	153.20
#3	9.8344	.49214	.49449	.56393	.49899	.48288	152.57

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48271	.48045	.49836	11.438	26.771	5.0614	.48412
SDev	.00109	.00104	.00142	.036	.060	.0094	.00103
%RSD	.22671	.21584	.28439	.31366	.22451	.18475	.21269
#1	.48171	.48014	.49996	11.431	26.829	5.0614	.48381
#2	.48388	.48160	.49785	11.477	26.777	5.0708	.48328
#3	.48253	.47960	.49727	11.406	26.709	5.0521	.48527

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.637	.04898	.48887	.49099	26.783	.48084	.49084
SDev	.029	.00026	.00136	.00403	.083	.00336	.00096
%RSD	.21224	.52757	.27893	.82143	.31134	.69932	.19485
#1	13.620	.04923	.49007	.49223	26.878	.47706	.49152
#2	13.671	.04900	.48916	.49426	26.748	.48351	.49126
#3	13.621	.04871	.48739	.48648	26.723	.48194	.48975

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49141	.62672	.49545	.49875	.49469	.48321	.49153
SDev	.00047	.00185	.00275	.00133	.00087	.00047	.00225
%RSD	.09672	.29552	.55406	.26689	.17645	.09774	.45820
#1	.49098	.62860	.49825	.49892	.49548	.48267	.49360
#2	.49192	.62668	.49276	.49735	.49483	.48339	.49187
#3	.49133	.62489	.49535	.50000	.49375	.48356	.48913

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.48811	.49203
SDev	.00300	.00619
%RSD	.61388	1.2586
#1	.49147	.49221
#2	.48571	.49813
#3	.48716	.48575

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Method: TAL Sample Name: 941060061 Operator:
Run Time: 11/01/99 18:41:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02597	.00118	.00007	.01187	.00036	.00001	26.349
SDev	.00047	.00166	.00359	.00042	.00003	.00001	.006
%RSD	1.8166	140.04	5219.5	3.5636	7.3652	89.634	.02136
#1	.02614	.00233	-.00404	.01211	.00039	.00003	26.342
#2	.02632	-.00072	.00255	.01212	.00034	.00001	26.352
#3	.02543	.00194	.00170	.01138	.00034	.00001	26.352

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00011	.00001	-.00037	.26145	3.2973	.88032	.00018
SDev	.00030	.00017	.00010	.00130	.0076	.00016	.00026
%RSD	285.98	2920.2	25.709	.49873	.22926	.01804	146.83
#1	.00041	.00001	-.00038	.26209	3.3033	.88035	.00048
#2	-.00019	-.00016	-.00028	.25995	3.2998	.88046	.00002
#3	.00010	.00018	-.00047	.26231	3.2888	.88014	.00004

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.63235	-.00014	-.00062	.00217	3.3841	-.00631	.00003
SDev	.00308	.00036	.00023	.00105	.0287	.01223	.00030
%RSD	.48636	252.93	36.454	48.454	.84714	193.88	1091.5
#1	.62900	.00026	-.00065	.00143	3.4102	.00006	.00020
#2	.63297	-.00041	-.00038	.00171	3.3534	.00142	.00020
#3	.63506	-.00028	-.00083	.00337	3.3886	L-.02041	-.00032

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01178	.02442	.00138	-.00183	.00020	.00056	-.00138
SDev	.00047	.00021	.00067	.00183	.00021	.00160	.00063
%RSD	3.9501	.87222	48.392	100.20	106.26	286.57	45.803
#1	.01222	.02466	.00085	-.00122	.00043	.00180	-.00204
#2	.01129	.02433	.00115	-.00389	.00015	.00112	-.00130
#3	.01183	.02426	.00212	-.00038	.00001	-.00125	-.00079

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00553	.00010
SDev	.00306	.00154
%RSD	55.330	1475.2
#1	.00682	-.00166
#2	.00203	.00116
#3	.00772	.00081

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Method: TAL Sample Name: 94106006p Operator:
Run Time: 11/01/99 18:47:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.103	.50930	.50008	.56640	.51502	.49602	136.03
SDev	.009	.00143	.00528	.00092	.00014	.00033	.05
%RSD	.08895	.28074	1.0569	.16275	.02754	.06601	.03499
#1	10.113	.51091	.50450	.56696	.51494	.49599	136.06
#2	10.098	.50818	.50151	.56691	.51494	.49636	136.04
#3	10.097	.50881	.49422	.56534	.51518	.49570	135.97

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49854	.49540	.51134	11.529	25.038	4.5404	.49923
SDev	.00062	.00060	.00073	.013	.021	.0018	.00150
%RSD	.12463	.12055	.14311	.10982	.08193	.03964	.30029
#1	.49910	.49515	.51165	11.543	25.057	4.5418	.50041
#2	.49866	.49609	.51051	11.524	25.042	4.5410	.49974
#3	.49787	.49498	.51187	11.519	25.016	4.5384	.49754

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.432	.05003	.50472	.50685	25.079	.49922	.50413
SDev	.049	.00055	.00163	.00601	.022	.00083	.00075
%RSD	.36133	1.1032	.32230	1.1861	.08636	.16563	.14942
#1	13.480	.05065	.50482	.50433	25.073	.49887	.50484
#2	13.432	.04983	.50629	.51372	25.062	.49863	.50420
#3	13.383	.04960	.50304	.50252	25.104	.50017	.50334

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49982	.62349	.50881	.51002	.50719	.49642	.50869
SDev	.00075	.00040	.00428	.00420	.00024	.00119	.00247
%RSD	.15080	.06366	.84010	.82392	.04653	.23979	.48619
#1	.50053	.62306	.51181	.51475	.50709	.49779	.50816
#2	.49990	.62385	.51070	.50671	.50701	.49574	.51139
#3	.49903	.62356	.50392	.50861	.50746	.49572	.50653

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.50285	.50846
SDev	.00269	.00869
%RSD	.53507	1.7101
#1	.49975	.50621
#2	.50424	.51805
#3	.50456	.50110

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Method: TAL Sample Name: 94106007 Operator:
Run Time: 11/01/99 18:53:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07891	.00055	.00061	.06014	.00056	-.00003	136.74
SDev	.00197	.00047	.00140	.00010	.00004	.00014	.01
%RSD	2.4905	84.970	229.65	.16667	7.0098	461.31	.01040
#1	.08107	.00011	.00077	.06019	.00060	.00006	136.75
#2	.07841	.00105	.00193	.06020	.00057	.00004	136.75
#3	.07724	.00051	-.00086	.06002	.00052	-.00019	136.73

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00048	.00058	.00119	1.4978	16.661	4.3330	.00137
SDev	.00010	.00038	.00010	.0156	.026	.0015	.00008
%RSD	20.010	66.594	8.4527	1.0395	.15607	.03426	5.5579
#1	.00058	.00102	.00129	1.4973	16.691	4.3340	.00145
#2	.00042	.00031	.00118	1.4825	16.649	4.3313	.00137
#3	.00042	.00040	.00109	1.5136	16.644	4.3337	.00130

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.3029	-.00061	-.00050	.00217	16.663	-.00022	.00028
SDev	.0077	.00055	.00019	.00368	.026	.00117	.00015
%RSD	.23182	88.792	37.640	169.89	.15619	539.36	53.120
#1	3.2962	-.00089	-.00053	-.00206	16.657	.00065	.00019
#2	3.3012	.00001	-.00067	.00391	16.640	-.00155	.00045
#3	3.3113	-.00096	-.00030	.00466	16.691	.00025	.00020

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01204	.12491	.00154	-.00313	.00047	-.00064	-.00060
SDev	.00022	.00083	.00131	.00066	.00020	.00156	.00103
%RSD	1.8270	.66493	85.504	20.909	41.920	245.91	171.39
#1	.01210	.12462	.00301	-.00247	.00041	.00054	-.00123
#2	.01180	.12585	.00047	-.00315	.00069	-.00004	-.00115
#3	.01223	.12426	.00113	-.00378	.00031	-.00241	.00059

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00596	-.00012
SDev	.00726	.00202
%RSD	121.84	1618.5
#1	-.00241	-.00229
#2	.01050	.00022
#3	.00979	.00170

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Method: TAL Sample Name: 94112001 Operator:
Run Time: 11/01/99 18:59:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.6620	.02236	.01076	1.1558	.00117	.00285	199.61
SDev	.0442	.00092	.00100	.0029	.00000	.00008	.46
%RSD	1.2065	4.1257	9.2653	.25437	.11980	2.8899	.23213
#1	3.7111	.02233	.01119	1.1589	.00117	.00275	199.99
#2	3.6497	.02330	.01146	1.1553	.00116	.00289	199.75
#3	3.6253	.02146	.00962	1.1531	.00117	.00290	199.09

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01495	.01445	.89214	20.480	66.190	4.3020	.07771
SDev	.00051	.00013	.00313	.062	.116	.0099	.00052
%RSD	3.4240	.91439	.35054	.30270	.17582	.22965	.66850
#1	.01492	.01434	.89510	20.535	66.265	4.3090	.07780
#2	.01445	.01460	.89244	20.492	66.249	4.3063	.07817
#3	.01547	.01442	.88887	20.413	66.056	4.2907	.07715

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31.318	.00038	.11050	.00225	663.74	-.00352	.01716
SDev	.130	.00065	.00134	.00236	.40	.00313	.00016
%RSD	.41622	173.22	1.2155	104.86	.06082	88.931	.91488
#1	31.442	.00112	.10947	.00123	663.96	-.00035	.01709
#2	31.329	-.00007	.11202	.00495	663.98	-.00661	.01734
#3	31.182	.00007	.11000	.00057	663.27	-.00359	.01705

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.7389	3.3627	.13291	.01983	.14402	.10853	.11131
SDev	.0049	.0034	.00075	.00211	.00323	.00151	.00276
%RSD	.17967	.10082	.56359	10.616	2.2442	1.3913	2.4790
#1	2.7444	3.3652	.13239	.01821	.14622	.10943	.10932
#2	2.7373	3.3640	.13377	.02221	.14553	.10678	.11446
#3	2.7350	3.3588	.13256	.01907	.14031	.10937	.11014

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00704	-.00054
SDev	.00129	.00347
%RSD	18.358	640.43
#1	.00829	-.00269
#2	.00712	.00346
#3	.00571	-.00240

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/01/99 19:05:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.612	5.0924	4.9650	4.8846	4.8782	4.9832	49.762
SDev	.057	.0227	.0226	.0080	.0332	.0394	.367
%RSD	.11630	.44503	.45439	.16402	.67985	.79045	.73700
#1	48.677	5.0665	4.9450	4.8939	4.8402	4.9384	49.347
#2	48.585	5.1025	4.9605	4.8807	4.9010	5.0126	50.040
#3	48.573	5.1083	4.9895	4.8794	4.8935	4.9984	49.900

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9953	4.8899	4.9811	47.871	47.945	4.9185	5.0505
SDev	.0269	.0291	.0101	.286	.025	.0248	.0360
%RSD	.53858	.59434	.20282	.59845	.05118	.50515	.71181
#1	4.9650	4.8570	4.9928	47.544	47.973	4.8903	5.0094
#2	5.0165	4.9119	4.9747	48.077	47.936	4.9371	5.0760
#3	5.0042	4.9009	4.9760	47.992	47.927	4.9282	5.0662

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.700	.51758	5.1460	5.1031	49.041	4.9649	4.9226
SDev	.372	.00179	.0259	.0317	.072	.0381	.0158
%RSD	.70499	.34659	.50261	.62212	.14607	.76694	.32186
#1	53.104	.51639	5.1204	5.0665	49.123	4.9226	4.9048
#2	52.374	.51964	5.1721	5.1216	49.006	4.9965	4.9353
#3	52.621	.51671	5.1455	5.1213	48.994	4.9755	4.9276

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0770	5.3724	5.0388	5.3156	5.0515	5.0793	5.1791
SDev	.0590	.0149	.0244	.0202	.0099	.0359	.0227
%RSD	1.1615	.27733	.48505	.38062	.19632	.70669	.43799
#1	5.0102	5.3552	5.0107	5.2926	5.0403	5.0387	5.1610
#2	5.1216	5.3807	5.0512	5.3307	5.0589	5.1068	5.2045
#3	5.0994	5.3812	5.0546	5.3235	5.0554	5.0925	5.1718

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.0384	5.1351
SDev	.0341	.0321
%RSD	.67700	.62606
#1	5.0014	5.0985
#2	5.0687	5.1476
#3	5.0449	5.1590

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/01/99 19:11:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01388	-.00002	.00109	.00018	.00059	.00021	.01549
SDev	.00106	.00079	.00066	.00000	.00005	.00009	.00114
%RSD	7.6759	4292.4	60.945	.95893	7.9315	44.670	7.3399
#1	.01511	.00042	.00104	.00019	.00063	.00021	.01637
#2	.01320	-.00093	.00045	.00019	.00058	.00030	.01588
#3	.01334	.00045	.00177	.00018	.00054	.00011	.01420

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00023	.00018	-.00001	-.02496	.00170	.00046	.00019
SDev	.00007	.00015	.00026	.00600	.00443	.00006	.00030
%RSD	28.329	79.291	3747.2	24.016	260.56	12.560	154.86
#1	.00016	.00027	.00029	-.01836	.00511	.00052	.00031
#2	.00025	.00027	-.00019	-.03007	-.00331	.00045	-.00015
#3	.00029	.00002	-.00012	-.02645	.00330	.00041	.00042

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06058	.00023	.00042	.00149	-.20431	.00097	.00032
SDev	.00571	.00033	.00099	.00386	.05650	.00085	.00015
%RSD	9.4298	147.56	236.96	258.90	27.654	87.837	46.497
#1	.05996	.00000	-.00017	H.00548	-.17273	.00136	.00050
#2	.06657	.00007	-.00014	-.00223	-.17067	-.00001	.00024
#3	.05520	.00061	.00157	.00123	-.26955	.00157	.00024

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00381	.00393	.00331	.00164	.00051	.00025	.00034
SDev	.00006	.00072	.00077	.00034	.00009	.00260	.00125
%RSD	1.7039	18.323	23.368	20.937	18.368	1033.6	370.17
#1	.00377	.00464	.00405	.00192	.00060	.00137	-.00110
#2	.00377	.00395	.00250	.00126	.00051	-.00272	.00098
#3	.00389	.00320	.00339	.00174	.00041	.00210	.00113

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00406	-.00017
SDev	.00605	.00434
%RSD	149.21	2481.0
#1	.01061	.00254
#2	.00289	-.00518
#3	-.00133	.00212

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Method: TAL Sample Name: 94112002 Operator:
Run Time: 11/01/99 19:17:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9149	.00404	.02757	.52807	.00169	.00076	168.15
SDev	.0104	.00255	.00613	.00183	.00004	.00013	.13
%RSD	.21231	63.188	22.227	.34660	2.5257	17.713	.07805
#1	4.9208	.00342	.02162	.52969	.00174	.00060	168.30
#2	4.9210	.00684	.03386	.52844	.00166	.00082	168.05
#3	4.9028	.00185	.02723	.52608	.00168	.00085	168.10

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02382	.01379	.12115	22.869	358.86	1.8995	.01677
SDev	.00051	.00031	.00010	.021	.62	.0022	.00002
%RSD	2.1483	2.2608	.08143	.09201	.17206	.11712	.09551
#1	.02416	.01414	.12115	22.888	359.32	1.9019	.01677
#2	.02323	.01366	.12106	22.873	359.09	1.8988	.01675
#3	.02407	.01355	.12125	22.846	358.15	1.8977	.01678

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	177.30	.00002	.14005	.00544	1954.0	.00273	.04769
SDev	.27	.00055	.00143	.00030	3.3	.00253	.00015
%RSD	.15057	2803.5	1.0188	5.5779	.17114	92.725	.32279
#1	177.01	-.00026	.14070	.00526	1957.4	.00127	.04780
#2	177.53	-.00034	.14104	.00579	1953.9	.00127	.04751
#3	177.37	.00065	.13842	.00527	1950.7	.00565	.04775

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.35873	1.3874	.00364	.00262	.06773	.13605	.14186
SDev	.00115	.0018	.00173	.00333	.00060	.00057	.00225
%RSD	.32159	.12903	47.612	127.01	.89308	.42275	1.5849
#1	.36006	1.3886	.00460	-.00078	.06826	.13539	.14317
#2	.35816	1.3882	.00467	.00276	.06786	.13642	.14315
#3	.35797	1.3853	.00164	.00589	.06708	.13633	.13927

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01032	.00257
SDev	.00421	.00183
%RSD	40.788	71.484
#1	.00554	.00468
#2	.01347	.00152
#3	.01195	.00150

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Method: TAL Sample Name: 94112003 Operator:
Run Time: 11/01/99 19:23:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94340	.00329	.01453	.39417	.00128	.00022	191.79
SDev	.00690	.00227	.00072	.00232	.00009	.00006	1.01
%RSD	.73143	68.948	4.9556	.58828	6.8130	28.377	.52593
#1	.93877	.00553	.01373	.39264	.00131	.00015	191.19
#2	.94009	.00099	.01514	.39305	.00118	.00025	191.23
#3	.95133	.00335	.01470	.39684	.00134	.00027	192.96

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00721	.00910	.03250	2.6567	509.11	2.0629	.04125
SDev	.00029	.00004	.00012	.0033	3.72	.0108	.00011
%RSD	3.9820	.40576	.37483	.12569	.73080	.52462	.25765
#1	.00688	.00910	.03245	2.6544	505.38	2.0556	.04113
#2	.00738	.00907	.03242	2.6553	509.15	2.0576	.04129
#3	.00737	.00914	.03264	2.6605	512.82	2.0753	.04134

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	238.31	-.00008	.46578	.00763	2002.9	.00067	.10113
SDev	1.99	.00057	.00305	.00526	9.2	.00381	.00036
%RSD	.83408	729.92	.65477	69.040	.45932	571.12	.36076
#1	236.12	-.00018	.46446	.01258	1993.8	.00421	.10115
#2	238.81	.00054	.46361	.00820	2002.5	-.00337	.10076
#3	240.00	-.00059	.46927	.00210	2012.2	.00116	.10149

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06096	3.3836	.03252	.00242	.04253	.45580	.47057
SDev	.00062	.0305	.00058	.00621	.00014	.00271	.00377
%RSD	1.0197	.90156	1.7954	256.57	.31757	.59417	.80136
#1	.06168	3.3583	.03297	-.00379	.04262	.45288	.47004
#2	.06065	3.3751	.03186	.00243	.04237	.45626	.46709
#3	.06056	3.4175	.03272	.00862	.04259	.45824	.47457

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00702	.00747
SDev	.00512	.00732
%RSD	72.915	97.980
#1	.01202	.01240
#2	.00179	.01095
#3	.00725	-.00094

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Method: TAL Sample Name: 94112004 Operator:
Run Time: 11/01/99 19:29:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.6014	.00357	.01254	.15457	.00086	.00017	70.747
SDev	.0088	.00116	.00232	.00038	.00001	.00004	.107
%RSD	.24501	32.591	18.503	.24895	.65083	21.299	.15185
#1	3.5934	.00223	.01454	.15413	.00086	.00018	70.757
#2	3.6000	.00409	.01000	.15471	.00086	.00013	70.635
#3	3.6108	.00437	.01309	.15486	.00087	.00021	70.849

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01652	.00393	.06783	22.748	127.16	.92102	.02001
SDev	.00019	.00018	.00019	.050	.26	.00143	.00047
%RSD	1.1328	4.7251	.28077	.22096	.20790	.15545	2.3521
#1	.01633	.00413	.06768	22.740	126.92	.92053	.02055
#2	.01652	.00378	.06777	22.702	127.11	.91991	.01971
#3	.01670	.00387	.06805	22.801	127.45	.92264	.01977

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	65.061	-.00072	.21064	.00626	1004.1	-.00270	.02633
SDev	.351	.00052	.00006	.00081	2.2	.00208	.00028
%RSD	.53908	72.851	.02773	12.970	.22021	77.112	1.0763
#1	64.709	-.00105	.21062	.00720	1001.8	-.00069	.02649
#2	65.065	-.00011	.21071	.00574	1004.2	-.00257	.02650
#3	65.410	-.00098	.21060	.00586	1006.3	-.00485	.02600

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13065	2.3934	.01318	.01651	.16563	.20658	.21249
SDev	.00148	.0032	.00158	.00210	.00033	.00112	.00055
%RSD	1.1353	.13346	11.976	12.702	.20193	.54358	.25876
#1	.13236	2.3901	.01392	.01748	.16541	.20531	.21309
#2	.12967	2.3935	.01137	.01795	.16546	.20700	.21238
#3	.12993	2.3965	.01425	.01411	.16601	.20744	.21201

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01828	-.00015
SDev	.00272	.00257
%RSD	14.894	1761.0
#1	.01514	.00282
#2	.01973	-.00166
#3	.01997	-.00160

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Method: TAL Sample Name: 94112005 Operator:
Run Time: 11/01/99 19:35:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0255	.00258	.00467	.25582	.00061	.00009	71.925
SDev	.0029	.00163	.00123	.00020	.00002	.00014	.150
%RSD	.28171	63.273	26.277	.07711	3.0676	154.96	.20902
#1	1.0268	.00443	.00608	.25567	.00062	-.00002	71.973
#2	1.0276	.00132	.00403	.25576	.00061	.00005	72.046
#3	1.0222	.00200	.00389	.25605	.00059	.00025	71.757

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00376	.00142	.01306	4.8979	50.156	1.0451	.00732
SDev	.00010	.00027	.00038	.0234	.050	.0020	.00039
%RSD	2.7770	18.938	2.8853	.47763	.09972	.19600	5.3885
#1	.00367	.00166	.01272	4.9103	50.212	1.0457	.00689
#2	.00387	.00148	.01347	4.9124	50.138	1.0467	.00739
#3	.00374	.00113	.01298	4.8709	50.117	1.0428	.00767

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.881	-.00022	.06639	.00517	500.76	-.00019	.00607
SDev	.078	.00008	.00088	.00320	.21	.00159	.00015
%RSD	.37279	36.098	1.3219	61.870	.04225	833.61	2.4489
#1	20.809	-.00013	.06678	.00832	501.00	.00084	.00616
#2	20.964	-.00027	.06700	.00525	500.64	.00062	.00590
#3	20.870	-.00027	.06538	.00193	500.63	-.00203	.00616

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08502	1.5062	.03042	.00422	.02718	.06610	.06636
SDev	.00102	.0018	.00083	.00242	.00013	.00346	.00122
%RSD	1.1971	.12264	2.7350	57.440	.47423	5.2381	1.8319
#1	.08584	1.5078	.03132	.00694	.02729	.06978	.06511
#2	.08535	1.5042	.03026	.00229	.02721	.06559	.06753
#3	.08388	1.5066	.02968	.00343	.02704	.06291	.06644

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00725	.00372
SDev	.00441	.00475
%RSD	60.832	127.54
#1	.01090	.00663
#2	.00235	.00630
#3	.00849	-.00176

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Method: TAL Sample Name: 94112006 Operator:
Run Time: 11/01/99 19:41:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.29640	.00548	.01709	.37876	.00056	-.00011	95.655
SDev	.00215	.00076	.00089	.00086	.00003	.00009	.081
%RSD	.72490	13.809	5.2070	.22590	4.4366	80.735	.08419
#1	.29842	.00502	.01689	.37975	.00058	-.00019	95.645
#2	.29662	.00636	.01806	.37828	.00054	-.00002	95.740
#3	.29414	.00507	.01631	.37826	.00054	-.00011	95.580

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00212	.00048	.00553	6.4563	37.230	.77785	.00771
SDev	.00051	.00026	.00010	.0143	.016	.00052	.00064
%RSD	24.144	54.292	1.7295	.22111	.04214	.06623	8.3582
#1	.00271	.00022	.00552	6.4563	37.218	.77807	.00800
#2	.00184	.00048	.00545	6.4705	37.224	.77822	.00697
#3	.00181	.00074	.00564	6.4419	37.247	.77726	.00816

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	29.122	.00033	.01109	.00102	374.50	-.00094	.01271
SDev	.046	.00048	.00029	.00095	.27	.00355	.00027
%RSD	.15955	144.15	2.5901	92.614	.07206	377.81	2.1089
#1	29.160	-.00015	.01077	.00174	374.61	-.00442	.01261
#2	29.135	.00033	.01120	-.00005	374.19	-.00108	.01251
#3	29.070	.00082	.01131	.00139	374.70	.00268	.01302

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02675	1.4596	.01278	.00968	.01023	.01074	.01110
SDev	.00026	.0005	.00089	.00132	.00002	.00182	.00105
%RSD	.96355	.03325	6.9710	13.640	.20696	16.949	9.4981
#1	.02658	1.4598	.01381	.01114	.01024	.01058	.01069
#2	.02705	1.4599	.01227	.00931	.01021	.01263	.01031
#3	.02663	1.4590	.01226	.00857	.01025	.00900	.01230

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00736	-.00253
SDev	.00232	.00160
%RSD	31.569	63.103
#1	.00976	-.00266
#2	.00719	-.00406
#3	.00512	-.00087

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Method: TAL Sample Name: 94112007 Operator:
Run Time: 11/01/99 19:47:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02193	.00050	.00095	.00026	.00026	-.00020	.10406
SDev	.00176	.00145	.00215	.00000	.00001	.00013	.00204
%RSD	8.0160	286.98	226.33	.54492	3.2136	63.820	1.9604
#1	.02366	.00157	.00315	.00026	.00026	-.00014	.10510
#2	.02197	.00108	.00084	.00026	.00025	-.00035	.10538
#3	.02015	-.00114	-.00114	.00026	.00027	-.00012	.10171

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.00010	-.00017	-.01291	.02046	.00030	.00004
SDev	.00025	.00043	.00019	.00358	.00663	.00007	.00039
%RSD	2267.5	443.61	110.40	27.691	32.397	24.992	878.68
#1	.00019	.00009	-.00036	-.01607	.02472	.00038	.00029
#2	.00006	.00052	.00002	-.00903	.02383	.00030	.00025
#3	-.00029	-.00033	-.00018	-.01364	.01282	.00023	-.00040

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05841	-.00045	-.00012	-.00038	-.13363	-.00126	-.00005
SDev	.00274	.00056	.00152	.00295	.03586	.00108	.00008
%RSD	4.6938	124.93	1265.2	782.94	26.836	85.609	138.25
#1	.06154	-.00027	-.00030	.00296	-.10367	-.00121	-.00001
#2	.05728	.00000	-.00154	-.00143	-.12385	-.00237	-.00001
#3	.05642	-.00108	.00148	-.00266	-.17336	-.00021	-.00014

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01485	.00586	.00099	.00104	.00020	.00013	-.00041
SDev	.00111	.00053	.00024	.00357	.00014	.00116	.00181
%RSD	7.4682	8.9725	24.764	344.21	70.190	914.73	441.26
#1	.01550	.00635	.00125	.00357	.00023	-.00069	-.00028
#2	.01547	.00592	.00076	-.00305	.00032	-.00039	-.00228
#3	.01357	.00531	.00097	.00259	.00005	.00145	.00133

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00298	-.00244
SDev	.00484	.00202
%RSD	162.56	82.615
#1	.00849	-.00020
#2	.00099	-.00302
#3	-.00056	-.00410

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Method: TAL Sample Name: 94113001 Operator:
Run Time: 11/01/99 19:53:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09008	.00213	.00620	.52386	.00032	.00034	78.352
SDev	.00150	.00154	.00353	.00038	.00002	.00014	.215
%RSD	1.6627	72.216	57.015	.07158	4.9402	41.075	.27501
#1	.09157	.00344	.00423	.52352	.00033	.00031	78.578
#2	.09011	.00044	.01028	.52426	.00033	.00022	78.331
#3	.08857	.00250	.00409	.52378	.00030	.00050	78.148

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01860	.00005	.00302	17.535	14.740	.56962	.01046
SDev	.00007	.00020	.00080	.046	.010	.00117	.00004
%RSD	.38658	404.28	26.450	.26390	.07037	.20525	.34331
#1	.01867	.00017	.00289	17.579	14.730	.57065	.01047
#2	.01860	.00017	.00229	17.540	14.750	.56985	.01049
#3	.01852	-.00018	.00388	17.486	14.740	.56835	.01042

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.117	-.00011	.00204	-.00173	333.62	-.00034	.00076
SDev	.022	.00015	.00123	.00346	.42	.00294	.00013
%RSD	.21403	137.33	60.456	200.49	.12732	862.15	16.457
#1	10.099	-.00015	.00075	L-.00524	333.14	-.00081	.00078
#2	10.111	.00006	.00217	.00168	333.96	-.00302	.00063
#3	10.141	-.00022	.00321	-.00162	333.75	.00280	.00088

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02313	.88314	.00232	.00115	.00211	.00160	.00213
SDev	.00001	.00141	.00066	.00424	.00007	.00276	.00054
%RSD	.04500	.16006	28.275	367.91	3.4167	172.55	25.268
#1	.02314	.88403	.00232	.00539	.00209	-.00117	.00154
#2	.02314	.88151	.00298	.00115	.00204	.00162	.00227
#3	.02312	.88389	.00166	-.00309	.00218	.00434	.00259

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00742	-.00669
SDev	.00365	.00344
%RSD	49.119	51.453
#1	.00335	-.00993
#2	.01039	-.00307
#3	.00852	-.00708

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Method: TAL Sample Name: 94113002 Operator:
Run Time: 11/01/99 19:59:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01769	.00037	-.00068	.00026	.00023	.00000	.15534
SDev	.00206	.00059	.00403	.00000	.00002	.00005	.00126
%RSD	11.645	159.32	591.47	.45217	8.6771	1866.2	.81071
#1	.01982	.00016	-.00530	.00026	.00025	-.00002	.15482
#2	.01755	-.00009	.00209	.00026	.00021	-.00003	.15678
#3	.01570	.00104	.00117	.00026	.00022	.00006	.15443

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.00007	-.00024	-.01290	.04047	.00021	-.00034
SDev	.00035	.00013	.00012	.01128	.00513	.00002	.00031
%RSD	3215.2	192.57	49.369	87.445	12.689	9.8227	91.880
#1	-.00042	.00010	-.00037	-.02308	.04620	.00023	-.00057
#2	.00022	.00018	-.00016	-.00077	.03890	.00019	-.00047
#3	.00016	-.00007	-.00017	-.01485	.03630	.00023	.00002

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04752	-.00009	-.00029	-.00025	-.22069	.00017	.00007
SDev	.00536	.00016	.00064	.00298	.05214	.00517	.00015
%RSD	11.282	174.23	221.20	1176.8	23.627	3005.2	205.28
#1	.04163	.00000	-.00047	-.00045	-.27880	-.00548	-.00002
#2	.04879	.00000	-.00081	-.00314	-.17797	.00465	.00025
#3	.05212	-.00027	.00042	.00282	-.20532	.00134	-.00001

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02098	.00292	-.00049	-.00109	.00012	-.00072	-.00020
SDev	.00045	.00019	.00169	.00219	.00007	.00076	.00122
%RSD	2.1595	6.6552	346.97	201.77	57.040	105.52	607.93
#1	.02136	.00306	-.00064	.00083	.00014	-.00129	-.00012
#2	.02048	.00300	-.00209	-.00347	.00019	.00014	-.00146
#3	.02110	.00270	.00127	-.00062	.00005	-.00103	.00098

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00312	-.00233
SDev	.00274	.00321
%RSD	87.869	137.81
#1	.00398	-.00305
#2	.00005	-.00512
#3	.00534	.00118

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Method: TAL Sample Name: 94105001 Operator:
Run Time: 11/01/99 20:05:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05893	.00042	-.00091	.00121	.00023	.00000	.41601
SDev	.00051	.00137	.00340	.00000	.00001	.00012	.00083
%RSD	.86214	327.54	372.56	.16483	2.1364	3779.3	.19850
#1	.05939	.00010	-.00120	.00121	.00023	.00013	.41688
#2	.05902	-.00077	-.00415	.00121	.00023	-.00009	.41524
#3	.05839	.00192	.00262	.00121	.00022	-.00004	.41589

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00094	.00043	.00038	.29776	.03912	.00507	.00067
SDev	.00058	.00022	.00017	.00740	.00530	.00004	.00012
%RSD	61.384	52.006	46.046	2.4849	13.548	.74199	17.441
#1	.00105	.00060	.00058	.30280	.04524	.00503	.00069
#2	.00032	.00018	.00028	.30122	.03607	.00509	.00054
#3	.00146	.00052	.00027	.28927	.03604	.00509	.00077

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09834	-.00025	.00171	.00024	.02696	.00089	-.00001
SDev	.00250	.00068	.00073	.00284	.03939	.00310	.00019
%RSD	2.5468	271.02	42.859	1205.4	146.08	348.84	3108.2
#1	.10090	.00027	.00133	.00265	.04743	.00004	-.00018
#2	.09822	-.00102	.00124	.00096	-.01844	.00432	-.00005
#3	.09590	-.00000	.00255	-.00290	.05190	-.00170	.00020

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02893	.00533	.00115	-.00007	.00121	.00079	.00200
SDev	.00018	.00023	.00030	.00154	.00013	.00137	.00069
%RSD	.62218	4.4016	26.187	2151.1	10.980	172.57	34.788
#1	.02906	.00558	.00139	-.00001	.00129	-.00063	.00214
#2	.02901	.00529	.00124	-.00164	.00106	.00091	.00124
#3	.02873	.00511	.00081	.00144	.00129	.00210	.00261

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00155	-.00081
SDev	.00712	.00195
%RSD	460.36	242.21
#1	.00946	-.00114
#2	-.00049	.00129
#3	-.00433	-.00257

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Method: TAL Sample Name: 94105002 Operator:
Run Time: 11/01/99 20:10:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.21309	.00002	.00214	.01387	.00026	-.00020	20.224
SDev	.00615	.00132	.00161	.00011	.00004	.00008	.183
%RSD	2.8871	7075.9	75.062	.76848	16.585	38.490	.90243
#1	.21775	.00120	.00188	.01394	.00030	-.00026	20.381
#2	.21541	.00027	.00068	.01392	.00027	-.00011	20.268
#3	.20612	-.00141	.00386	.01375	.00021	-.00022	20.024

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00556	.00018	.00139	1.4895	5.7290	.01046	.00117
SDev	.00024	.00026	.00024	.0177	.0514	.00008	.00040
%RSD	4.3244	149.24	17.317	1.1865	.89764	.74914	34.566
#1	.00554	.00023	.00113	1.5034	5.7671	.01051	.00070
#2	.00534	-.00011	.00142	1.4955	5.7494	.01050	.00144
#3	.00582	.00041	.00161	1.4696	5.6705	.01037	.00136

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.4592	-.00042	-.00026	.00167	10.952	.00171	.00182
SDev	.0242	.00036	.00062	.00340	.143	.00277	.00041
%RSD	.98351	86.220	240.87	203.43	1.3092	161.49	22.324
#1	2.4770	-.00056	.00027	.00369	11.033	-.00027	.00201
#2	2.4690	-.00069	-.00010	.00359	11.036	.00053	.00135
#3	2.4317	-.00001	-.00094	-.00226	10.786	.00488	.00210

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02172	.01657	.00088	.00221	.00222	-.00061	-.00025
SDev	.00046	.00032	.00055	.00324	.00017	.00202	.00064
%RSD	2.1066	1.9362	62.626	146.57	7.4962	330.42	255.14
#1	.02125	.01686	.00144	.00456	.00237	.00171	-.00062
#2	.02217	.01663	.00034	-.00148	.00204	-.00160	.00048
#3	.02174	.01622	.00086	.00355	.00224	-.00195	-.00061

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00749	-.00162
SDev	.00595	.00307
%RSD	79.526	189.43
#1	.01366	-.00168
#2	.00702	.00148
#3	.00178	-.00466

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/01/99 20:16:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.091	5.0353	4.9297	4.8489	4.8425	4.9554	49.301
SDev	.110	.0066	.0181	.0108	.0075	.0122	.123
%RSD	.22788	.13156	.36774	.22305	.15530	.24560	.24989
#1	47.965	5.0289	4.9497	4.8367	4.8390	4.9652	49.370
#2	48.147	5.0421	4.9143	4.8529	4.8512	4.9593	49.374
#3	48.161	5.0349	4.9251	4.8572	4.8375	4.9418	49.159

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9430	4.8380	4.9236	47.454	47.277	4.8843	5.0173
SDev	.0102	.0093	.0143	.094	.107	.0068	.0099
%RSD	.20552	.19259	.29068	.19847	.22669	.13883	.19819
#1	4.9481	4.8445	4.9075	47.490	47.155	4.8849	5.0226
#2	4.9496	4.8421	4.9280	47.525	47.353	4.8907	5.0235
#3	4.9313	4.8273	4.9351	47.347	47.324	4.8772	5.0058

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.134	.51070	5.1016	5.0655	48.206	4.9249	4.8610
SDev	.257	.00105	.0106	.0140	.034	.0139	.0087
%RSD	.49251	.20536	.20875	.27551	.07083	.28147	.17850
#1	51.838	.51177	5.1079	5.0519	48.170	4.9133	4.8650
#2	52.293	.51065	5.1076	5.0648	48.237	4.9212	4.8670
#3	52.272	.50967	5.0893	5.0798	48.211	4.9402	4.8511

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0519	5.3230	4.9660	5.2219	4.9977	5.0357	5.1343
SDev	.0204	.0137	.0191	.0222	.0055	.0062	.0141
%RSD	.40356	.25694	.38392	.42491	.11031	.12355	.27546
#1	5.0670	5.3200	4.9877	5.2464	4.9920	5.0335	5.1449
#2	5.0599	5.3379	4.9578	5.2158	5.0030	5.0427	5.1398
#3	5.0287	5.3110	4.9523	5.2033	4.9982	5.0309	5.1183

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.0215	5.0871
SDev	.0109	.0157
%RSD	.21663	.30776
#1	5.0097	5.0726
#2	5.0236	5.0851
#3	5.0311	5.1037

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/01/99 20:22:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00988	.00116	-.00374	.00031	.00049	.00029	.01205
SDev	.00073	.00165	.00237	.00004	.00008	.00014	.00033
%RSD	7.3446	143.13	63.278	13.956	16.176	47.281	2.7131
#1	.00984	-.00075	-.00411	.00026	.00052	.00044	.01167
#2	.01062	.00222	-.00590	.00034	.00055	.00017	.01224
#3	.00917	.00200	-.00121	.00034	.00040	.00025	.01223

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00023	.00044	.00011	-.01959	-.00156	.00029	.00014
SDev	.00062	.00023	.00026	.00535	.00434	.00008	.00022
%RSD	266.65	51.492	224.74	27.316	278.22	26.945	165.27
#1	-.00041	.00018	.00001	-.02543	-.00407	.00026	-.00000
#2	.00083	.00052	.00041	-.01844	-.00405	.00038	.00002
#3	.00029	.00061	-.00008	-.01491	.00345	.00023	.00039

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04572	-.00013	.00061	.00148	-.38389	.00076	.00046
SDev	.00341	.00082	.00100	.00460	.01724	.00428	.00027
%RSD	7.4649	609.98	162.55	310.86	4.4914	566.28	58.553
#1	.04189	-.00061	.00170	-.00382	-.40062	-.00021	.00037
#2	.04843	.00082	.00040	.00446	-.36617	.00543	.00076
#3	.04685	-.00061	-.00026	.00380	-.38487	-.00295	.00025

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00371	.00293	.00261	.00043	.00048	.00141	.00005
SDev	.00074	.00048	.00026	.00073	.00011	.00156	.00074
%RSD	20.067	16.234	9.8249	168.76	22.361	110.65	1577.6
#1	.00298	.00335	.00284	-.00032	.00042	.00296	.00090
#2	.00366	.00303	.00234	.00114	.00060	.00143	-.00028
#3	.00447	.00241	.00264	.00047	.00042	-.00016	-.00048

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00693	-.00163
SDev	.00240	.00626
%RSD	34.656	383.55
#1	.00512	-.00867
#2	.00601	.00330
#3	.00966	.00048

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Method: TAL Sample Name: 94121018 Operator:
Run Time: 11/01/99 20:28:54
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm N	ppm	ppm	ppm	ppm
Avge	.01767	.00001	.00120	.00034	.00028	.00016	.14801
SDev	.00152	.00105	.00269	.00008	.00003	.00012	.00078
%RSD	8.6219	17973.	224.60	22.752	12.550	75.349	.52640
#1	.01892	.00103	-.00185	.00034	.00032	.00029	.14877
#2	.01597	-.00106	.00223	.00026	.00026	.00014	.14804
#3	.01813	.00004	.00322	.00041	.00026	.00005	.14721

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00009	.00021	.00062	-.00944	.04782	.00029	.00003
SDev	.00027	.00025	.00018	.00498	.00163	.00005	.00005
%RSD	313.27	118.47	28.948	52.791	3.4086	15.973	181.33
#1	.00022	.00035	.00067	-.01502	.04689	.00034	.00001
#2	-.00022	.00035	.00077	-.00782	.04686	.00026	.00008
#3	-.00026	-.00008	.00042	-.00546	.04970	.00026	-.00001

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04499	.00000	-.00063	.00159	-.36226	-.00056	.00025
SDev	.00625	.00000	.00098	.00448	.04944	.00177	.00000
%RSD	13.889	2.9322	154.47	281.97	13.648	314.89	1.6791
#1	.04972	.00000	-.00107	.00355	-.33472	.00148	.00025
#2	.03791	.00000	.00049	.00476	-.41934	-.00156	.00024
#3	.04735	.00000	-.00132	-.00354	-.33272	-.00160	.00025

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01382	.00209	.00139	.00170	.00026	-.00042	-.00091
SDev	.00018	.00042	.00109	.00170	.00007	.00381	.00043
%RSD	1.3204	19.982	78.216	100.24	27.305	911.73	47.717
#1	.01402	.00257	.00262	.00035	.00033	-.00226	-.00064
#2	.01367	.00190	.00057	.00361	.00028	.00396	-.00141
#3	.01376	.00181	.00098	.00114	.00019	-.00295	-.00067

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00479	-.00040
SDev	.00741	.00555
%RSD	154.65	1389.2
#1	.00009	.00489
#2	.01333	.00008
#3	.00095	-.00617

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Method: TAL Sample Name: 94127019 Operator:
Run Time: 11/01/99 20:34:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.45722	.00033	.00155	.11488	.00036	.00048	139.64
SDev	.00281	.00189	.00188	.00017	.00002	.00004	.15
%RSD	.61543	579.78	121.62	.14876	4.5480	7.4644	.11038
#1	.45814	-.00156	-.00060	.11507	.00035	.00051	139.60
#2	.45946	.00223	.00292	.11483	.00038	.00049	139.81
#3	.45406	.00031	.00231	.11474	.00034	.00044	139.51

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00123	.00221	.00482	20.337	15.155	9.3687	.00576
SDev	.00003	.00035	.00005	.025	.022	.0101	.00016
%RSD	2.7342	15.892	.94738	.12244	.14541	.10756	2.8620
#1	.00127	.00256	.00480	20.350	15.175	9.3678	.00574
#2	.00123	.00221	.00479	20.353	15.158	9.3792	.00593
#3	.00120	.00186	.00487	20.308	15.131	9.3591	.00560

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.5160	-.00086	.00131	.00410	12.662	.00085	.00089
SDev	.0076	.00042	.00050	.00178	.071	.00352	.00008
%RSD	.21545	48.596	38.415	43.426	.56384	414.12	8.5244
#1	3.5160	-.00114	.00104	.00205	12.635	.00371	.00097
#2	3.5236	-.00038	.00099	.00501	12.743	-.00308	.00085
#3	3.5084	-.00107	.00189	.00523	12.608	.00192	.00084

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06261	.12450	.00066	.00016	.00421	.00064	.00151
SDev	.00051	.00027	.00222	.00186	.00014	.00136	.00133
%RSD	.81769	.21550	335.86	1175.1	3.3400	213.30	87.829
#1	.06300	.12420	.00160	.00016	.00429	-.00012	.00146
#2	.06281	.12469	.00225	.00202	.00429	.00222	.00021
#3	.06203	.12462	-.00187	-.00170	.00405	-.00017	.00286

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00630	.00260
SDev	.00446	.00245
%RSD	70.713	94.403
#1	.00396	.00069
#2	.00351	.00536
#3	.01144	.00173

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Method: TAL Sample Name: 94127020 Operator:
Run Time: 11/01/99 20:40:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.19059	-.00067	.00115	.10328	.00037	.00008	136.18
SDev	.00223	.00214	.00184	.00037	.00003	.00013	.19
%RSD	1.1680	319.26	160.24	.35529	9.1204	169.84	.13851
#1	.19168	.00078	.00315	.10350	.00039	-.00002	136.02
#2	.19206	.00033	.00079	.10350	.00039	.00023	136.13
#3	.18803	-.00313	-.00049	.10286	.00033	.00002	136.39

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00090	.00205	.00298	15.050	14.695	9.1719	.00478
SDev	.00027	.00026	.00022	.030	.023	.0065	.00034
%RSD	29.707	12.845	7.2770	.20152	.15475	.07092	7.0590
#1	.00120	.00231	.00273	15.043	14.703	9.1646	.00517
#2	.00078	.00179	.00311	15.083	14.714	9.1740	.00459
#3	.00071	.00205	.00310	15.023	14.670	9.1771	.00459

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.3235	-.00105	-.00041	-.00001	12.513	.00073	.00036
SDev	.0105	.00010	.00050	.00137	.057	.00189	.00026
%RSD	.31724	9.9400	119.65	18173.	.45328	260.28	72.883
#1	3.3344	-.00107	-.00064	-.00121	12.465	.00066	.00057
#2	3.3133	-.00114	.00015	-.00030	12.576	.00265	.00007
#3	3.3228	-.00094	-.00076	.00149	12.497	-.00113	.00045

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03681	.12303	.00123	-.00038	.00196	-.00034	-.00059
SDev	.00026	.00012	.00068	.00039	.00005	.00127	.00135
%RSD	.69850	.09668	55.646	103.85	2.6752	377.25	231.09
#1	.03709	.12305	.00188	-.00015	.00193	.00029	-.00116
#2	.03676	.12290	.00052	-.00015	.00193	-.00180	.00096
#3	.03659	.12313	.00129	-.00083	.00202	.00050	-.00156

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00898	-.00489
SDev	.00563	.00137
%RSD	62.709	28.077
#1	.00656	-.00549
#2	.00496	-.00332
#3	.01541	-.00586

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Method: TAL Sample Name: 94127021 Operator:
Run Time: 11/01/99 20:46:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01360	.00003	-.00087	.00034	.00023	-.00002	.13066
SDev	.00036	.00142	.00348	.00000	.00001	.00006	.00137
%RSD	2.6773	4130.3	399.22	.16073	6.2018	259.93	1.0507
#1	.01355	-.00055	-.00172	.00034	.00024	-.00007	.13111
#2	.01326	.00165	.00295	.00034	.00022	-.00005	.13175
#3	.01398	-.00099	-.00385	.00034	.00022	.00005	.12912

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.00026	.00073	.01895	.03487	.00137	.00073
SDev	.00000	.00023	.00025	.00532	.00178	.00012	.00050
%RSD	.00038	86.983	34.126	28.066	5.0944	8.4375	69.479
#1	.00022	.00000	.00076	.01285	.03430	.00140	.00015
#2	.00022	.00043	.00096	.02262	.03687	.00148	.00111
#3	.00022	.00035	.00047	.02139	.03345	.00125	.00092

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04748	.00000	-.00053	-.00243	-.33523	-.00002	.00018
SDev	.00106	.00007	.00057	.00125	.02157	.00554	.00020
%RSD	2.2401	57887.	109.44	51.634	6.4338	23891.	113.16
#1	.04867	-.00007	-.00118	-.00293	-.36007	-.00521	.00013
#2	.04715	.00007	-.00009	-.00100	-.32126	.00582	.00039
#3	.04663	.00000	-.00031	-.00335	-.32435	-.00068	.00000

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03082	.00171	.00058	.00224	.00014	-.00112	-.00040
SDev	.00054	.00025	.00057	.00241	.00000	.00118	.00029
%RSD	1.7447	14.669	98.881	107.33	.08318	105.35	72.435
#1	.03027	.00155	.00118	.00445	.00014	-.00242	-.00073
#2	.03084	.00158	.00051	-.00033	.00014	-.00009	-.00025
#3	.03135	.00200	.00004	.00261	.00014	-.00086	-.00021

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00036	-.00385
SDev	.00211	.00218
%RSD	579.25	56.511
#1	.00194	-.00575
#2	-.00084	-.00148
#3	-.00219	-.00433

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Method: TAL Sample Name: 94127026 Operator:
Run Time: 11/01/99 20:52:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.65499	.00028	.00374	.19801	.00010	.00103	149.18
SDev	.01863	.00097	.00142	.00443	.00006	.00023	3.64
%RSD	2.8451	338.79	37.898	2.2385	68.201	22.477	2.4428
#1	.63348	.00018	.00368	.19289	.00002	.00080	144.98
#2	.66605	-.00062	.00519	.20048	.00014	.00102	151.40
#3	.66545	.00130	.00236	.20066	.00012	.00127	151.17

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00174	.00141	.00513	37.537	17.242	9.6259	.00475
SDev	.00011	.00007	.00114	.884	.428	.2286	.00056
%RSD	6.2263	5.3254	22.255	2.3544	2.4829	2.3750	11.876
#1	.00164	.00148	.00413	36.518	16.748	9.3620	.00491
#2	.00172	.00142	.00489	38.078	17.467	9.7615	.00413
#3	.00185	.00133	.00638	38.017	17.511	9.7542	.00522

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.7278	-.00081	.00384	.00035	16.381	-.00030	.00263
SDev	.0943	.00047	.00061	.00072	.467	.00376	.00019
%RSD	2.5293	57.877	15.874	204.16	2.8528	1254.0	7.4218
#1	3.6194	-.00032	.00344	.00096	15.842	.00357	.00256
#2	3.7734	-.00126	.00354	.00054	16.624	-.00053	.00249
#3	3.7906	-.00084	.00454	-.00044	16.676	-.00393	.00285

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08215	.13395	.00048	.02323	.00775	.00472	.00323
SDev	.00150	.00312	.00072	.00205	.00011	.00131	.00043
%RSD	1.8299	2.3272	149.93	8.8412	1.4597	27.845	13.361
#1	.08059	.13035	.00128	.02242	.00763	.00450	.00275
#2	.08228	.13567	.00030	.02170	.00785	.00353	.00337
#3	.08359	.13583	-.00013	.02557	.00776	.00613	.00358

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00039	-.00006
SDev	.01016	.00515
%RSD	2624.6	8497.7
#1	.00866	-.00327
#2	-.01096	.00587
#3	.00346	-.00278

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Method: TAL Sample Name: 94043001 Operator:
Run Time: 11/01/99 20:58:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.22408	.00052	.02147	.25589	.00036	-.00009	37.271
SDev	.00383	.00086	.00437	.00026	.00002	.00011	.107
%RSD	1.7098	163.82	20.351	.10304	5.8732	111.62	.28700
#1	.22843	-.00030	.02406	.25606	.00035	.00000	37.296
#2	.22261	.00141	.01643	.25602	.00038	-.00008	37.363
#3	.22121	.00046	.02393	.25559	.00034	-.00021	37.153

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02350	.00123	.03795	21.867	50.080	.17014	.03257
SDev	.00028	.00023	.00028	.035	.047	.00052	.00015
%RSD	1.2011	19.122	.72940	.16052	.09470	.30536	.45484
#1	.02364	.00114	.03792	21.902	50.126	.17054	.03242
#2	.02368	.00149	.03824	21.868	50.083	.17034	.03272
#3	.02317	.00105	.03768	21.831	50.031	.16955	.03258

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31.004	-.00015	.01498	.00033	472.46	-.00080	.05038
SDev	.041	.00000	.00072	.00193	.44	.00472	.00064
%RSD	.13104	.19799	4.8206	580.21	.09276	592.45	1.2745
#1	31.047	-.00015	.01581	-.00188	472.93	.00040	.05016
#2	31.000	-.00015	.01456	.00165	472.41	.00321	.05110
#3	30.966	-.00015	.01455	.00122	472.05	-.00601	.04988

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10113	1.1107	.00445	.01710	.00403	.01396	.01531
SDev	.00053	.0023	.00106	.00356	.00004	.00156	.00082
%RSD	.52198	.20821	23.934	20.802	.99156	11.145	5.3861
#1	.10154	1.1127	.00431	.01579	.00403	.01514	.01597
#2	.10132	1.1113	.00557	.02112	.00399	.01220	.01557
#3	.10054	1.1081	.00345	.01438	.00407	.01454	.01439

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00325	-.00153
SDev	.00235	.00253
%RSD	72.291	165.48
#1	.00167	-.00405
#2	.00213	.00101
#3	.00596	-.00155

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Method: TAL Sample Name: 94285033 Operator:
Run Time: 11/01/99 21:04:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01561	-.00049	.00208	.00112	.00020	-.00008	.20649
SDev	.00171	.00061	.00195	.00007	.00003	.00020	.00091
%RSD	10.984	122.86	93.764	6.4860	13.335	232.45	.43959
#1	.01726	-.00061	.00126	.00112	.00022	-.00031	.20709
#2	.01574	.00016	.00431	.00104	.00020	.00002	.20693
#3	.01383	-.00104	.00068	.00119	.00017	.00004	.20544

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00179	.00002	.00007	.03425	.03785	.01915	.00048
SDev	.00006	.00017	.00014	.00344	.00423	.00012	.00036
%RSD	3.4759	791.60	198.05	10.041	11.171	.62357	75.598
#1	.00173	-.00015	-.00008	.03625	.03543	.01928	.00028
#2	.00186	.00002	.00020	.03621	.04273	.01905	.00090
#3	.00179	.00019	.00010	.03028	.03539	.01912	.00026

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08337	.00011	-.00110	.00022	-.09046	-.00214	.00008
SDev	.00304	.00010	.00026	.00155	.00624	.00116	.00007
%RSD	3.6505	95.226	23.288	699.52	6.8964	54.056	95.148
#1	.07985	.00020	-.00124	-.00066	-.09323	-.00336	.00012
#2	.08516	.00013	-.00080	-.00069	-.09483	-.00201	.00012
#3	.08509	-.00000	-.00125	.00201	-.08331	-.00106	-.00001

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02308	.00323	.00060	-.00185	.00035	-.00113	-.00125
SDev	.00047	.00015	.00030	.00144	.00020	.00056	.00034
%RSD	2.0204	4.5289	50.280	78.143	58.939	49.009	27.111
#1	.02257	.00340	.00027	-.00108	.00036	-.00081	-.00162
#2	.02348	.00315	.00087	-.00096	.00054	-.00081	-.00096
#3	.02321	.00314	.00066	-.00351	.00014	-.00178	-.00116

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00354	-.00182
SDev	.00136	.00249
%RSD	38.220	136.57
#1	.00227	-.00250
#2	.00496	-.00389
#3	.00340	.00094

Analysis Report 11/01/99 09:16:29 PM page 1

Method: TAL Sample Name: icsa Operator:
Run Time: 11/01/99 21:10:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	476.73	-.00354	-.00545	-.00289	-.00048	.00217	475.03
SDev	.37	.00255	.01156	.00005	.00002	.00010	.51
%RSD	.07676	71.968	212.23	1.6715	4.9172	4.6497	.10763
#1	476.95	-.00484	-.01402	-.00286	-.00046	.00209	474.45
#2	476.92	-.00061	-.01002	-.00295	-.00049	.00229	475.41
#3	476.30	-.00519	.00770	-.00287	-.00050	.00214	475.24

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00082	.00352	.00137	240.67	479.55	.00175	.00489
SDev	.00007	.00035	.00041	.16	.81	.00006	.00070
%RSD	8.7136	10.059	29.775	.06456	.16902	3.4282	14.269
#1	-.00087	.00314	.00094	240.52	480.16	.00174	.00554
#2	-.00084	.00358	.00174	240.83	479.86	.00170	.00498
#3	-.00074	.00384	.00142	240.65	478.63	.00182	.00415

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	241.64	-.00096	.00307	.00095	242.08	.00399	-.00145
SDev	.65	.00035	.00040	.00398	.22	.00824	.00011
%RSD	.26878	36.775	12.839	420.03	.09072	206.71	7.8092
#1	241.25	-.00113	.00263	.00553	242.26	.00289	-.00145
#2	242.39	-.00120	.00338	-.00171	242.15	-.00365	-.00157
#3	241.28	-.00056	.00322	-.00097	241.84	.01273	-.00134

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00990	-.00644	-.00193	.00515	-.00378	-.00654	.00770
SDev	.00044	.00028	.00157	.00368	.00016	.00271	.00083
%RSD	4.4753	4.2719	81.467	71.491	4.1278	41.532	10.727
#1	.00958	-.00673	-.00011	.00702	-.00391	-.00920	.00835
#2	.00971	-.00618	-.00287	.00753	-.00381	-.00377	.00677
#3	.01041	-.00642	-.00280	.00091	-.00361	-.00664	.00796

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00082	.00060
SDev	.01283	.01106
%RSD	1563.2	1847.0
#1	-.00686	.01130
#2	.01563	-.01078
#3	-.00631	.00128

Analysis Report 11/01/99 09:22:27 PM page 1

Method: TAL Sample Name: icsab Operator:
Run Time: 11/01/99 21:16:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	487.37	.09836	.09680	.09814	.09566	.09141	484.17
SDev	.19	.00241	.00519	.00014	.00004	.00049	.49
%RSD	.03910	2.4458	5.3648	.14596	.04596	.53859	.10065
#1	487.39	.09642	.10048	.09822	.09562	.09136	483.73
#2	487.56	.09760	.09907	.09822	.09570	.09095	484.70
#3	487.18	.10105	.09086	.09797	.09566	.09193	484.08

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09146	.09164	.10818	245.10	485.68	.09487	.09281
SDev	.00013	.00067	.00181	.14	.60	.00014	.00053
%RSD	.13672	.72829	1.6760	.05684	.12403	.15082	.56808
#1	.09133	.09152	.10704	244.95	485.93	.09470	.09303
#2	.09158	.09236	.11027	245.22	486.11	.09495	.09221
#3	.09146	.09104	.10723	245.13	484.99	.09495	.09319

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	246.69	.01014	.09276	.09286	246.19	.08799	.09367
SDev	.15	.00033	.00256	.00224	.24	.00713	.00035
%RSD	.06000	3.2165	2.7617	2.4107	.09674	8.1069	.36992
#1	246.53	.01045	.09522	.09123	246.35	L.07976	.09390
#2	246.83	.01016	.09011	.09541	246.31	.09242	.09385
#3	246.70	.00980	.09294	.09194	245.91	.09180	.09327

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09461	.09427	.09223	.10001	.09388	.08240	.09779
SDev	.00038	.00091	.00190	.00345	.00016	.00179	.00313
%RSD	.40591	.96594	2.0572	3.4451	.17413	2.1788	3.2042
#1	.09457	.09322	.09276	.10042	.09402	.08446	.10054
#2	.09501	.09475	.09012	.09638	.09393	.08121	.09438
#3	.09425	.09484	.09381	.10323	.09370	.08153	.09845

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.08887	.09443
SDev	.00723	.00466
%RSD	8.1319	4.9329
#1	.09474	.08905
#2	.09106	.09716
#3	.08080	.09708

Analysis Report 11/01/99 09:28:26 PM page 1

Method: TAL Sample Name: ccv Operator:
Run Time: 11/01/99 21:22:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.864	5.1126	5.0136	4.9083	4.9155	5.0248	50.084
SDev	.061	.0107	.0086	.0092	.0047	.0062	.027
%RSD	.12505	.20849	.17070	.18761	.09614	.12249	.05379
#1	48.804	5.1026	5.0038	4.8985	4.9101	5.0290	50.099
#2	48.926	5.1113	5.0196	4.9168	4.9188	5.0277	50.100
#3	48.861	5.1238	5.0174	4.9096	4.9175	5.0177	50.053

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0100	4.9061	4.9924	48.077	48.009	4.9560	5.0857
SDev	.0043	.0039	.0090	.050	.027	.0035	.0071
%RSD	.08609	.08015	.18043	.10472	.05580	.07013	.14051
#1	5.0116	4.9096	4.9824	48.048	47.978	4.9522	5.0910
#2	5.0133	4.9070	4.9998	48.135	48.030	4.9591	5.0885
#3	5.0051	4.9018	4.9952	48.048	48.017	4.9567	5.0776

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.893	.51786	5.1830	5.1182	48.907	4.9960	4.9262
SDev	.108	.00014	.0056	.0164	.115	.0057	.0038
%RSD	.20410	.02634	.10874	.32061	.23519	.11458	.07739
#1	52.772	.51800	5.1866	5.1081	48.775	4.9987	4.9269
#2	52.927	.51786	5.1860	5.1372	48.963	4.9895	4.9296
#3	52.980	.51773	5.1765	5.1094	48.984	4.9999	4.9221

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1246	5.4101	5.0077	5.2808	5.0651	5.1117	5.2185
SDev	.0106	.0139	.0085	.0217	.0044	.0117	.0067
%RSD	.20629	.25699	.17044	.41002	.08590	.22838	.12813
#1	5.1344	5.3944	5.0106	5.2986	5.0602	5.1073	5.2260
#2	5.1259	5.4206	5.0144	5.2870	5.0685	5.1249	5.2164
#3	5.1134	5.4155	4.9981	5.2567	5.0664	5.1029	5.2132

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.0573	5.1483
SDev	.0114	.0203
%RSD	.22445	.39512
#1	5.0583	5.1326
#2	5.0681	5.1713
#3	5.0455	5.1410

Analysis Report 11/01/99 09:34:24 PM page 1

Method: TAL Sample Name: ccb Operator:
Run Time: 11/01/99 21:28:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01954	.00081	.00354	.00029	.00044	.00018	.01995
SDev	.00398	.00027	.00366	.00004	.00005	.00007	.00149
%RSD	20.362	33.832	103.45	14.266	10.240	39.380	7.4893
#1	.02408	.00053	.00123	.00027	.00047	.00014	.02020
#2	.01784	.00082	.00163	.00026	.00047	.00014	.02130
#3	.01669	.00107	.00776	.00033	.00039	.00026	.01835

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.00052	.00008	-.01412	.00342	.00030	-.00013
SDev	.00000	.00017	.00011	.00180	.00534	.00000	.00034
%RSD	.00410	32.803	125.22	12.761	156.17	.53279	260.11
#1	.00022	.00035	.00004	-.01376	-.00083	.00030	-.00041
#2	.00022	.00069	.00020	-.01608	.00167	.00030	.00025
#3	.00022	.00052	.00001	-.01253	.00941	.00030	-.00023

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05510	-.00034	-.00040	.00130	-.41790	.00231	.00020
SDev	.00397	.00059	.00034	.00142	.05003	.00170	.00020
%RSD	7.2080	173.47	85.320	109.00	11.972	73.423	96.984
#1	.05948	-.00102	-.00001	.00284	-.36018	.00132	.00025
#2	.05407	.00000	-.00058	.00006	-.44470	.00134	.00037
#3	.05174	.00000	-.00061	.00100	-.44883	.00427	-.00001

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00246	.00201	.00253	.00120	.00040	-.00074	-.00040
SDev	.00160	.00083	.00059	.00061	.00011	.00057	.00035
%RSD	64.955	41.219	23.341	51.331	26.792	77.227	88.826
#1	.00422	.00293	.00308	.00053	.00047	-.00026	-.00004
#2	.00111	.00176	.00191	.00174	.00046	-.00058	-.00075
#3	.00204	.00134	.00260	.00132	.00028	-.00137	-.00039

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00192	.00060
SDev	.00292	.00103
%RSD	151.83	172.15
#1	.00526	.00124
#2	.00058	-.00059
#3	-.00008	.00115

SDev	.0012243	.0010770	.005137	.001850	.0008654	.0007434
%RSD	1.858850	16.72324	132.5787	85.15389	4.415477	.7914471
#1	.0672753	.0051994	-.009804	-.004287	.0205993	.0947807
#2	.0652509	.0071345	-.000743	-.000855	.0190996	.0934545
#3	.0650700	.0069864	-.001078	-.001375	.0191011	.0935357
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

000518

Paul C 4/3/99

✓ = CHECKED
U = USE
Ⓡ = RERUN

Calibration Report 11/03/99 02:40:58 PM page 1

Method: TALPC Standard Name: STD3A Operator: pdc
Run Time: 11/03/99 14:37:31
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na5889
Avge	.2157190	.1049171	.0694801	.0721574	.0257708	.8016331
SDev	.0002380	.0006893	.0003157	.0003446	.0001475	.0025455
%RSD	.1103442	.6570172	.4543740	.4775453	.5723007	.3175362
#1	.2158731	.1056953	.0697981	.0725478	.0256140	.7994576
#2	.2158390	.1043833	.0694754	.0718959	.0259067	.8044325
#3	.2154449	.1046726	.0691668	.0720283	.0257916	.8010091
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/03/99 02:45:28 PM page 1

Method: TALPC Standard Name: STD3B Operator: pdc
Run Time: 11/03/99 14:42:06
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na5889
Avge	1.562181	.9786344	.7153922	.7323803	.0831687	6.843835
SDev	.003461	.0039247	.0015295	.0017285	.0005043	.028771
%RSD	.2215697	.4010363	.2137932	.2360104	.6063508	.4203961
#1	1.566172	.9746575	.7139375	.7338184	.0837192	6.876765
#2	1.560374	.9825047	.7152523	.7328598	.0827290	6.831178
#3	1.559998	.9787409	.7169868	.7304627	.0830580	6.823562
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/03/99 02:50:01 PM page 1

Method: TALPC Standard Name: STD30 Operator: [illegible]
Run Time: 11/03/99 14:46:40
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na5889
Avge	15.14941	9.664146	7.176755	7.520021	.6222639	52.14446
SDev	.04516	.029650	.018717	.021908	.0026254	.21200
%RSD	.2981255	.3067999	.2607981	.2913301	.4219120	.4065655
#1	15.14876	9.693562	7.184624	7.529974	.6209686	52.11877
#2	15.19489	9.664611	7.190253	7.535185	.6252853	52.36813
#3	15.10457	9.634268	7.155388	7.494903	.6205379	51.94647
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/03/99 02:54:13 PM page 1

Method: TALPC Standard Name: STD3D Operator: pdc
Run Time: 11/03/99 14:50:51
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na5889
Avge	73.76640	47.17432	18.11029	39.29081	1.485411	103.2228
SDev	.17279	.13642	.01882	.19043	.002774	.2464
%RSD	.2342330	.2891839	.1038967	.4846624	.1867667	.2387532
#1	73.88959	47.04969	18.09736	39.48054	1.488567	103.4346
#2	73.84071	47.15320	18.10163	39.29219	1.484306	103.2816
#3	73.56889	47.32006	18.13187	39.09969	1.483359	102.9523
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Standardization Rpt. 11/03/99 03:06:09 PM page 1

Method: TALPC Standard: STD1-BLANK
Run Time: 11/03/99 15:01:59

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.00585	-.00203	.00214	.00869	-.00062	-.00140	-.00102
SDev	.00015	.00133	.00005	.00002	.00152	.00044	.00074
%RSD	2.5341	65.432	2.3726	.27896	247.69	31.164	72.307
#1	.00602	-.00176	.00219	.00867	.00043	-.00148	-.00185
#2	.00573	-.00085	.00215	.00868	.00009	-.00093	-.00045
#3	.00581	-.00346	.00209	.00872	-.00237	-.00179	-.00076

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.01961	.00058	-.00738	-.00122	-.01323	.00006	.00098
SDev	.00037	.00013	.00077	.00218	.00196	.00058	.00023
%RSD	1.8810	22.785	10.373	179.08	14.788	944.70	23.144
#1	.01925	.00043	-.00819	-.00122	-.01534	.00000	.00072
#2	.01998	.00063	-.00727	.00096	-.01288	.00067	.00109
#3	.01959	.00067	-.00667	-.00339	-.01147	-.00048	.00114

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.06110	-.00074	-.00209	.00137	-.01688	.00395	-.03177
SDev	.00048	.00107	.00110	.00108	.00757	.00549	.00326
%RSD	.78421	143.04	52.786	78.443	44.870	138.86	10.270
#1	.06150	-.00011	-.00328	.00033	-.02408	.00619	-.03331
#2	.06123	-.00015	-.00189	.00249	-.00898	-.00230	-.02802
#3	.06057	-.00197	-.00110	.00130	-.01758	.00797	-.03397

Elem	1960/2
Avge	.01750
SDev	.00329
%RSD	18.772
#1	.02097
#2	.01444
#3	.01710

Standardization Rpt. 11/03/99 03:11:45 PM page 1

Method: TALPC Standard: STD2A
Run Time: 11/03/99 15:07:36

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.07963	.06017	.19453	.17335	.32706	.14630	.05663
SDev	.00090	.00043	.00004	.00073	.00198	.00349	.00154
%RSD	1.1312	.72106	.02011	.42303	.60519	2.3870	2.7190
#1	.07886	.05976	.19456	.17349	.32667	.14421	.05503
#2	.08062	.06014	.19455	.17401	.32921	.15033	.05811
#3	.07941	.06062	.19449	.17256	.32531	.14436	.05674

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.13905	.15452	.13813	.02812	.03976	.05382	.03419
SDev	.00022	.00085	.00139	.00368	.00155	.00049	.00061
%RSD	.15633	.54891	1.0074	13.095	3.9066	.91224	1.7757
#1	.13896	.15440	.13815	.02464	.04025	.05368	.03399
#2	.13890	.15542	.13951	.03198	.04101	.05436	.03487
#3	.13930	.15374	.13672	.02775	.03802	.05341	.03371

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.14774	.06841	.06455	.33453	.14839	.12445	.11959
SDev	.00090	.00195	.00116	.00086	.01145	.00605	.00317
%RSD	.61180	2.8550	1.7967	.25620	7.7155	4.8571	2.6525
#1	.14776	.06726	.06589	.33397	.15528	.13136	.12004
#2	.14863	.07067	.06397	.33552	.13517	.12182	.11622
#3	.14683	.06731	.06380	.33411	.15471	.12016	.12251

Elem	1960/2
Avge	.12734
SDev	.00362
%RSD	2.8400
#1	.12628
#2	.13137
#3	.12438

Standardization Rpt. 11/03/99 03:16:42 PM page 1

Method: TALPC Standard: STD2B
Run Time: 11/03/99 15:12:33

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.73894	.63393	1.9185	1.6477	3.2712	1.4957	.58071
SDev	.00147	.00345	.0045	.0018	.0025	.0024	.00141
%RSD	.19965	.54420	.23424	.10811	.07676	.16193	.24230
#1	.73845	.63048	1.9144	1.6462	3.2704	1.4938	.57945
#2	.74060	.63738	1.9233	1.6472	3.2741	1.4984	.58222
#3	.73777	.63391	1.9177	1.6497	3.2693	1.4948	.58045

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	1.2095	1.5402	1.4631	.29215	.53182	.53534	.32785
SDev	.0029	.0021	.0018	.00918	.00102	.00190	.00107
%RSD	.24309	.13396	.12097	3.1418	.19124	.35448	.32735
#1	1.2080	1.5380	1.4624	.28813	.53167	.53422	.32865
#2	1.2129	1.5404	1.4652	.30265	[illegible]	[illegible]	.32871
#3	1.2077	1.5422	1.4619	[illegible]	[illegible]	.53428	.32820

Elem	B_2496	Mo2020	Sn1899	[illegible]	[illegible]	1960/1	1960/1
Avge	.92368	.69080	.66250	[illegible]	[illegible]	1.2217	1.4538
SDev	.00253	.00240	.00201	.0085	.0368	.0617	.0206
%RSD	.27402	.34801	.30373	.19496	2.3798	5.0519	1.4155
#1	.92078	.69044	.66062	3.3343	1.5078	1.2391	1.4363
#2	.92480	.69337	.66226	3.3469	1.5811	1.1531	1.4765
#3	.92546	.68860	.66462	3.3376	1.5495	1.2728	1.4487

Elem	1960/2
Avge	1.1041
SDev	.0347
%RSD	3.1430
#1	1.1174
#2	1.0647
#3	1.1302

Standardization Rpt. 11/03/99 03:21:44 PM page 1

Method: IALPC Standard: STD2C
Run Time: 11/03/99 15:17:34

Elem	Sb2068	As1890	Ba4934	Cr2677	Co2286	Cu3247	Mn2576
Avge	7.3867	6.2838	18.966	15.172	5.8860	12.021	15.210
SDev	.0127	.0131	.098	.104	.0301	.086	.087
%RSD	.17245	.20888	.51916	.68814	.51069	.71778	.57299
#1	7.3752	6.2732	19.043	15.081	5.8676	12.088	15.137
#2	7.4004	6.2985	18.855	15.286	5.9207	11.924	15.306
#3	7.3843	6.2796	19.000	15.148	5.8697	12.053	15.185

Elem	Ni2316	Ag3280	Tl1908	V_2924	Zn2062	B_2496	Mo2020
Avge	14.857	2.9385	5.5267	5.4066	3.2917	8.8840	6.9549
SDev	.096	.0047	.0130	.0173	.0328	.0178	.0486
%RSD	.64898	.15910	.23456	.31944	.99611	.20077	.69841
#1	14.781	2.9334	5.5283	5.3900	3.2617	8.8822	6.9067
#2	14.965	2.9398	5.5130	5.4245	3.3267	8.8671	7.0039
#3	14.825	2.9425	5.5388	5.4054	3.2868	8.9026	6.9540

Elem	Sn1899	Ti3349	1960/1	1960/2
Avge	6.7260	33.612	14.912	11.284
SDev	.0328	.064	.301	.203
%RSD	.48696	.18955	2.0216	1.7984
#1	6.6963	33.557	14.997	11.417
#2	6.7612	33.682	14.577	11.051
#3	6.7205	33.597	15.162	11.385

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Method: TALPC Sample Name: [illegible] Operator: [illegible]
Run Time: 11/03/99 15:22:[illegible]
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.18817	9.9162	9.8584	9.8165	9.8655	10.059	.01796
SDev	.00280	.0326	.0256	.0403	.0543	.111	.00807
%RSD	1.4886	.32892	.25952	.41075	.54990	1.1001	44.946
#1	.19087	9.9100	9.8541	9.8505	9.8461	10.019	.01161
#2	.18836	9.9515	9.8858	9.7720	9.9268	10.184	.02704
#3	.18528	9.8872	9.8352	9.8270	9.8237	9.9738	.01522

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.9566	9.9423	9.9611	9.4523	-.01561	9.7454	9.9258
SDev	.0797	.0695	.0847	.1025	.01328	.0738	.0710
%RSD	.80048	.69873	.85003	1.0841	85.078	.75730	.71508
#1	9.9249	9.9078	10.013	9.4034	-.02454	9.7128	9.8906
#2	10.047	10.022	9.8634	9.5700	-.00035	9.8299	10.008
#3	9.8977	9.8967	10.007	9.3834	-.02193	9.6936	9.8794

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00947	.99702	10.278	10.075	.12973	10.077	9.9014
SDev	.05123	.00450	.202	.183	.00084	.019	.0476
%RSD	541.23	.45179	1.9633	1.8177	.64683	.18755	.48066
#1	.04233	.99702	10.407	10.191	.12979	10.058	9.8938
#2	-.04957	1.0015	10.045	9.8636	.12886	10.096	9.9524
#3	.03563	.99252	10.382	10.169	.13053	10.076	9.8581

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.7956	10.035	9.9235	9.9249	9.8732	9.6891	10.571
SDev	.1155	.003	.0745	.0699	.0310	.1831	.214
%RSD	1.1794	.03403	.75024	.70458	.31392	1.8899	2.0234
#1	9.7140	10.036	9.9053	9.8856	9.8763	9.7672	10.725
#2	9.9278	10.038	10.005	10.006	9.9025	9.4799	10.327
#3	9.7451	10.032	9.8599	9.8835	9.8407	9.8202	10.662

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	9.8802	10.171
SDev	.1787	.187
%RSD	1.8085	1.8380
#1	9.9654	10.303
#2	9.6749	9.9574
#3	10.000	10.253

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Method: TALPC Sample Name: icv 3d Operator: pdc
Run Time: 11/03/99 15:28:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	499.37	.00345	-.00044	.00271	.00191	.00327	493.62
SDev	.07	.00552	.00475	.00059	.00054	.00115	.67
%RSD	.01387	160.04	1082.9	21.875	28.336	35.145	.13487
#1	499.31	.00770	-.00039	.00334	.00248	.00405	494.21
#2	499.44	.00544	.00428	.00261	.00183	.00383	493.76
#3	499.35	-.00279	-.00521	.00217	.00141	.00195	492.90

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00023	.00758	-.00200	249.10	497.20	.01017	.00717
SDev	.00063	.00131	.00073	.32	.65	.00045	.00119
%RSD	279.59	17.252	36.610	.12856	.13058	4.4411	16.557
#1	-.00045	.00824	-.00145	248.81	497.30	.01059	.00691
#2	.00049	.00842	-.00171	249.44	496.62	.01022	.00813
#3	-.00072	.00607	-.00283	249.06	497.08	.00970	.00846

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	250.78	-.00070	-.00202	.00544	252.34	.00120	-.00130
SDev	.03	.00061	.00091	.00108	.96	.00663	.00176
%RSD	.01341	86.831	45.249	19.796	.38017	553.15	135.74
#1	250.82	-.00014	-.00101	.00666	253.16	-.00491	-.00148
#2	250.76	-.00062	-.00225	.00502	252.56	.00826	.00055
#3	250.77	-.00134	-.00280	.00463	251.28	.00026	-.00296

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02424	.02269	.00189	.00064	.00221	.02477	-.01593
SDev	.00212	.00402	.00293	.00288	.00060	.00608	.00433
%RSD	8.7586	17.739	154.64	448.54	27.156	24.549	27.201
#1	.02484	.02693	.00507	.00286	.00276	.01778	-.01093
#2	.02599	.02222	.00130	.00168	.00231	.02881	-.01829
#3	.02188	.01892	-.00070	-.00262	.00157	.02771	-.01856

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00476	.00528
SDev	.00515	.00419
%RSD	108.22	79.446
#1	-.00118	.01010
#2	.00754	.00329
#3	.00792	.00246

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Method: TALPC Sample Name: icb Operator: pdc
Run Time: 11/03/99 15:34:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.05121	.00243	.00148	.00007	-.00004	.00017	.02529
SDev	.02141	.00126	.00077	.00020	.00003	.00026	.01295
%RSD	41.809	51.937	51.570	305.61	78.574	150.68	51.213
#1	-.02846	.00388	.00078	.00024	-.00004	.00041	.03790
#2	-.05423	.00176	.00230	.00012	-.00008	-.00010	.02595
#3	-.07096	.00164	.00137	-.00016	-.00001	.00020	.01202

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00125	.00114	.00142	.01999	.02059	.00007	.00042
SDev	.00072	.00080	.00018	.02551	.02326	.00017	.00038
%RSD	57.329	69.921	12.737	127.62	112.98	246.20	89.401
#1	.00127	.00173	.00140	.04336	.03685	.00005	.00022
#2	.00196	.00145	.00125	.02383	.03097	.00024	.00086
#3	.00053	.00023	.00161	-.00722	-.00606	-.00009	.00018

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.09158	.00175	.00028	.00104	.05846	-.00134	.00185
SDev	.03252	.00123	.00111	.00095	.00953	.00224	.00153
%RSD	35.504	70.563	394.44	91.179	16.306	167.22	82.996
#1	-.09038	.00147	.00148	.00017	.06877	.00068	.00188
#2	-.12468	.00310	.00005	.00205	.05666	-.00375	.00337
#3	-.05969	.00068	-.00069	.00091	.04996	-.00094	.00030

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00208	.00575	.00089	.00204	.00064	.01029	-.00545
SDev	.00076	.00027	.00130	.00051	.00043	.00381	.00324
%RSD	36.244	4.6303	145.73	25.027	67.060	37.067	59.496
#1	.00218	.00597	.00118	.00151	.00057	.00611	-.00171
#2	.00278	.00545	.00203	.00253	.00109	.01359	-.00714
#3	.00128	.00582	-.00053	.00208	.00025	.01117	-.00750

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00410	-.00096
SDev	.00470	.00094
%RSD	114.47	97.565
#1	-.00067	.00009
#2	.00872	-.00171
#3	.00427	-.00127

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Method: TALPC Sample Name: gcs Operator: pdc
Run Time: 11/03/99 15:40:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47197	.02167	.02158	.02122	.02098	.02180	.21907
SDev	.01248	.00088	.00111	.00004	.00009	.00036	.00182
%RSD	2.6439	4.0690	5.1433	.20901	.40504	1.6613	.83181
#1	.48638	.02193	.02032	.02127	.02107	.02150	.21749
#2	.46488	.02240	.02199	.02118	.02090	.02170	.21865
#3	.46464	.02069	.02243	.02121	.02097	.02220	.22107

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02212	.02038	.02305	.53952	.19866	.02042	.02134
SDev	.00108	.00048	.00045	.02408	.00501	.00007	.00110
%RSD	4.8719	2.3758	1.9334	4.4633	2.5238	.34008	5.1576
#1	.02095	.02003	.02258	.51221	.20442	.02043	.02030
#2	.02232	.02018	.02347	.54868	.19528	.02035	.02121
#3	.02308	.02093	.02311	.55769	.19627	.02049	.02249

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	[illegible]
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99494	.02198	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SDev	.02040	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
%RSD	2.0506	.40548	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.01970	.02158

Elem	In2082	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02467	.03997	.02214	.02291	.02102	.02177	.01895
SDev	.00088	.00074	.00148	.00277	.00013	.00740	.00336
%RSD	3.5481	1.8434	6.6772	12.079	.61118	33.973	17.751
#1	.02400	.04033	.02155	.02077	.02107	.02866	.01637
#2	.02435	.04046	.02105	.02192	.02087	.02271	.01772
#3	.02566	.03913	.02382	.02603	.02111	.01395	.02276

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01999	.02090
SDev	.00517	.00235
%RSD	25.868	11.246
#1	.02531	.01885
#2	.01968	.02038
#3	.01498	.02347

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Method: TALPC Sample Name: qcs 600 Operator: pdc
Run Time: 11/03/99 15:46:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95507	.97799	.96753	.97801	.99121	.98078	9.5416
SDev	.00797	.01213	.00932	.00269	.00988	.01662	.1465
%RSD	.83490	1.2405	.96326	.27461	.99637	1.6949	1.5356
#1	.94903	.98738	.97471	.97641	.99653	.99310	9.6395
#2	.96411	.98229	.97088	.97651	.99729	.98737	9.6121
#3	.95207	.96429	.95700	.98111	.97981	.96187	9.3731

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98159	.96419	1.0124	.95534	9.4844	.96194	.99528
SDev	.01225	.01174	.0050	.04461	.0157	.00996	.01056
%RSD	1.2482	1.2180	.49656	4.6692	.16530	1.0355	1.0612
#1	.98958	.97196	1.0082	.95965	9.4914	.96776	1.0018
#2	.98770	.96993	1.0111	.99764	9.4954	.96782	1.0009
#3	.96748	.95068	1.0180	.90874	9.4864	.95044	.98810

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.5772	H1.0713	1.0382	.96027	9.7962	.97993	.96463
SDev	.1812	.0058	.0241	.01701	.0682	.00641	.00998
%RSD	1.8920	.53770	2.3200	1.7352	.69616	.65400	1.0348
#1	9.4150	H1.0764	1.0156	.96489	9.7517	.98637	.97147
#2	9.5439	H1.0726	1.0383	.97738	9.7621	.97987	.96925
#3	9.7727	H1.0651	1.0638	.99854	9.8747	.97356	.95318

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99510	1.0165	.99825	1.0928	.97550	.98345	1.0664
SDev	.01844	.0018	.00970	.0112	.00457	.01849	.0399
%RSD	1.8528	.17543	.97172	1.0214	.46881	1.8796	3.7432
#1	1.0095	1.0182	1.0063	1.0990	.97787	.99995	1.0228
#2	1.0015	1.0166	1.0010	1.0994	.97839	.96347	1.0750
#3	.97432	1.0147	.98748	1.0799	.97022	.98692	1.1012

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.96046	.98971
SDev	.00795	.02549
%RSD	.82791	2.5751
#1	.96557	.96410
#2	.95130	.98996
#3	.96451	1.0151

Analysis Report 11/03/99 03:57:47 PM page 1

Method: TALPC Sample Name: icsa Operator: pdc
Run Time: 11/03/99 15:52:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	506.38	.00196	-.00346	.00194	.00122	.00268	503.76
SDev	1.73	.00849	.00172	.00015	.00006	.00074	3.30
%RSD	.34186	432.13	49.773	7.8781	4.6928	27.629	.65483
#1	505.24	-.00022	-.00520	.00177	.00120	.00183	503.28
#2	505.52	.01133	-.00176	.00206	.00117	.00319	507.28
#3	508.37	-.00522	-.00342	.00197	.00128	.00301	500.73

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00339	.00635	.00112	255.34	503.80	.00961	.00477
SDev	.00074	.00082	.00035	.87	2.12	.00031	.00077
%RSD	21.955	12.989	30.924	.33980	.42052	3.2672	16.101
#1	-.00323	.00630	.00083	254.40	502.60	.00951	.00554
#2	-.00273	.00719	.00102	256.12	502.56	.00996	.00476
#3	-.00420	.00555	.00151	255.50	506.25	.00935	.00401

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	255.92	-.00044	-.00263	.00250	256.45	.00609	-.00138
SDev	3.83	.00111	.00198	.00416	1.86	.00494	.00337
%RSD	1.4977	250.11	75.088	166.54	.72660	81.100	243.28
#1	254.23	.00055	-.00492	-.00230	256.38	.00775	.00029
#2	253.22	-.00024	-.00144	.00499	254.63	.00999	.00082
#3	260.30	-.00163	-.00155	.00480	258.35	.00054	-.00526

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02779	.01062	-.00057	.00012	.00146	.03597	-.02243
SDev	.00284	.00097	.00223	.00508	.00041	.02153	[illegible]
%RSD	10.213	9.1872	393.48	4116.4	28.263	[illegible]	[illegible]
#1	.02688	.01094	-.00248	[illegible]	.00175	[illegible]	[illegible]
#2	.03097	.00952	.00188	.00588	[illegible]	[illegible]	[illegible]
#3	.02581	.01138	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Elem	[illegible]	[illegible]
Units	ppm	ppm
Avge	[illegible]	[illegible]
SDev	[illegible]	[illegible]
%RSD	[illegible]	[illegible]
#1	.02884	[illegible]
#2	.00143	.00328
#3	[illegible]	[illegible]

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Method: [illegible] Sample Name: icsab Operator: pdc
Run Time: 11/03/99 15:57:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	501.42	.11214	.10475	.11115	.10068	.10619	496.10
SDev	1.04	.00149	.00022	.00039	.00017	.00051	.30
%RSD	.20657	1.3265	.21459	.34732	.17119	.48354	.05951
#1	500.84	.11382	.10476	.11095	.10049	.10560	496.05
#2	502.62	.11158	.10497	.11160	.10082	.10639	495.84
#3	500.81	.11101	.10452	.11091	.10074	.10657	496.42

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10019	.11001	.11424	251.78	495.49	.11306	.10747
SDev	.00059	.00047	.00086	.41	.96	.00025	.00038
%RSD	.58690	.43061	.75482	.16194	.19289	.21933	.34859
#1	.09992	.10976	.11383	251.70	494.42	.11314	.10704
#2	.09979	.10970	.11523	252.22	496.25	.11325	.10771
#3	.10087	.11055	.11366	251.42	495.81	.11278	.10767

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	250.04	.01003	.10471	.10418	252.63	.11467	.10139
SDev	.62	.00019	.00188	.00243	1.73	.00072	.00105
%RSD	.24640	1.9313	1.7933	2.3288	.68553	.62716	1.0313
#1	249.82	.01006	.10436	.10212	251.94	.11547	.10257
#2	250.74	.01020	.10674	.10356	254.61	.11408	.10103
#3	249.56	.00982	.10303	.10685	251.35	.11447	.10057

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H.12629	.11570	.10536	.11564	.10497	.12725	.09274
SDev	.00037	.00034	.00069	.00287	.00015	.00182	.00191
%RSD	.29290	.29426	.65330	2.4805	.14695	1.4286	2.0614
#1	H.12598	.11578	.10518	.11423	.10479	.12674	.09247
#2	H.12619	.11600	.10613	.11374	.10508	.12927	.09477
#3	H.12670	.11533	.10479	.11894	.10503	.12575	.09098

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.10016	.10567
SDev	.00164	.00429
%RSD	1.6413	4.0572
#1	.10206	.10162
#2	.09927	.10523
#3	.09916	.11016

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Method: TALPC Sample Name: ccv Operator: pdc
Run Time: 11/03/99 16:03:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.549	5.1518	5.1198	4.9396	4.8122	4.9600	48.934
SDev	.048	.0087	.0055	.0112	.0066	.0232	.279
%RSD	.09796	.16829	.10651	.22680	.13739	.46867	.57110
#1	48.537	5.1602	5.1259	4.9279	4.8160	4.9666	49.203
#2	48.508	5.1524	5.1180	4.9405	4.8161	4.9792	48.953
#3	48.601	5.1429	5.1154	4.9503	4.8046	4.9341	48.645

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9811	4.9180	4.9763	47.455	47.269	4.9432	5.0713
SDev	.0142	.0166	.0104	.131	.028	.0147	.0099
%RSD	.28539	.33740	.20984	.27646	.05993	.29653	.19568
#1	4.9947	4.9336	4.9644	47.565	47.276	4.9558	5.0662
#2	4.9823	4.9198	4.9840	47.491	47.293	4.9466	5.0828
#3	4.9663	4.9006	4.9805	47.310	47.238	4.9271	5.0650

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	54.962	.51359	5.2304	5.2691	49.516	5.0402	4.8834
SDev	.294	.00029	.0216	.0280	.227	.0161	.0062
%RSD	.53462	.05662	.41238	.53181	.45791	.31936	.12650
#1	54.681	.51369	5.2309	5.2392	49.286	5.0394	4.8874
#2	54.938	.51327	5.2086	5.2733	49.524	5.0244	4.8866
#3	H55.267	.51383	5.2518	5.2947	49.739	5.0566	4.8763

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1011	5.3572	5.0894	5.2104	4.9876	4.9612	5.3641
SDev	.0213	.0117	.0077	.0115	.0032	.0707	.0295
%RSD	.41744	.21861	.15074	.22042	.06495	1.4249	.54957
#1	5.1191	5.3440	5.0906	5.2152	4.9899	4.8986	5.3962
#2	5.1067	5.3662	5.0965	5.2186	4.9889	4.9472	5.3383
#3	5.0776	5.3615	5.0813	5.1972	4.9839	5.0379	5.3579

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.1935	5.3063
SDev	.0629	.0106
%RSD	1.2117	.19906
#1	5.1265	5.2950
#2	5.2027	5.3081
#3	5.2514	5.3159

Analysis Report 11/03/99 04:[illegible] PM page [illegible]

Method: TALPC Sample Name: ccb [illegible]
Run Time: 11/03/99 16:09:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.09024	-.00050	.00055	.00019	.00016	.00031	.00410
SDev	.00727	.00413	.00189	.00032	.00006	.00089	.00689
%RSD	8.0572	818.44	345.74	168.44	39.444	283.05	168.00
#1	-.09266	.00387	.00009	.00049	.00023	.00098	.01049
#2	-.09599	-.00105	.00262	.00024	.00011	.00066	.00501
#3	-.08206	-.00434	-.00107	-.00015	.00014	-.00070	-.00320

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00025	.00015	.00218	.01705	-.00724	.00015	.00029
SDev	.00196	.00171	.00039	.02119	.02052	.00029	.00196
%RSD	780.07	1147.2	18.010	124.34	283.53	187.56	668.91
#1	.00189	.00083	.00245	.03707	.01236	.00044	.00200
#2	.00078	.00142	.00237	.01922	-.00550	.00016	.00072
#3	-.00192	-.00180	.00173	-.00515	-.02857	-.00014	-.00185

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.08313	.00082	-.00057	.00219	.04916	.00029	.00126
SDev	.06476	.00244	.00101	.00111	.00270	.00392	.00267
%RSD	77.898	296.63	176.53	50.856	5.4971	1364.1	212.16
#1	-.12715	.00251	.00051	.00142	.05220	.00154	.00361
#2	-.11347	.00194	-.00073	.00167	.04828	.00344	.00180
#3	-.00877	-.00198	-.00150	.00346	.04701	-.00411	-.00164

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00192	.00725	.00175	.00410	.00053	.00533	-.00411
SDev	.00161	.00199	.00039	.00479	.00085	.00632	.00170
%RSD	83.756	27.411	22.304	116.96	159.54	118.55	41.358
#1	.00334	.00917	.00144	.00555	.00127	.00994	-.00463
#2	.00224	.00738	.00219	.00799	.00072	.00793	-.00549
#3	.00018	.00520	.00162	-.00125	-.00040	-.00187	-.00221

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00397	.00084
SDev	.00689	.00504
%RSD	173.58	602.75
#1	.00713	-.00186
#2	.00872	-.00228
#3	-.00394	.00865

pnewg Operator: pdc

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Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.10909	-.00362	-.00087	-.00009	-.00002	-.00039	.00033
SDev	.00065	.00313	.00408	.00019	.00004	.00063	.00492
%RSD	.59474	86.406	466.52	205.75	210.15	159.95	1471.5
#1	-.10966	-.00327	.00016	.00003	-.00005	-.00044	-.00074
#2	-.10922	-.00691	-.00537	-.00031	.00002	-.00100	-.00396
#3	-.10839	-.00068	.00259	.00000	-.00003	.00026	.00570

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00082	-.00065	.00242	-.01378	-.01800	-.00020	.00037
SDev	.00161	.00134	.00061	.03232	.00922	.00015	.00162
%RSD	196.10	208.25	25.137	234.49	51.210	76.941	436.64
#1	-.00129	-.00023	.00269	-.00956	-.01842	-.00022	.00004
#2	-.00215	-.00215	.00172	-.04801	-.02700	-.00033	-.00106
#3	.00097	.00044	.00283	.01622	-.00858	-.00003	.00213

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.04423	-.00087	-.00123	.00001	.04061	.00348	-.00026
SDev	.05129	.00172	.00062	.00191	.00117	.00611	.00087
%RSD	115.97	199.19	50.461	13743.	2.8733	175.52	334.99
#1	-.03609	-.00168	-.00180	.00082	.04117	.00139	.00043
#2	.00251	-.00203	-.00057	.00139	.04140	-.00131	-.00124
#3	-.09911	.00112	-.00133	-.00217	.03927	H.01035	.00003

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00117	.00283	-.00000	-.00321	-.00029	-.00010	-.00263
SDev	.00076	.00107	.00183	.00269	.00054	.00816	.00398
%RSD	65.375	37.814	471060.	84.045	187.68	8008.6	151.34
#1	.00153	.00379	.00039	-.00299	-.00045	-.00752	.00016
#2	.00029	.00303	-.00199	-.00600	-.00073	-.00143	-.00087
#3	.00168	.00168	.00161	-.00063	.00032	.00864	-.00719

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00230	-.00163
SDev	.00333	.00391
%RSD	144.78	240.79
#1	.00483	-.00168
#2	-.00147	.00231
#3	.00354	-.00551

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Method: TALPC Sample Name: lcsswg Operator: pdc
Run Time: 11/03/99 16:21:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.6907	.50427	.51140	.50281	.49093	.49840	9.6251
SDev	.0111	.00276	.00305	.00101	.00126	.00397	.0256
%RSD	.11429	.54672	.59554	.20144	.25656	.79745	.26621
#1	9.6842	.50145	.51472	.50258	.49151	.50054	9.6514
#2	9.6845	.50439	.51073	.50193	.48948	.49381	9.6002
#3	9.7035	.50696	.50875	.50392	.49179	.50084	9.6238

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49773	.49730	.49331	10.250	9.5193	.49583	.49594
SDev	.00170	.00228	.00175	.055	.0203	.00082	.00370
%RSD	.34172	.44785	.35468	.53241	.21287	.16580	.74578
#1	.49857	.49931	.49139	10.300	9.4959	.49668	.50015
#2	.49577	.49557	.49482	10.192	9.5303	.49503	.49320
#3	.49884	.49651	.49372	10.258	9.5317	.49577	.49447

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.085	.05093	.50828	.50170	9.6799	.50167	.49704
SDev	.010	.00091	.00370	.00388	.0062	.00676	.00066
%RSD	.09792	1.7801	.72800	.77323	.06388	1.3475	.13237
#1	10.094	.05005	.51254	.50113	9.6729	.50395	.49639
#2	10.087	.05186	.50583	.50583	9.6846	.49406	.49770
#3	10.074	.05088	.50648	.49813	9.6822	.50699	.49704

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.52016	.50357	.51347	.51561	.49047	.48204	.52074
SDev	.00442	.00123	.00455	.00493	.00064	.02426	.01641
%RSD	.84928	.24494	.88665	.95602	.13005	5.0338	3.1517
#1	.52340	.50353	.51631	.51531	.48983	.46455	.53584
#2	.51512	.50236	.50822	.51083	.49048	.50974	.50327
#3	.52195	.50482	.51588	.52068	.49110	.47182	.52311

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.49779	.50315
SDev	.01652	.00493
%RSD	3.3187	.97901
#1	.48473	.50883
#2	.51636	.50006
#3	.49228	.50055

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Method: TALPC Sample Name: 94121001 Operator: pdc
Run Time: 11/03/99 16:26:54
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.678	.15147	H13.336	.45080	.00147	.02854	10.354
SDev	.096	.00261	.064	.00227	.00004	.00102	.157
%RSD	.65602	1.7246	.48348	.50245	2.8636	3.5600	1.5184
#1	14.779	.14950	H13.289	.45304	.00152	.02771	10.222
#2	14.587	.15443	H13.409	.44851	.00144	.02967	10.528
#3	14.667	.15047	H13.309	.45084	.00146	.02824	10.312

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06964	.01882	2.4301	66.816	4.8692	.83750	.09572
SDev	.00238	.00133	.0270	.546	.0170	.00841	.00092
%RSD	3.4166	7.0848	1.1117	.81775	.34906	1.0037	.96284
#1	.06782	.01773	2.4568	66.421	4.8888	.83010	.09485
#2	.07233	.02031	2.4028	67.440	4.8607	.84664	.09669
#3	.06876	.01843	2.4309	66.588	4.8581	.83577	.09563

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.2527	.00009	3.6298	.06730	.99971	.02480	.05862
SDev	.0935	.00186	.0541	.00143	.01693	.00146	.00230
%RSD	7.4655	2130.0	1.4898	2.1267	1.6938	5.8974	3.9183
#1	1.3540	-.00175	3.6885	.06894	1.0183	.02593	.05623
#2	1.1696	.00197	3.5819	.06663	.98514	.02533	.06081
#3	1.2346	.00004	3.6191	.06633	.99569	.02315	.05881

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.74053	.05879	.00250	.01245	.53772	3.4034	3.7421
SDev	.01424	.00045	.00200	.00505	.00204	.0143	.0748
%RSD	1.9229	.75979	79.903	40.538	.38035	.41932	1.9991
#1	.72944	.05928	.00306	.00794	.53569	3.4140	3.8246
#2	.75659	.05869	.00415	.01790	.53978	3.3872	3.6787
#3	.73556	.05841	.00028	.01150	.53768	3.4090	3.7230

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.06569	.06763
SDev	.00565	.00446
%RSD	8.5981	6.5938
#1	.06108	.07237
#2	.07199	.06352
#3	.06400	.06700

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Method: TALPC Sample Name: 94121002 Operator: pdc
Run Time: 11/03/99 16:32:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	68.925	.00299	5.3176	.98592	.00406	.00295	6.2306
SDev	.173	.00186	.0145	.00355	.00002	.00017	.0273
%RSD	.25087	62.363	.27355	.35970	.47850	5.7460	.43853
#1	68.728	.00504	5.3008	.98217	.00403	.00298	6.2621
#2	68.993	.00141	5.3249	.98922	.00407	.00310	6.2127
#3	69.053	.00250	5.3270	.98636	.00407	.00276	6.2171

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.11303	.03870	.15435	99.829	17.360	.84767	.12435
SDev	.00066	.00024	.00086	.199	.057	.00152	.00087
%RSD	.58322	.61074	.55454	.19926	.32969	.17946	.69980
#1	.11288	.03844	.15338	100.05	17.308	.84812	.12438
#2	.11246	.03875	.15480	99.781	17.349	.84808	.12368
#3	.11375	.03890	.15488	99.689	17.421	.84779	.12518

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.4387	-.00061	.18771	.01250	1.0175	.00707	.16299
SDev	.0349	.00015	.00091	.00169	.0049	.00298	.00041
%RSD	.78838	46.716	.48545	13.532	.48312	42.077	.25387
#1	4.3895	-.00021	.18768	.01385	1.0121	.00364	.16315
#2	4.4470	-.00048	.18864	.01060	1.0187	.00862	.16330
#3	4.4526	-.00024	.18682	.01306	1.0217	.00895	.16252

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.52876	.03988	.00277	.02105	1.3553	.18064	.19076
SDev	.00257	.00078	.00093	.00112	.0020	.00508	.00232
%RSD	.48649	1.9483	33.409	5.3373	.14759	2.8132	1.2169
#1	.53122	.03925	.00384	.01976	1.3540	.18590	.18810
#2	.52897	.04074	.00232	.02157	1.3543	.18026	.19234
#3	.52609	.03964	.00216	.02181	1.3576	.17576	.19185

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01108	.01278
SDev	.00284	.00200
%RSD	25.664	15.613
#1	.01436	.01317
#2	.00970	.01062
#3	.00920	.01456

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Method: TALPC Sample Name: 94121003 Operator: pdc
Run Time: 11/03/99 16:38:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.8912	.00602	4.6497	.33358	.00091	.00647	18.180
SDev	.0142	.00121	.0031	.00082	.00002	.00018	.075
%RSD	.24180	20.138	.06731	.24733	1.8249	2.7292	.41417
#1	5.8757	.00487	4.6496	.33263	.00089	.00661	18.262
#2	5.9037	.00591	4.6528	.33413	.00091	.00653	18.161
#3	5.8943	.00729	4.6466	.33398	.00092	.00628	18.115

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02253	.00841	.13058	141.98	2.5224	2.9368	.03158
SDev	.00060	.00032	.00077	.38	.0031	.0082	.00067
%RSD	2.6744	3.8044	.58958	.19480	.12099	.27761	2.1272
#1	.02016	.00813	.12974	142.29	2.5253	2.9457	.03229
#2	.02244	.00834	.13070	141.89	2.5227	2.9341	.03100
#3	.02198	.00876	.13126	141.76	2.5192	2.9300	.03131

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.80253	-.00007	.28064	.01147	.95249	.00286	.02625
SDev	.01210	.00013	.00358	.00225	.00293	.00282	.00044
%RSD	1.5082	182.03	1.2748	19.582	.30765	98.448	1.6673
#1	.81650	-.00010	.28475	.00941	.94933	.00086	.02654
#2	.79593	.00007	.27827	.01114	.95511	.00164	.02575
#3	.79515	-.00018	.27889	.01387	.95303	.00608	.02647

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	220372
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50872	.07701	.00178	.00431	.22542	.26715	.28662
SDev	.00234	.00094	.00024	.00159	.00025	.00173	.00614
%RSD	.45971	1.2168	13.594	36.915	.11237	.64782	2.1417
#1	.51129	.07602	.00192	.00266	.22553	.26584	.29370
#2	.50816	.07714	.00193	.00445	.22561	.26649	.28327
#3	.50671	.07788	.00150	.00584	.22513	.26911	.28288

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01352	.00995
SDev	.00378	.00240
%RSD	27.978	24.105
#1	.00918	.00909
#2	.01611	.00810
#3	.01528	.01266

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Method: TALPC Sample Name: 94121004 ✓ Operator: pdc
Run Time: 11/03/99 16:44:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm 4	ppm	ppm	ppm	ppm
Avge	43.685	.00276	.52030	.45329	.00285	.00318	3.8472
SDev	.035	.00138	.00181	.00123	.00001	.00051	.0155
%RSD	.07926	50.064	.34802	.27165	.47285	15.938	.40314
#1	43.646	.00347	.52201	.45187	.00284	.00287	3.8553
#2	43.705	.00365	.51840	.45410	.00287	.00377	3.8571
#3	43.706	.00117	.52048	.45389	.00285	.00290	3.8293

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05950	.03007	.08133	101.86	10.508	1.2581	.07156
SDev	.00025	.00051	.00067	.19	.008	.0028	.00100
%RSD	.42656	1.7032	.82138	.18255	.07229	.22290	1.3898
#1	.05970	.02951	.08065	101.89	10.510	1.2605	.07251
#2	.05959	.03019	.08137	102.03	10.499	1.2589	.07052
#3	.05922	.03051	.08198	101.66	10.513	1.2550	.07165

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.9454	-.00042	.12412	.00762	.80878	.00312	.09848
SDev	.0045	.00023	.00213	.00187	.00174	.00079	.00083
%RSD	.15295	54.938	1.7190	24.506	.21493	25.305	.83975
#1	2.9464	-.00044	.12220	.00791	.80692	.00364	[illegible]
#2	2.9493	-.00018	.12374	.00933	[illegible]	.00351	[illegible]
#3	2.9405	-.00063	.12641	.00562	.81038	[illegible]	[illegible]

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24725	.02529	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SDev	.00165	.00030	[illegible]	[illegible]	[illegible]	[illegible]	.00262
%RSD	[illegible]	1.1973	[illegible]	[illegible]	[illegible]	2.2569	2.1087
#1	[illegible]	[illegible]	[illegible]	.01271	1.0004	.11982	.12291
#2	.24867	.02564	.00281	.01757	.99899	.12517	.12255
#3	.24544	.02516	.00399	.01255	.99878	.12377	.12726

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00897	.00653
SDev	.00285	.00302
%RSD	31.803	46.303
#1	.00576	.00856
#2	.01122	.00796
#3	.00992	.00305

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Method: TALPC Sample Name: 94121005 Operator: pdc
Run Time: 11/03/99 16:50:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.785	.07369	5.8237	.29512	.00131	.00799	8.9273
SDev	.006	.00049	.0040	.00013	.00001	.00027	.0513
%RSD	.04515	.67027	.06948	.04333	.59783	3.3821	.57469
#1	13.791	.07372	5.8283	.29497	.00130	.00772	8.9858
#2	13.784	.07319	5.8208	.29518	.00131	.00799	8.8898
#3	13.779	.07417	5.8220	.29521	.00132	.00826	8.9064

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04337	.01422	.24077	70.379	4.0064	.40219	.05931
SDev	.00038	.00046	.00031	.212	.0079	.00158	.00096
%RSD	.87693	3.2035	.12953	.30163	.19774	.39389	1.6189
#1	.04299	.01465	.24048	70.623	4.0148	.40402	.05929
#2	.04337	.01427	.24074	70.236	3.9990	.40118	.05837
#3	.04375	.01374	.24110	70.278	4.0055	.40137	.06029

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0214	.00138	.70480	.01836	1.1936	.00697	.08856
SDev	.0126	.00017	.00106	.00236	.0018	.00101	.00085
%RSD	1.2298	12.107	.15065	12.875	.15172	14.468	.96396
#1	1.0354	.00122	.70397	.01780	1.1920	.00774	.08947
#2	1.0177	.00136	.70600	.02096	1.1933	.00733	.08844
#3	1.0111	.00155	.70443	.01633	1.1956	.00583	.08778

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.62539	.05133	.00330	.02673	.66379	.67020	.72158
SDev	.00297	.00024	.00080	.00115	.00076	.00036	.00166
%RSD	.47561	.47158	24.313	4.2943	.11405	.05305	.22944
#1	.62878	.05161	.00240	.02542	.66403	.67000	.72043
#2	.62320	.05118	.00394	.02755	.66294	.66999	.72347
#3	.62419	.05119	.00357	.02722	.66440	.67061	.72082

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.02062	.01680
SDev	.00501	.00266
%RSD	24.295	15.862
#1	.02408	.01423
#2	.02290	.01955
#3	.01487	.01661

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Method: TALPC Sample Name: 94121006 Operator: pdc
Run Time: 11/03/99 16:56:00
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	45.377	.02187	5.3022	.42382	.00263	.01630	10.497
SDev	.148	.00153	.0178	.00148	.00003	.00034	.023
%RSD	.32559	6.9777	.33518	.35027	1.1748	2.0953	.22320
#1	45.208	.02225	5.2839	.42224	.00259	.01628	10.498
#2	45.481	.02019	5.3194	.42519	.00265	.01666	10.520
#3	45.441	.02317	5.3032	.42404	.00264	.01598	10.473

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08154	.03852	.37775	83.620	13.311	.67057	.15441
SDev	.00058	.00102	.00265	.162	.042	.00075	.00145
%RSD	.71218	2.6346	.70275	.19356	.31457	.11143	.94143
#1	.08136	.03735	.37487	83.500	13.263	.67014	.15306
#2	.08219	.03900	.38010	83.804	13.340	.67143	.15595
#3	.08108	.03920	.37827	83.556	13.330	.67014	.15423

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.0564	.00044	.46854	.02535	1.1147	.00824	.12041
SDev	.0054	.00040	.00373	.00015	.0055	.00369	.00077
%RSD	.13221	91.485	.79628	.57539	.49612	44.786	.64384
#1	4.0613	-.00001	.47190	.02548	1.1085	.01248	.11983
#2	4.0507	.00075	.46453	.02519	1.1192	.00658	.12118
#3	4.0572	.00058	.46920	.02539	1.1163	.00568	.12042

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.65709	.04507	.00346	.03450	1.6331	[illegible]	.47784
SDev	.00196	.00063	.00022	.00543	.0054	.00214	[illegible]
%RSD	.29753	1.4013	6.2488	5.5286	[illegible]	[illegible]	[illegible]
#1	.65644	.04435	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#2	.65929	.04543	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
#1	[illegible]	[illegible]
#2	[illegible]	[illegible]
#3	[illegible]	[illegible]

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Method: TALPC Sample Name: 94121007 Operator: pdc
Run Time: 11/03/99 17:01:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.2314	.00474	7.6509	.35520	.00176	.01247	5.7543
SDev	.0307	.00186	.1044	.00225	.00004	.00078	.1210
%RSD	.49255	39.233	1.3645	.63196	2.3409	6.2325	2.1030
#1	6.2071	.00557	7.6570	.35286	.00172	.01285	5.8177
#2	6.2659	.00605	7.7521	.35734	.00180	.01298	5.8305
#3	6.2213	.00261	7.5436	.35539	.00177	.01157	5.6148

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03309	.01421	.25151	69.407	2.0807	.47249	.04942
SDev	.00216	.00116	.00182	1.030	.0255	.00752	.00233
%RSD	6.5385	8.1692	.72455	1.4840	1.2248	1.5914	4.7120
#1	.03381	.01423	.24941	69.739	2.0834	.47560	.05129
#2	.03480	.01536	.25269	70.230	2.1047	.47795	.05015
#3	.03066	.01304	.25242	68.252	2.0540	.46391	.04681

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.54128	-.00046	.66688	.00874	.86351	.00797	.04632
SDev	.03094	.00083	.00694	.00143	.00770	.00804	.00174
%RSD	5.7151	181.47	1.0414	16.341	.89181	100.82	3.7619
#1	.51524	.00026	.66008	.00712	.85482	.01210	
#2	.53312	-.00026	.66658	.00925	[illegible]	.01311	[illegible]
#3	.57548	-.00137	.67396	.00883	.86950	-.00129	[illegible]

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	[illegible]
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SDev	[illegible]						
%RSD	[illegible]				[illegible]	1.2003	1.4931
[illegible]	[illegible]		[illegible]	.00743	.33792	.63488	.67179
[illegible]	[illegible]	.03074	.00240	.00427	.34089	.62367	.68712
#3	.91918	.03110	.00447	-.00111	.33384	.63814	.69112

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01048	.00737
SDev	.00299	.00260
%RSD	28.488	35.292
#1	.01117	.00461
#2	.00721	.00978
#3	.01306	.00772

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Method: TALPC Sample Name: 94121008 Operator: pdc
Run Time: 11/03/99 17:07:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.805	.03479	H31.523	.49553	.00483	.01672	10.412
SDev	.025	.00038	.005	.00171	.00002	.00010	.015
%RSD	.14247	1.1011	.01556	.34611	.36236	.61482	.14696
#1	17.779	.03507	H31.518	.49357	.00483	.01673	10.429
#2	17.830	.03494	H31.522	.49632	.00481	.01661	10.399
#3	17.804	.03435	H31.528	.49672	.00485	.01681	10.407

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07042	.02829	.44757	102.57	6.3969	1.0117	.10603
SDev	.00032	.00063	.00177	.09	.0072	.0008	.00043
%RSD	.45754	2.2238	.39577	.08838	.11220	.07591	.40460
#1	.07046	.02886	.44566	102.61	6.3905	1.0125	.10648
#2	.07008	.02838	.44917	102.64	6.3956	1.0110	.10563
#3	.07072	.02762	.44788	102.47	6.4047	1.0115	.10597

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.6613	.00248	1.0783	.02746	5.6276	.00870	.08194
SDev	.0094	.00045	.0061	.00113	.0266	.00668	.00089
%RSD	.56355	18.053	.56619	4.1275	.47315	76.829	1.0875
#1	1.6652	.00217	1.0850	.02657	5.5970	.00450	.08215
#2	1.6681	.00228	1.0731	.02707	5.6454	.00519	.08271
#3	1.6506	.00300	1.0767	.02874	5.6404	.01641	.08096

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0402	.06503	.00558	.03651	.89449	1.0180	1.1079
SDev	.0018	.00059	.00084	.00151	.00056	.0026	.0097
%RSD	.17636	.90671	15.097	4.1261	.06316	.25961	.87569
#1	1.0410	.06454	.00541	.03521	.89406	1.0161	1.1189
#2	1.0381	.06487	.00649	.03816	.89428	1.0168	1.1007
#3	1.0415	.06568	.00484	.03615	.89513	1.0210	1.1039

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.02618	.02765
SDev	.00282	.00202
%RSD	10.774	7.2988
#1	.02346	.02768
#2	.02909	.02562
#3	.02601	.02965

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Method: TALPC Sample Name: ccv Operator: pdc
Run Time: 11/03/99 17:13:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3[illegible]	[illegible]	Ca3[illegible]
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.047	5.2039	5.1492	5.0344	4.8[illegible]	[illegible]	[illegible]
SDev	.096	.0084	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
%RSD	.19481	.16054	.14554	.27491	.03488	.24339	[illegible]
#1	49.051	5.2090	5.1499	5.0415	4.8188	[illegible]	48.574
#2	49.141	5.1943	5.1411	5.0434	4.8166	4.9833	48.677
#3	48.950	5.2085	5.1564	5.0184	4.8199	5.0049	48.752

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9848	4.9241	5.0137	47.635	47.412	4.9311	5.0896
SDev	.0150	.0041	.0322	.102	.208	.0024	.0090
%RSD	.30167	.08416	.64221	.21379	.43766	.04948	.17645
#1	5.0020	4.9266	4.9848	47.749	47.228	4.9335	5.0799
#2	4.9785	4.9263	5.0484	47.603	47.637	4.9311	5.0912
#3	4.9740	4.9193	5.0078	47.553	47.371	4.9286	5.0976

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H55.574	.51934	5.2455	5.2805	50.747	5.0836	4.9172
SDev	.284	.00213	.0238	.0223	.251	.0056	.0122
%RSD	.51025	.40936	.45418	.42280	.49557	.11057	.24897
#1	H55.878	.52172	5.2506	5.2597	50.940	5.0872	4.9305
#2	H55.529	.51869	5.2664	5.3041	50.838	5.0771	4.9146
#3	H55.316	.51762	5.2196	5.2776	50.463	5.0864	4.9064

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1102	5.4061	5.2178	5.2575	4.9930	4.9324	5.4014
SDev	.0218	.0043	.0491	.0176	.0142	.0525	.0095
%RSD	.42681	.07893	.94040	.33459	.28429	1.0645	.17604
#1	5.1335	5.4035	5.2727	5.2762	4.9796	4.9427	5.4038
#2	5.0903	5.4110	5.1782	5.2551	5.0079	4.9790	5.4094
#3	5.1068	5.4038	5.2023	5.2413	4.9917	4.8755	5.3909

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.1816	5.3294
SDev	.0300	.0208
%RSD	.57881	.39037
#1	5.1648	5.3067
#2	5.2162	5.3476
#3	5.1637	5.3340

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Method: TALPC Sample Name: ccb Operator: pdc
Run Time: 11/03/99 17:19:16
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.11346	.00040	.00056	.00019	.00024	.00030	.00611
SDev	.00450	.00064	.00255	.00026	.00009	.00062	.00233
%RSD	3.9679	159.56	456.91	141.69	36.624	207.90	38.178
#1	-.10861	.00070	.00209	.00047	.00033	.00093	.00761
#2	-.11752	-.00033	-.00239	.00013	.00021	.00025	.00730
#3	-.11424	.00083	.00198	-.00005	.00017	-.00030	.00342

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00020	-.00061	.00359	.00183	-.00766	.00012	.00013
SDev	.00129	.00045	.00040	.02495	.00578	.00032	.00138
%RSD	657.12	74.153	11.213	1364.3	75.531	265.13	1035.3
#1	.00078	-.00017	.00397	.02087	-.00190	.00042	.00086
#2	.00029	-.00059	.00317	.01104	-.00761	.00016	.00100
#3	-.00166	-.00108	.00363	-.02642	-.01347	-.00022	-.00146

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.07515	.00021	.00034	-.00095	.03676	.00017	.00112
SDev	.03875	.00064	.00307	.00238	.00149	.00424	.00110
%RSD	51.573	310.53	903.33	251.69	4.0620	2554.7	97.859
#1	-.10224	.00065	H.00383	-.00202	.03842	.00045	.00195
#2	-.09244	.00050	-.00085	-.00260	.03633	.00425	.00154
#3	-.03075	-.00053	-.00196	.00178	.03553	-.00420	-.00012

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00141	.00618	.00122	-.00015	.00037	.00540	-.00308
SDev	.00067	.00150	.00035	.00199	.00043	.00495	.00552
%RSD	47.603	24.206	28.417	1318.6	116.67	91.716	179.31
#1	.00192	.00786	.00155	.00170	.00077	.00362	.00305
#2	.00167	.00573	.00086	.00011	.00041	.01099	-.00765
#3	.00065	.00497	.00124	-.00226	-.00008	.00158	-.00462

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00157	-.00268
SDev	.00150	.00288
%RSD	95.647	107.43
#1	.00028	-.00366
#2	.00121	-.00494
#3	.00321	.00056

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Method: TALPC Sample Name: 94121009 Operator: pdc
Run Time: 11/03/99 17:25:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.399	.00452	5.9872	.44383	.00130	.00324	8.8147
SDev	.011	.00124	.0308	.00071	.00003	.00026	.0144
%RSD	.05091	27.551	.51489	.15986	1.9282	7.9115	.16289
#1	22.402	.00309	5.9607	.44301	.00127	.00322	8.8109
#2	22.408	.00536	6.0210	.44421	.00130	.00351	8.8306
#3	22.386	.00510	5.9797	.44427	.00132	.00299	8.8027

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05062	.01226	.12355	92.166	[illegible]	.33117	.04086
SDev	.00060	.00072	.00014	.141	.0100	.00033	.00052
%RSD	1.1829	5.8720	.11391	.15315	.20096	.10037	1.2772
#1	.05001	.01144	.12377	92.077	4.9927	.33102	.04042
#2	.05121	.01260	.12401	92.343	4.9816	.33155	.04144
#3	.05063	.01276	.12376	92.129	4.9727	.33094	.04071

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.5320	.00068	.31381	.01016	.72816	.00115	.08187
SDev	.0143	.00085	.00260	.00033	.00166	.00505	.00092
%RSD	.93609	123.96	.82864	3.2100	.22852	438.53	1.1252
#1	1.5438	-.00009	.31666	.00979	.72902	-.00342	.08112
#2	1.5361	.00056	.31320	.01035	.72624	.00031	.08159
#3	1.5160	.00158	.31157	.01035	.72921	.00657	.08289

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.26785	.04121	.00259	.02376	.86308	.30391	.31825
SDev	.00115	.00026	.00060	.00169	.00160	.00871	.00511
%RSD	.42807	.64240	23.242	7.1181	.18518	2.8645	1.6057
#1	.26666	.04131	.00193	.02497	.86190	.30923	.31987
#2	.26895	.04140	.00273	.02448	.86490	.29387	.32235
#3	.26795	.04090	.00310	.02183	.86244	.30865	.31253

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01283	.00839
SDev	.00264	.00176
%RSD	20.591	21.028
#1	.01550	.00649
#2	.01022	.00998
#3	.01278	.00869

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Method: TALPC Sample Name: 94121010 Operator: pdc
Run Time: 11/03/99 17:30:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	[illegible]	[illegible]
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	60.421	-.00120	[illegible]	.54334	[illegible]	[illegible]	[illegible]
SDev	.188	.00223	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
%RSD	.30751	184.99	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#1	60.209	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#2	60.553	-.00346	[illegible]	.54401	[illegible]	.00276	4.8816
#3	60.501	-.00232	[illegible]	.54508	.00381	.00356	4.8736

Elem	[illegible]	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10292	.05702	.10208	113.74	22.810	.93366	.13243
SDev	.00059	.00023	.00050	.14	.136	.00101	.00125
%RSD	.57638	.40161	.49100	.12319	.59542	.10835	.94691
#1	.10223	.05695	.10151	113.60	22.664	.93251	.13249
#2	.10325	.05683	.10245	113.73	22.933	.93443	.13365
#3	.10327	.05728	.10227	113.88	22.833	.93403	.13114

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.3974	-.00021	.20857	.00690	.79938	.01103	.12825
SDev	.0563	.00032	.00081	.00159	.00370	.00327	.00026
%RSD	.76102	153.95	.39046	23.092	.46344	29.696	.20133
#1	7.3326	-.00042	.20882	.00754	.79529	.00726	.12844
#2	7.4255	.00016	.20923	.00808	.80251	.01267	.12835
#3	7.4341	-.00036	.20766	.00509	.80034	.01315	.12796

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.41129	.04920	.00337	.01855	.99914	.20310	.21084
SDev	.00100	.00099	.00060	.00186	.00365	.01239	.00538
%RSD	.24370	2.0043	17.977	10.048	.36541	6.1015	2.5518
#1	.41088	.04809	.00359	.01889	.99526	.19625	.21464
#2	.41056	.04953	.00383	.01654	1.0025	.21740	.20468
#3	.41243	.04998	.00268	.02022	.99968	.19564	.21319

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01042	.00473
SDev	.00697	.00110
%RSD	66.859	23.235
#1	.01279	.00451
#2	.01589	.00376
#3	.00258	.00592

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Method: TALPC Sample Name: 94121011 Operator: pdc
Run Time: 11/03/99 17:36:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.295	.01099	H21.393	.17791	.00082	.00671	8.5446
SDev	.014	.00322	.062	.00005	.00001	.00024	.0420
%RSD	.09687	29.285	.28955	.02666	1.0023	3.6474	.49134
#1	14.308	.01013	H21.327	.17791	.00082	.00649	8.5088
#2	14.280	.01455	H21.450	.17796	.00083	.00697	8.5908
#3	14.297	.00828	H21.401	.17787	.00082	.00667	8.5343

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04450	.01578	.17614	65.857	4.0525	.17686	.05637
SDev	.00091	.00106	.00031	.145	.0066	.00051	.00165
%RSD	2.0369	6.7313	.17699	.21986	.16356	.29048	2.9213
#1	.04373	.01505	.17580	65.737	4.0473	.17652	.05455
#2	.04550	.01700	.17641	66.018	4.0600	.17745	.05776
#3	.04427	.01529	.17619	65.815	4.0503	.17661	[illegible]

Elem	K_7664	Ag3280	Pb2203	Se1960	[illegible]	[illegible]	V_[illegible]
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	63.397	.00119	.42377	[illegible]	[illegible]	[illegible]	[illegible]
SDev	.333	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
%RSD	.53513	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#1	63.721	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#2	63.128	[illegible]	[illegible]	[illegible]	[illegible]	.00199	.08419
#3	63.139	[illegible]	.42558	.01294	6.7690	.00371	.08226

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47369	.03283	.00705	.03246	.68463	.40104	.43912
SDev	.00341	.00042	.00153	.00195	.00142	.00995	.00614
%RSD	.71924	1.2706	21.650	5.9961	.20662	2.4819	1.3989
#1	.47193	.03331	.00531	.03035	.68346	.41234	.44405
#2	.47762	.03264	.00768	.03417	.68620	.39722	.43224
#3	.47152	.03254	.00817	.03287	.68424	.39356	.44107

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01490	.01074
SDev	.00116	.00139
%RSD	7.7980	12.924
#1	.01621	.00915
#2	.01398	.01136
#3	.01453	.01171

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Method: TALPC Sample Name: 94121012 Operator: pdc
Run Time: 11/03/99 17:42:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	61.202	-.00204	.28583	.37309	.00349	.00252	3.9007
SDev	.137	.00222	.00254	.00134	.00003	.00011	.0209
%RSD	.22324	108.65	.89045	.35861	.89010	4.2825	.53624
#1	61.049	.00047	.28845	.37155	.00345	.00260	3.9217
#2	61.242	-.00286	.28568	.37396	.00351	.00257	3.9005
#3	61.314	-.00373	.28337	.37375	.00350	.00240	3.8798

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10103	.05189	.06934	123.53	18.723	1.1213	.10646
SDev	.00018	.00051	.00060	.21	.015	.0029	.00155
%RSD	.17925	.97331	.86696	.16872	.08279	.25505	1.4534
#1	.10124	.05201	.06867	123.56	18.707	1.1226	.10485
#2	.10093	.05133	.06955	123.73	18.738	1.1233	.10793
#3	.10092	.05232	.06981	123.31	18.723	1.1180	.10660

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.9363	-.00061	.08377	.00289	.62699	.00524	.15370
SDev	.0328	.00033	.00275	.00056	.00302	.00289	.00034
%RSD	.55265	54.133	3.2861	19.390	.48229	55.096	.22260
#1	5.9594	-.00095	.08573	.00227	.62376	.00449	.15331
#2	5.9507	-.00058	.08063	.00306	.62748	.00843	.15385
#3	5.8987	-.00029	.08496	.00335	.62975	.00281	.15394

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.28178	.04098	.00241	.01223	1.6566	.08154	.08440
SDev	.00130	.00039	.00067	.00098	.0019	.00798	.00335
%RSD	.46191	.95245	27.686	7.9835	.11265	9.7870	3.9742
#1	.28218	.04061	.00240	.01163	1.6568	.07982	.08820
#2	.28284	.04139	.00308	.01335	1.6583	.07457	.08317
#3	.28033	.04095	.00175	.01169	1.6546	.09025	.08184

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00456	.00163
SDev	.00523	.00190
%RSD	114.73	116.31
#1	.00000	.00297
#2	.00341	.00246
#3	.01027	-.00054

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Method: TALPC Sample Name: 94121013 Operator: pdc
Run Time: 11/03/99 17:48:19
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.3916	.01010	H77.616	.77438	.00068	.00986	22.403
SDev	.0128	.00267	.317	.00092	.00002	.00050	.188
%RSD	.17286	26.415	.40786	.11837	2.8340	5.0491	.83882
#1	7.4059	.00947	H77.880	.77332	.00067	.01011	22.620
#2	7.3812	.00780	H77.265	.77489	.00066	.00928	22.301
#3	7.3878	.01303	H77.703	.77492	.00070	.01018	22.288

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02350	.02589	.08120	239.18	2.3919	18.063	.19231
SDev	.00084	.00127	.00034	1.48	.0150	.102	.00405
%RSD	3.5738	4.8883	.42071	.61763	.62736	.56623	2.1069
#1	.02414	.02691	.08083	240.76	2.4077	18.179	.19674
#2	.02255	.02447	.08128	237.83	2.3900	17.986	.18879
#3	.02381	.02627	.08150	238.95	2.3779	18.024	.19139

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.76964	.00180	.18637	.00700	.83690	.03312	.02823
SDev	.00885	.00030	.00086	.00215	.00196	.00183	.00060
%RSD	1.1493	16.845	.46045	30.770	.23380	[illegible]	2.1182
#1	.76642	.00145	.18539	[illegible]	.83523	.03505	[illegible]
#2	.78286	.00167	.18698	.00820	[illegible]	[illegible]	[illegible]
#3	.77965	.00197	.18675	.00845	[illegible]	[illegible]	[illegible]

Elem	Zn2062	B_2496	Mo2020	[illegible]	[illegible]	[illegible]	[illegible]
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.17711	.19050
SDev	[illegible]	[illegible]	[illegible]	[illegible]	.00123	.00947	.00457
%RSD	[illegible]	[illegible]	[illegible]	18.760	.39485	5.3488	2.4012
#1	[illegible]	.04974	.00428	.01699	.31237	.17575	.18971
#2	.40203	.05016	.00229	.01431	.31000	.18719	.18638
#3	.40551	.05023	.00456	.02079	.31064	.16839	.19542

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01137	.00437
SDev	.00328	.00466
%RSD	28.812	106.61
#1	.01009	.00415
#2	.01509	-.00018
#3	.00893	.00913

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Method: TALPC Sample Name: 94121014 Operator: pdc
Run Time: 11/03/99 17:54:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	89.097	.00031	5.8776	.60539	.00461	.01923	7.6025
SDev	1.265	.00380	.0148	.00371	.00005	.00025	.0783
%RSD	.29763	1239.7	.25185	.61358	1.0844	1.3154	1.0302
#1	88.913	.00402	5.8714	.60210	.00457	.01952	7.6590
#2	88.978	.00048	5.8945	.60465	.00460	.01911	7.6353
#3	89.401	-.00358	5.8669	.60942	.00467	.01906	7.5131

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13203	.09526	.21022	161.76	28.446	6.6560	.43122
SDev	.00185	.00159	.00136	.60	.073	.0320	.00170
%RSD	1.4038	1.6678	.64608	.37119	.25788	.48150	.39481
#1	.13299	.09651	.20889	162.13	28.437	6.6860	.43020
#2	.13320	.09580	.21016	162.08	28.378	6.6599	.43318
#3	.12989	.09347	.21160	161.07	28.524	6.6222	.43025

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.4988	-.00013	.21058	.00608	1.0863	.01769	.19107
SDev	.1125	.00148	.00109	.00190	.0119	.00585	.00237
%RSD	1.1839	1169.6	.51702	31.258	1.0925	33.792	1.2432
#1	9.3786	.00018	.20947	.00728	1.0775	.01079	.19267
#2	9.5161	.00118	.21083	.00708	1.0817	.02392	.19220
#3	9.6016	-.00174	.21164	.00389	1.0998	.01210	.18834

Elem	Zn2062	B 2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97960	.06499	.00504	.01454	1.9093	.20876	.21102
SDev	.01016	.00080	.00123	.00195	.0019	.00807	.00423
%RSD	1.0370	1.2241	24.393	13.420	.09774	3.8640	2.0033
#1	.98677	.06409	.00568	.01636	1.9108	.20384	.21181
#2	.98406	.06525	.00582	.01248	1.9100	.21807	.20645
#3	.96798	.06562	.00363	.01478	1.9072	.20437	.21479

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01021	.00360
SDev	.00220	.00180
%RSD	21.560	49.928
#1	.01108	.00496
#2	.01183	.00429
#3	.00770	.00156

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Method: TALPC Sample Name: 94121016dup Operator: pdc
Run Time: 11/03/99 17:59:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm u	ppm	ppm	ppm	ppm
Avge	82.784	.00152	4.5957	.49521	.00446	.01444	6.2212
SDev	.163	.00233	.0085	.00190	.00004	.00020	.0178
%RSD	.19658	153.48	.18465	.38357	.80575	1.3864	.28611
#1	82.639	.00273	4.5860	.49317	.00444	.01443	6.2374
#2	82.960	.00299	4.6002	.49693	.00450	.01464	6.2240
#3	82.754	-.00117	4.6010	.49552	.00445	.01424	6.2021

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.15401	.08043	.16348	155.13	28.124	3.7612	.40304
SDev	.00109	.00038	.00059	.23	.048	.0114	.00114
%RSD	.70742	.46980	.36246	.15111	.17215	.30354	.28242
#1	.15391	.08033	.16279	155.20	28.112	3.7687	.40277
#2	.15514	.08012	.16386	155.31	28.177	3.7668	.40207
#3	.15297	.08085	.16377	154.86	28.082	3.7480	.40429

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.2244	.00018	.14861	.01049	.95349	.01454	.18792
SDev	.0499	.00031	.00261	.00064	.00385	.00447	.00095
%RSD	.60692	174.30	1.7538	6.1248	.40384	30.728	.50570
#1	8.1682	-.00004	.15103	.01118	.94905	.01969	.18774
#2	8.2634	.00053	.14585	.00992	.95593	.01195	.18895
#3	8.2417	.00005	.14896	.01037	.95548	.01196	.18708

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.82052	.05534	.00459	.02198	1.9872	.14571	.14958
SDev	.00186	.00066	.00125	.00241	.0051	.00794	.00617
%RSD	.22686	1.1960	27.314	10.953	.25705	5.4487	4.1273
#1	.82239	.05523	.00499	.02384	1.9869	.14935	.15139
#2	.82050	.05605	.00318	.01926	1.9924	.15118	.14271
#3	.81867	.05474	.00559	.02284	1.9822	.13861	.15465

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01058	.01002
SDev	.00214	.00111
%RSD	20.234	11.066
#1	.01232	.01126
#2	.01124	.00885
#3	.00818	.01103

Analysis Report [illegible]

Method: TALPC Sample Name: [illegible] Operator: [illegible]
Run Time: 11/03/99 12:05:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	96.812	.37465	5.5330	.95255	.43756	.45537	14.535
SDev	.300	.00330	.0040	.00316	.00128	.00430	.127
%RSD	.30963	.87996	.07241	.33141	.29216	.94445	.87293
#1	96.635	.37443	5.5375	.95122	.43782	.45811	14.615
#2	96.644	.37804	5.5300	.95028	.43868	.45759	14.601
#3	97.159	.37146	5.5314	.95616	.43617	.45041	14.389

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.55436	.52777	.61174	146.54	35.300	5.6109	.80086
SDev	.00357	.00199	.00443	.50	.123	.0303	.00326
%RSD	.64464	.37720	.72489	.33988	.34917	.54076	.40655
#1	.55593	.52909	.60963	146.95	35.239	5.6339	.80323
#2	.55688	.52874	.60876	146.67	35.219	5.6222	.80220
#3	.55027	.52548	.61683	145.98	35.442	5.5765	.79715

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.035	.04541	.59762	.44848	10.188	.45137	.60789
SDev	.213	.00131	.00762	.00315	.081	.00326	.00202
%RSD	1.1199	2.8791	1.2754	.70349	.79784	.72265	.33295
#1	18.853	.04536	.59005	.44751	10.145	.45310	.60984
#2	18.983	.04675	.59752	.44592	10.138	.45340	.60803
#3	19.270	.04413	.60529	.45200	10.282	.44761	.60580

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.3032	.50505	.45179	.46038	2.2262	.56981	.61095
SDev	.0136	.00234	.00304	.00499	.0013	.01413	.00683
%RSD	1.0416	.46261	.67258	1.0829	.05632	2.4795	1.1182
#1	1.3091	.50235	.45484	.46451	2.2264	.55352	.60774
#2	1.3128	.50655	.45178	.46179	2.2273	.57879	.60632
#3	1.2877	.50624	.44876	.45485	2.2248	.57712	.61880

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.44237	.45105
SDev	.00703	.00630
%RSD	1.5900	1.3960
#1	.43498	.45328
#2	.44899	.44394
#3	.44313	.45593

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Method: TALPC Sample Name: 94121014msd Operator: pdc
Run Time: 11/03/99 18:11:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	92.822	.34486	4.9407	.84946	.42598	.43615	13.082
SDev	1.333	.00695	.0480	.01260	.00513	.00787	.221
%RSD	1.4366	2.0159	.97093	1.4837	1.2051	1.8053	1.6906
#1	94.028	.34322	4.9280	.86171	.42543	.43109	12.938
#2	93.048	.35248	4.9938	.85015	.43137	.44523	13.337
#3	91.390	.33887	4.9004	.83653	.42115	.43215	12.972

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.54958	.49565	.56490	149.92	33.094	2.4039	.70422
SDev	.00843	.00716	.01058	1.60	.433	.0278	.01051
%RSD	1.5329	1.4445	1.8736	1.0694	1.3078	1.1576	1.4928
#1	.54453	.49190	.57548	149.68	33.414	2.3952	.69788
#2	.55931	.50391	.56492	151.64	33.266	2.4350	.71635
#3	.54491	.49115	.55431	148.46	32.601	2.3814	.69842

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.150	.04312	.55397	.44668	10.021	.43423	.60676
SDev	.447	.00205	.01477	.01053	.218	.00523	.00813
%RSD	2.3322	4.7459	2.6668	2.3565	2.1738	1.2043	1.3392
#1	19.642	.04102	.57098	.45763	10.265	.43696	.60319
#2	19.035	.04511	.54437	.44579	9.9535	.43754	.61606
#3	18.772	.04322	.54656	.43663	9.8452	.42820	.60103

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0400	.50405	.44224	.44112	2.2834	.52276	.56900
SDev	.0187	.00576	.00405	.00401	.0241	.00727	.01913
%RSD	1.7943	1.1425	.91501	.90931	1.0568	1.3909	3.3625
#1	1.0259	.50678	.44099	.43798	2.2956	.53024	.59076
#2	1.0611	.50794	.44677	.44564	2.2990	.52233	.55482
#3	1.0329	.49743	.43897	.43975	2.2556	.51571	.58141

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.43833	.45038
SDev	.00696	.01232
%RSD	1.5888	2.7366
#1	.44558	.46320
#2	.43773	.44932
#3	.43169	.43862

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Method: TALPC Sample Name: 941210141 Operator: [illegible]
Run Time: 11/03/99 18:17:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	18.897	-.00053	1.2353	.12683	.00108	.00460	1.6197
SDev	.013	.00054	.0028	.00022	.00002	.00027	.0052
%RSD	.06646	100.73	.22850	.17180	2.1748	5.9273	.32104
#1	18.899	-.00079	1.2337	.12658	.00107	.00429	1.6247
#2	18.884	.00008	1.2385	.12693	.00110	.00471	1.6200
#3	18.909	-.00089	1.2336	.12698	.00106	.00481	1.6143

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02818	.01942	.04741	34.204	5.9822	1.4215	.09034
SDev	.00009	.00043	.00060	.051	.0019	.0026	.00240
%RSD	.31704	2.1972	1.2659	.14909	.03136	.18296	2.6605
#1	.02825	.01930	.04717	34.183	5.9830	1.4231	.08759
#2	.02821	.01989	.04696	34.262	5.9800	1.4228	.09206
#3	.02808	.01906	.04809	34.167	5.9835	1.4185	.09137

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8143	.00008	.04562	.00203	.22797	.00314	.04171
SDev	.0121	.00058	.00111	.00175	.00021	.00208	.00061
%RSD	.66930	696.20	2.4386	86.246	.09140	66.285	1.4630
#1	1.8271	-.00050	.04638	.00104	.22781	.00553	.04100
#2	1.8029	.00009	.04434	.00100	.22821	.00180	.04205
#3	1.8131	.00066	.04613	.00405	.22790	.00207	.04207

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.21253	.01593	.00154	.00280	.39963	.04419	.04583
SDev	.00056	.00031	.00059	.00147	.00016	.00140	.00159
%RSD	.26207	1.9652	38.178	52.439	.03998	3.1652	3.4786
#1	.21310	.01586	.00208	.00148	.39961	.04326	.04744
#2	.21249	.01565	.00092	.00438	.39949	.04352	.04425
#3	.21199	.01627	.00161	.00253	.39981	.04580	.04580

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00444	.00038
SDev	.00237	.00156
%RSD	53.505	407.02
#1	.00399	-.00088
#2	.00232	-.00010
#3	.00700	.00213

Analysis Report

Method: TALPC Sample Name:
Run Time: 11/03/98 18:00:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	47.682	5.0865	5.0194	4.9190	4.7000	4.8918	47.348
SDev	1.400	.1562	.1612	.1433	.1517	.1605	1.644
%RSD	2.9358	3.0718	3.2110	2.9124	3.2281	3.2816	3.4718
#1	48.033	5.1271	5.0588	4.9401	4.7465	4.9391	47.858
#2	48.872	5.2184	5.1573	5.0506	4.8230	5.0234	48.677
#3	46.140	4.9139	4.8422	4.7664	4.5304	4.7130	45.510

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.8869	4.8066	4.8283	46.656	45.877	4.8044	4.9555
SDev	.1659	.1571	.1445	1.499	1.415	.1607	.1534
%RSD	3.3958	3.2676	2.9934	3.2139	3.0839	3.3440	3.0964
#1	4.9404	4.8558	4.8471	47.093	46.239	4.8551	4.9953
#2	5.0195	4.9331	4.9625	47.888	47.075	4.9337	5.0851
#3	4.7008	4.6308	4.6753	44.986	L44.316	4.6245	4.7860

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	54.264	.51030	5.1589	5.1832	49.255	4.9519	4.8120
SDev	1.494	.01507	.1511	.1369	1.309	.1497	.1516
%RSD	2.7528	2.9527	2.9282	2.6416	2.6582	3.0237	3.1508
#1	54.614	.51534	5.2158	5.2018	49.508	4.9797	4.8550
#2	H55.551	.52221	5.2733	5.3100	50.419	5.0858	4.9375
#3	52.626	.49336	4.9877	5.0380	47.837	4.7903	4.6435

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0367	5.2715	5.1955	5.1601	4.8310	4.8718	5.3017
SDev	.1690	.1580	.1597	.1665	.1533	.1307	.1622
%RSD	3.3561	2.9969	3.0747	3.2259	3.1742	2.6820	3.0599
#1	5.0984	5.3043	5.2452	5.2165	4.8759	4.8992	5.3732
#2	5.1662	5.4105	5.3245	5.2911	4.9569	4.9865	5.4159
#3	4.8455	5.0997	5.0168	4.9728	4.6602	4.7296	5.1160

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.1294	5.2097
SDev	.1204	.1456
%RSD	2.3465	2.7949
#1	5.1594	5.2224
#2	5.2318	5.3485
#3	4.9968	5.0581

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Method: TALPC Sample Name: ccb Operator: pdc
Run Time: 11/03/99 18:29:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.12989	-.00164	-.00035	.00033	.00035	.00038	.00813
SDev	.00355	.00090	.00213	.00019	.00014	.00035	.00093
%RSD	2.7337	54.599	616.83	59.290	39.328	93.539	11.505
#1	-.13337	-.00260	.00087	.00052	.00049	.00070	.00883
#2	-.13004	-.00150	-.00280	.00033	.00035	.00043	.00849
#3	-.12627	-.00082	.00090	.00013	.00022	.00000	.00707

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00022	-.00036	.00537	.00511	-.01295	.00014	.00013
SDev	.00079	.00103	.00051	.01850	.00307	.00018	.00099
%RSD	363.10	287.08	9.5377	362.31	23.710	134.32	747.78
#1	.00067	.00069	.00487	.02647	-.01168	.00034	.00125
#2	-.00086	-.00040	.00590	-.00560	-.01073	.00013	-.00065
#3	-.00046	-.00138	.00535	-.00556	-.01848	-.00004	-.00013

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03552	.00028	-.00000	.00024	.03747	.00656	.00105
SDev	.00989	.00041	.00095	.00238	.00195	.00426	.00042
%RSD	27.841	147.48	114780.	978.52	5.1935	64.832	39.623
#1	-.04563	.00046	-.00109	.00199	.03958	.00168	.00133
#2	-.03508	.00057	.00065	.00121	.03710	.00858	.00126
#3	-.02586	-.00019	.00043	-.00247	.03574	.00944	.00057

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00164	.00671	.00065	.00021	.00048	.00328	-.00223
SDev	.00017	.00159	.00056	.00282	.00021	.00445	.00350
%RSD	10.576	23.718	86.690	1345.0	44.255	135.69	156.98
#1	.00179	.00839	.00060	.00310	.00069	.00730	-.00571
#2	.00167	.00650	.00124	-.00253	.00047	-.00150	.00128
#3	.00145	.00523	.00011	.00005	.00027	.00404	-.00226

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00169	-.00094
SDev	.00260	.00234
%RSD	153.86	249.12
#1	.00320	.00095
#2	.00317	-.00021
#3	-.00131	-.00355

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Method: TALPC Sample Name: 94121014p Operator: pdc
Run Time: 11/03/99 18:34:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm u	ppm	ppm	ppm	ppm
Avge	94.978	.49728	6.1590	1.0777	.47713	.50492	16.389
SDev	.513	.00254	.0403	.0059	.00303	.00136	.081
%RSD	.54022	.51061	.65423	.55038	.63545	.26913	.49220
#1	94.562	.49644	6.1191	1.0726	.47432	.50336	16.357
#2	95.551	.50013	6.1996	1.0842	.48035	.50586	16.480
#3	94.822	.49526	6.1583	1.0764	.47674	.50553	16.329

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.61018	.57575	.68791	166.01	36.337	6.8669	.89751
SDev	.00415	.00331	.00422	.98	.289	.0406	.00729
%RSD	.67953	.57580	.61383	.59189	.79460	.59054	.81200
#1	.60788	.57341	.68444	165.43	36.128	6.8414	.89009
#2	.61496	.57954	.69261	167.15	36.666	6.9136	.90466
#3	.60769	.57430	.68667	165.46	36.216	6.8456	.89778

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.569	.04963	.70290	.50790	11.027	.50796	.66826
SDev	.153	.00061	.00318	.00361	.049	.00336	.00430
%RSD	.78157	1.2234	.45287	.71141	.44162	.66147	.64403
#1	19.429	.04948	.70060	.50373	10.986	.50668	.66616
#2	19.733	.05030	.70653	.50999	11.081	.51177	.67321
#3	19.546	.04911	.70155	.50998	11.015	.50543	.66541

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.4309	.55778	.52122	.50869	2.2961	.65875	.72430
SDev	.0087	.00338	.00529	.00253	.0140	.01181	.00356
%RSD	.61124	.60591	1.0146	.49749	.60982	1.7932	.49207
#1	1.4233	.55596	.51696	.50708	2.2857	.65843	.72103
#2	1.4405	.56168	.52714	.51161	2.3120	.67073	.72376
#3	1.4288	.55570	.51957	.50739	2.2905	.64711	.72810

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.49685	.51294
SDev	.00987	.00473
%RSD	1.9866	.92203
#1	.49019	.51001
#2	.50819	.51041
#3	.49217	.51840

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Method: TALPC Sample Name: 94121017 Operator: pdc
Run Time: 11/03/99 18:40:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	61.545	-.00340	2.7716	.30511	.00307	.00422	5.2773
SDev	.210	.00312	.0088	.00127	.00003	.00065	.0605
%RSD	.34176	91.771	.31876	.41735	.87342	15.433	1.1460
#1	61.381	-.00098	2.7668	.30438	.00304	.00397	5.2950
#2	61.472	-.00230	2.7817	.30437	.00309	.00495	5.3270
#3	61.782	-.00693	2.7662	.30658	.00309	.00372	5.2100

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08685	.04392	.09894	109.94	20.683	1.5870	.19938
SDev	.00230	.00161	.00084	.60	.104	.0087	.00149
%RSD	2.6535	3.6710	.85081	.54436	.50285	.55126	.74543
#1	.08745	.04438	.09820	109.93	20.565	1.5883	.20049
#2	.08879	.04525	.09875	110.55	20.724	1.5950	.19997
#3	.08430	.04212	.09986	109.35	20.781	1.5777	.19769

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_3924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.6245	-.00065	.08031	.00527	4.7872	.00778	.12130
SDev	.1197	.00155	.00178	.00188	.0451	.00764	.00256
%RSD	1.5705	237.81	2.2281	28.154	.94599	98.185	2.1127
#1	7.5867	-.00004	.08148	.00508	4.7465	.00668	.12243
#2	7.5758	-.00050	.07825	.00674	4.7362	.01592	.12310
#3	7.7609	-.00242	.08119	.00400	4.8189	.00076	.11837

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.40569	.04775	.00268	.01307	1.2041	.08411	.07793
SDev	.00586	.00055	.00133	.00670	.0042	.00788	.00405
%RSD	1.4437	1.1599	49.622	51.247	.34524	9.3620	5.1992
#1	.40716	.04827	.00139	.01204	1.2023	.09282	.07533
#2	.41068	.04781	.00404	.02023	1.2089	.08204	.07587
#3	.39924	.04717	.00261	.00695	1.2012	.07748	.08260

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01312	.00093
SDev	.00405	.00309
%RSD	30.853	333.57
#1	.01779	-.00169
#2	.01070	.00433
#3	.01087	.00013

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Method: TALPC Sample Name: 94127018 Operator: pdc
Run Time: 11/03/99 18:46:30
Comment:
Mode: CONC Corr. Factor: 1

11/3/99 TJN

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.487	-.00104	.02189	.12329	.00172	.00792	H652.77
SDev	.015	.00307	.00053	.00036	.00004	.00037	1.89
%RSD	.05725	295.90	2.4188	.28890	2.2461	4.7041	.28960
#1	26.470	.00170	.02128	.12315	.00170	.00749	H654.75
#2	26.493	-.00046	.02221	.12302	.00169	.00818	H652.57
#3	26.499	-.00436	.02219	.12369	.00176	.00808	H650.98

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08502	.02485	.08296	82.794	344.47	2.3473	.06684
SDev	.00064	.00030	.00015	.230	.22	.0051	.00026
%RSD	.75276	1.1886	.17591	.27757	.06275	.21905	[illegible]
#1	.08576	.02470	.08285	83.059	[illegible]	[illegible]	[illegible]
#2	.08469	.02466	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#3	.08461	.02519	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.1762	-.00003	.23496	.00246	1.7040	.00264	.05326
SDev	.0290	.00075	.00319	.00147	.0041	.00555	.00046
%RSD	1.3336	2344.8	1.3572	59.690	.24232	209.94	.85393
#1	2.1936	-.00029	.23438	.00147	1.6993	-.00018	.05376
#2	2.1427	.00081	.23210	.00414	1.7070	.00904	.05287
#3	2.1922	-.00061	.23840	.00176	1.7056	-.00092	.05316

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.32608	.00981	.00260	.01463	.09869	.22063	.24161
SDev	.00110	.00022	.00218	.00493	.00028	.00567	.00688
%RSD	.33604	2.2037	83.795	33.700	.28831	2.5692	2.8454
#1	.32710	.00999	.00501	.01443	.09879	.21611	.24299
#2	.32623	.00987	.00205	.01966	.09891	.22699	.23415
#3	.32492	.00957	.00075	.00980	.09837	.21878	.24769

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01090	-.00221
SDev	.00547	.00058
%RSD	50.166	26.337
#1	.00774	-.00210
#2	.01722	-.00284
#3	.00775	-.00169

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Method: TALPC Sample Name: 94127025 Operator: pdc
Run Time: 11/03/99 18:52:19
Comment:
Mode: CONC Corr. Factor: 1

USE 11/3/99 TJN

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31.112	.00041	.04478	.78182	.00149	.02334	28.916
SDev	1.166	.00448	.00318	.03025	.00025	.00135	.875
%RSD	3.7472	1101.3	7.1072	3.8686	16.509	5.7607	3.0252
#1	29.770	.00321	.04116	.74697	.00121	.02276	27.909
#2	31.871	.00476	.04714	.80121	.00167	.02239	29.359
#3	31.695	.00277	.04604	.79728	.00160	.02488	29.481

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07000	.02982	.13818	320.13	14.323	H20.475	.09469
SDev	.00269	.00096	.00608	10.61	.515	.656	.00111
%RSD	3.8376	3.2334	4.3973	3.3156	3.5946	3.2059	1.1725
#1	.06774	.02930	.13117	307.87	13.732	19.717	.09343
#2	.06929	.02922	.14197	326.17	14.676	H20.853	.09514
#3	.07297	.03093	.14140	326.34	14.561	H20.855	.09551

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.3327	.00190	.23723	.00510	.58116	.02947	.11653
SDev	.2370	.00097	.01111	.00460	.02267	.00565	.00383
%RSD	7.1120	51.365	4.6849	90.035	3.9011	19.167	3.2909
#1	3.0686	.00265	.22483	.00848	.55536	.02523	.11358
#2	3.5271	.00080	.24629	-.00013	.59793	.03588	.11516
#3	3.4024	.00224	.24057	.00696	.59017	.02730	.12087

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0535	.05058	.00604	.03016	.26981	.22177	.24442
SDev	.0325	.00446	.00257	.00409	.00995	.01011	.01284
%RSD	3.0838	8.8188	42.447	13.574	3.6865	4.5574	5.2546
#1	1.0163	.04543	.00695	.02817	.25832	.21426	.22959
#2	1.0679	.05293	.00315	.02744	.27560	.23326	.25225
#3	1.0762	.05337	.00803	.03487	.27551	.21778	.25141

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00571	.00437
SDev	.00408	.00643
%RSD	71.430	147.17
#1	.01020	.00721
#2	.00472	-.00299
#3	.00222	.00889

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Method: TALPC Sample Name: 94314001;;;as ✓ Operator: pdc
Run Time: 11/03/99 18:58:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm u	ppm	ppm	ppm	ppm
Avge	-.13304	-.00659	.17934	-.00042	-.00001	.00004	.26686
SDev	.00445	.00264	.00392	.00016	.00008	.00030	.00359
%RSD	3.3431	40.162	2.1887	36.518	690.55	700.84	1.3436
#1	-.13696	-.00776	.18377	-.00028	-.00009	.00033	.26927
#2	-.13396	-.00844	.17631	-.00059	.00006	-.00027	.26857
#3	-.12821	-.00356	.17794	-.00040	-.00000	.00006	.26274

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00060	.00053	.00816	.02507	.06412	.00659	.00239
SDev	.00051	.00049	.00040	.02696	.00365	.00090	.00031
%RSD	85.114	92.221	4.8809	107.54	5.6904	13.731	12.897
#1	.00075	.00068	.00781	.04951	.06576	.00758	.00246
#2	.00003	.00091	.00859	-.00384	.06665	.00639	.00205
#3	.00102	-.00002	.00808	.02954	.05994	.00580	.00265

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.210	.00014	.00067	.00355	75.485	.00414	.00130
SDev	.066	.00087	.00168	.00128	.532	.00093	.00063
%RSD	.64217	612.11	252.09	36.094	.70537	22.519	48.534
#1	10.153	-.00038	.00115	.00311	75.119	.00454	.00057
#2	10.282	.00115	-.00120	.00499	76.096	.00480	.00172
#3	10.196	-.00034	.00205	.00254	75.240	.00307	.00159

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00345	.09474	.00018	.00799	.00004	-.00062	.00084
SDev	.00002	.00019	.00171	.00125	.00016	.00713	.00604
%RSD	.49081	.20173	959.70	15.621	424.63	1148.3	721.52
#1	.00343	.09458	.00092	.00802	-.00011	-.00164	.00205
#2	.00346	.09495	-.00178	.00922	.00022	.00696	-.00571
#3	.00346	.09469	.00139	.00673	.00001	-.00718	.00617

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00926	.00026
SDev	.00575	.00124
%RSD	62.149	476.22
#1	.00952	-.00052
#2	.01487	-.00039
#3	.00338	.00169

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Method: TALPC Sample Name: 94326001;;;as Operator: pdc
Run Time: 11/03/99 19:03:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm U	ppm	ppm	ppm	ppm
Avge	-.13815	-.00784	.06223	-.00064	.00005	-.00013	.31943
SDev	.00146	.00193	.00446	.00006	.00004	.00028	.00318
%RSD	1.0551	24.591	7.1676	8.6779	74.887	208.17	.99703
#1	-.13955	-.00788	.05897	-.00059	.00001	-.00022	.31898
#2	-.13825	-.00589	.06041	-.00063	.00006	.00018	.32281
#3	-.13664	-.00974	.06732	-.00070	.00009	-.00036	.31649

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00045	.00005	.00841	-.01200	.07741	-.00026	.00133
SDev	.00064	.00056	.00066	.01667	.00908	.00004	.00044
%RSD	140.96	1146.1	7.8299	138.99	11.726	16.584	33.275
#1	-.00071	-.00032	.00771	-.01826	.06952	-.00030	.00125
#2	.00027	.00069	.00902	.00690	.08732	-.00021	.00180
#3	-.00092	-.00022	.00848	-.02463	.07538	-.00027	.00093

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.405	-.00088	.00182	.00406	102.97	-.00206	.00043
SDev	.142	.00043	.00152	.00289	.40	.00390	.00088
%RSD	.73209	48.401	83.953	71.231	.39134	188.83	202.92
#1	19.457	-.00113	.00255	.00134	103.01	.00196	-.00053
#2	19.244	-.00039	.00283	.00375	102.55	-.00234	.00119
#3	19.513	-.00113	.00006	.00710	103.35	-.00581	.00064

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00117	.10473	-.00142	.01041	-.00023	.00518	-.00049
SDev	.00060	.00042	.00124	.00249	.00016	.00385	.00440
%RSD	51.330	.39772	87.334	23.962	69.948	74.293	892.19
#1	.00074	.10427	-.00105	.00903	-.00032	.00236	.00215
#2	.00186	.10509	-.00041	.01329	-.00004	.00381	.00194
#3	.00091	.10481	-.00280	.00862	-.00033	.00956	-.00557

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01200	-.00136
SDev	.00881	.00284
%RSD	57.577	726.88
#1	.00967	-.00327
#2	.00655	.00191
#3	.01977	.00027

Analysis Report

Run Time: 11/05/99 18:09:46
Comment:
Mode: Std Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	504.43	-.00016	-.00418	.00179	.00117	H.01061	480.98
SDev	1.39	.00468	.00305	.00016	.00001	.00192	1.35
%RSD	.27600	2976.6	73.042	8.7424	.93197	18.045	.28095
#1	505.92	-.00537	-.00770	.00165	.00118	H.00840	479.42
#2	503.17	.00367	-.00251	.00196	.00118	H.01175	481.68
#3	504.19	.00123	-.00232	.00175	.00116	H.01169	481.83

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00330	.00655	.00280	252.15	491.96	.00905	.00360
SDev	.00134	.00083	.00016	.13	1.60	.00018	.00071
%RSD	40.445	12.735	5.6836	.05221	.32553	2.0284	19.801
#1	-.00476	.00615	.00268	252.04	493.81	.00885	.00304
#2	-.00213	.00751	.00273	252.13	491.10	.00921	.00440
#3	-.00302	.00599	.00298	252.30	490.98	.00910	.00335

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	258.86	-.00129	-.00218	.00540	257.98	-.00150	-.00184
SDev	2.01	.00101	.00257	.00193	2.61	.00901	.00287
%RSD	.77759	77.953	117.74	35.813	1.0100	602.35	156.25
#1	261.18	-.00245	-.00096	.00318	260.99	-.01144	-.00499
#2	257.91	-.00079	-.00046	.00631	256.58	.00613	-.00116
#3	257.50	-.00064	-.00514	.00671	256.37	.00083	.00063

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02521	.00819	.00037	-.00415	.00108	.02572	-.01666
SDev	.00208	.00013	.00128	.00441	.00028	.00659	.00692
%RSD	8.2562	1.5961	342.84	106.28	26.233	25.621	41.546
#1	.02283	.00832	-.00109	-.00924	.00078	.02631	-.01512
#2	.02664	.00805	.00090	-.00182	.00118	.01885	-.01064
#3	.02617	.00819	.00131	-.00140	.00135	.03198	-.02422

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00955	.00283
SDev	.01036	.00540
%RSD	108.53	191.21
#1	.00853	.00002
#2	-.00027	.00905
#3	.02039	-.00060

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Method: TALPC Sample Name: icsab Operator: pdc
Run Time: 11/03/99 19:15:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	504.25	.10846	.10189	.11423	.10066	.11381	486.19
SDev	1.94	.00551	.00513	.00023	.00003	.00152	1.95
%RSD	.38485	5.0831	5.0312	.20077	.03110	1.3318	.40209
#1	506.44	.10212	.09607	.11446	.10062	.11248	483.99
#2	502.76	.11215	.10384	.11400	.10069	.11349	487.72
#3	503.53	.11111	.10575	.11424	.10065	.11546	486.86

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09956	.10860	.11809	252.99	488.03	.11119	.10784
SDev	.00215	.00064	.00081	.23	.75	.00034	.00070
%RSD	2.1640	.58538	.68876	.08958	.15437	.30153	.64852
#1	.09750	.10800	.11886	253.24	488.89	.11086	.10790
#2	.10180	.10927	.11724	252.92	487.64	.11153	.10712
#3	.09939	.10854	.11816	252.81	487.54	.11118	.10851

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	255.12	.01040	.10421	.10844	258.27	.10615	.10183
SDev	2.83	.00061	.00156	.00264	5.46	.00627	.00280
%RSD	1.1081	5.9001	1.4989	2.4358	2.1138	5.9063	2.7467
#1	258.38	.00981	.10470	.10905	264.57	.10922	.09885
#2	253.29	.01036	.10547	.10555	255.33	.11029	.10222
#3	253.69	.01104	.10246	.11072	254.91	.09894	.10441

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H.12761	.11708	.11152	.11177	.10312	.12570	.09276
SDev	.00186	.00106	.00235	.00889	.00031	.00723	.00510
%RSD	1.4539	.90663	2.1069	7.9499	.30279	5.7549	5.5007
#1	H.12548	.11784	.10988	.10204	.10289	.13191	.09038
#2	H.12841	.11586	.11421	.11946	.10301	.11776	.09862
#3	H.12892	.11752	.11047	.11379	.10348	.12742	.08929

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.10539	.10944
SDev	.00442	.00313
%RSD	4.1904	2.8616
#1	.10992	.10806
#2	.10110	.10723
#3	.10516	.11302

Analysis Report 11/03/99 07:27:10 PM page 1

Method: TALPC Sample Name: ccv Operator: pdc
Run Time: 11/03/99 19:21:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.121	5.2555	5.1630	5.0998	4.8099	5.0231	48.018
SDev	.186	.0124	.0180	.0235	.0096	.0238	.385
%RSD	.37898	.23632	.34859	.46165	.19894	.47305	.80129
#1	49.118	5.2699	5.1814	5.0975	4.8201	5.0485	48.389
#2	48.937	5.2487	5.1455	5.0774	4.8086	5.0192	48.045
#3	49.309	5.2481	5.1619	5.1244	4.8011	5.0014	47.621

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0095	4.9076	4.9818	47.853	46.727	4.8915	5.0677
SDev	.0273	.0192	.0225	.183	.161	.0209	.0341
%RSD	.54512	.39130	.45324	.38249	.34408	.42686	.67240
#1	5.0311	4.9295	4.9565	48.060	46.711	4.9156	5.1046
#2	4.9928	4.8993	4.9424	47.814	46.574	4.8787	5.0611
#3	4.9784	4.8939	4.9865	47.702	46.895	4.8803	5.0375

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H56.194	.52826	5.2686	5.3319	50.497	5.0790	4.9429
SDev	.629	.00158	.0787	.0845	.400	.0259	.0130
%RSD	1.1189	.29970	1.4945	1.5855	.79185	.50938	.26236
#1	H55.913	.52984	5.2414	5.2825	50.338	5.0789	4.9578
#2	H55.755	.52667	5.2071	5.2837	50.202	5.0532	4.9349
#3	H56.915	.52826	5.3573	5.4295	50.952	5.1050	4.9358

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1541	5.4225	5.4062	5.2994	4.9440	4.9553	5.4244
SDev	.0371	.0142	.0116	.0148	.0189	.0817	.0774
%RSD	.71918	.26278	.21388	.28020	.38203	1.6483	1.4263
#1	5.1865	5.4222	5.4195	5.3158	4.9643	4.9249	5.3987
#2	5.1621	5.4084	5.4010	5.2957	4.9269	4.8931	5.3632
#3	5.1137	5.4369	5.3982	5.2868	4.9410	5.0478	5.5114

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.2492	5.3727
SDev	.0945	.0808
%RSD	1.8007	1.5032
#1	5.1782	5.3341
#2	5.2130	5.3184
#3	5.3565	5.4655

Analysis Report 11/03/99 07:32:59 PM page 1

Method: TALPC Sample Name: ccb Operator: pdc
Run Time: 11/03/99 19:27:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.16010	-.00099	.00012	.00010	.00026	.00039	.01505
SDev	.01328	.00158	.00348	.00020	.00018	.00082	.00580
%RSD	8.2972	159.04	2816.5	206.72	70.202	211.31	38.555
#1	-.14791	.00077	.00302	.00032	.00046	.00119	.02152
#2	-.17425	-.00229	-.00374	-.00008	.00011	-.00045	.01031
#3	-.15813	-.00146	.00109	.00005	.00021	.00043	.01333

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00027	-.00037	.00683	.00348	-.00788	-.00002	-.00036
SDev	.00094	.00067	.00088	.01772	.00883	.00014	.00153
%RSD	349.82	181.31	12.803	509.69	112.08	798.69	424.28
#1	.00051	.00040	.00750	.00755	.00026	.00014	.00100
#2	-.00131	-.00068	.00584	-.01592	-.01727	-.00014	-.00201
#3	-.00000	-.00081	.00716	.01880	-.00662	-.00005	-.00007

Elem	K_7664	Ag3280	Pb2203	Se1960	Na5889	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01079	.00078	.00017	.00102	.05666	.00097	.00085
SDev	.03400	.00120	.00059	.00135	.00629	.00309	.00137
%RSD	315.24	155.29	341.32	131.85	11.108	318.55	161.44
#1	.01758	.00133	-.00025	.00221	.06387	.00445	.00214
#2	-.04848	-.00061	.00085	-.00044	.05222	-.00143	-.00059
#3	-.00146	.00160	-.00008	.00129	.05390	-.00011	.00101

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00169	.00683	.00158	-.00091	.00039	.00791	-.00432
SDev	.00083	.00282	.00165	.00481	.00054	.00230	.00183
%RSD	49.247	41.296	104.86	530.63	137.46	29.041	42.296
#1	.00240	.01000	.00348	.00104	.00093	.00963	-.00569
#2	.00077	.00458	.00050	-.00638	-.00015	.00530	-.00225
#3	.00190	.00593	.00075	.00263	.00039	.00882	-.00503

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00490	-.00138
SDev	.00276	.00090
%RSD	56.327	65.238
#1	.00790	-.00108
#2	.00248	-.00239
#3	.00432	-.00067

Paul C 00[illegible]

Calibration Report 11/04/99 12:11:39 PM page 1

Method: TAL Standard Name: BLANK-STD1 Operator: pdc
Run Time: 11/04/99 12:08:18
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.0135548	.0062887	-.000890	.0004637	.4309439	.1637214
SDev	.0001344	.0000830	.000267	.0002390	.0019269	.0008592
%RSD	.9916014	1.319485	29.98572	51.53933	.4471345	.5248205
#1	.0134440	.0063840	-.001127	.0006008	.4287806	.1638815
#2	.0135160	.0062324	-.000601	.0001877	.4315750	.1627933
#3	.0137043	.0062498	-.000941	.0006024	.4324762	.1644893
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

✓=CHECKED
U=USE
R= RERUN

Calibration Report 11/04/99 12:15:27 PM page 1

Method: TAL Standard Name: STD3A Operator: pdc
Run Time: 11/04/99 12:12:06
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.1014680	.0871736	.0333730	.0501774	.8456214	.1883694
SDev	.0002320	.0001775	.0002841	.0004394	.0009411	.0002608
%RSD	.2286781	.2036393	.8513540	.8755857	.1112941	.1384360
#1	.1017321	.0870131	.0331178	.0502527	.8448930	.1883735
#2	.1013751	.0873643	.0333222	.0497053	.8452871	.1886282
#3	.1012968	.0871434	.0336791	.0505743	.8466840	.1881067
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/04/99 12:19:18 PM page 1

Method: TAL Standard Name: STD3B Operator: pdc
Run Time: 11/04/99 12:15:57
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.9108755	.8373508	.3419367	.5038073	4.520433	.4129522
SDev	.0007949	.0016884	.0004972	.0004272	.005364	.0018517
%RSD	.0872732	.2016308	.1454041	.0847908	.1186650	.4483923
#1	.9101594	.8366704	.3420467	.5037820	4.516315	.4109010
#2	.9107361	.8392732	.3423697	.5033933	4.518487	.4145003
#3	.9117309	.8361087	.3413938	.5042465	4.526499	.4134555
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/04/99 12:23:04 PM page 1

Method: TAL Standard Name: STD3C Operator: pdc
Run Time: 11/04/99 12:19:44
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	9.199118	8.196469	3.340487	5.267511	34.95732	2.924902
SDev	.009120	.015591	.002530	.003848	.10912	.003435
%RSD	.0991449	.1902131	.0757262	.0730589	.3121523	.1174264
#1	9.188770	8.201294	3.341568	5.264675	34.91778	2.921203
#2	9.202596	8.179036	3.337596	5.265966	34.87349	2.927990
#3	9.205988	8.209077	3.342296	5.271892	35.08070	2.925515
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/04/99 12:27:28 PM page 1

Method: TAL Standard Name: STD3D Operator: pdc
Run Time: 11/04/99 12:24:07
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	42.40526	36.79182	7.709498	26.91440	76.89436	7.779197
SDev	.00602	.07105	.012930	.01553	.13458	.005617
%RSD	.0142041	.1931086	.1677214	.0577131	.1750164	.0722036
#1	42.40696	36.75675	7.704285	26.91350	76.77920	7.775055
#2	42.39857	36.74512	7.699988	26.93037	76.86158	7.785591
#3	42.41025	36.87358	7.724221	26.89934	77.04230	7.776946
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Standardization Rpt. 11/04/99 12:38:36 PM page 1

Method: TAL Standard: STD1-BLANK
Run Time: 11/04/99 12:32:48

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.00066	-.00118	.00035	.00586	.00103	-.00008	-.00006
SDev	.00020	.00118	.00002	.00003	.00013	.00013	.00007
%RSD	30.261	99.474	6.1953	.59580	12.733	163.69	115.48
#1	.00079	-.00241	.00034	.00587	.00113	-.00006	-.00002
#2	.00077	-.00006	.00034	.00589	.00109	-.00023	-.00002
#3	.00043	-.00109	.00038	.00582	.00088	.00004	-.00013

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.00147	.00009	-.00073	.00000	-.00100	.00019	.00045
SDev	.00002	.00000	.00041	.00000	.00038	.00006	.00000
%RSD	1.1994	.08310	55.496	.00000	37.637	34.716	.08310
#1	.00145	.00009	-.00026	.00000	-.00139	.00026	.00045
#2	.00148	.00009	-.00098	.00000	-.00064	.00015	.00045
#3	.00147	.00009	-.00096	.00000	-.00098	.00015	.00045

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.01865	.00287	-.00075	.00016	.00197	-.00041	-.00271
SDev	.00004	.00116	.00043	.00008	.00233	.00118	.00030
%RSD	.22501	40.511	57.228	48.061	118.29	285.79	11.150
#1	.01861	.00211	-.00028	.00023	.00316	-.00124	-.00301
#2	.01869	.00420	-.00113	.00019	.00345	-.00094	-.00270
#3	.01864	.00229	-.00085	.00008	-.00071	.00094	-.00240

Elem	1960/2
Avge	.00114
SDev	.00028
%RSD	24.662
#1	.00086
#2	.00143
#3	.00113

Standardization Rpt. 11/04/99 12:44:30 PM page 1

Method: TAL Standard: STD2A
Run Time: 11/04/99 12:38:45

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.04612	.02938	.05074	.16851	.37764	.06088	.02270
SDev	.00040	.00145	.00020	.00032	.00112	.00036	.00009
%RSD	.86013	4.9226	.40462	.19067	.29635	.59826	.38292
#1	.04580	.03042	.05093	.16824	.37696	.06080	.02263
#2	.04656	.02773	.05077	.16844	.37704	.06057	.02267
#3	.04599	.02999	.05052	.16887	.37893	.06128	.02280

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.02074	.05360	.09360	.00554	.01840	.02992	.01582
SDev	.00006	.00008	.00015	.00030	.00067	.00010	.00003
%RSD	.30587	.15595	.15830	5.3401	3.6330	.32438	.17859
#1	.02071	.05352	.09375	.00588	.01868	.02985	.01585
#2	.02081	.05361	.09359	.00542	.01889	.02989	.01583
#3	.02069	.05368	.09346	.00533	.01764	.03003	.01579

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.06888	.12688	.03195	.08301	.10845	.09841	.01309
SDev	.00083	.00088	.00091	.00009	.00088	.00045	.00059
%RSD	1.2007	.69046	2.8572	.10863	.80783	.45451	4.5133
#1	.06827	.12674	.03145	.08307	.10777	.09790	.01365
#2	.06856	.12608	.03140	.08291	.10944	.09870	.01247
#3	.06983	.12782	.03301	.08307	.10814	.09864	.01317

Elem	1960/2
Avge	.01213
SDev	.00041
%RSD	3.3882
#1	.01235
#2	.01166
#3	.01239

Standardization Rpt. 11/04/99 12:50:23 PM page 1

Method: TAL Standard: STD2B
Run Time: 11/04/99 12:44:39

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.45341	.29161	.50495	1.6345	3.7358	.61289	.23070
SDev	.00098	.00250	.00056	.0018	.0039	.00094	.00043
%RSD	.21635	.85824	.11032	.10882	.10525	.15300	.18531
#1	.45231	.28876	.50441	1.6334	3.7362	.61266	.23090
#2	.45372	.29262	.50492	1.6365	3.7395	.61392	.23099
#3	.45420	.29345	.50553	1.6334	3.7317	.61209	.23021

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.19679	.53907	.94222	.05624	.20395	.30039	.15134
SDev	.00024	.00029	.00025	.00015	.00299	.00023	.00022
%RSD	.12126	.05347	.02610	.26261	1.4681	.07783	.14480
#1	.19653	.53880	.94194	.05607	.20308	.30018	.15117
#2	.19686	.53938	.94236	.05634	.20148	.30064	.15159
#3	.19699	.53904	.94236	.05631	.20728	.30037	.15126

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.53065	1.2318	.31940	.83494	1.0733	1.0040	.16453
SDev	.00328	.0073	.00221	.00080	.0019	.0024	.00017
%RSD	.61748	.59305	.69128	.09560	.17253	.24125	.10650
#1	.52692	1.2237	.32113	.83402	1.0748	1.0019	.16460
#2	.53195	1.2342	.32015	.83531	1.0739	1.0067	.16466
#3	.53307	1.2377	.31691	.83549	1.0712	1.0034	.16433

Elem	1960/2
Avge	.11134
SDev	.00048
%RSD	.42848
#1	.11080
#2	.11171
#3	.11151

Standardization Rpt. 11/04/99 12:56:17 PM page 1

Method: TAL Standard: STD2C
Run Time: 11/04/99 12:50:33

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	4.5303	2.9194	4.9530	15.619	36.511	6.1897	2.3215
SDev	.0008	.0090	.0093	.030	.097	.0149	.0040
%RSD	.01789	.30892	.18839	.18946	.26447	.24062	.17305
#1	4.5303	2.9156	4.9637	15.587	36.409	6.1736	2.3171
#2	4.5312	2.9129	4.9474	15.624	36.521	6.1926	2.3224
#3	4.5295	2.9297	4.9477	15.646	36.602	6.2030	2.3250

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	1.9428	5.2759	9.4582	.56862	2.0790	3.0467	1.4943
SDev	.0044	.0095	.0206	.00042	.0048	.0062	.0071
%RSD	.22814	.18036	.21827	.07316	.23297	.20199	.47184
#1	1.9478	5.2656	9.4363	.56814	2.0845	3.0408	1.4870
#2	1.9414	5.2778	9.4610	.56887	2.0754	3.0463	1.4947
#3	1.9393	5.2844	9.4773	.56886	2.0770	3.0531	1.5011

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	5.2188	12.329	3.2287	8.3626	10.726	10.081	1.6877
SDev	.0226	.016	.0068	.0097	.029	.028	.0030
%RSD	.43243	.13380	.21082	.11599	.26608	.27444	.17658
#1	5.1951	12.310	3.2274	8.3533	10.693	10.066	1.6854
#2	5.2211	12.340	3.2227	8.3618	10.743	10.065	1.6867
#3	5.2401	12.338	3.2361	8.3726	10.743	10.113	1.6911

Elem	1960/2
Avge	1.1041
SDev	.0011
%RSD	.09905
#1	1.1050
#2	1.1029
#3	1.1045

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Method: TAL Sample Name: icv 2c Operator: tjn
Run Time: 11/04/99 12:56:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06832	9.9904	9.8514	9.9263	10.079	10.141	.05064
SDev	.00189	.0070	.0334	.0079	.024	.030	.00409
%RSD	2.7729	.06973	.33872	.07958	.23534	.29407	8.0813
#1	.06661	9.9976	9.8470	9.9314	10.090	10.172	.04751
#2	.06799	9.9898	9.8868	9.9303	10.096	10.141	.04915
#3	.07036	9.9837	9.8205	9.9172	10.052	10.112	.05527

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.140	10.125	9.9880	9.6529	-.02328	9.8953	10.082
SDev	.021	.021	.0146	.0417	.00450	.0227	.011
%RSD	.20342	.20757	.14626	.43168	19.339	.22905	.10527
#1	10.155	10.144	9.9958	9.6777	-.02848	9.9110	10.091
#2	10.147	10.128	9.9969	9.6763	-.02069	9.9055	10.085
#3	10.116	10.102	9.9711	9.6048	-.02068	9.8693	10.071

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08507	1.0153	10.110	10.140	.88734	10.268	10.207
SDev	.00505	.0008	.022	.029	.02195	.025	.016
%RSD	5.9319	.07847	.22080	.28295	2.4743	.24415	.15973
#1	.07929	1.0160	10.122	10.172	.86201	10.272	10.216
#2	.08857	1.0154	10.123	10.132	.90081	10.290	10.217
#3	.08737	1.0144	10.084	10.116	.89922	10.241	10.189

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.9592	10.202	10.070	10.053	10.104	10.017	10.156
SDev	.0178	.030	.010	.007	.016	.040	.017
%RSD	.17875	.29135	.10424	.06597	.15389	.40388	.16561
#1	9.9753	10.174	10.078	10.049	10.110	10.022	10.172
#2	9.9623	10.233	10.074	10.060	10.115	10.055	10.157
#3	9.9401	10.198	10.058	10.049	10.086	9.9746	10.138

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	10.279	10.070
SDev	.031	.042
%RSD	.30019	.41263
#1	10.279	10.118
#2	10.310	10.043
#3	10.249	10.050

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Method: TAL Sample Name: icv 3d Operator: tjn
Run Time: 11/04/99 13:02:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	499.66	.00268	.00775	-.00216	.00024	.00047	501.08
SDev	1.20	.00376	.01030	.00073	.00063	.00092	1.46
%RSD	.24084	140.68	132.87	33.652	257.58	197.03	.29037
#1	500.70	-.00012	.00643	-.00250	-.00013	-.00052	500.04
#2	499.93	.00695	.01865	-.00267	-.00010	.00061	500.46
#3	498.34	.00119	-.00183	-.00133	.00097	.00130	502.75

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00040	.00428	.00213	251.12	498.71	.00274	.00514
SDev	.00018	.00092	.00084	.40	1.34	.00063	.00086
%RSD	46.269	21.498	39.237	.15733	.26906	23.029	16.772
#1	.00023	.00371	.00177	250.97	499.58	.00237	.00510
#2	.00036	.00378	.00153	250.82	499.39	.00238	.00430
#3	.00059	.00534	.00309	251.57	497.17	.00347	.00603

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	250.15	-.00104	.00165	.00674	249.76	.00802	.00151
SDev	.67	.00019	.00159	.00333	.90	.01051	.00077
%RSD	.26629	18.170	96.125	49.330	.35979	131.12	51.265
#1	250.90	-.00125	.00125	.00546	250.47	-.00116	.00110
#2	249.64	-.00090	.00030	.01052	250.08	.00572	.00103
#3	249.89	-.00097	.00340	.00425	248.75	.01949	.00241

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01064	.00104	.00085	.00908	-.00283	-.00600	.00529
SDev	.00121	.00148	.00234	.00399	.00065	.00296	.00266
%RSD	11.424	142.51	276.64	43.945	23.083	49.434	50.376
#1	.00956	.00258	.00319	.01258	-.00316	-.00276	.00307
#2	.01041	.00091	.00084	.00994	-.00326	-.00857	.00456
#3	.01195	-.00037	-.00149	.00473	-.00208	-.00666	.00824

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00187	.00875
SDev	.00503	.00539
%RSD	268.27	61.567
#1	.00716	.00419
#2	.00131	.01470
#3	-.00285	.00737

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Method: TAL Sample Name: qcs Operator:
Run Time: 11/04/99 13:14:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.56771	.02274	.02185	.02158	.02179	.02215	.24767
SDev	.00363	.00140	.00480	.00048	.00011	.00015	.00089
%RSD	.63893	6.1401	21.981	2.2339	.50703	.69800	.35959
#1	.57018	.02138	.02420	.02103	.02168	.02198	.24745
#2	.56940	.02417	.02501	.02184	.02190	.02229	.24865
#3	.56355	.02266	.01632	.02188	.02178	.02219	.24691

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02139	.02076	.02175	.53355	.21399	.02113	.02192
SDev	.00030	.00026	.00009	.00875	.00063	.00006	.00092
%RSD	1.4275	1.2697	.42785	1.6406	.29281	.27120	4.1839
#1	.02154	.02066	.02168	.52526	.21440	.02107	.02086
#2	.02159	.02105	.02186	.54270	.21429	.02116	.02238
#3	.02104	.02055	.02172	.53269	.21326	.02117	.02251

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0417	.02171	.02168	.02034	1.0259	.01745	.02104
SDev	.0034	.00043	.00122	.00456	.0469	.00652	.00035
%RSD	.33113	1.9676	5.6291	22.413	4.5710	37.338	1.6679
#1	1.0423	.02217	.02101	.01998	1.0310	.02470	.02083
#2	1.0449	.02162	.02309	.01597	1.0700	.01561	.02145
#3	1.0380	.02133	.02095	.02506	.97665	.01206	.02085

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02574	.03973	.02148	.02779	.02155	.02159	.02156
SDev	.00062	.00020	.00081	.00076	.00020	.00175	.00097
%RSD	2.4263	.49688	3.7696	2.7474	.94038	8.1094	4.4851
#1	.02567	.03990	.02059	.02796	.02138	.02084	.02092
#2	.02640	.03979	.02170	.02696	.02177	.02359	.02267
#3	.02515	.03952	.02216	.02846	.02149	.02034	.02108

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01629	.02196
SDev	.00442	.00587
%RSD	27.134	26.705
#1	.01191	.02361
#2	.01622	.01545
#3	.02074	.02683

Analysis Report 11/04/99 01:26:00 PM

Method: TAL Sample Name: qcs 600 Operator:
Run Time: 11/04/99 13:20:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0027	.96004	.94742	.96089	1.0081	.97253	9.3465
SDev	.0227	.01777	.02180	.02128	.0229	.02088	.2107
%RSD	2.2660	1.8515	2.3008	2.2149	2.2694	2.1465	2.2541
#1	1.0166	.96621	.96975	.97325	1.0197	.98413	9.4542
#2	.97651	.94000	.92620	.93632	.98170	.94843	9.1038
#3	1.0150	.97390	.94631	.97311	1.0228	.98503	9.4816

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97505	.94825	.99003	.98122	9.4179	.95430	.97755
SDev	.02223	.02120	.02239	.01900	.2173	.02130	.02156
%RSD	2.2794	2.2355	2.2612	1.9368	2.3074	2.2318	2.2051
#1	.98710	.96005	1.0021	.98952	9.5421	.96513	.98964
#2	.94940	.92378	.96420	.95947	9.1670	.92976	.95266
#3	.98865	.96092	1.0038	.99466	9.5446	.96800	.99034

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.3773	1.0727	.98547	.96131	9.6188	.97657	.96669
SDev	.2089	.0221	.01372	.01041	.2906	.02720	.02165
%RSD	2.2281	2.0642	1.3920	1.0833	3.0211	2.7851	2.2393
#1	9.4989	1.0859	.99358	.96819	9.7550	.97901	.97742
#2	9.1360	1.0471	.96963	.94933	9.2851	.94823	.94177
#3	9.4969	1.0851	.99320	.96642	9.8162	1.0025	.98087

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97946	1.0141	.98749	1.0697	.99233	.97730	.98939
SDev	.02142	.0215	.02064	.0207	.02217	.01167	.01566
%RSD	2.1865	2.1223	2.0905	1.9324	2.2340	1.1946	1.5826
#1	.99079	1.0254	.99642	1.0769	1.0043	.98882	.99578
#2	.95476	.98930	.96389	1.0463	.96675	.96548	.97154
#3	.99283	1.0276	1.0022	1.0857	1.0059	.97759	1.0008

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.97745	.95287
SDev	.00039	.01561
%RSD	.04024	1.6378
#1	.97782	.96299
#2	.97748	.93490
#3	.97704	.96073

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Method: TAL Sample Name: icsa Operator:
Run Time: 11/04/99 13:26:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	489.35	-.00267	-.00333	-.00304	-.00080	.00321	489.74
SDev	1.27	.00095	.01164	.00002	.00005	.00034	1.75
%RSD	.25909	35.755	349.63	.58879	6.7875	10.573	.35685
#1	489.68	-.00377	-.00472	-.00303	-.00075	.00305	488.79
#2	490.41	-.00214	.00894	-.00306	-.00079	.00298	491.76
#3	487.95	-.00209	-.01421	-.00303	-.00086	.00360	488.67

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00099	.00316	.00218	246.72	490.87	.00181	.00463
SDev	.00000	.00021	.00016	.89	1.31	.00006	.00035
%RSD	.29572	6.7194	7.5796	.36086	.26661	3.5958	7.5116
#1	-.00099	.00301	.00199	246.53	491.11	.00179	.00431
#2	-.00099	.00341	.00228	247.69	492.04	.00188	.00458
#3	-.00098	.00308	.00227	245.94	489.45	.00175	.00500

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	247.41	-.00095	-.00030	-.00224	245.60	.00277	.00016
SDev	.52	.00037	.00068	.00224	.68	.00192	.00035
%RSD	.21107	39.613	225.18	99.762	.27698	69.362	217.34
#1	247.80	-.00123	-.00027	-.00286	245.68	.00388	.00041
#2	247.62	-.00052	.00036	-.00411	246.24	.00055	.00033
#3	246.82	-.00109	-.00100	.00024	244.88	.00389	-.00024

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00892	-.00485	-.00234	.00589	-.00396	-.00904	.00388
SDev	.00140	.00038	.00279	.00536	.00007	.00113	.00108
%RSD	15.687	7.8159	119.33	90.939	1.6859	12.517	27.955
#1	.00793	-.00459	-.00548	.00679	-.00399	-.00774	.00329
#2	.01052	-.00528	-.00139	.00014	-.00400	-.00956	.00513
#3	.00831	-.00467	-.00015	.01074	-.00388	-.00982	.00322

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00399	-.00179
SDev	.00920	.00685
%RSD	230.35	382.85
#1	-.01188	.00122
#2	.00611	-.00963
#3	-.00621	.00304

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Method: TAL Sample Name: icsab Operator:
Run Time: 11/04/99 13:32:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	520.74	.09954	.09823	.10097	.10191	.09633	522.25
SDev	.77	.00561	.00698	.00028	.00009	.00041	.48
%RSD	.14701	5.6392	7.1104	.27851	.08918	.42356	.09222
#1	521.12	.10267	.09511	.10089	.10195	.09653	522.74
#2	521.25	.09306	.10623	.10128	.10198	.09660	522.24
#3	519.86	.10289	.09334	.10074	.10181	.09586	521.78

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09621	.09664	.11487	263.33	515.55	.10109	.09634
SDev	.00018	.00037	.00028	.21	1.13	.00013	.00030
%RSD	.18521	.37879	.24737	.07955	.21926	.12343	.30856
#1	.09639	.09707	.11513	263.50	516.30	.10123	.09626
#2	.09620	.09643	.11491	263.39	516.10	.10099	.09667
#3	.09603	.09643	.11457	263.10	514.25	.10106	.09610

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	261.16	.01067	.09400	.10038	257.28	.09945	.10099
SDev	.59	.00012	.00096	.00978	.32	.00804	.00056
%RSD	.22651	1.0762	1.0220	9.7453	.12609	8.0885	.55358
#1	261.63	.01080	.09292	.08927	257.23	.10674	.10162
#2	261.37	.01062	.09475	.10420	257.63	.09082	.10083
#3	260.50	.01059	.09433	.10768	256.99	.10078	.10054

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10089	.10135	.09537	.10506	.09911	.08284	.09939
SDev	.00023	.00099	.00182	.00577	.00031	.00323	.00304
%RSD	.22866	.97589	1.9087	5.4959	.31665	3.9034	3.0567
#1	.10114	.10129	.09327	.10497	.09944	.08657	.09590
#2	.10069	.10236	.09646	.09933	.09881	.08095	.10146
#3	.10083	.10039	.09639	.11087	.09909	.08100	.10080

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.08610	.10707
SDev	.00910	.01919
%RSD	10.568	17.920
#1	.09616	.08539
#2	.08371	.11399
#3	.07843	.12184

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/04/99 13:38:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.999	5.0079	4.9369	4.8492	4.8719	4.8594	48.811
SDev	.067	.0082	.0140	.0166	.0080	.0046	.117
%RSD	.13633	.16307	.28372	.34230	.16400	.09539	.23888
#1	48.924	5.0014	4.9412	4.8303	4.8811	4.8644	48.945
#2	49.052	5.0171	4.9212	4.8557	4.8682	4.8552	48.755
#3	49.020	5.0053	4.9482	4.8615	4.8664	4.8586	48.734

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9025	4.8139	5.0017	46.848	48.178	4.8766	4.9281
SDev	.0072	.0061	.0119	.080	.026	.0060	.0031
%RSD	.14770	.12680	.23816	.16980	.05299	.12394	.06366
#1	4.9108	4.8183	4.9880	46.936	48.152	4.8836	4.9302
#2	4.8974	4.8069	5.0080	46.828	48.203	4.8726	4.9245
#3	4.8992	4.8165	5.0092	46.781	48.180	4.8737	4.9296

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	53.728	.51286	5.0151	5.1466	49.021	4.9501	4.8758
SDev	.103	.00043	.0030	.0165	.082	.0100	.0005
%RSD	.19258	.08425	.06060	.32078	.16827	.20261	.01048
#1	53.709	.51301	5.0174	5.1343	48.927	4.9388	4.8752
#2	53.840	.51321	5.0117	5.1402	49.054	4.9537	4.8760
#3	53.636	.51238	5.0163	5.1654	49.082	4.9579	4.8761

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9621	5.3872	4.9462	5.1182	5.0336	4.9717	5.0366
SDev	.0129	.0116	.0147	.0089	.0024	.0046	.0043
%RSD	.25898	.21572	.29722	.17295	.04809	.09300	.08622
#1	4.9748	5.3738	4.9338	5.1091	5.0310	4.9767	5.0376
#2	4.9491	5.3940	4.9425	5.1268	5.0341	4.9708	5.0319
#3	4.9625	5.3938	4.9624	5.1186	5.0358	4.9676	5.0404

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.2221	5.1086
SDev	.0184	.0163
%RSD	.35154	.31927
#1	5.2040	5.0991
#2	5.2216	5.0992
#3	5.2407	5.1274

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/04/99 13:44:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01673	.00158	.00282	.00108	.00024	H.01689	.07199
SDev	.00270	.00083	.00655	.00005	.00003	.00045	.00355
%RSD	16.133	52.215	232.55	4.1415	12.077	2.6792	4.9260
#1	.01802	.00099	-.00462	.00110	.00026	H.01678	.07097
#2	.01853	.00253	.00536	.00110	.00026	H.01739	.07594
#3	.01362	.00123	.00771	.00102	.00021	H.01651	.06907

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00015	.00012	.00036	.00570	.00067	.00030	.00245
SDev	.00015	.00026	.00031	.00354	.00584	.00004	.00101
%RSD	101.34	221.41	86.228	62.045	871.65	13.473	41.113
#1	.00005	.00042	.00072	.00956	-.00269	.00035	.00217
#2	.00032	.00001	.00014	.00493	.00741	.00028	.00357
#3	.00008	-.00007	.00023	.00261	-.00271	.00028	.00161

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08577	-.00016	.00017	-.00050	-.01876	.00083	.00006
SDev	.00441	.00037	.00055	.00204	.05653	.00362	.00007
%RSD	5.1433	237.97	315.87	409.83	301.29	436.75	126.19
#1	.08542	-.00054	-.00038	-.00017	-.05200	.00500	.00002
#2	.09034	.00020	.00018	.00136	.04651	-.00098	.00014
#3	.08154	-.00013	.00073	-.00268	-.05079	-.00153	.00001

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00752	.00554	.00539	.00278	.00040	.00069	-.00025
SDev	.00014	.00079	.00222	.00169	.00005	.00107	.00135
%RSD	1.8978	14.308	41.180	60.977	11.429	155.85	535.63
#1	.00735	.00599	.00731	.00266	.00044	.00190	-.00169
#2	.00761	.00600	.00590	.00453	.00040	.00031	-.00006
#3	.00760	.00462	.00296	.00115	.00035	-.00015	.00099

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00102	-.00063
SDev	.00609	.00361
%RSD	594.64	571.00
#1	-.00737	.00303
#2	.00477	-.00074
#3	-.00048	-.00418

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Method: TAL Sample Name: 94149001;25x Operator:
Run Time: 11/04/99 13:50:00
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm u	ppm	ppm	ppm	ppm
Avge	.61674	.00971	3.4543	.01182	.00038	.00112	.50815
SDev	.00630	.00120	.0178	.00005	.00004	.00008	.00116
%RSD	1.0217	12.342	.51452	.40621	9.6760	7.4469	.22804
#1	.61618	.00837	3.4348	.01178	.00040	.00115	.50692
#2	.62330	.01008	3.4696	.01188	.00041	.00120	.50922
#3	.61073	.01069	3.4586	.01181	.00034	.00103	.50831

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00445	.00184	.03641	4.4507	.30396	.24224	.03464
SDev	.00047	.00032	.00013	.0252	.00989	.00112	.00022
%RSD	10.657	17.109	.35298	.56717	3.2551	.46335	.64849
#1	.00499	.00148	.03626	4.4286	.30371	.24157	.03489
#2	.00410	.00198	.03650	4.4782	.29419	.24354	.03457
#3	.00427	.00206	.03647	4.4453	.31398	.24162	.03446

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10758	.00008	.22347	.00290	.08963	.00024	.00324
SDev	.00871	.00033	.00178	.00554	.03093	.00131	.00026
%RSD	8.0982	420.69	.79750	191.20	34.509	547.86	7.9472
#1	.11022	-.00015	.22544	.00251	.05495	.00038	.00297
#2	.11467	-.00008	.22198	.00861	.11436	.00147	.00326
#3	.09785	.00046	.22297	-.00244	.09957	-.00113	.00349

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09489	.00600	.00128	.00289	.02893	.22119	.22443
SDev	.00118	.00065	.00053	.00159	.00024	.00161	.00336
%RSD	1.2409	10.878	41.696	54.968	.81668	.72744	1.4991
#1	.09531	.00675	.00172	.00424	.02887	.21943	.22827
#2	.09580	.00574	.00144	.00114	.02918	.22156	.22202
#3	.09356	.00553	.00069	.00331	.02872	.22258	.22300

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00103	.00343
SDev	.00938	.00725
%RSD	913.98	211.33
#1	-.00871	.00772
#2	.01001	.00752
#3	.00178	-.00494

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Method: TAL Sample Name: 94149002;5x Operator:
Run Time: 11/04/99 13:55:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.585	.00131	5.6414	.17919	.00153	.00083	1.2700
SDev	.033	.00057	.0189	.00033	.00001	.00007	.0020
%RSD	.28144	43.626	.33537	.18650	.68561	8.6915	.15579
#1	11.623	.00192	5.6506	.17957	.00152	.00091	1.2723
#2	11.571	.00123	5.6538	.17894	.00154	.00077	1.2692
#3	11.562	.00079	5.6196	.17906	.00154	.00083	1.2686

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02130	.01089	.01964	18.682	3.3836	.22758	.04397
SDev	.00009	.00020	.00016	.014	.0124	.00025	.00064
%RSD	.39982	1.8437	.80546	.07400	.36512	.10942	1.4515
#1	.02138	.01092	.01978	18.687	3.3958	.22780	.04401
#2	.02133	.01107	.01947	18.666	3.3711	.22763	.04332
#3	.02121	.01067	.01966	18.692	3.3837	.22731	.04459

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.61125	.00027	.10736	.00243	.40050	-.00416	.03358
SDev	.00130	.00036	.00011	.00384	.02260	.00510	.00020
%RSD	.21196	134.03	.09986	158.20	5.6440	122.59	.60871
#1	.60976	.00051	.10745	-.00171	.38642	-.00259	.03377
#2	.61192	.00044	.10724	.00312	.38851	-.00003	.03336
#3	.61207	-.00015	.10738	.00587	.42657	-.00987	.03362

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08349	.01022	.00198	.00618	.27667	.10713	.10731
SDev	.00160	.00019	.00017	.00123	.00038	.00228	.00112
%RSD	1.9115	1.8583	8.3870	19.931	.13673	2.1272	1.0420
#1	.08484	.01027	.00206	.00601	.27711	.10921	.10641
#2	.08390	.01001	.00179	.00504	.27642	.10748	.10696
#3	.08173	.01038	.00209	.00749	.27649	.10469	.10856

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00458	.00097
SDev	.00085	.00547
%RSD	18.490	565.65
#1	.00420	-.00505
#2	.00399	.00230
#3	.00555	.00565

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Method: TAL Sample Name: 94149003;10x Operator:
Run Time: 11/04/99 14:01:54
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.8809	.00929	7.9442	.13557	.00085	.00192	2.1212
SDev	.0455	.00119	.0746	.00151	.00002	.00018	.0250
%RSD	1.1716	12.831	.93964	1.1149	2.5306	9.5275	1.1782
#1	3.9331	.00826	8.0296	.13731	.00088	.00199	2.1493
#2	3.8601	.01060	7.9117	.13482	.00084	.00206	2.1128
#3	3.8495	.00902	7.8913	.13458	.00084	.00172	2.1015

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01421	.00594	.10309	17.903	1.4221	1.5178	.03703
SDev	.00028	.00027	.00129	.230	.0213	.0190	.00083
%RSD	1.9880	4.5016	1.2553	1.2832	1.5008	1.2520	2.2353
#1	.01403	.00574	.10458	18.160	1.4452	1.5391	.03799
#2	.01454	.00625	.10243	17.831	1.4178	1.5118	.03656
#3	.01407	.00584	.10226	17.718	1.4032	1.5025	.03655

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.35864	.00013	.16564	.00323	.05303	.00291	.01227
SDev	.00708	.00010	.00350	.00316	.01353	.00193	.00020
%RSD	1.9730	78.074	2.1107	97.724	25.511	66.526	1.6022
#1	.36679	.00015	.16966	.00332	.06853	.00084	.01242
#2	.35505	.00002	.16331	.00003	.04697	.00320	.01234
#3	.35407	.00022	.16395	.00635	.04359	.00467	.01205

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.14424	.00860	.00007	.00438	.15339	.16347	.16656
SDev	.00111	.00018	.00058	.00277	.00158	.00230	.00418
%RSD	.77232	2.0938	798.50	63.208	1.0313	1.4041	2.5077
#1	.14549	.00880	.00005	.00752	.15514	.16604	.17130
#2	.14335	.00854	.00066	.00231	.15294	.16274	.16343
#3	.14387	.00845	-.00050	.00330	.15207	.16163	.16494

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00109	.00500
SDev	.00298	.00344
%RSD	274.11	68.874
#1	-.00245	.00581
#2	-.00314	.00122
#3	.00233	.00796

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Method: TAL Sample Name: 94149004;5x Operator:
Run Time: 11/04/99 14:07:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.915	.01314	3.2613	.19717	.00125	.00192	3.5517
SDev	.033	.00117	.0170	.00112	.00001	.00010	.0097
%RSD	.23998	8.8876	.52235	.57037	.69857	4.9342	.27313
#1	13.952	.01404	3.2559	.19837	.00126	.00201	3.5413
#2	13.906	.01182	3.2804	.19702	.00124	.00194	3.5534
#3	13.887	.01356	3.2476	.19613	.00125	.00182	3.5605

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03405	.01811	.11811	32.888	9.5206	.53139	.07036
SDev	.00038	.00021	.00173	.016	.0134	.00039	.00069
%RSD	1.1118	1.1682	1.4644	.04843	.14109	.07411	.97535
#1	.03399	.01798	.11919	32.905	9.5286	.53095	.07002
#2	.03445	.01800	.11903	32.886	9.5282	.53171	.07115
#3	.03370	.01835	.11612	32.874	9.5051	.53151	.06990

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.7728	.00044	.25232	.00529	.30902	-.00338	.03673
SDev	.0086	.00057	.00061	.00142	.04651	.00644	.00011
%RSD	.31055	130.78	.24350	26.797	15.051	190.30	.28708
#1	2.7635	-.00022	.25289	.00383	.26876	.00360	.03666
#2	2.7745	.00077	.25238	.00666	.29836	-.00466	.03668
#3	2.7804	.00077	.25167	.00537	.35993	-.00909	.03685

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.21321	.01922	.00046	.02548	.43621	.24927	.25371
SDev	.00072	.00020	.00118	.00252	.00087	.00137	.00143
%RSD	.33854	1.0280	258.01	9.8987	.19922	.55078	.56271
#1	.21402	.01902	-.00042	.02294	.43715	.24899	.25468
#2	.21266	.01923	.00179	.02553	.43605	.24806	.25438
#3	.21294	.01942	-.00000	.02798	.43544	.25076	.25207

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00572	.00468
SDev	.00863	.00285
%RSD	150.84	60.937
#1	.00110	.00481
#2	.01568	.00177
#3	.00039	.00747

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Method: TAL Sample Name: 94149006dup;5x Operator:
Run Time: 11/04/99 14:13:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.118	.00808	3.1362	.16641	.00122	.00180	3.4870
SDev	.038	.00106	.0221	.00058	.00001	.00015	.0076
%RSD	.26667	13.059	.70475	.35052	1.1315	8.4612	.21933
#1	14.158	.00774	3.1391	.16709	.00123	.00167	3.4834
#2	14.114	.00725	3.1567	.16607	.00121	.00197	3.4957
#3	14.083	.00927	3.1128	.16608	.00123	.00177	3.4817

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02879	.01788	.12479	24.630	9.5465	.46378	.07188
SDev	.00014	.00052	.00056	.032	.0190	.00074	.00030
%RSD	.48416	2.8873	.44876	.13194	.19854	.16046	.41708
#1	.02865	.01736	.12541	24.628	9.5626	.46399	.07156
#2	.02879	.01839	.12432	24.663	9.5512	.46440	.07194
#3	.02893	.01790	.12465	24.598	9.5256	.46296	.07215

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.7433	.00058	.27882	.00425	.45882	-.00176	.03194
SDev	.0054	.00020	.00138	.00335	.04148	.00559	.00036
%RSD	.19859	34.682	.49352	78.918	9.0401	317.57	1.1338
#1	2.7448	.00036	.28041	.00811	.41487	-.00109	.03175
#2	2.7479	.00062	.27806	.00247	.49728	.00347	.03236
#3	2.7373	.00075	.27799	.00216	.46433	-.00765	.03172

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.21396	.01615	-.00005	.00694	.40547	.27714	.27949
SDev	.00047	.00025	.00020	.00051	.00073	.00069	.00172
%RSD	.21761	1.5288	434.97	7.3815	.18011	.24864	.61554
#1	.21433	.01634	-.00026	.00698	.40573	.27794	.28148
#2	.21413	.01624	.00000	.00641	.40603	.27670	.27857
#3	.21344	.01587	.00012	.00743	.40464	.27679	.27843

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00149	.00524
SDev	.00658	.00344
%RSD	441.47	65.742
#1	.00729	.00813
#2	-.00566	.00614
#3	.00284	.00143

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Method: TAL Sample Name: 94149005ms;5x Operator:
Run Time: 11/04/99 14:19:46
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.855	.08302	2.7336	.23575	.09030	.08951	5.6551
SDev	.011	.00145	.0095	.00023	.00014	.00022	.0115
%RSD	.09488	1.7518	.34855	.09781	.15068	.24989	.20273
#1	11.867	.08136	2.7425	.23601	.09028	.08960	5.6515
#2	11.854	.08365	2.7236	.23557	.09044	.08967	5.6679
#3	11.845	.08406	2.7349	.23566	.09017	.08925	5.6458

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10831	.09924	.19800	18.484	8.2461	.43566	.13829
SDev	.00092	.00037	.00063	.028	.0043	.00064	.00051
%RSD	.84912	.37579	.31854	.15077	.05218	.14584	.37161
#1	.10839	.09918	.19801	18.485	8.2428	.43571	.13882
#2	.10919	.09964	.19737	18.511	8.2510	.43626	.13780
#3	.10735	.09891	.19863	18.456	8.2444	.43500	.13825

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.4463	.00897	.29729	.09372	2.0970	.08187	.11131
SDev	.0018	.00039	.00142	.00165	.0165	.00383	.00030
%RSD	.05277	4.3380	.47645	1.7599	.78720	4.6759	.27268
#1	3.4479	.00942	.29698	.09346	2.0797	.08351	.11099
#2	3.4443	.00875	.29606	.09548	2.1126	.08461	.11159
#3	3.4467	.00875	.29884	.09221	2.0987	.07750	.11136

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24260	.09965	.08490	.10021	.34354	.29427	.29864
SDev	.00059	.00058	.00096	.00293	.00043	.00258	.00115
%RSD	.24329	.58532	1.1357	2.9228	.12493	.87503	.38581
#1	.24198	.09904	.08489	.10113	.34400	.29240	.29909
#2	.24315	.09973	.08587	.09693	.34347	.29320	.29733
#3	.24268	.10020	.08394	.10257	.34316	.29720	.29949

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.09671	.09183
SDev	.00529	.00484
%RSD	5.4729	5.2724
#1	.10106	.08927
#2	.09082	.09742
#3	.09824	.08881

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Method: TAL Sample Name: 94149004msd;5x Operator:
Run Time: 11/04/99 14:25:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.965	.07631	3.5385	.27365	.09294	.09237	4.6675
SDev	.034	.00206	.0121	.00043	.00010	.00054	.0052
%RSD	.21037	2.7061	.34086	.15694	.10204	.58173	.11123
#1	15.975	.07420	3.5438	.27384	.09300	.09209	4.6730
#2	15.992	.07640	3.5247	.27396	.09300	.09203	4.6626
#3	15.927	.07832	3.5470	.27316	.09284	.09299	4.6670

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.11939	.10628	.22847	23.521	10.108	.52924	.15750
SDev	.00066	.00018	.00068	.014	.032	.00050	.00060
%RSD	.55336	.17216	.29955	.05870	.32009	.09384	.38028
#1	.11864	.10640	.22925	23.513	10.116	.52954	.15729
#2	.11962	.10638	.22818	23.537	10.136	.52952	.15703
#3	.11990	.10607	.22797	23.512	10.073	.52867	.15818

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.3038	.00949	.32319	.09347	2.0465	.08699	.12205
SDev	.0094	.00044	.00216	.00328	.0173	.00433	.00020
%RSD	.21927	4.5987	.66945	3.5091	.84662	4.9806	.16708
#1	4.3147	.00925	.32289	.09681	2.0650	.09198	.12199
#2	4.2990	.00924	.32548	.09025	2.0306	.08479	.12189
#3	4.2978	.01000	.32119	.09334	2.0440	.08420	.12228

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.28574	.10422	.08854	.10157	.48009	.32064	.32429
SDev	.00134	.00060	.00139	.00184	.00077	.00207	.00221
%RSD	.47011	.57516	1.5744	1.8074	.16035	.64670	.68235
#1	.28440	.10478	.08739	.10287	.47972	.32054	.32390
#2	.28573	.10429	.08814	.09947	.48098	.32276	.32667
#3	.28708	.10359	.09009	.10237	.47958	.31862	.32230

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.09282	.09340
SDev	.00539	.00293
%RSD	5.8030	3.1320
#1	.09608	.09678
#2	.08660	.09168
#3	.09577	.09174

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Method: TAL Sample Name: 941490041;5x Operator:
Run Time: 11/04/99 14:31:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.9360	.00300	.66017	.04008	.00032	.00015	.75341
SDev	.0079	.00069	.00389	.00019	.00002	.00016	.00371
%RSD	.27025	23.134	.58946	.46392	7.4125	103.24	.49218
#1	2.9276	.00232	.65574	.03989	.00030	.00032	.74915
#2	2.9434	.00298	.66300	.04026	.00033	.00014	.75584
#3	2.9371	.00370	.66179	.04011	.00034	.00000	.75525

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00696	.00352	.02364	6.7143	1.9926	.10830	.01393
SDev	.00027	.00025	.00026	.0374	.0082	.00040	.00068
%RSD	3.8603	7.1798	1.1045	.55772	.41352	.37319	4.8898
#1	.00665	.00362	.02355	6.6719	1.9851	.10788	.01350
#2	.00708	.00324	.02393	6.7430	2.0014	.10868	.01472
#3	.00715	.00372	.02343	6.7279	1.9914	.10833	.01357

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.55589	-.00024	.05121	.00149	-.02696	-.00694	.00732
SDev	.00692	.00008	.00062	.00531	.04706	.01000	.00025
%RSD	1.2440	33.111	1.2115	356.80	174.53	144.24	3.3752
#1	.54791	-.00019	.05057	-.00464	-.08073	-.00095	.00748
#2	.56000	-.00033	.05126	.00479	.00672	-.00137	.00743
#3	.55977	-.00019	.05180	.00432	-.00688	L-.01848	.00703

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04759	.00485	-.00060	.00644	.08874	.05079	.05125
SDev	.00029	.00021	.00082	.00174	.00034	.00050	.00098
%RSD	.61193	4.4216	135.62	27.038	.38350	.98083	1.9063
#1	.04730	.00473	-.00137	.00457	.08851	.05108	.05014
#2	.04788	.00510	.00026	.00675	.08913	.05022	.05161
#3	.04758	.00473	-.00070	.00801	.08859	.05109	.05199

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00239	.00303
SDev	.00746	.00604
%RSD	312.39	199.25
#1	-.00859	-.00306
#2	-.00446	.00901
#3	.00589	.00314

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Method: TAL Sample Name: 94149004p;5x Operator:
Run Time: 11/04/99 14:37:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.109	.51374	3.5601	.69099	.50851	.50150	13.107
SDev	.080	.00220	.0054	.00301	.00242	.00277	.052
%RSD	.34669	.42816	.15163	.43568	.47630	.55323	.39734
#1	23.198	.51446	3.5663	.69446	.51119	.50468	13.165
#2	23.086	.51549	3.5561	.68953	.50787	.50023	13.091
#3	23.043	.51127	3.5580	.68899	.50647	.49959	13.065

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.53205	.51976	.62169	41.256	18.842	1.0024	.56407
SDev	.00353	.00298	.00281	.120	.062	.0032	.00315
%RSD	.66439	.57361	.45271	.28982	.32953	.31780	.55910
#1	.53538	.52295	.62455	41.384	18.914	1.0060	.56762
#2	.53243	.51930	.62162	41.236	18.809	1.0012	.56296
#3	.52834	.51704	.61892	41.148	18.804	.99996	.56161

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.176	.05058	.74213	.51972	10.352	.50857	.53663
SDev	.095	.00019	.00459	.00426	.110	.00649	.00210
%RSD	.72227	.36947	.61870	.81890	1.0646	1.2767	.39123
#1	13.284	.05074	.74738	.52385	10.466	.51209	.53891
#2	13.103	.05061	.74012	.51535	10.346	.51253	.53620
#3	13.141	.05038	.73888	.51997	10.246	.50107	.53478

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.69503	.51985	.50542	.53283	.91483	.73233	.74685
SDev	.00148	.00155	.00344	.00638	.00277	.00361	.00525
%RSD	.21311	.29883	.68047	1.1974	.30322	.49325	.70238
#1	.69620	.52134	.50920	.54020	.91794	.73638	.75271
#2	.69336	.51998	.50459	.52901	.91398	.72945	.74528
#3	.69553	.51824	.50248	.52929	.91259	.73115	.74257

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.52543	.51649
SDev	.01199	.00896
%RSD	2.2825	1.7340
#1	.51736	.52670
#2	.51971	.51278
#3	.53921	.50998

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Method: TAL Sample Name: 94149007;25x Operator:
Run Time: 11/04/99 14:43:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.4310	.00385	3.6542	.11221	.00022	.00132	.98043
SDev	.0022	.00116	.0160	.00021	.00002	.00005	.00291
%RSD	.15540	30.094	.43734	.18697	8.6405	3.6943	.29650
#1	1.4316	.00440	3.6712	.11198	.00023	.00135	.98339
#2	1.4329	.00252	3.6520	.11240	.00022	.00126	.98034
#3	1.4285	.00463	3.6394	.11224	.00019	.00135	.97758

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00302	.00276	.10230	8.6184	.46153	.66238	.01738
SDev	.00066	.00053	.00033	.0319	.00632	.00144	.00031
%RSD	21.897	19.201	.32252	.36965	1.3695	.21730	1.8081
#1	.00346	.00337	.10208	8.6541	.46878	.66404	.01759
#2	.00226	.00238	.10267	8.6081	.45862	.66166	.01702
#3	.00333	.00254	.10213	8.5929	.45719	.66145	.01754

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.15555	.00039	.08306	.00331	-.06657	-.00126	.00415
SDev	.00165	.00040	.00157	.00129	.05099	.00378	.00030
%RSD	1.0586	102.45	1.8897	38.887	76.589	300.07	7.2920
#1	.15366	.00068	.08433	.00206	-.00782	.00216	.00450
#2	.15629	.00054	.08131	.00463	-.09264	-.00531	.00398
#3	.15669	-.00006	.08354	.00325	-.09926	-.00063	.00397

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03776	.00342	-.00070	.00339	.04901	.08212	.08336
SDev	.00034	.00019	.00060	.00171	.00017	.00149	.00189
%RSD	.91486	5.7023	85.552	50.399	.35751	1.8161	2.2694
#1	.03816	.00355	-.00010	.00535	.04921	.08384	.08441
#2	.03759	.00320	-.00130	.00237	.04895	.08123	.08118
#3	.03754	.00351	-.00069	.00243	.04888	.08129	.08449

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00104	.00405
SDev	.00324	.00346
%RSD	310.77	85.452
#1	.00477	.00031
#2	-.00117	.00713
#3	-.00046	.00471

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/04/99 14:49:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.774	5.1127	5.0470	4.9564	4.9597	5.0196	49.990
SDev	.056	.0123	.0251	.0086	.0038	.0018	.031
%RSD	.11351	.24102	.49709	.17406	.07576	.03680	.06116
#1	49.709	5.1001	5.0484	4.9468	4.9557	5.0208	50.021
#2	49.808	5.1248	5.0713	4.9591	4.9632	5.0204	49.987
#3	49.805	5.1131	5.0212	4.9634	4.9602	5.0175	49.960

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0326	4.9456	5.0818	48.041	48.982	4.9735	5.0817
SDev	.0030	.0006	.0100	.029	.030	.0020	.0048
%RSD	.05885	.01194	.19760	.06075	.06194	.04045	.09480
#1	5.0344	4.9462	5.0704	48.019	48.961	4.9712	5.0840
#2	5.0342	4.9455	5.0855	48.074	48.969	4.9749	5.0761
#3	5.0291	4.9451	5.0895	48.029	49.017	4.9744	5.0849

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	53.889	.52495	5.1402	5.2562	49.799	5.0445	4.9924
SDev	.130	.00049	.0521	.0571	.050	.0253	.0013
%RSD	.24129	.09354	1.0128	1.0863	.10007	.50058	.02671
#1	53.844	.52548	5.0801	5.1910	49.743	5.0185	4.9939
#2	53.787	.52452	5.1691	5.2970	49.839	5.0690	4.9915
#3	54.035	.52483	5.1714	5.2806	49.815	5.0460	4.9918

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1305	5.4949	5.1497	5.3242	5.1299	5.0980	5.1611
SDev	.0015	.0124	.0049	.0113	.0037	.0193	.0877
%RSD	.02953	.22508	.09508	.21234	.07175	.37866	1.6988
#1	5.1306	5.4807	5.1450	5.3371	5.1260	5.1203	5.0599
#2	5.1289	5.5019	5.1493	5.3191	5.1304	5.0864	5.2102
#3	5.1319	5.5023	5.1548	5.3163	5.1333	5.0873	5.2132

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.3621	5.2029
SDev	.0111	.0878
%RSD	.20730	1.6873
#1	5.3650	5.1037
#2	5.3498	5.2703
#3	5.3714	5.2348

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/04/99 14:55:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01177	.00187	.00157	.00012	.00034	.00029	.03916
SDev	.00239	.00154	.00353	.00000	.00004	.00004	.00064
%RSD	20.318	82.166	225.03	.48013	10.707	14.324	1.6417
#1	.01453	.00111	-.00245	.00012	.00037	.00025	.03899
#2	.01052	.00086	.00301	.00012	.00036	.00031	.03862
#3	.01027	.00364	.00415	.00012	.00030	.00033	.03987

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00020	.00009	-.00009	.01037	.00124	.00023	.00052
SDev	.00016	.00025	.00028	.00352	.00751	.00002	.00025
%RSD	80.979	268.23	294.16	33.989	606.28	8.7808	48.065
#1	.00026	-.00015	-.00026	.00730	-.00271	.00021	.00056
#2	.00002	.00009	-.00025	.00959	-.00348	.00025	.00026
#3	.00032	.00034	.00023	.01422	.00991	.00024	.00076

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04894	.00023	.00032	.00191	-.08528	-.00060	.00006
SDev	.00205	.00051	.00022	.00297	.08068	.00323	.00007
%RSD	4.1856	223.89	67.556	155.26	94.606	539.71	125.02
#1	.04966	-.00027	.00052	H.00531	-.08804	.00127	.00002
#2	.04662	.00074	.00009	.00059	-.16454	.00126	.00002
#3	.05052	.00020	.00035	-.00017	-.00326	-.00433	.00014

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00236	.00547	.00480	.00216	.00038	.00037	.00012
SDev	.00054	.00052	.00274	.00373	.00007	.00166	.00059
%RSD	23.001	9.6004	56.963	172.94	17.929	447.91	468.69
#1	.00210	.00594	.00794	.00470	.00040	.00105	.00009
#2	.00199	.00555	.00358	-.00212	.00031	-.00152	.00073
#3	.00298	.00490	.00290	.00389	.00044	.00158	-.00044

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00178	.00336
SDev	.00441	.00274
%RSD	247.70	81.490
#1	.00296	.00609
#2	-.00576	.00337
#3	-.00253	.00062

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Method: TAL Sample Name: 94149008;25x Operator:
Run Time: 11/04/99 15:01:27
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.2310	.00394	4.2398	.12558	.00024	.00112	1.0733
SDev	.0010	.00100	.0124	.00010	.00003	.00011	.0035
%RSD	.08326	25.395	.29234	.08303	10.177	9.7566	.32461
#1	1.2312	.00279	4.2516	.12557	.00027	.00114	1.0750
#2	1.2299	.00448	4.2411	.12568	.00025	.00122	1.0756
#3	1.2319	.00455	4.2269	.12547	.00022	.00100	1.0693

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00261	.00241	.07561	10.445	.40221	.80025	.01407
SDev	.00043	.00022	.00016	.005	.00034	.00074	.00008
%RSD	16.462	9.0143	.21804	.04760	.08424	.09279	.57577
#1	.00301	.00249	.07573	10.448	.40219	.80077	.01398
#2	.00215	.00257	.07542	10.447	.40256	.80058	.01411
#3	.00267	.00216	.07567	10.439	.40189	.79940	.01413

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13907	.00018	.05284	.00188	-.10087	.00309	.00372
SDev	.00281	.00044	.00233	.00532	.04146	.00140	.00029
%RSD	2.0220	237.98	4.4056	283.10	41.099	45.396	7.7861
#1	.13914	.00063	.05517	-.00153	-.14691	.00149	.00389
#2	.14184	-.00024	.05284	.00801	-.06649	.00371	.00389
#3	.13622	.00016	.05052	-.00085	-.08921	.00409	.00339

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03467	.00442	.00141	.00229	.04723	.05194	.05313
SDev	.00104	.00003	.00115	.00199	.00009	.00109	.00319
%RSD	3.0123	.77564	81.109	87.011	.18504	2.0936	6.0120
#1	.03492	.00442	.00103	.00457	.04726	.05309	.05604
#2	.03557	.00446	.00270	.00086	.04730	.05094	.05362
#3	.03353	.00439	.00051	.00144	.04713	.05179	.04971

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00456	.00015
SDev	.00425	.00681
%RSD	93.252	4557.2
#1	.00592	-.00564
#2	.00796	.00765
#3	-.00021	-.00156

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Method: TAL Sample Name: 94149009;5x Operator:
Run Time: 11/04/99 15:07:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.687	.00851	4.1233	.20993	.00087	.00294	2.0880
SDev	.021	.00108	.0109	.00033	.00001	.00006	.0015
%RSD	.15211	12.624	.26480	.15772	1.4528	2.0584	.06949
#1	13.710	.00966	4.1359	.21009	.00087	.00293	2.0892
#2	13.683	.00836	4.1170	.20955	.00088	.00289	2.0884
#3	13.669	.00752	4.1170	.21016	.00086	.00300	2.0864

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02478	.01403	.32209	28.333	4.1374	.38466	.04536
SDev	.00006	.00023	.00104	.031	.0095	.00018	.00092
%RSD	.24683	1.6234	.32190	.10846	.22973	.04819	2.0350
#1	.02485	.01428	.32273	28.367	4.1465	.38479	.04617
#2	.02474	.01394	.32265	28.308	4.1275	.38445	.04436
#3	.02476	.01385	.32090	28.324	4.1381	.38475	.04555

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.72310	.00020	.17369	.00239	.21017	-.00115	.04019
SDev	.00062	.00038	.00136	.00365	.03507	.00334	.00008
%RSD	.08631	191.21	.78121	152.46	16.686	291.05	.20860
#1	.72345	-.00023	.17213	.00373	.19610	.00068	.04009
#2	.72238	.00035	.17462	-.00174	.25009	.00088	.04024
#3	.72346	.00048	.17432	.00518	.18432	-.00500	.04023

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.11738	.00822	.00144	.01123	.32057	.17180	.17447
SDev	.00110	.00035	.00125	.00182	.00005	.00123	.00147
%RSD	.93727	4.2129	86.643	16.161	.01566	.71567	.84265
#1	.11638	.00857	.00155	.01058	.32062	.17052	.17277
#2	.11719	.00819	.00262	.00984	.32057	.17298	.17528
#3	.11856	.00788	.00014	.01329	.32052	.17190	.17536

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00306	.00168
SDev	.00445	.00768
%RSD	145.47	456.63
#1	.00092	.00476
#2	.00817	-.00706
#3	.00008	.00735

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Method: TAL Sample Name: 94149010;5x Operator:
Run Time: 11/04/99 15:13:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.8834	.02066	3.3958	.15260	.00079	.00266	2.6022
SDev	.0051	.00026	.0070	.00028	.00004	.00013	.0033
%RSD	.10441	1.2343	.20681	.18618	5.6190	4.8732	.12814
#1	4.8891	.02048	3.3938	.15284	.00081	.00272	2.6006
#2	4.8818	.02095	3.4036	.15268	.00082	.00274	2.6000
#3	4.8793	.02054	3.3899	.15229	.00074	.00251	2.6061

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01802	.01114	.21586	14.730	1.8995	3.3477	.03949
SDev	.00011	.00014	.00066	.019	.0015	.0007	.00012
%RSD	.59490	1.2900	.30723	.12637	.08008	.01994	.30566
#1	.01801	.01131	.21655	14.737	1.9007	3.3485	.03949
#2	.01814	.01107	.21579	14.709	1.8978	3.3475	.03961
#3	.01792	.01105	.21523	14.744	1.9001	3.3472	.03937

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.52118	-.00002	.37718	.00423	.18012	.00038	.01697
SDev	.00138	.00004	.00064	.00174	.02295	.00740	.00014
%RSD	.26517	233.82	.17048	41.233	12.743	1932.3	.83712
#1	.52042	-.00006	.37761	.00623	.20604	.00484	.01705
#2	.52278	.00001	.37749	.00341	.16237	.00447	.01680
#3	.52035	.00001	.37644	.00304	.17195	-.00816	.01704

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.17291	.01034	.00017	.01126	.21012	.37021	.38053
SDev	.00022	.00018	.00078	.00205	.00033	.00144	.00142
%RSD	.12515	1.7318	453.57	18.186	.15672	.38812	.37298
#1	.17299	.01035	.00068	.00975	.21050	.37108	.38081
#2	.17307	.01016	.00056	.01359	.20996	.36855	.38178
#3	.17266	.01052	-.00072	.01044	.20990	.37100	.37899

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00319	.00435
SDev	.00357	.00313
%RSD	112.02	71.932
#1	.00372	.00708
#2	-.00062	.00502
#3	.00647	.00094

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Method: TAL Sample Name: 94149012;100x Operator:
Run Time: 11/04/99 15:19:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12488	.00084	2.3788	.06796	.00014	.00007	.84404
SDev	.00199	.00098	.0086	.00036	.00000	.00005	.00133
%RSD	1.5911	117.80	.36059	.52419	2.6967	61.726	.15775
#1	.12714	.00177	2.3874	.06836	.00014	.00007	.84263
#2	.12407	.00094	2.3787	.06781	.00015	.00012	.84527
#3	.12342	-.00019	2.3702	.06769	.00015	.00003	.84422

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00015	.00079	.00395	4.9092	.04756	.75498	.00206
SDev	.00002	.00038	.00012	.0076	.00427	.00092	.00011
%RSD	11.969	48.295	2.9263	.15555	8.9684	.12193	5.4627
#1	.00014	.00057	.00388	4.9061	.04996	.75507	.00198
#2	.00017	.00123	.00390	4.9179	.05009	.75585	.00219
#3	.00014	.00057	.00409	4.9035	.04264	.75402	.00200

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08235	-.00032	.00378	.00250	.01929	.00011	.00019
SDev	.00344	.00020	.00116	.00274	.04931	.00110	.00015
%RSD	4.1740	62.062	30.719	109.59	255.64	1024.7	78.662
#1	.07864	-.00054	.00244	.00559	-.01842	.00055	.00035
#2	.08301	-.00020	.00453	.00153	.07509	.00092	.00010
#3	.08542	-.00020	.00437	.00037	.00120	-.00115	.00010

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01049	.00297	-.00093	.00155	.00457	.00344	.00378
SDev	.00014	.00026	.00239	.00149	.00003	.00109	.00205
%RSD	1.2902	8.7375	256.01	96.332	.60444	31.549	54.253
#1	.01056	.00268	-.00360	.00220	.00455	.00410	.00144
#2	.01033	.00305	-.00022	-.00016	.00456	.00404	.00460
#3	.01057	.00317	.00102	.00261	.00460	.00219	.00528

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00075	.00372
SDev	.00445	.00527
%RSD	591.43	141.55
#1	-.00342	.00969
#2	.00439	-.00029
#3	-.00322	.00177

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Method: TAL Sample Name: 94149013;5x Operator:
Run Time: 11/04/99 15:25:14
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.2922	.06428	4.4691	.09680	.00026	.01632	1.1787
SDev	.0048	.00069	.0029	.00010	.00001	.00009	.0014
%RSD	.14586	1.0747	.06561	.09799	2.6244	.57878	.11792
#1	3.2892	.06508	4.4722	.09686	.00026	.01643	1.1775
#2	3.2978	.06393	4.4689	.09686	.00027	.01628	1.1802
#3	3.2897	.06384	4.4663	.09669	.00025	.01626	1.1785

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04582	.00479	.99239	7.5905	.98845	.13406	.03930
SDev	.00007	.00017	.00111	.0081	.00119	.00014	.00027
%RSD	.16151	3.4761	.11159	.10729	.12059	.10431	.69346
#1	.04582	.00493	.99214	7.5856	.98745	.13412	.03943
#2	.04589	.00461	.99361	7.5861	.98977	.13415	.03898
#3	.04574	.00484	.99144	7.5999	.98811	.13390	.03948

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.30905	.00165	2.9485	.04066	.01700	-.00314	.00921
SDev	.00215	.00039	.0040	.00345	.02664	.00714	.00014
%RSD	.69704	23.647	.13419	8.4795	156.73	227.07	1.4887
#1	.30781	.00181	2.9461	.03867	.02714	.00330	.00930
#2	.31154	.00121	2.9531	.04464	.03707	-.00192	.00905
#3	.30781	.00194	2.9464	.03867	-.01322	L-.01082	.00928

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.15010	.00697	.00004	.01426	.14985	2.9068	2.9692
SDev	.00032	.00013	.00055	.00217	.00010	.0032	.0061
%RSD	.21018	1.8414	1376.0	15.220	.06530	.11003	.20640
#1	.15043	.00685	.00008	.01675	.14983	2.9037	2.9671
#2	.14981	.00710	.00057	.01327	.14976	2.9067	2.9761
#3	.15006	.00696	-.00053	.01277	.14996	2.9101	2.9644

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.04520	.03800
SDev	.00564	.00366
%RSD	12.482	9.6234
#1	.03897	.03813
#2	.04997	.04159
#3	.04667	.03428

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Method: TAL Sample Name: 94096001;5x Operator:
Run Time: 11/04/99 15:31:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.3460	.02912	.01168	1.0416	.00026	.00726	14.540
SDev	.0581	.00091	.00229	.0061	.00002	.00032	.072
%RSD	.69622	3.1194	19.578	.58343	5.7062	4.4248	.49597
#1	8.3806	.02816	.00973	1.0456	.00028	.00720	14.576
#2	8.3785	.02997	.01112	1.0447	.00025	.00761	14.587
#3	8.2789	.02923	.01420	1.0346	.00026	.00698	14.457

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51636	.02492	2.5219	120.28	5.5428	.75632	.31645
SDev	.00332	.00027	.0185	.70	.0410	.00452	.00192
%RSD	.64340	1.0842	.73366	.58387	.73911	.59719	.60610
#1	.51663	.02478	2.5351	120.60	5.5674	.75899	.31617
#2	.51953	.02476	2.5299	120.77	5.5654	.75886	.31850
#3	.51291	.02523	2.5008	119.48	5.4955	.75111	.31470

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm u	ppm	ppm	ppm	ppm
Avge	.81785	.01256	2.9152	L-.00563	8.0055	.00289	.05534
SDev	.00845	.00064	.0164	.00262	.0872	.00238	.00031
%RSD	1.0334	5.0753	.56427	46.477	1.0897	82.598	.55498
#1	.82237	.01217	2.9221	-.00352	8.0157	.00168	.05543
#2	.82308	.01223	2.9271	-.00481	8.0871	.00135	.05559
#3	.80810	.01330	2.8964	L-.00856	7.9136	.00563	.05500

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.6974	.06611	.02118	2.0741	.79146	2.8690	2.9381
SDev	.0099	.00044	.00089	.0016	.00467	.0110	.0193
%RSD	.36521	.66003	4.1850	.07585	.58991	.38331	.65775
#1	2.6982	.06658	.02218	2.0740	.79440	2.8760	2.9449
#2	2.7068	.06604	.02048	2.0756	.79389	2.8747	2.9530
#3	2.6872	.06572	.02088	2.0725	.78607	2.8563	2.9163

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00911	-.00429
SDev	.00492	.00499
%RSD	54.013	116.34
#1	-.00583	-.00277
#2	-.01477	-.00024
#3	-.00673	-.00987

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Method: TAL Sample Name: 94340001;;;as Operator:
Run Time: 11/04/99 15:37:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02418	-.00125	.05259	.00012	.00019	-.00013	1.1156
SDev	.00208	.00146	.00173	.00001	.00008	.00016	.0187
%RSD	8.5971	116.48	3.2977	11.557	39.225	116.34	1.6732
#1	.02458	-.00042	.05459	.00011	.00018	-.00031	1.1167
#2	.02193	-.00294	.05165	.00010	.00013	-.00008	1.0964
#3	.02602	-.00040	.05153	.00013	.00028	-.00002	1.1337

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00039	-.00021	.00265	-.00177	.13870	.00041	.00049
SDev	.00046	.00056	.00013	.00038	.00146	.00004	.00060
%RSD	118.48	265.24	4.7087	21.594	1.0511	9.9795	121.69
#1	.00091	.00042	.00260	-.00215	.14030	.00046	.00032
#2	.00017	-.00039	.00256	-.00175	.13745	.00038	.00115
#3	.00008	-.00067	.00279	-.00139	.13834	.00040	-.00000

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.621	.00002	.00025	.00420	64.478	-.00309	.00069
SDev	.359	.00008	.00034	.00193	1.246	.00192	.00018
%RSD	2.0398	318.28	138.80	45.898	1.9326	62.102	26.942
#1	17.589	.00007	.00058	.00543	64.276	-.00324	.00090
#2	17.278	-.00007	.00026	.00518	63.345	-.00110	.00063
#3	17.995	.00007	-.00010	.00198	65.813	-.00493	.00054

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00249	.08111	-.00037	.00647	.00011	.00134	-.00047
SDev	.00066	.00220	.00070	.00023	.00002	.00083	.00063
%RSD	26.544	2.7157	187.04	3.6130	19.779	61.704	134.60
#1	.00173	.08128	.00043	.00623	.00013	.00191	-.00025
#2	.00290	.07883	-.00078	.00670	.00012	.00039	.00002
#3	.00283	.08323	-.00077	.00649	.00009	.00173	-.00119

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00624	.00277
SDev	.00567	.00370
%RSD	90.761	133.36
#1	.01222	.00164
#2	.00094	.00691
#3	.00558	-.00023

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Method: TAL Sample Name: icsa Operator:
Run Time: 11/04/99 15:43:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	493.25	-.00366	.00409	-.00306	-.00062	.00225	486.79
SDev	.24	.00258	.00810	.00004	.00003	.00019	3.14
%RSD	.04889	70.519	198.20	1.1616	5.3172	8.4635	.64606
#1	493.46	-.00632	.00876	-.00305	-.00058	.00245	483.24
#2	493.31	-.00352	.00876	-.00303	-.00062	.00208	489.24
#3	492.99	-.00116	-.00527	-.00310	-.00065	.00221	487.88

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00090	.00345	.00269	246.47	495.07	.00186	.00495
SDev	.00033	.00053	.00066	1.13	.56	.00014	.00038
%RSD	36.578	15.421	24.444	.46038	.11213	7.3125	7.7233
#1	-.00122	.00304	.00345	245.22	495.56	.00178	.00465
#2	-.00057	.00405	.00232	247.43	495.19	.00202	.00538
#3	-.00090	.00327	.00231	246.77	494.47	.00179	.00482

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	249.76	-.00114	.00004	-.00274	249.69	-.00092	-.00046
SDev	.52	.00017	.00082	.01417	.58	.00469	.00042
%RSD	.20816	15.065	1908.3	517.41	.23053	507.99	90.006
#1	249.56	-.00094	.00024	-.00333	250.30	-.00606	-.00084
#2	250.35	-.00124	.00074	L-.01660	249.61	.00017	-.00002
#3	249.37	-.00123	-.00086	H.01172	249.16	.00312	-.00053

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01663	-.00716	-.00330	.00677	-.00397	-.01078	.00527
SDev	.00023	.00045	.00075	.00129	.00007	.00339	.00145
%RSD	1.3766	6.2530	22.863	19.110	1.7220	31.427	27.503
#1	.01673	-.00762	-.00411	.00654	-.00389	-.00713	.00374
#2	.01679	-.00713	-.00317	.00816	-.00398	-.01141	.00663
#3	.01637	-.00673	-.00262	.00561	-.00402	-.01382	.00543

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00856	-.00025
SDev	.01573	.01351
%RSD	183.63	5368.0
#1	-.00672	-.00206
#2	-.02514	-.01277
#3	.00616	.01407

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Method: TAL Sample Name: icsab Operator:
Run Time: 11/04/99 15:49:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	489.50	.09448	.10160	.09632	.09526	.09052	486.38
SDev	.26	.00104	.00623	.00002	.00002	.00015	.33
%RSD	.05341	1.1040	6.1288	.02528	.01810	.16185	.06779
#1	489.73	.09467	.09694	.09633	.09524	.09050	486.76
#2	489.55	.09335	.09919	.09634	.09527	.09038	486.15
#3	489.21	.09541	.10867	.09629	.09527	.09067	486.24

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09120	.09121	.10818	245.48	488.01	.09416	.09116
SDev	.00024	.00020	.00025	.15	.32	.00007	.00082
%RSD	.26548	.21950	.23207	.05948	.06657	.07818	.90410
#1	.09148	.09125	.10798	245.64	488.36	.09417	.09211
#2	.09108	.09099	.10846	245.41	487.96	.09408	.09074
#3	.09104	.09138	.10810	245.38	487.71	.09423	.09063

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	246.24	.00988	.09016	.09358	247.36	.09158	.09421
SDev	1.14	.00071	.00179	.00513	.14	.00049	.00056
%RSD	.46491	7.2125	1.9844	5.4775	.05651	.53751	.59309
#1	247.56	.01025	.08820	.08851	247.32	.09215	.09478
#2	245.53	.00906	.09056	.09346	247.52	.09131	.09421
#3	245.63	.01033	.09171	.09876	247.25	.09128	.09366

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09370	.09238	.09700	.09748	.09328	.08076	.09467
SDev	.00048	.00070	.00149	.00305	.00023	.00243	.00368
%RSD	.51677	.76253	1.5364	3.1265	.24689	3.0088	3.8876
#1	.09374	.09168	.09559	.09398	.09342	.08215	.09105
#2	.09416	.09237	.09686	.09891	.09301	.08217	.09456
#3	.09319	.09309	.09856	.09955	.09340	.07795	.09840

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.08270	.09859
SDev	.00791	.00817
%RSD	9.5579	8.2878
#1	.08637	.08916
#2	.07363	.10294
#3	.08811	.10366

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/04/99 15:55:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.912	5.1216	5.0787	4.9802	4.9756	5.0629	50.391
SDev	.495	.0566	.0512	.0528	.0482	.0545	.525
%RSD	.99214	1.1060	1.0084	1.0593	.96944	1.0773	1.0418
#1	49.540	5.0698	5.0462	4.9373	4.9298	5.0118	49.888
#2	50.474	5.1821	5.1377	5.0391	5.0260	5.1204	50.935
#3	49.723	5.1129	5.0521	4.9642	4.9711	5.0565	50.349

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0800	4.9867	5.0919	48.319	49.092	4.9970	5.1322
SDev	.0536	.0542	.0484	.498	.480	.0497	.0519
%RSD	1.0558	1.0862	.95090	1.0302	.97785	.99510	1.0113
#1	5.0300	4.9369	5.0569	47.847	48.724	4.9499	5.0843
#2	5.1367	5.0444	5.1472	48.839	49.635	5.0490	5.1873
#3	5.0735	4.9790	5.0717	48.270	48.917	4.9920	5.1248

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	54.042	.52937	5.2166	5.2918	50.121	5.0613	5.0282
SDev	.333	.00520	.0556	.0542	.481	.0517	.0504
%RSD	.61598	.98304	1.0662	1.0244	.96031	1.0225	1.0029
#1	53.696	.52520	5.1660	5.2474	49.847	5.0146	4.9834
#2	54.360	.53520	5.2762	5.3522	50.677	5.1170	5.0828
#3	54.072	.52771	5.2076	5.2758	49.839	5.0524	5.0184

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1841	5.4974	5.2282	5.3972	5.1518	5.1004	5.2744
SDev	.0571	.0618	.0605	.0536	.0525	.0465	.0602
%RSD	1.1008	1.1237	1.1574	.99299	1.0196	.91200	1.1407
#1	5.1259	5.4432	5.1660	5.3540	5.1055	5.0591	5.2192
#2	5.2400	H5.5647	5.2868	5.4572	5.2089	5.1508	5.3386
#3	5.1862	5.4844	5.2317	5.3806	5.1411	5.0914	5.2655

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.3618	5.2565
SDev	.0471	.0581
%RSD	.87796	1.1059
#1	5.3180	5.2118
#2	5.4116	5.3222
#3	5.3558	5.2355

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/04/99 16:00:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02437	.00221	.00714	.00012	.00055	.00037	.04598
SDev	.00303	.00095	.00205	.00000	.00013	.00007	.00202
%RSD	12.438	43.104	28.754	.20342	24.174	19.634	4.4034
#1	.02447	.00212	.00756	.00012	.00051	.00029	.04611
#2	.02734	.00320	.00491	.00012	.00070	.00038	.04794
#3	.02128	.00130	.00895	.00012	.00044	.00044	.04390

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00027	.00009	-.00024	.00470	.00523	.00041	.00021
SDev	.00006	.00029	.00022	.00764	.00520	.00014	.00018
%RSD	23.386	316.40	94.946	162.69	99.476	34.962	86.068
#1	.00032	-.00015	-.00050	.00971	.00638	.00038	.00034
#2	.00020	.00042	-.00011	.00849	.00976	.00056	.00030
#3	.00029	.00001	-.00011	-.00410	-.00045	.00028	.00000

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07025	.00007	.00039	.00255	-.07085	-.00019	.00030
SDev	.00524	.00007	.00052	.00551	.03240	.00445	.00014
%RSD	7.4576	98.371	131.34	216.14	45.722	2291.0	47.303
#1	.07008	.00007	.00099	-.00048	-.06963	.00426	.00014
#2	.07558	.00000	.00014	-.00078	-.03908	-.00020	.00039
#3	.06510	.00014	.00005	H.00890	-.10384	-.00465	.00038

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00278	.00450	.00526	.00494	.00054	.00076	.00004
SDev	.00031	.00109	.00137	.00100	.00009	.00077	.00040
%RSD	11.191	24.318	26.074	20.183	17.177	100.58	968.86
#1	.00282	.00539	.00681	.00573	.00062	.00163	.00050
#2	.00307	.00483	.00472	.00382	.00057	.00051	-.00021
#3	.00245	.00328	.00423	.00527	.00044	.00016	-.00017

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00099	.00293
SDev	.00321	.00683
%RSD	324.29	232.91
#1	-.00196	-.00013
#2	.00053	-.00183
#3	.00440	.01076

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Method: TAL Sample Name: pbswg Operator:
Run Time: 11/04/99 16:06:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01614	.00077	.00243	.00013	.00028	.00007	.04040
SDev	.00105	.00069	.00272	.00000	.00004	.00017	.00125
%RSD	6.5342	90.306	111.95	.53785	14.676	258.68	3.1008
#1	.01597	.00134	-.00071	.00013	.00026	.00013	.04181
#2	.01726	.00096	.00396	.00013	.00033	.00019	.03996
#3	.01518	-.00000	.00403	.00013	.00026	-.00013	.03943

Notused

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00002	.00012	-.00031	.00209	-.00787	.00012	.00033
SDev	.00009	.00019	.00017	.00373	.00525	.00002	.00070
%RSD	591.56	161.06	56.967	178.22	66.693	17.277	213.89
#1	-.00008	.00001	-.00020	.00364	-.00340	.00011	-.00031
#2	.00011	.00034	-.00021	.00480	-.01366	.00011	.00108
#3	.00002	.00001	-.00051	-.00216	-.00657	.00014	.00021

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06728	.00000	-.00065	H.00548	-.00837	-.00152	-.00011
SDev	.00329	.00041	.00024	.00036	.03288	.00537	.00012
%RSD	4.8875	28397.	36.633	6.4880	392.68	353.89	115.59
#1	.06888	.00048	-.00042	H.00521	.01209	-.00760	-.00011
#2	.06946	-.00020	-.00063	H.00536	.00909	.00049	-.00023
#3	.06349	-.00027	-.00089	H.00588	-.04629	.00256	.00002

P

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00198	.00267	.00036	.00208	.00016	-.00114	-.00057
SDev	.00008	.00048	.00109	.00150	.00007	.00136	.00052
%RSD	3.8337	17.933	303.71	72.353	43.817	118.74	90.389
#1	.00202	.00322	.00161	.00190	.00017	.00036	-.00098
#2	.00202	.00245	-.00036	.00366	.00022	-.00227	.00001
#3	.00189	.00234	-.00018	.00067	.00008	-.00152	-.00075

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00049	.00758
SDev	.00292	.00120
%RSD	602.68	15.802
#1	.00101	.00690
#2	-.00267	.00896
#3	.00311	.00687

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Method: TAL Sample Name: lcsswg Operator:
Run Time: 11/04/99 16:12:54
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.8058	.48689	.48639	.49595	.49670	.49331	9.5556
SDev	.0179	.00242	.00266	.00084	.00066	.00158	.0131
%RSD	.18297	.49620	.54701	.16950	.13338	.31999	.13690
#1	9.8206	.48855	.48758	.49647	.49682	.49501	9.5629
#2	9.8109	.48801	.48824	.49639	.49729	.49190	9.5634
#3	9.7858	.48412	.48334	.49498	.49598	.49301	9.5405

Not used

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49247	.49322	.49176	10.122	9.6111	.49101	.49115
SDev	.00075	.00140	.00096	.022	.0093	.00084	.00130
%RSD	.15257	.28389	.19441	.21326	.09646	.17092	.26407
#1	.49309	.49473	.49261	10.136	9.6210	.49156	.49060
#2	.49269	.49297	.49194	10.133	9.6026	.49143	.49263
#3	.49163	.49196	.49072	10.098	9.6097	.49005	.49021

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.8894	.04988	.49643	.49411	9.6071	.48917	.49434
SDev	.0142	.00059	.00168	.00384	.0330	.00616	.00125
%RSD	.14372	1.1813	.33929	.77629	.34370	1.2585	.25367
#1	9.8947	.05028	.49735	.49394	9.6211	.49188	.49526
#2	9.9002	.05017	.49449	.49803	9.5694	.48212	.49484
#3	9.8733	.04921	.49746	.49037	9.6308	.49351	.49291

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50788	.49688	.50421	.51705	.49572	.48768	.50064
SDev	.00111	.00279	.00178	.00423	.00069	.00152	.00194
%RSD	.21937	.56235	.35278	.81856	.13841	.31081	.38699
#1	.50680	.49962	.50386	.52108	.49627	.48921	.50125
#2	.50903	.49404	.50614	.51743	.49594	.48618	.49847
#3	.50782	.49700	.50264	.51264	.49495	.48763	.50220

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.50224	.48967
SDev	.00755	.00627
%RSD	1.5035	1.2806
#1	.51074	.48517
#2	.49966	.49683
#3	.49631	.48701

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Method: TAL Sample Name: 94121014 Operator:
Run Time: 11/04/99 16:18:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890 NOT USED	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	87.941	.00083	5.5835	.59049	.00342	.01325	7.7115
SDev	.179	.00234	.0179	.00070	.00001	.00018	.0298
%RSD	.20318	281.64	.32141	.11891	.15130	1.3968	.38653
#1	88.100	.00274	5.5844	.59112	.00342	.01304	7.7348
#2	87.975	-.00178	5.6009	.59061	.00342	.01338	7.7217
#3	87.748	.00154	5.5651	.58974	.00343	.01335	7.6779

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12837	.09264	.20657	168.62	28.681	6.5103	.41861
SDev	.00078	.00034	.00047	.61	.053	.0209	.00201
%RSD	.60859	.36528	.22884	.36182	.18568	.32127	.48022
#1	.12878	.09279	.20709	169.19	28.738	6.5286	.42093
#2	.12887	.09288	.20648	168.69	28.674	6.5149	.41744
#3	.12747	.09226	.20615	167.98	28.632	6.4875	.41746

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.0384	-.00187	.19989	.00319	.72720	.00936	.18826
SDev	.0326	.00041	.00105	.00368	.03918	.00304	.00054
%RSD	.36066	21.942	.52801	115.34	5.3879	32.454	.28809
#1	9.0461	-.00208	.20109	-.00072	.77051	.00651	.18879
#2	9.0664	-.00140	.19946	.00660	.71688	.00901	.18830
#3	9.0026	-.00213	.19912	.00370	.69422	.01256	.18770

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94107	.05633	.00277	.02339	1.9090	.19512	.20211
SDev	.00533	.00023	.00137	.00110	.0049	.00124	.00099
%RSD	.56656	.41129	49.490	4.7016	.25636	.63417	.49174
#1	.94568	.05643	.00167	.02461	1.9131	.19643	.20326
#2	.94230	.05650	.00234	.02246	1.9102	.19495	.20155
#3	.93523	.05606	.00431	.02310	1.9036	.19398	.20153

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00139	.00373
SDev	.00222	.00454
%RSD	160.32	121.65
#1	-.00033	-.00128
#2	.00390	.00758
#3	.00059	.00489

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Method: TAL Sample Name: 94121016dup Operator:
Run Time: 11/04/99 16:24:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm Not used	ppm	ppm	ppm	ppm
Avge	82.870	.00005	4.3949	.48897	.00331	.00836	6.3549
SDev	.086	.00243	.0149	.00146	.00004	.00003	.0064
%RSD	.10322	4876.1	.33905	.29907	1.1263	.33867	.10057
#1	82.905	.00028	4.3871	.49023	.00333	.00833	6.3516
#2	82.932	-.00248	4.4121	.48931	.00333	.00837	6.3508
#3	82.772	.00236	4.3855	.48736	.00327	.00838	6.3622

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.15303	.08059	.16394	162.97	28.848	3.7295	.39457
SDev	.00065	.00026	.00039	.05	.024	.0006	.00112
%RSD	.42352	.32377	.23924	.02852	.08165	.01674	.28491
#1	.15376	.08085	.16416	162.97	28.861	3.7298	.39551
#2	.15254	.08058	.16417	163.01	28.862	3.7288	.39486
#3	.15277	.08032	.16349	162.92	28.820	3.7299	.39332

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.8584	-.00114	.14115	.00462	.91602	.01218	.18652
SDev	.0094	.00048	.00044	.00123	.04087	.00343	.00032
%RSD	.12004	42.044	.30792	26.588	4.4615	28.172	.17228
#1	7.8692	-.00170	.14065	.00468	.87165	.00883	.18651
#2	7.8547	-.00087	.14141	.00336	.95212	.01202	.18685
#3	7.8515	-.00086	.14139	.00581	.92431	.01568	.18620

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.80257	.04629	.00171	.02931	2.0155	.13843	.14235
SDev	.00116	.00059	.00071	.00121	.0020	.00129	.00123
%RSD	.14481	1.2800	41.465	4.1403	.10037	.93104	.86148
#1	.80387	.04695	.00109	.03044	2.0174	.13959	.14102
#2	.80164	.04582	.00249	.02946	2.0157	.13704	.14343
#3	.80219	.04609	.00156	.02803	2.0133	.13865	.14260

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00332	.00489
SDev	.00742	.00428
%RSD	223.64	87.512
#1	.01181	.00075
#2	.00006	.00463
#3	-.00192	.00930

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Method: TAL Sample Name: 94121015ms Operator:
Run Time: 11/04/99 16:30:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm NOTUSED	ppm	ppm	ppm	ppm
Avge	94.204	.35052	5.2102	.89541	.43681	.43216	14.742
SDev	.216	.00366	.0154	.00305	.00035	.00104	.017
%RSD	.22892	1.0429	.29585	.34055	.08091	.24054	.11254
#1	94.327	.35007	5.2063	.89682	.43653	.43280	14.734
#2	94.331	.35438	5.2272	.89749	.43670	.43096	14.731
#3	93.955	.34711	5.1972	.89191	.43721	.43272	14.761

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.53759	.51009	.59329	149.77	35.161	5.4595	.76621
SDev	.00081	.00072	.00179	.14	.068	.0013	.00167
%RSD	.14985	.14123	.30110	.09141	.19251	.02414	.21827
#1	.53677	.50939	.59351	149.75	35.214	5.4584	.76800
#2	.53762	.51004	.59495	149.64	35.185	5.4592	.76468
#3	.53838	.51083	.59140	149.91	35.085	5.4610	.76596

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.989	.04247	.55765	.41980	9.6344	.42767	.58875
SDev	.051	.00010	.00116	.00156	.0470	.00283	.00057
%RSD	.28275	.24040	.20866	.37126	.48767	.66068	.09702
#1	17.987	.04239	.55642	.41866	9.6701	.42673	.58935
#2	18.041	.04244	.55782	.41915	9.6519	.43085	.58868
#3	17.939	.04258	.55873	.42157	9.5812	.42544	.58821

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.2511	.47406	.42076	.45287	2.1989	.55054	.56105
SDev	.0036	.00041	.00333	.00759	.0023	.00361	.00333
%RSD	.28435	.08558	.79037	1.6758	.10510	.65571	.59359
#1	1.2477	.47447	.42089	.45054	2.1997	.55242	.55825
#2	1.2506	.47405	.42402	.44671	2.2007	.55282	.56015
#3	1.2548	.47366	.41737	.46135	2.1963	.54638	.56473

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.42568	.41648
SDev	.00912	.00551
%RSD	2.1430	1.3239
#1	.41896	.41814
#2	.43607	.41033
#3	.42202	.42098

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Method: TAL Sample Name: 94121014msd Operator:
Run Time: 11/04/99 16:36:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm Not used	ppm	ppm	ppm	ppm
Avge	91.570	.33201	4.7419	.81936	.43305	.42564	13.613
SDev	.249	.00253	.0059	.00110	.00139	.00122	.043
%RSD	.27246	.76313	.12336	.13365	.32111	.28712	.31761
#1	91.738	.33192	4.7426	.82038	.43459	.42645	13.659
#2	91.690	.33459	4.7473	.81949	.43267	.42625	13.606
#3	91.284	.32953	4.7357	.81821	.43188	.42424	13.573

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.54732	.49397	.55410	157.40	33.454	2.3990	.69625
SDev	.00176	.00139	.00111	.45	.085	.0059	.00104
%RSD	.32138	.28122	.20070	.28540	.25343	.24416	.14877
#1	.54926	.49536	.55468	157.86	33.518	2.4050	.69739
#2	.54686	.49397	.55479	157.38	33.485	2.3987	.69599
#3	.54583	.49258	.55281	156.96	33.358	2.3933	.69537

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	18.240	.04245	.52149	.42645	9.6777	.42669	.60429
SDev	.018	.00013	.00025	.00355	.0754	.00297	.00199
%RSD	.09622	.30050	.04859	.83191	.77863	.69604	.32883
#1	18.254	.04259	.52177	.42533	9.7641	.42349	.60632
#2	18.246	.04241	.52127	.42359	9.6257	.42935	.60418
#3	18.221	.04235	.52144	.43042	9.6433	.42724	.60235

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0216	.47708	.42290	.45067	2.3040	.51262	.52576
SDev	.0039	.00246	.00044	.00366	.0052	.00159	.00045
%RSD	.38057	.51498	.10459	.81183	.22532	.31063	.08524
#1	1.0257	.47915	.42268	.45458	2.3093	.51407	.52544
#2	1.0209	.47772	.42260	.44733	2.3037	.51092	.52627
#3	1.0180	.47437	.42341	.45010	2.2989	.51287	.52556

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.42626	.42616
SDev	.00968	.00591
%RSD	2.2720	1.3875
#1	.43545	.41990
#2	.41614	.42694
#3	.42720	.43165

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Method: TAL Sample Name: 941210141 Operator:
Run Time: 11/04/99 16:42:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm Not USED	ppm	ppm	ppm	ppm
Avge	19.153	.00080	1.2135	.12670	.00091	.00313	1.6952
SDev	.016	.00212	.0068	.00034	.00001	.00015	.0023
%RSD	.08445	265.29	.55873	.26430	1.5091	4.9146	.13474
#1	19.157	.00238	1.2088	.12703	.00092	.00297	1.6975
#2	19.167	-.00161	1.2212	.12636	.00089	.00315	1.6951
#3	19.135	.00164	1.2103	.12671	.00091	.00328	1.6929

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02751	.02029	.04289	34.502	6.2729	1.4362	.09185
SDev	.00049	.00024	.00018	.022	.0100	.0001	.00028
%RSD	1.7935	1.2067	.41287	.06316	.15888	.00529	.29906
#1	.02808	.02011	.04274	34.514	6.2714	1.4362	.09154
#2	.02722	.02018	.04309	34.516	6.2835	1.4363	.09195
#3	.02723	.02057	.04286	34.477	6.2637	1.4362	.09206

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.7981	-.00025	.04355	.00011	.09397	.00107	.03978
SDev	.0033	.00086	.00008	.00172	.01066	.00501	.00021
%RSD	.18236	345.59	.17598	1567.3	11.343	467.38	.52435
#1	1.8018	.00021	.04348	-.00168	.09378	.00405	.03984
#2	1.7972	.00028	.04353	.00026	.08341	.00388	.03995
#3	1.7954	-.00124	.04363	.00175	.10473	-.00471	.03954

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.20926	.01286	-.00004	.00789	.41218	.04295	.04368
SDev	.00071	.00013	.00083	.00303	.00035	.00226	.00124
%RSD	.34118	1.0088	2020.6	38.414	.08447	5.2535	2.8419
#1	.20851	.01297	-.00100	.00528	.41253	.04472	.04270
#2	.20935	.01272	.00047	.00717	.41218	.04372	.04326
#3	.20993	.01290	.00041	.01121	.41183	.04041	.04507

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00141	.00048
SDev	.00474	.00469
%RSD	335.70	974.83
#1	.00396	-.00488
#2	-.00500	.00250
#3	-.00319	.00383

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Method: TAL Sample Name: 94121014p Operator:
Run Time: 11/04/99 16:48:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm Not used	ppm	ppm	ppm	ppm
Avge	94.500	.47932	5.8912	1.0686	.48416	.49292	16.846
SDev	.185	.00229	.0208	.0027	.00056	.00113	.034
%RSD	.19629	.47787	.35351	.25208	.11542	.23020	.20391
#1	94.656	.48078	5.9099	1.0709	.48456	.49332	16.871
#2	94.549	.47668	5.8950	1.0694	.48352	.49164	16.807
#3	94.295	.48050	5.8688	1.0657	.48439	.49380	16.859

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.60692	.57046	.69414	174.34	37.107	6.7616	.88615
SDev	.00134	.00225	.00123	.36	.043	.0106	.00252
%RSD	.22010	.39507	.17704	.20898	.11495	.15653	.28472
#1	.60824	.57298	.69468	174.70	37.147	6.7728	.88740
#2	.60557	.56863	.69500	173.97	37.112	6.7517	.88325
#3	.60697	.56977	.69273	174.35	37.063	6.7603	.88780

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.100	.04720	.67537	.49849	10.612	.48430	.66714
SDev	.085	.00046	.00104	.00027	.022	.00816	.00095
%RSD	.44629	.96970	.15474	.05358	.20570	1.6839	.14207
#1	19.196	.04772	.67658	.49826	10.623	.48940	.66823
#2	19.032	.04691	.67469	.49878	10.587	.47490	.66664
#3	19.073	.04696	.67486	.49843	10.626	.48861	.66655

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.3851	.53522	.49688	.51202	2.3345	.65792	.68393
SDev	.0056	.00044	.00387	.00355	.0022	.00292	.00129
%RSD	.40568	.08265	.77877	.69256	.09418	.44439	.18823
#1	1.3907	.53542	.50109	.51302	2.3369	.66028	.68455
#2	1.3794	.53552	.49348	.50809	2.3340	.65882	.68245
#3	1.3852	.53471	.49607	.51497	2.3325	.65465	.68479

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.50045	.49714
SDev	.00517	.00261
%RSD	1.0337	.52469
#1	.49639	.49882
#2	.49869	.49846
#3	.50628	.49414

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Method: TAL Sample Name: 94127018 Operator:
Run Time: 11/04/99 16:54:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm Unfused	ppm	ppm	ppm	ppm
Avge	26.903	-.00038	.02290	.11306	.00151	.00512	706.84
SDev	.030	.00134	.00202	.00022	.00001	.00031	1.21
%RSD	.11044	355.64	8.8429	.19778	.74764	5.9898	.17138
#1	26.932	-.00176	.02401	.11332	.00151	.00494	707.12
#2	26.872	.00091	.02056	.11292	.00152	.00494	707.88
#3	26.905	-.00029	.02412	.11294	.00150	.00547	705.51

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08154	.02220	.07802	80.036	356.26	2.2872	.06286
SDev	.00006	.00009	.00058	.078	.50	.0026	.00084
%RSD	.07991	.38851	.74342	.09760	.14114	.11326	1.3285
#1	.08147	.02223	.07864	80.084	356.77	2.2896	.06253
#2	.08156	.02227	.07750	80.079	355.76	2.2875	.06381
#3	.08159	.02210	.07790	79.946	356.26	2.2844	.06224

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.1444	-.00094	.21265	-.00206	L-2.0744	-.00091	.05173
SDev	.0028	.00000	.00080	.00326	.0086	.00069	.00028
%RSD	.13225	.10490	.37668	158.69	.41556	76.373	.54208
#1	2.1434	-.00094	.21280	.00168	L-2.0760	-.00049	.05171
#2	2.1476	-.00094	.21178	-.00437	L-2.0822	-.00052	.05202
#3	2.1421	-.00094	.21336	-.00347	L-2.0652	-.00170	.05146

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.28217	.00731	.00102	.01349	.09896	.20595	.21582
SDev	.00034	.00100	.00086	.00460	.00020	.00346	.00204
%RSD	.12111	13.634	83.914	34.112	.20520	1.6819	.94396
#1	.28178	.00735	.00028	.01625	.09917	.20206	.21799
#2	.28237	.00829	.00082	.00818	.09895	.20709	.21395
#3	.28236	.00629	.00196	.01604	.09876	.20871	.21551

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00217	-.00241
SDev	.00460	.00449
%RSD	212.25	186.25
#1	.00062	.00179
#2	.00036	-.00714
#3	-.00747	-.00189

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Method: TAL Sample Name: 94127025 Operator:
Run Time: 11/04/99 17:00:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm Normed	ppm	ppm	ppm	ppm
Avge	31.915	-.00353	.04855	.78179	-.00199	.00332	29.754
SDev	.023	.00072	.00370	.00153	.00002	.00013	.046
%RSD	.07217	20.412	7.6241	.19610	1.0498	4.0034	.15344
#1	31.889	-.00381	.04688	.78009	-.00201	.00324	29.804
#2	31.932	-.00406	.04599	.78221	-.00200	.00347	29.742
#3	31.924	-.00271	.05280	.78306	-.00197	.00324	29.715

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06883	.02588	.14501	396.34	15.136	20.210	.09401
SDev	.00046	.00019	.00041	.71	.011	.020	.00045
%RSD	.67169	.73139	.27975	.17812	.07389	.09683	.47765
#1	.06905	.02582	.14547	397.12	15.126	20.232	.09370
#2	.06915	.02573	.14489	396.16	15.148	20.204	.09380
#3	.06830	.02609	.14468	395.74	15.135	20.195	.09452

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.2956	-.00157	.22270	.02378	.39326	.02359	.13663
SDev	.0119	.00025	.00063	.00331	.04695	.00939	.00008
%RSD	.36154	16.048	.28245	13.910	11.939	39.815	.06067
#1	3.2819	-.00132	.22256	.02756	.44142	.02477	.13671
#2	3.3020	-.00157	.22338	.02143	.34762	.01366	.13665
#3	3.3031	-.00182	.22215	.02234	.39073	.03233	.13654

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0282	.02869	.00290	.03749	.28212	.21400	.22687
SDev	.0019	.00118	.00074	.00261	.00021	.00092	.00127
%RSD	.18371	4.1242	25.618	6.9487	.07470	.43063	.55849
#1	1.0300	.02732	.00287	.03450	.28204	.21326	.22704
#2	1.0263	.02928	.00366	.03865	.28197	.21370	.22805
#3	1.0284	.02945	.00217	.03931	.28236	.21503	.22553

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00498	.03775
SDev	.00228	.00386
%RSD	45.812	10.226
#1	-.00236	.04211
#2	-.00607	.03477
#3	-.00650	.03636

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/04/99 17:06:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.836	5.0778	5.0300	5.0016	4.9078	4.9995	49.615
SDev	.046	.0078	.0219	.0108	.0010	.0026	.023
%RSD	.09168	.15365	.43624	.21688	.01963	.05172	.04573
#1	49.788	5.0729	5.0197	4.9891	4.9077	4.9982	49.626
#2	49.879	5.0868	5.0151	5.0084	4.9068	4.9978	49.589
#3	49.839	5.0737	5.0552	5.0074	4.9088	5.0025	49.630

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0250	4.9302	5.1049	47.860	48.946	4.9332	5.0741
SDev	.0021	.0041	.0091	.045	.039	.0033	.0048
%RSD	.04167	.08361	.17776	.09327	.08045	.06670	.09389
#1	5.0226	4.9278	5.0946	47.825	48.903	4.9301	5.0699
#2	5.0265	4.9278	5.1118	47.844	48.955	4.9328	5.0731
#3	5.0260	4.9349	5.1082	47.910	48.980	4.9367	5.0793

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	54.637	.52760	5.1606	5.2457	50.227	5.0085	4.9937
SDev	.035	.00064	.0037	.0099	.096	.0276	.0043
%RSD	.06391	.12178	.07128	.18906	.19131	.55038	.08701
#1	54.609	.52776	5.1572	5.2344	50.128	5.0374	4.9892
#2	54.676	.52815	5.1600	5.2529	50.320	5.0055	4.9942
#3	54.625	.52689	5.1645	5.2498	50.232	4.9825	4.9978

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0784	5.4108	5.1880	5.3321	5.1337	5.0443	5.2184
SDev	.0089	.0127	.0286	.0077	.0054	.0152	.0086
%RSD	.17611	.23517	.55167	.14520	.10601	.30047	.16494
#1	5.0764	5.3967	5.1555	5.3240	5.1274	5.0316	5.2197
#2	5.0706	5.4146	5.1992	5.3331	5.1366	5.0611	5.2092
#3	5.0881	5.4213	5.2093	5.3393	5.1370	5.0403	5.2263

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.3141	5.2111
SDev	.0150	.0075
%RSD	.28287	.14372
#1	5.2968	5.2029
#2	5.3233	5.2174
#3	5.3223	5.2131

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/04/99 17:12:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01981	.00101	.00148	.00002	.00047	.00014	.04210
SDev	.00115	.00114	.00286	.00004	.00003	.00004	.00146
%RSD	5.8120	113.49	192.66	279.36	6.0059	27.430	3.4756
#1	.02095	.00027	.00466	.00004	.00046	.00010	.04376
#2	.01865	.00043	-.00089	.00004	.00051	.00016	.04154
#3	.01981	.00232	.00069	-.00003	.00046	.00017	.04100

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00020	.00009	-.00099	.01084	-.00359	.00069	.00060
SDev	.00008	.00029	.00000	.00700	.00001	.00008	.00033
%RSD	40.214	315.10	.43715	64.583	.22792	11.886	54.594
#1	.00017	.00042	-.00099	.01542	-.00359	.00073	.00097
#2	.00014	-.00015	-.00099	.00278	-.00359	.00073	.00034
#3	.00029	.00001	-.00100	.01432	-.00360	.00059	.00050

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05116	.00000	-.00010	-.00016	-.01677	.00173	.00009
SDev	.00288	.00000	.00013	.00253	.02497	.00308	.00007
%RSD	5.6314	2.9451	125.04	1633.3	148.87	177.89	75.439
#1	.05055	.00000	-.00016	-.00176	-.03026	-.00111	.00014
#2	.05429	.00000	-.00020	-.00147	-.03210	.00500	.00013
#3	.04862	.00000	.00004	.00276	.01204	.00130	.00001

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00227	.00463	.00355	.00347	.00038	.00077	-.00067
SDev	.00082	.00091	.00015	.00349	.00019	.00056	.00036
%RSD	36.273	19.721	4.1728	100.61	49.355	73.032	53.736
#1	.00132	.00562	.00340	.00197	.00053	.00141	-.00099
#2	.00281	.00445	.00355	.00746	.00017	.00054	-.00073
#3	.00268	.00382	.00370	.00098	.00044	.00036	-.00028

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00276	.00075
SDev	.00327	.00292
%RSD	118.29	387.35
#1	-.00648	.00020
#2	-.00148	-.00185
#3	-.00033	.00392

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Method: TAL Sample Name: 94121001;5x Operator:
Run Time: 11/04/99 17:18:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.0941	.03353	2.7446	.08993	.00047	.00589	2.2228
SDev	.0098	.00135	.0137	.00010	.00002	.00007	.0052
%RSD	.31530	4.0390	.50043	.11433	3.3274	1.1712	.23580
#1	3.0856	.03398	2.7288	.08983	.00047	.00585	2.2173
#2	3.0920	.03201	2.7511	.09003	.00048	.00585	2.2278
#3	3.1047	.03461	2.7539	.08993	.00045	.00597	2.2233

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01473	.00424	.49123	13.975	1.0419	.17450	.01979
SDev	.00007	.00033	.00034	.015	.0024	.00014	.00025
%RSD	.49756	7.7706	.07012	.10716	.22958	.07981	1.2436
#1	.01474	.00441	.49088	13.971	1.0393	.17440	.01999
#2	.01466	.00386	.49125	13.991	1.0424	.17466	.01986
#3	.01480	.00444	.49157	13.962	1.0440	.17444	.01952

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.23305	-.00002	.72541	.01461	.09305	-.00610	.01254
SDev	.00155	.00015	.00139	.00127	.01660	.00998	.00017
%RSD	.66385	732.19	.19100	8.6630	17.843	163.50	1.3203
#1	.23143	-.00011	.72562	.01422	.07390	-.00311	.01235
#2	.23452	-.00011	.72668	.01358	.10335	.00204	.01262
#3	.23320	.00016	.72393	.01602	.10191	L-.01723	.01265

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.15811	.01208	.00128	.00552	.11242	.70757	.73415
SDev	.00083	.00042	.00060	.00164	.00027	.00371	.00323
%RSD	.52585	3.4742	47.065	29.756	.23623	.52386	.43944
#1	.15866	.01187	.00178	.00375	.11219	.70340	.73654
#2	.15853	.01257	.00061	.00582	.11271	.70883	.73543
#3	.15716	.01181	.00144	.00699	.11237	.71048	.73048

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01376	.01465
SDev	.00588	.00357
%RSD	42.763	24.355
#1	.00729	.01729
#2	.01880	.01059
#3	.01518	.01605

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Method: TAL Sample Name: 94121008;10x Operator:
Run Time: 11/04/99 17:24:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9511	.00369	3.4496	.05057	.00058	.00157	1.1544
SDev	.0016	.00035	.0023	.00055	.00002	.00008	.0022
%RSD	.08029	9.5369	.06619	1.0789	2.5291	5.2834	.18822
#1	1.9516	.00336	3.4522	.05011	.00056	.00154	1.1569
#2	1.9494	.00406	3.4487	.05043	.00058	.00167	1.1529
#3	1.9525	.00365	3.4479	.05117	.00058	.00151	1.1534

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00744	.00322	.04519	10.960	.70309	.10749	.01157
SDev	.00005	.00009	.00019	.014	.00765	.00006	.00048
%RSD	.64549	2.8938	.42881	.13064	1.0885	.05167	4.1865
#1	.00739	.00327	.04518	10.967	.69679	.10750	.01161
#2	.00745	.00327	.04501	10.943	.70087	.10743	.01107
#3	.00748	.00311	.04540	10.969	.71161	.10754	.01203

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.19350	.00025	.11139	.00198	.55166	-.00274	.00879
SDev	.00298	.00035	.00044	.00239	.00889	.00261	.00026
%RSD	1.5422	138.85	.39717	120.74	1.6120	95.272	2.9723
#1	.19067	-.00001	.11102	.00166	.54255	-.00433	.00899
#2	.19661	.00065	.11188	-.00023	.56031	.00027	.00849
#3	.19321	.00012	.11128	.00451	.55213	-.00415	.00887

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.11652	.00723	.00084	.00525	.09487	.10906	.11239
SDev	.00056	.00042	.00020	.00087	.00026	.00223	.00170
%RSD	.48390	5.7537	23.712	16.588	.27509	2.0438	1.5115
#1	.11661	.00678	.00065	.00623	.09498	.11161	.11056
#2	.11591	.00760	.00105	.00496	.09506	.10747	.11392
#3	.11703	.00731	.00081	.00456	.09457	.10810	.11269

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00205	.00155
SDev	.00327	.00411
%RSD	159.35	264.34
#1	.00582	-.00081
#2	.00016	-.00082
#3	.00016	.00630

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Method: TAL Sample Name: 94121011;5x Operator:
Run Time: 11/04/99 17:30:20
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.0537	.00247	4.4823	.03635	.00024	.00075	1.8139
SDev	.0073	.00103	.0047	.00007	.00003	.00005	.0009
%RSD	.24063	41.766	.10471	.19889	11.287	6.4598	.04869
#1	3.0454	.00129	4.4838	.03629	.00021	.00074	1.8143
#2	3.0561	.00294	4.4770	.03643	.00026	.00080	1.8145
#3	3.0595	.00319	4.4860	.03633	.00024	.00071	1.8128

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00901	.00342	.03493	13.788	.87882	.03679	.01145
SDev	.00037	.00021	.00023	.012	.00396	.00003	.00012
%RSD	4.1110	6.0660	.66452	.08556	.45039	.09128	1.0281
#1	.00864	.00322	.03499	13.793	.87466	.03676	.01148
#2	.00899	.00363	.03468	13.796	.87928	.03682	.01132
#3	.00938	.00339	.03513	13.774	.88253	.03680	.01155

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.133	.00008	.08636	.00358	1.2954	-.00192	.01657
SDev	.048	.00014	.00164	.00136	.0275	.00808	.00026
%RSD	.36857	175.23	1.8978	37.823	2.1239	420.47	1.5463
#1	13.085	.00012	.08757	.00296	1.2740	.00024	.01656
#2	13.182	.00019	.08449	.00265	1.2858	.00486	.01683
#3	13.131	-.00008	.08702	.00514	1.3264	L-.01087	.01632

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10140	.00635	.00082	.00741	.14476	.08329	.08777
SDev	.00013	.00028	.00065	.00133	.00042	.00242	.00203
%RSD	.12759	4.4405	79.256	17.994	.29129	2.9070	2.3188
#1	.10155	.00631	.00125	.00895	.14427	.08608	.08814
#2	.10136	.00609	.00113	.00676	.14503	.08200	.08557
#3	.10130	.00665	.00007	.00653	.14498	.08178	.08959

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00193	.00402
SDev	.00073	.00167
%RSD	37.867	41.524
#1	.00164	.00322
#2	.00139	.00290
#3	.00276	.00593

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Method: TAL Sample Name: 94121013;25x Operator:
Run Time: 11/04/99 17:36:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.35601	.00144	3.8174	.03272	.00014	.00000	1.0045
SDev	.00136	.00142	.0304	.00008	.00001	.00003	.0064
%RSD	.38069	98.276	.79595	.24608	4.7921	19765.	.63783
#1	.35450	-.00019	3.8141	.03271	.00014	-.00001	1.0059
#2	.35713	.00220	3.8493	.03280	.00013	.00003	1.0101
#3	.35639	.00231	3.7888	.03264	.00014	-.00002	.99751

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00068	.00062	.00233	10.463	.10354	.81711	.00854
SDev	.00020	.00008	.00002	.054	.00551	.00418	.00035
%RSD	29.335	13.207	1.0152	.52007	5.3177	.51165	4.1026
#1	.00087	.00053	.00233	10.473	.10989	.81815	.00861
#2	.00069	.00062	.00235	10.512	.10065	.82067	.00885
#3	.00047	.00070	.00231	10.405	.10009	.81251	.00816

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07012	-.00007	.00741	-.00047	-.04139	-.00066	.00095
SDev	.00032	.00031	.00127	.00354	.02009	.00261	.00020
%RSD	.45409	461.46	17.153	756.95	48.526	397.97	20.714
#1	.06989	.00029	.00804	-.00432	-.06454	-.00040	.00116
#2	.07048	-.00025	.00594	.00265	-.03108	-.00339	.00092
#3	.06999	-.00024	.00824	.00027	-.02856	.00182	.00077

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02245	.00257	-.00145	.07533	.01364	.00876	.00657
SDev	.00138	.00018	.00085	.00195	.00003	.00092	.00198
%RSD	6.1533	6.9133	58.220	2.5848	.24438	10.490	30.090
#1	.02174	.00237	-.00207	.07419	.01363	.00970	.00704
#2	.02404	.00269	-.00049	.07758	.01367	.00871	.00440
#3	.02156	.00266	-.00180	.07421	.01361	.00786	.00826

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00020	-.00100
SDev	.00400	.00331
%RSD	2045.7	332.29
#1	-.00451	-.00462
#2	.00340	.00187
#3	.00052	-.00025

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Method: TAL Sample Name: 94285002;5x Operator:
Run Time: 11/04/99 17:42:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	18.861	.01816	2.6510	.07047	.00108	.00047	1.4004
SDev	.008	.00147	.0178	.00009	.00003	.00005	.0016
%RSD	.04200	8.0742	.67236	.12493	2.8537	11.455	.11208
#1	18.854	.01722	2.6676	.07037	.00110	.00051	1.4006
#2	18.870	.01985	2.6322	.07049	.00104	.00049	1.4018
#3	18.860	.01741	2.6532	.07054	.00109	.00041	1.3987

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03157	.01847	.04282	39.591	6.6235	.60673	.03878
SDev	.00058	.00034	.00018	.049	.0109	.00055	.00026
%RSD	1.8317	1.8182	.41603	.12267	.16428	.09028	.68403
#1	.03115	.01834	.04283	39.620	6.6124	.60694	.03868
#2	.03133	.01885	.04263	39.620	6.6238	.60714	.03858
#3	.03223	.01821	.04299	39.535	6.6342	.60611	.03908

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8549	-.00062	.01680	.00120	.00478	-.00183	.04847
SDev	.0043	.00038	.00126	.00145	.01559	.00420	.00028
%RSD	.23251	61.023	7.5251	121.04	326.49	229.75	.57276
#1	1.8512	-.00105	.01697	.00264	-.01234	.00286	.04836
#2	1.8539	-.00034	.01796	.00122	.00849	-.00309	.04878
#3	1.8596	-.00047	.01545	-.00026	.01817	-.00525	.04826

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.82847	.01369	.00001	.00683	.47745	.01545	.01731
SDev	.00063	.00044	.00008	.00177	.00032	.00023	.00182
%RSD	.07559	3.2200	852.60	25.872	.06694	1.5109	10.509
#1	.82908	.01346	.00007	.00746	.47757	.01567	.01746
#2	.82849	.01420	-.00008	.00484	.47770	.01547	.01905
#3	.82783	.01341	.00004	.00820	.47709	.01520	.01542

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00194	.00238
SDev	.00774	.00356
%RSD	398.59	149.44
#1	.00540	.00087
#2	-.01002	.00646
#3	-.00121	-.00017

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Method: TAL Sample Name: 94285004;5x Operator:
Run Time: 11/04/99 17:48:13
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.455	.02563	2.1955	.09788	.00066	.00057	1.9802
SDev	.003	.00178	.0072	.00041	.00004	.00025	.0041
%RSD	.02771	6.9421	.32952	.41616	6.6915	44.074	.20718
#1	12.456	.02362	2.1978	.09834	.00071	.00070	1.9783
#2	12.451	.02701	2.2013	.09770	.00063	.00073	1.9850
#3	12.457	.02626	2.1874	.09759	.00063	.00028	1.9775

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02081	.00712	.06842	25.758	2.6792	.30489	.01829
SDev	.00031	.00017	.00035	.035	.0063	.00047	.00044
%RSD	1.5027	2.4447	.51223	.13434	.23404	.15543	2.4097
#1	.02054	.00697	.06864	25.741	2.6754	.30464	.01833
#2	.02072	.00731	.06802	25.798	2.6865	.30544	.01784
#3	.02115	.00707	.06862	25.736	2.6758	.30460	.01872

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.84665	-.00029	.08048	-.00013	.06103	-.00365	.02807
SDev	.00238	.00015	.00009	.00307	.03285	.00631	.00021
%RSD	.28110	52.617	.10915	2356.2	53.828	172.98	.74693
#1	.84441	-.00020	.08052	.00301	.02694	.00019	.02826
#2	.84915	-.00020	.08038	-.00313	.09248	-.00020	.02810
#3	.84638	-.00046	.08055	-.00027	.06368	L-.01093	.02785

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.15128	.00688	.00051	.01053	.29740	.07731	.08190
SDev	.00136	.00005	.00132	.00051	.00047	.00097	.00058
%RSD	.89849	.75834	258.17	4.8174	.15761	1.2583	.70826
#1	.15284	.00690	-.00100	.01034	.29742	.07784	.08169
#2	.15065	.00682	.00144	.01110	.29785	.07790	.08146
#3	.15035	.00692	.00109	.01014	.29692	.07619	.08256

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00614	.00249
SDev	.00373	.00289
%RSD	60.719	116.36
#1	-.00313	.00569
#2	-.01032	.00007
#3	-.00498	.00170

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Method: TAL Sample Name: 94285014;5x Operator:
Run Time: 11/04/99 17:54:10
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.833	.01387	3.3305	.08216	.00131	-.00002	1.8053
SDev	.013	.00167	.0197	.00009	.00003	.00004	.0024
%RSD	.07300	12.061	.59144	.10934	2.6193	214.39	.13250
#1	17.821	.01241	3.3158	.08206	.00131	.00002	1.8030
#2	17.847	.01570	3.3529	.08222	.00127	-.00001	1.8077
#3	17.831	.01350	3.3229	.08221	.00134	-.00006	1.8053

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02551	.01558	.05841	38.716	5.2549	.61071	.03647
SDev	.00055	.00012	.00005	.027	.0089	.00048	.00005
%RSD	2.1499	.75588	.09084	.06975	.16859	.07791	.14489
#1	.02614	.01545	.05845	38.709	5.2447	.61020	.03641
#2	.02516	.01565	.05835	38.746	5.2600	.61114	.03651
#3	.02522	.01565	.05844	38.694	5.2600	.61080	.03648

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.4476	-.00045	.01914	.00025	.05857	-.00053	.04365
SDev	.0032	.00027	.00117	.00268	.02026	.00288	.00025
%RSD	.22392	61.328	6.0849	1088.1	34.601	538.86	.57397
#1	1.4440	-.00053	.02042	.00165	.04609	-.00118	.04375
#2	1.4486	-.00067	.01885	.00193	.04766	-.00304	.04336
#3	1.4502	-.00014	.01815	-.00284	.08195	.00261	.04383

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13809	.00999	-.00019	.00581	.36805	.01750	.01980
SDev	.00109	.00069	.00113	.00152	.00013	.00037	.00192
%RSD	.78816	6.9149	601.99	26.176	.03549	2.0912	9.7061
#1	.13751	.00921	.00082	.00481	.36791	.01715	.02189
#2	.13742	.01028	.00002	.00505	.36815	.01746	.01938
#3	.13935	.01050	-.00141	.00755	.36810	.01788	.01812

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.01117	.00556
SDev	.00418	.00610
%RSD	37.396	109.71
#1	-.01365	.00890
#2	-.01351	.00926
#3	-.00635	-.00148

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Method: TAL Sample Name: 94285015;10x Operator:
Run Time: 11/04/99 18:00:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm U	ppm	ppm	ppm	ppm
Avge	15.108	.04868	4.9009	.08398	.00087	-.00010	2.3364
SDev	.054	.00172	.0150	.00028	.00004	.00009	.0052
%RSD	.35536	3.5317	.30523	.33651	4.2570	95.097	.22214
#1	15.084	.04933	4.8842	.08378	.00083	.00001	2.3324
#2	15.071	.04673	4.9054	.08386	.00091	-.00015	2.3346
#3	15.170	.04998	4.9131	.08430	.00086	-.00015	2.3423

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02580	.01546	.06553	28.480	4.7442	.65748	.02482
SDev	.00037	.00017	.00063	.077	.0202	.00193	.00084
%RSD	1.4312	1.0890	.95558	.27027	.42631	.29295	3.3816
#1	.02559	.01539	.06523	28.463	4.7297	.65584	.02486
#2	.02559	.01565	.06511	28.413	4.7356	.65701	.02564
#3	.02623	.01533	.06625	28.564	4.7673	.65960	.02396

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8877	.00012	.01339	-.00143	.03050	-.00104	.02931
SDev	.0083	.00037	.00047	.00278	.04632	.00328	.00002
%RSD	.44203	320.47	3.4836	194.23	151.84	315.07	.07580
#1	1.8849	.00042	.01391	.00080	-.01143	-.00482	.02930
#2	1.8811	.00023	.01324	-.00055	.02273	.00113	.02930
#3	1.8971	-.00030	.01302	-.00455	.08021	.00057	.02934

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08791	.03067	.00044	.00614	.42045	.01349	.01317
SDev	.00068	.00011	.00138	.00180	.00178	.00086	.00083
%RSD	.76871	.34610	310.35	29.405	.42267	6.3987	6.3048
#1	.08838	.03069	-.00107	.00802	.41906	.01371	.01385
#2	.08714	.03055	.00079	.00599	.41985	.01254	.01343
#3	.08822	.03076	.00161	.00441	.42245	.01423	.01225

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00288	-.00110
SDev	.00163	.00472
%RSD	56.792	430.30
#1	-.00261	.00212
#2	-.00462	.00110
#3	-.00139	-.00651

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Method: TAL Sample Name: 94285008 Operator:
Run Time: 11/04/99 18:06:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	83.887	-.00282	.03912	.23868	.00249	-.00154	2.4353
SDev	.010	.00103	.00394	.00019	.00004	.00022	.0020
%RSD	.01201	36.511	10.077	.07948	1.5545	14.483	.08233
#1	83.898	-.00196	.03693	.23852	.00249	-.00132	2.4337
#2	83.880	-.00253	.04367	.23889	.00253	-.00153	2.4375
#3	83.883	-.00396	.03676	.23862	.00246	-.00177	2.4346

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12924	.07415	.08924	161.71	21.320	2.8746	.10853
SDev	.00024	.00016	.00040	.19	.013	.0027	.00038
%RSD	.18878	.22087	.44295	.11974	.06017	.09321	.35030
#1	.12900	.07426	.08961	161.68	21.316	2.8744	.10856
#2	.12949	.07396	.08927	161.92	21.335	2.8774	.10890
#3	.12921	.07423	.08883	161.54	21.310	2.8720	.10814

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.2529	-.00132	.06898	-.00082	.68738	.00728	.19658
SDev	.0112	.00015	.00140	.00464	.03596	.00117	.00055
%RSD	.13541	11.352	2.0242	564.58	5.2319	16.082	.27735
#1	8.2476	-.00149	.07001	.00156	.64773	.00643	.19606
#2	8.2453	-.00123	.06954	.00214	.71790	.00862	.19715
#3	8.2657	-.00123	.06739	L-.00617	.69651	.00680	.19654

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.61173	.04804	.00134	.02546	2.3821	.06647	.07007
SDev	.00230	.00069	.00124	.00074	.0009	.00330	.00122
%RSD	.37581	1.4455	92.832	2.8988	.03719	4.9691	1.7365
#1	.61098	.04884	.00002	.02545	2.3819	.07015	.06977
#2	.61431	.04771	.00150	.02473	2.3830	.06548	.07141
#3	.60990	.04758	.00249	.02620	2.3813	.06377	.06903

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00542	.00109
SDev	.00231	.00621
%RSD	42.669	568.00
#1	-.00631	.00511
#2	-.00280	.00423
#3	-.00716	-.00606

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Method: TAL Sample Name: 94285010dup Operator:
Run Time: 11/04/99 18:12:03
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	82.228	-.00164	.04246	.23925	.00257	-.00190	2.6313
SDev	.018	.00062	.00321	.00026	.00001	.00012	.0068
%RSD	.02193	38.125	7.5612	.11040	.27407	6.3675	.25838
#1	82.242	-.00236	.04598	.23897	.00258	-.00188	2.6385
#2	82.207	-.00128	.03969	.23926	.00256	-.00202	2.6304
#3	82.234	-.00127	.04171	.23950	.00257	-.00178	2.6250

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12155	.05636	.08717	158.99	18.893	2.2286	.10391
SDev	.00053	.00027	.00063	.31	.017	.0028	.00107
%RSD	.43475	.48579	.72093	.19613	.09040	.12392	1.0306
#1	.12145	.05667	.08691	159.35	18.903	2.2318	.10425
#2	.12107	.05623	.08789	158.84	18.903	2.2270	.10271
#3	.12212	.05617	.08672	158.78	18.874	2.2270	.10476

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.8242	-.00128	.06552	.00042	.66659	.01088	.19684
SDev	.0143	.00008	.00043	.00205	.06920	.00246	.00030
%RSD	.20930	5.8806	.65684	487.87	10.382	22.591	.15098
#1	6.8184	-.00132	.06503	-.00160	.74119	.01370	.19701
#2	6.8405	-.00119	.06582	.00250	.65410	.00921	.19650
#3	6.8138	-.00132	.06572	.00036	.60449	.00973	.19702

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.62915	.04071	.00238	.02149	2.2343	.06306	.06662
SDev	.00291	.00034	.00174	.00378	.0014	.00106	.00042
%RSD	.46208	.83396	73.235	17.577	.06467	1.6761	.63100
#1	.63250	.04069	.00224	.02034	2.2359	.06230	.06634
#2	.62766	.04038	.00071	.02570	2.2336	.06427	.06643
#3	.62730	.04106	.00418	.01841	2.2333	.06262	.06711

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00418	.00234
SDev	.00451	.00398
%RSD	107.70	169.80
#1	-.00648	.00046
#2	-.00708	.00691
#3	.00101	-.00034

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/04/99 18:18:01
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.535	5.0846	5.0522	5.0222	4.9140	5.0639	49.922
SDev	.065	.0193	.0300	.0048	.0293	.0348	.344
%RSD	.13105	.37868	.59417	.09563	.59625	.68796	.68957
#1	49.564	5.0643	5.0178	5.0237	4.8802	5.0237	49.525
#2	49.580	5.1025	5.0651	5.0262	4.9320	5.0825	50.118
#3	49.460	5.0870	5.0735	5.0169	4.9298	5.0854	50.124

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0576	4.9611	5.0750	48.090	48.723	4.9519	5.1335
SDev	.0285	.0281	.0094	.330	.053	.0268	.0324
%RSD	.56282	.56583	.18518	.68718	.10848	.54111	.63129
#1	5.0248	4.9288	5.0846	47.709	48.716	4.9211	5.0960
#2	5.0731	4.9791	5.0744	48.281	48.778	4.9691	5.1523
#3	5.0750	4.9754	5.0658	48.282	48.673	4.9656	5.1521

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	53.831	.52781	5.2080	5.2303	50.043	4.9875	5.0098
SDev	.115	.00065	.0308	.0343	.105	.0344	.0181
%RSD	.21297	.12272	.59190	.65658	.20942	.68915	.36057
#1	53.708	.52707	5.1736	5.1907	50.134	4.9499	4.9891
#2	53.849	.52828	5.2331	5.2521	50.066	5.0173	5.0220
#3	53.936	.52808	5.2172	5.2481	49.928	4.9954	5.0183

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1625	5.3991	5.2549	5.4150	5.1387	5.1024	5.2605
SDev	.0547	.0261	.0375	.0312	.0133	.0433	.0671
%RSD	1.0592	.48351	.71403	.57704	.25922	.84772	1.2756
#1	5.0994	5.3691	5.2123	5.3800	5.1236	5.1523	5.1840
#2	5.1927	5.4115	5.2833	5.4401	5.1490	5.0797	5.3095
#3	5.1954	5.4167	5.2690	5.4249	5.1434	5.0752	5.2880

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.3244	5.1829
SDev	.0305	.0667
%RSD	.57289	1.2867
#1	5.3596	5.1060
#2	5.3072	5.2241
#3	5.3064	5.2187

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/04/99 18:23:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02902	.00142	.00432	.00009	.00052	.00023	.03694
SDev	.00264	.00170	.00060	.00004	.00000	.00009	.00005
%RSD	9.1007	120.13	13.847	46.644	.55294	40.467	.14172
#1	.02929	.00007	.00364	.00012	.00053	.00033	.03699
#2	.03151	.00085	.00453	.00012	.00053	.00019	.03696
#3	.02625	.00333	.00478	.00004	.00052	.00016	.03689

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.00004	-.00122	.00043	-.00275	.00035	.00023
SDev	.00007	.00020	.00024	.00635	.00079	.00009	.00028
%RSD	31.993	539.08	19.696	1491.1	28.670	26.779	120.97
#1	.00026	.00026	-.00125	.00614	-.00197	.00042	.00056
#2	.00026	.00001	-.00144	-.00640	-.00275	.00038	.00008
#3	.00014	-.00015	-.00097	.00154	-.00354	.00024	.00006

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04425	.00011	-.00009	.00018	.00154	.00283	.00014
SDev	.00136	.00019	.00037	.00115	.03763	.00047	.00022
%RSD	3.0710	171.31	432.82	644.55	2437.4	16.471	160.07
#1	.04440	.00034	.00026	-.00063	.04131	.00277	.00039
#2	.04553	.00000	-.00004	-.00033	-.00317	.00333	.00001
#3	.04283	.00000	-.00048	.00149	-.03351	.00240	.00001

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00168	.00436	.00406	.00208	.00053	.00050	-.00055
SDev	.00044	.00110	.00230	.00302	.00012	.00069	.00029
%RSD	26.031	25.299	56.715	145.49	22.533	138.27	53.515
#1	.00209	.00553	.00620	-.00141	.00062	.00086	-.00021
#2	.00122	.00419	.00434	.00365	.00058	.00093	-.00070
#3	.00172	.00335	.00163	.00400	.00040	-.00030	-.00073

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00156	-.00090
SDev	.00479	.00227
%RSD	307.92	251.44
#1	-.00385	.00058
#2	.00528	-.00352
#3	.00324	.00023

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Method: TAL Sample Name: 94285009ms Operator:
Run Time: 11/04/99 18:29:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	103.49	.32165	.45219	.70163	.44360	.42995	11.237
SDev	.18	.00147	.00743	.00123	.00129	.00183	.041
%RSD	.17561	.45676	1.6420	.17538	.29076	.42445	.36746
#1	103.37	.32061	.45717	.70105	.44237	.42797	11.194
#2	103.70	.32100	.44365	.70304	.44494	.43157	11.277
#3	103.40	.32333	.45574	.70079	.44349	.43030	11.242

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.56715	.49084	.53857	161.02	29.074	2.6359	.54289
SDev	.00261	.00147	.00084	.54	.053	.0070	.00318
%RSD	.46082	.30005	.15525	.33571	.18331	.26430	.58654
#1	.56453	.48972	.53908	160.51	29.035	2.6293	.54066
#2	.56976	.49251	.53901	161.59	29.135	2.6432	.54654
#3	.56715	.49029	.53760	160.98	29.053	2.6353	.54147

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.231	.04314	.49485	.42545	9.5054	.43317	.63280
SDev	.052	.00062	.00061	.00774	.0030	.00553	.00134
%RSD	.32278	1.4354	.12264	1.8202	.03144	1.2768	.21095
#1	16.263	.04290	.49503	.43280	9.5084	.43175	.63171
#2	16.260	.04385	.49417	.42619	9.5024	.43927	.63429
#3	16.171	.04269	.49534	.41736	9.5054	.42848	.63242

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1050	.47017	.43619	.49073	2.7188	.48435	.49993
SDev	.0042	.00331	.00378	.00247	.0064	.00247	.00112
%RSD	.37948	.70298	.86684	.50378	.23417	.50988	.22414
#1	1.1011	.47110	.43194	.48799	2.7142	.48711	.49882
#2	1.1094	.47291	.43917	.49280	2.7261	.48236	.49991
#3	1.1045	.46650	.43748	.49139	2.7162	.48356	.50106

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.41422	.43068
SDev	.00821	.00881
%RSD	1.9827	2.0444
#1	.42368	.43697
#2	.40890	.43445
#3	.41009	.42062

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Method: TAL Sample Name: 94285008msd Operator:
Run Time: 11/04/99 18:35:53
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	102.33	.31337	.44087	.68023	.43101	.42050	10.727
SDev	.14	.00013	.01463	.00070	.00167	.00161	.053
%RSD	.13872	.04015	3.3173	.10323	.38763	.38333	.49817
#1	102.45	.31327	.43060	.68064	.43213	.42137	10.753
#2	102.37	.31333	.45762	.67942	.43181	.42150	10.762
#3	102.18	.31352	.43440	.68064	.42909	.41865	10.665

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.54759	.48298	.52216	159.67	29.540	2.4858	.53361
SDev	.00280	.00136	.00124	.68	.048	.0087	.00268
%RSD	.51055	.28191	.23785	.42803	.16165	.34984	.50221
#1	.54843	.48372	.52356	160.07	29.592	2.4904	.53612
#2	.54988	.48382	.52176	160.06	29.530	2.4913	.53390
#3	.54448	.48141	.52118	158.88	29.498	2.4758	.53079

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.762	.04229	.48735	.42047	9.2997	.42215	.61527
SDev	.029	.00059	.00265	.00308	.0461	.01036	.00196
%RSD	.16511	1.4007	.54408	.73324	.49544	2.4541	.31824
#1	17.767	.04172	.49035	.41730	9.3207	.42992	.61654
#2	17.731	.04290	.48636	.42067	9.3315	.42614	.61624
#3	17.789	.04225	.48533	.42345	9.2468	.41039	.61301

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0281	.47262	.42592	.44358	2.7974	.47510	.49331
SDev	.0065	.00349	.00068	.00095	.0062	.00169	.00320
%RSD	.63237	.73777	.15870	.21407	.22217	.35562	.64884
#1	1.0321	.46861	.42643	.44411	2.8017	.47702	.49685
#2	1.0316	.47433	.42515	.44414	2.8001	.47385	.49245
#3	1.0206	.47492	.42617	.44248	2.7902	.47442	.49062

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.42403	.41832
SDev	.00327	.00615
%RSD	.77097	1.4704
#1	.42642	.41236
#2	.42537	.41794
#3	.42031	.42465

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Method: TAL Sample Name: 942850081 Operator:
Run Time: 11/04/99 18:41:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.504	-.00012	.01138	.04899	.00079	.00003	.52919
SDev	.018	.00108	.00230	.00008	.00002	.00010	.00019
%RSD	.10255	892.98	20.189	.17002	2.7781	388.94	.03570
#1	17.491	-.00040	.01160	.04893	.00082	-.00005	.52907
#2	17.496	.00107	.00898	.04896	.00078	.00014	.52941
#3	17.524	-.00104	.01356	.04909	.00079	-.00001	.52909

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02642	.01508	.01707	31.635	4.4696	.59648	.02261
SDev	.00053	.00003	.00026	.036	.0035	.00075	.00011
%RSD	2.0011	.16929	1.5046	.11338	.07808	.12637	.49028
#1	.02655	.01507	.01710	31.648	4.4656	.59606	.02253
#2	.02584	.01508	.01731	31.595	4.4718	.59603	.02257
#3	.02687	.01511	.01680	31.663	4.4714	.59735	.02274

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.5728	-.00052	.01399	.00300	.07618	.00017	.03974
SDev	.0061	.00027	.00022	.00298	.01820	.00380	.00018
%RSD	.39018	53.004	1.5674	99.219	23.890	2249.4	.46535
#1	1.5703	-.00030	.01384	.00344	.05892	.00074	.03991
#2	1.5683	-.00083	.01389	.00574	.07444	.00366	.03954
#3	1.5798	-.00043	.01424	-.00017	.09519	-.00389	.03976

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13050	.01152	-.00017	.00862	.49094	.01367	.01398
SDev	.00093	.00089	.00141	.00181	.00046	.00029	.00032
%RSD	.71245	7.7134	825.55	21.045	.09440	2.1266	2.2792
#1	.13074	.01213	.00142	.01027	.49046	.01336	.01391
#2	.12947	.01050	-.00065	.00890	.49097	.01393	.01370
#3	.13128	.01193	-.00128	.00668	.49139	.01373	.01432

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00649	.00088
SDev	.00618	.00291
%RSD	95.334	331.20
#1	.00260	.00347
#2	.01362	.00142
#3	.00324	-.00226

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Method: TAL Sample Name: 94285008p Operator:
Run Time: 11/04/99 18:47:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	89.272	.48815	.52229	.73909	.49283	.49286	11.867
SDev	.717	.00763	.01024	.00562	.00509	.00632	.138
%RSD	.80267	1.5634	1.9611	.75972	1.0334	1.2822	1.1634
#1	89.641	.49621	.53396	.74225	.49569	.49685	11.943
#2	89.729	.48722	.51807	.74242	.49585	.49615	11.950
#3	88.446	.48103	.51483	.73261	.48695	.48557	11.707

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.61857	.56423	.59131	163.20	29.798	3.1923	.59760
SDev	.00675	.00634	.00442	1.91	.250	.0330	.00653
%RSD	1.0911	1.1236	.74758	1.1674	.83857	1.0347	1.0928
#1	.62197	.56877	.59354	164.31	29.944	3.2105	.60177
#2	.62293	.56693	.59416	164.28	29.941	3.2122	.60097
#3	.61079	.55699	.58622	161.00	29.510	3.1542	.59008

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	18.526	.04871	.56136	.50276	10.706	.49222	.68366
SDev	.138	.00060	.00556	.00592	.138	.01275	.00770
%RSD	.74511	1.2253	.98986	1.1779	1.2853	2.5910	1.1268
#1	18.603	.04930	.56468	.50526	10.823	.49819	.68859
#2	18.608	.04872	.56445	.50702	10.740	.50088	.68760
#3	18.366	.04810	.55494	.49600	10.554	.47757	.67478

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0570	.54301	.51906	.53066	2.7533	.54206	.57083
SDev	.0148	.00867	.00690	.00158	.0253	.01097	.00331
%RSD	1.3988	1.5968	1.3296	.29813	.91962	2.0228	.58011
#1	1.0670	.54945	.52315	.53035	2.7668	.55109	.57130
#2	1.0640	.54644	.52293	.53238	2.7691	.54524	.57387
#3	1.0400	.53315	.51109	.52926	2.7241	.52986	.56730

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.50457	.50148
SDev	.01194	.00505
%RSD	2.3660	1.0071
#1	.51577	.49963
#2	.50592	.50719
#3	.49201	.49761

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Method: TAL Sample Name: pbwwg Operator:
Run Time: 11/04/99 18:53:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03200	.00047	.00346	.00009	.00032	-.00015	.03562
SDev	.00296	.00230	.00253	.00004	.00003	.00017	.00050
%RSD	9.2433	491.77	73.259	46.607	7.8177	112.99	1.4051
#1	.02859	.00011	.00092	.00004	.00034	-.00009	.03511
#2	.03395	-.00163	.00599	.00012	.00029	-.00035	.03611
#3	.03345	.00292	.00345	.00012	.00034	-.00002	.03565

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00015	.00001	-.00160	.00733	-.00874	.00016	.00015
SDev	.00007	.00022	.00015	.00305	.00650	.00004	.00006
%RSD	47.267	2028.4	9.3226	41.550	74.344	25.346	39.896
#1	.00023	-.00015	-.00164	.00620	-.00354	.00014	.00022
#2	.00011	.00026	-.00144	.01078	-.01602	.00021	.00010
#3	.00011	-.00007	-.00173	.00501	-.00665	.00014	.00014

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03812	-.00004	-.00014	-.00121	-.07105	-.00139	-.00011
SDev	.00176	.00017	.00084	.00350	.03985	.00173	.00000
%RSD	4.6131	388.42	578.74	289.48	56.096	124.57	1.0308
#1	.03621	-.00007	-.00000	-.00435	-.09670	-.00188	-.00011
#2	.03968	.00014	.00061	.00256	-.09131	.00053	-.00011
#3	.03847	-.00020	-.00105	-.00184	-.02513	-.00282	-.00011

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00230	.00138	-.00052	.00293	.00020	.00015	-.00046
SDev	.00019	.00022	.00125	.00108	.00005	.00072	.00100
%RSD	8.4317	16.185	239.68	36.652	26.048	489.66	217.33
#1	.00209	.00144	.00017	.00400	.00017	.00076	-.00055
#2	.00247	.00113	.00023	.00185	.00026	.00034	.00058
#3	.00235	.00156	-.00196	.00295	.00017	-.00065	-.00141

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00011	-.00226
SDev	.00703	.00220
%RSD	6276.2	97.222
#1	-.00747	-.00318
#2	.00641	.00025
#3	.00140	-.00386

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Method: TAL Sample Name: lcswwg Operator:
Run Time: 11/04/99 18:59:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.024	.50767	.51085	.52085	.50145	.51951	9.9862
SDev	.028	.00138	.00285	.00153	.00328	.00523	.0807
%RSD	.28022	.27182	.55794	.29441	.65380	1.0074	.80860
#1	10.017	.50717	.51051	.52078	.49910	.51690	9.9370
#2	10.055	.50661	.50819	.52242	.50005	.51610	9.9422
#3	10.000	.50923	.51386	.51936	.50519	.52554	10.079

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51174	.51264	.50381	10.585	10.138	.50634	.51768
SDev	.00319	.00345	.00213	.087	.018	.00278	.00385
%RSD	.62335	.67194	.42264	.82277	.17568	.54814	.74319
#1	.51033	.51043	.50386	10.530	10.124	.50442	.51627
#2	.50951	.51087	.50591	10.539	10.158	.50507	.51474
#3	.51540	.51661	.50166	10.685	10.132	.50952	.52204

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.827	.05193	.52553	.53334	10.247	.51339	.51230
SDev	.069	.00027	.00138	.00174	.052	.00579	.00200
%RSD	.63892	.52147	.26237	.32638	.50513	1.1284	.39071
#1	10.849	.05206	.52606	.53468	10.226	.51232	.51101
#2	10.883	.05212	.52396	.53137	10.208	.50820	.51128
#3	10.750	.05162	.52656	.53397	10.306	.51964	.51461

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.52720	.51832	.53146	.52394	.51283	.51043	.53289
SDev	.00809	.00264	.00690	.00420	.00102	.00091	.00227
%RSD	1.5343	.50970	1.2992	.80217	.19812	.17905	.42520
#1	.52197	.51592	.52428	.52035	.51226	.50937	.53422
#2	.52311	.51787	.53203	.52290	.51224	.51097	.53028
#3	.53651	.52115	.53806	.52856	.51401	.51095	.53419

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.54167	.52879
SDev	.00469	.00488
%RSD	.86547	.92283
#1	.53692	.53316
#2	.54630	.52353
#3	.54177	.52969

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Method: TAL Sample Name: icsa Operator:
Run Time: 11/04/99 19:05:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	487.31	-.00129	.00159	-.00303	-.00054	.00079	482.98
SDev	.35	.00219	.00659	.00004	.00004	.00032	1.31
%RSD	.07211	170.24	413.60	1.1660	6.9371	39.737	.27198
#1	486.92	.00002	.00793	-.00300	-.00050	.00043	482.56
#2	487.61	-.00007	.00206	-.00302	-.00057	.00096	484.45
#3	487.40	-.00381	-.00522	-.00307	-.00056	.00099	481.93

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00112	.00366	.00065	245.88	489.98	.00169	.00416
SDev	.00036	.00028	.00032	.61	.33	.00007	.00050
%RSD	32.013	7.6382	48.781	.24653	.06684	4.1789	11.947
#1	-.00153	.00342	.00030	245.89	489.60	.00169	.00382
#2	-.00098	.00359	.00093	246.49	490.22	.00176	.00393
#3	-.00085	.00397	.00073	245.27	490.10	.00162	.00473

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	248.35	-.00026	.00053	.00289	249.34	-.00435	-.00042
SDev	.26	.00014	.00213	.00686	.08	.01132	.00041
%RSD	.10530	55.021	401.64	237.56	.03185	260.41	97.572
#1	248.08	-.00031	-.00159	-.00414	249.25	-.00167	-.00016
#2	248.60	-.00010	.00268	.00323	249.40	-.01676	-.00021
#3	248.36	-.00038	.00050	.00957	249.36	.00540	-.00089

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00967	-.00780	-.00101	.00495	-.00385	-.00686	.00404
SDev	.00032	.00081	.00083	.00077	.00010	.00239	.00431
%RSD	3.2711	10.355	82.173	15.571	2.4987	34.901	106.64
#1	.00969	-.00690	-.00141	.00415	-.00376	-.00529	.00008
#2	.00998	-.00805	-.00006	.00501	-.00386	-.00962	.00864
#3	.00934	-.00846	-.00155	.00569	-.00395	-.00568	.00341

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00626	.00704
SDev	.01238	.00497
%RSD	197.57	70.582
#1	-.01587	.00131
#2	-.01063	.00973
#3	.00770	.01008

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Method: TAL Sample Name: icsab Operator:
Run Time: 11/04/99 19:11:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	487.77	.09435	.09348	.09783	.09439	.08957	481.82
SDev	.69	.00356	.00406	.00018	.00012	.00068	.45
%RSD	.14184	3.7719	4.3471	.18050	.13172	.75380	.09331
#1	488.41	.09846	.09352	.09801	.09452	.09035	482.19
#2	487.85	.09223	.09752	.09783	.09439	.08918	481.94
#3	487.04	.09236	.08939	.09766	.09427	.08917	481.32

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09165	.09090	.10786	244.81	487.51	.09352	.09178
SDev	.00042	.00055	.00036	.23	.85	.00013	.00018
%RSD	.45425	.60548	.33219	.09320	.17482	.14317	.19258
#1	.09200	.09121	.10789	244.99	488.37	.09367	.09170
#2	.09177	.09026	.10820	244.89	487.48	.09347	.09198
#3	.09119	.09122	.10749	244.55	486.67	.09341	.09166

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	247.79	.00981	.09061	.10307	249.59	.08313	.09422
SDev	1.01	.00055	.00021	.00346	.44	.00281	.00030
%RSD	.40778	5.5887	.23554	3.3529	.17770	3.3857	.32219
#1	248.14	.01013	.09085	.10552	249.98	.08356	.09396
#2	248.58	.01011	.09045	.09911	249.67	.08013	.09455
#3	246.65	.00917	.09054	.10456	249.11	.08571	.09415

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09267	.08898	.09238	.10096	.09373	.08065	.09541
SDev	.00021	.00062	.00150	.00531	.00017	.00066	.00047
%RSD	.23139	.69414	1.6247	5.2552	.18501	.82386	.49599
#1	.09288	.08967	.09111	.10709	.09386	.08077	.09571
#2	.09245	.08879	.09201	.09780	.09379	.08125	.09486
#3	.09267	.08848	.09404	.09800	.09353	.07993	.09565

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.10977	.09930
SDev	.00613	.00688
%RSD	5.5832	6.9290
#1	.10301	.10635
#2	.11131	.09260
#3	.11497	.09895

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/04/99 19:17:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.205	5.1106	5.0380	5.0495	4.9061	5.0157	49.758
SDev	.095	.0142	.0069	.0061	.0210	.0108	.178
%RSD	.19016	.27831	.13749	.12011	.42836	.21630	.35858
#1	50.104	5.0954	5.0342	5.0445	4.8818	5.0032	49.552
#2	50.294	5.1235	5.0460	5.0563	4.9177	5.0225	49.850
#3	50.216	5.1129	5.0337	5.0478	4.9188	5.0215	49.871

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0557	4.9560	5.1499	48.098	49.312	4.9526	5.0966
SDev	.0114	.0135	.0126	.151	.120	.0148	.0134
%RSD	.22492	.27165	.24428	.31408	.24269	.29916	.26262
#1	5.0426	4.9405	5.1366	47.924	49.180	4.9355	5.0816
#2	5.0615	4.9652	5.1617	48.175	49.413	4.9606	5.1073
#3	5.0631	4.9622	5.1515	48.195	49.343	4.9616	5.1009

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.058	.53290	5.1931	5.2539	50.696	5.0285	5.0249
SDev	.095	.00061	.0129	.0158	.045	.0217	.0124
%RSD	.17195	.11458	.24836	.30143	.08956	.43244	.24736
#1	54.995	.53262	5.1802	5.2437	50.645	5.0066	5.0106
#2	55.013	.53360	5.1929	5.2458	50.731	5.0287	5.0333
#3	55.167	.53247	5.2060	5.2722	50.713	5.0501	5.0307

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0773	5.4605	5.2383	5.3764	5.1715	5.0549	5.2619
SDev	.0187	.0165	.0081	.0192	.0146	.0203	.0157
%RSD	.36762	.30250	.15398	.35650	.28180	.40188	.29897
#1	5.0567	5.4440	5.2303	5.3568	5.1548	5.0334	5.2533
#2	5.0818	5.4771	5.2381	5.3774	5.1819	5.0738	5.2523
#3	5.0932	5.4604	5.2464	5.3951	5.1777	5.0574	5.2800

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	5.3320	5.2145
SDev	.0192	.0277
%RSD	.35993	.53205
#1	5.3172	5.2067
#2	5.3537	5.1916
#3	5.3250	5.2454

Analysis Report 11/04/99 07:29:21 PM page 1

Method: TAL Sample Name: ccb Operator:
Run Time: 11/04/99 19:23:36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03150	.00124	.00196	.00011	.00047	.00025	.04443
SDev	.00199	.00117	.00276	.00000	.00004	.00013	.00246
%RSD	6.3104	94.027	140.72	1.1143	7.6638	51.449	5.5341
#1	.03131	.00164	.00046	.00011	.00050	.00024	.04712
#2	.03358	.00217	.00028	.00011	.00049	.00013	.04385
#3	.02962	-.00007	.00515	.00011	.00043	.00039	.04231

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00006	.00020	-.00101	.00449	.00166	.00024	.00024
SDev	.00019	.00019	.00015	.00733	.00399	.00003	.00052
%RSD	329.37	92.245	15.055	163.34	240.00	14.683	215.38
#1	.00020	.00009	-.00085	.00752	.00617	.00020	.00083
#2	-.00016	.00042	-.00115	.00981	-.00140	.00024	-.00009
#3	.00014	.00009	-.00103	-.00387	.00022	.00027	-.00003

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05432	-.00006	.00098	.00203	-.17688	.00531	.00009
SDev	.00248	.00041	.00005	.00371	.04064	.00198	.00007
%RSD	4.5721	639.72	5.4414	182.57	22.977	37.353	81.222
#1	.05691	.00007	.00097	-.00176	-.15565	.00758	.00013
#2	.05408	-.00053	.00104	H.00564	-.22373	.00390	.00001
#3	.05196	.00027	.00093	.00221	-.15124	.00445	.00013

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00166	.00356	.00421	.00333	.00036	.00177	.00042
SDev	.00068	.00089	.00247	.00144	.00009	.00148	.00081
%RSD	40.755	24.889	58.780	43.317	25.722	83.661	195.47
#1	.00154	.00457	.00634	.00220	.00043	.00260	-.00002
#2	.00239	.00318	.00479	.00495	.00039	.00006	.00136
#3	.00105	.00293	.00150	.00283	.00026	.00264	-.00009

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00152	.00190
SDev	.00615	.00543
%RSD	404.53	286.28
#1	-.00360	-.00124
#2	-.00018	.00816
#3	.00834	-.00124

001025 11/5/99

Calibration Report 11/05/99 10:56:35 AM page 1

Method: TAL Standard Name: BLANK-STD1 Operator: pdc
Run Time: 11/05/99 10:53:14
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.0137498	.0060259	-.000778	.0004248	.4246562	.1599267
SDev	.0001313	.0000645	.000360	.0002736	.0022044	.0009945
%RSD	.9552107	1.069879	46.24825	64.41441	.5190979	.6218612
#1	.0137160	.0060960	-.000689	.0001089	.4258863	.1600203
#2	.0136387	.0059692	-.000470	.0005788	.4221113	.1588886
#3	.0138947	.0060125	-.001173	.0005866	.4259711	.1608711
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

✓=CHECKED
U=USE
R=RERUN

Calibration Report 11/05/99 11:00:38 AM page 1

Method: TAL Standard Name: STD3A Operator: pdc
Run Time: 11/05/99 10:57:18
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.0988146	.0845437	.0327356	.0480316	.8261942	.1850144
SDev	.0002151	.0001577	.0003252	.0001834	.0013473	.0007600
%RSD	.2176796	.1865020	.9933656	.3818401	.1630746	.4107861
#1	.0987818	.0847008	.0325331	.0480831	.8247940	.1850233
#2	.0990441	.0843855	.0325630	.0478280	.8263072	.1842499
#3	.0986177	.0845448	.0331107	.0481837	.8274815	.1857699
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/05/99 11:04:26 AM page 1

Method: TAL Standard Name: STD3B Operator: pdc
Run Time: 11/05/99 11:01:05
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	.8801776	.8100733	.3317748	.4835232	4.391068	.4022028
SDev	.0002681	.0012679	.0003434	.0004617	.004942	.0009627
%RSD	.0304639	.1565101	.1034919	.0954925	.1125390	.2393585
#1	.8799856	.8106169	.3314562	.4830344	4.388845	.4012912
#2	.8800631	.8086243	.3321385	.4835831	4.396731	.4021077
#3	.8804839	.8109787	.3317297	.4839521	4.387629	.4032096
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/05/99 11:08:22 AM page 1

Method: TAL Standard Name: STD30 Operator: pdc
Run Time: 11/05/99 11:05:01
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	8.822956	7.897713	3.225595	5.035193	33.83792	2.822859
SDev	.003752	.012895	.003519	.003280	.06638	.003202
%RSD	.0425299	.1632709	.1091099	.0651346	.1961820	.1134382
#1	8.827180	7.895953	3.225283	5.038093	33.76698	2.826338
#2	8.820008	7.911397	3.229261	5.035852	33.89853	2.822208
#3	8.821679	7.885788	3.222243	5.031634	33.84827	2.820034
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Calibration Report 11/05/99 11:12:48 AM page 1

Method: TAL Standard Name: STD3D Operator: pdc
Run Time: 11/05/99 11:09:28
Comment:
Correction Factor: 1

Elem	Al3082	Ca3179	Fe2714	Mg3832	K_7664	Na3302
Avge	40.68998	35.92751	7.535791	25.72161	73.51152	7.465255
SDev	.14301	.19239	.033662	.09298	.28324	.019680
%RSD	.3514538	.5355077	.4466992	.3614948	.3852967	.2636249
#1	40.85365	36.13566	7.572776	25.82829	73.79964	7.487950
#2	40.62714	35.89068	7.527653	25.67883	73.50148	7.452898
#3	40.58915	35.75620	7.506944	25.65772	73.23344	7.454917
Factor	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Standardization Rpt. 11/05/99 11:22:46 AM page 1

Method: TAL Standard: STD1-BLANK
Run Time: 11/05/99 11:16:58

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.00051	-.00030	.00031	.00578	.00107	-.00072	-.00012
SDev	.00041	.00119	.00002	.00004	.00024	.00007	.00006
%RSD	80.798	393.52	6.8570	.64342	22.575	9.0588	45.938
#1	.00016	.00000	.00029	.00577	.00087	-.00070	-.00007
#2	.00096	.00071	.00033	.00582	.00134	-.00080	-.00018
#3	.00040	-.00161	.00033	.00575	.00101	-.00067	-.00011

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.00136	.00007	-.00085	-.00012	-.00134	.00014	.00048
SDev	.00002	.00000	.00046	.00031	.00025	.00000	.00003
%RSD	1.5055	.20429	54.384	255.52	18.730	.20429	5.9651
#1	.00133	.00007	-.00032	-.00047	-.00159	.00014	.00045
#2	.00137	.00007	-.00119	.00011	-.00134	.00014	.00047
#3	.00136	.00007	-.00103	.00000	-.00109	.00014	.00051

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.01841	.00337	-.00068	.00010	.00092	-.00064	-.00231
SDev	.00013	.00022	.00071	.00006	.00193	.00080	.00113
%RSD	.71748	6.6102	104.36	57.305	209.88	124.80	48.840
#1	.01831	.00332	-.00150	.00011	-.00079	-.00025	-.00162
#2	.01856	.00318	-.00033	.00014	.00054	-.00011	-.00362
#3	.01835	.00362	-.00022	.00004	.00300	-.00156	-.00170

Elem	1960/2
Avge	.00088
SDev	.00038
%RSD	42.979
#1	.00126
#2	.00087
#3	.00051

Standardization Rpt. 11/05/99 11:28:39 AM page 1

Method: TAL Standard: STD2A
Run Time: 11/05/99 11:22:55

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.04365	.02811	.04831	.16049	.35967	.05900	.02185
SDev	.00105	.00136	.00097	.00331	.00885	.00109	.00043
%RSD	2.4158	4.8369	1.9973	2.0656	2.4594	1.8435	1.9648
#1	.04266	.02661	.04720	.15668	.34965	.05775	.02136
#2	.04355	.02925	.04885	.16277	.36639	.05977	.02216
#3	.04476	.02848	.04888	.16201	.36297	.05947	.02204

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.02004	.05108	.08974	.00517	.01748	.02874	.01508
SDev	.00037	.00104	.00179	.00006	.00070	.00063	.00022
%RSD	1.8318	2.0445	1.9993	1.2237	3.9948	2.1968	1.4760
#1	.01962	.04989	.08769	.00510	.01717	.02801	.01483
#2	.02023	.05182	.09102	.00523	.01698	.02918	.01526
#3	.02028	.05153	.09050	.00519	.01828	.02902	.01516

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.06493	.12281	.03040	.08098	.10422	.09489	.01395
SDev	.00133	.00172	.00139	.00179	.00260	.00018	.00154
%RSD	2.0433	1.4041	4.5768	2.2068	2.4972	.18721	11.051
#1	.06342	.12110	.02907	.07894	.10168	.09506	.01235
#2	.06590	.12455	.03185	.08227	.10688	.09490	.01408
#3	.06547	.12279	.03028	.08173	.10411	.09470	.01543

Elem	1960/2
Avge	.01165
SDev	.00026
%RSD	2.2297
#1	.01144
#2	.01194
#3	.01157

Method: TAL Standard: STD2B
Run Time: 11/05/99 11:28:48

Elem	Sb2068	As1890	Be4934	Be3130	Cd2265	Cr2677	Co2286
Avge	.43575	.28473	.49134	1.5722	3.6603	.60198	.22468
SDev	.00193	.00109	.00066	.0004	.0060	.00085	.00030
%RSD	.44317	.38319	.13442	.02491	.16340	.14111	.13123
#1	.43766	.28593	.49086	1.5723	3.6534	.60150	.22434
#2	.43380	.28445	.49209	1.5717	3.6636	.60148	.22489
#3	.43581	.28380	.49106	1.5725	3.6638	.60296	.22480

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	.19197	.52021	.92192	.05432	.19522	.29234	.14829
SDev	.00032	.00005	.00165	.00011	.00128	.00013	.00042
%RSD	.16562	.00954	.17929	.20093	.65574	.04260	.28088
#1	.19205	.52018	.92013	.05420	.19377	.29226	.14781
#2	.19223	.52026	.92339	.05435	.19618	.29248	.14847
#3	.19161	.52018	.92223	.05442	.19572	.29227	.14858

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	.50030	1.2330	.31708	.82214	1.0340	.98666	.15955
SDev	.00089	.0042	.00816	.00044	.0026	.00113	.00119
%RSD	.17827	.33623	.99747	.05308	.25429	.11490	.74846
#1	.50059	1.2348	.31391	.82215	1.0337	.98562	.15817
#2	.50102	1.2310	.31710	.82257	1.0367	.98650	.16029
#3	.49930	1.2393	.32023	.82169	1.0315	.98787	.16018

Elem	1960/2
Avge	.10761
SDev	.00052
%RSD	.48104
#1	.10815
#2	.10712
#3	.10755

Standardization Rpt. 11/05/99 11:40:27 AM page 1

Method: TAL Standard: STD2C
Run Time: 11/05/99 11:34:42

Elem	Sb2068	As1890	Ba4934	Be3130	Cd2265	Cr2677	Co2286
Avge	4.3683	2.8509	4.8066	15.158	36.273	6.1280	2.2820
SDev	.0131	.0108	.0244	.031	.111	.0158	.0063
%RSD	.29968	.37825	.50804	.20621	.30498	.25727	.27600
#1	4.3756	2.8605	4.8302	15.167	36.343	6.1360	2.2857
#2	4.3762	2.8531	4.8134	15.184	36.330	6.1382	2.2856
#3	4.3532	2.8393	4.7821	15.123	36.145	6.1099	2.2747

Elem	Cu3247	Mn2576	Ni2316	Ag3280	Tl1908	V_2924	Zn2062
Avge	1.8876	5.1329	9.3783	.55266	1.9973	2.9793	1.4968
SDev	.0071	.0123	.0276	.00078	.0061	.0078	.0042
%RSD	.37517	.23968	.29424	.14188	.30628	.26270	.27805
#1	1.8939	5.1381	9.3953	.55292	1.9994	2.9829	1.4982
#2	1.8888	5.1418	9.3931	.55329	2.0021	2.9846	1.5001
#3	1.8799	5.1189	9.3464	.55178	1.9904	2.9703	1.4921

Elem	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2	1960/1
Avge	4.9765	12.451	3.2360	8.2380	10.401	10.005	1.6384
SDev	.0109	.039	.0128	.0253	.026	.024	.0040
%RSD	.21972	.31217	.39543	.30715	.25017	.23688	.24285
#1	4.9801	12.493	3.2489	8.2555	10.415	10.026	1.6427
#2	4.9851	12.445	3.2357	8.2495	10.371	10.011	1.6377
#3	4.9642	12.416	3.2233	8.2090	10.416	9.9793	1.6349

Elem	1960/2
Avge	1.0753
SDev	.0031
%RSD	.28564
#1	1.0768
#2	1.0773
#3	1.0718

Analysis Report 11/05/99 11:46:21 AM page 1

Method: TAL Sample Name: icv 2c Operator: tjn
Run Time: 11/05/99 11:40.36
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03867	10.039	9.9170	9.8696	10.069	10.060	.02526
SDev	.00281	.015	.0472	.0204	.037	.028	.00215
%RSD	7.2676	.15315	.47563	.20661	.37036	.27832	8.4919
#1	.04134	10.030	9.9351	9.8914	10.051	10.046	.02426
#2	.03893	10.031	9.8634	9.8510	10.044	10.042	.02772
#3	.03574	10.057	9.9523	9.8664	10.112	10.092	.02380

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.100	10.105	10.021	9.6135	-.04797	9.9326	10.031
SDev	.038	.030	.016	.0711	.00507	.0349	.024
%RSD	.37935	.29427	.15943	.73990	10.570	.35171	.23963
#1	10.083	10.092	10.030	9.5518	-.04217	9.9167	10.027
#2	10.074	10.083	10.003	9.5973	-.05158	9.9084	10.010
#3	10.144	10.139	10.031	9.6913	-.05015	9.9726	10.057

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05898	1.0207	10.070	9.9834	.98478	10.269	10.206
SDev	.00399	.0025	.029	.0374	.08016	.041	.032
%RSD	6.7707	.24198	.28899	.37487	8.1403	.39535	.31126
#1	.05470	1.0200	10.073	9.9757	.89306	10.232	10.190
#2	.05964	1.0186	10.039	9.9504	1.0198	10.263	10.185
#3	.06261	1.0234	10.097	10.024	1.0415	10.312	10.242

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.9595	10.274	10.055	10.090	10.066	10.013	10.098
SDev	.0404	.021	.015	.020	.025	.024	.033
%RSD	.40607	.20320	.14702	.19331	.24974	.24466	.32260
#1	9.9376	10.266	10.054	10.099	10.061	10.006	10.107
#2	9.9347	10.258	10.040	10.067	10.044	9.9931	10.062
#3	10.006	10.297	10.070	10.103	10.094	10.040	10.125

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	10.034	9.9579
SDev	.014	.0522
%RSD	.13820	.52395
#1	10.020	9.9535
#2	10.035	9.9081
#3	10.047	10.012

Analysis Report 11/05/99 11:52:18 AM page 1

Method: TAL Sample Name: icv 3a Operator: tjn
Run Time: 11/05/99 11:46:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	514.71	.00090	.00123	-.00260	.00004	.00148	507.19
SDev	.80	.00166	.00351	.00001	.00011	.00004	1.48
%RSD	.15636	183.45	286.14	.52886	269.53	2.8982	.29250
#1	515.20	.00122	.00194	-.00260	-.00006	.00144	507.30
#2	515.16	.00239	-.00258	-.00261	.00002	.00152	508.61
#3	513.79	-.00089	.00432	-.00258	.00016	.00150	505.65

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00089	.00480	.00234	254.74	513.10	.00256	.00546
SDev	.00059	.00028	.00026	.72	.65	.00024	.00025
%RSD	66.735	5.8212	11.318	.28133	.12670	9.4053	4.5261
#1	.00061	.00456	.00237	254.72	513.63	.00243	.00549
#2	.00048	.00473	.00259	253.47	513.30	.00241	.00520
#3	.00157	.00511	.00206	254.03	512.38	.00284	.00569

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	259.52	-.00083	.00174	.00681	256.99	.10302	.00101
SDev	.38	.00032	.00256	.01173	.28	.18069	.00026
%RSD	.14769	38.163	146.64	172.23	.10867	175.39	26.222
#1	259.11	-.00105	-.00101	.00904	257.28	-.00638	.00131
#2	259.87	-.00047	.00405	.01726	256.97	.00387	.00091
#3	259.60	-.00097	.00219	-.00587	256.72	.31159	.00081

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00815	.00304	.00216	.01136	-.00320	-.00832	.00659
SDev	.00041	.00181	.00395	.00286	.00006	.00182	.00474
%RSD	5.0469	59.721	182.79	25.213	1.7180	21.931	71.868
#1	.00820	.00484	.00633	.00996	-.00326	-.00626	.00144
#2	.00771	.00306	-.00153	.01466	-.00320	-.00974	.01075
#3	.00853	.00121	.00169	.00947	-.00315	-.00895	.00757

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00520	.00719
SDev	.01046	.01539
%RSD	201.07	213.97
#1	-.00374	.01500
#2	.01670	.01712
#3	.00264	-.01054

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Method: TAL Sample Name: icb Operator: tjn
Run Time: 11/05/99 11:52:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00292	.00365	-.00071	.00009	.00044	.00041	.03908
SDev	.01533	.00201	.00441	.00051	.00016	.00021	.01438
%RSD	525.38	55.142	618.62	539.66	36.728	51.293	36.803
#1	.02025	.00588	.00237	.00068	.00063	.00065	.05541
#2	-.00263	.00314	-.00576	-.00020	.00038	.00034	.03348
#3	-.00887	.00195	.00125	-.00020	.00032	.00025	.02833

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00160	.00056	-.00079	.03956	.00632	.00039	.00077
SDev	.00053	.00032	.00095	.00884	.01483	.00019	.00034
%RSD	33.394	56.963	119.80	22.332	234.75	49.951	44.381
#1	.00221	.00087	-.00189	.04974	.02313	.00059	.00038
#2	.00121	.00056	-.00028	.03391	.00071	.00035	.00102
#3	.00138	.00024	-.00021	.03504	-.00489	.00021	.00092

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05194	.00029	.00133	.00101	.10334	-.00053	.00055
SDev	.00902	.00011	.00158	.00184	.05566	.00091	.00007
%RSD	17.367	39.287	118.57	181.97	53.860	172.33	13.253
#1	.06045	.00022	.00191	.00314	.14658	-.00041	.00064
#2	.05289	.00022	.00254	-.00005	.12289	.00032	.00051
#3	.04248	.00042	-.00046	-.00005	.04054	-.00149	.00051

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00104	.00422	.00110	.00014	.00047	.00184	.00092
SDev	.00007	.00019	.00144	.00117	.00018	.00054	.00212
%RSD	6.7999	4.5686	131.63	821.14	37.166	29.182	230.47
#1	.00112	.00430	.00268	-.00042	.00068	.00182	.00180
#2	.00100	.00435	.00076	-.00064	.00037	.00238	.00245
#3	.00099	.00400	-.00015	.00149	.00037	.00131	-.00150

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00095	.00067
SDev	.00215	.00384
%RSD	225.30	572.61
#1	-.00153	.00510
#2	.00217	-.00153
#3	.00221	-.00156

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Method: TAL Sample Name: qcs Operator:
Run Time: 11/05/99 11:58:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.53964	.02377	.01553	.02173	.02157	.02191	.22194
SDev	.00329	.00107	.00559	.00009	.00005	.00004	.00195
%RSD	.60999	4.5002	36.010	.39342	.22918	.19589	.87782
#1	.54188	.02322	.02031	.02179	.02153	.02188	.22047
#2	.54118	.02500	.00938	.02176	.02163	.02196	.22415
#3	.53586	.02309	.01690	.02163	.02156	.02190	.22120

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02220	.02079	.02119	.53823	.19974	.02088	.02187
SDev	.00015	.00038	.00015	.00584	.00182	.00006	.00072
%RSD	.68274	1.8387	.69555	1.0848	.91207	.30067	3.2719
#1	.02225	.02043	.02111	.53199	.19780	.02089	.02139
#2	.02233	.02119	.02136	.54356	.20140	.02094	.02270
#3	.02203	.02074	.02110	.53914	.20003	.02081	.02153

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0190	.02235	.02109	.01919	.99567	.02022	.02108
SDev	.0035	.00013	.00014	.00359	.03483	.00047	.00021
%RSD	.34220	.56930	.67008	18.680	3.4980	2.3330	1.0174
#1	1.0181	.02220	.02123	.02129	.97018	.02058	.02091
#2	1.0229	.02245	.02111	.01505	1.0354	.01969	.02132
#3	1.0161	.02239	.02094	.02123	.98149	.02039	.02102

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02440	.03832	.02126	.02341	.02122	.02303	.01996
SDev	.00004	.00040	.00103	.00182	.00007	.00095	.00043
%RSD	.15027	1.0579	4.8466	7.7641	.32048	4.1250	2.1673
#1	.02438	.03803	.02245	.02473	.02117	.02281	.02027
#2	.02444	.03878	.02063	.02416	.02130	.02408	.01947
#3	.02437	.03814	.02071	.02134	.02120	.02221	.02015

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.01581	.02050
SDev	.00452	.00401
%RSD	28.575	19.578
#1	.02080	.02116
#2	.01199	.01620
#3	.01464	.02415

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Method: TAL Sample Name: qcs 600 Operator:
Run Time: 11/05/99 12:04:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99373	.96433	.95584	.96636	1.0098	.97563	9.4622
SDev	.00462	.00709	.00052	.00348	.0030	.00148	.0174
%RSD	.46450	.73542	.05486	.36010	.29320	.15167	.18413
#1	.99890	.97111	.95536	.97037	1.0132	.97734	9.4795
#2	.99225	.96492	.95575	.96421	1.0086	.97480	9.4624
#3	.99004	.95696	.95640	.96449	1.0076	.97476	9.4446

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97560	.95169	.99564	.98217	9.4871	.95722	.97834
SDev	.00197	.00277	.00498	.00378	.0422	.00274	.00105
%RSD	.20222	.29101	.49970	.38478	.44499	.28581	.10786
#1	.97774	.95478	1.0013	.98502	9.5352	.96035	.97954
#2	.97523	.95084	.99356	.97788	9.4701	.95596	.97753
#3	.97384	.94944	.99204	.98362	9.4560	.95533	.97796

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.4662	1.0858	.98455	.94413	9.8404	.96076	.97151
SDev	.0087	.0033	.00170	.00198	.0300	.00198	.00258
%RSD	.09225	.30636	.17229	.20923	.30505	.20613	.26586
#1	9.4737	1.0897	.98593	.94528	9.8751	.96145	.97448
#2	9.4683	1.0838	.98507	.94185	9.8231	.95853	.97025
#3	9.4566	1.0841	.98266	.94526	9.8231	.96231	.96980

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98297	1.0182	.99472	1.0894	.99223	.97492	.98920
SDev	.00121	.0033	.00082	.0016	.00282	.00260	.00159
%RSD	.12307	.32077	.08230	.14380	.28400	.26652	.16104
#1	.98200	1.0220	.99441	1.0903	.99548	.97784	.98981
#2	.98259	1.0165	.99411	1.0903	.99059	.97407	.99040
#3	.98432	1.0162	.99565	1.0876	.99061	.97286	.98739

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.94294	.94435
SDev	.00687	.00081
%RSD	.72867	.08540
#1	.94546	.94482
#2	.93516	.94481
#3	.94819	.94342

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Method: TAL Sample Name: icsa Operator:
Run Time: 11/05/99 12:10:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	491.03	-.00514	.00490	-.00290	-.00060	-.00000	482.22
SDev	.18	.00299	.00474	.00005	.00001	.00058	1.33
%RSD	.03628	58.101	96.704	1.6086	1.8144	29034.	.27666
#1	490.92	-.00768	-.00056	-.00291	-.00059	.00022	480.75
#2	490.93	-.00589	.00733	-.00284	-.00061	.00043	482.53
#3	491.23	-.00185	.00793	-.00293	-.00059	-.00066	483.37

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00067	.00398	.00202	244.11	492.22	.00188	.00485
SDev	.00013	.00022	.00007	.53	.19	.00011	.00030
%RSD	19.112	5.4863	3.2842	.21668	.03938	6.0347	6.1141
#1	.00081	.00382	.00198	243.56	492.31	.00201	.00510
#2	.00065	.00390	.00210	244.13	492.00	.00184	.00452
#3	.00055	.00423	.00199	244.62	492.35	.00179	.00494

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	250.88	-.00043	.00082	-.00122	248.52	.00298	-.00025
SDev	.27	.00021	.00064	.00972	.22	.00427	.00009
%RSD	.10941	49.153	78.036	795.40	.08897	143.25	34.742
#1	250.70	-.00064	.00040	L-.01206	248.70	-.00101	-.00035
#2	250.75	-.00043	.00155	.00675	248.27	.00749	-.00018
#3	251.20	-.00022	.00050	.00164	248.59	.00246	-.00024

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01065	-.00532	.00002	.00643	-.00384	-.00825	.00517
SDev	.00127	.00063	.00112	.00905	.00006	.00291	.00119
%RSD	11.942	11.913	5461.7	140.71	1.4420	35.222	23.069
#1	.01023	-.00469	.00098	.01667	-.00381	-.00706	.00396
#2	.00964	-.00596	-.00122	-.00050	-.00381	-.00613	.00521
#3	.01208	-.00530	.00030	.00313	-.00390	-.01156	.00634

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00937	.00244
SDev	.00398	.01326
%RSD	42.538	543.40
#1	-.01334	-.01182
#2	-.00938	.01440
#3	-.00537	.00473

Analysis Report 11/05/99 12:22:03 PM page 1

Method: TAL Sample Name: icsab Operator:
Run Time: 11/05/99 12:16:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	487.07	.09771	.09524	.09687	.09612	.08946	487.72
SDev	.64	.00456	.00734	.00013	.00010	.00027	1.16
%RSD	.13122	4.6614	7.7023	.13703	.10831	.29991	.23790
#1	487.52	.09756	.08836	.09696	.09608	.08958	486.49
#2	487.35	.09323	.10296	.09694	.09624	.08915	488.79
#3	486.34	.10234	.09440	.09672	.09605	.08965	487.88

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09212	.09217	.10621	245.49	485.39	.09562	.09285
SDev	.00096	.00032	.00027	.52	.60	.00013	.00061
%RSD	1.0392	.35173	.25308	.21065	.12378	.13281	.66076
#1	.09147	.09197	.10636	245.07	486.02	.09562	.09266
#2	.09322	.09254	.10636	246.07	485.33	.09574	.09354
#3	.09168	.09199	.10590	245.33	484.83	.09549	.09236

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	245.24	.01015	.09109	.09920	245.64	.09006	.09551
SDev	.76	.00019	.00202	.00751	.29	.00476	.00029
%RSD	.30793	1.8998	2.2138	7.5728	.11995	5.2901	.30691
#1	245.86	.01023	.09011	.10338	245.86	.09015	.09518
#2	245.46	.01029	.08976	.09052	245.77	.08525	.09574
#3	244.40	.00993	.09341	.10369	245.31	.09478	.09561

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09693	.09439	.09419	.10197	.09340	.08451	.09421
SDev	.00093	.00016	.00197	.00147	.00019	.00108	.00279
%RSD	.96157	.17311	2.0920	1.4390	.20833	1.2755	2.9582
#1	.09586	.09445	.09622	.10325	.09333	.08327	.09335
#2	.09742	.09421	.09229	.10230	.09361	.08502	.09195
#3	.09752	.09452	.09406	.10037	.09324	.08524	.09732

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.08785	.10447
SDev	.00622	.00930
%RSD	7.0787	8.9002
#1	.09472	.10730
#2	.08260	.09408
#3	.08622	.11202

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/05/99 12:22:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.450	5.0617	4.9684	5.2291	5.1029	4.9564	49.795
SDev	.091	.0104	.0208	.0126	.0113	.0180	.142
%RSD	.18421	.20504	.41890	.24097	.22072	.36315	.28605
#1	49.551	5.0736	4.9486	5.2437	5.1157	4.9767	49.952
#2	49.424	5.0553	4.9665	5.2225	5.0946	4.9424	49.673
#3	49.375	5.0560	4.9901	5.2212	5.0983	4.9501	49.761

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0176	5.0673	5.0740	47.565	48.226	5.0330	5.0912
SDev	.0113	.0132	.0056	.135	.089	.0117	.0182
%RSD	.22510	.26119	.11063	.28357	.18503	.23201	.35786
#1	5.0303	5.0817	5.0800	47.709	48.328	5.0463	5.1101
#2	5.0088	5.0557	5.0733	47.442	48.184	5.0243	5.0737
#3	5.0137	5.0645	5.0688	47.544	48.165	5.0283	5.0899

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.283	.51938	5.0680	4.9009	49.160	5.0107	5.0514
SDev	.026	.00159	.0211	.0265	.047	.0058	.0093
%RSD	.05161	.30647	.41681	.54144	.09549	.11621	.18364
#1	51.300	.52096	5.0915	4.9254	49.212	5.0099	5.0619
#2	51.296	.51778	5.0506	4.8727	49.145	5.0169	5.0442
#3	51.252	.51940	5.0620	4.9045	49.122	5.0053	5.0481

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9388	5.1381	5.0123	5.2532	5.1903	5.0099	5.0969
SDev	.0175	.0019	.0150	.0177	.0099	.0134	.0250
%RSD	.35431	.03600	.29875	.33678	.19131	.26664	.49088
#1	4.9579	5.1360	5.0295	5.2733	5.2016	5.0245	5.1248
#2	4.9236	5.1396	5.0021	5.2400	5.1828	4.9982	5.0766
#3	4.9348	5.1387	5.0054	5.2463	5.1865	5.0071	5.0892

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	4.9513	4.8853
SDev	.0255	.0271
%RSD	.51727	.55391
#1	4.9542	4.9106
#2	4.9038	4.8568
#3	4.9358	4.8885

Analysis Report 11/05/99 12:33:56 PM page 1

Method: TAL Sample Name: ccb Operator:
Run Time: 11/05/99 12:28:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01289	.00228	-.00049	-.00013	.00027	.00021	.02260
SDev	.00266	.00041	.00345	.00007	.00001	.00005	.00140
%RSD	20.601	17.994	710.06	56.796	2.9042	24.226	6.1910
#1	-.01420	.00188	-.00129	-.00020	.00027	.00017	.02371
#2	-.00983	.00270	-.00347	-.00006	.00028	.00027	.02307
#3	-.01463	.00226	.00330	-.00013	.00026	.00020	.02103

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00109	.00042	-.00090	.03232	-.01551	.00014	.00027
SDev	.00015	.00005	.00067	.00741	.00162	.00006	.00020
%RSD	14.189	10.661	74.202	22.932	10.456	41.505	74.901
#1	.00103	.00040	-.00036	.02574	-.01733	.00021	.00037
#2	.00127	.00048	-.00165	.04035	-.01423	.00011	.00040
#3	.00097	.00040	-.00070	.03088	-.01497	.00011	.00004

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03898	.00025	.00060	.00075	-.05166	.00352	.00010
SDev	.00339	.00070	.00038	.00341	.02525	.00156	.00007
%RSD	8.6923	283.77	62.890	452.78	48.885	44.458	72.827
#1	.04278	.00009	.00017	.00179	-.05226	.00383	.00002
#2	.03785	-.00036	.00086	-.00306	-.02611	.00182	.00014
#3	.03629	.00101	.00077	.00353	-.07660	.00491	.00014

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00109	.00495	.00131	.00275	.00025	.00090	.00029
SDev	.00012	.00156	.00052	.00187	.00007	.00073	.00034
%RSD	10.717	31.583	39.455	67.921	26.172	81.276	117.75
#1	.00107	.00675	.00190	.00438	.00019	.00027	-.00004
#2	.00121	.00400	.00099	.00316	.00033	.00171	.00028
#3	.00098	.00408	.00103	.00071	.00024	.00072	.00064

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00408	.00280
SDev	.00929	.00081
%RSD	227.65	28.849
#1	-.00267	.00364
#2	-.01400	.00204
#3	.00442	.00271

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Method: TAL Sample Name: pbswwg Operator:
Run Time: 11/05/99 12:34:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01317	.00088	-.00123	.00003	.00020	-.00002	.01483
SDev	.00135	.00052	.00284	.00000	.00003	.00006	.00109
%RSD	10.264	59.011	230.51	.91160	13.617	367.09	7.3721
#1	-.01185	.00033	-.00171	.00003	.00023	.00004	.01468
#2	-.01455	.00095	.00182	.00003	.00018	-.00001	.01599
#3	-.01310	.00136	-.00380	.00003	.00019	-.00008	.01382

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00067	.00010	-.00105	.02207	-.01995	.00005	.00026
SDev	.00013	.00018	.00011	.01154	.00565	.00004	.00025
%RSD	19.233	180.74	10.666	52.279	28.304	75.413	95.357
#1	.00076	-.00000	-.00098	.01888	-.02646	.00008	-.00002
#2	.00052	.00032	-.00118	.01247	-.01710	.00008	.00047
#3	.00073	-.00000	-.00098	.03488	-.01631	.00001	.00033

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm u	ppm	ppm	ppm
Avge	.01730	.00011	-.00054	.00220	-.15338	.00198	-.00002
SDev	.00639	.00044	.00046	.00249	.01872	.00021	.00019
%RSD	36.923	390.40	85.463	113.00	12.208	10.781	1114.7
#1	.02147	.00022	-.00106	.00087	-.17427	.00174	-.00022
#2	.00994	.00049	-.00019	H.00507	-.13810	.00211	.00014
#3	.02048	-.00037	-.00036	.00066	-.14778	.00211	.00003

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00153	.00207	.00012	.00003	.00005	.00040	-.00117
SDev	.00044	.00021	.00171	.00153	.00013	.00097	.00026
%RSD	28.667	10.365	1377.8	5096.5	233.24	242.53	22.162
#1	.00104	.00203	.00120	.00126	-.00002	-.00061	-.00145
#2	.00165	.00231	.00102	-.00169	.00020	.00134	-.00112
#3	.00190	.00189	-.00185	.00052	-.00002	.00047	-.00094

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00146	.00365
SDev	.00615	.00102
%RSD	422.14	27.977
#1	-.00322	.00253
#2	.00539	.00453
#3	-.00654	.00388

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Method: TAL Sample Name: 94127018;5x Operator:
Run Time: 11/05/99 12:40:05
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.5932	.00206	.00272	.02323	.00054	.00081	141.18
SDev	.0052	.00127	.00798	.00003	.00001	.00019	.28
%RSD	.09302	61.766	293.35	.15193	1.8108	23.378	.19648
#1	5.5929	.00259	-.00469	.02327	.00055	.00090	141.19
#2	5.5985	.00061	.01117	.02322	.00053	.00059	140.91
#3	5.5881	.00298	.00169	.02320	.00054	.00093	141.46

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01834	.00522	.01644	16.904	73.080	.49127	.01401
SDev	.00019	.00021	.00029	.028	.055	.00069	.00033
%RSD	1.0509	4.0582	1.7438	.16717	.07537	.14099	2.3249
#1	.01847	.00545	.01617	16.898	73.028	.49137	.01388
#2	.01812	.00505	.01639	16.878	73.138	.49054	.01377
#3	.01844	.00514	.01674	16.934	73.076	.49191	.01438

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.41066	.00000	.04564	.00152	.59723	.00026	.01118
SDev	.00192	.00073	.00048	.00174	.01865	.00067	.00016
%RSD	.46694	125790.	1.0586	114.64	3.1227	256.99	1.3926
#1	.41283	.00063	.04615	.00132	.60206	-.00048	.01125
#2	.40994	-.00079	.04561	.00336	.57664	.00083	.01100
#3	.40921	.00016	.04518	-.00011	.61298	.00044	.01129

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06677	.00308	-.00002	.00413	.02037	.04525	.04568
SDev	.00023	.00017	.00040	.00332	.00006	.00013	.00073
%RSD	.34919	5.6544	1932.5	80.256	.30740	.27628	1.5978
#1	.06666	.00304	.00003	.00233	.02042	.04531	.04640
#2	.06660	.00293	.00036	.00210	.02030	.04510	.04569
#3	.06703	.00327	-.00045	.00796	.02040	.04533	.04494

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00269	.00324
SDev	.00297	.00137
%RSD	110.73	42.383
#1	-.00168	.00243
#2	-.00034	.00482
#3	-.00603	.00246

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Method: TAL Sample Name: 94285019;10x Operator:
Run Time: 11/05/99 12:46:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.729	.01647	6.6515	.09020	.00087	.00012	2.0769
SDev	.009	.00051	.0210	.00006	.00002	.00012	.0023
%RSD	.06955	3.1120	.31581	.06652	2.5577	103.73	.11284
#1	12.739	.01588	6.6307	.09026	.00089	-.00001	2.0794
#2	12.723	.01674	6.6512	.09014	.00085	.00012	2.0765
#3	12.725	.01679	6.6727	.09020	.00087	.00024	2.0748

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01894	.03779	.05975	17.665	6.4029	1.8759	.02775
SDev	.00047	.00040	.00021	.035	.0125	.0018	.00039
%RSD	2.5105	1.0650	.34934	.19788	.19592	.09616	1.3899
#1	.01901	.03823	.05987	17.703	6.3888	1.8779	.02783
#2	.01843	.03745	.05951	17.659	6.4069	1.8744	.02809
#3	.01937	.03768	.05988	17.634	6.4130	1.8753	.02733

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.7111	-.00040	.00861	.00356	.03562	.00575	.02340
SDev	.0196	.00015	.00111	.00237	.03399	.00070	.00020
%RSD	.72250	38.337	12.864	66.707	95.443	12.140	.87239
#1	2.7337	-.00031	.00972	.00610	.06995	.00625	.02317
#2	2.6995	-.00057	.00750	.00140	.00197	.00606	.02353
#3	2.7001	-.00031	.00861	.00317	.03492	.00495	.02351

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.22134	.01463	-.00110	.00319	.46123	.01007	.00772
SDev	.00108	.00041	.00038	.00253	.00021	.00144	.00109
%RSD	.48944	2.8184	34.577	79.252	.04478	14.259	14.148
#1	.22082	.01464	-.00146	.00064	.46129	.01172	.00856
#2	.22258	.01504	-.00114	.00323	.46139	.00922	.00648
#3	.22061	.01421	-.00070	.00570	.46100	.00925	.00812

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00240	.00615
SDev	.00237	.00473
%RSD	98.751	76.930
#1	-.00503	.01127
#2	-.00043	.00194
#3	-.00174	.00525

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Method: TAL Sample Name: 94285021 Operator:
Run Time: 11/05/99 12:51:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.009	-.00046	.02776	.17617	.00206	.00429	2.4507
SDev	.032	.00112	.00704	.00010	.00005	.00021	.0041
%RSD	.06092	243.28	25.368	.05929	2.4572	4.8388	.16821
#1	52.025	-.00134	.02742	.17621	.00211	.00443	2.4476
#2	52.031	-.00084	.03496	.17625	.00208	.00439	2.4491
#3	51.973	.00080	.02089	.17605	.00201	.00405	2.4554

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07829	.04618	.12138	109.90	14.644	1.1901	.08941
SDev	.00022	.00021	.00110	.12	.012	.0012	.00021
%RSD	.28411	.44878	.90834	.11217	.08209	.10352	.23513
#1	.07854	.04642	.12246	109.84	14.646	1.1889	.08965
#2	.07819	.04606	.12144	109.82	14.655	1.1899	.08927
#3	.07814	.04606	.12025	110.04	14.632	1.1914	.08930

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.5168	-.00052	.04731	-.00114	1.2804	.00530	.14362
SDev	.0113	.00015	.00101	.01066	.0286	.00112	.00026
%RSD	.24931	28.767	2.1376	934.79	2.2309	21.143	.17950
#1	4.5298	-.00035	.04807	L-.01069	1.2952	.00649	.14392
#2	4.5094	-.00061	.04616	-.00309	1.2475	.00513	.14344
#3	4.5112	-.00061	.04771	.01036	1.2986	.00427	.14352

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.0750	.02191	.00027	.01847	1.4646	.04788	.04687
SDev	.0072	.00073	.00173	.00252	.0002	.00226	.00059
%RSD	.23355	3.3489	645.70	13.640	.01643	4.7288	1.2646
#1	3.0688	.02232	-.00118	.02129	1.4648	.04879	.04755
#2	3.0732	.02106	-.00021	.01643	1.4643	.04530	.04644
#3	3.0829	.02235	.00219	.01770	1.4646	.04955	.04663

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00750	.00167
SDev	.00631	.01498
%RSD	84.126	897.87
#1	-.00561	-.01359
#2	-.01454	.00226
#3	-.00235	.01634

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Method: TAL Sample Name: 94285032;5x Operator:
Run Time: 11/05/99 12:57:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.054	.02837	3.3508	.12429	.00109	.00791	11.114
SDev	.013	.00028	.0116	.00032	.00001	.00013	.014
%RSD	.07829	.99965	.34609	.25321	.95640	1.5941	.12877
#1	17.043	.02851	3.3630	.12393	.00109	.00801	11.127
#2	17.050	.02804	3.3400	.12443	.00111	.00776	11.116
#3	17.069	.02855	3.3493	.12451	.00109	.00795	11.099

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03222	.03404	.36907	35.206	8.6856	.69003	.14470
SDev	.00058	.00019	.00022	.052	.0041	.00074	.00064
%RSD	1.7905	.56699	.06071	.14890	.04696	.10788	.44436
#1	.03268	.03398	.36882	35.234	8.6822	.68995	.14506
#2	.03241	.03425	.36926	35.239	8.6845	.69082	.14508
#3	.03158	.03388	.36913	35.146	8.6901	.68934	.14396

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9128	.00065	.72086	.00201	.42582	.00768	.04159
SDev	.0025	.00004	.00040	.00681	.01166	.00370	.00019
%RSD	.06461	6.0886	.05595	338.44	2.7390	48.151	.46051
#1	3.9125	.00061	.72114	-.00165	.42107	.01043	.04164
#2	3.9104	.00067	.72040	-.00218	.43910	.00348	.04175
#3	3.9154	.00067	.72105	.00986	.41727	.00913	.04138

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.30068	.02366	-.00037	.00790	.50657	.71416	.72405
SDev	.00087	.00029	.00098	.00255	.00037	.00193	.00051
%RSD	.28954	1.2209	264.01	32.246	.07362	.27058	.07016
#1	.30168	.02361	.00041	.00802	.50687	.71452	.72428
#2	.30020	.02340	-.00005	.01039	.50669	.71207	.72440
#3	.30015	.02397	-.00147	.00530	.50616	.71589	.72347

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00165	.00182
SDev	.00596	.00847
%RSD	361.71	465.87
#1	-.00501	-.00035
#2	.00345	-.00536
#3	.00650	.01117

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Method: TAL Sample Name: 94197001;10x Operator:
Run Time: 11/05/99 13:03:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm u	ppm	ppm u	ppm u	ppm
Avge	8.7340	.08072	.02496	.63668	-.00051	.00137	23.980
SDev	.0256	.00013	.00188	.00209	.00001	.00041	.230
%RSD	.29366	.16013	7.5240	.32747	1.4141	29.630	.96017
#1	8.7627	.08084	.02657	.63905	-.00050	.00184	23.714
#2	8.7261	.08073	.02540	.63515	-.00051	.00114	24.112
#3	8.7133	.08058	.02290	.63582	-.00051	.00113	24.114

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm u	ppm	ppm	ppm	ppm	ppm	ppm u
Avge	.08491	.03493	2.1738	139.65	6.9452	1.0993	.28212
SDev	.00056	.00025	.0097	.94	.0173	.0064	.00170
%RSD	.65832	.72152	.44806	.67358	.24945	.58286	.60193
#1	.08427	.03503	2.1849	138.56	6.9652	1.0919	.28016
#2	.08529	.03511	2.1668	140.22	6.9348	1.1023	.28307
#3	.08518	.03464	2.1697	140.16	6.9356	1.1037	.28314

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm u	ppm	ppm	ppm	ppm
Avge	.41033	-.00045	.17822	-.00073	3.2289	.00344	.26701
SDev	.00444	.00011	.00289	.00296	.0369	.00341	.00159
%RSD	1.0799	24.773	1.6233	404.01	1.1438	99.117	.59708
#1	.40614	-.00032	.17488	-.00349	3.1958	.00026	.26517
#2	.41176	-.00047	.17994	.00239	3.2687	.00302	.26780
#3	.41490	-.00054	.17984	-.00111	3.2222	.00705	.26805

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.1981	.02626	.02922	.03192	.10195	.17549	.17942
SDev	.0525	.00102	.00130	.00093	.00021	.00370	.00314
%RSD	1.6425	3.8889	4.4490	2.9234	.20677	2.1112	1.7499
#1	3.1375	.02510	.02773	.03145	.10172	.17215	.17608
#2	3.2263	.02699	.03013	.03299	.10199	.17486	.18231
#3	3.2305	.02671	.02981	.03131	.10214	.17948	.17987

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00034	-.00164
SDev	.00318	.00334
%RSD	940.32	203.10
#1	-.00334	-.00394
#2	.00207	.00218
#3	.00229	-.00317

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Method: TAL Sample Name: 94193001;10x Operator:
Run Time: 11/05/99 13:09:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	43.926	.00115	.00438	.65890	.00331	.00045	16.272
SDev	.415	.00089	.00282	.00664	.00008	.00011	.189
%RSD	.94406	77.723	64.294	1.0074	2.3487	24.573	1.1612
#1	43.809	.00051	.00563	.65656	.00327	.00034	16.188
#2	43.583	.00217	.00116	.65376	.00325	.00056	16.140
#3	44.387	.00076	.00636	.66640	.00339	.00046	16.489

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.14837	.02202	.09668	66.824	3.2549	.21753	.05102
SDev	.00228	.00050	.00079	.763	.0300	.00246	.00078
%RSD	1.5359	2.2827	.81858	1.1418	.92049	1.1295	1.5390
#1	.14829	.02193	.09644	66.541	3.2467	.21640	.05062
#2	.14613	.02157	.09603	66.242	3.2299	.21584	.05052
#3	.15069	.02256	.09756	67.688	3.2881	.22035	.05193

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.8065	.00007	1.5785	.00177	2.0150	.00715	.08398
SDev	.0584	.00014	.0155	.00334	.1082	.00247	.00095
%RSD	.85801	179.58	.98259	188.69	5.3708	34.535	1.1365
#1	6.7625	-.00003	1.5748	.00160	1.9559	.00461	.08361
#2	6.7842	.00023	1.5651	.00520	1.9492	.00731	.08327
#3	6.8728	.00003	1.5955	-.00148	2.1399	.00954	.08507

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1298	.05535	.00652	.01415	2.0547	1.5559	1.5895
SDev	.0145	.00091	.00107	.00244	.0218	.0134	.0168
%RSD	1.2826	1.6484	16.463	17.221	1.0587	.85986	1.0588
#1	1.1227	.05484	.00528	.01155	2.0464	1.5564	1.5838
#2	1.1202	.05481	.00708	.01450	2.0384	1.5423	1.5763
#3	1.1465	.05641	.00720	.01639	2.0794	1.5691	1.6085

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00421	.00019
SDev	.00110	.00508
%RSD	26.134	2720.6
#1	.00295	.00055
#2	.00471	.00507
#3	.00497	-.00507

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Method: TAL Sample Name: 94227001;5x Operator:
Run Time: 11/05/99 13:15:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm u	ppm	ppm	ppm	ppm	ppm
Avge	2.6902	6.2105	.15558	.00354	-.00018	.02751	19.526
SDev	.0005	.0073	.00220	.00001	.00001	.00040	.016
%RSD	.01991	.11827	1.4130	.38696	5.1172	1.4635	.08117
#1	2.6899	6.2031	.15306	.00353	-.00018	.02737	19.523
#2	2.6899	6.2105	.15659	.00354	-.00019	.02720	19.512
#3	2.6909	6.2178	.15710	.00356	-.00018	.02797	19.544

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.5554	.16017	50.744	97.780	8.9558	.68825	59.102
SDev	.0019	.00074	.030	.042	.0062	.00065	.072
%RSD	.07533	.46131	.05992	.04301	.06869	.09485	.12120
#1	2.5572	.16081	50.752	97.756	8.9567	.68798	59.185
#2	2.5533	.15936	50.710	97.756	8.9493	.68777	59.059
#3	2.5556	.16035	50.769	97.829	8.9615	.68899	59.063

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm u	ppm	ppm	ppm
Avge	.23241	.00036	.04826	-.00272	L-35.408	.00547	.01040
SDev	.00136	.00051	.00063	.00080	.045	.00332	.00016
%RSD	.58490	140.80	1.3138	29.262	.12572	60.758	1.5479
#1	.23255	-.00023	.04779	-.00363	L-35.458	.00919	.01040
#2	.23099	.00065	.04801	-.00238	L-35.393	.00280	.01023
#3	.23370	.00066	.04899	-.00215	L-35.373	.00442	.01056

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	168.75	.01185	.05530	.00690	.08725	.05442	.04503
SDev	.15	.00030	.00140	.00162	.00020	.00044	.00113
%RSD	.08635	2.5321	2.5338	23.476	.23518	.81024	2.5067
#1	168.72	.01151	.05370	.00503	.08721	.05492	.04407
#2	168.63	.01202	.05588	.00785	.08748	.05425	.04473
#3	168.91	.01203	.05632	.00782	.08708	.05409	.04627

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00642	-.00126
SDev	.00474	.00318
%RSD	73.844	252.98
#1	-.00280	-.00443
#2	-.01179	.00193
#3	-.00468	-.00127

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Method: TAL Sample Name: 94227001;100x Operator:
Run Time: 11/05/99 13:21:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13346	.31948	.00679	.00002	.00011	.00135	1.0055
SDev	.00089	.00230	.00265	.00000	.00000	.00020	.0024
%RSD	.66914	.72020	38.993	2.6743	3.1915	14.683	.23503
#1	.13375	.31940	.00978	.00002	.00011	.00112	1.0039
#2	.13245	.31722	.00580	.00002	.00011	.00141	1.0082
#3	.13416	.32182	.00478	.00002	.00011	.00150	1.0043

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm u	ppm	ppm	ppm	ppm u
Avge	.13170	.00840	2.7994	4.8498	.45543	.03498	3.2001
SDev	.00047	.00019	.0036	.0049	.00248	.00010	.0065
%RSD	.35915	2.2510	.12919	.10062	.54534	.28216	.20258
#1	.13121	.00819	2.7955	4.8534	.45444	.03487	3.1928
#2	.13176	.00852	2.8000	4.8443	.45826	.03507	3.2027
#3	.13215	.00851	2.8026	4.8518	.45360	.03501	3.2050

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01596	.00035	.00290	.00038	L-2.8509	.00115	.00036
SDev	.00244	.00044	.00112	.00262	.0199	.00184	.00000
%RSD	15.285	127.91	38.562	695.40	.69852	159.29	.55147
#1	.01555	-.00014	.00173	.00235	L-2.8658	.00203	.00036
#2	.01376	.00073	.00395	-.00259	L-2.8283	-.00096	.00036
#3	.01858	.00046	.00301	.00137	L-2.8586	.00240	.00036

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm u	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.531	.00081	.00176	-.00038	.00442	.00457	.00190
SDev	.017	.00028	.00096	.00196	.00006	.00136	.00100
%RSD	.14454	34.451	54.704	516.12	1.4438	29.654	52.543
#1	11.512	.00049	.00171	.00102	.00448	.00315	.00086
#2	11.536	.00093	.00275	.00045	.00435	.00585	.00285
#3	11.545	.00101	.00082	-.00261	.00443	.00472	.00200

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00115	.00076
SDev	.00157	.00342
%RSD	136.70	450.65
#1	-.00129	.00379
#2	-.00264	-.00294
#3	.00049	.00143

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Method: TAL Sample Name: 94227001;250x Operator:
Run Time: 11/05/99 13:27:44
Comment: NOT USED
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04488	.12974	.00043	.00002	.00011	.00050	.41054
SDev	.00151	.00039	.00435	.00000	.00002	.00014	.00202
%RSD	3.3520	.30095	1022.4	1.6387	19.918	29.065	.49133
#1	.04653	.13013	.00162	.00002	.00012	.00063	.41287
#2	.04454	.12975	.00406	.00002	.00009	.00035	.40944
#3	.04358	.12935	-.00440	.00002	.00014	.00051	.40932

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05386	.00336	1.1243	1.9585	.17489	.01406	1.2962
SDev	.00020	.00044	.0014	.0161	.00683	.00009	.0019
%RSD	.37536	13.084	.12815	.82213	3.9022	.61821	.14537
#1	.05403	.00378	1.1229	1.9762	.18209	.01416	1.2981
#2	.05364	.00290	1.1258	1.9547	.17407	.01401	1.2943
#3	.05392	.00338	1.1243	1.9447	.16851	.01401	1.2963

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00639	-.00001	.00181	.00045	L-1.2774	.00095	-.00013
SDev	.00203	.00008	.00026	.00385	.0090	.00392	.00013
%RSD	31.747	867.86	14.254	862.33	.70335	414.89	98.565
#1	.00780	-.00005	.00199	.00278	L-1.2804	-.00034	-.00000
#2	.00407	.00008	.00193	.00256	L-1.2844	.00535	-.00013
#3	.00732	-.00005	.00152	-.00400	L-1.2673	-.00217	-.00026

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.7195	.00042	.00019	-.00117	.00174	.00255	.00129
SDev	.0206	.00027	.00112	.00068	.00011	.00119	.00026
%RSD	.43570	65.100	578.30	57.621	6.3657	46.816	20.453
#1	4.7411	.00071	-.00089	-.00054	.00185	.00369	.00098
#2	4.7002	.00017	.00013	-.00110	.00172	.00263	.00142
#3	4.7174	.00038	.00135	-.00188	.00164	.00132	.00146

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00727	.00393
SDev	.00386	.00385
%RSD	53.123	98.083
#1	-.00473	.00616
#2	-.00537	.00614
#3	-.01172	-.00052

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Method: TAL Sample Name: ccv Operator:
Run Time: 11/05/99 13:33:41
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.596	5.0838	4.9742	5.2565	5.1105	4.9625	49.716
SDev	.040	.0052	.0029	.0188	.0054	.0087	.044
%RSD	.08119	.10273	.05734	.35764	.10516	.17579	.08876
#1	49.616	5.0879	4.9766	5.2763	5.1055	4.9726	49.673
#2	49.622	5.0779	4.9710	5.2542	5.1099	4.9568	49.714
#3	49.549	5.0855	4.9749	5.2389	5.1162	4.9582	49.761

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0246	5.0786	5.1003	47.641	48.433	5.0309	5.0916
SDev	.0027	.0012	.0033	.031	.015	.0017	.0112
%RSD	.05361	.02268	.06548	.06566	.03082	.03432	.21938
#1	5.0276	5.0794	5.1032	47.630	48.421	5.0307	5.1037
#2	5.0224	5.0773	5.1009	47.617	48.450	5.0292	5.0816
#3	5.0238	5.0792	5.0967	47.676	48.429	5.0326	5.0895

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.524	.51969	5.0804	4.9435	49.331	5.0092	5.0642
SDev	.112	.00031	.0034	.0111	.042	.0142	.0029
%RSD	.21699	.05956	.06703	.22485	.08476	.28266	.05820
#1	51.434	.51944	5.0814	4.9339	49.371	5.0245	5.0675
#2	51.489	.51960	5.0766	4.9409	49.334	5.0066	5.0632
#3	51.649	.52004	5.0832	4.9556	49.288	4.9965	5.0618

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9333	5.2128	5.0724	5.2966	5.2056	5.0091	5.1159
SDev	.0035	.0025	.0128	.0211	.0039	.0052	.0042
%RSD	.07061	.04770	.25329	.39869	.07581	.10303	.08202
#1	4.9365	5.2099	5.0816	5.3158	5.2099	5.0147	5.1146
#2	4.9296	5.2144	5.0778	5.2740	5.2047	5.0045	5.1125
#3	4.9339	5.2141	5.0577	5.2999	5.2022	5.0083	5.1206

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	4.9586	4.9355
SDev	.0144	.0149
%RSD	.29023	.30112
#1	4.9431	4.9289
#2	4.9715	4.9252
#3	4.9610	4.9526

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Method: TAL Sample Name: ccb Operator:
Run Time: 11/05/99 13:39:38
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01698	.00208	-.00167	.00004	.00034	.00002	.01386
SDev	.00116	.00057	.00107	.00000	.00002	.00008	.00027
%RSD	6.8124	27.398	64.255	.19396	7.0231	374.36	1.9392
#1	-.01653	.00228	-.00099	.00004	.00031	-.00002	.01401
#2	-.01829	.00144	-.00112	.00004	.00036	.00011	.01402
#3	-.01611	.00253	-.00291	.00004	.00034	-.00002	.01355

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00107	.00020	-.00044	.03101	-.01928	.00015	.00068
SDev	.00034	.00031	.00039	.00781	.00137	.00007	.00040
%RSD	31.789	150.64	88.530	25.171	7.1199	47.015	58.161
#1	.00115	.00007	-.00002	.02705	-.01769	.00022	.00114
#2	.00069	.00056	-.00079	.04001	-.02007	.00015	.00041
#3	.00136	-.00001	-.00051	.02598	-.02007	.00008	.00050

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01966	.00020	.00034	.00336	-.00479	.00122	.00016
SDev	.00186	.00022	.00105	.00158	.01170	.00200	.00013
%RSD	9.4805	107.55	313.06	47.102	244.33	164.06	79.817
#1	.01987	.00036	-.00017	.00373	-.00040	.00166	.00016
#2	.02142	-.00005	-.00037	.00162	-.01804	-.00097	.00029
#3	.01771	.00029	.00155	.00472	.00408	.00297	.00003

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00180	.00455	.00304	.00076	.00029	.00187	-.00059
SDev	.00019	.00088	.00108	.00076	.00005	.00079	.00119
%RSD	10.485	19.381	35.454	99.347	15.142	42.191	201.74
#1	.00184	.00536	.00359	.00009	.00034	.00162	-.00122
#2	.00160	.00468	.00180	.00061	.00029	.00123	-.00134
#3	.00197	.00361	.00373	.00159	.00025	.00275	.00078

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00244	.00587
SDev	.00971	.00290
%RSD	398.11	49.310
#1	.00435	.00304
#2	-.01357	.00883
#3	.00189	.00575

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Method: TAL Sample Name: 94354001;;;as Operator:
Run Time: 11/05/99 13:45:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm u	ppm	ppm	ppm	ppm
Avge	-.01146	-.00012	.03808	-.00022	.00024	.00007	.16969
SDev	.00116	.00123	.00206	.00012	.00002	.00005	.00213
%RSD	10.145	1042.2	5.4056	52.525	9.4498	79.400	1.2577
#1	-.01129	-.00024	.03601	-.00019	.00025	.00012	.17043
#2	-.01039	.00117	.03811	-.00012	.00025	.00005	.17134
#3	-.01270	-.00128	.04013	-.00035	.00021	.00002	.16728

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00095	.00029	.00094	.02592	.03530	.00012	.00078
SDev	.00022	.00032	.00154	.00231	.00279	.00005	.00015
%RSD	23.647	112.55	163.51	8.9208	7.8901	43.782	18.865
#1	.00082	-.00001	.00202	.02726	.03797	.00008	.00076
#2	.00082	.00064	.00163	.02723	.03551	.00018	.00065
#3	.00121	.00024	-.00082	.02325	.03241	.00011	.00094

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	27.521	.00020	.00060	.00634	53.989	.00081	.00064
SDev	.141	.00004	.00022	.00267	.388	.00141	.00033
%RSD	.51259	18.890	37.146	42.097	.71775	174.61	51.558
#1	27.557	.00022	.00081	.00351	54.210	.00171	.00089
#2	27.641	.00022	.00062	.00670	54.215	.00152	.00077
#3	27.366	.00016	.00037	.00881	53.541	-.00082	.00027

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00168	.07534	.00021	.00473	.00013	.00180	-.00016
SDev	.00016	.00082	.00040	.00054	.00009	.00118	.00037
%RSD	9.5207	1.0956	190.35	11.330	72.466	65.276	225.71
#1	.00154	.07539	.00060	.00449	.00016	.00316	-.00052
#2	.00166	.07614	-.00019	.00535	.00020	.00110	.00021
#3	.00185	.07450	.00022	.00436	.00002	.00115	-.00018

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.00568	.00629
SDev	.00505	.00522
%RSD	88.882	82.964
#1	.00921	.00028
#2	-.00010	.00972
#3	.00795	.00887

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Method: TAL Sample Name: icsa Operator:
Run Time: 11/05/99 13:51:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	490.20	.00103	-.00025	-.00290	-.00053	.00078	481.41
SDev	.48	.00461	.00155	.00002	.00003	.00039	1.68
%RSD	.09805	449.23	621.96	.51793	5.7804	50.192	.34920
#1	489.75	-.00030	.00154	-.00289	-.00051	.00079	479.52
#2	490.70	-.00277	-.00118	-.00291	-.00056	.00039	482.76
#3	490.16	.00615	-.00111	-.00291	-.00051	.00117	481.94

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00027	.00365	.00173	243.83	492.07	.00177	.00497
SDev	.00027	.00036	.00052	.66	.30	.00009	.00055
%RSD	100.42	9.9361	29.826	.26892	.06096	5.0456	10.963
#1	.00053	.00377	.00122	243.21	491.95	.00172	.00441
#2	.00030	.00324	.00225	244.52	492.42	.00187	.00500
#3	-.00002	.00394	.00173	243.78	491.86	.00172	.00550

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	250.60	-.00069	.00038	-.00355	248.90	.00160	.00018
SDev	.56	.00046	.00157	.00540	.14	.00231	.00028
%RSD	.22159	66.420	410.79	152.07	.05452	144.33	157.11
#1	250.36	-.00042	-.00143	-.00975	248.78	.00325	-.00014
#2	250.21	-.00121	.00141	.00011	248.86	.00260	.00041
#3	251.24	-.00042	.00117	-.00101	249.05	-.00104	.00027

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01017	-.00558	-.00254	.00526	-.00388	-.00556	.00318
SDev	.00071	.00053	.00092	.00340	.00012	.00275	.00305
%RSD	6.9817	9.5807	36.164	64.658	3.1134	49.512	96.041
#1	.01089	-.00497	-.00354	.00915	-.00390	-.00489	.00013
#2	.01014	-.00582	-.00172	.00283	-.00399	-.00858	.00623
#3	.00947	-.00596	-.00236	.00380	-.00375	-.00320	.00318

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.01060	-.00044
SDev	.00629	.00523
%RSD	59.385	1201.3
#1	-.01767	-.00620
#2	-.00852	.00401
#3	-.00561	.00089

Analysis Report 11/05/99 02:03:14 PM page 1

Method: TAL Sample Name: icsab Operator:
Run Time: 11/05/99 13:57:29
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	509.47	.09837	.10016	.10023	.09880	.09173	499.80
SDev	5.86	.00494	.00196	.00098	.00115	.00077	6.48
%RSD	1.1496	5.0201	1.9550	.97391	1.1623	.83901	1.2968
#1	509.87	.09877	.09794	.09974	.09887	.09174	500.22
#2	515.11	.10310	.10167	.10136	.09992	.09250	506.06
#3	503.42	.09325	.10086	.09960	.09762	.09096	493.11

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09471	.09392	.11214	252.91	505.90	.09727	.09428
SDev	.00130	.00099	.00106	3.15	5.14	.00111	.00083
%RSD	1.3772	1.0511	.94452	1.2439	1.0170	1.1408	.87561
#1	.09425	.09356	.11233	252.94	506.28	.09720	.09466
#2	.09618	.09503	.11310	256.03	510.84	.09840	.09484
#3	.09369	.09316	.11100	249.74	500.58	.09619	.09333

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	259.59	.01051	.09210	.10104	256.23	.09883	.09819
SDev	2.86	.00049	.00230	.00532	1.96	.00159	.00150
%RSD	1.1015	4.6998	2.4991	5.2704	.76592	1.6097	1.5225
#1	259.60	.01072	.09073	.10672	256.29	.10037	.09819
#2	262.45	.01086	.09476	.10024	258.16	.09894	.09968
#3	256.73	.00994	.09081	.09617	254.24	.09719	.09669

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09547	.09890	.09794	.10444	.09614	.08337	.09628
SDev	.00368	.00109	.00215	.00219	.00106	.00363	.00484
%RSD	3.8564	1.0991	2.1967	2.0970	1.0993	4.3583	5.0308
#1	.09425	.09931	.09583	.10345	.09611	.08750	.09216
#2	.09960	.09972	.10013	.10695	.09721	.08066	.10162
#3	.09254	.09767	.09786	.10292	.09510	.08195	.09506

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	.09678	.10275
SDev	.01021	.00365
%RSD	10.551	3.5487
#1	.10546	.10694
#2	.09935	.10026
#3	.08553	.10106

Analysis Report 11/05/99 02:09:11 PM page 1

Method: TAL Sample Name: ccv Operator:
Run Time: 11/05/99 14:03:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.230	5.0793	5.0011	5.2464	5.1246	5.0321	50.145
SDev	.737	.0705	.0574	.0834	.0772	.0761	.760
%RSD	1.4966	1.3882	1.1469	1.5892	1.5066	1.5114	1.5148
#1	48.845	5.0364	4.9590	5.2011	5.0747	4.9817	49.618
#2	48.766	5.0409	4.9779	5.1954	5.0855	4.9951	49.803
#3	50.080	5.1607	5.0665	5.3426	5.2135	5.1196	51.016

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0606	5.1209	5.0539	47.929	48.039	5.0452	5.1530
SDev	.0775	.0773	.0803	.752	.718	.0766	.0800
%RSD	1.5315	1.5098	1.5880	1.5688	1.4951	1.5179	1.5518
#1	5.0088	5.0708	5.0117	47.447	47.670	4.9958	5.0987
#2	5.0234	5.0821	5.0036	47.545	47.580	5.0063	5.1154
#3	5.1497	5.2100	5.1464	48.796	48.867	5.1334	5.2448

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.068	.52020	5.1235	4.9639	49.002	4.9969	5.0814
SDev	.644	.00820	.0620	.0795	.716	.0719	.0795
%RSD	1.2615	1.5759	1.2100	1.6017	1.4609	1.4388	1.5638
#1	50.740	.51683	5.0786	4.9114	48.631	4.9586	5.0319
#2	50.653	.51423	5.0975	4.9250	48.548	4.9523	5.0391
#3	51.810	.52955	5.1942	5.0554	49.827	5.0799	5.1730

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0419	5.1868	5.1398	5.3611	5.2032	5.0373	5.1663
SDev	.0728	.0709	.0877	.0793	.0808	.0557	.0657
%RSD	1.4447	1.3675	1.7055	1.4798	1.5527	1.1059	1.2719
#1	4.9867	5.1407	5.0859	5.3047	5.1546	5.0062	5.1147
#2	5.0146	5.1513	5.0925	5.3268	5.1585	5.0042	5.1440
#3	5.1245	5.2685	5.2409	5.4518	5.2964	5.1016	5.2403

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	4.9838	4.9536
SDev	.0680	.0863
%RSD	1.3636	1.7422
#1	4.9533	4.8901
#2	4.9365	4.9189
#3	5.0617	5.0519

Analysis Report 11/05/99 02:15:08 PM page 1

Method: TAL Sample Name: ccb Operator:
Run Time: 11/05/99 14:09:23
Comment:
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00671	.00042	.00093	.00001	.00037	.00015	.02150
SDev	.00349	.00087	.00232	.00004	.00003	.00026	.00066
%RSD	52.073	205.12	248.63	577.91	7.9481	166.62	3.0687
#1	-.00554	.00021	.00239	.00003	.00039	-.00014	.02182
#2	-.00395	.00138	.00214	.00003	.00038	.00031	.02194
#3	-.01063	-.00032	-.00174	-.00004	.00034	.00030	.02074

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg3832	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00146	.00053	-.00062	.03651	-.01045	.00025	.00035
SDev	.00024	.00017	.00012	.00406	.00533	.00003	.00040
%RSD	16.503	31.732	19.247	11.119	50.941	13.730	114.44
#1	.00148	.00048	-.00076	.03475	-.00446	.00025	.00033
#2	.00121	.00072	-.00056	.04115	-.01465	.00029	-.00004
#3	.00169	.00039	-.00055	.03363	-.01226	.00022	.00076

Elem	K_7664	Ag3280	Pb2203	Se1960	Na3302	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03720	.00074	-.00016	.00098	-.04971	.00002	.00020
SDev	.00301	.00030	.00029	.00245	.01380	.00252	.00007
%RSD	8.0959	41.029	177.55	249.24	27.753	10114.	36.401
#1	.04066	.00042	-.00027	.00373	-.03632	.00264	.00015
#2	.03582	.00076	.00017	.00022	-.06388	-.00239	.00016
#3	.03514	.00103	-.00039	-.00099	-.04893	-.00017	.00028

Elem	Zn2062	B_2496	Mo2020	Sn1899	Ti3349	2203/1	2203/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00164	.00512	.00170	.00013	.00026	-.00000	-.00041
SDev	.00032	.00148	.00189	.00164	.00003	.00087	.00084
%RSD	19.195	29.004	111.22	1267.4	9.9733	100290.	206.67
#1	.00130	.00683	.00367	-.00137	.00025	.00075	-.00095
#2	.00193	.00434	.00152	.00188	.00025	-.00096	.00056
#3	.00169	.00419	-.00010	-.00012	.00029	.00020	-.00084

Elem	1960/1	1960/2
Units	ppm	ppm
Avge	-.00372	.00295
SDev	.00089	.00374
%RSD	23.854	126.67
#1	-.00354	.00698
#2	-.00468	.00228
#3	-.00293	-.00041

091020

11/3/99

13:44:47 03 Nov 1999 Protocol: hgclp

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 0 13:44:47 03 Nov 1999 HG

Hg .000 ppb 426
Ave. Int. = 426 S. D. = 0

*** Standard: 2 Rep: 1 Seq: 1 13:46:50 03 Nov 1999 HG

Hg .200 ppb 2311
Ave. Int. = 2311 S. D. = 0

*** Standard: 3 Rep: 1 Seq: 2 13:49:01 03 Nov 1999 HG

Hg .500 ppb 8383
Ave. Int. = 8383 S. D. = 0

*** Standard: 4 Rep: 1 Seq: 3 13:51:22 03 Nov 1999 HG

Hg 1.00 ppb 16573
Ave. Int. = 16573 S. D. = 0

*** Standard: 5 Rep: 1 Seq: 4 13:53:44 03 Nov 1999 HG

Hg 5.00 ppb 79592
Ave. Int. = 79592 S. D. = 0

*** Standard: 6 Rep: 1 Seq: 5 13:56:17 03 Nov 1999 HG

Hg 10.0 ppb 157841
Ave. Int. = 157841 S. D. = 0

Protocol: hgclp

Rev: 3.001 Time: 13:56:25 03 Nov 1999

Folder: 110399 Seq: 6 Print: On

User: Batch: Id: StdGRepl Cup: Gas: 0.30 LPM

State: Idle Macro HGCLP 79: F3 Print Xmit: Off Autosampler: On

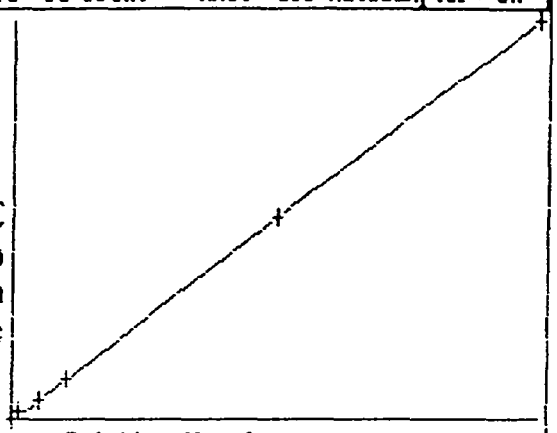
CALIBRATION: Line Calibration

Line: Hg

	Conc.	Calc.	Dev.	Accepted LiNear	
S1	.000	.011	.011	Quadratic	
S2	.200	.130	-.070	WtdLinear	
S3	.500	.515	.015		C
S4	1.00	1.03	.034	Accept	o
S5	5.00	5.03	.026		n
S6	10.0	9.98	-.017	StdAdd	c

A .0000000 r .999954

B 6.33511e-5 C -1.60043e-2



Relative Absorbance

	Mean	%RSD	
S1	426	0	426
S2	2311	0	2311
S3	8383	0	8383
S4	16573	0	16573
S5	79592	0	79592
S6	157841	0	157841

New calibration coefficients stored

Folder: 110399 Page 2
13:58:50 03 Nov 1999 Protocol: hgclp

Line Conc. Units SD/RSD 1 2 3 4 5

*** Check Standard: 2 Ck2 Seq: 6 13:58:50 03 Nov 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		~~84.1~~ 96.0	3.36	~~4.00~~ 3.50	ppb	.000

*** Check Standard: 1 Ck1 Seq: 7 14:01:16 03 Nov 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.054	.200	ppb	.000

*** Sample ID: cra Seq: 8 14:03:17 03 Nov 1999 HG

Hg .170 ppb .000 .170

*** Sample ID: pbw Seq: 9 14:05:27 03 Nov 1999 HG

Hg .013 ppb .000 .013

*** Sample ID: lcsw Seq: 10 14:07:24 03 Nov 1999 HG

Hg 1.78 ppb .000 1.78

*** Sample ID: 94050005 Seq: 11 14:09:46 03 Nov 1999 HG

Hg -.023 ppb .000 -.023

*** Sample ID: 94050007 Seq: 12 14:11:43 03 Nov 1999 HG

Hg -.019 ppb .000 -.019

*** Sample ID: 94050015 Seq: 13 14:13:40 03 Nov 1999 HG

Hg -.026 ppb .000 -.026

*** Sample ID: 94050021 Seq: 14 14:15:38 03 Nov 1999 HG

Hg -.014 ppb .000 -.014

*** Sample ID: 94050023 Seq: 15 14:17:35 03 Nov 1999 HG

Hg -.019 ppb .000 -.019

*** Sample ID: 94050025 Seq: 16 14:19:32 03 Nov 1999 HG

Hg -.013 ppb .000 -.013

*** Sample ID: 94132001 Seq: 17 14:21:29 03 Nov 1999 HG

Hg -.010 ppb .000 -.010

Line Conc. Units SD/RSD 1 2 3 4 5

*** Check Standard: 2 Ck2 Seq: 18 14:23:27 03 Nov 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		93.8	3.75	4.00	ppb	.000

*** Check Standard: 1 Ck1 Seq: 19 14:25:58 03 Nov 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.040	.200	ppb	.000

*** Sample ID: 94132002 Seq: 20 14:27:56 03 Nov 1999 HG

Hg -.014 ppb .000 -.014

*** Sample ID: 94132003 Seq: 21 14:29:52 03 Nov 1999 HG

Hg -.021 ppb .000 -.021

*** Sample ID: 94132004 Seq: 22 14:31:47 03 Nov 1999 HG

Hg -.018 ppb .000 -.018

*** Sample ID: 94132005 Seq: 23 14:33:43 03 Nov 1999 HG

Hg .006 ppb .000 .006

*** Sample ID: 94132011 Seq: 24 14:35:39 03 Nov 1999 HG

Hg .034 ppb .000 .034

*** Sample ID: 94132012 Seq: 25 14:37:35 03 Nov 1999 HG

Hg .009 ppb .000 .009

*** Sample ID: 94132013 Seq: 26 14:39:31 03 Nov 1999 HG

Hg -.023 ppb .000 -.023

*** Sample ID: 94132014 Seq: 27 14:41:27 03 Nov 1999 HG
UNSPIKED
Hg -.012 ppb .000 -.012

*** Sample ID: 94132014 Seq: 28 14:43:22 03 Nov 1999 HG
UNSPIKED DUP dup
Hg -.016 ppb .000 -.016

*** DUP ID: 94132014 Seq: 29 14:43:22 03 Nov 1999 HG

	RPD		Orig.	Dup.
Hg	25.9	%	-.012	-.016

Folder: 110399 Page 4
14:45:20 03 Nov 1999 Protocol: hgclp

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 94132014 Seq: 30 14:45:20 03 Nov 1999 HG
SPIKED ms
Hg .884 ppb .000 .884

*** %Rec. ID: 94132014 Seq: 31 14:45:20 03 Nov 1999 HG
Spikes =1 Unspiked =2

	Spike		%Rcv.	Avg(U)	SD(U)	Avg(S)	SD(S)
Hg	1.00	ppb	89.9	-.014	.003	.884	.000

*** Check Standard: 2 Ck2 Seq: 32 14:47:42 03 Nov 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		91.6	3.66	4.00	ppb	.000

*** Check Standard: 1 Ck1 Seq: 33 14:50:06 03 Nov 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.045	.200	ppb	.000

*** Sample ID: 94132014 Seq: 34 14:52:04 03 Nov 1999 HG
msd
Hg .851 ppb .000 .851

*** Sample ID: 94132015 Seq: 35 14:54:23 03 Nov 1999 HG

Hg -.034 ppb .000 -.034

*** Sample ID: 94127019 Seq: 36 14:56:18 03 Nov 1999 HG

Hg -.019 ppb .000 -.019

*** Sample ID: 94127020 Seq: 37 14:58:11 03 Nov 1999 HG

Hg -.020 ppb .000 -.020

*** Sample ID: 94127021 Seq: 38 15:00:05 03 Nov 1999 HG

Hg -.025 ppb .000 -.025

*** Sample ID: 94127026 Seq: 39 15:01:59 03 Nov 1999 HG

Hg -.015 ppb .000 -.015

*** Sample ID: pbw Seq: 40 15:03:53 03 Nov 1999 HG

Hg -.033 ppb .000 -.033

*** Sample ID: lcsw Seq: 41 15:05:47 03 Nov 1999 HG

Hg 1.70 ppb .000 1.70

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Sample ID: 94159001              Seq:  42     15:08:11 03 Nov 1999 HG

Hg   -.039    ppb       .000     -.039

*** Sample ID: 94159002              Seq:  43     15:10:07 03 Nov 1999 HG
 UNSPIKED
Hg   -.021    ppb       .000     -.021

*** Check Standard: 2  Ck2           Seq:  44     15:12:04 03 Nov 1999 HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          91.2     3.65    4.00  ppb        .000

*** Check Standard: 1  Ck1           Seq:  45     15:14:34 03 Nov 1999 HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.047     .200     ppb        .000

*** Sample ID: 94159002              Seq:  46     15:16:31 03 Nov 1999 HG
 UNSPIKED DUP              dup
Hg   -.017    ppb       .000     -.017

*** DUP  ID: 94159002                Seq:  47     15:16:31 03 Nov 1999 HG
      RPD                 Orig.     Dup.
Hg    19.8    %          -.021    -.017

*** Sample ID: 94159002              Seq:  48     15:18:28 03 Nov 1999 HG
 SPIKED                     ms
Hg    .851    ppb       .000      .851

*** %Rec.  ID: 94159002              Seq:  49     15:18:28 03 Nov 1999 HG
                         Spikes =1  Unspiked =2
      Spike               %Rcv.    Avg(U)   SD(U)    Avg(S)   SD(S)
Hg    1.00    ppb        87.0    -.019    .003      .851    .000

*** Sample ID: 94159002              Seq:  50     15:20:47 03 Nov 1999 HG
                            msd
Hg    .873    ppb       .000      .873

*** Sample ID: 94159003              Seq:  51     15:23:06 03 Nov 1999 HG

Hg   -.027    ppb       .000     -.027

*** Sample ID: 94159004              Seq:  52     15:25:01 03 Nov 1999 HG

Hg   -.021    ppb       .000     -.021

*** Sample ID: 94159005              Seq:  53     15:26:56 03 Nov 1999 HG

Hg   -.023    ppb       .000     -.023
```

Folder: 110399 Page 6

15:28:51 03 Nov 1999 Protocol: hgclp

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 94159006 Seq: 54 15:28:51 03 Nov 1999 HG

Hg	-.010	ppb	.000	-.010

*** Sample ID: 94159007 Seq: 55 15:30:46 03 Nov 1999 HG

Hg	-.025	ppb	.000	-.025

*** Sample ID: 94159009 Seq: 56 15:32:41 03 Nov 1999 HG

Hg	-.028	ppb	.000	-.028

*** Check Standard: 2 Ck2 Seq: 57 15:34:39 03 Nov 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		90.9	3.64	4.00	ppb	.000

*** Check Standard: 1 Ck1 Seq: 58 15:37:08 03 Nov 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.040	.200	ppb	.000

*** Check Standard: 2 Ck2 Seq: 59 15:39:07 03 Nov 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		89.2	3.57	4.00	ppb	.000

11/3/99 TJN

*** Check Standard: 1 Ck1 Seq: 60 15:41:36 03 Nov 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.046	.200	ppb	.000

11/3/99 TJN

11/3/99

11/3/99

001067

12/1/99

*** Standard: 1 Rep: 1 Seq: 0 13:07:58 01 Dec 1999 HG

Hg .000 ppb -155
Ave. Int. = -155 S. D. = 0

*** Standard: 2 Rep: 1 Seq: 1 13:10:00 01 Dec 1999 HG

Hg .200 ppb 2577
Ave. Int. = 2577 S. D. = 0

*** Standard: 3 Rep: 1 Seq: 2 13:12:13 01 Dec 1999 HG

Hg .500 ppb 6448
Ave. Int. = 6448 S. D. = 0

*** Standard: 4 Rep: 1 Seq: 3 13:14:35 01 Dec 1999 HG

Hg 1.00 ppb 13057
Ave. Int. = 13057 S. D. = 0

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 5 Rep: 1 Seq: 4 13:16:59 01 Dec 1999 HG

Hg 5.00 ppb 64261
Ave. Int. = 64261 S. D. = 0

*** Standard: 6 Rep: 1 Seq: 5 13:19:35 01 Dec 1999 HG

Hg 10.0 ppb 124266
Ave. Int. = 124266 S. D. = 0

Protocol: hgclp

Rev: 3.001 Time: 13:19:43 01 Dec 1999

Folder: 120199c Seq: 6 Print: On

User: Batch: Id: StdCRep1 Cup: 1 01 Gas: 0.30 LPM

State: Idle Macro HGCLP F9: F3 Print Xmit: Off Autosampler: On

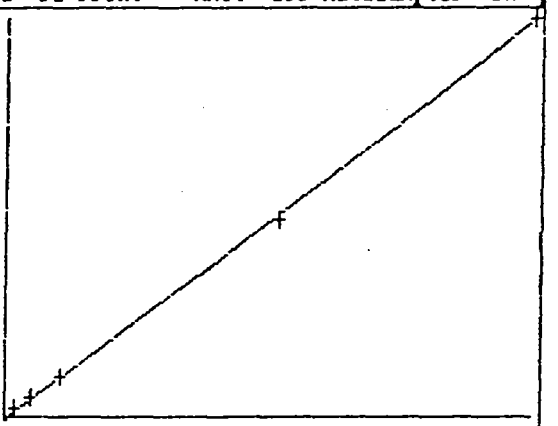
CALIBRATION: Line Calibration

Line: Hg

	Conc.	Calc.	Dev.	Accepted LiNear	
S1	.000	-.042	-.042	Quadratic	
S2	.200	.177	-.023	MtdLinear	
S3	.500	.488	-.012		C
S4	1.00	1.02	.018	Accept	o
S5	5.00	5.12	.124		n
S6	10.0	9.94	-.065	StdAdd	c

A .0000000 r .999861

B 8.01873e-5 C -2.92882e-2



Relative Absorbance

	Mean	%RSD	
S1	-155	0	-155
S2	2577	0	2577
S3	6440	0	6440
S4	13057	0	13057
S5	64261	0	64261
S6	124266	0	124266

New calibration coefficients stored

Folder: 120199c Page 7
13:22:17 01 Dec 1999 Protocol: hgclp

Line Conc. Units SD/RSD 1 2 3 4 5

*** Check Standard: 2 Ck2 Seq: 6 13:22:17 01 Dec 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		~~88.2~~ 100.86	3.53	~~4.00~~ 3.50	ppb	.000

*** Check Standard: 1 Ck1 Seq: 7 13:24:47 01 Dec 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.071	.200	ppb	.000

*** Sample ID: cra Seq: 8 13:26:46 01 Dec 1999 HG

Hg .185 ppb .000 .185

*** Sample ID: pbswg60134 Seq: 9 13:28:55 01 Dec 1999 HG

Hg -.055 ppb .000 -.055

*** Sample ID: lcsswg60134 Seq: 10 13:30:52 01 Dec 1999 HG

Hg 1.96 ppb .000 1.96

*** Sample ID: 94127018 Seq: 11 13:33:19 01 Dec 1999 HG

Hg .041 ppb .000 .041

*** Sample ID: 94127025 Seq: 12 13:35:20 01 Dec 1999 HG

Hg .282 ppb .000 .282

*** Sample ID: 94227001 Seq: 13 13:37:28 01 Dec 1999 HG

Hg .070 ppb .000 .070

*** Sample ID: 94435001 Seq: 14 13:39:35 01 Dec 1999 HG

Hg -.027 ppb .000 -.027

*** Sample ID: 94374001 Seq: 15 13:41:33 01 Dec 1999 HG
UNSPIKED
Hg .088 ppb .000 .088

*** Sample ID: 94374001 Seq: 16 13:43:35 01 Dec 1999 HG
UNSPIKED DUP dup
Hg .403 ppb .000 .403

*** DUP ID: 94374001 Seq: 17 13:43:35 01 Dec 1999 HG

	RPD		Orig.	Dup.
Hg	128.	%	.088	.403

Folder: 120199c
13:45:50 01 Dec 1999 Protocol: hgclp
Page 8

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 94374001 Seq: 18 13:45:50 01 Dec 1999 HG
SPIKED ms
Hg 1.04 ppb .000 1.04

*** %Rec. ID: 94374001 Seq: 19 13:45:50 01 Dec 1999 HG
Spikes =1 Unspiked =2

	Spike		%Rcv.	Avg(U)	SD(U)	Avg(S)	SD(S)
Hg	1.00	L ppb	79.2	.246	.222	1.04	.000

*** Check Standard: 2 Ck2 Seq: 20 13:48:12 01 Dec 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.	4.19	4.00	ppb	.000

*** Check Standard: 1 Ck1 Seq: 21 13:50:43 01 Dec 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.067	.200	ppb	.000

*** Sample ID: 94374001 Seq: 22 13:52:42 01 Dec 1999 HG
msd
Hg 1.07 ppb .000 1.07

*** Sample ID: 94374002 Seq: 23 13:55:01 01 Dec 1999 HG

Hg .086 ppb .000 .086

*** Check Standard: 2 Ck2 Seq: 24 13:57:09 01 Dec 1999 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		106.	4.23	4.00	ppb	.000

*** Check Standard: 1 Ck1 Seq: 25 13:59:12 01 Dec 1999 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.029	.200	ppb	.000

12/1/99

12/1/99

STL LABS

DATE: 11/3/99
ANALYST: [illegible]
PAGE: 1 of 2

MERCURY PREPARATION LOG

STL SAMPLE #	MATRIX	AMT. SAMPLE	FINAL VOL	COMMENTS	STD. USED
0		—	100 ml		
0.2		0.2 ml		lot # A498	std D 100 ppb
0.5		0.5 ml			
1		1.0 ml			
5		5.0 ml			
10		10.0 ml			
ICV		3.5 ml		lot # A440	std B 100 ppb
ICB		—			
CCV		4.0 ml		lot # A440	std B 100 ppb
CCB		—			
CRA		0.2 ml		lot # A440	std B 100 ppb
PBW WG6011					
LCSW WG 6011				2.0 ppb std D	
94050005	AQ	100 ml			
007					
015					
021					
023					
025					
94132001					
002					
003					
004					
005					
011					
012					
013					
014					
014 Dup					
014 MS				1.0 ppb std D	
014 MSD					
015					
94127019					
020					
021					
026					
PBW WG 6012					
LCSW WG 6012				2.0 ppb std D	
94159001	AQ	100 ml			
002					
002 Dup					

STL SAMPLE #	MATRIX	AMT. SAMPLE	FINAL VOL	COMMENTS	STD. USED
94159002 MS	Aq	100 ml	100 ml	1.0 ppb std D	
002 MSD				1.0 ppb std D	
003					
004					
005					
006					
007					
009					
		Water Bath	Temp - 95°C		
		In at 0900			
		out at 1100			
		Acid lot #			
		HNO_3	A144		
		H_2SO_4	A137		
			11/3/99		
			11/3/99		

STL LABS

DATE: 12/1/99
ANALYST: [illegible]
PAGE: 1 of 1

MERCURY PREPARATION LOG

STL SAMPLE #	MATRIX	AMT. SAMPLE	FINAL VOL	COMMENTS	STD. USED
0		—	100 ml		
0.2		0.2 ml		lot # M498	std B 100 ppb
0.5		0.5 ml			
1		1.0 ml			
5		5.0 ml			
10		10.0 ml			
ICV		3.5 ml		lot # M440	std D 100 ppb
ICB		—			
CCV		4.0 ml		lot # M440	std D 100 ppb
CCB		—			
CRA		0.2 ml		lot # M440	std D 100 ppb
PBS WG60134					
LCSS WG60134				20 ppb std D	
94127018 4211	So	0.60 g			
025 4211					
94227001 3411					
94435001 73411					
94374001 411					
001Dp					
001MS				1.0 ppb std D	
001MSD				1.0 ppb std D	
002 411					
		Water Bath Temp = 95° C			
		In at 0900			
		out at 0930			
		Acid lot #			
		HNO_3 A144			
		~~H_2SO_4 A137~~			
		HCl A143			
				12/1/99	

STL-NJ

Metals Digestion Log

Run ID: RA8760

Batch ID: WG50025 Method: SW-846 EPA 600 CLP Method Number: 3050B Date: 10-29-99

Tape Color: Yellow Instrument: ICP GFAA Analyst: Lori Herpen

IEA Sample Number	Matrix	Initial Vo./Wt.	Final Volume	Furnace Analysis Sb	As	Pb	Se	Tl	ICP Analysis	Due Date	Comments
PBS WG50025			100.0ml								micro wt. micro wt.
LCSS WG50025											Initial final
94121 002	SO	1.0g							As		
004											
005											
006											
008											
009											
010											
011											
012											
013											
014											
016 DUP											
015 MS											
014 MSD											
017											
94127 018									TAL metals		Sample was Stones
025											

MS/ LCS Lot# L-LCS-MS-59 ml added to LCS: 5.0ml ml added to matrix spike: 5.0 ml

Hot plate temp: #1 95 #2 95 #3 #4 #5

10/29/99 Lori Herpen

ACID LOT # HCL A142 HNO3 A144

REAGENT LOT # H2O2 R84

000144

001035

STL-NJ

Metals Digestion Log

Run ID: RA8756

Batch ID: WG50021 Method: SW-846 EPA 600 CLP Method Number: 3010A Date: 10-28-99

Tape Color: White Instrument: ICP GFAA Analyst: Lori Hesper

IEA Sample Number	Matrix	Initial Vo./Wt.	Final Volume	Furnace Analysis Sb	As	Pb	Se	Tl	ICP Analysis	Due Date	Comments
PBW WG50021			50.0 ml								micro wt. micro wt.
LCSW WG50021											Initial final
94106 006	AQ	50.0ml							TAL	11/1	
006 DUP											
006 MS											
006 MSD											
007											
94112 001									SKINNER	11/1	
002											
003											
004											
005											
006											
007											
94113 001									TAL	11/1	
002											
94105 001									TAL	11/2	
002											
94121 018									As		
94127 019									TAL		
020											
021		LH 10/28/99									
026											
94043 001									SKINNER	10/27	
94285 033									As	11/3	

MS/ LCS Lot# L-LCS-MS-59 ml added to LCS: 2.5ml ml added to matrix spike: 2.5 ml

Hot plate temp: #1: 95 #2 95 #3 #4 #5

10/28/99 Lori Hesper

ACID LOT #
HCL A142
HNO3 A144

REAGENT LOT #
H2O2 N/A

SUBCONTRACTING

Soil

TABLE SV-1.0
7099-2732A
SEVERN TRENT LABS-WHIPPANY
TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	S2-2-01	S2-3-01	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKJQ	992732A-03	992732A-04	
Method Blank I.D.	SBLKJQ	SBLKJQ	SBLKJQ	
Quant. Factor	1.00	1.28	9.52	
Phenol	U	U	U	330
bis(2-Chloroethyl)ether	U	U	U	330
2-Chlorophenol	U	U	U	330
1,3-Dichlorobenzene	U	U	U	330
1,4-Dichlorobenzene	U	U	U	330
Benzyl alcohol	U	U	U	330
1,2-Dichlorobenzene	U	U	U	330
2-Methylphenol	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	330
4-Methylphenol	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	330
Hexachloroethane	U	U	U	330
Nitrobenzene	U	U	U	330
Isophorone	U	U	U	330
2-Nitrophenol	U	U	U	330
2,4-Dimethylphenol	U	U	U	330
Benzoic acid	U	U	U	1600
bis(2-Chloroethoxy)methane	U	U	U	330
2,4-Dichlorophenol	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	330
Naphthalene	U	U	U	330
4-Chloroaniline	U	U	U	330
Hexachlorobutadiene	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	330
2-Methylnaphthalene	U	U	U	330
Hexachlorocyclopentadiene	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	1600
2-Chloronaphthalene	U	U	U	330
2-Nitroaniline	U	U	U	1600
Dimethylphthalate	U	U	U	330
Acenaphthylene	U	7J	310J	330
2,6-Dinitrotoluene	U	U	U	330
3-Nitroaniline	U	U	U	1600
Acenaphthene	U	17J	760J	330
Date Received		10/16/99	10/16/99	
Date Extracted	10/22/99	10/22/99	10/22/99	
Date Analyzed	10/28/99	10/29/99	10/29/99	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

TABLE SV-1.0
7099-2732A
SEVERN TRENT LABS-WHIPPANY
TCL SEMI-VOLATILE ORGANICS

All values are ug/Kg dry weight basis.

Client Sample I.D.	Method Blank	S2-2-01	S2-3-01	Quant. Limits with no Dilution
Lab Sample I.D.	SBLKJQ	992732A-03	992732A-04	
Method Blank I.D.	SBLKJQ	SBLKJQ	SBLKJQ	
Quant. Factor	1.00	1.28	9.52	
2,4-Dinitrophenol	U	U	U	1600
4-Nitrophenol	U	U	U	1600
Dibenzofuran	U	7J	240J	330
2,4-Dinitrotoluene	U	U	U	330
Diethylphthalate	6J	7JB	U	330
4-Chlorophenyl-phenylether	U	U	U	330
Fluorene	U	27J	780J	330
4-Nitroaniline	U	U	U	1600
4,6-Dinitro-2-methylphenol	U	U	U	1600
N-Nitrosodiphenylamine (1)	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	330
Hexachlorobenzene	U	U	U	330
Pentachlorophenol	U	U	U	1600
Phenanthrene	U	65J	2500J	330
Anthracene	U	27J	440J	330
Carbazole	U	8J	490J	330
Di-n-butylphthalate	20J	42JB	5200B	330
Fluoranthene	U	140J	16000	330
Pyrene	U	140J	19000	330
Butylbenzylphthalate	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	660
Benzo(a)anthracene	U	63J	9500	330
Chrysene	U	79J	12000	330
bis(2-Ethylhexyl)phthalate	21J	36JB	290JB	330
Di-n-octylphthalate	32J	8JB	36JB	330
Benzo(b)fluoranthene	U	54J	6800	330
Benzo(k)fluoranthene	U	75J	9000	330
Benzo(a)pyrene	U	56J	8500	330
Indeno(1,2,3-cd)pyrene	U	35J	4200	330
Dibenzo(a,h)anthracene	U	14J	1400J	330
Benzo(g,h,i)perylene	U	30J	3000J	330
Date Received		10/16/99	10/16/99	
Date Extracted	10/22/99	10/22/99	10/22/99	
Date Analyzed	10/28/99	10/29/99	10/29/99	

See Appendix for qualifier definitions
Note: Compound detection limit = quantitation limit x quantitation factor
Quant. Factor = a numerical value which takes into account any variation in sample weight/volume, % moisture and sample dilution.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

0001

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical Requirements					
		*VOA GC/MS Method #	*BNA GC/MS Method #	*VOA GC Method #	*Pest PCBs Method #	*Metals	*Other
~~S-2-1-01~~	~~992732A-01~~		X				
~~S-2-1-02~~	~~992732A-02~~		X				
S2-2-01	992732A-03		X				
S2-3-01	992732A-04		X				

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES

0002

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
~~992732A-01~~	SOIL	10/13/99	10/15/99	10-22-99	10-29-99
~~992732A-02~~	SOIL	10/13/99	10/15/99		
992732A-03	SOIL	10/14/99	10/16/99		
992732A-04	SOIL	10/14/99	10/16/99		

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES

~~0003~~

LABORATORY SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILIARY CLEANUP	DIL/CONC FACTOR
~~992732A-01~~	SOIL	SW846	SONC	NA	1.0
~~992732A-02~~	SOIL	↓	↓	↓	1.0
992732A-03	SOIL	↓	↓	↓	1.0
992732A-04	SOIL	↓	↓	↓	2.0

SDG NARRATIVE

Client:	STL/NJ
PROJ ID:	~~94106~~ 94127
P.O.	~~94106~~ 94127
SDG#	A2732
STL ID	7099-2732A

001104
0004A

Committed To *Your* Success

Severn Trent Laboratories
200 Monroe Turnpike
Monroe, Connecticut 06468

Tel: (203) 261-4458
Fax: (203) 261-5346
www.stl-inc.com

7099-2732A
STL/NJ

Case Narrative

Sample Receipt - All samples were received in good condition and at the proper temperature.

Semi-Volatile Organics - Semi-volatile organic samples were extracted and analyzed by capillary GC/MS using guidance provided in Methods 3550C/8270C. The instrumentation used was a Hewlett-Packard Gas Chromatograph interfaced with a Mass Selective Detector.

Sample S2-3-01 would not concentrate to a final volume of 1 ml and was brought to a final volume of 2 mls. The sample was also analyzed at a 1:2 dilution due to the presence of high target compounds.

The spike recovery for hexachlorocyclopentadiene was ouside recovery limits in SBLKJQFMS.

Sample Calculation:

Sample ID - S2-2-01
Compound - acenaphthylene

$$\frac{6328(40)1000(1)}{444223(1.720)2(30).78} = 7 \text{ ug/kg}$$

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Cheryl Cascina for Nov 11, 1999

Jeffrey C. Curran Date
Laboratory Manager

CLIENT CHAINS OF CUSTODY

Client:	STL/NJ
PROJ ID:	~~94106~~ 94127
P.O.	~~94106~~ 94127
SDG#	A2732
STL ID	7099-2732A

STL-LT 7094-~~2758A~~ 2732A

No. 73810

Severn Trent Laboratories
628 Route 10
Whippany NJ 07981
Tel: (973) 428-8181
Fax: (973) 428-5222

Committed To Your Success

CHAIN OF CUSTODY

FIELD BOOK: _____ Pg 1 of 1

(1) Client: STL-Whippany

(2) Project Name/no.: 94127

(3) Client Contact: D. Glenn

(4) STL Contact:

(5) TAT: 1wk, 2wk, 3wk, OTHER _____

(6) Proj. Type: NJPDES, NPDES, ISRA, CLP, CERCLA, RCRA, UST, ACO, MOA, OTHER _____

(7) Protocol: CLP, SW846, EPA 600, DW, OTHER _____

(8) Reporting Type: NJ Reg Format, NJ Reduced Format, CLP, Level II, Level I (Data Sum), Other ASP B

(14) Bill To / PO#

(15) ANALYSIS REQUIRED

(9) Client ID (10 CHAR)	(10) Date	(11) Time	(12) Mtx	(13) # of Containers	BNA+TCL 8270
03 S2-2-01	10/14/99	1225	SO	1	X
04 S2-3-01		1545	SO	1	X

PASSED RAD SCREEN

50

For Lab Use Only

Job No.:
Quote No.:
# of Coolers:
Cooler Temp.(s):
Custody Seal #(s):
Date Due:

PM NON CONFORMANCE

Preserved: Temp:
Container: Volume:
Broken: Initials:
Holding Time:
Other:
Logged By:

DESCRIPTION

94127-18
-25
-32
-38
-45
-52
-58
-65
-72
-78
-85
-92
-98
-105

(16) COMMENTS: (Please include hazards on site.)

(17)

	Print Name and Company	Signature	Custody Seal # (s)	Date/Time
Sampled By:				/
Received By:				/
Relinquished By:	Rachel Malaniak STL	R Malaniak		10/15/99 1900
Received By:	Rich Chandler STL	[illegible]		10/16/99 1000
Relinquished By:				/
Received By:				/

Mtx = Matrix of Sample. (AI=Air, AQ=Aqueous, LE=Leachate, ML=Misc Liquid, MS=Misc Solids, OIL, SE=Sediment, SL=Sludge, SO=Soil)

(Copies: White and yellow copies should accompany samples to STL. The pink copy should be retained by the client.) See reverse for directions.

00167

001166

LABORATORY CHAINS OF CUSTODY

Client:	STL/NJ
PROJ ID:	~~94106~~ 94127
P.O.	~~94106~~ 94127
SDG#	A2732
STL ID	7099-2732A

Severn Trent Connecticut
Internal Chain-of-Custody

Client: SK-NJ

STL Job #: 7199-2738A

Custody Seal: present / absent
Tamper Evident /Non Tamper Evident
intact / not intact

Date Received: 10/16/99

Airbill# EE

Sample #s: 03-04

Field C-O-C present / absent

Locations: A5

Laboratory Sample #	Relinquished by	Accepted by	Date	Time	Reason	Relinquished by	Accepted by	Date	Time
3,4 A	[illegible]	LAM	10/22	10:45	BNA	CJM	[illegible]	10/23/99	12:30

STL Form# SMF00504.CT

001108

STL GC-GC/MS Extract Chain of Custody

Fraction: BNA Pesticide-PCB / Herbicide / O/P Pesticide / DRO / Other (Circle one)

CLIENT: STL

JOB NO: 2732A

SAMPLE IN (Extractions)					SAMPLE IN (Extractions)				
Sample(s)	Date	Time	Sign.	Location	Sample(s)	Date	Time	Sign.	Location
1-4	10.24.99	1350	DA	29					

SAMPLE OUT					SAMPLE IN			
Sample(s)	Date	Time	Code	Sign.	Date	Time	Location	Sign.
1-4	10/29/99	PA	AL	[illegible]	10/29/99	2:10P	29	OP

Codes: SC = Screening AN = Analysis

Verified By: Marsha K. [illegible]

Dat

Lab Form: SMF01201.CT

SEMI-VOLATILE DATA

Client:	STL/NJ
PROJ ID:	~~94106~~ 94127
P.O.	~~94106~~ 94127
SDG#	A2732
STL ID	7099-2732A

3D
SOIL SEMIVOLATILE SPIKE/SPIKE DUPLICATE RECOVERY SUMMARY

0014

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix Spike - EPA Sample No.: SBLKJQ Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	SPIKE CONCENTRATION (ug/Kg)	SPIKE % REC #	QC. LIMITS REC.
Phenol	1300	0	1200	92	48-146
bis(2-Chloroethyl)ether	1300	0	1100	85	60-119
2-Chlorophenol	1300	0	1300	100	58-139
1,3-Dichlorobenzene	1300	0	1100	85	55-113
1,4-Dichlorobenzene	1300	0	1100	85	54-114
Benzyl alcohol	1300	0	1300	100	58-137
1,2-Dichlorobenzene	1300	0	1200	92	59-116
2-Methylphenol	1300	0	1100	85	50-126
bis(2-Chloroisopropyl)ether	1300	0	1400	108	64-120
4-Methylphenol	1300	0	1300	100	51-147
N-Nitroso-di-n-propylamine	1300	0	1300	100	61-121
Hexachloroethane	1300	0	1000	77	54-108
Nitrobenzene	1300	0	1100	85	62-119
Isophorone	1300	0	1100	85	63-123
2-Nitrophenol	1300	0	1200	92	64-119
2,4-Dimethylphenol	1300	0	1100	85	57-130
Benzoic acid	4000	0	440	11	0-88
bis(2-Chloroethoxy)methane	1300	0	1200	92	64-123
2,4-Dichlorophenol	1300	0	1400	108	67-129
1,2,4-Trichlorobenzene	1300	0	1200	92	59-115
Naphthalene	1300	0	1200	92	63-124
4-Chloroaniline	1300	0	940	72	0-139
Hexachlorobutadiene	1300	0	1100	85	54-124
4-Chloro-3-methylphenol	1300	0	1400	108	62-136
2-Methylnaphthalene	1300	0	1200	92	56-120
Hexachlorocyclopentadiene	1300	0	240	18*	20-114
2,4,6-Trichlorophenol	1300	0	1100	85	64-129
2,4,5-Trichlorophenol	1300	0	1200	92	52-119
2-Chloronaphthalene	1300	0	1300	100	70-138
2-Nitroaniline	1300	0	1200	92	59-140

Column to be used to flag recovery with an asterisk

* Values outside of QC limits.

Spike Recovery: ~~0~~ 1 out of 65 outside limits JW 11-4-99

COMMENTS: _____

FORM III SV-2

3D

SOIL SEMIVOLATILE SPIKE/SPIKE DUPLICATE RECOVERY SUMMARY

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix Spike - EPA Sample No.: SBLKJQ Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	SPIKE CONCENTRATION (ug/Kg)	SPIKE % REC #	QC. LIMITS REC.
Dimethylphthalate	1300	0	1200	92	62-139
Acenaphthylene	1300	0	990	76	57-127
2,6-Dinitrotoluene	1300	0	1200	92	58-146
3-Nitroaniline	1300	0	1200	92	24-172
Acenaphthene	1300	0	1000	77	63-131
2,4-Dinitrophenol	1300	0	860	66	8-220
4-Nitrophenol	1300	0	1300	100	37-164
Dibenzofuran	1300	0	1200	92	58-131
2,4-Dinitrotoluene	1300	0	1200	92	46-146
Diethylphthalate	1300	6	1100	84	56-142
4-Chlorophenyl-phenylether	1300	0	1100	85	58-133
Fluorene	1300	0	1100	85	56-133
4-Nitroaniline	1300	0	1400	108	35-174
4,6-Dinitro-2-methylphenol	1300	0	1100	85	49-186
N-Nitrosodiphenylamine (1)	1300	0	1300	100	69-142
4-Bromophenyl-phenylether	1300	0	1300	100	63-139
Hexachlorobenzene	1300	0	1300	100	63-134
Pentachlorophenol	1300	0	970	75	68-124
Phenanthrene	1300	0	1300	100	64-140
Anthracene	1300	0	1100	85	67-134
Di-n-butylphthalate	1300	20	1400	106	70-139
Fluoranthene	1300	0	1400	108	63-145
Pyrene	1300	0	1300	100	55-146
Butylbenzylphthalate	1300	0	1800	138	65-149
3,3'-Dichlorobenzidine	1300	0	810	62	23-124
Benzo(a)anthracene	1300	0	1200	92	58-148
Chrysene	1300	0	1200	92	60-151
bis(2-Ethylhexyl)phthalate	1300	21	1300	98	60-146
Di-n-octylphthalate	1300	32	1300	98	66-154
Benzo(b)fluoranthene	1300	0	1200	92	37-191

Column to be used to flag recovery with an asterisk

* Values outside of QC limits.

Spike Recovery: 01 out of 65 outside limits

COMMENTS: _____

FORM III SV-2

3D

SOIL SEMIVOLATILE SPIKE/SPIKE DUPLICATE RECOVERY SUMMARY

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix Spike - EPA Sample No.: SBLKJQ Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	SPIKE CONCENTRATION (ug/Kg)	SPIKE % REC #	QC. LIMITS REC.
Benzo(k)fluoranthene	1300	0	1300	100	53-130
Benzo(a)pyrene	1300	0	1200	92	60-148
Indeno(1,2,3-cd)pyrene	1300	0	1600	123	44-160
Dibenzo(a,h)anthracene	1300	0	1600	123	30-154
Benzo(g,h,i)perylene	1300	0	1600	123	39-173
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Column to be used to flag recovery with an asterisk

* Values outside of QC limits.

Spike Recovery: 01 out of 65 outside limits

COMMENTS: _____

FORM III SV-2

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: Q5955 DFTPP Injection Date:10/28/99

Instrument ID: HP5971Q DFTPP Injection Time:0852

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	40.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	54.1
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	40.0 - 60.0% of mass 198	51.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	22.2
365	Greater than 1.0% of mass 198	2.29
441	Present, but less than mass 443	9.8
442	40.0 - 100.0% of mass 198	62.6
443	17.0 - 23.0% of mass 442	11.9 (18.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050P1	SSTD050P1	>Q5955	10/28/99	0852
02	SBLKJQ	SBLKJQ	>Q5964	10/28/99	1508
03	SBLKJQFMS	SBLKJQFMS	>Q5965	10/28/99	1550
04					
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22					

FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: Q5974 DFTPP Injection Date:10/29/99

Instrument ID: HP5971Q DFTPP Injection Time:0838

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.3
68	Less than 2.0% of mass 69	0.2 (0.4)1
69	Mass 69 relative abundance	57.6
70	Less than 2.0% of mass 69	0.4 (0.6)1
127	40.0 - 60.0% of mass 198	56.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	21.3
365	Greater than 1.0% of mass 198	2.20
441	Present, but less than mass 443	7.9
442	40.0 - 100.0% of mass 198	53.9
443	17.0 - 23.0% of mass 442	11.2 (20.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050P3	SSTD050P3	>Q5974	10/29/99	0838
02	S2-2-01	992732A-03	>Q5990	10/29/99	1947
03	S2-3-01	992732A-04	>Q5991	10/29/99	2028
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FORM V SV

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: (Standard): >Q5955 Date Analyzed:10/28/99

Instrument ID: HP5971Q Time Analyzed:0852

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	178926	8.84	640844	11.80	378893	15.74
	UPPER LIMIT	357852	9.34	1281688	12.30	757786	16.24
	LOWER LIMIT	89463	8.34	320422	11.30	189446	15.24
	EPA SAMPLE NO.						
01	SBLKJQ	183954	8.86	761041	11.81	444755	15.76
02	SBLKJQFMS	163664	8.86	590840	11.82	388127	15.76
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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.

FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: (Standard): >Q5955 Date Analyzed:10/28/99

Instrument ID: HP5971Q Time Analyzed:0852

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	637030	18.81	499553	24.22	471295	26.96
	UPPER LIMIT	1274060	19.31	999106	24.72	942590	27.46
	LOWER LIMIT	318515	18.31	249776	23.72	235648	26.46
	EPA SAMPLE NO.						
01	SBLKJQ	728491	18.81	736889	24.22	587955	26.97
02	SBLKJQFMS	596659	18.83	518611	24.23	476220	26.98
03							
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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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: (Standard): >Q5974 Date Analyzed:10/29/99

Instrument ID: HP5971Q Time Analyzed:0838

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	189009	8.79	698034	11.75	421448	15.69
	UPPER LIMIT	378018	9.29	1396068	12.25	842896	16.19
	LOWER LIMIT	94504	8.29	349017	11.25	210724	15.19
	EPA SAMPLE NO.						
01	S2-2-01	206053	8.79	839408	11.75	444223	15.70
02	S2-3-01	237755	8.78	926239	11.74	480424	15.69
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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.

FORM VIII SV-1

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Lab File ID: (Standard): >Q5974 Date Analyzed:10/29/99

Instrument ID: HP5971Q Time Analyzed:0838

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	705158	18.76	538605	24.17	538662	26.91
	UPPER LIMIT	1410316	19.26	1077210	24.67	1077324	27.41
	LOWER LIMIT	352579	18.26	269302	23.67	269331	26.41
	EPA SAMPLE NO.						
01	S2-2-01	616347	18.76	394964	24.17	461554	26.92
02	S2-3-01	656427	18.76	370630	24.18	480781	26.93
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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.

FORM VIII SV-2

Instrument:HP5971Q Units: ug/L

	IDL
Pyridine	5
N-Nitrosodimethylamine	2
Cyclohexanone	2
Phenol	2
Aniline	2
bis(2-Chloroethyl)ether	1
2-Chlorophenol	2
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	2
Benzyl alcohol	2
1,2-Dichlorobenzene	1
bis(2-Chloroisopropyl)ether	1
2-Methylphenol	1
Hexachloroethane	2
N-Nitroso-di-n-propylamine	2
4-Methylphenol	2
Nitrobenzene	2
Isophorone	2
2-Nitrophenol	2
2,4-Dimethylphenol	1
Benzoic acid	1
bis(2-Chloroethoxy)methane	2
2,4-Dichlorophenol	2
1,2,4-Trichlorobenzene	2
Naphthalene	2
4-Chloroaniline	2
Hexachlorobutadiene	2
4-Chloro-3-methylphenol	1
2-Methylnaphthalene	2
2,4,5-Trichlorotoluene	1
Hexachlorocyclopentadiene	1
2,4,6-Trichlorophenol	1
2,4,5-Trichlorophenol	3
2-Chloronaphthalene	1
2-Nitroaniline	2
Acenaphthylene	2
Dimethylphthalate	2
2,6-Dinitrotoluene	1
Acenaphthene	1
3-Nitroaniline	1
2,4-Dinitrophenol	1
Dibenzofuran	2
2,4-Dinitrotoluene	1
4-Nitrophenol	1
Fluorene	1
4-Chlorophenyl-phenylether	1
Diethylphthalate	1
4-Nitroaniline	2
4,6-Dinitro-2-methylphenol	1
N-Nitrosodiphenylamine (1)	2
1,2-Diphenylhydrazine	1
4-Bromophenyl-phenylether	2
Hexachlorobenzene	1

Pentachlorophenol	1
Phenanthrene	1
Carbazole	2
Anthracene	2
Di-n-butylphthalate	1
Fluoranthene	1
Benzidine	1
Pyrene	1
Butylbenzylphthalate	1
3,3'-Dichlorobenzidine	2
Benzo(a)anthracene	1
Chrysene	1
bis(2-Ethylhexyl)phthalate	2
Di-n-octylphthalate	1
Benzo(b)fluoranthene	4
Benzo(k)fluoranthene	7
Benzo(a)pyrene	1
Indeno(1,2,3-cd)pyrene	1
Dibenzo(a,h)anthracene	1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S2-2-01

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: 992732A-03

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5990

Level: (low/med) LOW Date Received: 10/16/99

% Moisture: 22 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2000	U
83-32-9	Acenaphthene	17	J
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
132-64-9	Dibenzofuran	7	J
121-14-2	2,4-Dinitrotoluene	420	U
84-66-2	Diethylphthalate	7	JB
7005-72-3	4-Chlorophenyl-phenylether	420	U
86-73-7	Fluorene	27	J
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-Nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	65	J
120-12-7	Anthracene	27	J
86-74-8	Carbazole	8	J
84-74-2	Di-n-butylphthalate	42	JB
206-44-0	Fluoranthene	140	J
129-00-0	Pyrene	140	J
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	850	U
56-55-3	Benzo(a)anthracene	63	J
218-01-9	Chrysene	79	J
117-81-7	bis(2-Ethylhexyl)phthalate	36	JB
117-84-0	Di-n-octylphthalate	8	JB
205-99-2	Benzo(b)fluoranthene	54	J
207-08-9	Benzo(k)fluoranthene	75	J
50-32-8	Benzo(a)pyrene	56	J
193-39-5	Indeno(1,2,3-cd)pyrene	35	J
53-70-3	Dibenzo(a,h)anthracene	14	J
191-24-2	Benzo(g,h,i)perylene	30	J

(1) - Cannot be separated from Diphenylamine

Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5990.D
Acq On : 29 Oct 99 19:47 hrs
Sample : 992732A-03
Misc : S2-2-01 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:13 1999

Vial: 16
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 21.37

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.79	152	206053	40.00 ug	0.00
20) Naphthalene-d8	11.75	136	839408	40.00 ug	0.00
35) Acenaphthene-d10	15.70	164	444223	40.00 ug	0.00
57) Phenanthrene-d10	18.75	188	616347	40.00 ug	0.00
70) Chrysene-d12	24.17	240	394964	40.00 ug	0.00
79) Perylene-d12	26.93	264	461554	40.00 ug	0.01

System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	6.15	112	869982	117.81 ug	58.91%
3) Phenol-d5	8.24	99	1228977	147.45 ug	73.72%
21) Nitrobenzene-d5	10.15	82	633813	69.84 ug	69.84%
40) 2-Fluorobiphenyl	14.25	172	958014	84.51 ug	84.51%
56) 2,4,6-Tribromophenol	17.39	330	351495	161.75 ug	80.87%
73) Terphenyl-d14	22.03	244	858731	82.03 ug	82.03%

Target Compounds						Qvalue
43) Acenaphthylene	15.37	152	6328	7.08 ug		88
46) Acenaphthene	15.77	153	8428	16.69 ug	#	83
49) Dibenzofuran	16.09	168	5294	7.04 ug		84
52) Fluorene	16.82	166	14413	26.83 ug		89
54) Diethylphthalate	16.71	149	5718	7.46 ug		96
64) Phenanthrene	18.81	178	39605	64.86 ug		95
65) Carbazole	19.27	167	5861	8.33 ug	#	89
66) Anthracene	18.90	178	16656	27.03 ug		97
67) Di-n-butylphthalate	20.03	149	43821	41.81 ug		95
68) Fluoranthene	21.25	202	107708	142.40 ug		91
72) Pyrene	21.70	202	84171	142.67 ug		91
76) Benzo(a)anthracene	24.13	228	32602	62.61 ug		97
77) Chrysene	24.22	228	33123	79.47 ug		98
78) bis(2-Ethylhexyl)phthalate	24.21	149	14410	35.78 ug	m	86
80) Di-n-octylphthalate	25.38	149	8410	8.07 ug	m	89
81) Benzo(b)fluoranthene	26.20	252	40759	54.33 ug	m	91
82) Benzo(k)fluoranthene	26.24	252	32375	75.04 ug		92
83) Benzo(a)pyrene	26.80	252	33206	56.43 ug		91
84) Indeno(1,2,3-cd)pyrene	29.30	276	24215	35.32 ug	#	63
85) Dibenzo(a,h)anthracene	29.29	278	8187	14.14 ug		81
86) Benzo(g,h,i)perylene	30.02	276	20061	29.87 ug		85

All spectra and manual integrations for this sample have been reviewed and approved.

By: JO Date: 11/3/99

Secondary review: AU Date: 11/03/99

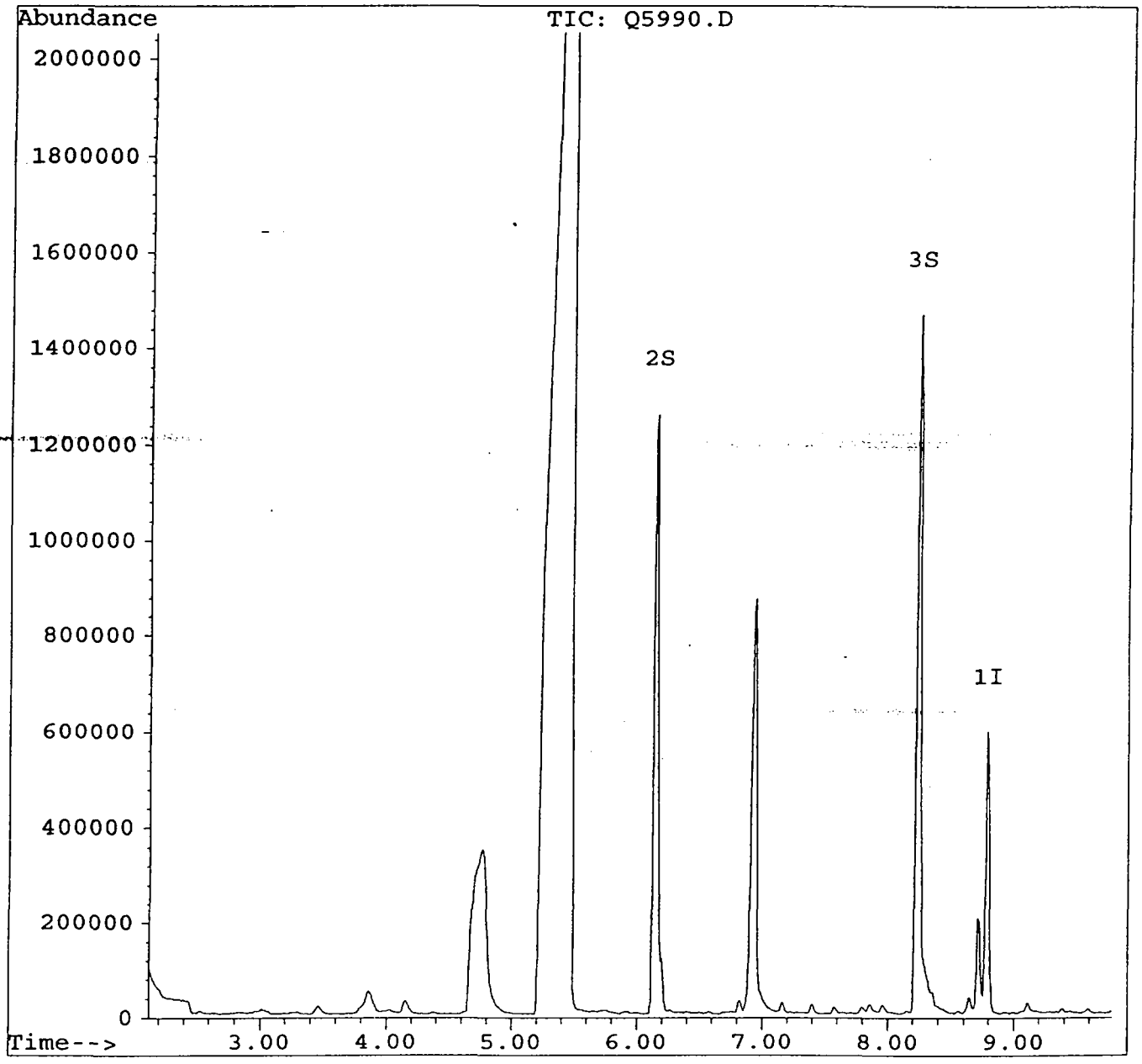
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5990.D
Acq On : 29 Oct 99 19:47 hrs
Sample : 992732A-03
Misc : S2-2-01 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:13 1999

Vial: 16
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 21.37

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

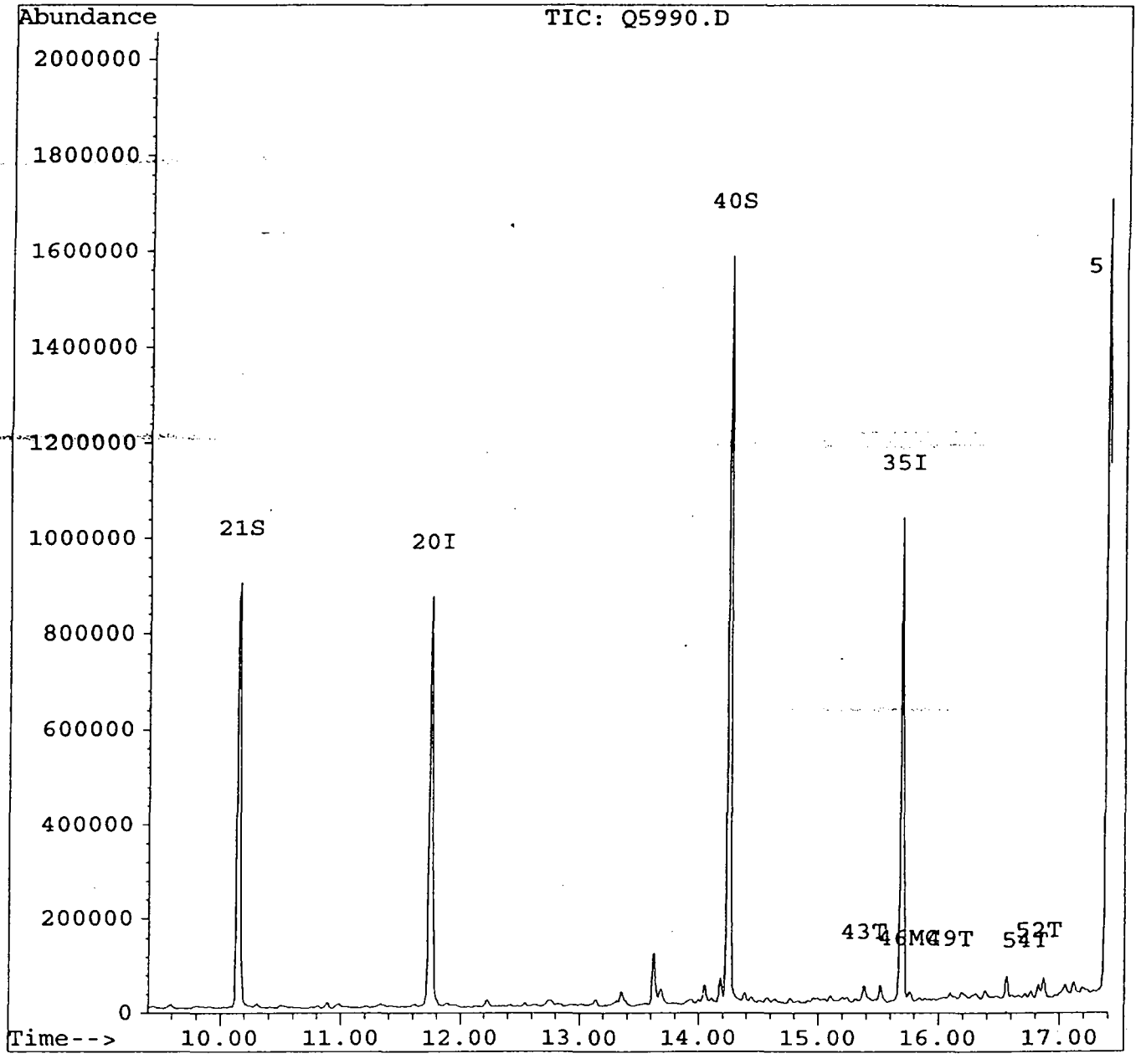


Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5990.D
Acq On : 29 Oct 99 19:47 hrs
Sample : 992732A-03
Misc : S2-2-01 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:13 1999

Vial: 16
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 21.37

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

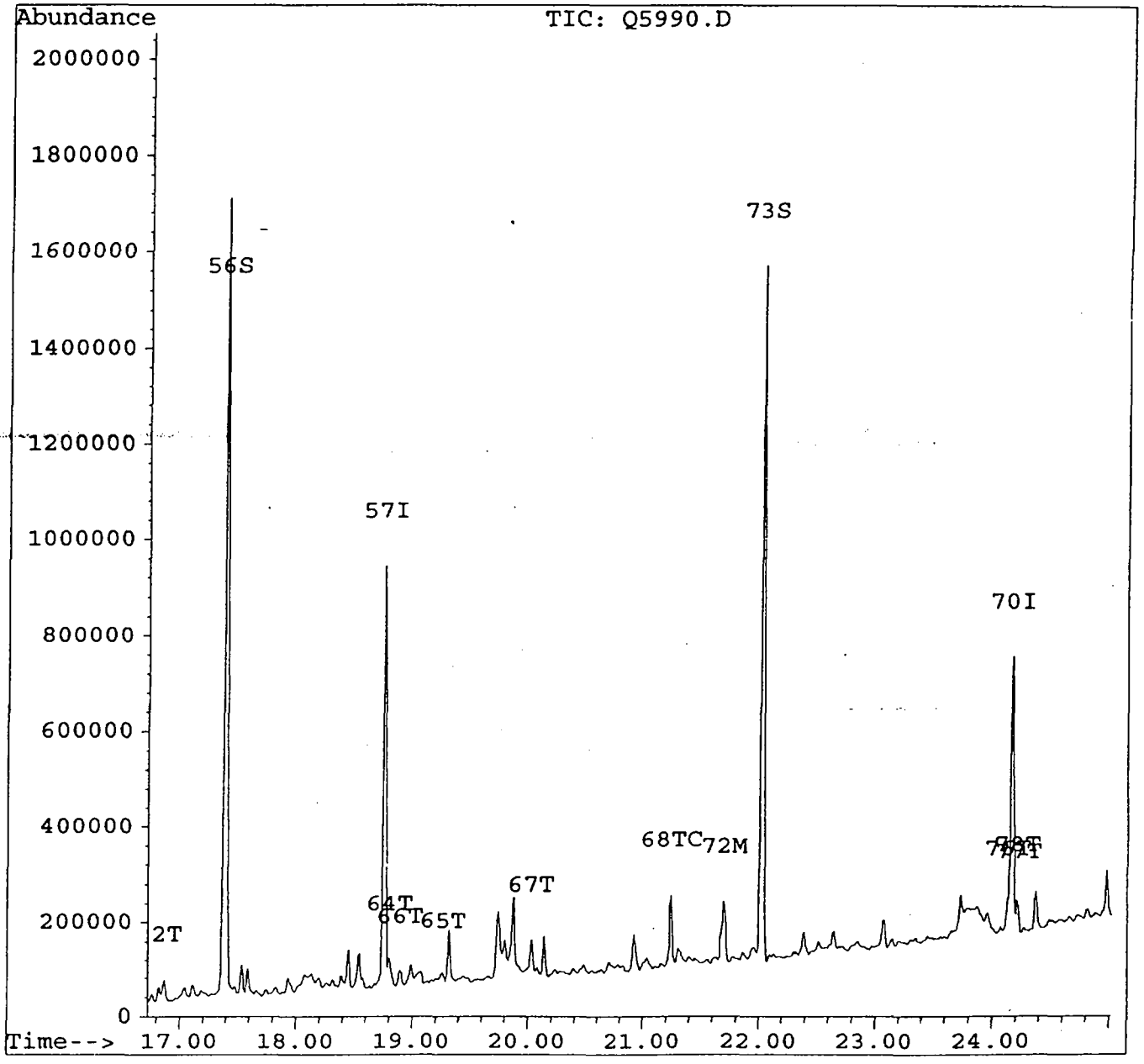


Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5990.D
Acq On : 29 Oct 99 19:47 hrs
Sample : 992732A-03
Misc : S2-2-01 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:13 1999

Vial: 16
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 21.37

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

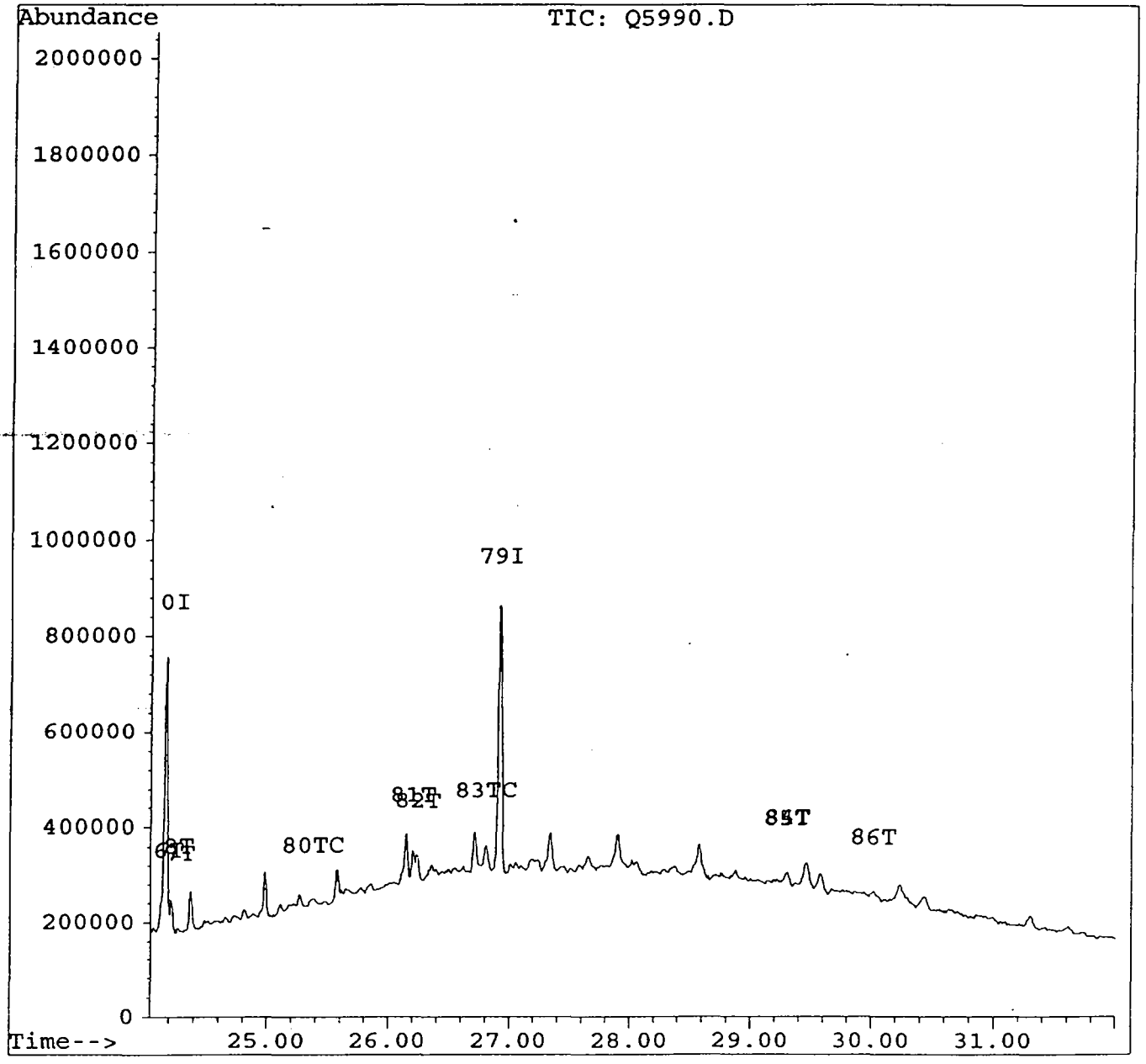


Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5990.D
Acq On : 29 Oct 99 19:47 hrs
Sample : 992732A-03
Misc : S2-2-01 ; SWC ; 1 ; LLS ; Q0388
Quant Time: Nov 3 10:13 1999

Vial: 16
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 21.37

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration



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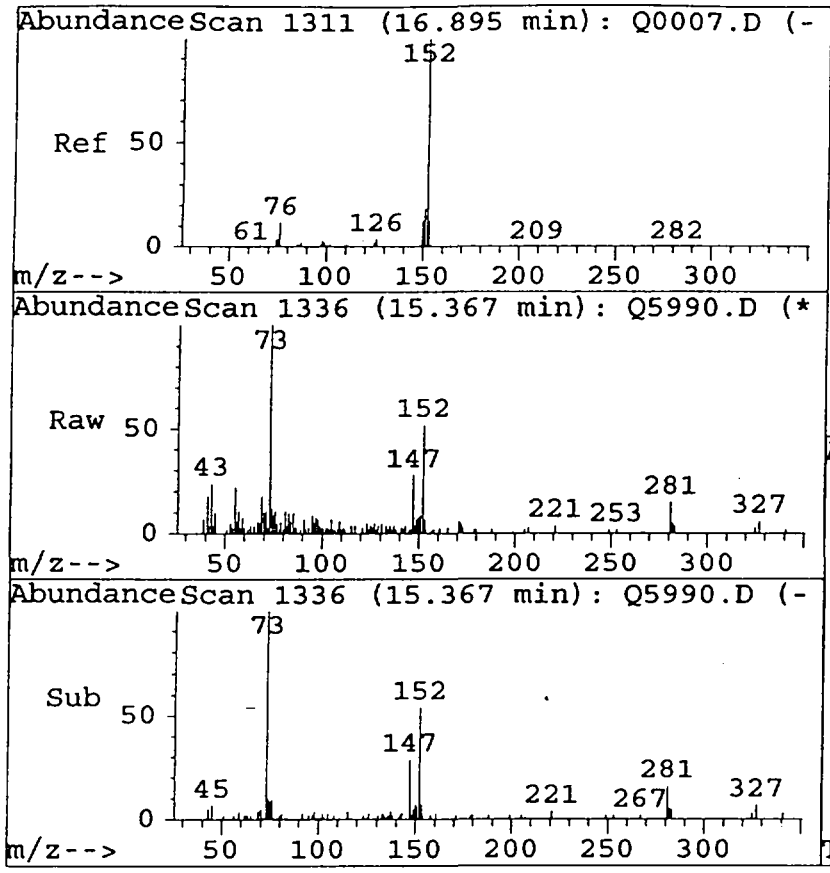
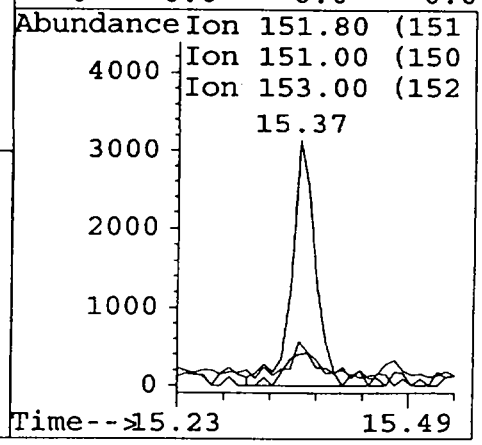
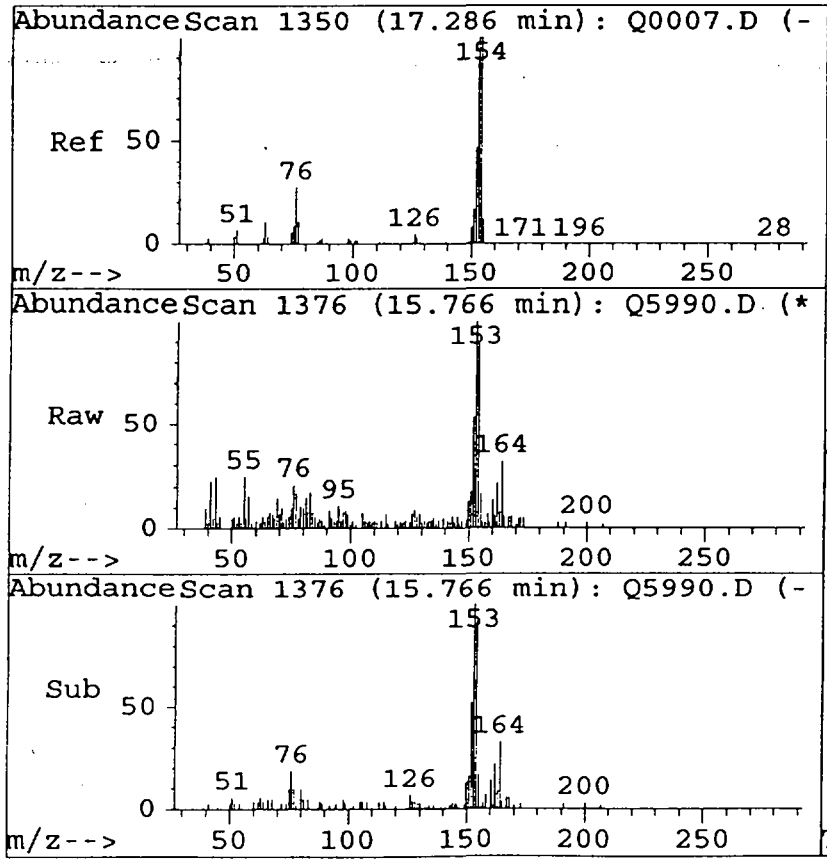


#43
Acenaphthylene
Concen: 7.08 ug
RT: 15.37 min Scan# 1336
Delta R.T. 0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:151.8 Resp: 6328

Ion	Ratio	Lower	Upper
152	100		
151	11.7	0.0	39.1
153	12.8	0.0	35.5
0	0.0	0.0	0.0

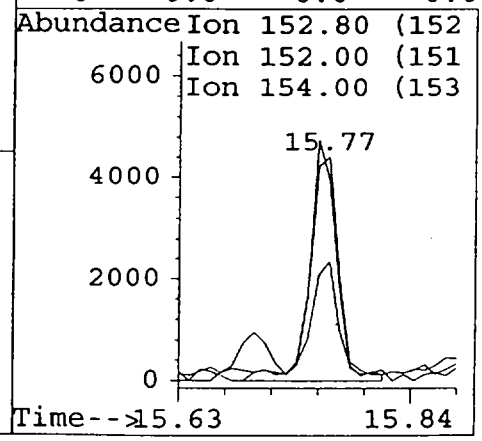


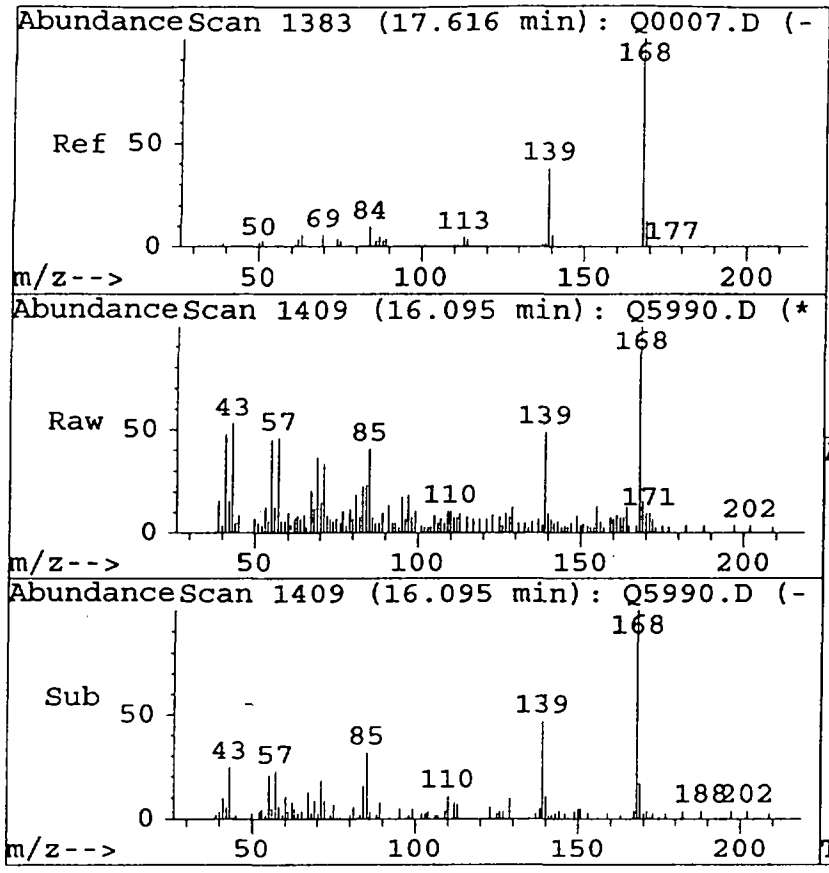


#46
Acenaphthene
Concen: 16.69 ug
RT: 15.77 min Scan# 1376
Delta R.T. 0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:152.8 Resp: 8428

Ion	Ratio	Lower	Upper
153	100		
152	50.6	25.4	65.4
154	84.6	86.4	126.4#
0	0.0	0.0	0.0

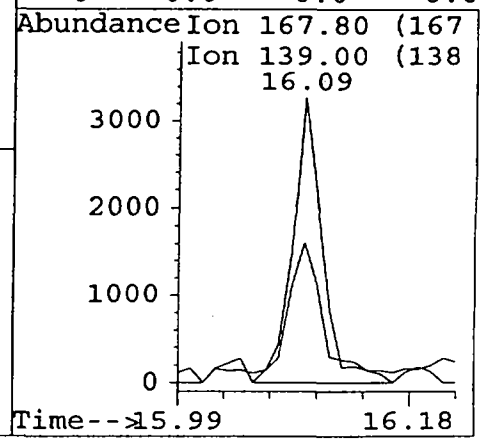


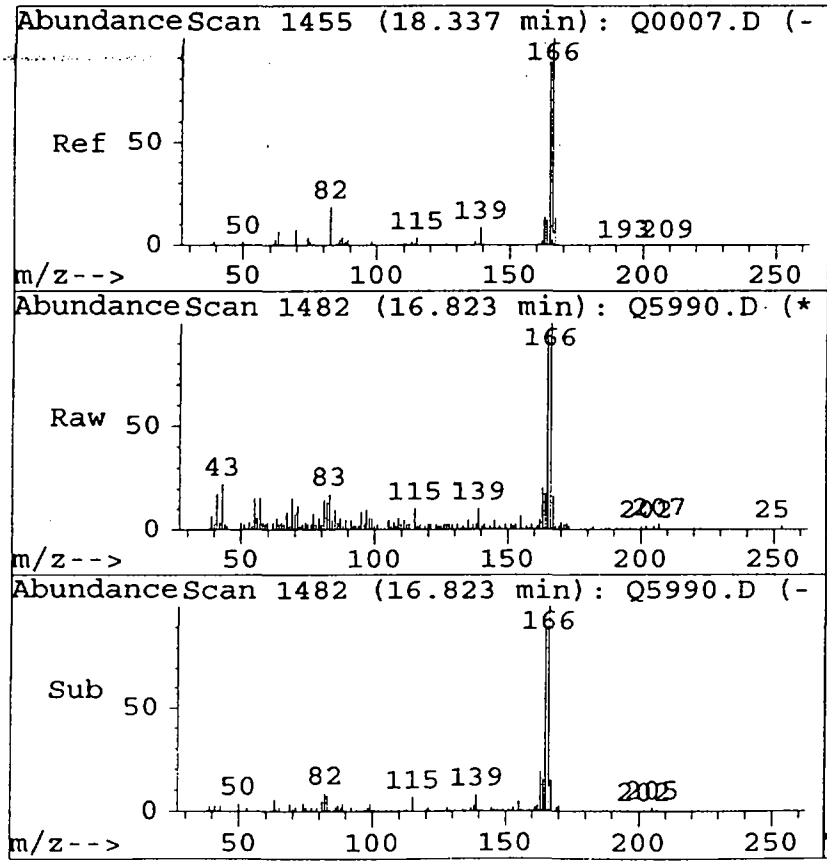


#49
Dibenzofuran
Concen: 7.04 ug
RT: 16.09 min Scan# 1409
Delta R.T. -0.01 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:167.8 Resp: 5294

Ion	Ratio	Lower	Upper
168	100		
139	46.1	16.8	56.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

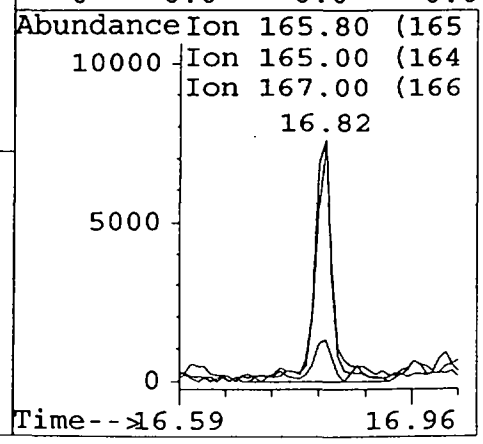


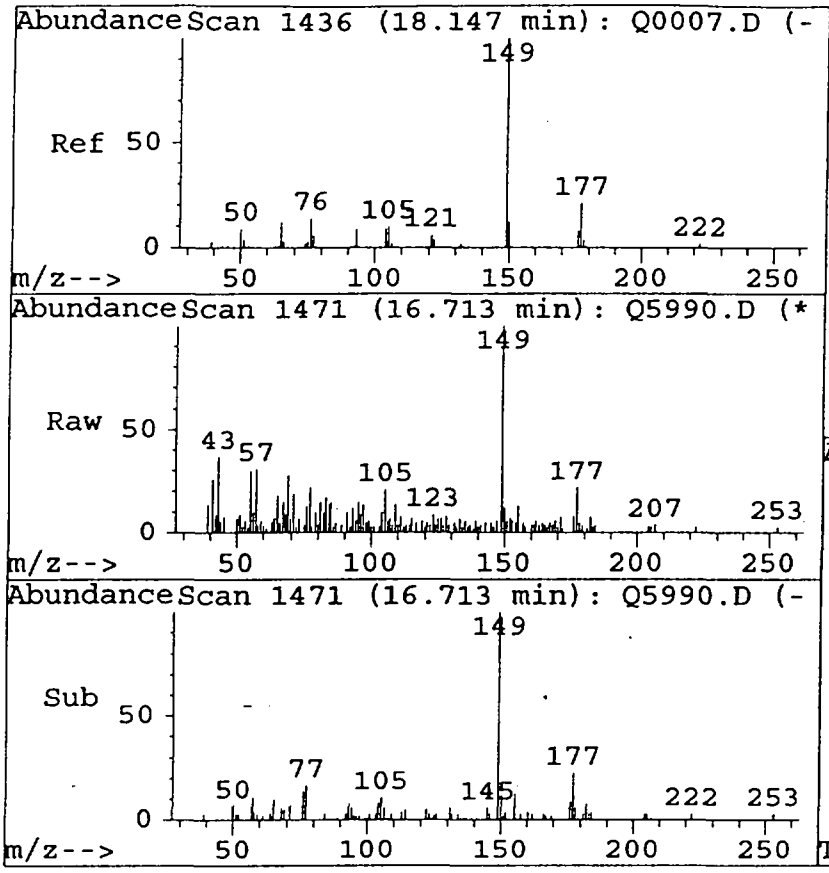


#52
Fluorene
Concen: 26.83 ug
RT: 16.82 min Scan# 1482
Delta R.T. -0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:165.8 Resp: 14413

Ion	Ratio	Lower	Upper
166	100		
165	94.8	63.4	103.4
167	15.4	0.0	35.0
0	0.0	0.0	0.0

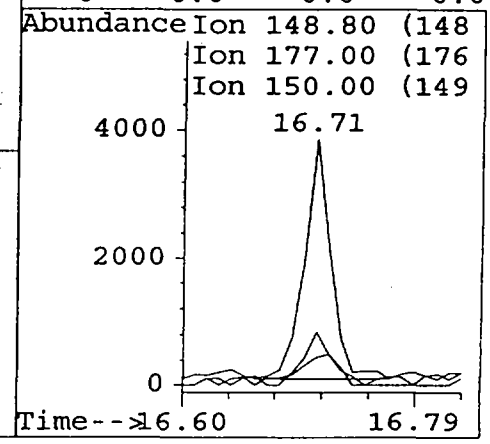


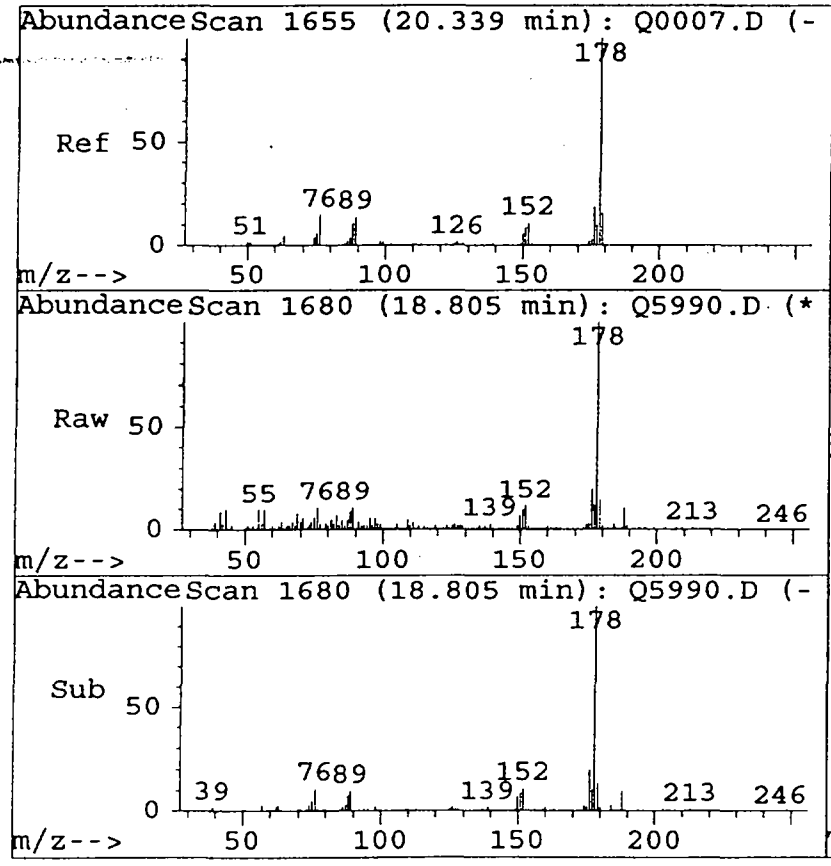


#54
Diethylphthalate
Concen: 7.46 ug
RT: 16.71 min Scan# 1471
Delta R.T. -0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:148.8 Resp: 5718

Ion	Ratio	Lower	Upper
149	100		
177	18.9	1.5	41.5
150	11.8	0.0	32.9
0	0.0	0.0	0.0

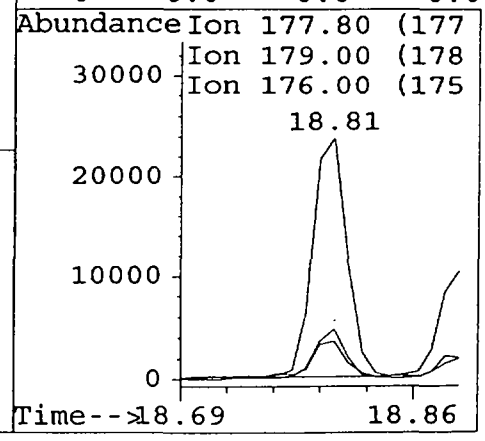


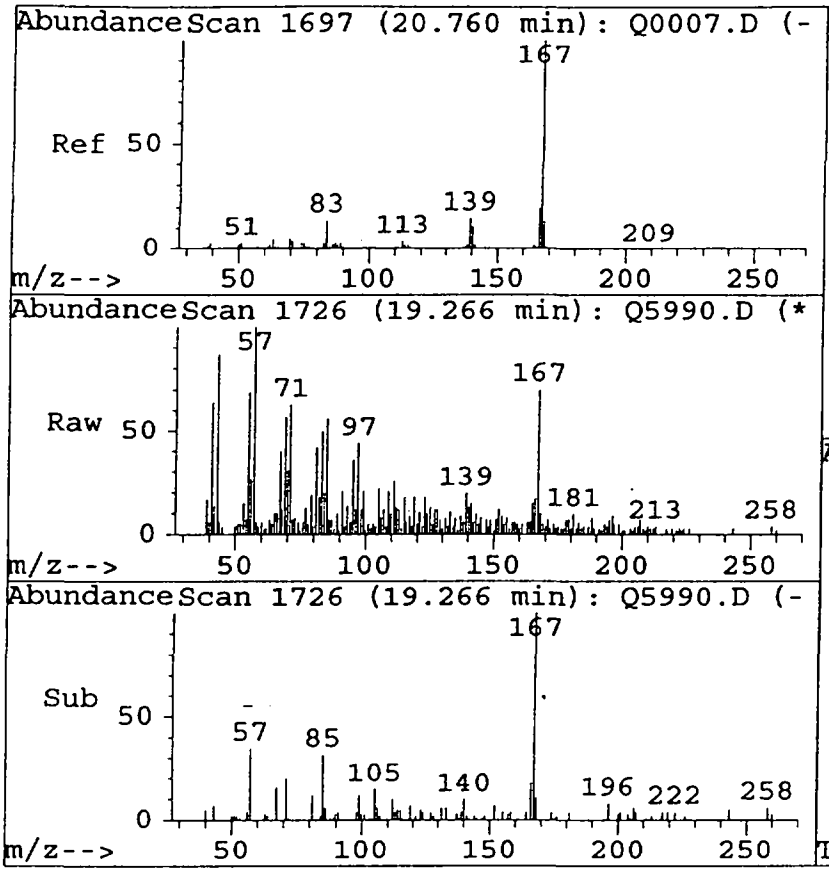


#64
Phenanthrene
Concen: 64.86 ug
RT: 18.81 min Scan# 1680
Delta R.T. -0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:177.8 Resp: 39605

Ion	Ratio	Lower	Upper
178	100		
179	13.9	0.0	37.1
176	19.6	0.0	38.4
0	0.0	0.0	0.0

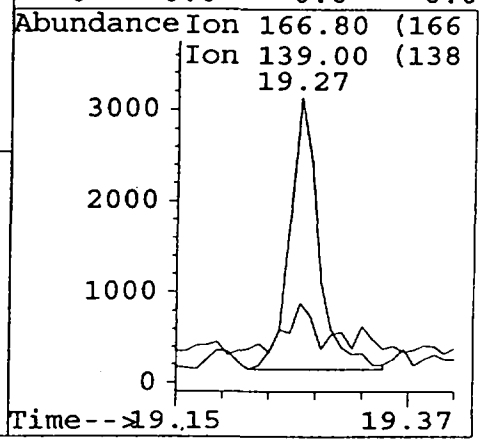


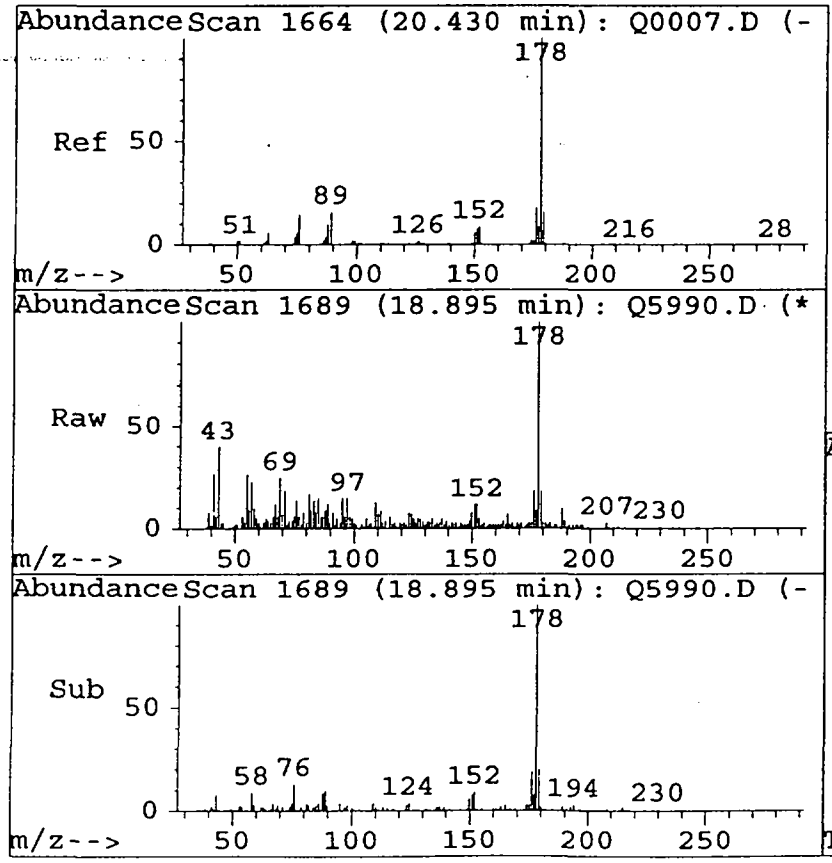


#65
Carbazole
Concen: 8.33 ug
RT: 19.27 min Scan# 1726
Delta R.T. 0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:166.8 Resp: 5861

Ion	Ratio	Lower	Upper
167	100		
139	17.6	10.6	15.9#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

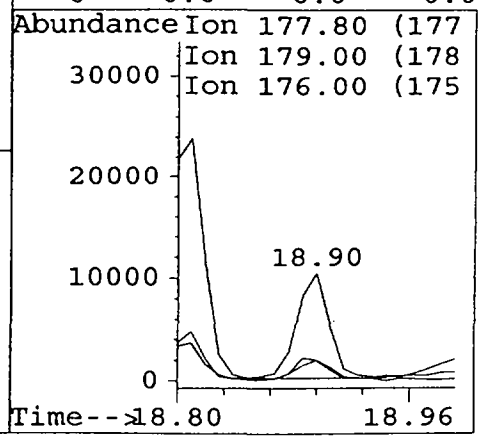


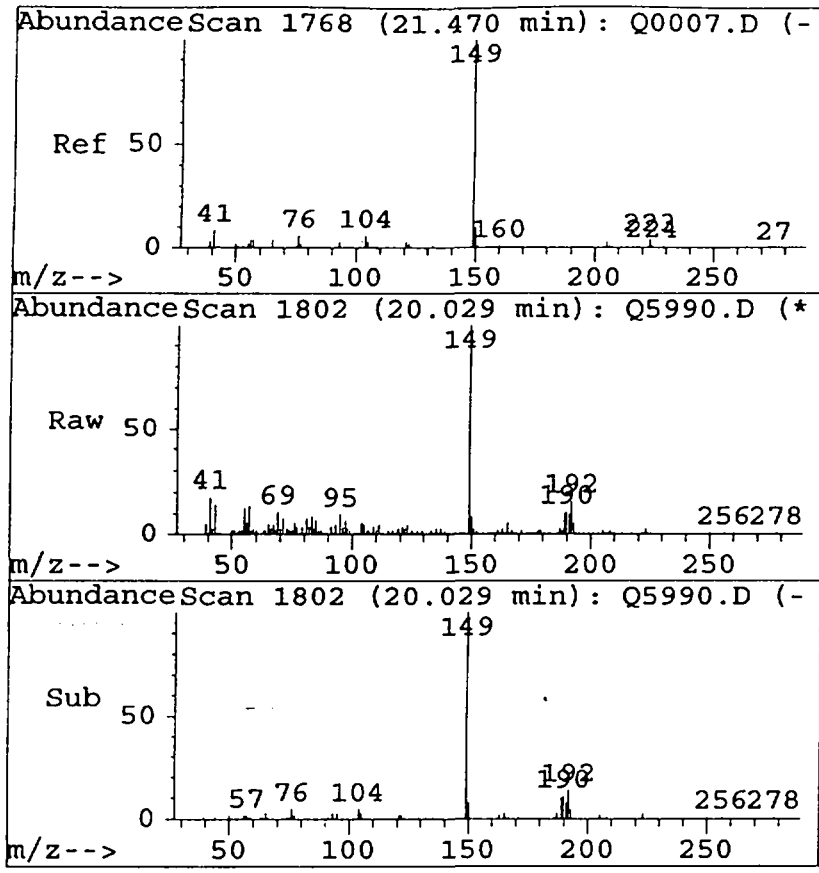


#66
Anthracene
Concen: 27.03 ug
RT: 18.90 min Scan# 1689
Delta R.T. -0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:177.8 Resp: 16656

Ion	Ratio	Lower	Upper
178	100		
179	16.6	0.0	37.5
176	19.3	0.0	38.0
0	0.0	0.0	0.0

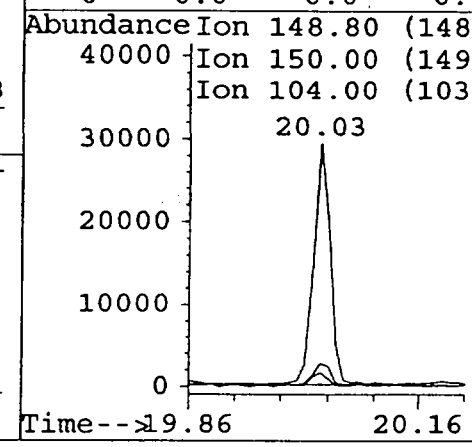


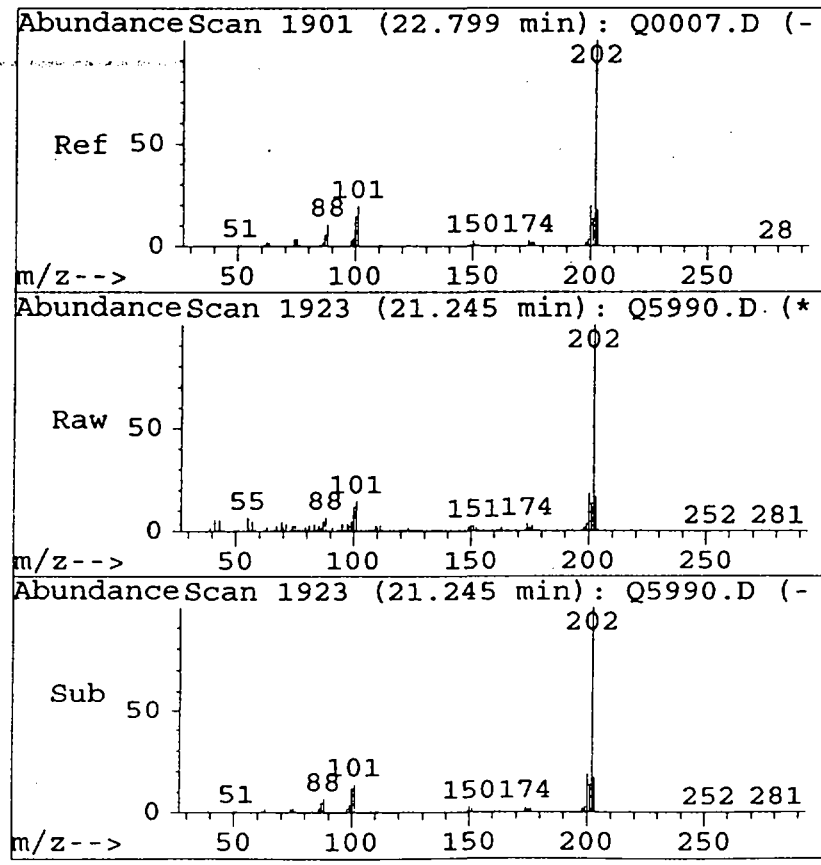


#67
Di-n-butylphthalate
Concen: 41.81 ug
RT: 20.03 min Scan# 1802
Delta R.T. -0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:148.8 Resp: 43821

Ion	Ratio	Lower	Upper
149	100		
150	8.6	0.0	31.5
104	5.2	0.0	25.2
0	0.0	0.0	0.0

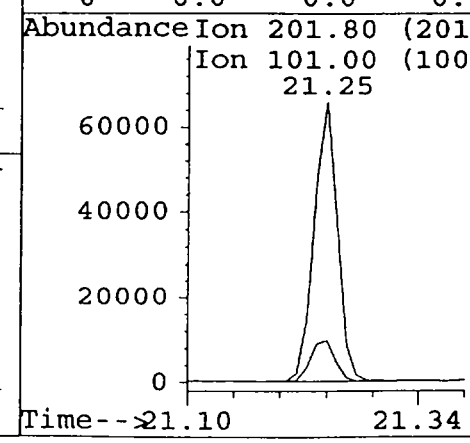


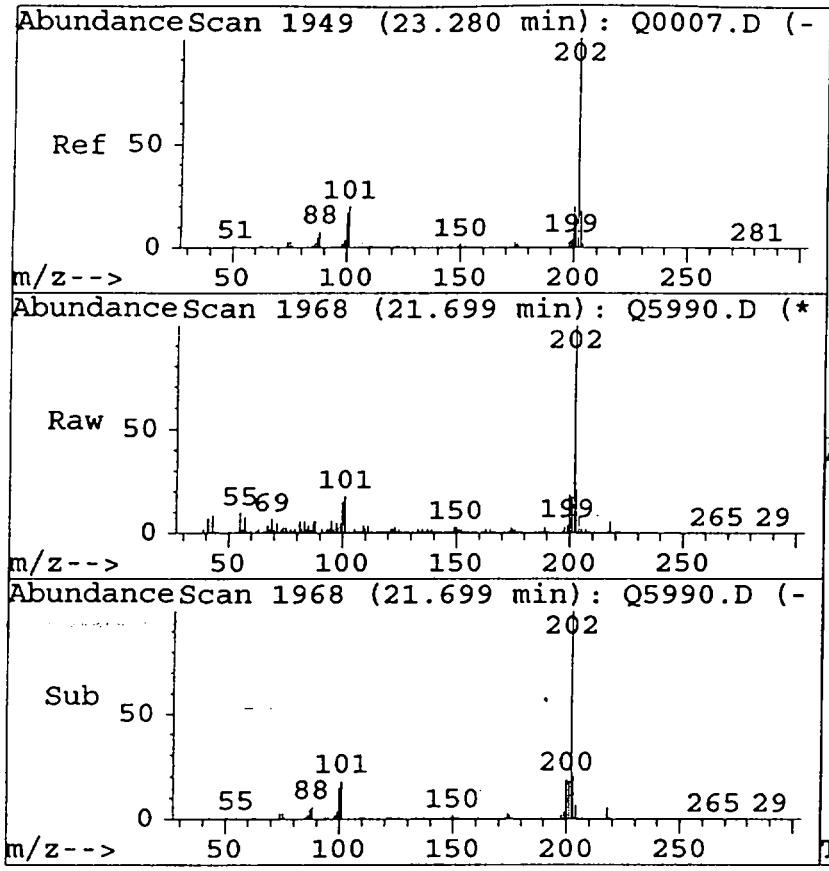


#68
Fluoranthene
Concen: 142.40 ug
RT: 21.25 min Scan# 1923
Delta R.T. 0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:201.8 Resp: 107708

Ion	Ratio	Lower	Upper
202	100		
101	14.6	0.0	38.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

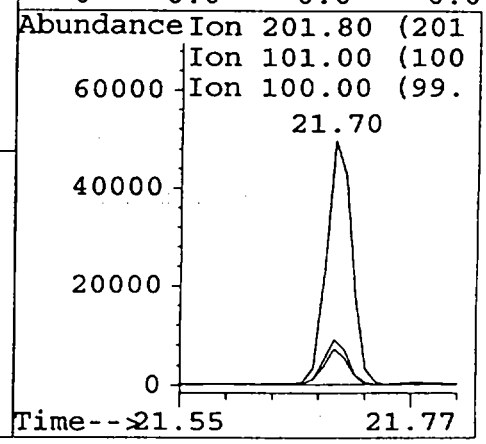


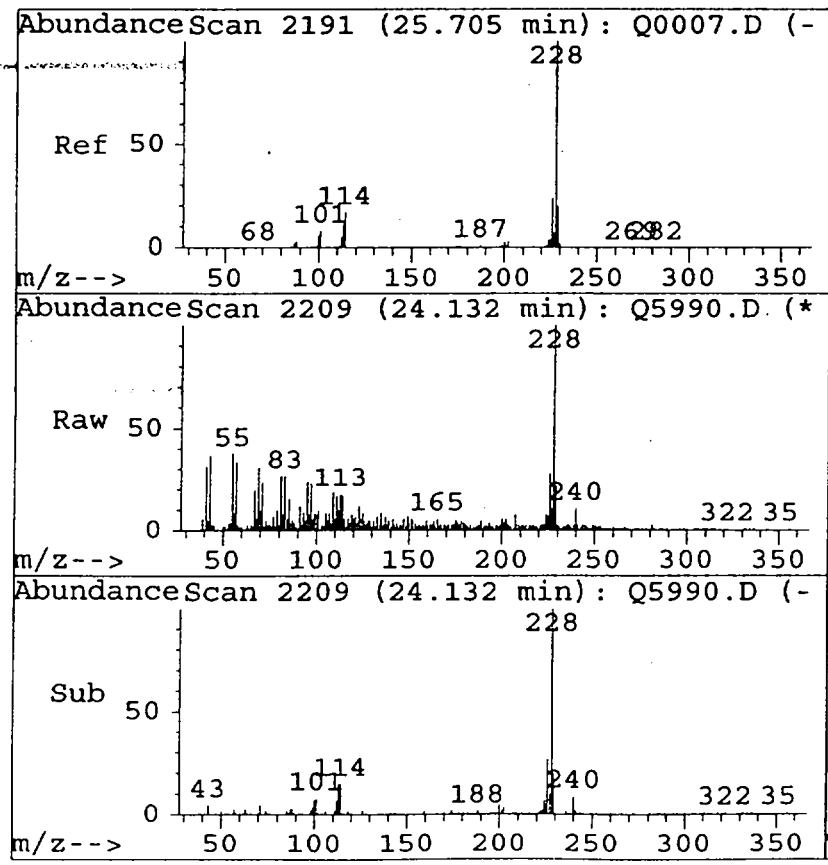


#72
Pyrene
Concen: 142.67 ug
RT: 21.70 min Scan# 1968
Delta R.T. -0.01 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:201.8 Resp: 84171

Ion	Ratio	Lower	Upper
202	100		
101	17.9	2.7	42.7
100	14.4	0.0	37.5
0	0.0	0.0	0.0

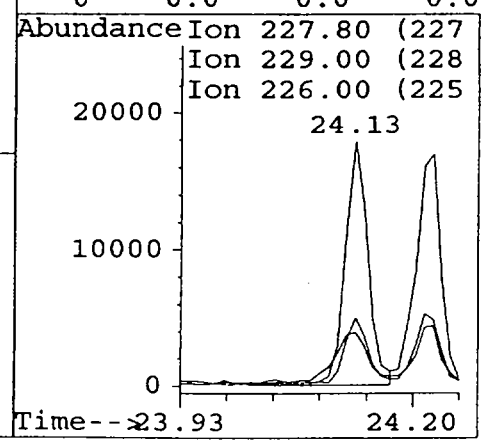


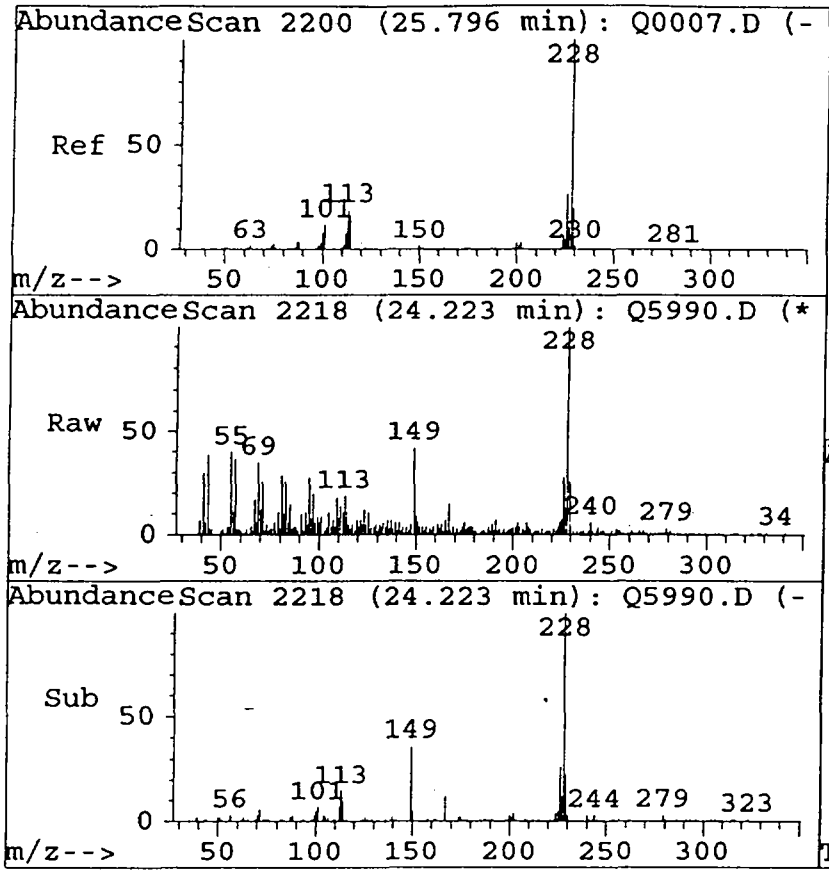


#76
Benzo(a)anthracene
Concen: 62.61 ug
RT: 24.13 min Scan# 2209
Delta R.T. 0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:227.8 Resp: 32602

Ion	Ratio	Lower	Upper
228	100		
229	20.2	1.7	41.7
226	26.4	4.8	44.8
0	0.0	0.0	0.0

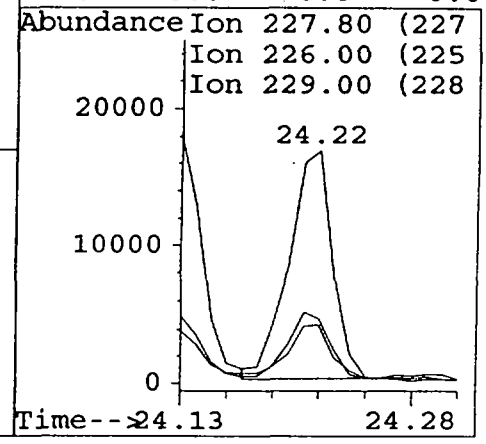


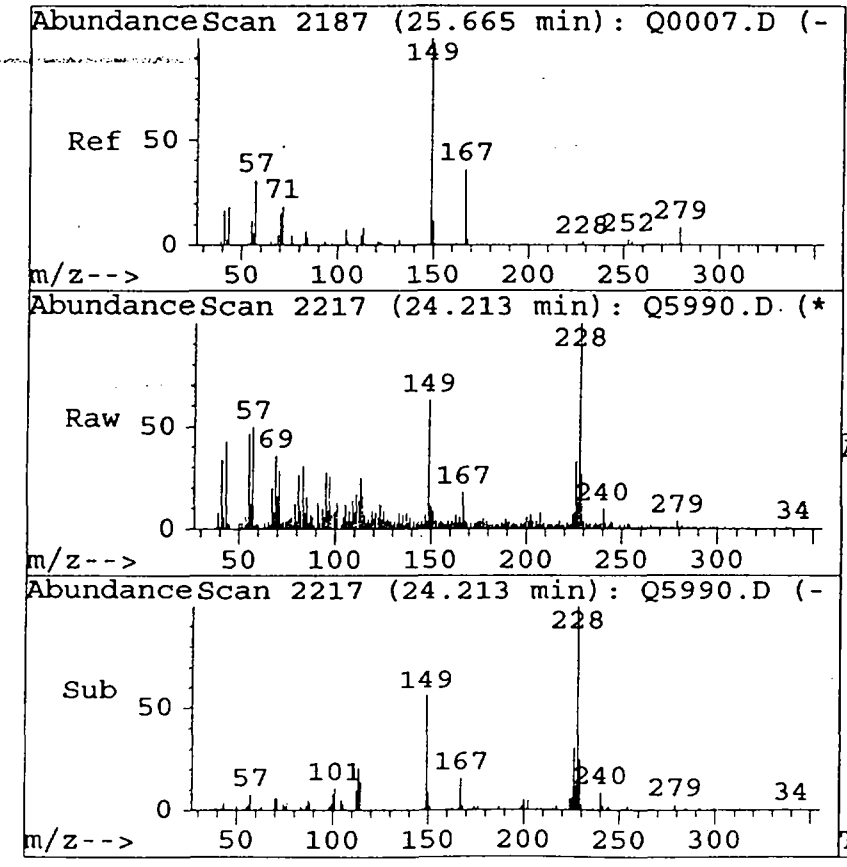


#77
Chrysene
Concen: 79.47 ug
RT: 24.22 min Scan# 2218
Delta R.T. -0.01 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:227.8 Resp: 33123

Ion	Ratio	Lower	Upper
228	100		
226	26.7	7.6	47.6
229	23.5	2.2	42.2
0	0.0	0.0	0.0

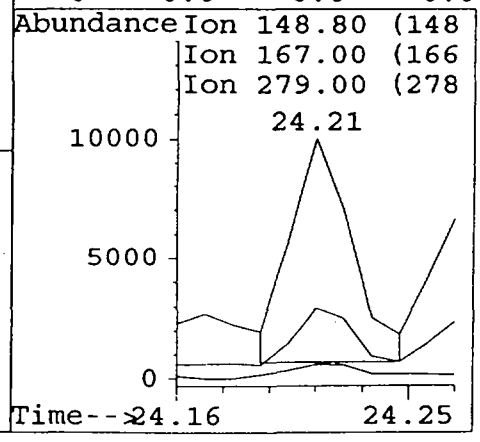


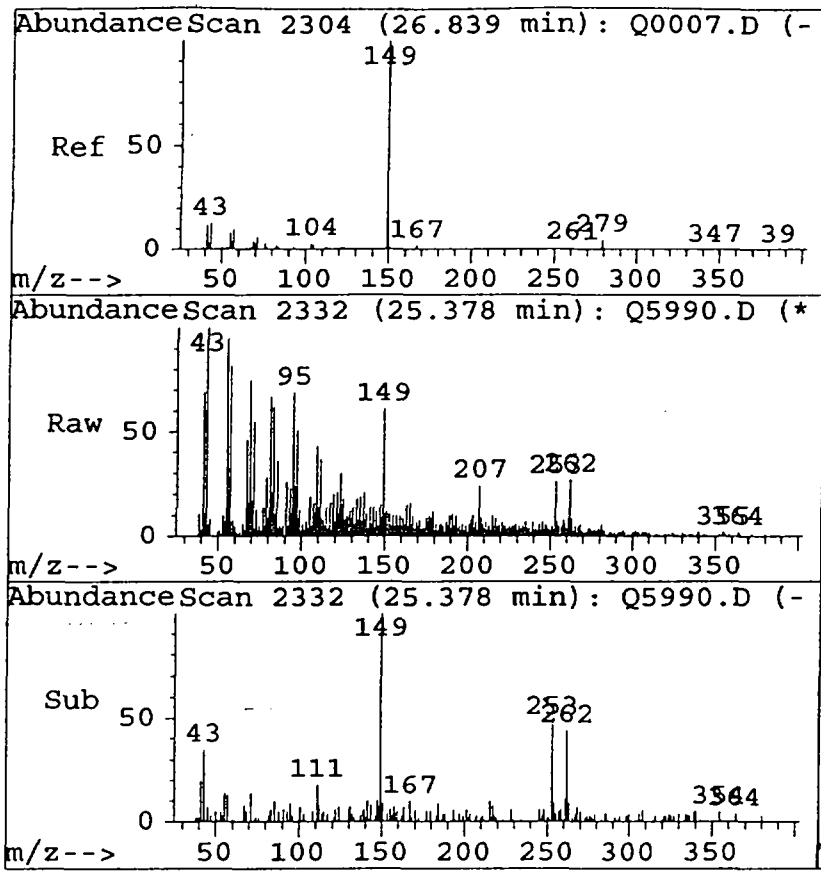


#78
bis(2-Ethylhexyl)phthalate
Concen: 35.78 ug m
RT: 24.21 min Scan# 2217
Delta R.T. 0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:148.8 Resp: 14410

Ion	Ratio	Lower	Upper
149	100		
167	29.0	16.4	56.4
279	5.8	0.0	28.7
0	0.0	0.0	0.0

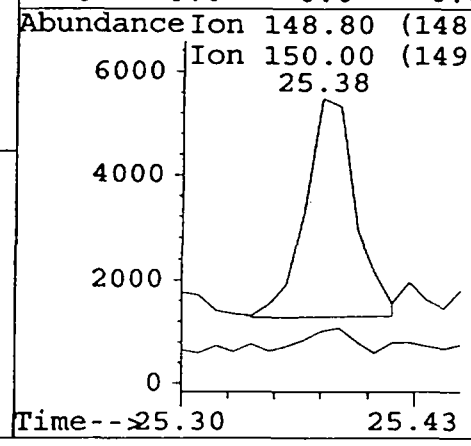


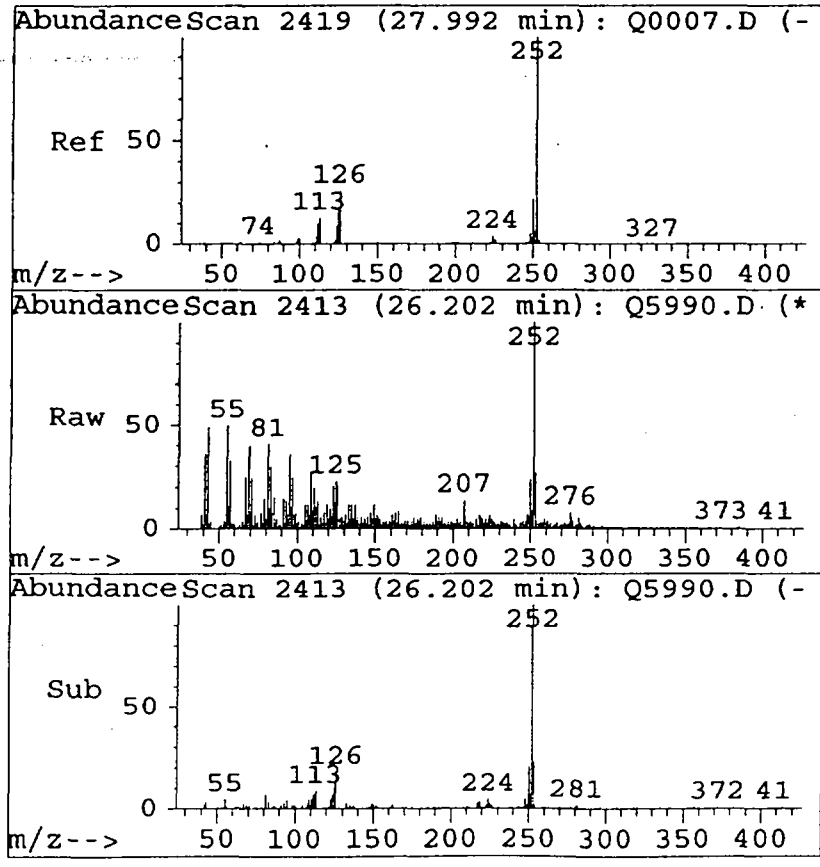


#80
Di-n-octylphthalate
Concen: 8.07 ug m
RT: 25.38 min Scan# 2332
Delta R.T. 0.01 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:148.8 Resp: 8410

Ion	Ratio	Lower	Upper
149	100		
150	18.5	0.0	32.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

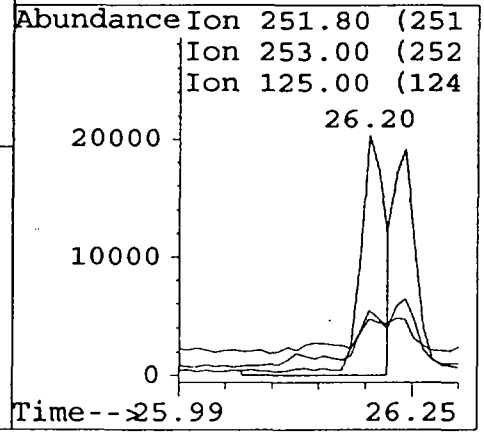


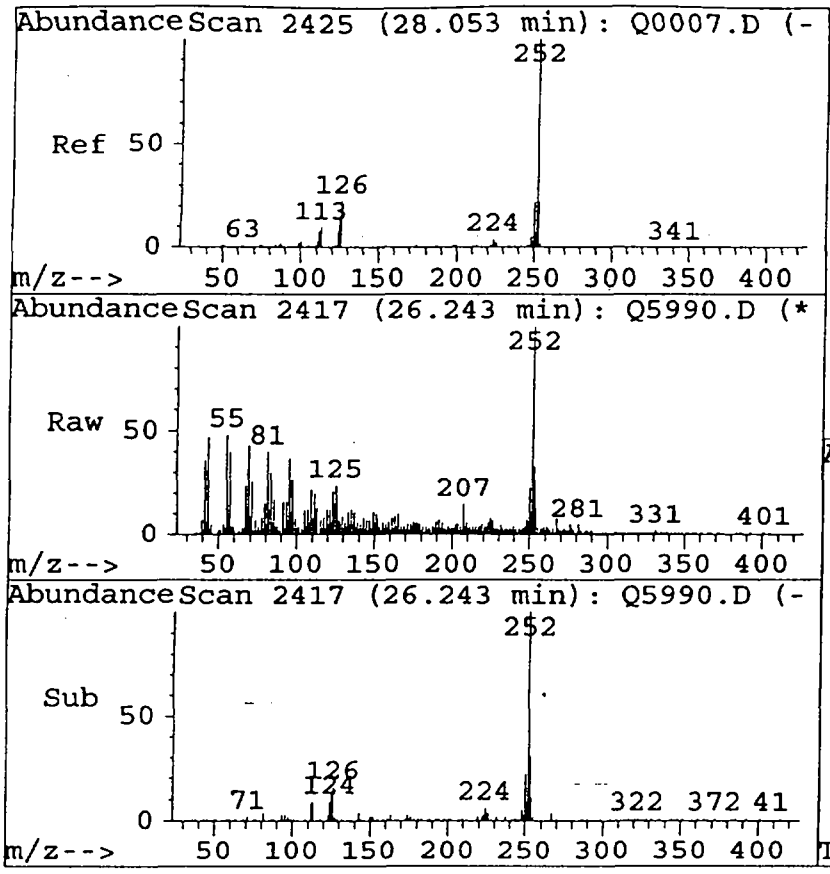


#81
Benzo(b)fluoranthene
Concen: 54.33 ug m
RT: 26.20 min Scan# 2413
Delta R.T. -0.01 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:251.8 Resp: 40759

Ion	Ratio	Lower	Upper
252	100		
253	26.6	4.4	44.4
125	23.1	0.0	38.4
0	0.0	0.0	0.0

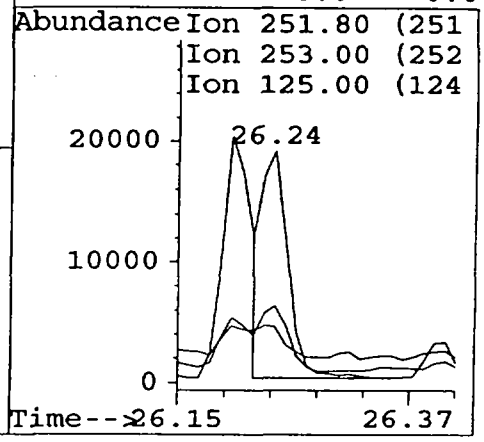


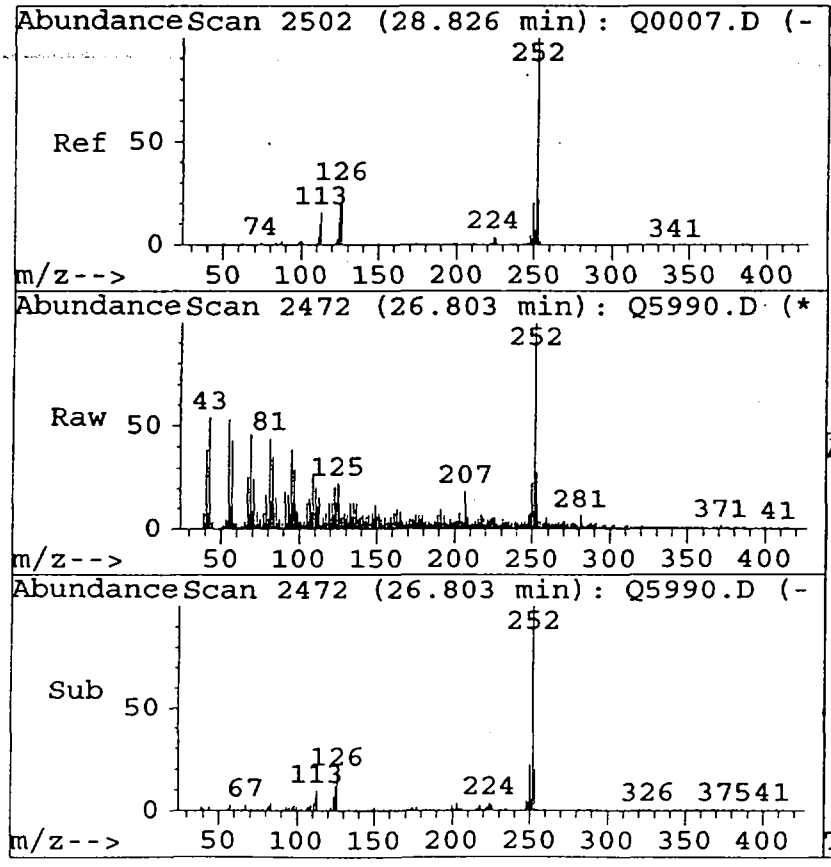


#82
Benzo(k)fluoranthene
Concen: 75.04 ug
RT: 26.24 min Scan# 2417
Delta R.T. -0.01 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:251.8 Resp: 32375

Ion	Ratio	Lower	Upper
252	100		
253	27.6	4.5	44.5
125	13.2	0.0	37.6
0	0.0	0.0	0.0

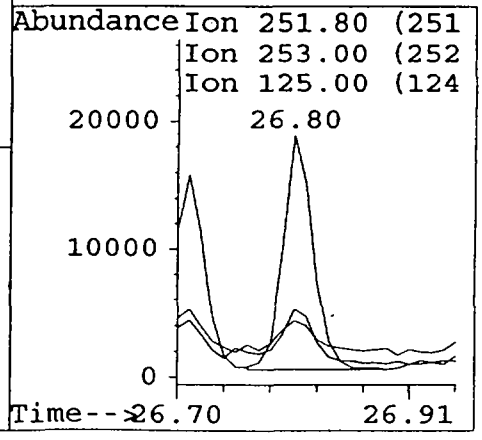




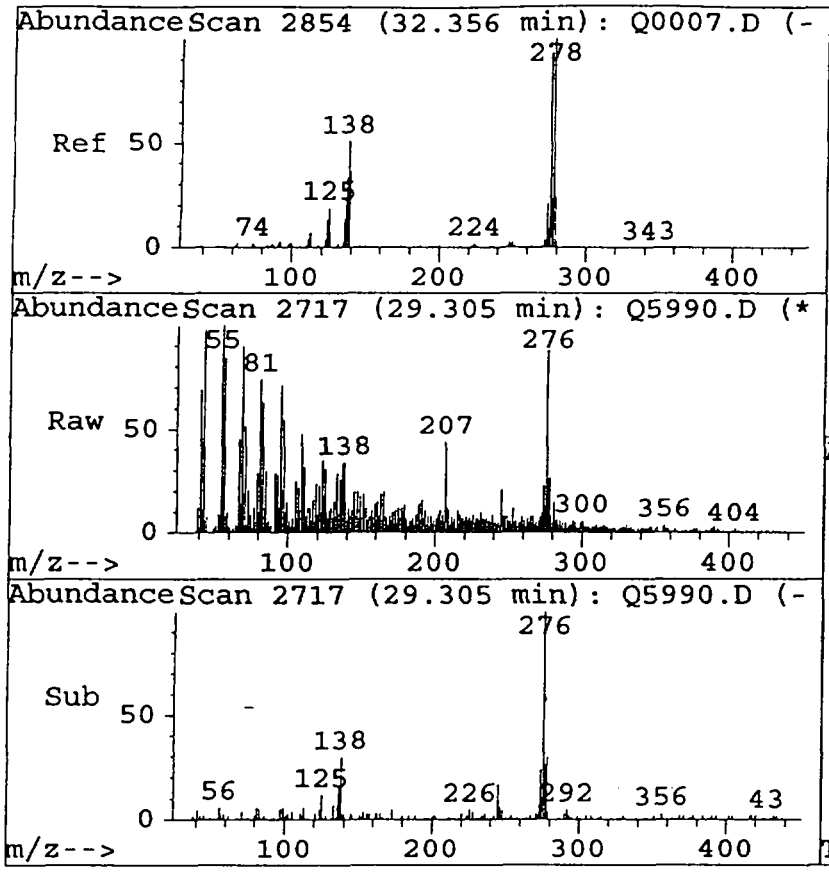
#83
Benzo(a)pyrene
Concen: 56.43 ug
RT: 26.80 min Scan# 2472
Delta R.T. 0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:251.8 Resp: 33206

Ion	Ratio	Lower	Upper
252	100		
253	23.1	3.9	43.9
125	11.5	0.0	39.6
0	0.0	0.0	0.0



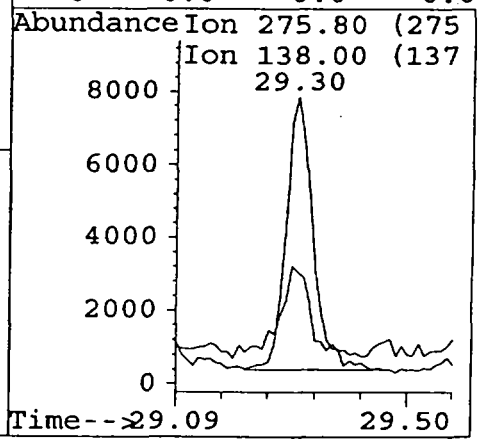
0079a

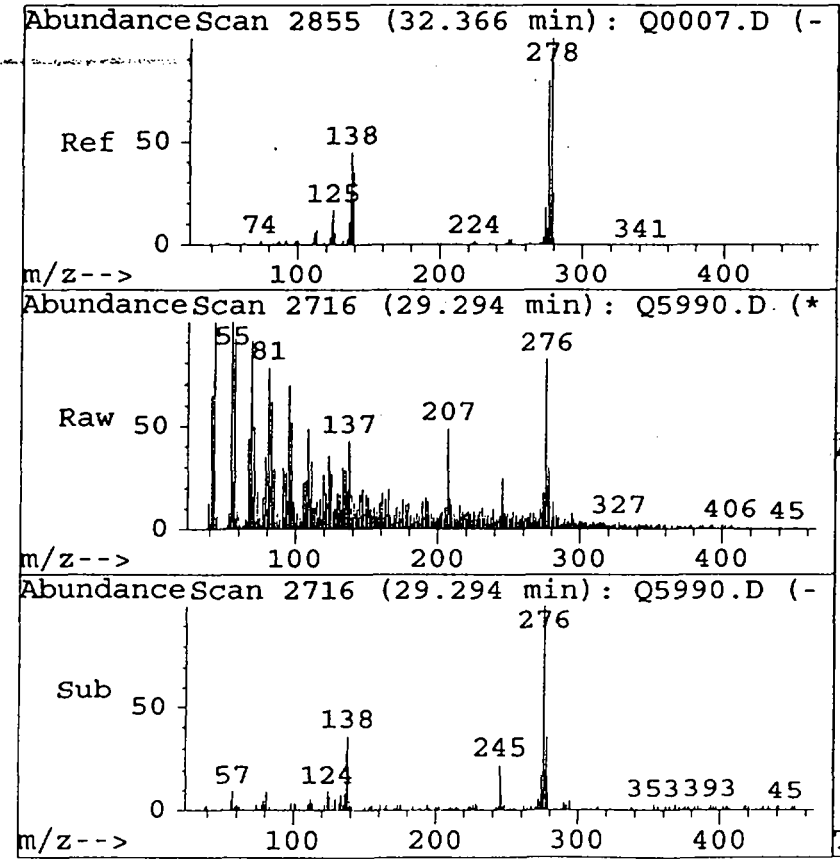


#84
Indeno(1,2,3-cd)pyrene
Concen: 35.32 ug
RT: 29.30 min Scan# 2717
Delta R.T. 0.01 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:275.8 Resp: 24215

Ion	Ratio	Lower	Upper
276	100		
138	29.3	36.8	76.8#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

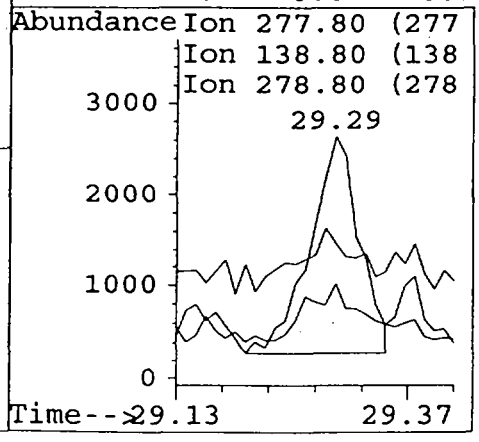


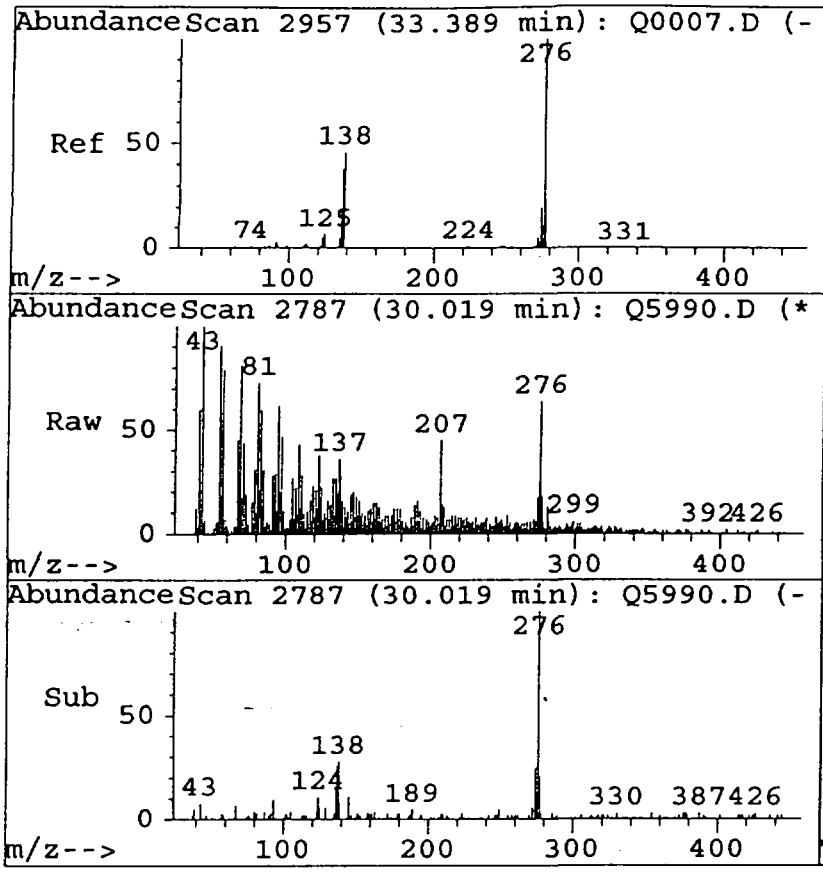


#85
Dibenzo(a,h)anthracene
Concen: 14.14 ug
RT: 29.29 min Scan# 2716
Delta R.T. 0.00 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:277.8 Resp: 8187

Ion	Ratio	Lower	Upper
278	100		
139	13.9	12.0	52.0
279	25.7	4.7	44.7
0	0.0	0.0	0.0

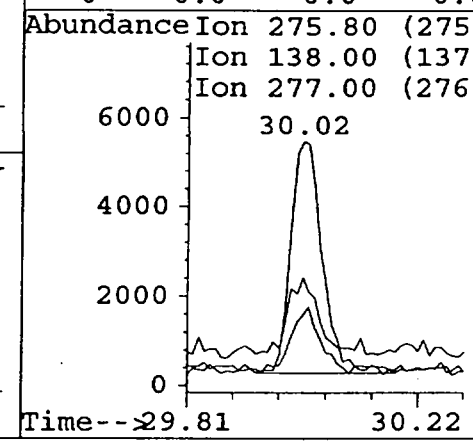




#86
Benzo(g,h,i)perylene
Concen: 29.87 ug
RT: 30.02 min Scan# 2787
Delta R.T. 0.01 min
Lab File: Q5990.D
Acq: 29 Oct 99 19:47 hrs

Tgt Ion:275.8 Resp: 20061

Ion	Ratio	Lower	Upper
276	100		
138	32.8	27.8	67.8
277	24.6	5.1	45.1
0	0.0	0.0	0.0



1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S2-3-01

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: 992732A-04

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5991

Level: (low/med) LOW Date Received: 10/16/99

% Moisture: 58 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 2000 (uL) Date Analyzed: 10/29/99

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	15000	U
83-32-9	Acenaphthene	760	J
51-28-5	2,4-Dinitrophenol	15000	U
100-02-7	4-Nitrophenol	15000	U
132-64-9	Dibenzofuran	240	J
121-14-2	2,4-Dinitrotoluene	3100	U
84-66-2	Diethylphthalate	3100	U
7005-72-3	4-Chlorophenyl-phenylether	3100	U
86-73-7	Fluorene	780	J
100-01-6	4-Nitroaniline	15000	U
534-52-1	4,6-Dinitro-2-methylphenol	15000	U
86-30-6	N-Nitrosodiphenylamine (1)	3100	U
101-55-3	4-Bromophenyl-phenylether	3100	U
118-74-1	Hexachlorobenzene	3100	U
87-86-5	Pentachlorophenol	15000	U
85-01-8	Phenanthrene	2500	J
120-12-7	Anthracene	440	J
86-74-8	Carbazole	490	J
84-74-2	Di-n-butylphthalate	5200	B
206-44-0	Fluoranthene	16000	
129-00-0	Pyrene	19000	
85-68-7	Butylbenzylphthalate	3100	U
91-94-1	3,3'-Dichlorobenzidine	6300	U
56-55-3	Benzo(a)anthracene	9500	
218-01-9	Chrysene	12000	
117-81-7	bis(2-Ethylhexyl)phthalate	290	JB
117-84-0	Di-n-octylphthalate	36	JB
205-99-2	Benzo(b)fluoranthene	6800	
207-08-9	Benzo(k)fluoranthene	9000	
50-32-8	Benzo(a)pyrene	8500	
193-39-5	Indeno(1,2,3-cd)pyrene	4200	
53-70-3	Dibenzo(a,h)anthracene	1400	J
191-24-2	Benzo(g,h,i)perylene	3000	J

(1) - Cannot be separated from Diphenylamine

Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5991.D
Acq On : 29 Oct 99 20:28 hrs
Sample : 992732A-04
Misc : S2-3-01 ; SWC ; 2 ; LLS ; Q0388
Quant Time: Nov 3 10:20 1999

Vial: 17
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 158.72

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.78	152	237755	40.00 ug	0.00
20) Naphthalene-d8	11.74	136	926239	40.00 ug	0.00
35) Acenaphthene-d10	15.69	164	480424	40.00 ug	0.00
57) Phenanthrene-d10	18.76	188	656427	40.00 ug	0.00
70) Chrysene-d12	24.18	240	370630	40.00 ug	0.00
79) Perylene-d12	26.93	264	480781	40.00 ug	0.02
System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	6.13	112	331380	38.89 ug	19.45%
3) Phenol-d5	8.23	99	500927	52.09 ug	26.04%
21) Nitrobenzene-d5	10.14	82	220151	21.99 ug	21.99%
40) 2-Fluorobiphenyl	14.25	172	358928	29.28 ug	29.28%
56) 2,4,6-Tribromophenol	17.39	330	108832	46.31 ug	23.15%
73) Terphenyl-d14	22.03	244	273138	27.80 ug	27.80%
Target Compounds					Qvalue
43) Acenaphthylene	15.37	152	40368	310.16 ug	97
46) Acenaphthene	15.76	153	56188	764.24 ug	94
49) Dibenzofuran	16.10	168	26151	238.82 ug	96
52) Fluorene	16.82	166	60611	775.00 ug	94
64) Phenanthrene	18.80	178	215780	2464.28 ug	97
65) Carbazole	19.26	167	49325	488.85 ug	95
66) Anthracene	18.89	178	39378	445.68 ug	95
67) Di-n-butylphthalate	20.03	149	781252	5197.90 ug	97
68) Fluoranthene	21.27	202	1703639	15707.26 ug	76
72) Pyrene	21.72	202	1448756	19436.06 ug	76
76) Benzo(a)anthracene	24.14	228	625306	9503.92 ug	97
77) Chrysene	24.23	228	626647	11899.91 ug	99
78) bis(2-Ethylhexyl)phthalate	24.22	149	14883	292.49 ug	87
80) Di-n-octylphthalate	25.38	149	5327	36.45 ug m	97
81) Benzo(b)fluoranthene	26.22	252	711970	6766.84 ug	90
82) Benzo(k)fluoranthene	26.26	252	548154	9059.40 ug	91
83) Benzo(a)pyrene	26.83	252	701851	8504.68 ug	87
84) Indeno(1,2,3-cd)pyrene	29.31	276	399640	4156.76 ug #	61
85) Dibenzo(a,h)anthracene	29.30	278	118166	1454.87 ug m	85
86) Benzo(g,h,i)perylene	30.02	276	280817	2981.30 ug	81

All spectra and manual integrations for this sample have been reviewed and approved.

By: JW Date: 11/3/99

Secondary review: JW Date: 11/03/99

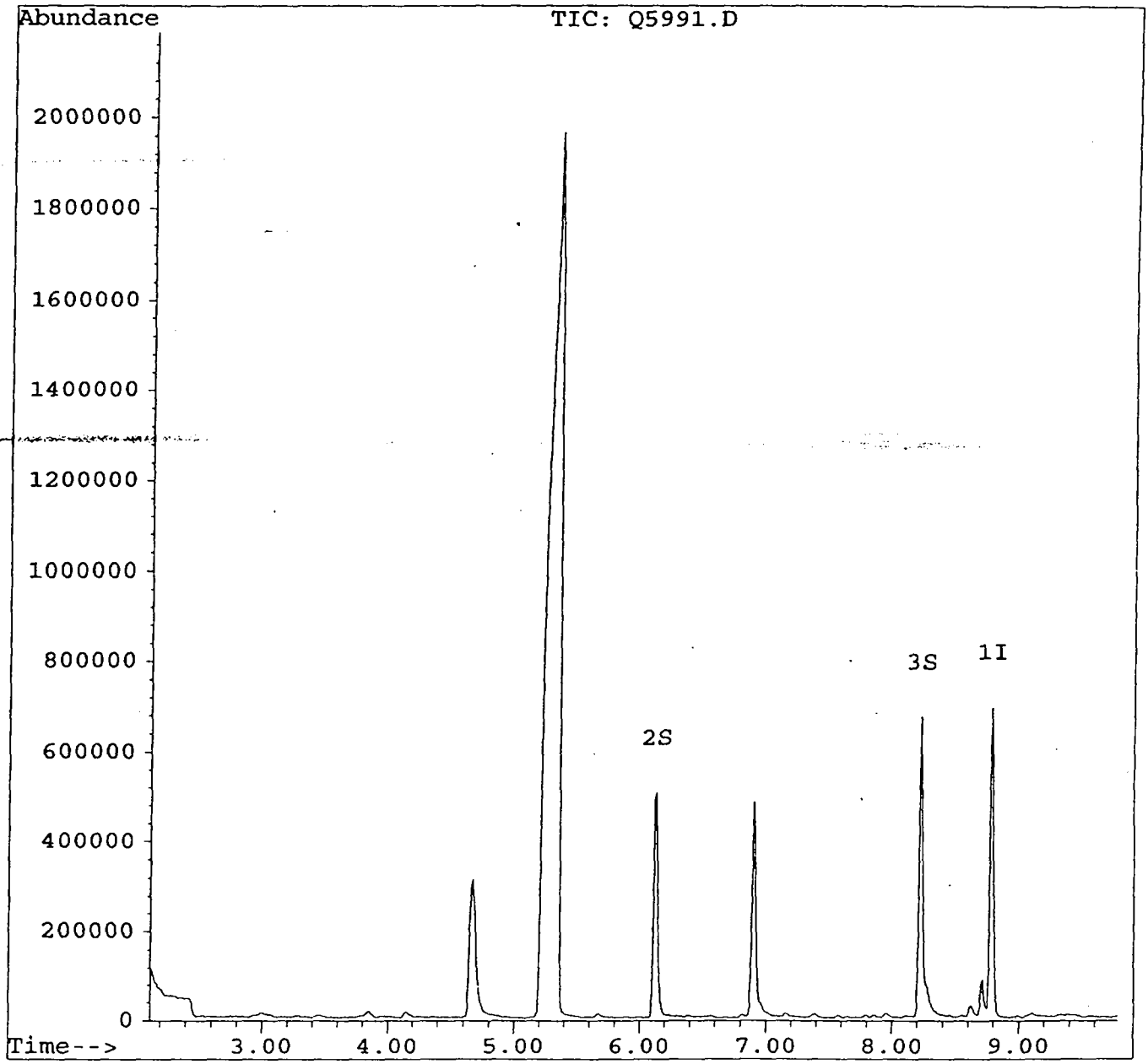
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5991.D
Acq On : 29 Oct 99 20:28 hrs
Sample : 992732A-04
Misc : S2-3-01 ; SWC ; 2 ; LLS ; Q0388
Quant Time: Nov 3 10:20 1999

Vial: 17
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 158.72

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

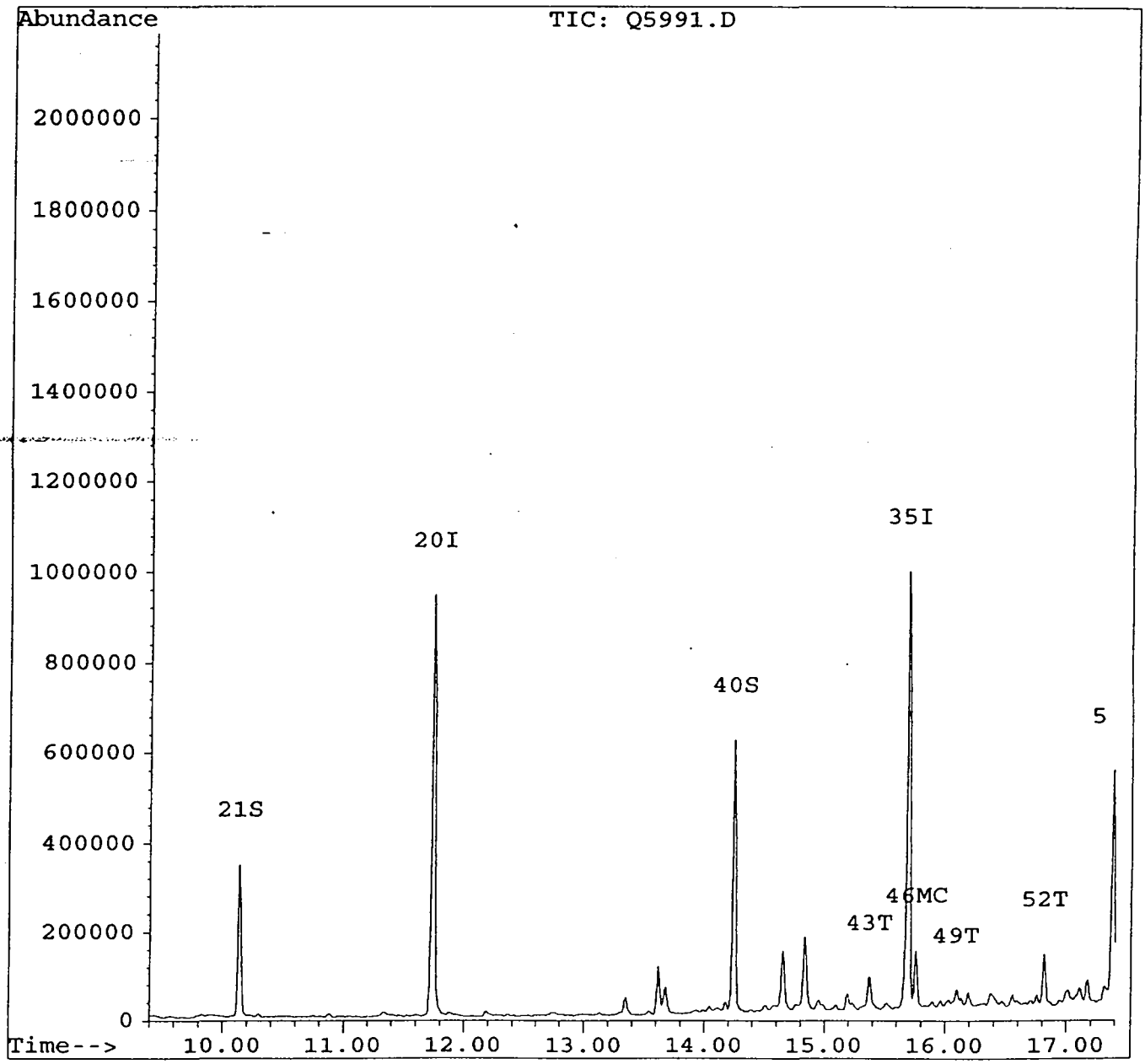


Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5991.D
Acq On : 29 Oct 99 20:28 hrs
Sample : 992732A-04
Misc : S2-3-01 ; SWC ; 2 ; LLS ; Q0388
Quant Time: Nov 3 10:20 1999

Vial: 17
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 158.72

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

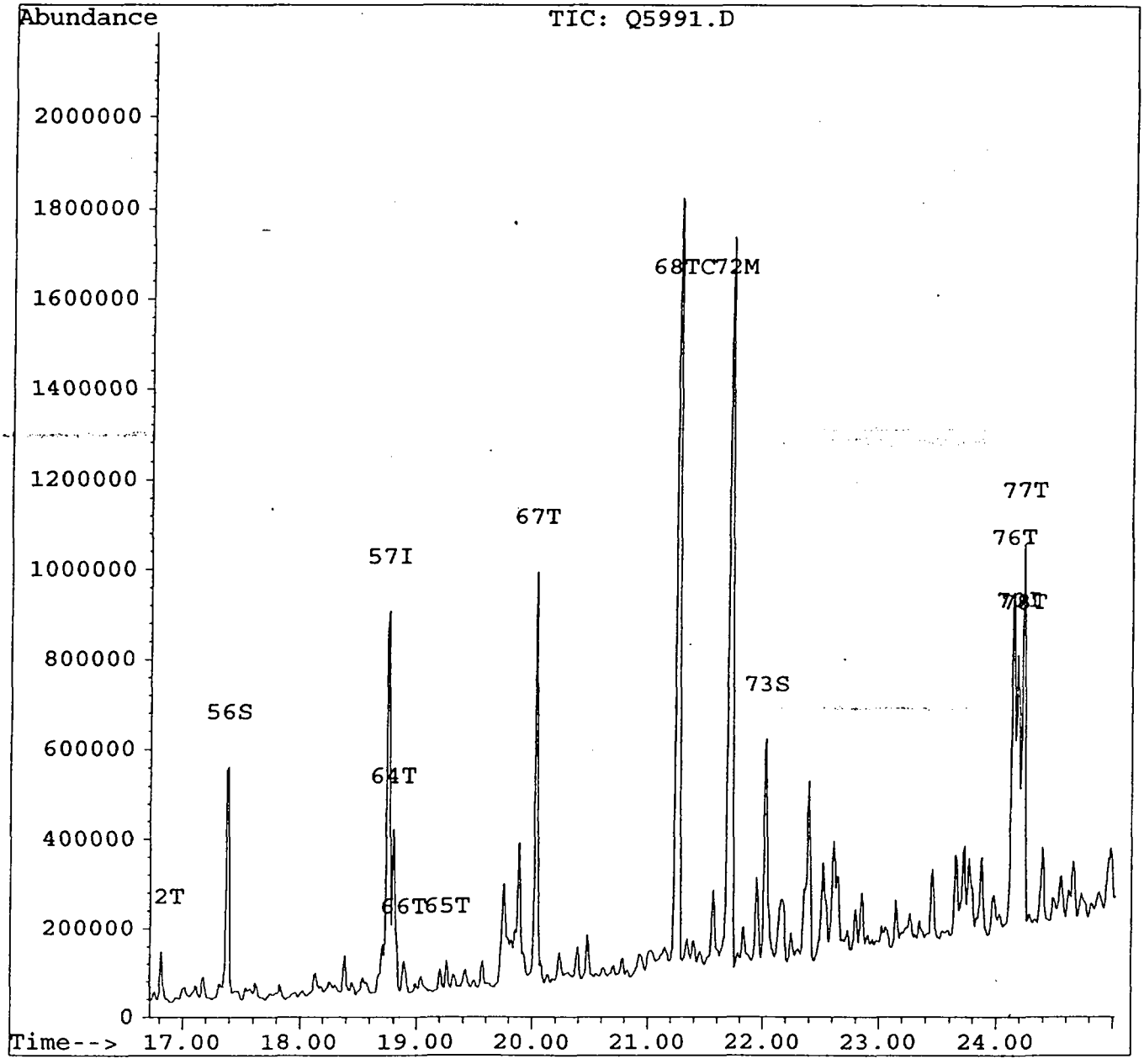


Quantitation Report

Data File : H:\HPCHEM\MSQ\Q5991.D
Acq On : 29 Oct 99 20:28 hrs
Sample : 992732A-04
Misc : S2-3-01 ; SWC ; 2 ; LLS ; Q0388
Quant Time: Nov 3 10:20 1999

Vial: 17
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 158.72

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration



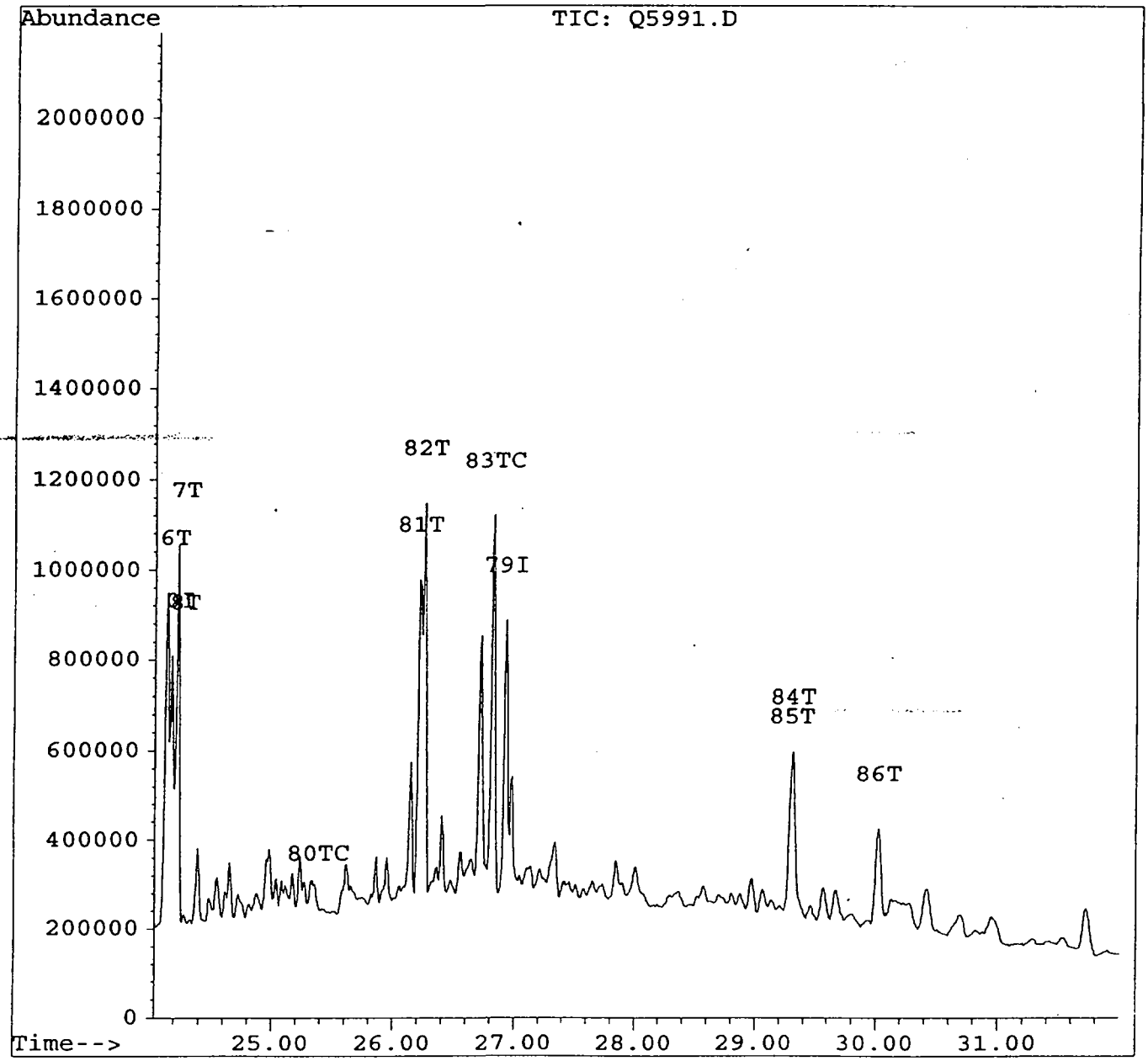
Quantitation Report

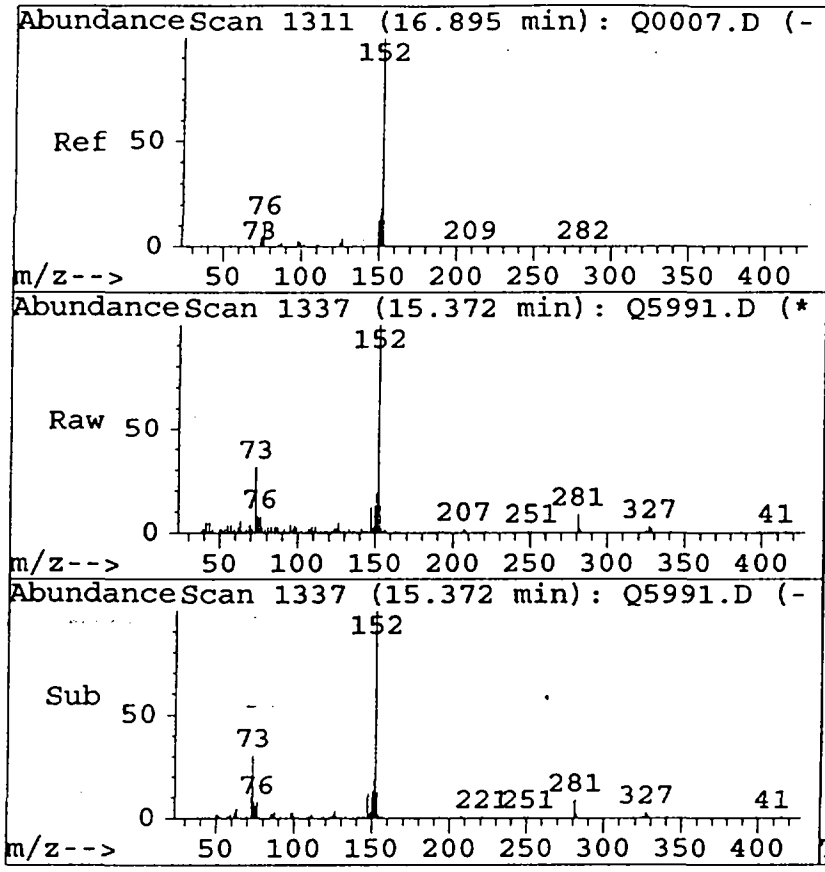
0087

Data File : H:\HPCHEM\MSQ\Q5991.D
Acq On : 29 Oct 99 20:28 hrs
Sample : 992732A-04
Misc : S2-3-01 ; SWC ; 2 ; LLS ; Q0388
Quant Time: Nov 3 10:20 1999

Vial: 17
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 158.72

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Tue Jul 13 10:32:16 1999
Response via : Multiple Level Calibration

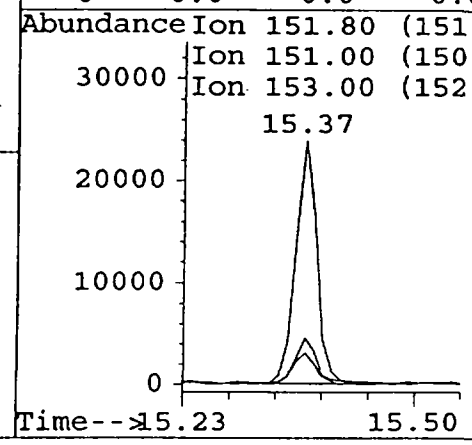


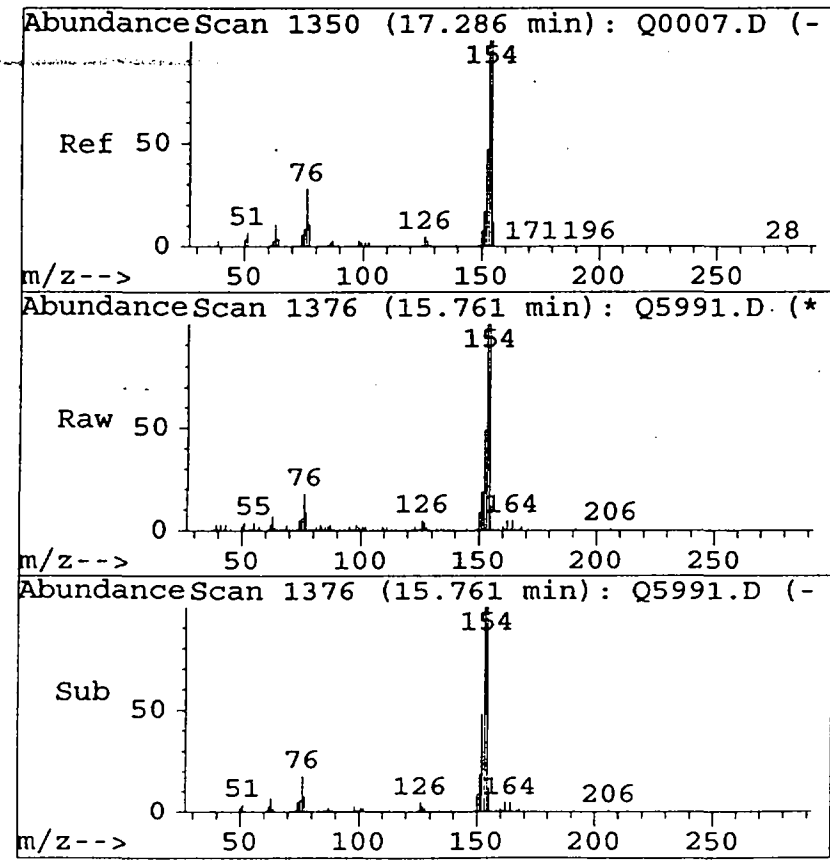


#43
Acenaphthylene
Concen: 310.16 ug
RT: 15.37 min Scan# 1337
Delta R.T. 0.01 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:151.8 Resp: 40368

Ion	Ratio	Lower	Upper
152	100		
151	18.9	0.0	39.1
153	13.1	0.0	35.5
0	0.0	0.0	0.0

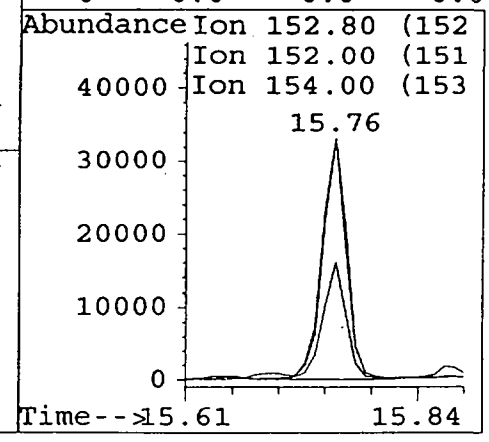


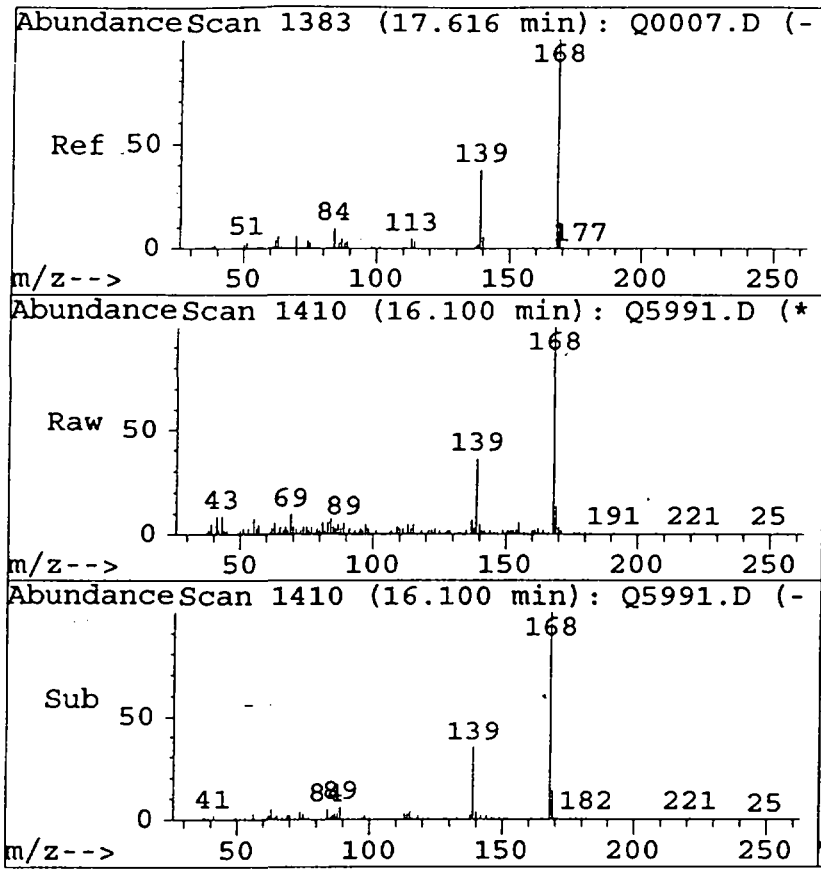


#46
Acenaphthene
Concen: 764.24 ug
RT: 15.76 min Scan# 1376
Delta R.T. -0.00 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:152.8 Resp: 56188

Ion	Ratio	Lower	Upper
153	100		
152	48.6	25.4	65.4
154	99.4	86.4	126.4
0	0.0	0.0	0.0

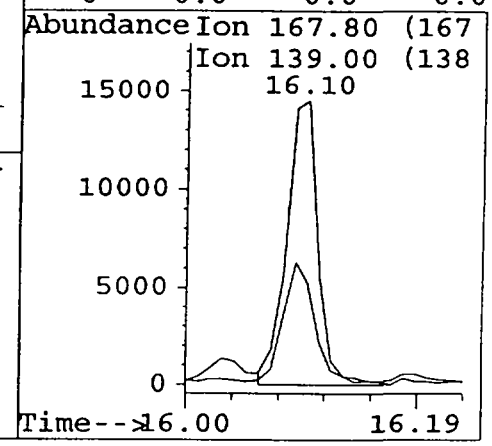


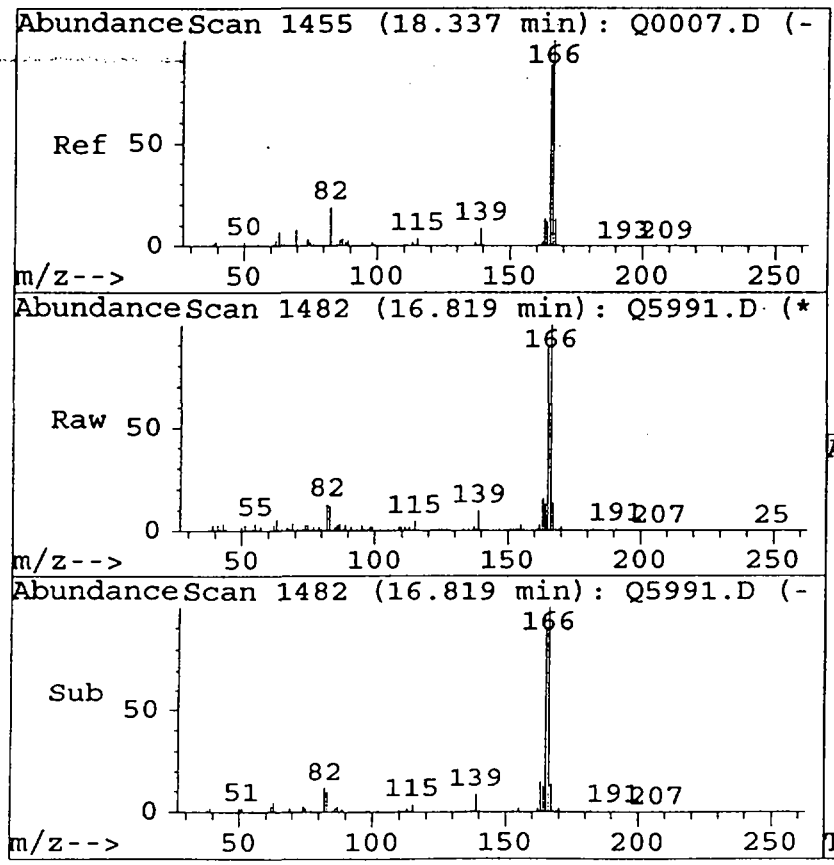


#49
Dibenzofuran
Concen: 238.82 ug
RT: 16.10 min Scan# 1410
Delta R.T. -0.00 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:167.8 Resp: 26151

Ion	Ratio	Lower	Upper
168	100		
139	34.6	16.8	56.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

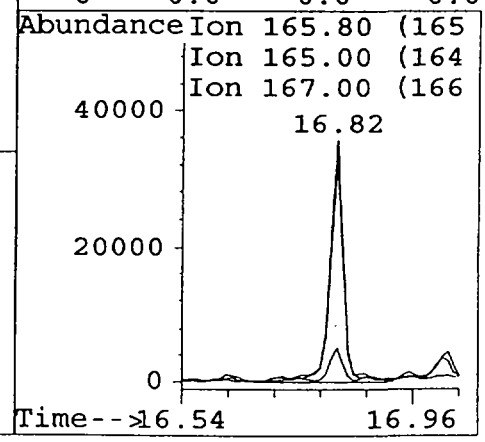


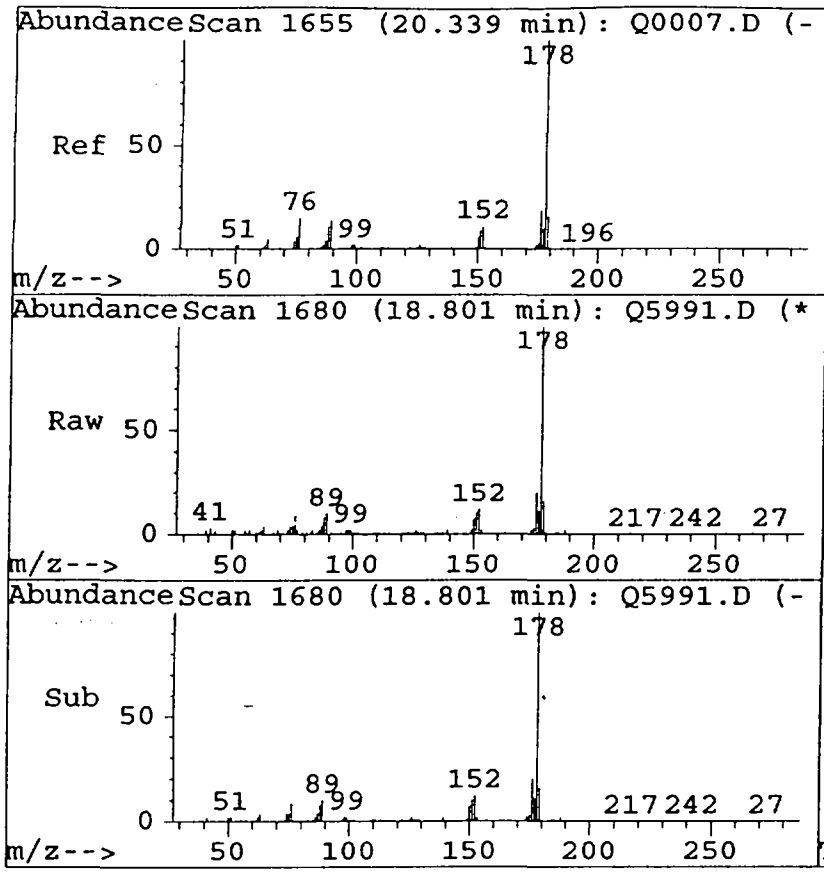


#52
Fluorene
Concen: 775.00 ug
RT: 16.82 min Scan# 1482
Delta R.T. -0.01 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:165.8 Resp: 60611

Ion	Ratio	Lower	Upper
166	100		
165	89.6	63.4	103.4
167	14.4	0.0	35.0
0	0.0	0.0	0.0

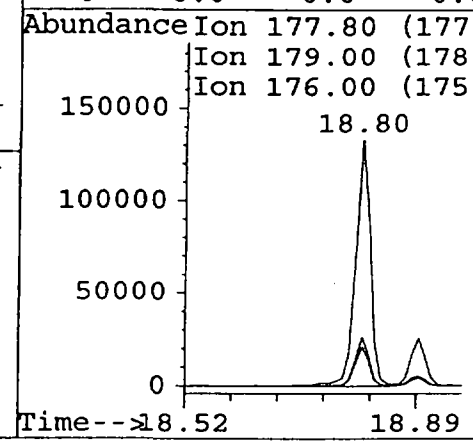


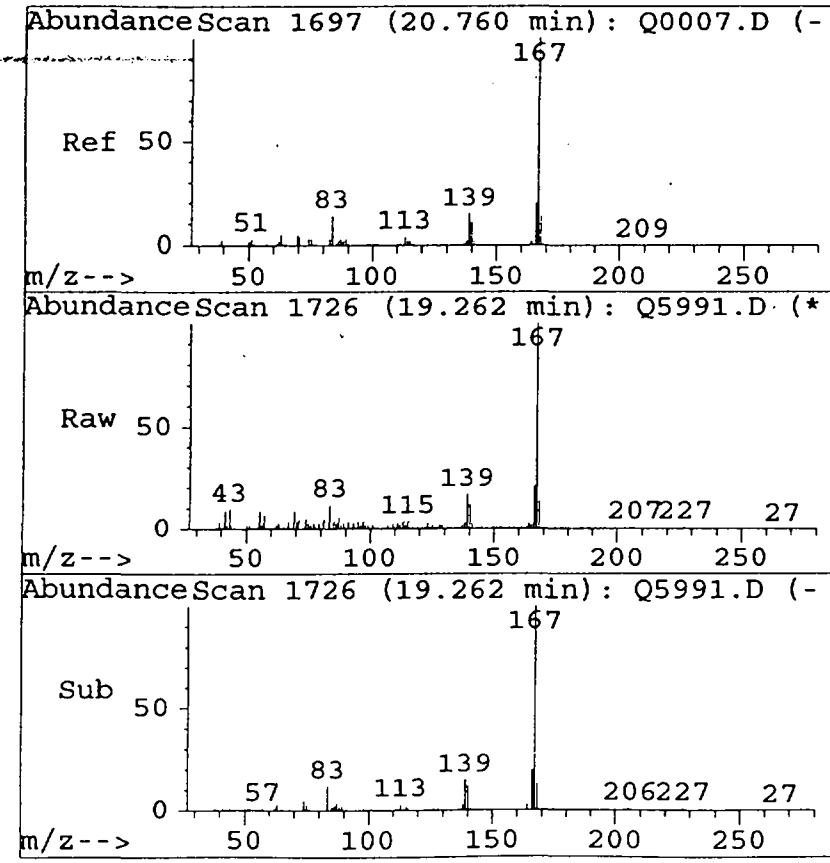


#64
Phenanthrene
Concen: 2464.28 ug
RT: 18.80 min Scan# 1680
Delta R.T. -0.01 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:177.8 Resp: 215780

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	37.1
176	19.7	0.0	38.4
0	0.0	0.0	0.0

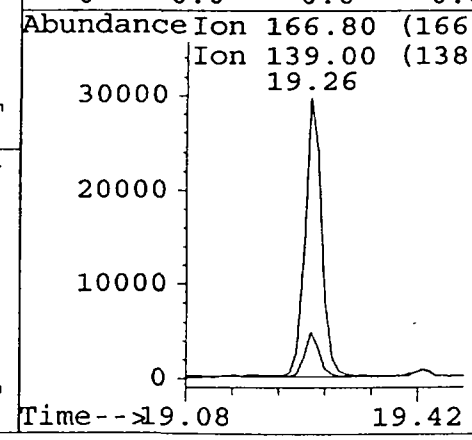


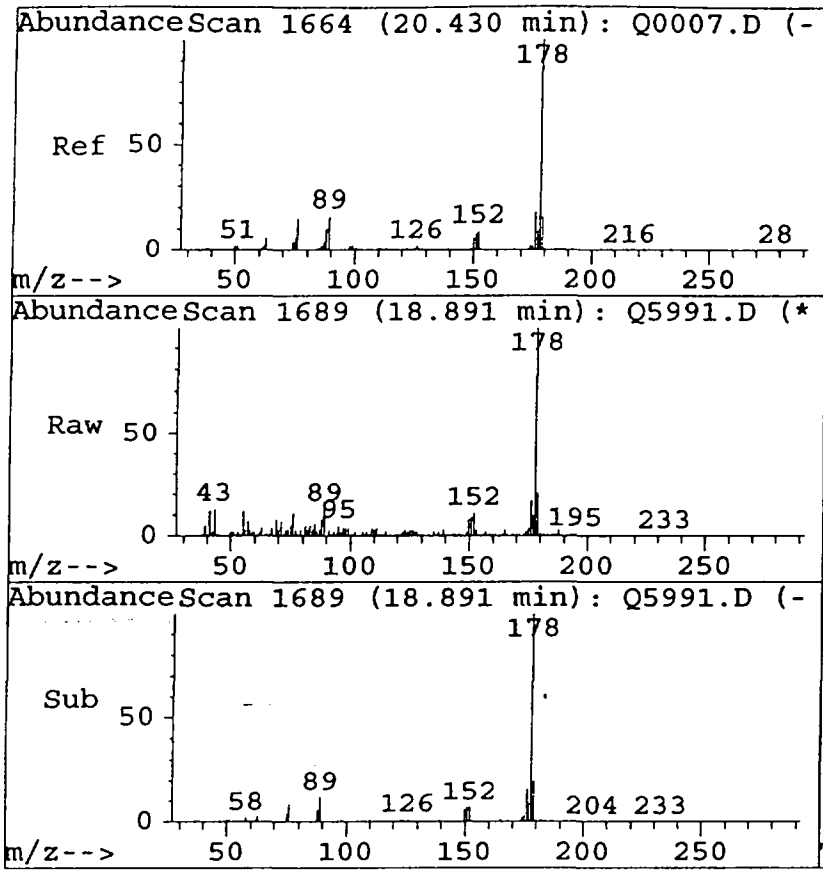


#65
Carbazole
Concen: 488.85 ug
RT: 19.26 min Scan# 1726
Delta R.T. -0.00 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:166.8 Resp: 49325

Ion	Ratio	Lower	Upper
167	100		
139	15.3	10.6	15.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

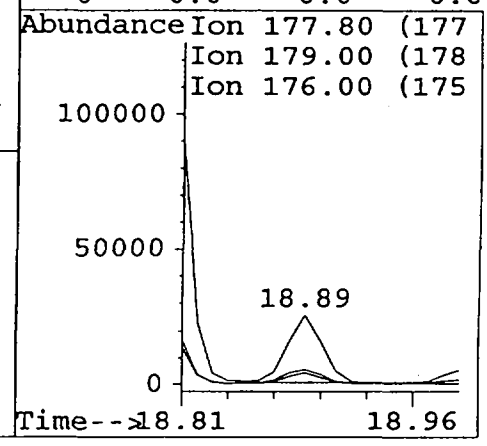


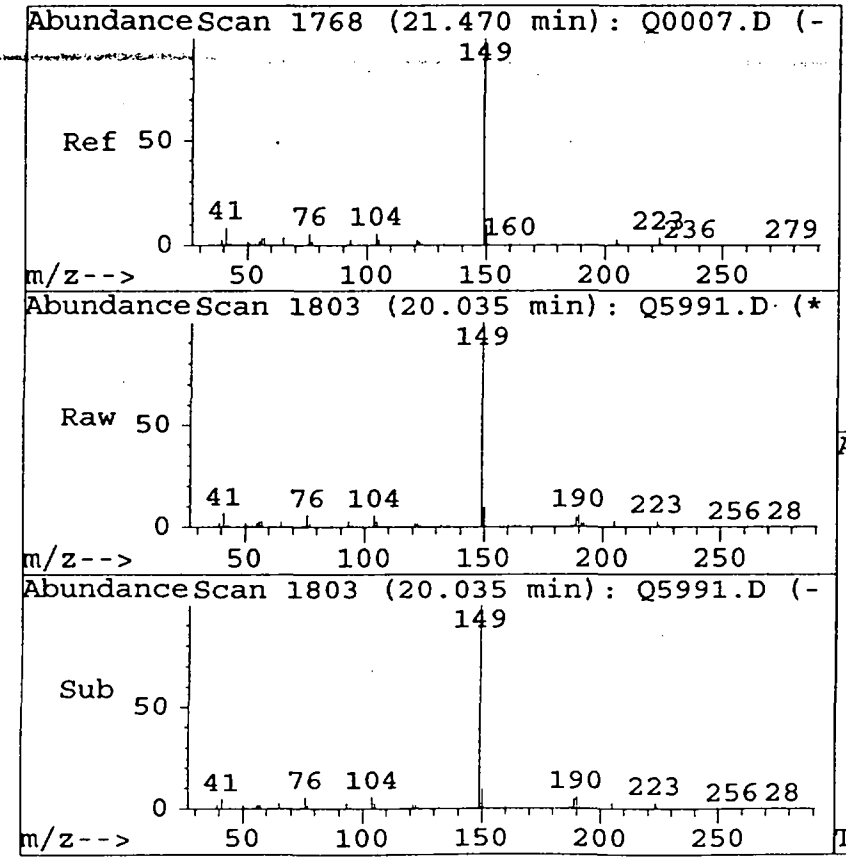


#66
Anthracene
Concen: 445.68 ug
RT: 18.89 min Scan# 1689
Delta R.T. -0.01 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:177.8 Resp: 39378

Ion	Ratio	Lower	Upper
178	100		
179	20.4	0.0	37.5
176	16.2	0.0	38.0
0	0.0	0.0	0.0

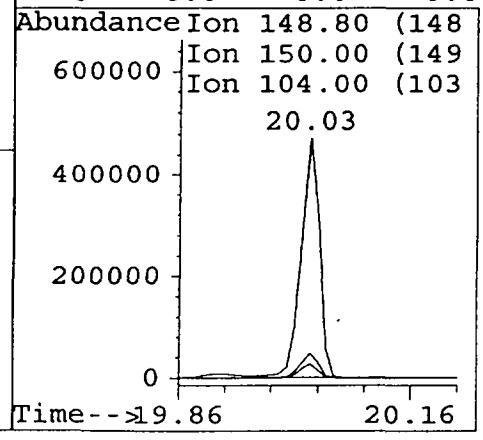


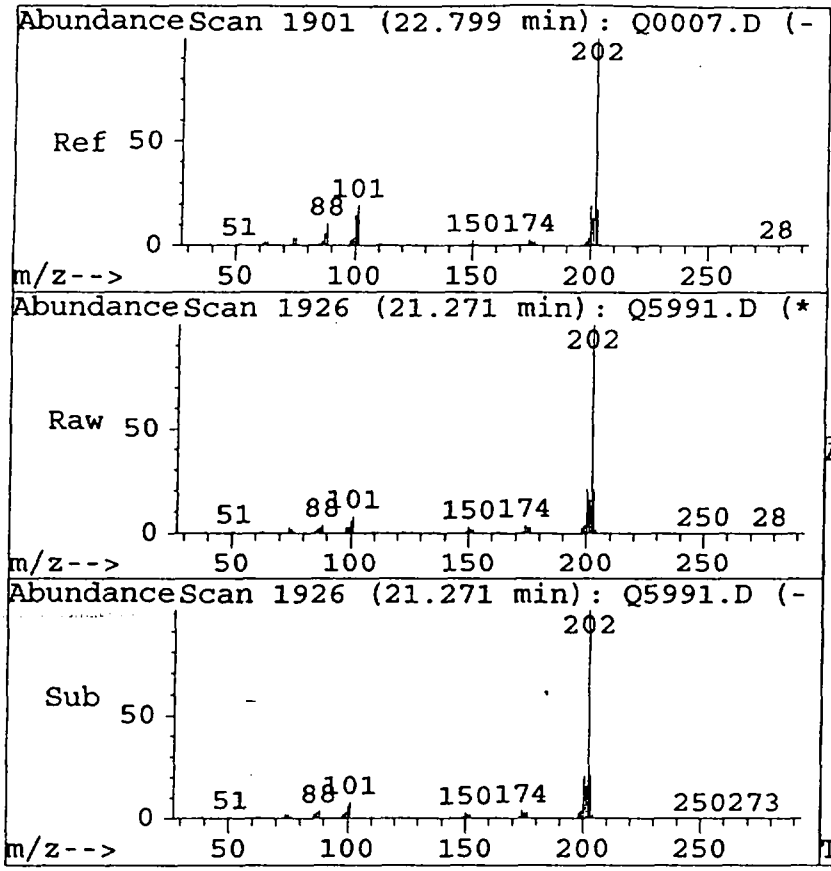


#67
Di-n-butylphthalate
Concen: 5197.90 ug
RT: 20.03 min Scan# 1803
Delta R.T. 0.00 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:148.8 Resp: 781252

Ion	Ratio	Lower	Upper
149	100		
150	10.3	0.0	31.5
104	5.7	0.0	25.2
0	0.0	0.0	0.0

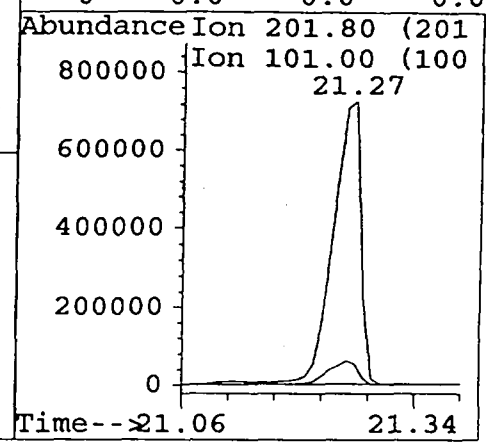


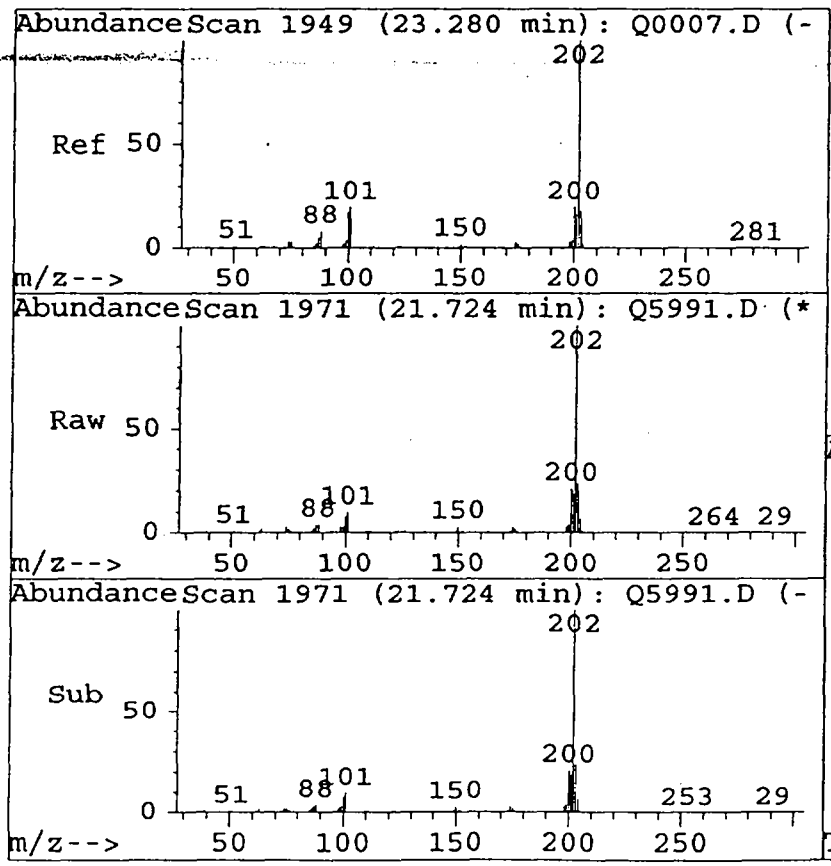


#68
Fluoranthene
Concen: 15707.26 ug
RT: 21.27 min Scan# 1926
Delta R.T. 0.03 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:201.8 Resp: 1703639

Ion	Ratio	Lower	Upper
202	100		
101	7.6	0.0	38.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

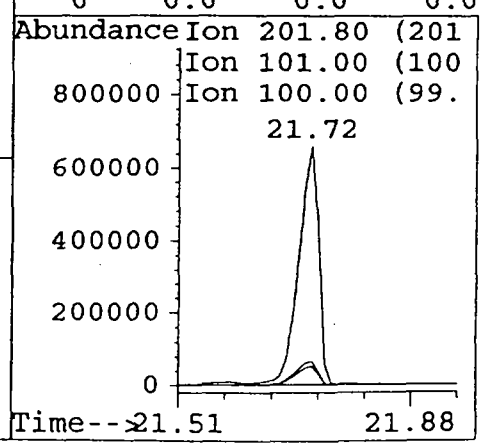


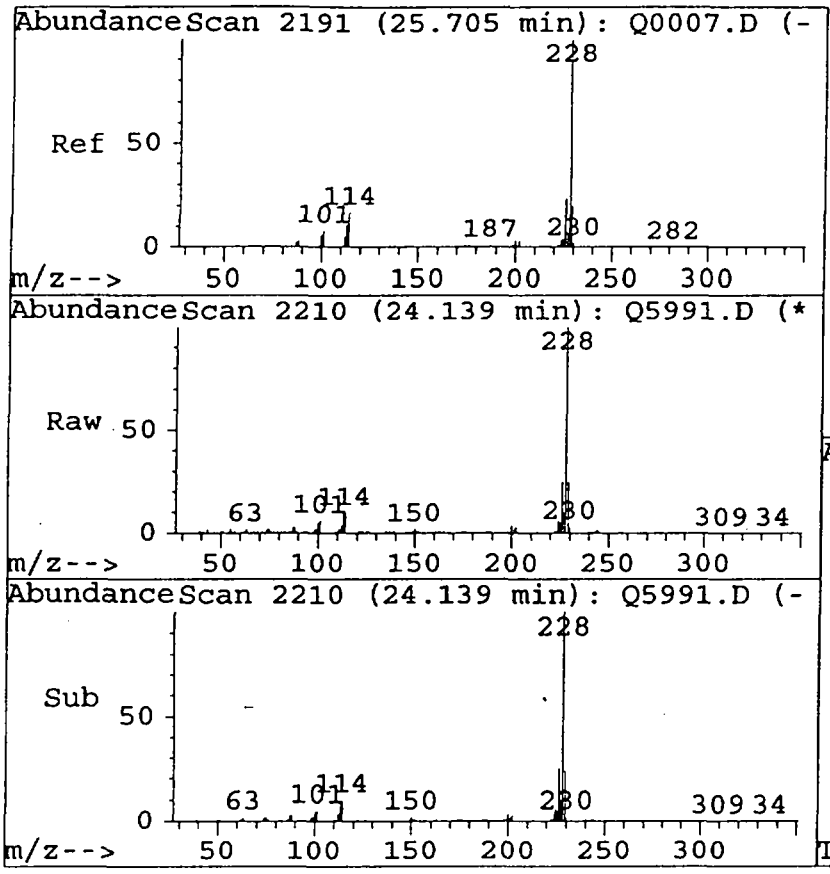


#72
Pyrene
Concen: 19436.06 ug
RT: 21.72 min Scan# 1971
Delta R.T. 0.02 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:201.8 Resp: 1448756

Ion	Ratio	Lower	Upper
202	100		
101	10.0	2.7	42.7
100	8.0	0.0	37.5
0	0.0	0.0	0.0

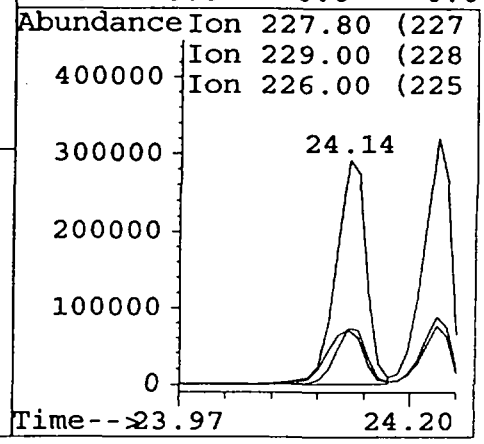


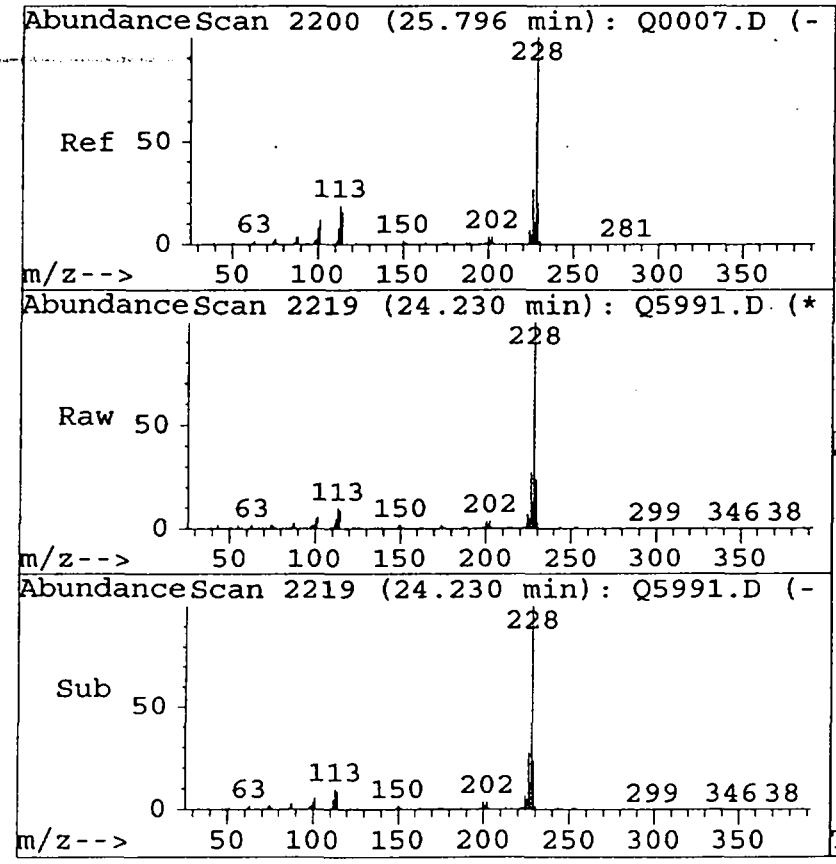


#76
Benzo(a)anthracene
Concen: 9503.92 ug
RT: 24.14 min Scan# 2210
Delta R.T. 0.01 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:227.8 Resp: 625306

Ion	Ratio	Lower	Upper
228	100		
229	24.3	1.7	41.7
226	25.3	4.8	44.8
0	0.0	0.0	0.0

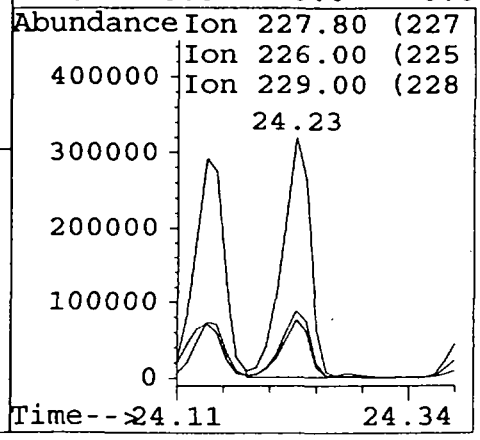


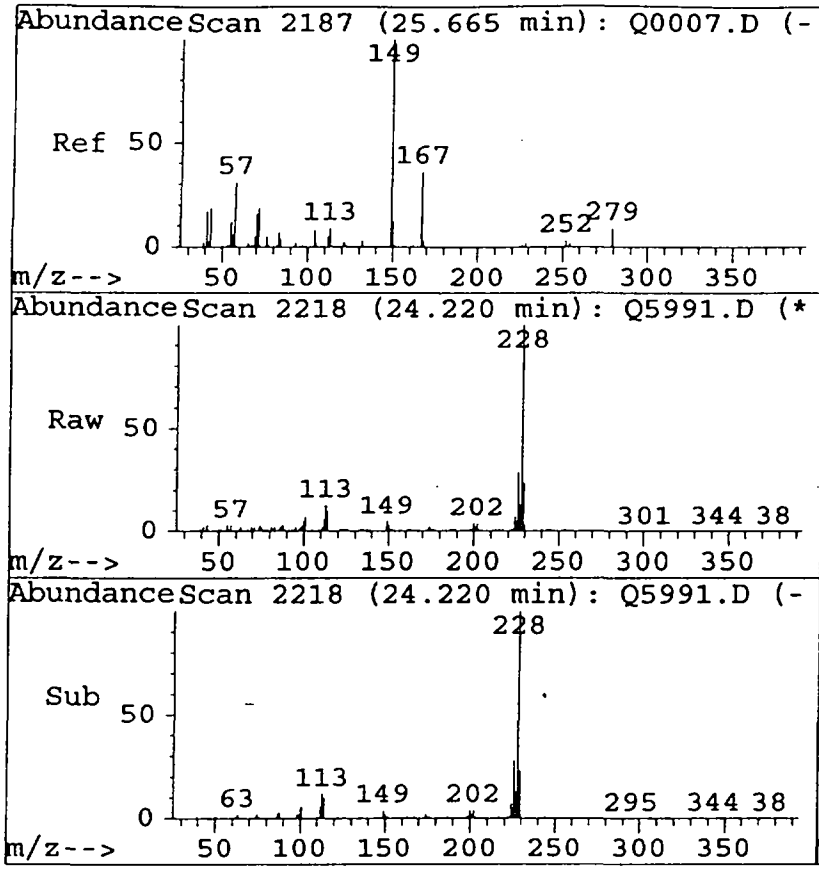


#77
Chrysene
Concen: 11899.91 ug
RT: 24.23 min Scan# 2219
Delta R.T. -0.00 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:227.8 Resp: 626647

Ion	Ratio	Lower	Upper
228	100		
226	27.7	7.6	47.6
229	23.6	2.2	42.2
0	0.0	0.0	0.0

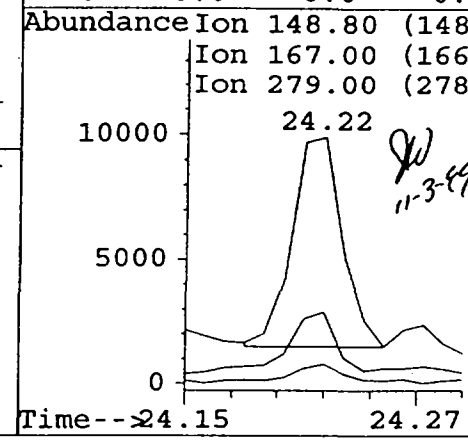


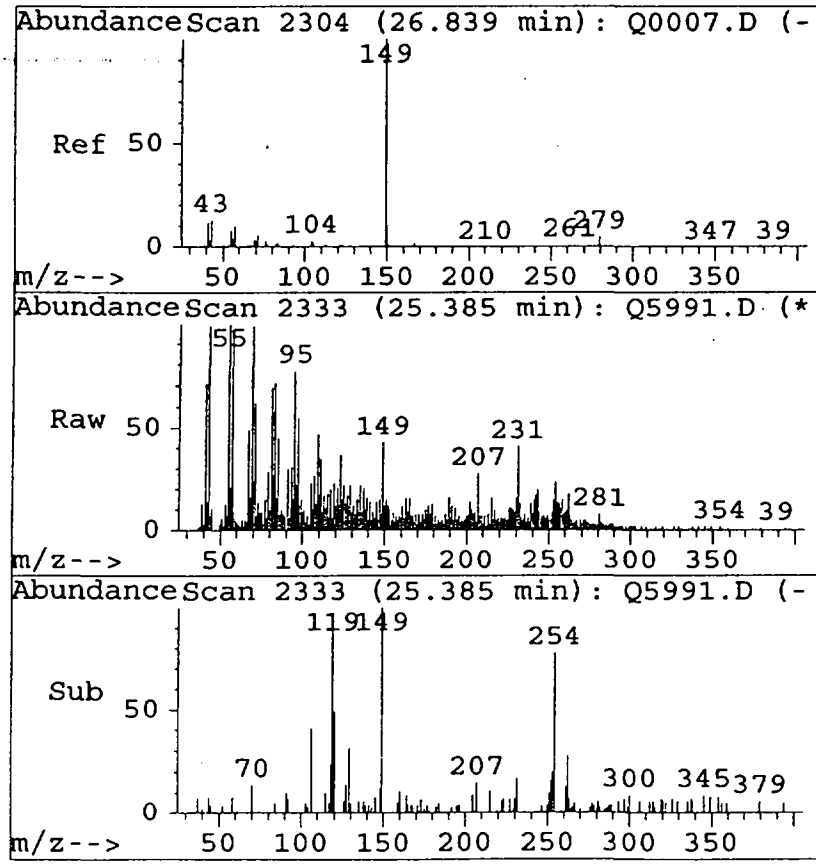


#78
bis(2-Ethylhexyl)phthalate
Concen: 292.49 ug
RT: 24.22 min Scan# 2218
Delta R.T. 0.01 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:148.8 Resp: 14883

Ion	Ratio	Lower	Upper
149	100		
167	27.0	16.4	56.4
279	7.9	0.0	28.7
0	0.0	0.0	0.0

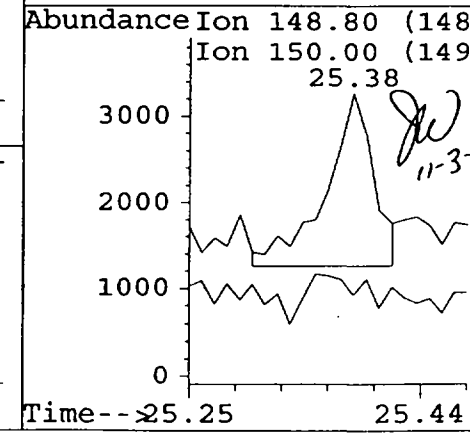


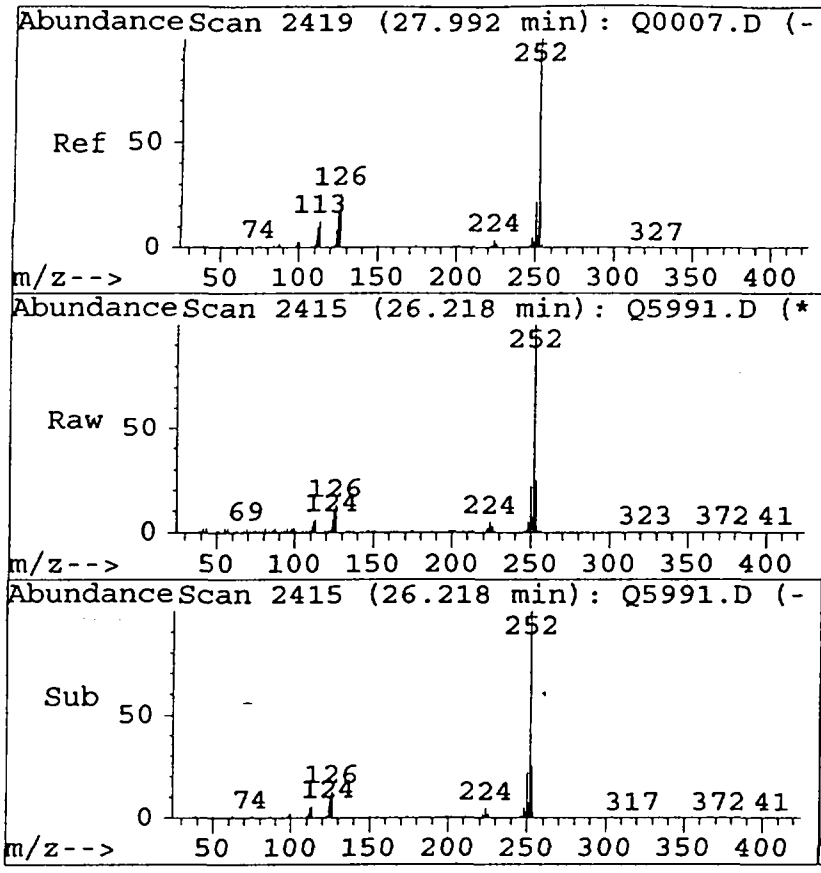


#80
Di-n-octylphthalate
Concen: 36.45 ug m
RT: 25.38 min Scan# 2333
Delta R.T. 0.02 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:148.8 Resp: 5327

Ion	Ratio	Lower	Upper
149	100		
150	28.2	0.0	32.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

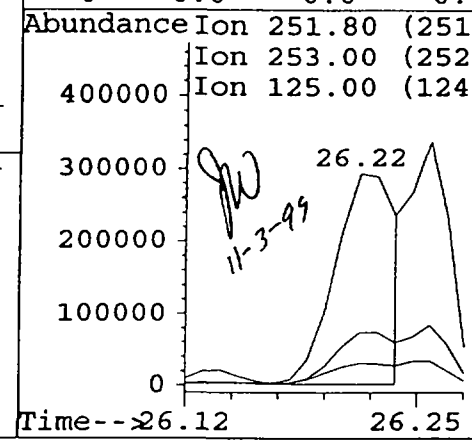


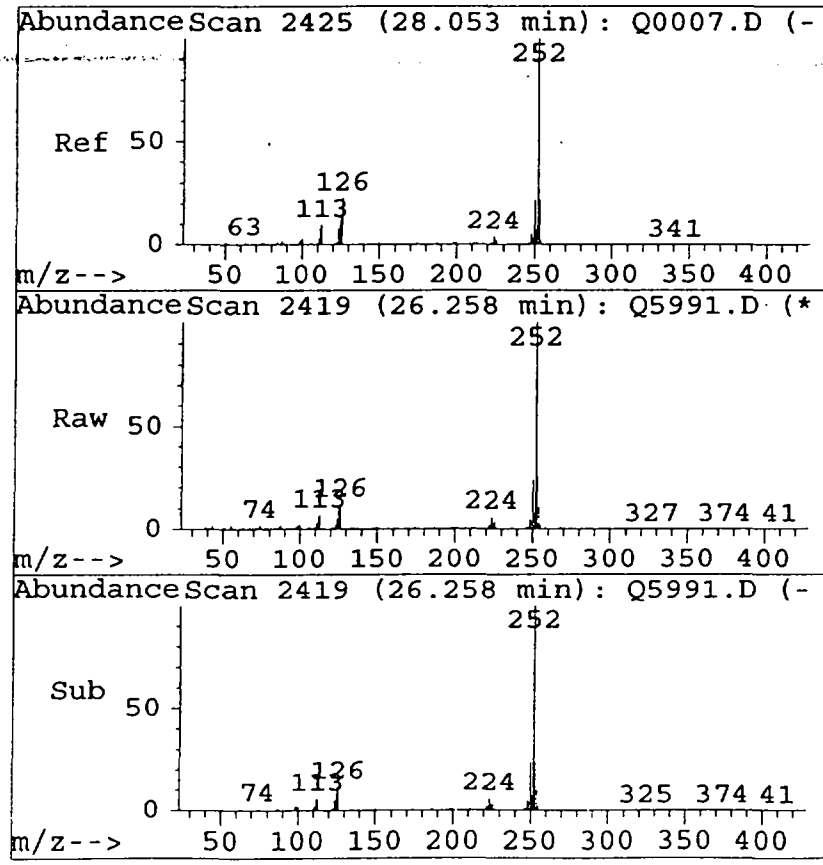


#81
Benzo(b)fluoranthene
Concen: 6766.84 ug
RT: 26.22 min Scan# 2415
Delta R.T. 0.01 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:251.8 Resp: 711970

Ion	Ratio	Lower	Upper
252	100		
253	23.3	4.4	44.4
125	9.1	0.0	38.4
0	0.0	0.0	0.0

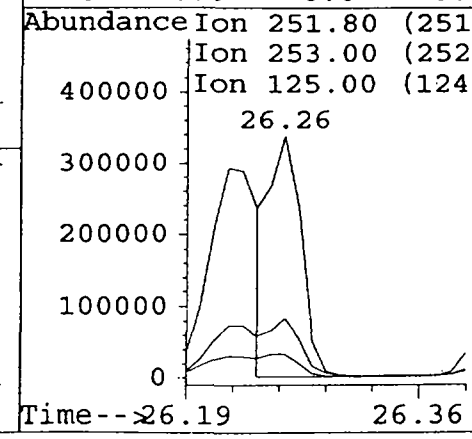


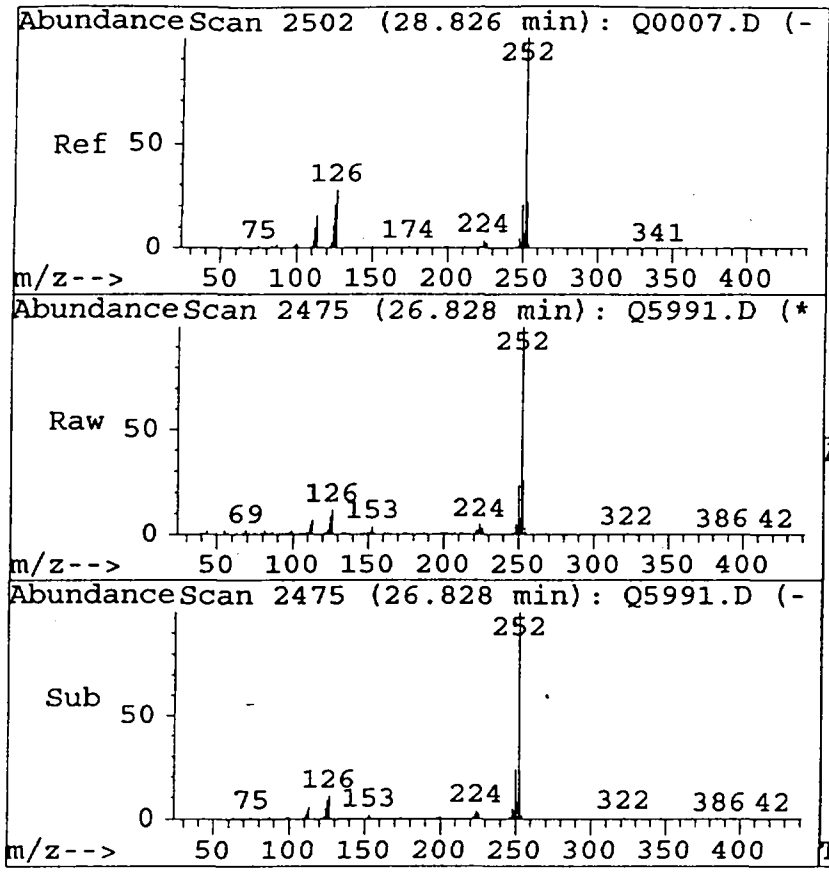


#82
Benzo(k)fluoranthene
Concen: 9059.40 ug
RT: 26.26 min Scan# 2419
Delta R.T. 0.01 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:251.8 Resp: 548154

Ion	Ratio	Lower	Upper
252	100		
253	23.8	4.5	44.5
125	9.4	0.0	37.6
0	0.0	0.0	0.0

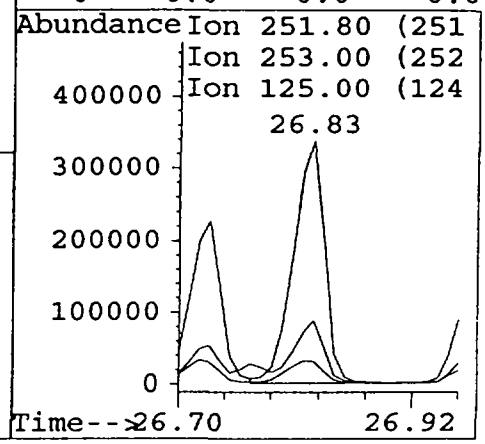


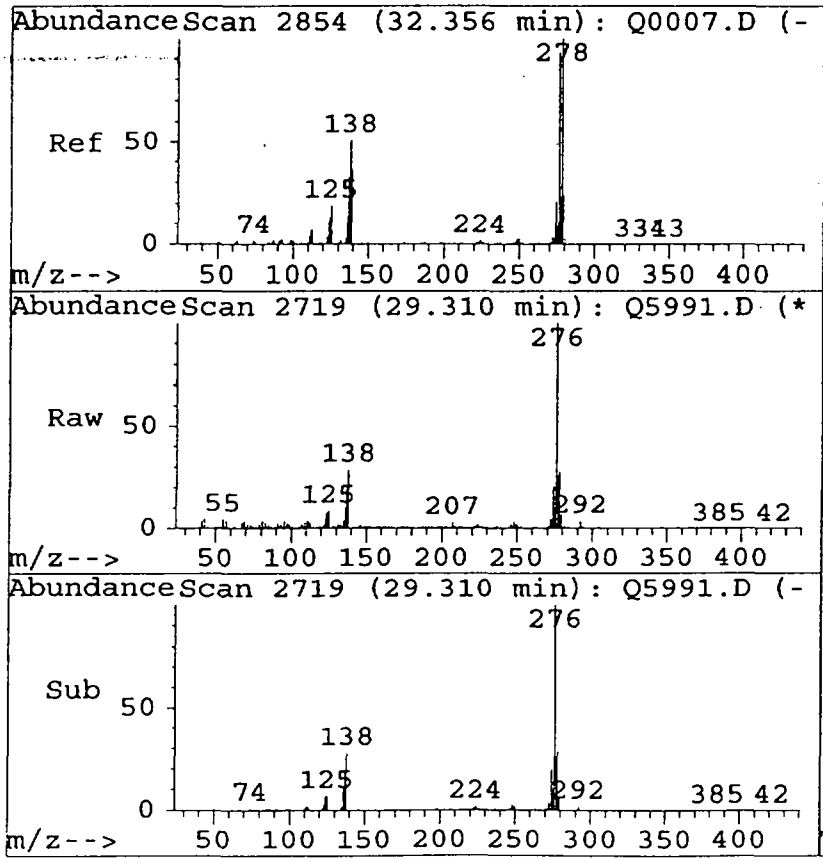


#83
Benzo(a)pyrene
Concen: 8504.68 ug
RT: 26.83 min Scan# 2475
Delta R.T. 0.03 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:251.8 Resp: 701851

Ion	Ratio	Lower	Upper
252	100		
253	25.9	3.9	43.9
125	8.7	0.0	39.6
0	0.0	0.0	0.0

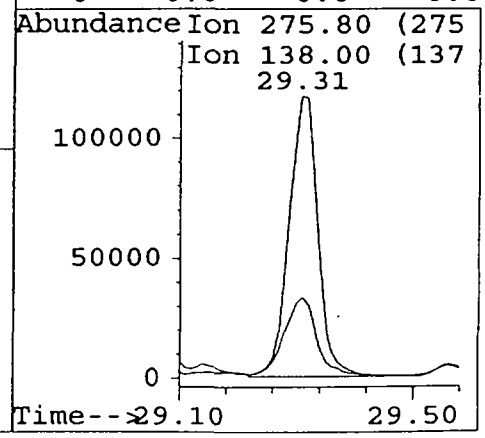


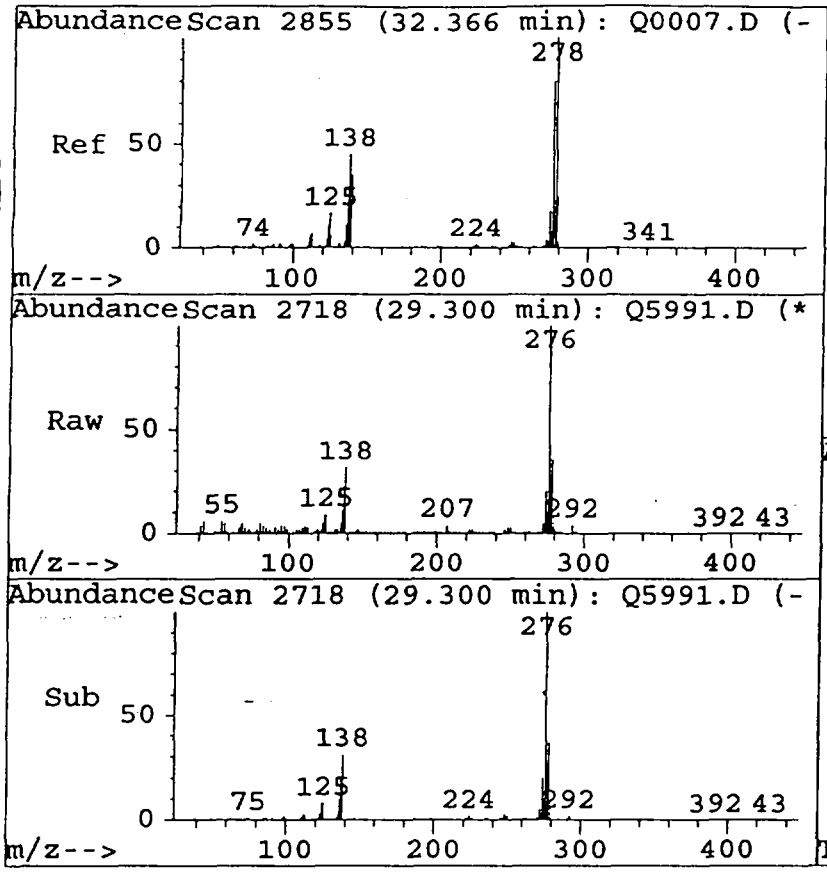


#84
Indeno(1,2,3-cd)pyrene
Concen: 4156.76 ug
RT: 29.31 min Scan# 2719
Delta R.T. 0.02 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:275.8 Resp: 399640

Ion	Ratio	Lower	Upper
276	100		
138	27.9	36.8	76.8#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

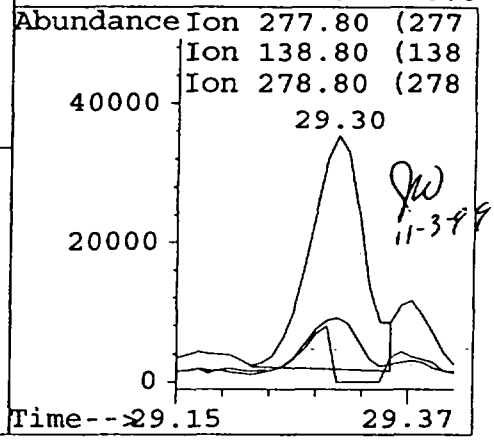


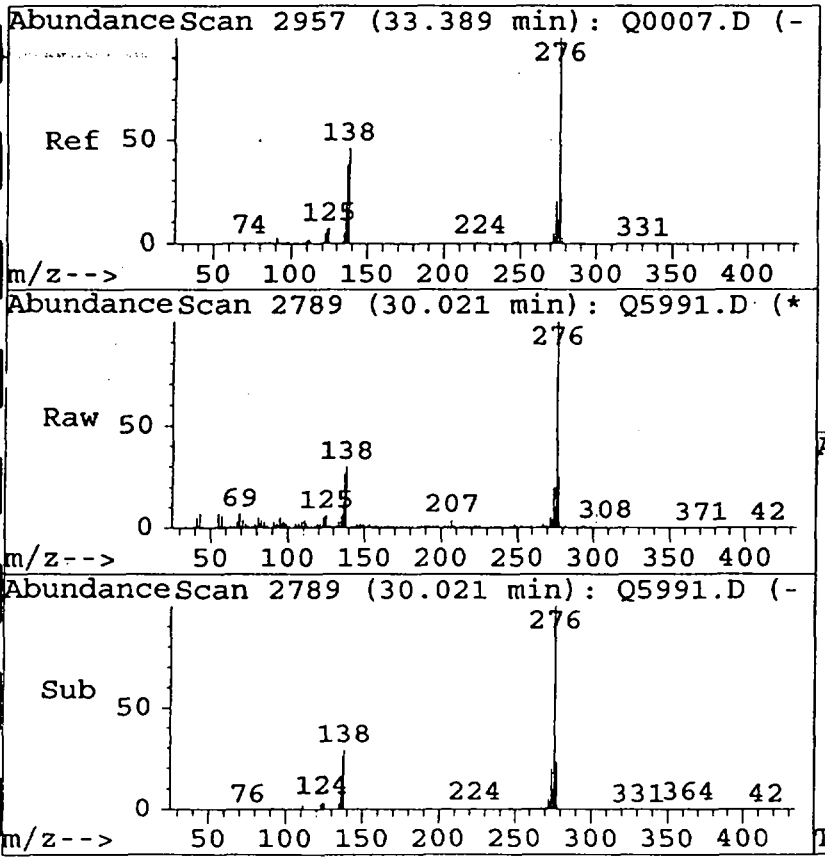


#85
Dibenzo(a,h)anthracene
Concen: 1454.87 ug m
RT: 29.30 min Scan# 2718
Delta R.T. 0.01 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:277.8 Resp: 118166

Ion	Ratio	Lower	Upper
278	100		
139	0.0	12.0	52.0#
279	25.9	4.7	44.7
0	0.0	0.0	0.0

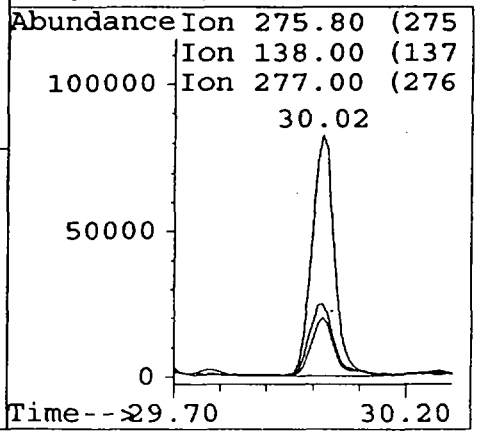




#86
Benzo(g,h,i)perylene
Concen: 2981.30 ug
RT: 30.02 min Scan# 2789
Delta R.T. 0.02 min
Lab File: Q5991.D
Acq: 29 Oct 99 20:28 hrs

Tgt Ion:275.8 Resp: 280817

Ion	Ratio	Lower	Upper
276	100		
138	29.4	27.8	67.8
277	24.1	5.1	45.1
0	0.0	0.0	0.0



% RSD
.5 *
.3 *
.8 *
.9 *
.4 *
.0 *
.7 *
.8 *
.0 *
.2 *
.6 *
.6 *
.9 *
.4 *
.8 *
.5 *
.0 *
.3 *
.3 *
.6 *
.7 *
.3 *
.1 *
.1 *
.9 *
.4 *
.9 *
.8 *
.3 *
.9 *
.3 *
.0 *
.5 *
.8 *
.2 *
.5 *
.6 *

6C
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

001101

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Instrument ID: HP5971Q Calibration Date(s):10/22/99 _____

Calibration Times: 1543 1838

LAB FILE ID: RRF20 = >Q5863 RRF50 = >Q5864
RRF80 = >Q5865 RRF120= >Q5866 RRF160= >Q5867

COMPOUND		RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
Dibenzofuran	*	1.724	1.541	1.444	1.342	1.184	1.447	14.1	*
2,4-Dinitrotoluene	*	0.489	0.455	0.451	0.435	0.398	0.446	7.4	*
Diethylphthalate	*	1.786	1.557	1.485	1.359	1.190	1.475	15.1	*
4-Chlorophenyl-phenyl Ether	*	0.552	0.495	0.454	0.428	0.377	0.461	14.4	*
Fluorene	*	1.282	1.085	1.019	0.948	0.832	1.033	16.2	*
4-Nitroaniline	*	0.463	0.394	0.418	0.382	0.355	0.402	10.1	*
4,6-Dinitro-2-methylphenol	*	0.135	0.147	0.149	0.144	0.127	0.140	6.6	*
N-Nitrosodiphenylamine	*	0.535	0.473	0.438	0.407	0.361	0.443	14.9	*
4-Bromophenyl-phenylether	*	0.225	0.226	0.211	0.204	0.183	0.210	8.4	*
Hexachlorobenzene	*	0.259	0.245	0.238	0.231	0.207	0.236	8.2	*
Pentachlorophenol	*	0.132	0.141	0.140	0.139	0.131	0.137	3.5	*
Phenanthrene	*	0.937	0.891	0.879	0.828	0.698	0.847	10.8	*
Anthracene	*	1.010	0.917	0.840	0.799	0.706	0.854	13.5	*
Carbazole	*	1.169	1.054	0.988	0.904	0.765	0.976	15.6	*
Di-n-butylphthalate	*	1.812	1.574	1.470	1.328	1.083	1.453	18.7	*
Fluoranthene	*	1.243	1.118	1.079	0.985	0.820	1.049	15.1	*
Pyrene	*	1.361	1.303	1.250	1.224	1.246	1.277	4.3	*
Butylbenzylphthalate	*	0.738	0.643	0.650	0.618	0.538	0.637	11.2	*
3,3'-Dichlorobenzidine	*	0.545	0.512	0.521	0.479	0.435	0.498	8.6	*
Benzo(a)anthracene	*	1.198	1.143	1.162	1.108	1.024	1.127	5.9	*
Chrysene	*	0.937	0.920	0.886	0.888	0.879	0.902	2.8	*
bis(2-Ethylhexyl)phthalate	*	0.910	0.900	0.876	0.842	0.830	0.872	4.0	*
Di-n-octylphthalate	*	2.171	2.094	1.939	1.740	1.704	1.930	10.8	*
Benzo(b)fluoranthene	*	1.229	1.378	1.418	1.525	1.396	1.389	7.6	*
Benzo(k)fluoranthene	*	1.154	0.962	0.822	0.548	0.508	0.799	34.3	*
Benzo(a)pyrene	*	1.149	1.155	1.120	1.043	0.982	1.090	6.9	*
Indeno(1,2,3-cd)pyrene	*	1.174	1.214	1.277	1.325	1.356	1.269	6.0	*
Dibenz(a,h)anthracene	*	1.010	1.029	1.070	1.113	1.141	1.073	5.1	*
Benzo(g,h,i)perylene	*	1.059	1.180	1.265	1.348	1.367	1.244	10.2	*
Nitrobenzene-D5	*	0.487	0.450	0.439	0.412	0.375	0.433	9.7	*
2-Fluorobiphenyl	*	1.215	1.097	1.027	0.959	0.806	1.021	15.0	*
Terphenyl-D14	*	1.098	1.082	1.048	1.022	1.051	1.060	2.8	*
Phenol-D5	*	1.948	1.767	1.642	1.474	1.258	1.618	16.4	*
2-Fluorophenol	*	1.452	1.502	1.498	1.402	1.314	1.434	5.4	*
2,4,6-Tribromophenol	*	0.200	0.196	0.202	0.193	0.188	0.196	2.8	*

(1) Cannot be separated from Diphenylamine
* Compounds with required minimum RRF and maximum %RSD values.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 27
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

All spectra and manual integrations for this sample have been reviewed and approved.
By: Date: 10/25/99
Secondary review: Date: 10/27/99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.12	152	208189	40.00	ug	0.00
20) Naphthalene-d8	12.09	136	754419	40.00	ug	0.00
35) Acenaphthene-d10	16.02	164	424057	40.00	ug	0.00
57) Phenanthrene-d10	19.08	188	732834	40.00	ug	0.00
70) Chrysene-d12	24.50	240	625943	40.00	ug	0.00
79) Perylene-d12	27.29	264	638693	40.00	ug	0.00

System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	6.42	112	151123	20.97	ug	10.48%
3) Phenol-d5	8.51	99	202791	20.56	ug	10.28%
21) Nitrobenzene-d5	10.48	82	183583	24.41	ug	24.41%
40) 2-Fluorobiphenyl	14.57	172	257566	24.85	ug	24.85%
56) 2,4,6-Tribromophenol	17.70	330	42348	21.53	ug	10.76%
73) Terphenyl-d14	22.33	244	343623	23.75	ug	23.75%

Target Compounds							Qvalue
4) Pyridine	2.96	52	110746	19.01	ug		85
5) N-Nitrosodimethylamine	2.97	42	83033	22.60	ug	#	77
6) Cyclohexanone	6.79	42	73371	25.69	ug		94
7) Phenol	8.54	94	205147	22.41	ug	m	84
8) Aniline	8.51	93	264565	28.11	ug	#	57
9) bis(2-Chloroethyl)ether	8.63	63	93998	22.42	ug		100
10) 2-Chlorophenol	8.75	128	143270	23.90	ug		89
11) 1,3-Dichlorobenzene	9.03	146	169762	24.79	ug		95
12) 1,4-Dichlorobenzene	9.16	146	144709	23.52	ug		99
13) Benzyl alcohol	9.53	108	100566	21.82	ug		99
14) 1,2-Dichlorobenzene	9.59	146	147804	26.10	ug		96
15) bis(2-Chloroisopropyl)ethe	9.84	45	128012	22.31	ug		63
16) 2-Methylphenol	9.85	108	132492	22.32	ug		95
17) Hexachloroethane	10.27	117	59618	22.90	ug		87
18) N-Nitroso-di-n-propylamine	10.17	70	96523	23.62	ug		97
19) 4-Methylphenol	10.18	108	134783	23.76	ug		97
22) Nitrobenzene	10.52	77	160365	25.36	ug		98
23) Isophorone	11.04	82	360504	24.13	ug		96
24) 2-Nitrophenol	11.27	139	106835	23.65	ug		92
25) 2,4-Dimethylphenol	11.39	107	144160	23.98	ug		95
26) Benzoic acid	11.66	122	80695	22.99	ug		97
27) bis(2-Chloroethoxy)methane	11.59	93	209757	24.18	ug		94
28) 2,4-Dichlorophenol	11.83	162	135561	24.11	ug		95
29) 1,2,4-Trichlorobenzene	12.00	180	123123	24.55	ug		100
30) Naphthalene	12.13	128	372616	25.05	ug		99
31) 4-Chloroaniline	12.35	127	187858	24.06	ug		97
32) Hexachlorobutadiene	12.54	225	66790	25.04	ug		97

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 27 0101
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33) 4-Chloro-3-methylphenol	13.50	107	150271	23.59 ug		99
34) 2-Methylnaphthalene	13.71	142	269195	27.36 ug		97
36) 2,4,5-Trichlorotoluene	13.70	159	123737	25.40 ug		96
37) Hexachlorocyclopentadiene	14.20	237	9351	4.39 ug		87
38) 2,4,6-Trichlorophenol	14.43	196	86438	23.28 ug		99
39) 2,4,5-Trichlorophenol	14.52	196	87279	23.47 ug		98
41) 2-Chloronaphthalene	14.78	162	235724	24.62 ug		96
42) 2-Nitroaniline	15.11	65	85923	22.21 ug		99
43) Acenaphthylene	15.69	152	442958	26.78 ug		98
44) Dimethylphthalate	15.54	163	348051	23.50 ug		98
45) 2,6-Dinitrotoluene	15.72	165	70357	21.36 ug		91
46) Acenaphthene	16.08	153	232826	23.43 ug		94
47) 3-Nitroaniline	16.02	138	80280	18.07 ug		94
48) 2,4-Dinitrophenol	16.23	184	21447	11.14 ug		90
49) Dibenzofuran	16.41	168	365515	25.74 ug		87
50) 2,4-Dinitrotoluene	16.54	165	103636	21.78 ug		98
51) 4-Nitrophenol	16.42	109	43169	18.18 ug	#	23
52) Fluorene	17.14	166	271895	24.76 ug		95
53) 4-Chlorophenyl-phenylether	17.14	204	117042	23.39 ug		97
54) Diethylphthalate	17.02	149	378649	24.59 ug		96
55) 4-Nitroaniline	17.31	138	98162	21.44 ug	#	82
58) 4,6-Dinitro-2-methylphenol	17.38	198	49413	20.49 ug		100
59) N-Nitrosodiphenylamine (1)	17.41	169	196008	26.15 ug		97
60) 1,2-Diphenylhydrazine	17.45	77	298761	25.90 ug		100
61) 4-Bromophenyl-phenylether	18.14	248	82322	24.51 ug		95
62) Hexachlorobenzene	18.44	284	94886	25.07 ug		97
63) Pentachlorophenol	18.84	266	48325	21.58 ug		96
64) Phenanthrene	19.12	178	343436	24.69 ug		98
65) Carbazole	19.58	167	428332	25.49 ug		99
66) Anthracene	19.21	178	370192	25.64 ug		99
67) Di-n-butylphthalate	20.33	149	664165	27.79 ug		97
68) Fluoranthene	21.57	202	455587	25.93 ug		89
69) Kepone	23.37	272	193502	18.59 ug		95
71) Benzidine	21.88	184	212145	23.10 ug		100
72) Pyrene	22.03	202	425988	23.65 ug		85
74) Butylbenzylphthalate	23.37	149	230832	19.14 ug		92
75) 3,3'-Dichlorobenzidine	24.44	252	170507	23.08 ug		98
76) Benzo(a)anthracene	24.46	228	374974	25.90 ug		98
77) Chrysene	24.55	228	293187	21.13 ug		98
78) bis(2-Ethylhexyl)phthalate	24.52	149	284678	23.77 ug		92
80) Di-n-octylphthalate	25.68	149	693369	26.65 ug		95
81) Benzo(b)fluoranthene	26.53	252	392527	20.55 ug		94
82) Benzo(k)fluoranthene	26.58	252	368586	31.73 ug		92

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

0102

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 2
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
83) Benzo(a)pyrene	27.17	252	367004	23.12 ug	94
84) Indeno(1,2,3-cd)pyrene	29.84	276	374953	20.08 ug	73
85) Dibenzo(a,h)anthracene	29.84	278	322557	20.86 ug	90
86) Benzo(g,h,i)perylene	30.60	276	338201	18.65 ug	87

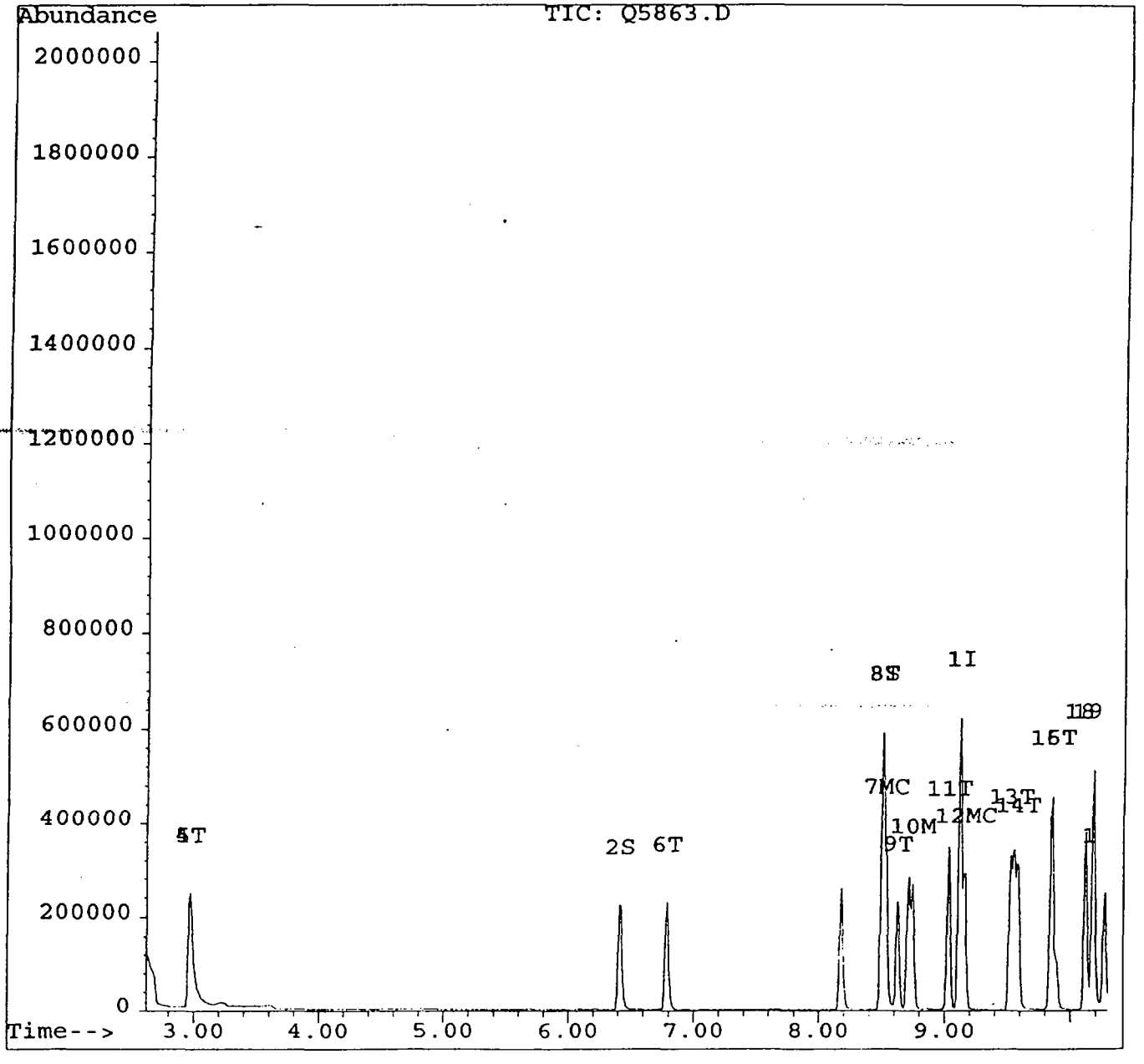
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 27
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

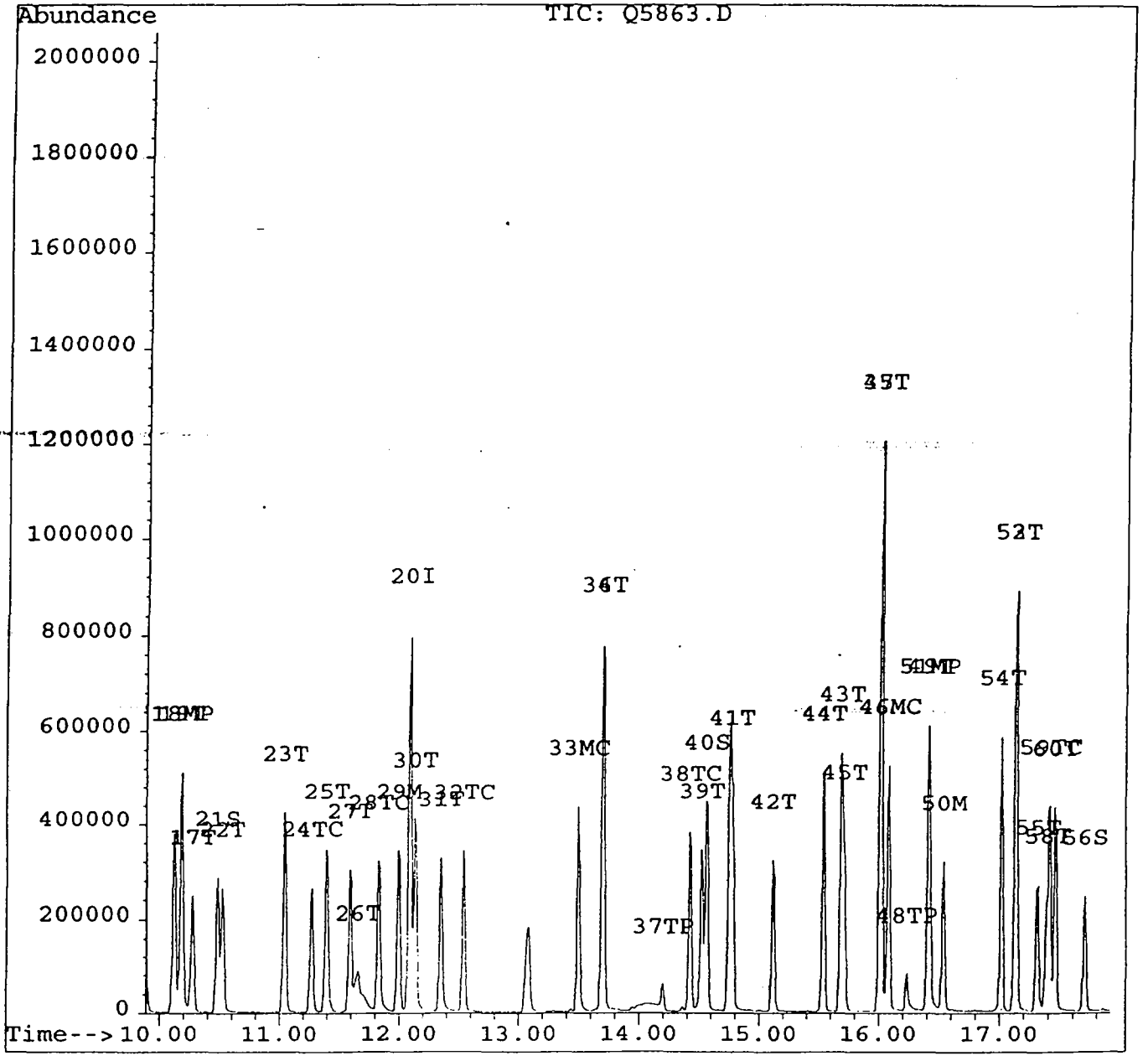


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 27
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



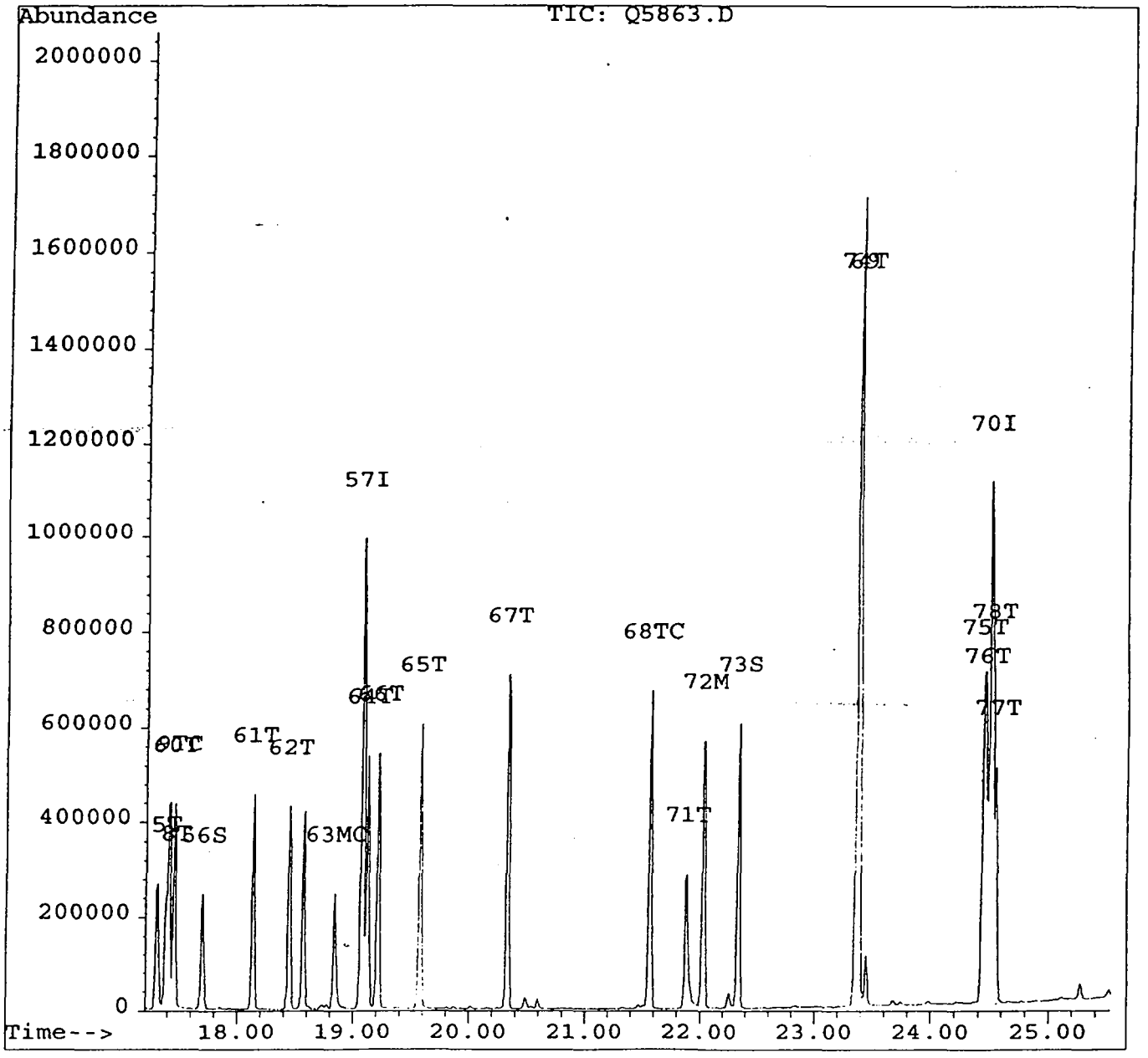
Quantitation Report

0105

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 27
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



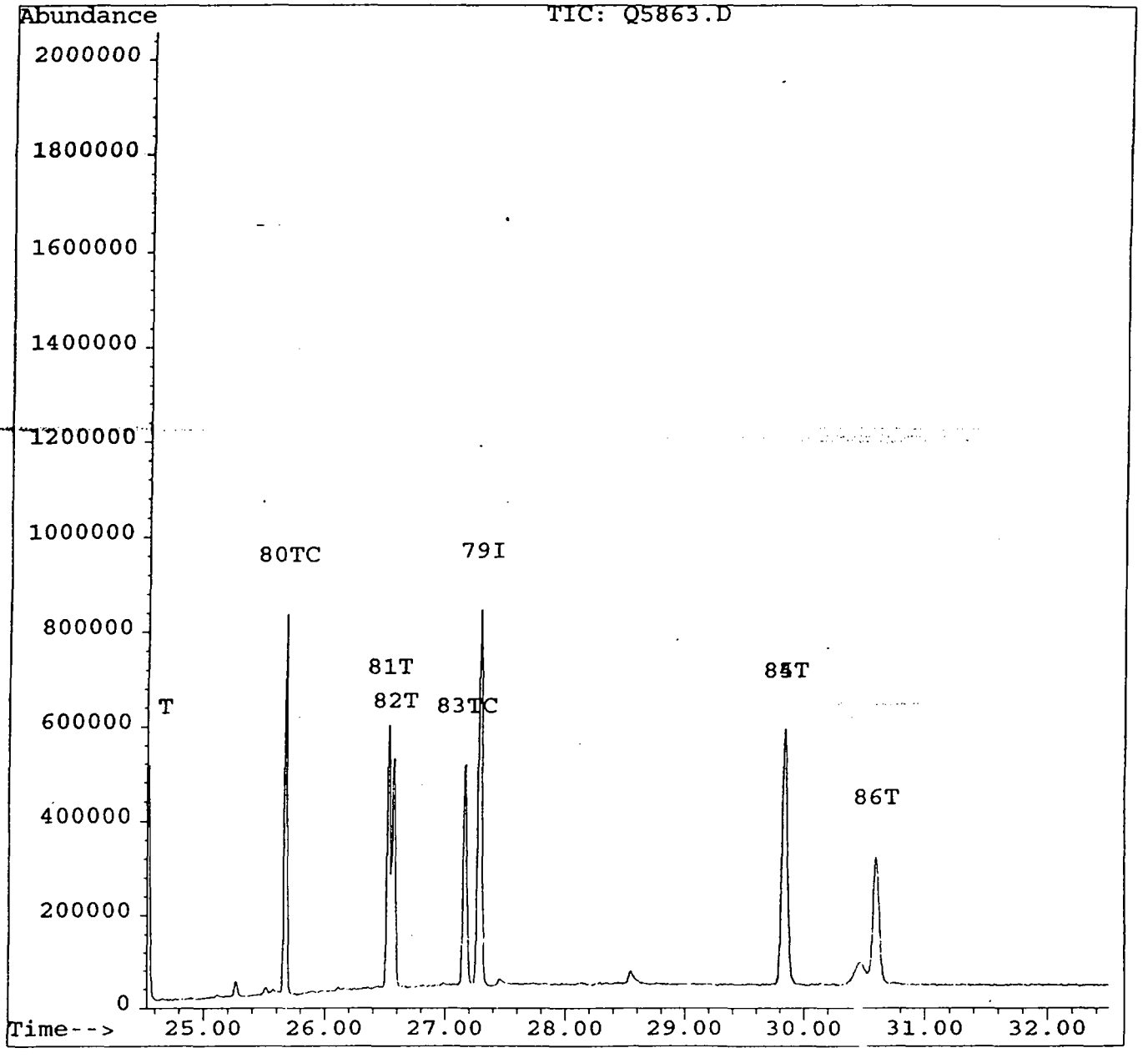
Quantitation Report

0166

Data File : C:\HPCHEM\MSQ\Q5863.D
Acq On : 22 Oct 99 15:43 hrs
Sample : SSTD020N8
Misc : SSTD020N8 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:33 1999

Vial: 27
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



Quantitation Report

001169
0107e

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

All spectra and manual integrations for this sample have been reviewed and approved.
By: Date: 10/25/99
Secondary review: Date: 10/27/99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.12	152	202114	40.00	ug	0.00
20) Naphthalene-d8	12.09	136	731974	40.00	ug	0.00
35) Acenaphthene-d10	16.02	164	397449	40.00	ug	0.00
57) Phenanthrene-d10	19.08	188	657434	40.00	ug	0.00
70) Chrysene-d12	24.51	240	509102	40.00	ug	0.00
79) Perylene-d12	27.29	264	505599	40.00	ug	0.00

System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	6.42	112	379471	54.23	ug	27.11%
3) Phenol-d5	8.52	99	446536	46.63	ug	23.32%
21) Nitrobenzene-d5	10.49	82	411439	56.39	ug	56.39%
40) 2-Fluorobiphenyl	14.58	172	545082	56.10	ug	56.10%
56) 2,4,6-Tribromophenol	17.71	330	97449	52.85	ug	26.43%
73) Terphenyl-d14	22.34	244	688550	58.50	ug	58.50%

Target Compounds							Qvalue
4) Pyridine	2.94	52	281988	49.85	ug		80
5) N-Nitrosodimethylamine	2.98	42	184529	51.73	ug	#	75
6) Cyclohexanone	6.79	42	170766	61.58	ug		89
7) Phenol	8.55	94	428567	48.22	ug	m	84
8) Aniline	8.51	93	570888	62.48	ug		98
9) bis(2-Chloroethyl)ether	8.64	63	200345	49.22	ug		100
10) 2-Chlorophenol	8.75	128	313159	53.80	ug		88
11) 1,3-Dichlorobenzene	9.04	146	383131	57.62	ug		99
12) 1,4-Dichlorobenzene	9.16	146	334291	55.96	ug		99
13) Benzyl alcohol	9.53	108	227342	50.81	ug		100
14) 1,2-Dichlorobenzene	9.59	146	304665	55.41	ug		96
15) bis(2-Chloroisopropyl)ethe	9.84	45	268799	48.26	ug		63
16) 2-Methylphenol	9.86	108	286889	49.78	ug		96
17) Hexachloroethane	10.27	117	136163	53.87	ug		91
18) N-Nitroso-di-n-propylamine	10.19	70	192475	48.51	ug		92
19) 4-Methylphenol	10.19	108	276000	50.12	ug		94
22) Nitrobenzene	10.53	77	350503	57.12	ug		93
23) Isophorone	11.05	82	781091	53.88	ug		94
24) 2-Nitrophenol	11.27	139	251254	57.32	ug		91
25) 2,4-Dimethylphenol	11.40	107	319701	54.80	ug		95
26) Benzoic acid	11.73	122	225533	66.21	ug	m	95
27) bis(2-Chloroethoxy)methane	11.60	93	460708	54.73	ug		98
28) 2,4-Dichlorophenol	11.84	162	294819	54.04	ug		97
29) 1,2,4-Trichlorobenzene	12.00	180	276964	56.91	ug		96
30) Naphthalene	12.14	128	817221	56.62	ug		99
31) 4-Chloroaniline	12.35	127	417090	55.06	ug		100
32) Hexachlorobutadiene	12.54	225	157381	60.81	ug		97

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

0108

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33) 4-Chloro-3-methylphenol	13.51	107	332357	53.78 ug		97
34) 2-Methylnaphthalene	13.71	142	528474	55.36 ug		98
36) 2,4,5-Trichlorotoluene	13.70	159	260619	57.08 ug		97
37) Hexachlorocyclopentadiene	14.21	237	58847	29.47 ug		98
38) 2,4,6-Trichlorophenol	14.43	196	193794	55.68 ug		97
39) 2,4,5-Trichlorophenol	14.53	196	186194	53.43 ug		99
41) 2-Chloronaphthalene	14.78	162	489993	54.60 ug		99
42) 2-Nitroaniline	15.12	65	187187	51.63 ug		93
43) Acenaphthylene	15.70	152	917076	59.15 ug		99
44) Dimethylphthalate	15.55	163	745712	53.73 ug		99
45) 2,6-Dinitrotoluene	15.73	165	156686	50.76 ug		93
46) Acenaphthene	16.09	153	507022	54.45 ug		96
47) 3-Nitroaniline	16.03	138	181984	43.71 ug		95
48) 2,4-Dinitrophenol	16.23	184	73822	40.93 ug		78
49) Dibenzofuran	16.42	168	765739	57.53 ug		77
50) 2,4-Dinitrotoluene	16.54	165	226198	50.72 ug		94
51) 4-Nitrophenol	16.43	109	100198	45.03 ug	#	64
52) Fluorene	17.15	166	539192	52.38 ug		97
53) 4-Chlorophenyl-phenylether	17.14	204	246094	52.47 ug		97
54) Diethylphthalate	17.03	149	773412	53.59 ug		99
55) 4-Nitroaniline	17.33	138	195572	45.57 ug	#	81
58) 4,6-Dinitro-2-methylphenol	17.40	198	120679	55.79 ug		100
59) N-Nitrosodiphenylamine (1)	17.42	169	388634	57.80 ug		97
60) 1,2-Diphenylhydrazine	17.47	77	564222	54.52 ug	m	100
61) 4-Bromophenyl-phenylether	18.14	248	185286	61.50 ug		93
62) Hexachlorobenzene	18.45	284	201332	59.28 ug		97
63) Pentachlorophenol	18.85	266	116040	57.77 ug		99
64) Phenanthrene	19.13	178	732199	58.67 ug		99
65) Carbazole	19.59	167	866008	57.44 ug		99
66) Anthracene	19.22	178	753559	58.19 ug		99
67) Di-n-butylphthalate	20.34	149	1293940	60.35 ug		98
68) Fluoranthene	21.57	202	918885	58.29 ug		83
69) Kepone	23.39	272	424467	45.45 ug		98
71) Benzidine	21.90	184	423587	56.72 ug		100
72) Pyrene	22.03	202	829243	56.61 ug		83
74) Butylbenzylphthalate	23.38	149	409465	41.75 ug		94
75) 3,3'-Dichlorobenzidine	24.45	252	325758	54.22 ug		98
76) Benzo(a)anthracene	24.47	228	727526	61.77 ug		99
77) Chrysene	24.56	228	585497	51.89 ug		99
78) bis(2-Ethylhexyl)phthalate	24.52	149	573033	58.84 ug		93
80) Di-n-octylphthalate	25.68	149	1323674	64.27 ug		98
81) Benzo(b)fluoranthene	26.54	252	871180	57.60 ug		91
82) Benzo(k)fluoranthene	26.58	252	608226	66.15 ug		93

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83)	Benzo(a)pyrene	27.17	252	730183	58.10 ug		93
84)	Indeno(1,2,3-cd)pyrene	29.85	276	767498	51.92 ug	#	68
85)	Dibenzo(a,h)anthracene	29.85	278	650421	53.13 ug		88
86)	Benzo(g,h,i)perylene	30.63	276	745697	51.95 ug		82

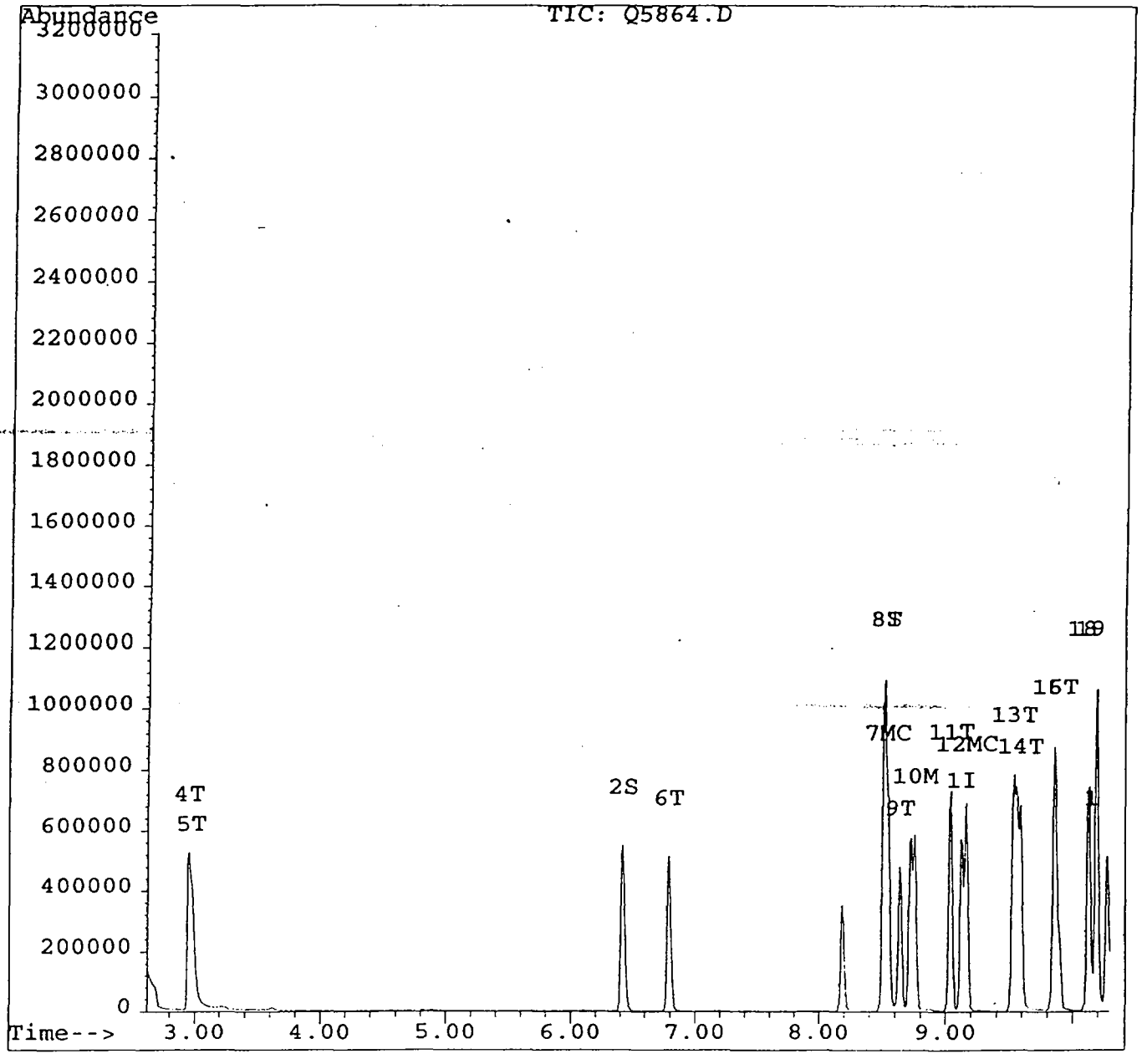
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

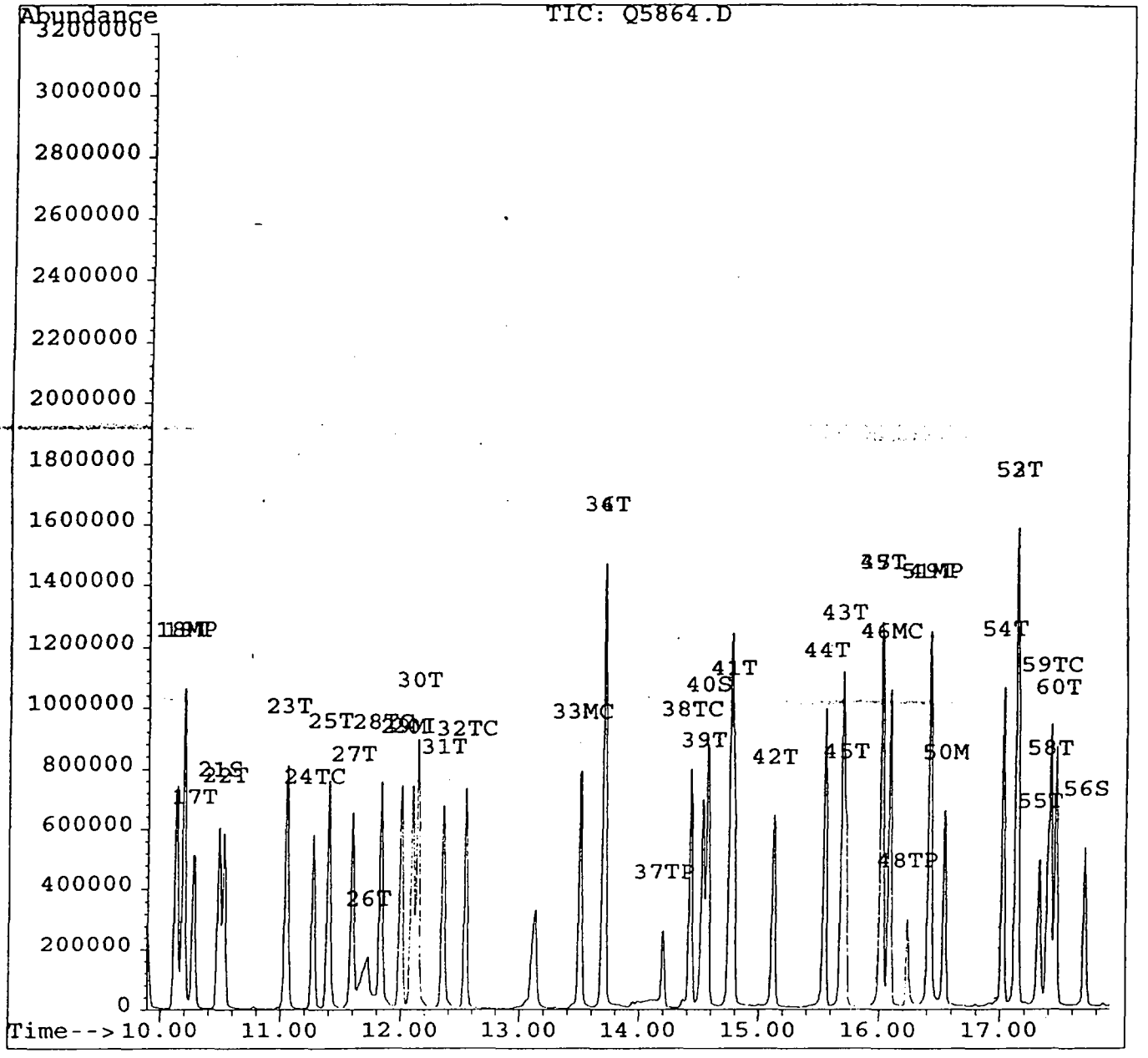


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



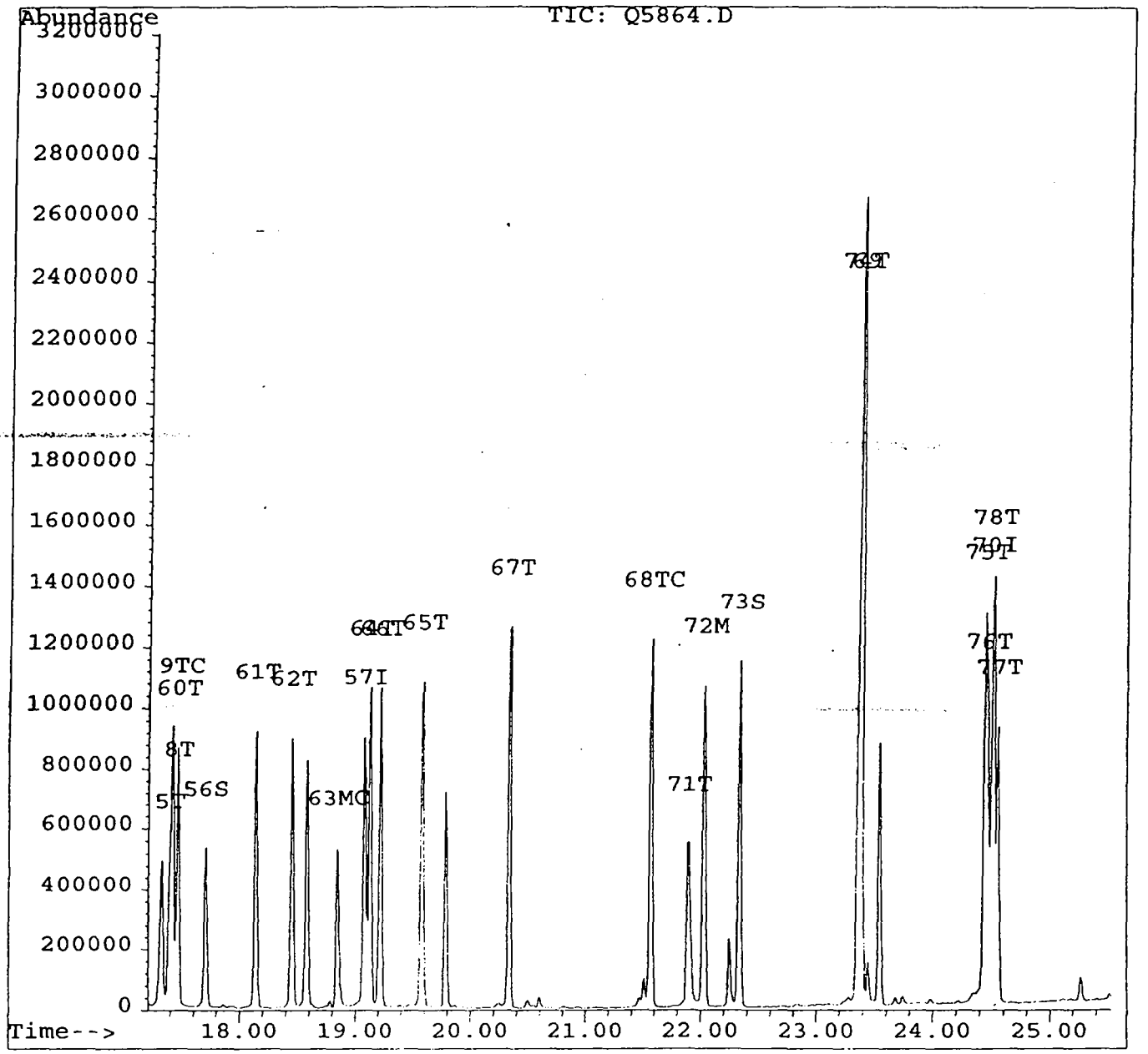
Quantitation Report

0112

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

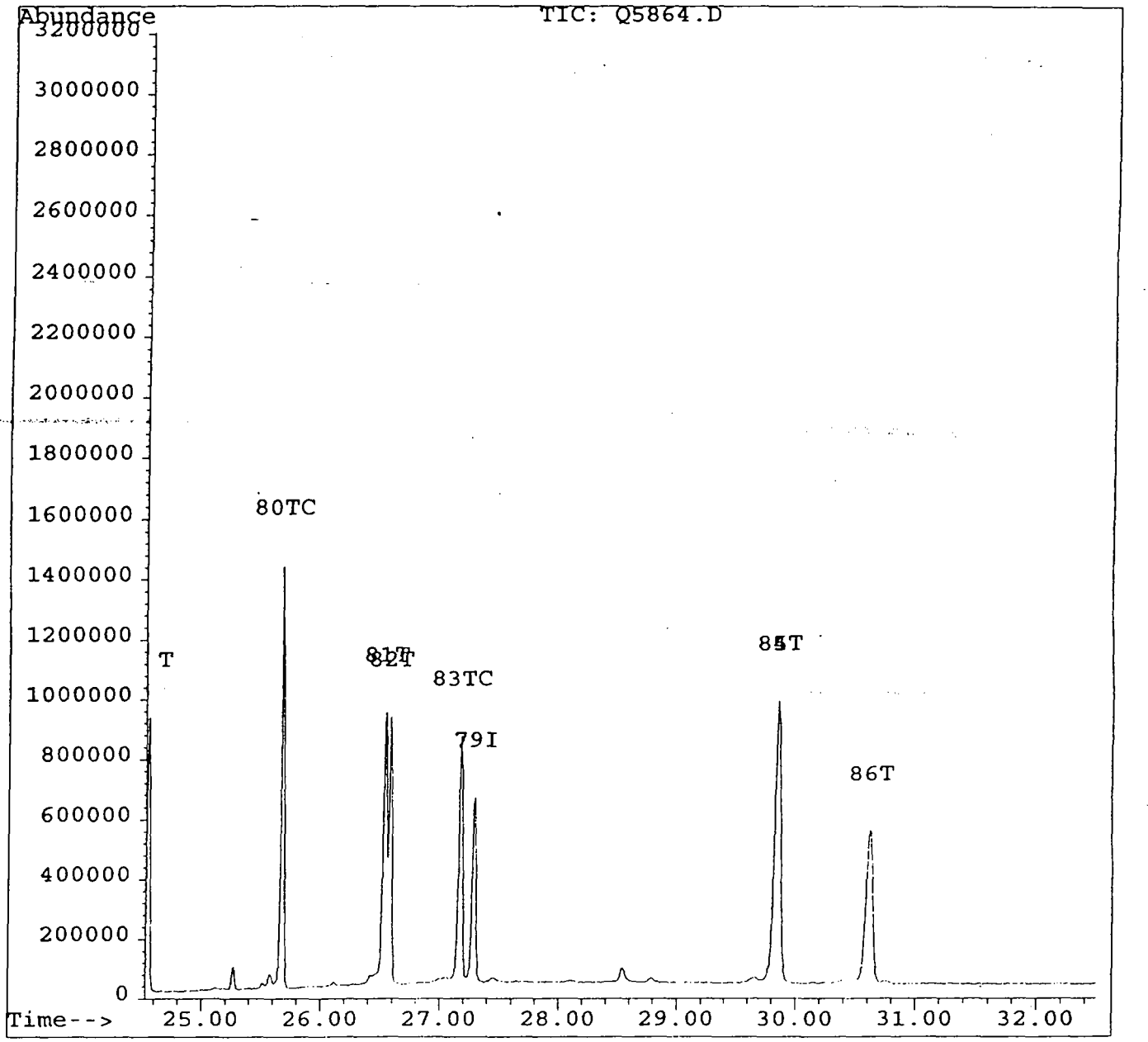


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5864.D
Acq On : 22 Oct 99 16:26 hrs
Sample : SSTD050N9
Misc : SSTD050N9 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:37 1999

Vial: 28
Operator: C LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



Quantitation Report

0114

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

All spectra and manual integrations for this sample have been reviewed and approved.
By: _____ Date: 10,25,99
Secondary review: _____ Date: 10,27,99

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.12	152	171837	40.00 ug	0.00
20) Naphthalene-d8	12.10	136	615574	40.00 ug	0.00
35) Acenaphthene-d10	16.01	164	333015	40.00 ug	0.00
57) Phenanthrene-d10	19.08	188	565091	40.00 ug	0.00
70) Chrysene-d12	24.51	240	443657	40.00 ug	0.00
79) Perylene-d12	27.29	264	461651	40.00 ug	0.00

System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	6.41	112	514765	86.52 ug	43.26%
3) Phenol-d5	8.52	99	564353	69.32 ug	34.66%
21) Nitrobenzene-d5	10.49	82	539952	88.00 ug	88.00%
40) 2-Fluorobiphenyl	14.57	172	683778	83.99 ug	83.99%
56) 2,4,6-Tribromophenol	17.71	330	134246	86.90 ug	43.45%
73) Terphenyl-d14	22.34	244	930251	90.70 ug	90.70%

Target Compounds						Qvalue
4) Pyridine	2.93	52	373062	77.57 ug		77
5) N-Nitrosodimethylamine	2.98	42	244011	80.46 ug	#	71
6) Cyclohexanone	6.79	42	146518	62.15 ug		91
7) Phenol	8.55	94	548662	72.61 ug	m	84
8) Aniline	8.51	93	640723	82.48 ug		99
9) bis(2-Chloroethyl)ether	8.64	63	254585	73.57 ug		100
10) 2-Chlorophenol	8.76	128	406154	82.08 ug		86
11) 1,3-Dichlorobenzene	9.03	146	477186	84.41 ug		99
12) 1,4-Dichlorobenzene	9.16	146	443538	87.33 ug		99
13) Benzyl alcohol	9.53	108	282368	74.23 ug		100
14) 1,2-Dichlorobenzene	9.59	146	387850	82.97 ug		100
15) bis(2-Chloroisopropyl)ethe	9.85	45	339086	71.60 ug	#	53
16) 2-Methylphenol	9.86	108	363995	74.28 ug		98
17) Hexachloroethane	10.27	117	177364	82.53 ug		82
18) N-Nitroso-di-n-propylamine	10.19	70	241668	71.64 ug		87
19) 4-Methylphenol	10.19	108	353145	75.42 ug		99
22) Nitrobenzene	10.53	77	445310	86.29 ug		94
23) Isophorone	11.06	82	990513	81.25 ug		93
24) 2-Nitrophenol	11.27	139	327367	88.81 ug		89
25) 2,4-Dimethylphenol	11.40	107	423311	86.28 ug		96
26) Benzoic acid	11.75	122	326533	113.99 ug	m	96
27) bis(2-Chloroethoxy)methane	11.60	93	582365	82.27 ug		99
28) 2,4-Dichlorophenol	11.84	162	382785	83.43 ug		96
29) 1,2,4-Trichlorobenzene	12.00	180	359860	87.92 ug		97
30) Naphthalene	12.14	128	1069875	88.14 ug		99
31) 4-Chloroaniline	12.36	127	518908	81.45 ug		100
32) Hexachlorobutadiene	12.55	225	205475	94.40 ug		99

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

001177

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29 0115
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	4-Chloro-3-methylphenol	13.51	107	433673	83.45 ug		99
34)	2-Methylnaphthalene	13.72	142	666436	83.02 ug		97
36)	2,4,5-Trichlorotoluene	13.71	159	332367	86.87 ug		98
37)	Hexachlorocyclopentadiene	14.20	237	100814	60.26 ug		98
38)	2,4,6-Trichlorophenol	14.43	196	253851	87.04 ug		97
39)	2,4,5-Trichlorophenol	14.53	196	243482	83.39 ug		99
41)	2-Chloronaphthalene	14.79	162	626509	83.32 ug		98
42)	2-Nitroaniline	15.13	65	241572	79.52 ug	#	85
43)	Acenaphthylene	15.70	152	1148679	88.42 ug		98
44)	Dimethylphthalate	15.56	163	946623	81.40 ug		99
45)	2,6-Dinitrotoluene	15.73	165	203514	78.69 ug		87
46)	Acenaphthene	16.09	153	663717	85.07 ug		97
47)	3-Nitroaniline	16.02	138	250419	71.78 ug		96
48)	2,4-Dinitrophenol	16.24	184	121109	80.13 ug		86
49)	Dibenzofuran	16.42	168	962071	86.27 ug		80
50)	2,4-Dinitrotoluene	16.55	165	300088	80.31 ug		99
51)	4-Nitrophenol	16.43	109	130608	70.05 ug	#	48
52)	Fluorene	17.15	166	678906	78.72 ug		96
53)	4-Chlorophenyl-phenylether	17.14	204	302320	76.93 ug		97
54)	Diethylphthalate	17.03	149	989004	81.78 ug		99
55)	4-Nitroaniline	17.34	138	278129	77.35 ug	#	80
58)	4,6-Dinitro-2-methylphenol	17.40	198	168051	90.39 ug		100
59)	N-Nitrosodiphenylamine (1)	17.43	169	495600	85.76 ug		97
60)	1,2-Diphenylhydrazine	17.47	77	676781	76.08 ug	m	100
61)	4-Bromophenyl-phenylether	18.14	248	238018	91.92 ug		93
62)	Hexachlorobenzene	18.45	284	269179	92.21 ug		95
63)	Pentachlorophenol	18.85	266	158504	91.81 ug		99
64)	Phenanthrene	19.13	178	993804	92.65 ug		99
65)	Carbazole	19.59	167	1116659	86.17 ug		98
66)	Anthracene	19.22	178	949112	85.26 ug		99
67)	Di-n-butylphthalate	20.34	149	1661524	90.16 ug		99
68)	Fluoranthene	21.58	202	1219192	89.97 ug		80
69)	Kepone	23.39	272	585832	72.97 ug		97
71)	Benzidine	21.91	184	362947	55.76 ug		100
72)	Pyrene	22.04	202	1109014	86.88 ug		80
74)	Butylbenzylphthalate	23.37	149	577083	67.52 ug		96
75)	3,3'-Dichlorobenzidine	24.45	252	461965	88.23 ug		98
76)	Benzo(a)anthracene	24.47	228	1030661	100.42 ug		99
77)	Chrysene	24.56	228	786517	79.99 ug		100
78)	bis(2-Ethylhexyl)phthalate	24.52	149	777650	91.63 ug		94
80)	Di-n-octylphthalate	25.68	149	1790180	95.20 ug		99
81)	Benzo(b)fluoranthene	26.54	252	1309455	94.82 ug		92
82)	Benzo(k)fluoranthene	26.59	252	759219	90.43 ug		92

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

10/25/99

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83) Benzo(a)pyrene	27.18	252	1033963	90.11 ug		92
84) Indeno(1,2,3-cd)pyrene	29.88	276	1179445	87.39 ug	#	63
85) Dibenzo(a,h)anthracene	29.88	278	987580	88.34 ug		84
86) Benzo(g,h,i)perylene	30.64	276	1167610	89.09 ug	#	80

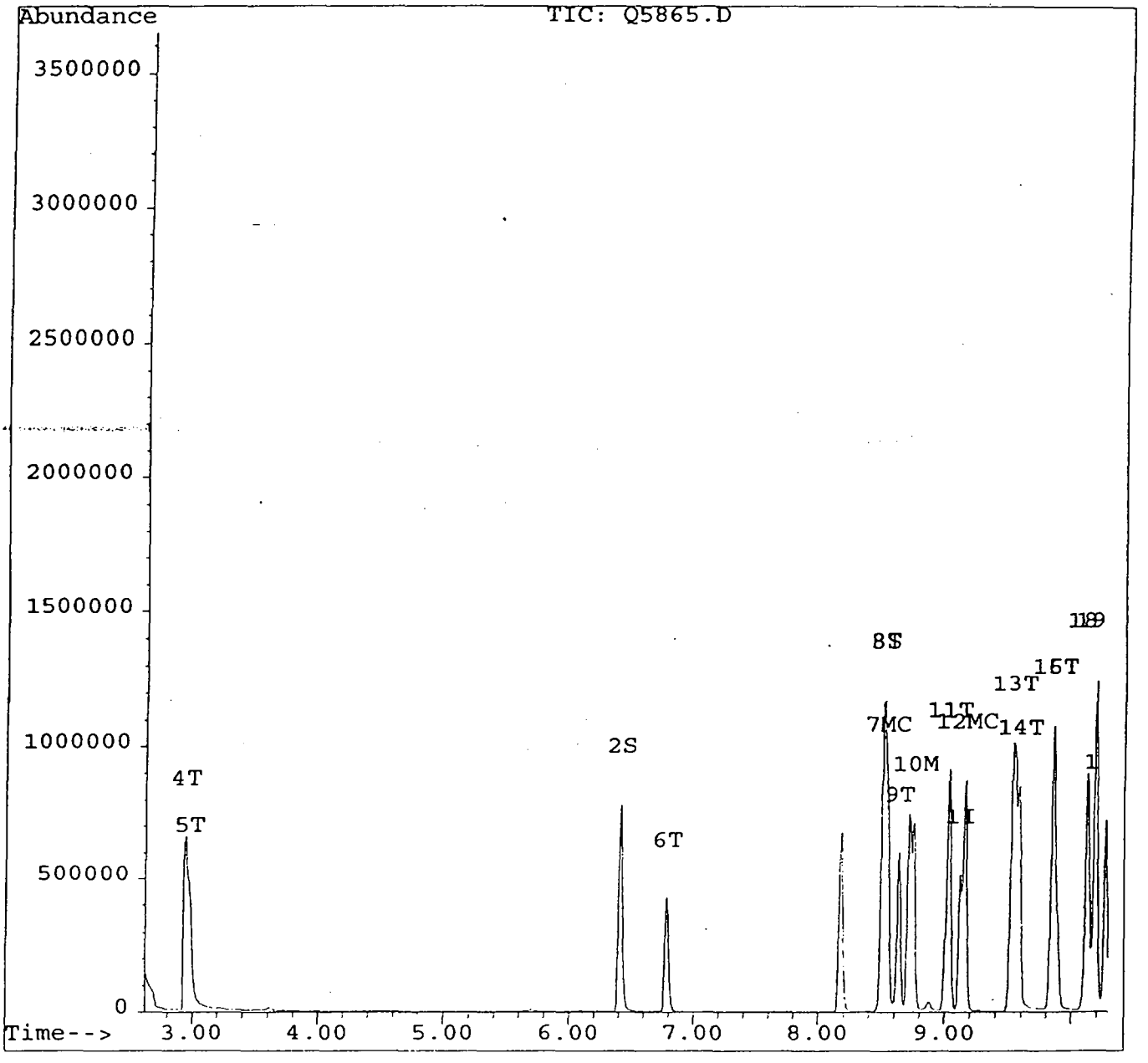
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

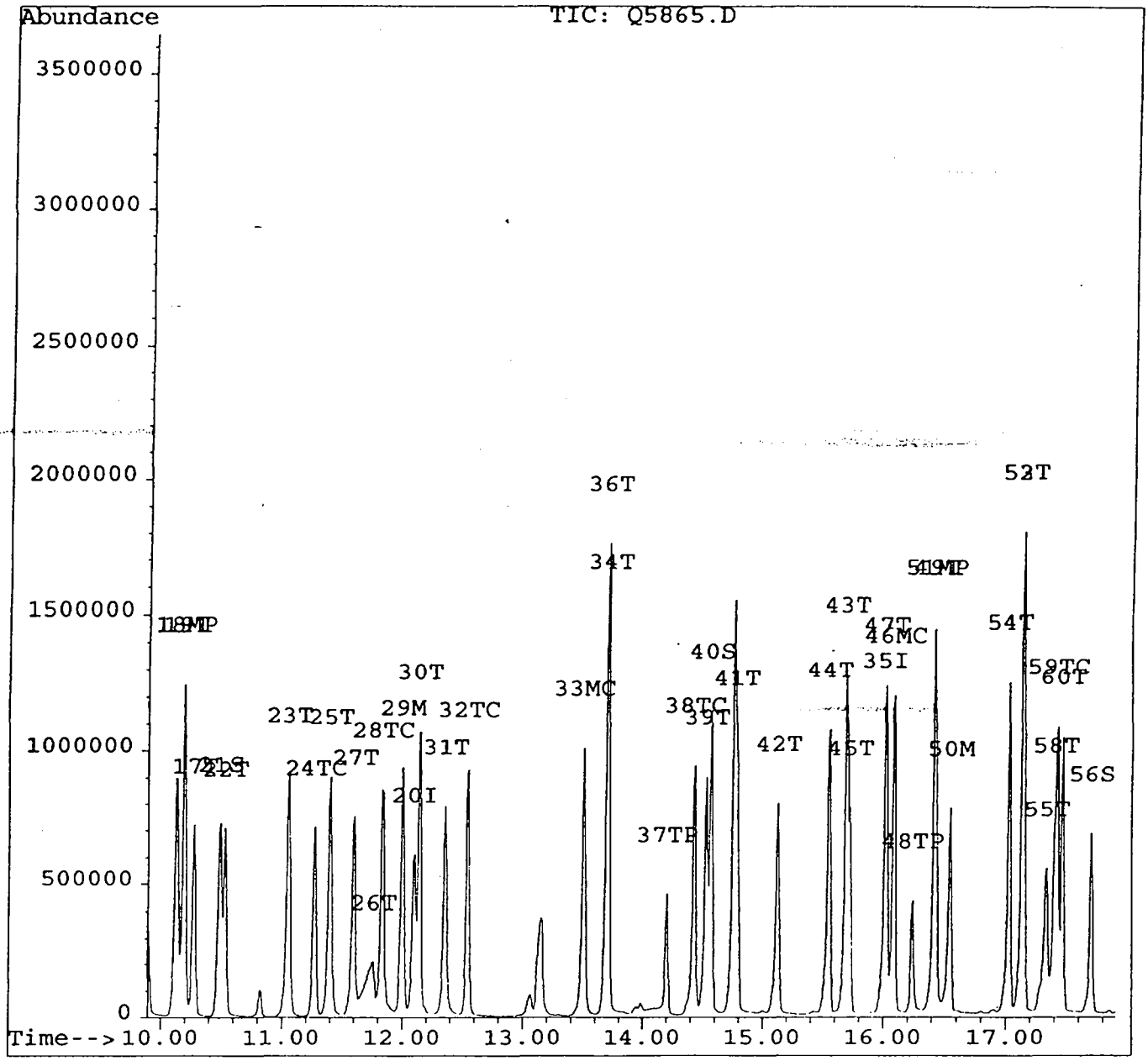


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

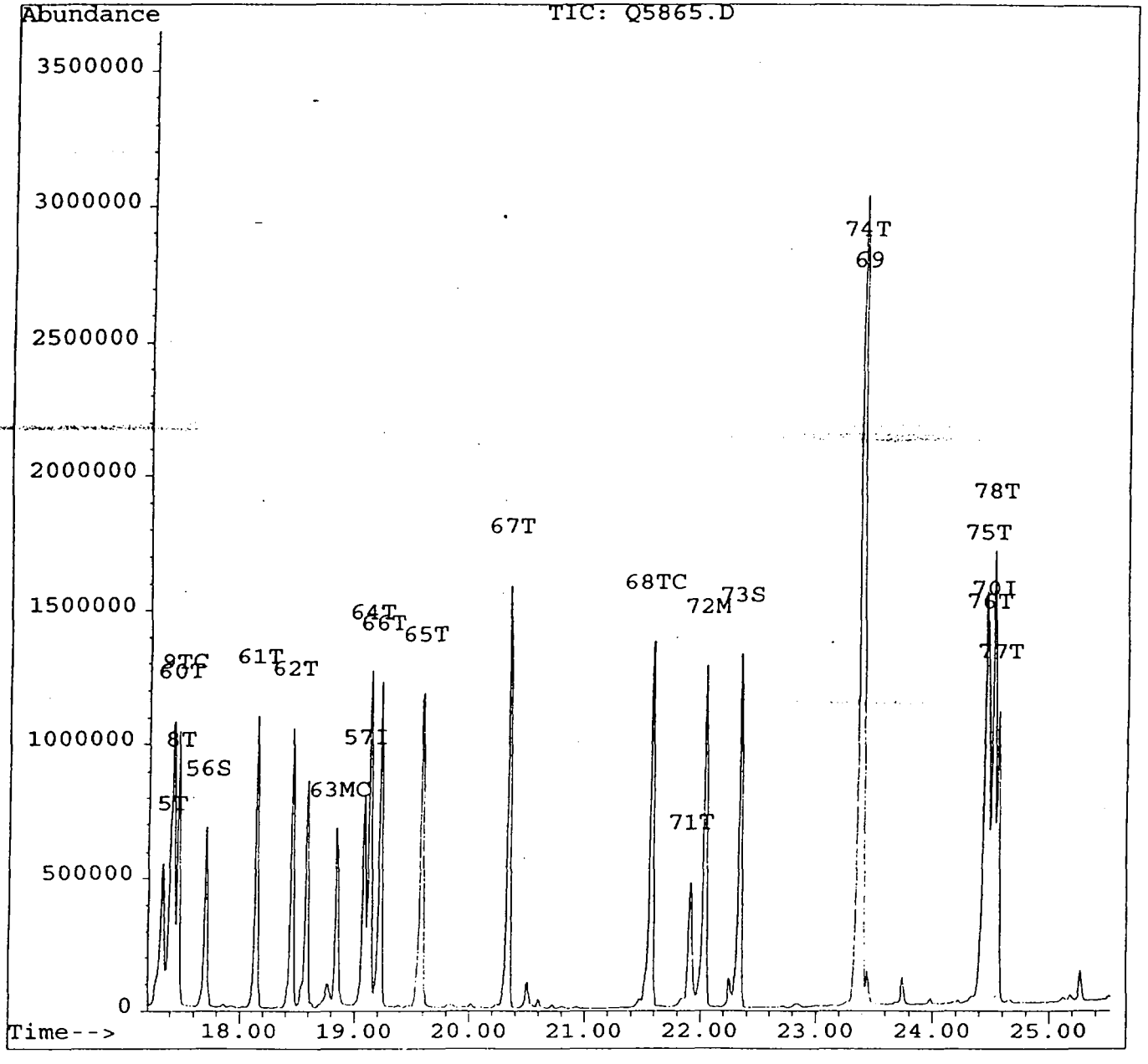


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29 0119
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

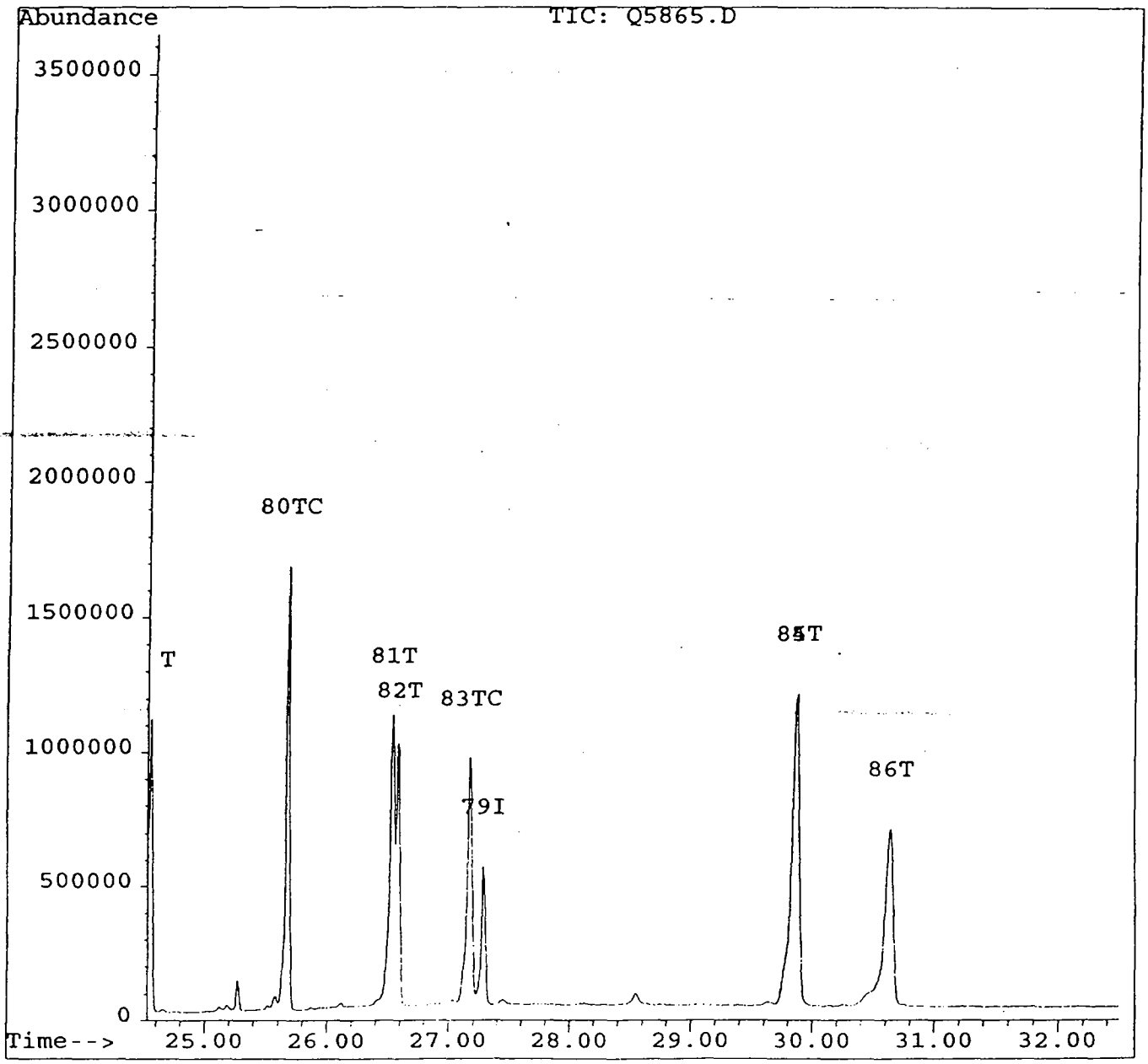


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5865.D
Acq On : 22 Oct 99 17:13 hrs
Sample : SSTD08001
Misc : SSTD08001 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:40 1999

Vial: 29 0120
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

All spectra and manual integrations for this sample have been reviewed and approved.
By: _____ Date: 10/25/99
Secondary review: _____ Date: 10/27/99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.13	152	180766	40.00 ug	0.00
20) Naphthalene-d8	12.10	136	631731	40.00 ug	0.01
35) Acenaphthene-d10	16.02	164	338124	40.00 ug	0.00
57) Phenanthrene-d10	19.09	188	568984	40.00 ug	0.01
70) Chrysene-d12	24.51	240	426593	40.00 ug	0.00
79) Perylene-d12	27.29	264	464057	40.00 ug	0.00

System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	6.41	112	760453	121.51 ug	60.75%
3) Phenol-d5	8.53	99	799272	93.33 ug	46.66%
21) Nitrobenzene-d5	10.50	82	780924	124.02 ug	124.02%
40) 2-Fluorobiphenyl	14.58	172	973127	117.73 ug	117.73%
56) 2,4,6-Tribromophenol	17.71	330	196197	125.08 ug	62.54%
73) Terphenyl-d14	22.35	244	1308051	132.63 ug	132.63%

Target Compounds						Qvalue
4) Pyridine	2.94	52	533376	105.42 ug	#	67
5) N-Nitrosodimethylamine	3.00	42	347181	108.83 ug	#	71
6) Cyclohexanone	6.79	42	175406	70.73 ug		86
7) Phenol	8.56	94	722730	90.93 ug	m	80
8) Aniline	8.52	93	852455	104.31 ug		93
9) bis(2-Chloroethyl)ether	8.65	63	356470	97.93 ug		100
10) 2-Chlorophenol	8.77	128	589290	113.20 ug		86
11) 1,3-Dichlorobenzene	9.05	146	674506	113.42 ug		97
12) 1,4-Dichlorobenzene	9.17	146	628520	117.64 ug		98
13) Benzyl alcohol	9.54	108	368414	92.06 ug		98
14) 1,2-Dichlorobenzene	9.59	146	543300	110.48 ug		100
15) bis(2-Chloroisopropyl)ethe	9.85	45	457836	91.90 ug	#	51
16) 2-Methylphenol	9.87	108	522390	101.34 ug		96
17) Hexachloroethane	10.28	117	248361	109.86 ug		79
18) N-Nitroso-di-n-propylamine	10.22	70	338754	95.46 ug		84
19) 4-Methylphenol	10.21	108	499975	101.51 ug		98
22) Nitrobenzene	10.54	77	629182	118.80 ug		91
23) Isophorone	11.07	82	1452879	116.13 ug		92
24) 2-Nitrophenol	11.28	139	486409	128.58 ug		89
25) 2,4-Dimethylphenol	11.41	107	628459	124.82 ug		94
26) Benzoic acid	11.81	122	506546	172.31 ug	m E	95
27) bis(2-Chloroethoxy)methane	11.61	93	842264	115.94 ug		99
28) 2,4-Dichlorophenol	11.84	162	562340	119.44 ug		96
29) 1,2,4-Trichlorobenzene	12.00	180	513879	122.34 ug		95
30) Naphthalene	12.15	128	1516908	121.77 ug		99
31) 4-Chloroaniline	12.36	127	741130	113.36 ug		100
32) Hexachlorobutadiene	12.55	225	301774	135.10 ug		99

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	4-Chloro-3-methylphenol	13.52	107	620773	116.40 ug		96
34)	2-Methylnaphthalene	13.72	142	944485	114.64 ug		97
36)	2,4,5-Trichlorotoluene	13.71	159	473596	121.92 ug		97
37)	Hexachlorocyclopentadiene	14.20	237	193315	113.81 ug		99
38)	2,4,6-Trichlorophenol	14.44	196	374622	126.51 ug		100
39)	2,4,5-Trichlorophenol	14.54	196	349015	117.72 ug		99
41)	2-Chloronaphthalene	14.80	162	902194	118.18 ug		98
42)	2-Nitroaniline	15.14	65	365382	118.46 ug	#	83
43)	Acenaphthylene	15.71	152	1602548	121.49 ug		97
44)	Dimethylphthalate	15.57	163	1347603	114.13 ug		99
45)	2,6-Dinitrotoluene	15.74	165	300255	114.34 ug		92
46)	Acenaphthene	16.09	153	948761	119.77 ug		97
47)	3-Nitroaniline	16.03	138	359377	101.46 ug		99
48)	2,4-Dinitrophenol	16.25	184	201886	131.56 ug		92
49)	Dibenzofuran	16.43	168	1360816	120.18 ug		80
50)	2,4-Dinitrotoluene	16.56	165	441068	116.26 ug		97
51)	4-Nitrophenol	16.44	109	199029	105.14 ug	#	72
52)	Fluorene	17.15	166	961899	109.85 ug		95
53)	4-Chlorophenyl-phenylether	17.14	204	434043	108.78 ug		99
54)	Diethylphthalate	17.04	149	1378656	112.28 ug		99
55)	4-Nitroaniline	17.35	138	387311	106.09 ug	#	78
58)	4,6-Dinitro-2-methylphenol	17.41	198	244941	130.84 ug		100
59)	N-Nitrosodiphenylamine (1)	17.43	169	694870	119.41 ug		96
60)	1,2-Diphenylhydrazine	17.47	77	897965	100.25 ug	m	100
61)	4-Bromophenyl-phenylether	18.15	248	348027	133.48 ug		93
62)	Hexachlorobenzene	18.46	284	394046	134.07 ug		92
63)	Pentachlorophenol	18.86	266	236658	136.14 ug		98
64)	Phenanthrene	19.14	178	1414265	130.95 ug		98
65)	Carbazole	19.59	167	1543038	118.25 ug		98
66)	Anthracene	19.23	178	1364029	121.70 ug		98
67)	Di-n-butylphthalate	20.35	149	2266866	122.16 ug		98
68)	Fluoranthene	21.58	202	1680853	123.19 ug		79
69)	Kepone	23.40	272	885390	109.53 ug		99
71)	Benzidine	21.93	184	512629	81.91 ug	m	100
72)	Pyrene	22.04	202	1566923	127.66 ug		79
74)	Butylbenzylphthalate	23.38	149	790391	96.18 ug		95
75)	3,3'-Dichlorobenzidine	24.46	252	612558	121.67 ug		98
76)	Benzo(a)anthracene	24.48	228	1418556	143.75 ug		98
77)	Chrysene	24.57	228	1136561	120.21 ug		99
78)	bis(2-Ethylhexyl)phthalate	24.53	149	1077036	131.98 ug		99
80)	Di-n-octylphthalate	25.68	149	2422666	128.16 ug		99
81)	Benzo(b)fluoranthene	26.55	252	2123251	152.95 ug		90
82)	Benzo(k)fluoranthene	26.60	252	762689	90.37 ug		91

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83)	Benzo(a)pyrene	27.18	252	1451731	125.86 ug		91
84)	Indeno(1,2,3-cd)pyrene	29.89	276	1845292	136.01 ug	#	61
85)	Dibenzo(a,h)anthracene	29.91	278	1549527	137.89 ug		82
86)	Benzo(g,h,i)perylene	30.67	276	1877192	142.49 ug	#	78

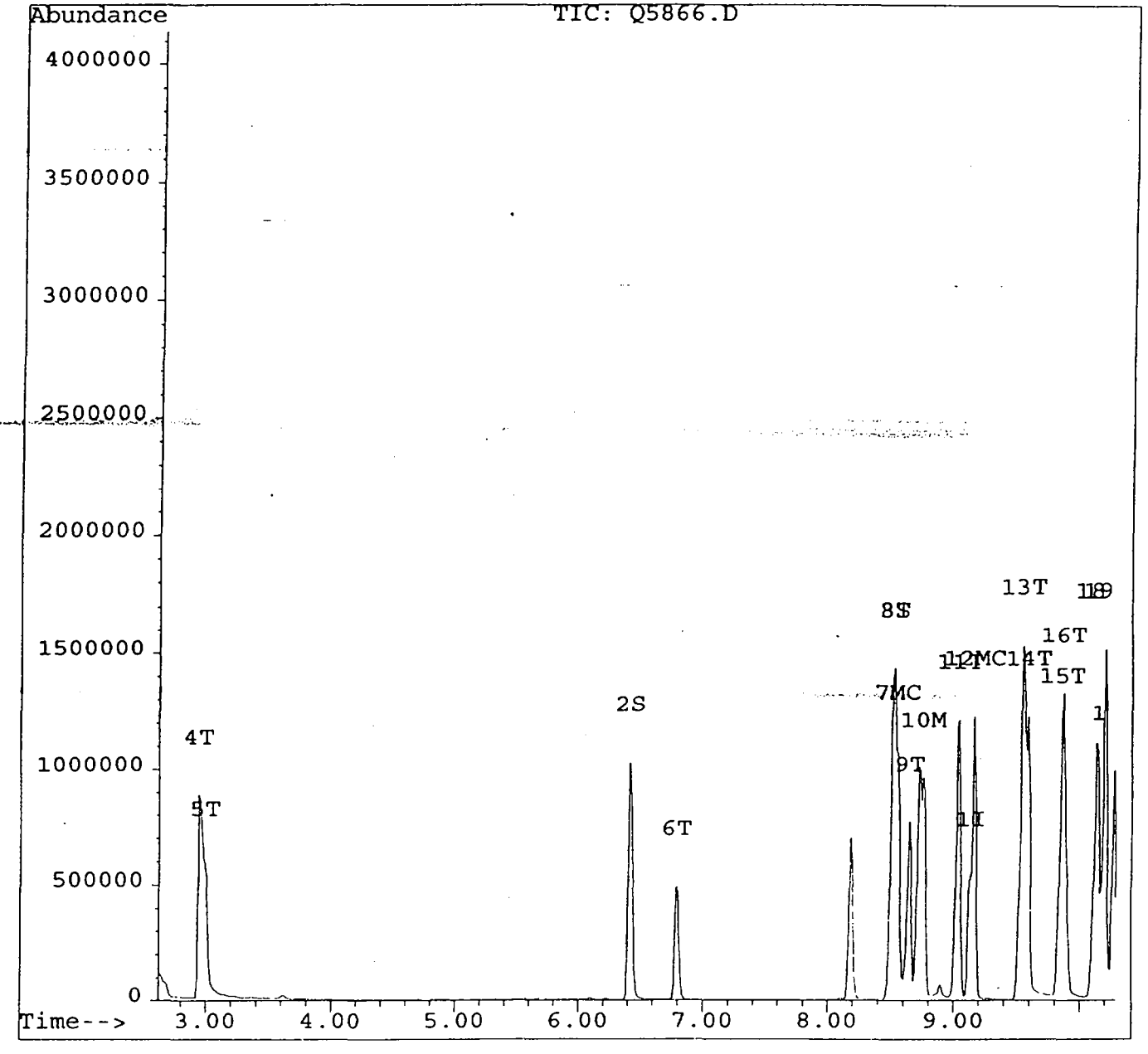
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

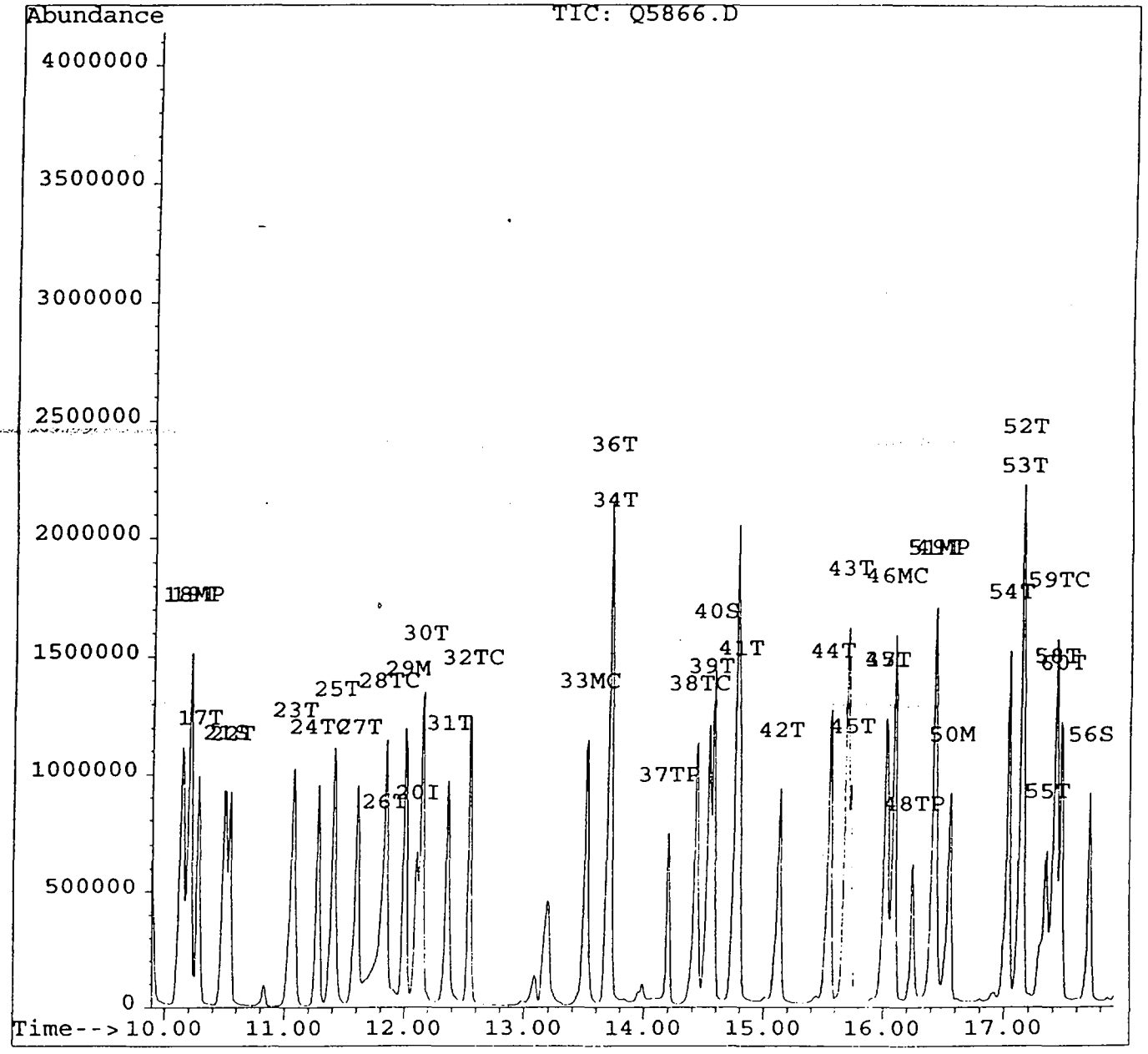
Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

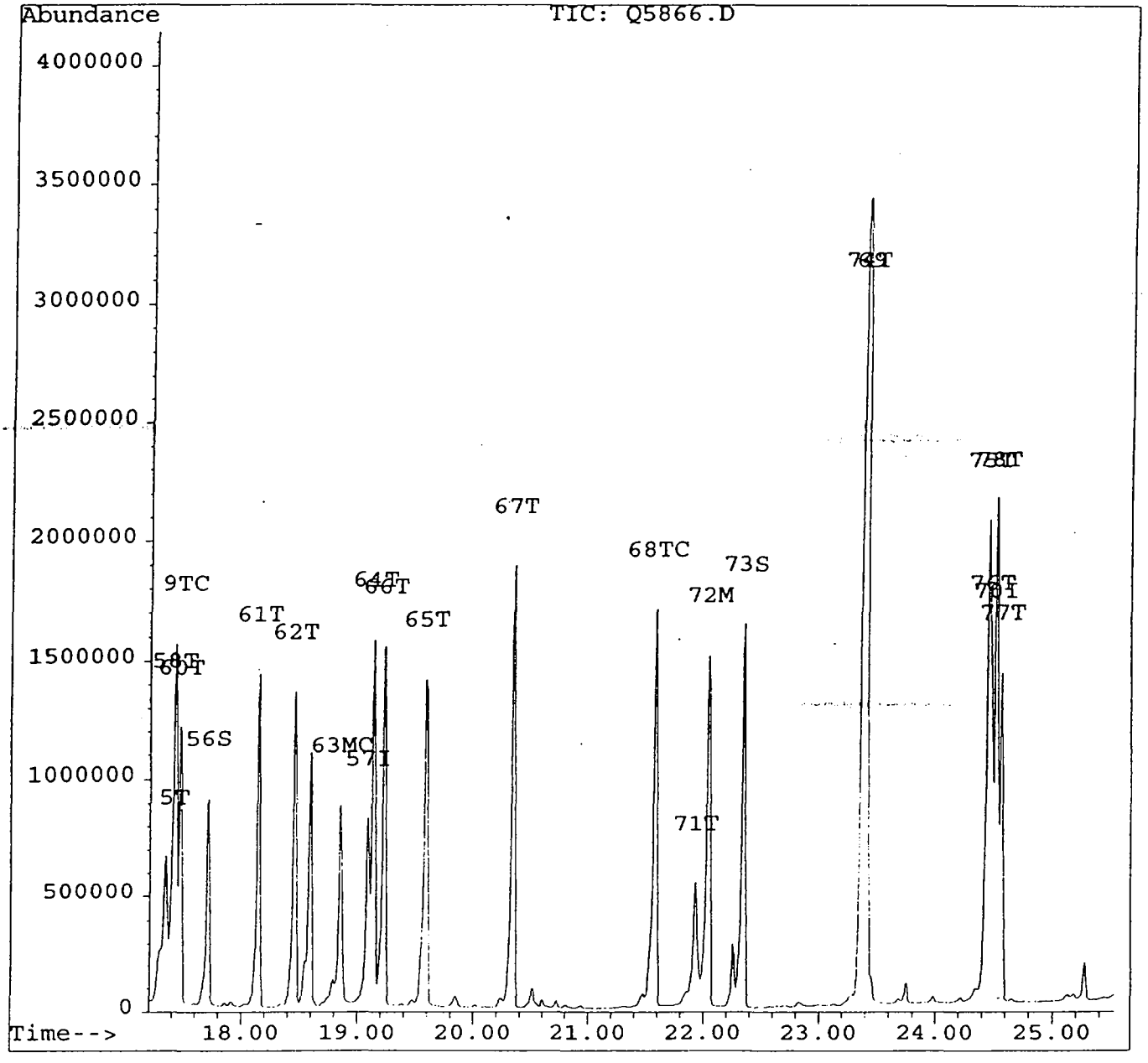


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD120O2
Misc : SSTD120O2 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

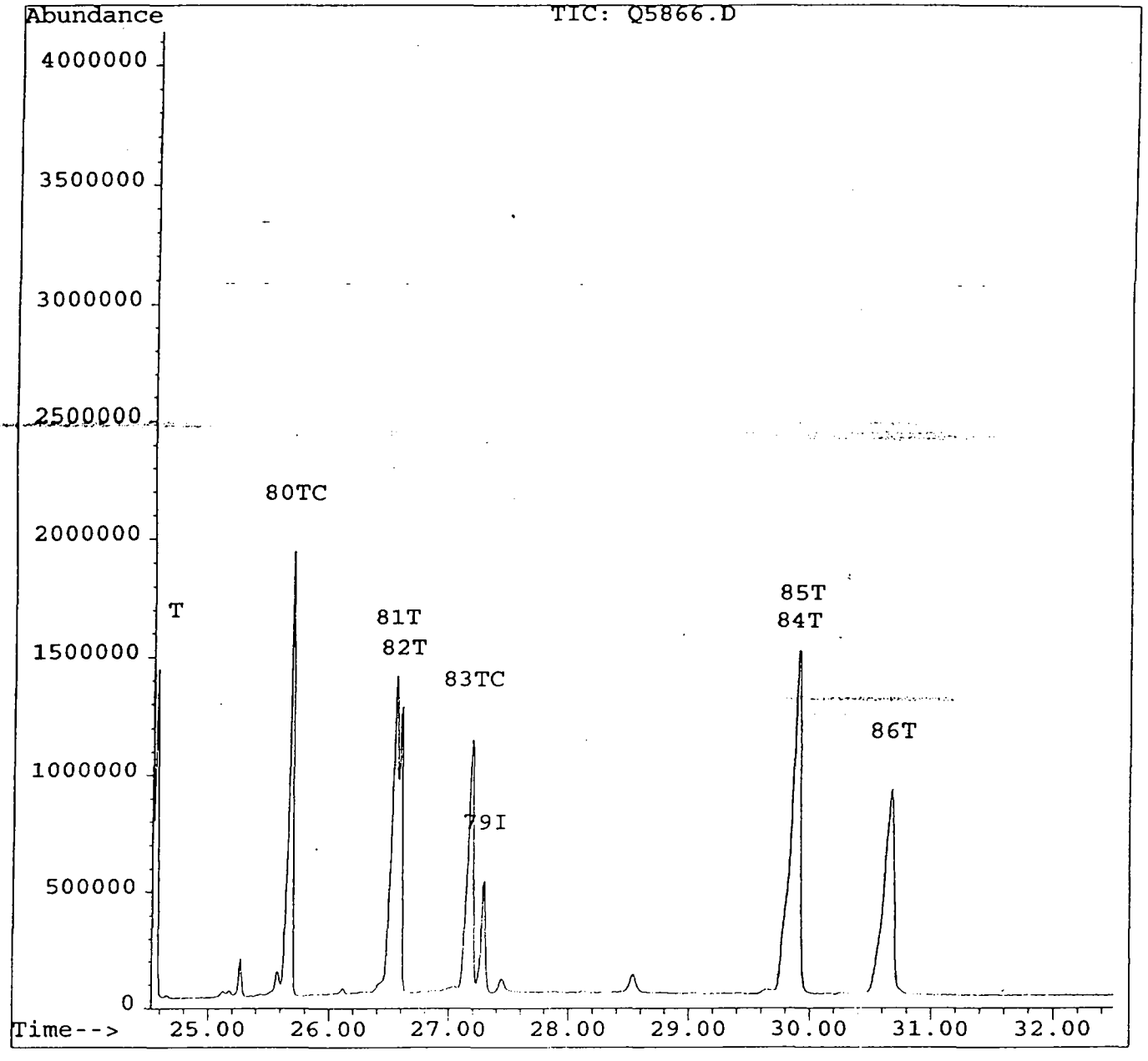


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5866.D
Acq On : 22 Oct 99 17:56 hrs
Sample : SSTD12002
Misc : SSTD12002 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:49 1999

Vial: 30
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5867.D
Acq On : 22 Oct 99 18:38 hrs
Sample : SSTD16003
Misc : SSTD16003 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:53 1999

Vial: 31 0128
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

All spectral and manual integrations for this sample have been reviewed and approved.
By: Date: 10,25,99
Secondary review: Date: 10,27,99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.14	152	202231	40.00 ug	0.00
20) Naphthalene-d8	12.11	136	703459	40.00 ug	0.01
35) Acenaphthene-d10	16.03	164	392470	40.00 ug	0.01
57) Phenanthrene-d10	19.09	188	669882	40.00 ug	0.00
70) Chrysene-d12	24.51	240	398789	40.00 ug	0.00
79) Perylene-d12	27.29	264	397473	40.00 ug	0.00

System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	6.42	112	1062595	151.76 ug	75.88%
3) Phenol-d5	8.54	99	1018015	106.25 ug	53.13%
21) Nitrobenzene-d5	10.51	82	1055717	150.57 ug	150.57%
40) 2-Fluorobiphenyl	14.58	172	1265506	131.90 ug	131.90%
56) 2,4,6-Tribromophenol	17.73	330	294383	161.69 ug	80.85%
73) Terphenyl-d14	22.35	244	1676067	181.80 ug	181.80%

Target Compounds						Qvalue
4) Pyridine	2.95	52	726495	128.35 ug	m	78
5) N-Nitrosodimethylamine	3.03	42	462830	129.68 ug	#	66
6) Cyclohexanone	6.80	42	395166	142.43 ug		82
7) Phenol	8.58	94	866707	97.47 ug	m	79
8) Aniline	8.53	93	1210468	132.40 ug		97
9) bis(2-Chloroethyl)ether	8.66	63	461692	113.37 ug		100
10) 2-Chlorophenol	8.78	128	767064	131.71 ug		85
11) 1,3-Dichlorobenzene	9.05	146	937393	140.90 ug		97
12) 1,4-Dichlorobenzene	9.18	146	838383	140.27 ug		94
13) Benzyl alcohol	9.56	108	470914	105.19 ug		100
14) 1,2-Dichlorobenzene	9.60	146	699039	127.06 ug		97
15) bis(2-Chloroisopropyl)ethe	9.85	45	590098	105.88 ug	#	49
16) 2-Methylphenol	9.88	108	676355	117.28 ug		97
17) Hexachloroethane	10.28	117	326242	128.99 ug	#	77
18) N-Nitroso-di-n-propylamine	10.24	70	436122	109.85 ug		88
19) 4-Methylphenol	10.22	108	643642	116.80 ug		100
22) Nitrobenzene	10.56	77	824204	139.76 ug		87
23) Isophorone	11.09	82	1925592	138.22 ug		88
24) 2-Nitrophenol	11.29	139	646684	153.52 ug		88
25) 2,4-Dimethylphenol	11.42	107	799545	142.61 ug		96
26) Benzoic acid	11.83	122	624487	190.77 ug	m E	95
27) bis(2-Chloroethoxy)methane	11.62	93	1093049	135.12 ug		99
28) 2,4-Dichlorophenol	11.86	162	739825	141.11 ug		94
29) 1,2,4-Trichlorobenzene	12.02	180	693334	148.23 ug		96
30) Naphthalene	12.16	128	1962767	141.49 ug		97
31) 4-Chloroaniline	12.37	127	1026620	141.01 ug		97
32) Hexachlorobutadiene	12.55	225	403141	162.08 ug	E	98

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5867.D
Acq On : 22 Oct 99 18:38 hrs
Sample : SSTD16003
Misc : SSTD16003 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:53 1999

Vial: 31
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	4-Chloro-3-methylphenol	13.54	107	805565	135.65 ug		94
34)	2-Methylnaphthalene	13.74	142	1224016	133.42 ug		100
36)	2,4,5-Trichlorotoluene	13.73	159	635051	140.85 ug		98
37)	Hexachlorocyclopentadiene	14.20	237	335807	170.33 ug	E	99
38)	2,4,6-Trichlorophenol	14.44	196	502644	146.24 ug		99
39)	2,4,5-Trichlorophenol	14.55	196	482443	140.19 ug		99
41)	2-Chloronaphthalene	14.80	162	1210019	136.55 ug		97
42)	2-Nitroaniline	15.14	65	482354	134.73 ug	#	89
43)	Acenaphthylene	15.71	152	2135246	139.46 ug		95
44)	Dimethylphthalate	15.57	163	1852283	135.15 ug		99
45)	2,6-Dinitrotoluene	15.75	165	425037	139.44 ug		94
46)	Acenaphthene	16.11	153	1267594	137.86 ug		98
47)	3-Nitroaniline	16.05	138	500252	121.67 ug		95
48)	2,4-Dinitrophenol	16.26	184	302004	169.55 ug	E	83
49)	Dibenzofuran	16.44	168	1858871	141.43 ug		87
50)	2,4-Dinitrotoluene	16.58	165	624001	141.71 ug		97
51)	4-Nitrophenol	16.47	109	284584	129.52 ug	#	48
52)	Fluorene	17.17	166	1306653	128.55 ug		97
53)	4-Chlorophenyl-phenylether	17.15	204	591755	127.77 ug		96
54)	Diethylphthalate	17.05	149	1868312	131.09 ug		97
55)	4-Nitroaniline	17.38	138	556979	131.44 ug	#	77
58)	4,6-Dinitro-2-methylphenol	17.44	198	339196	153.90 ug		100
59)	N-Nitrosodiphenylamine (1)	17.45	169	968010	141.30 ug		93
60)	1,2-Diphenylhydrazine	17.49	77	1427737	135.39 ug		100
61)	4-Bromophenyl-phenylether	18.16	248	491073	159.97 ug	#	88
62)	Hexachlorobenzene	18.47	284	553572	159.97 ug		92
63)	Pentachlorophenol	18.87	266	351022	171.52 ug	E	98
64)	Phenanthrene	19.15	178	1871156	147.16 ug		95
65)	Carbazole	19.61	167	2048914	133.37 ug		98
66)	Anthracene	19.24	178	1893151	143.47 ug		97
67)	Di-n-butylphthalate	20.34	149	2902204	132.85 ug		96
68)	Fluoranthene	21.59	202	2197508	136.80 ug		79
69)	Kepone	23.41	272	1285486	135.08 ug		99
71)	Benzidine	21.94	184	799182	136.60 ug	m	100
72)	Pyrene	22.05	202	1987281	173.19 ug	E	78
74)	Butylbenzylphthalate	23.38	149	858793	111.79 ug		90
75)	3,3'-Dichlorobenzidine	24.46	252	694590	147.58 ug		97
76)	Benzo(a)anthracene	24.48	228	1633270	177.04 ug	E	97
77)	Chrysene	24.57	228	1402018	158.62 ug		98
78)	bis(2-Ethylhexyl)phthalate	24.52	149	1324091	173.57 ug	E	98
80)	Di-n-octylphthalate	25.69	149	2709564	167.35 ug	E	97
81)	Benzo(b)fluoranthene	26.55	252	2219337	186.66 ug	E	90
82)	Benzo(k)fluoranthene	26.60	252	808151	111.80 ug	m	91

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5867.D
Acq On : 22 Oct 99 18:38 hrs
Sample : SSTD16003
Misc : SSTD16003 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:53 1999

Vial: 31
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83)	Benzo(a)pyrene	27.19	252	1560610	157.97 ug		89
84)	Indeno(1,2,3-cd)pyrene	29.91	276	2156609	185.58 ug	E	62
85)	Dibenzo(a,h)anthracene	29.92	278	1813811	188.45 ug	E	83
86)	Benzo(g,h,i)perylene	30.69	276	2173745	192.64 ug	E	76

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

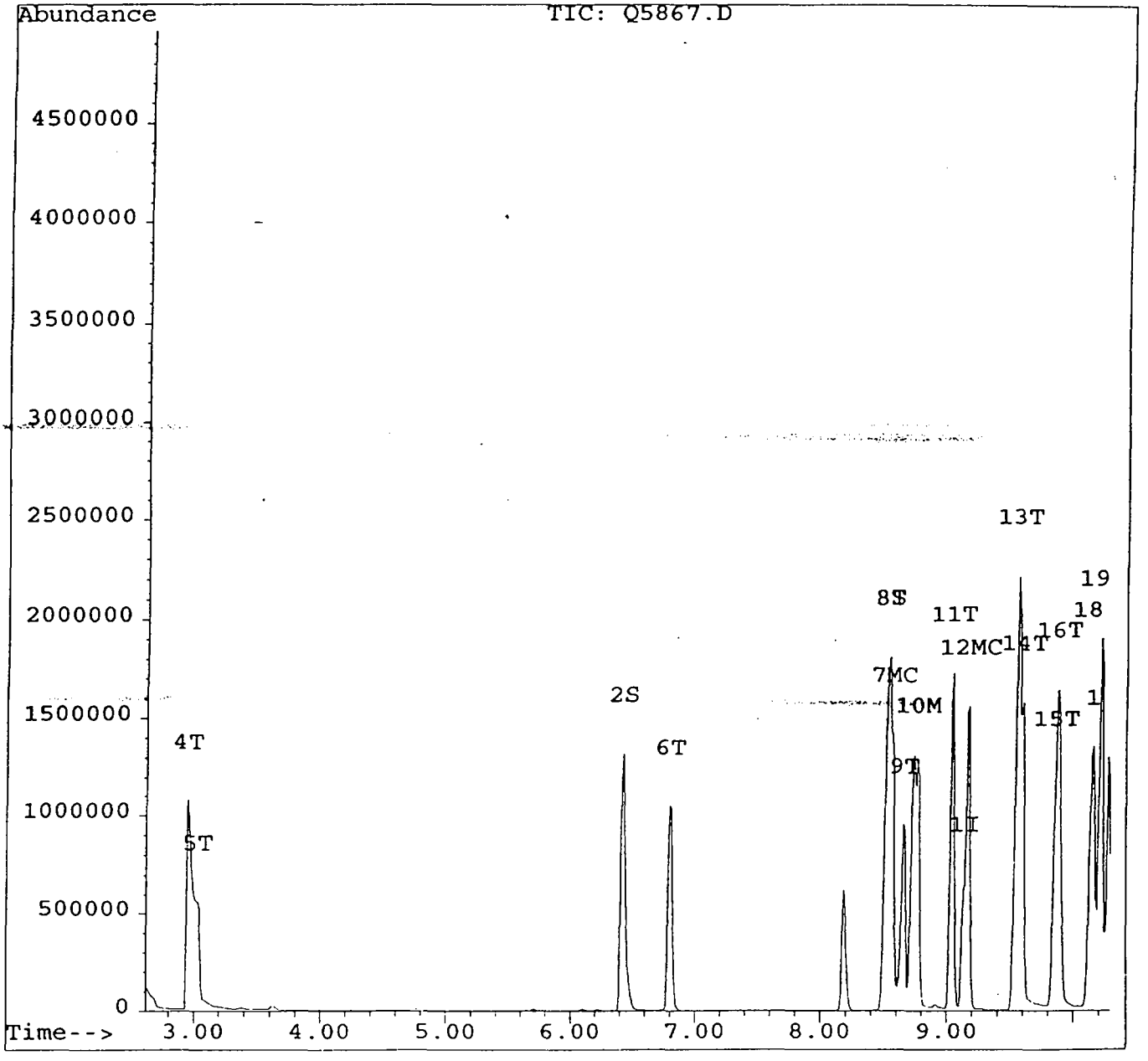
Quantitation Report

0131

Data File : C:\HPCHEM\MSQ\Q5867.D
Acq On : 22 Oct 99 18:38 hrs
Sample : SSTD16003
Misc : SSTD16003 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:53 1999

Vial: 31
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



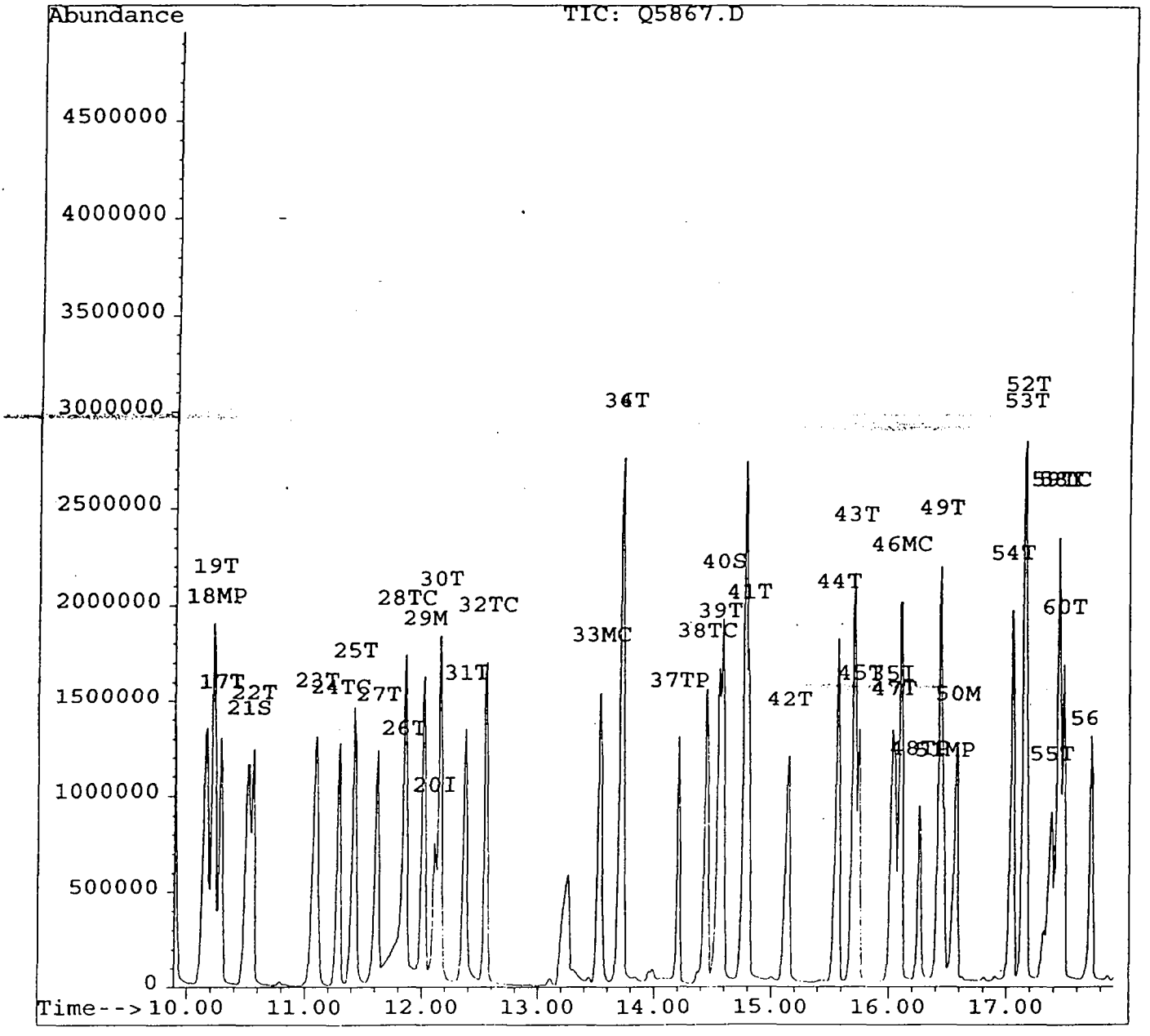
Quantitation Report

0132

Data File : C:\HPCHEM\MSQ\Q5867.D
Acq On : 22 Oct 99 18:38 hrs
Sample : SSTD16003
Misc : SSTD16003 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:53 1999

Vial: 31
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration

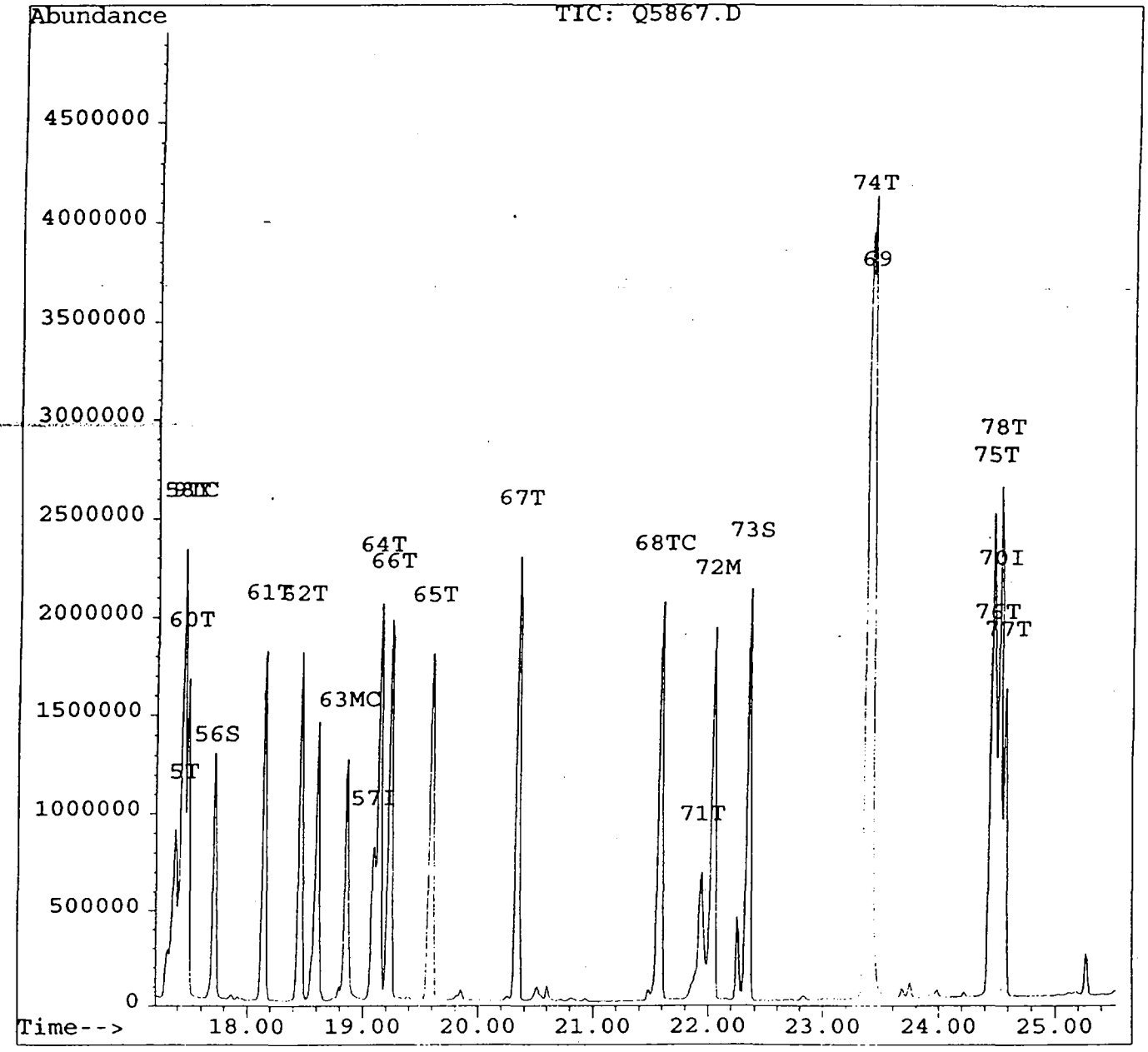


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5867.D
Acq On : 22 Oct 99 18:38 hrs
Sample : SSTD16003
Misc : SSTD16003 ; SWC ; 1 ; LLW ; Q0382
Quant Time: Oct 25 7:53 1999

Vial: 31 ~~0133~~
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Mon Oct 25 11:26:00 1999
Response via : Multiple Level Calibration



7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Instrument ID: HP5971Q Calibration Date: 10/28/99 Time: 0852

Lab File ID: >Q5955 Init. Calib. Date(s): 10/22/99 _____

Init. Calib. Times: 1543 1838

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.533	1.698		10.8	20.0
bis(2-Chloroethyl)ether	0.733	0.826		12.7	
2-Chlorophenol	1.167	1.220		4.5	
1,3-Dichlorobenzene	1.388	1.469		5.8	
1,4-Dichlorobenzene	1.240	1.282		3.4	20.0
Benzyl alcohol	0.790	0.618		-21.8	
1,2-Dichlorobenzene	1.124	1.204		7.1	
2-Methylphenol	1.053	1.084		2.9	
2,2'-oxybis(1-Chloropropane)	0.971	1.089		12.2	
4-Methylphenol	1.027	1.087		5.8	
N-Nitroso-di-n-propylamine	0.711	0.865	0.050	21.6	
Hexachloroethane	0.498	0.492		-1.2	
Nitrobenzene	0.359	0.369		2.8	
Isophorone	0.813	0.841		3.4	
2-Nitrophenol	0.262	0.256		-2.3	20.0
2,4-Dimethylphenol	0.338	0.357		5.6	
Benzoic acid	0.243	0.220		-9.5	
bis(2-Chloroethoxy)methane	0.473	0.471		-0.4	
2,4-Dichlorophenol	0.310	0.315		1.6	20.0
1,2,4-Trichlorobenzene	0.288	0.286		-0.7	
Naphthalene	0.850	0.873		2.7	
4-Chloroaniline	0.426	0.368		-13.6	
Hexachlorobutadiene	0.164	0.165		0.6	20.0
4-Chloro-3-methylphenol	0.345	0.369		7.0	20.0
2-Methylnaphthalene	0.553	0.567		2.5	
Hexachlorocyclopentadiene	0.144	0.075	0.050	-47.9	
2,4,6-Trichlorophenol	0.374	0.351		-6.2	20.0
2,4,5-Trichlorophenol	0.361	0.342		-5.3	
2-Chloronaphthalene	0.940	0.886		-5.7	
2-Nitroaniline	0.362	0.356		-1.7	
Dimethylphthalate	1.414	1.396		-1.3	
Acenaphthylene	1.720	1.673		-2.7	
2,6-Dinitrotoluene	0.304	0.295		-3.0	
3-Nitroaniline	0.359	0.313		-12.8	
Acenaphthene	0.971	0.928		-4.4	20.0
2,4-Dinitrophenol	0.165	0.163	0.050	-1.2	
4-Nitrophenol	0.196	0.207	0.050	5.6	

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Instrument ID: HP5971Q Calibration Date: 10/28/99 Time: 0852

Lab File ID: >Q5955 Init. Calib. Date(s): 10/22/99 _____

Init. Calib. Times: 1543 1838

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Dibenzofuran	1.447	1.417		-2.1	
2,4-Dinitrotoluene	0.446	0.420		-5.8	
Diethylphthalate	1.475	1.480		0.3	
4-Chlorophenyl-Phenyl Ether	0.461	0.437		-5.2	
Fluorene	1.033	1.009		-2.3	
4-Nitroaniline	0.402	0.380		-5.5	
4,6-Dinitro-2-methylphenol	0.140	0.139		-0.7	
N-Nitrosodiphenylamine	0.443	0.432		-2.5	20.0
4-Bromophenyl-phenylether	0.210	0.207		-1.4	
Hexachlorobenzene	0.236	0.233		-1.3	
Pentachlorophenol	0.137	0.112		-18.2	20.0
Phenanthrene	0.847	0.829		-2.1	
Anthracene	0.854	0.848		-0.7	
Carbazole	0.976	0.988		1.2	
Di-n-butylphthalate	1.453	1.492		2.7	
Fluoranthene	1.049	1.042		-0.7	20.0
Pyrene	1.277	1.210		-5.2	
Butylbenzylphthalate	0.637	0.546		-14.3	
3,3'-Dichlorobenzidine	0.498	0.462		-7.2	
Benzo(a)anthracene	1.127	1.060		-5.9	
Chrysene	0.902	0.788		-12.6	
bis(2-Ethylhexyl)phthalate	0.872	0.822		-5.7	
Di-n-octylphthalate	1.930	2.045		6.0	20.0
Benzo(b)fluoranthene	1.389	1.336		-3.8	
Benzo(k)fluoranthene	0.799	0.888		11.1	
Benzo(a)pyrene	1.090	1.093		0.3	20.0
Indeno(1,2,3-cd)pyrene	1.269	1.225		-3.5	
Dibenz(a,h)anthracene	1.073	1.048		-2.3	
Benzo(g,h,i)perylene	1.244	1.206		-3.0	
Nitrobenzene-D5	0.433	0.446		3.0	
2-Fluorobiphenyl	1.021	0.966		-5.4	
Terphenyl-D14	1.060	1.016		-4.2	
Phenol-D5	1.618	1.703		5.2	
2-Fluorophenol	1.434	1.388		-3.2	
2,4,6-Tribromophenol	0.196	0.176		-10.2	

(1) Cannot be separated from Diphenylamine

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26 0137
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

All spectra and manual integrations for this sample have been reviewed and approved.
By: [signature] Date: 10,29,99
Secondary review: [signature] Date: 10,29,99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.84	152	178926	40.00	ug	-0.07
20) Naphthalene-d8	11.80	136	640844	40.00	ug	-0.07
35) Acenaphthene-d10	15.74	164	378893	40.00	ug	-0.07
57) Phenanthrene-d10	18.81	188	637030	40.00	ug	-0.07
70) Chrysene-d12	24.22	240	499553	40.00	ug	-0.09
79) Perylene-d12	26.96	264	471295	40.00	ug	-0.09
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	6.18	112	310368	48.40	ug	24.20%
3) Phenol-d5	8.28	99	380956	52.64	ug	26.32%
21) Nitrobenzene-d5	10.20	82	357546	51.61	ug	51.61%
40) 2-Fluorobiphenyl	14.30	172	457414	47.31	ug	47.31%
56) 2,4,6-Tribromophenol	17.44	330	83282	44.93	ug	22.47%
73) Terphenyl-d14	22.07	244	634626	47.93	ug	47.93%
Target Compounds						Qvalue
4) Pyridine	2.63	52	198109	43.02	ug #	75
5) N-Nitrosodimethylamine	2.67	42	143858	46.60	ug #	71
6) Cyclohexanone	6.50	42	143243	61.13	ug	88
7) Phenol	8.31	94	379851	55.37	ug	96
8) Aniline	8.23	93	448710	51.53	ug	96
9) bis(2-Chloroethyl)ether	8.36	63	184797	56.36	ug	100
10) 2-Chlorophenol	8.48	128	272922	52.30	ug	88
11) 1,3-Dichlorobenzene	8.75	146	328606	52.94	ug	99
12) 1,4-Dichlorobenzene	8.88	146	286805	51.71	ug	98
13) Benzyl alcohol	9.26	108	138202	39.12	ug	99
14) 1,2-Dichlorobenzene	9.30	146	269302	53.56	ug	96
15) bis(2-Chloroisopropyl)ethe	9.57	45	243653	56.11	ug	65
16) 2-Methylphenol	9.61	108	242477	51.46	ug	89
17) Hexachloroethane	9.98	117	110138	49.46	ug	94
18) N-Nitroso-di-n-propylamine	9.91	70	193489	60.82	ug	92
19) 4-Methylphenol	9.94	108	243092	52.94	ug	93
22) Nitrobenzene	10.25	77	295428	51.37	ug	95
23) Isophorone	10.76	82	673572	51.71	ug	95
24) 2-Nitrophenol	10.99	139	205395	48.92	ug	92
25) 2,4-Dimethylphenol	11.14	107	285689	52.72	ug	93
26) Benzoic acid	11.48	122	175940	45.20	ug m	97
27) bis(2-Chloroethoxy)methane	11.32	93	377464	49.80	ug	99
28) 2,4-Dichlorophenol	11.56	162	252398	50.75	ug	96
29) 1,2,4-Trichlorobenzene	11.71	180	229346	49.74	ug	97
30) Naphthalene	11.85	128	699121	51.36	ug	99
31) 4-Chloroaniline	12.08	127	294712	43.16	ug	98
32) Hexachlorobutadiene	12.26	225	132499	50.52	ug	99

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26 0138
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	4-Chloro-3-methylphenol	13.26	107	295658	53.41 ug		99
34)	2-Methylnaphthalene	13.44	142	454107	51.24 ug		98
36)	2,4,5-Trichlorotoluene	13.43	159	217336	46.28 ug		96
37)	Hexachlorocyclopentadiene	13.93	237	35516	26.10 ug		96
38)	2,4,6-Trichlorophenol	14.16	196	166163	46.94 ug		99
39)	2,4,5-Trichlorophenol	14.27	196	162182	47.47 ug		98
41)	2-Chloronaphthalene	14.51	162	419480	47.12 ug		97
42)	2-Nitroaniline	14.86	65	168520	49.09 ug		93
43)	Acenaphthylene	15.42	152	792367	48.64 ug		98
44)	Dimethylphthalate	15.29	163	661340	49.36 ug		98
45)	2,6-Dinitrotoluene	15.47	165	139778	48.56 ug		92
46)	Acenaphthene	15.81	153	439769	47.78 ug		95
47)	3-Nitroaniline	15.76	138	148119	43.58 ug		95
48)	2,4-Dinitrophenol	15.98	184	77212	49.52 ug		87
49)	Dibenzofuran	16.15	168	671121	48.96 ug		94
50)	2,4-Dinitrotoluene	16.28	165	198770	47.11 ug		90
51)	4-Nitrophenol	16.21	109	98170	52.94 ug	#	51
52)	Fluorene	16.87	166	477995	48.83 ug		95
53)	4-Chlorophenyl-phenylether	16.87	204	207119	47.41 ug		99
54)	Diethylphthalate	16.77	149	701104	50.17 ug		98
55)	4-Nitroaniline	17.07	138	179786	47.19 ug	#	75
58)	4,6-Dinitro-2-methylphenol	17.14	198	110725	49.63 ug		100
59)	N-Nitrosodiphenylamine (1)	17.16	169	344412	48.82 ug		95
60)	1,2-Diphenylhydrazine	17.20	77	507588	50.44 ug	m	100
61)	4-Bromophenyl-phenylether	17.87	248	164868	49.40 ug		96
62)	Hexachlorobenzene	18.18	284	185738	49.44 ug		93
63)	Pentachlorophenol	18.58	266	89516	41.15 ug		97
64)	Phenanthrene	18.86	178	660187	48.95 ug		99
65)	Carbazole	19.32	167	786930	50.63 ug		97
66)	Anthracene	18.95	178	675213	49.61 ug		98
67)	Di-n-butylphthalate	20.08	149	1187782	51.31 ug		98
68)	Fluoranthene	21.29	202	829746	49.67 ug		82
69)	Kepone	23.09	272	450198	55.18 ug		97
71)	Benzidine	21.63	184	309732	46.72 ug		100
72)	Pyrene	21.75	202	755848	47.40 ug		81
74)	Butylbenzylphthalate	23.11	149	340993	42.83 ug		91
75)	3,3'-Dichlorobenzidine	24.17	252	288554	46.37 ug		99
76)	Benzo(a)anthracene	24.18	228	662277	47.05 ug		99
77)	Chrysene	24.27	228	492191	43.69 ug		98
78)	bis(2-Ethylhexyl)phthalate	24.26	149	513529	47.18 ug		93
80)	Di-n-octylphthalate	25.41	149	1204767	52.99 ug		97
81)	Benzo(b)fluoranthene	26.25	252	787072	48.08 ug		91
82)	Benzo(k)fluoranthene	26.29	252	523113	55.57 ug		92

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83)	Benzo(a)pyrene	26.85	252	643947	50.15 ug		92
84)	Indeno(1,2,3-cd)pyrene	29.36	276	721492	48.23 ug	#	63
85)	Dibenzo(a,h)anthracene	29.36	278	617689	48.88 ug		86
86)	Benzo(g,h,i)perylene	30.08	276	710682	48.49 ug		81

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

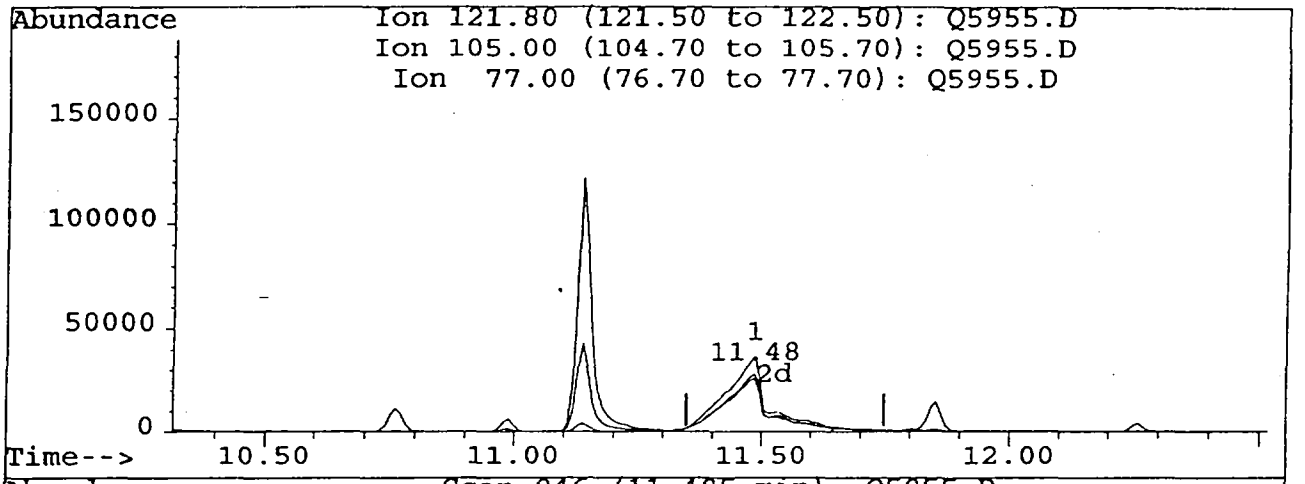
Quantitation Report

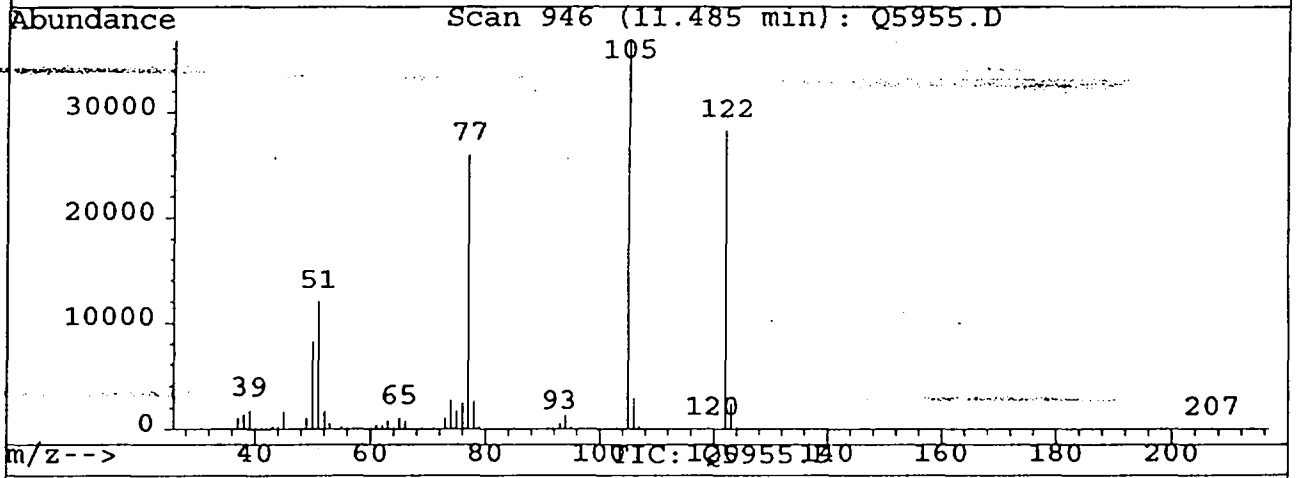
0140

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:45 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Wed Oct 27 10:04:02 1999
Response via : Multiple Level Calibration





(26) Benzoic acid (T)
11.48min 45.20ug m
response 175940

Ion	Exp%	Act%
121.80	100	100
105.00	125.60	130.20
77.00	88.70	92.14
0.00	0.00	0.00

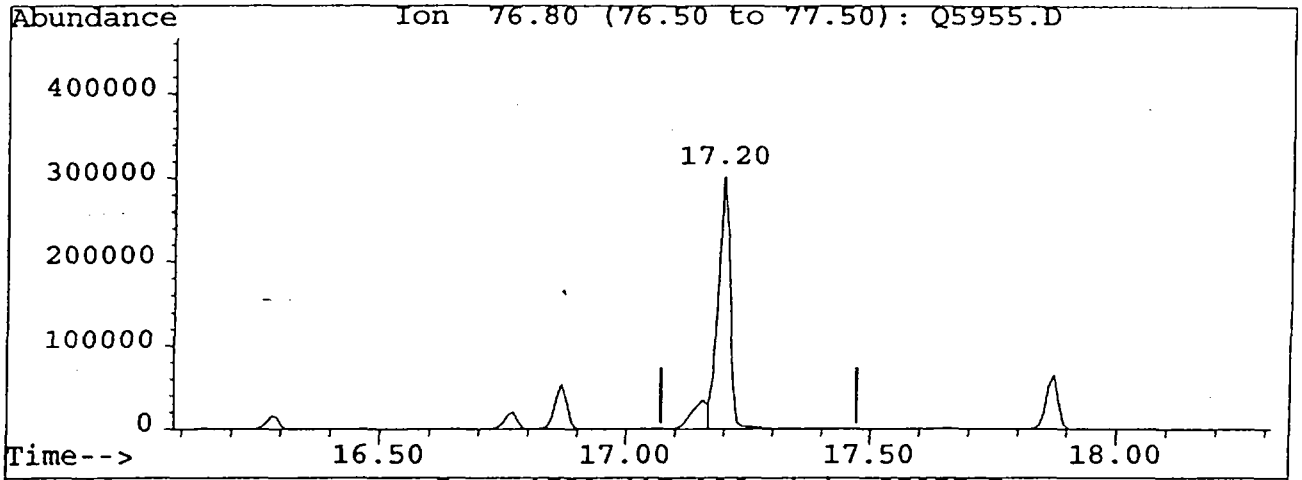
JB 10/28/99

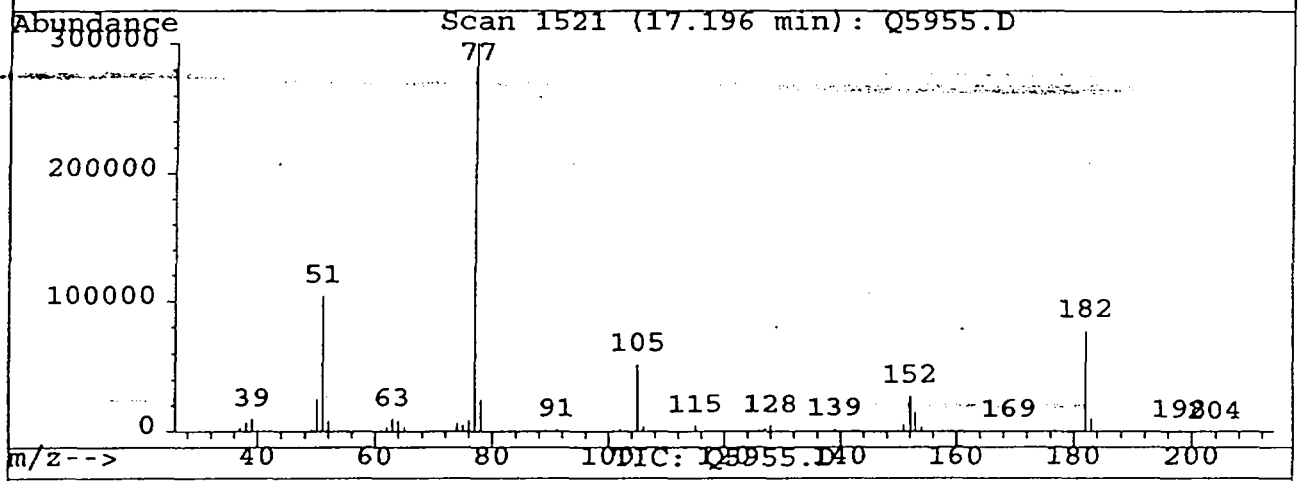
Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Wed Oct 27 10:04:02 1999
Response via : Multiple Level Calibration





(60) 1,2-Diphenylhydrazine (T)
17.20min 50.44ug m
response 507588

Ion	Exp%	Act%
76.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

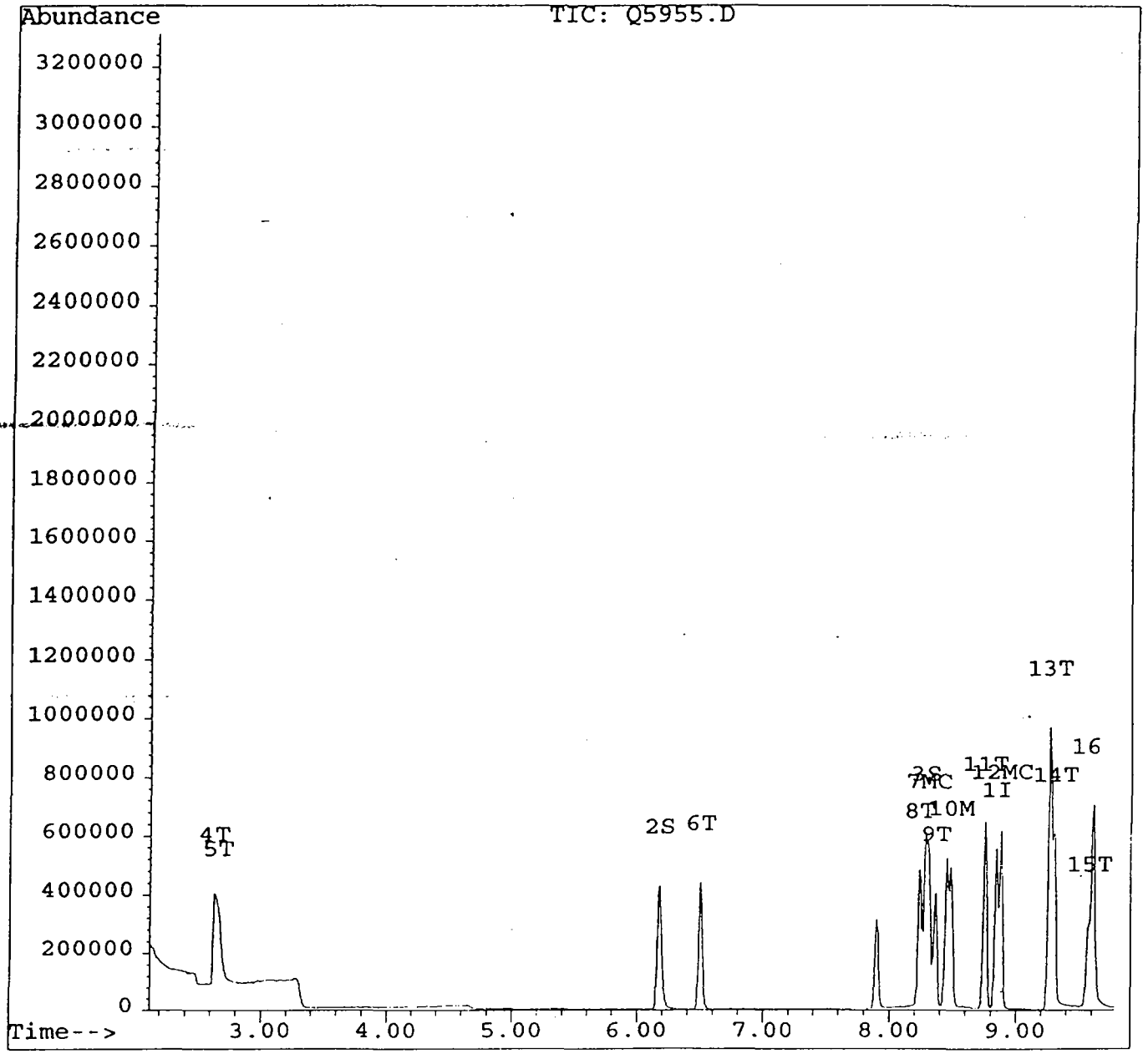
JB 10/28/99

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

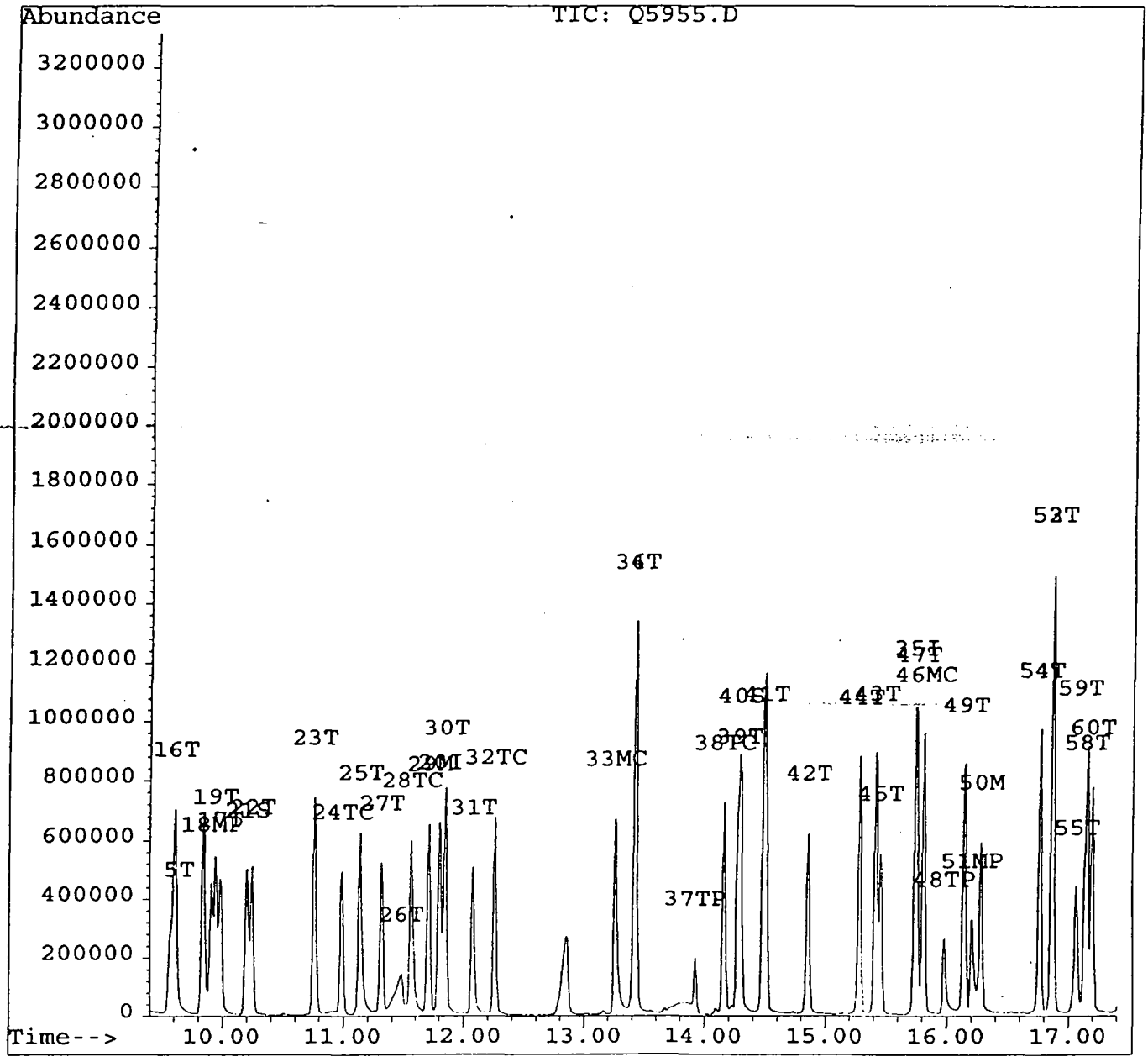


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

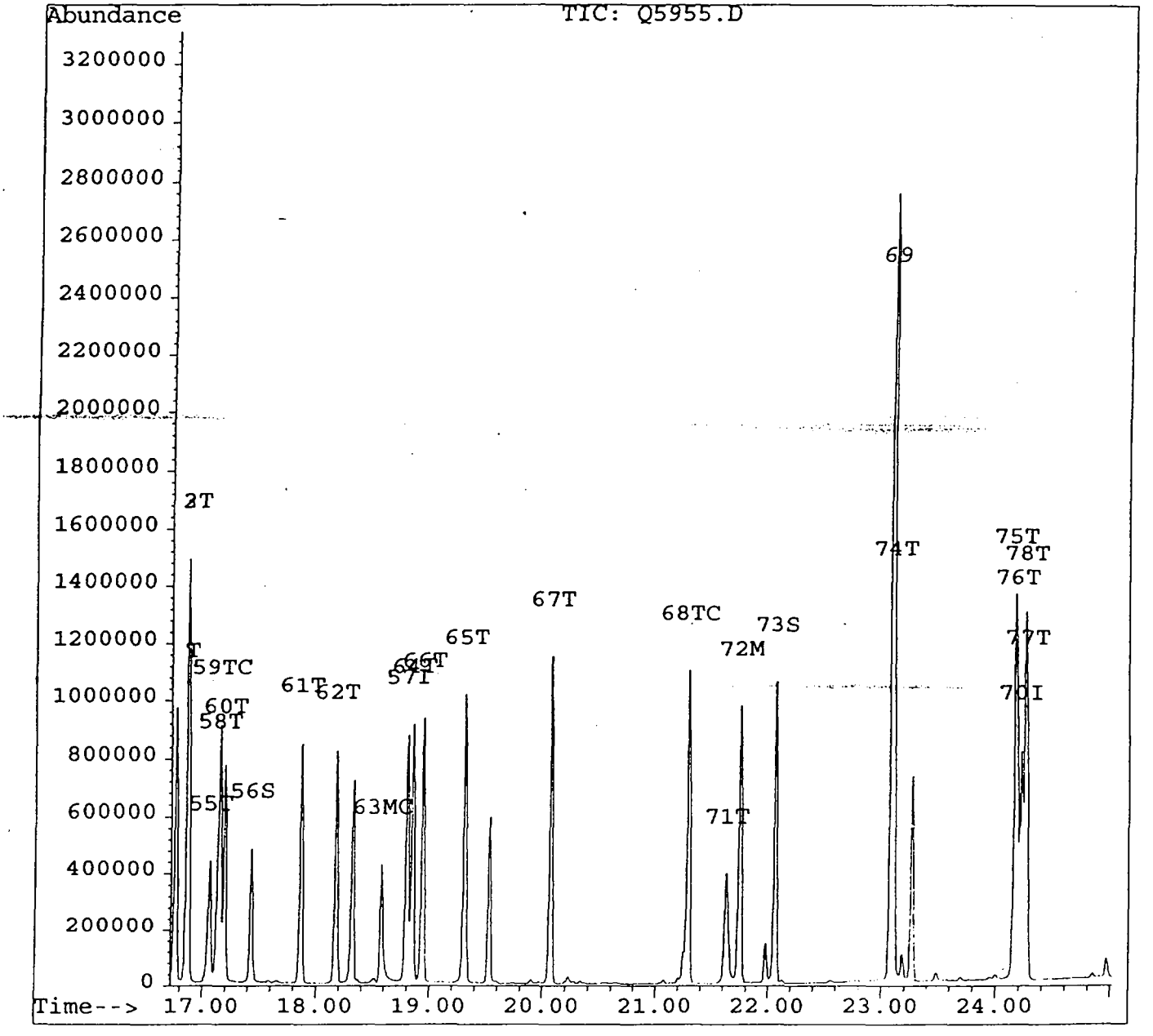


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

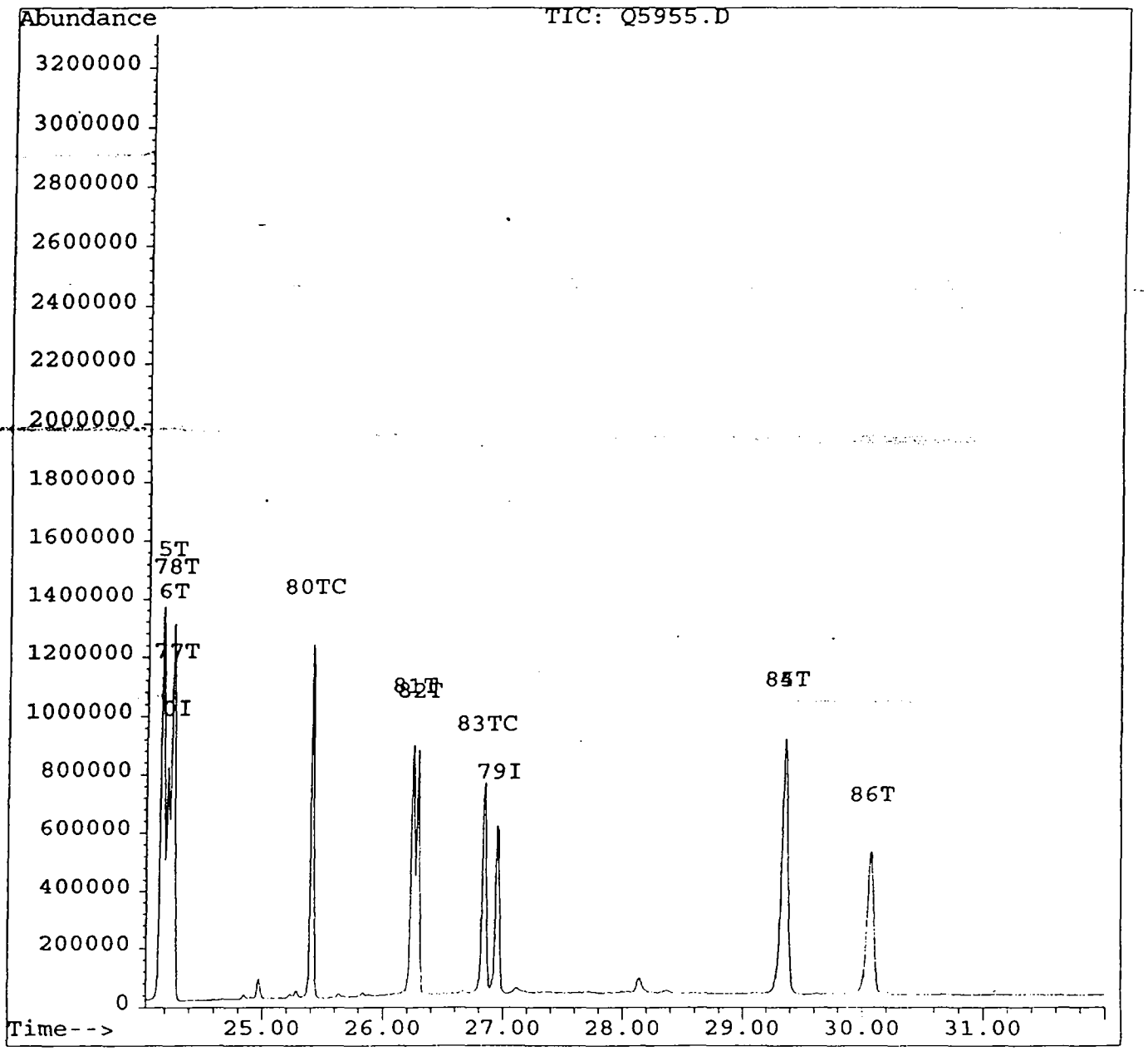


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 12:46 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration



7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Instrument ID: HP5971Q Calibration Date: 10/29/99 Time: 0838

Lab File ID: >Q5974 Init. Calib. Date(s): 10/22/99 _____

Init. Calib. Times: 1543 1838

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.533	1.737		13.3	20.0
bis(2-Chloroethyl)ether	0.733	0.726		-1.0	
2-Chlorophenol	1.167	1.192		2.1	
1,3-Dichlorobenzene	1.388	1.442		3.9	
1,4-Dichlorobenzene	1.240	1.270		2.4	20.0
Benzyl alcohol	0.790	0.641		-18.9	
1,2-Dichlorobenzene	1.124	1.191		6.0	
2-Methylphenol	1.053	1.068		1.4	
2,2'-oxybis(1-Chloropropane)	0.971	1.100		13.3	
4-Methylphenol	1.027	1.098		6.9	
N-Nitroso-di-n-propylamine	0.711	0.850	0.050	19.5	
Hexachloroethane	0.498	0.488		-2.0	
Nitrobenzene	0.359	0.356		-0.8	
Isophorone	0.813	0.825		1.5	
2-Nitrophenol	0.262	0.259		-1.1	20.0
2,4-Dimethylphenol	0.338	0.352		4.1	
Benzoic acid	0.243	0.206		-15.2	
bis(2-Chloroethoxy)methane	0.473	0.465		-1.7	
2,4-Dichlorophenol	0.310	0.310		0.0	20.0
1,2,4-Trichlorobenzene	0.288	0.279		-3.1	
Naphthalene	0.850	0.840		-1.2	
4-Chloroaniline	0.426	0.398		-6.6	
Hexachlorobutadiene	0.164	0.159		-3.0	20.0
4-Chloro-3-methylphenol	0.345	0.363		5.2	20.0
2-Methylnaphthalene	0.553	0.564		2.0	
Hexachlorocyclopentadiene	0.144	0.087	0.050	-39.6	
2,4,6-Trichlorophenol	0.374	0.334		-10.7	20.0
2,4,5-Trichlorophenol	0.361	0.334		-7.5	
2-Chloronaphthalene	0.940	0.862		-8.3	
2-Nitroaniline	0.362	0.342		-5.5	
Dimethylphthalate	1.414	1.355		-4.2	
Acenaphthylene	1.720	1.617		-6.0	
2,6-Dinitrotoluene	0.304	0.287		-5.6	
3-Nitroaniline	0.359	0.303		-15.6	
Acenaphthene	0.971	0.889		-8.4	20.0
2,4-Dinitrophenol	0.165	0.115	0.050	-30.3	
4-Nitrophenol	0.196	0.198	0.050	1.0	

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Instrument ID: HP5971Q Calibration Date: 10/29/99 Time: 0838

Lab File ID: >Q5974 Init. Calib. Date(s): 10/22/99 _____

Init. Calib. Times: 1543 1838

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Dibenzofuran	1.447	1.391		-3.9	
2,4-Dinitrotoluene	0.446	0.411		-7.8	
Diethylphthalate	1.475	1.435		-2.7	
4-Chlorophenyl-Phenyl Ether	0.461	0.422		-8.5	
Fluorene	1.033	0.986		-4.6	
4-Nitroaniline	0.402	0.364		-9.4	
4,6-Dinitro-2-methylphenol	0.140	0.122		-12.8	
N-Nitrosodiphenylamine	0.443	0.432		-2.5	20.0
4-Bromophenyl-phenylether	0.210	0.204		-2.9	
Hexachlorobenzene	0.236	0.226		-4.2	
Pentachlorophenol	0.137	0.110		-19.7	20.0
Phenanthrene	0.847	0.794		-6.3	
Anthracene	0.854	0.822		-3.8	
Carbazole	0.976	0.936		-4.1	
Di-n-butylphthalate	1.453	1.412		-2.8	
Fluoranthene	1.049	0.984		-6.2	20.0
Pyrene	1.277	1.186		-7.1	
Butylbenzylphthalate	0.637	0.531		-16.6	
3,3'-Dichlorobenzidine	0.498	0.464		-6.8	
Benzo(a)anthracene	1.127	1.017		-9.8	
Chrysene	0.902	0.751		-16.7	
bis(2-Ethylhexyl)phthalate	0.872	0.798		-8.5	
Di-n-octylphthalate	1.930	1.876		-2.8	20.0
Benzo(b)fluoranthene	1.389	1.274		-8.3	
Benzo(k)fluoranthene	0.799	0.812		1.6	
Benzo(a)pyrene	1.090	1.051		-3.6	20.0
Indeno(1,2,3-cd)pyrene	1.269	1.237		-2.5	
Dibenz(a,h)anthracene	1.073	1.056		-1.6	
Benzo(g,h,i)perylene	1.244	1.215		-2.3	
Nitrobenzene-D5	0.433	0.435		0.5	
2-Fluorobiphenyl	1.021	0.926		-9.3	
Terphenyl-D14	1.060	0.990		-6.6	
Phenol-D5	1.618	1.702		5.2	
2-Fluorophenol	1.434	1.426		-0.6	
2,4,6-Tribromophenol	0.196	0.179		-8.7	

(1) Cannot be separated from Diphenylamine

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS
Quant Time: Oct 29 12:59 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

All spectra and manual integrations for this sample have been reviewed and approved:
By: [signature] Date: 10/8/99
Secondary review: [signature] Date: 11/2/99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.79	152	189009	40.00 ug	-0.05
20) Naphthalene-d8	11.75	136	698034	40.00 ug	-0.05
35) Acenaphthene-d10	15.69	164	421448	40.00 ug	-0.05
57) Phenanthrene-d10	18.76	188	705158	40.00 ug	-0.05
70) Chrysene-d12	24.17	240	538605	40.00 ug	-0.05
79) Perylene-d12	26.91	264	538662	40.00 ug	-0.05

System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	6.10	112	337015	49.75 ug	24.88%
3) Phenol-d5	8.22	99	402052	52.59 ug	26.29%
21) Nitrobenzene-d5	10.14	82	379214	50.25 ug	50.25%
40) 2-Fluorobiphenyl	14.25	172	487826	45.36 ug	45.36%
56) 2,4,6-Tribromophenol	17.38	330	94176	45.68 ug	22.84%
73) Terphenyl-d14	22.02	244	666339	46.68 ug	46.68%

Target Compounds					Qvalue
4) Pyridine	2.55	52	235368	48.39 ug	78
5) N-Nitrosodimethylamine	2.59	42	166636	51.10 ug	# 70
6) Cyclohexanone	6.44	42	149972	60.59 ug	89
7) Phenol	8.24	94	410466	56.64 ug	89
8) Aniline	8.18	93	517933	56.30 ug	93
9) bis(2-Chloroethyl)ether	8.30	63	171436	49.50 ug	100
10) 2-Chlorophenol	8.42	128	281525	51.07 ug	88
11) 1,3-Dichlorobenzene	8.69	146	340799	51.97 ug	97
12) 1,4-Dichlorobenzene	8.82	146	300101	51.22 ug	99
13) Benzyl alcohol	9.21	108	151527	40.60 ug	98
14) 1,2-Dichlorobenzene	9.25	146	281442	52.99 ug	97
15) bis(2-Chloroisopropyl)ethe	9.52	45	259806	56.64 ug	66
16) 2-Methylphenol	9.55	108	252213	50.67 ug	92
17) Hexachloroethane	9.93	117	115412	49.06 ug	88
18) N-Nitroso-di-n-propylamine	9.86	70	200751	59.74 ug	94
19) 4-Methylphenol	9.89	108	259306	53.46 ug	96
22) Nitrobenzene	10.19	77	310872	49.63 ug	92
23) Isophorone	10.70	82	719502	50.72 ug	96
24) 2-Nitrophenol	10.93	139	225722	49.36 ug	91
25) 2,4-Dimethylphenol	11.08	107	307142	52.04 ug	92
26) Benzoic acid	11.42	122	179565	42.35 ug	98
27) bis(2-Chloroethoxy)methane	11.27	93	405654	49.13 ug	98
28) 2,4-Dichlorophenol	11.51	162	270505	49.93 ug	96
29) 1,2,4-Trichlorobenzene	11.66	180	243155	48.42 ug	98
30) Naphthalene	11.79	128	732858	49.43 ug	99
31) 4-Chloroaniline	12.03	127	347208	46.68 ug	96
32) Hexachlorobutadiene	12.21	225	138959	48.64 ug	99

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

~~0149~~

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33) 4-Chloro-3-methylphenol	13.22	107	316554	52.50 ug		97
34) 2-Methylnaphthalene	13.39	142	492061	50.97 ug		97
36) 2,4,5-Trichlorotoluene	13.38	159	233068	44.62 ug		96
37) Hexachlorocyclopentadiene	13.88	237	46032	30.41 ug		98
38) 2,4,6-Trichlorophenol	14.12	196	176092	44.73 ug		99
39) 2,4,5-Trichlorophenol	14.23	196	175815	46.27 ug		98
41) 2-Chloronaphthalene	14.46	162	453920	45.84 ug		97
42) 2-Nitroaniline	14.81	65	180176	47.18 ug		93
43) Acenaphthylene	15.37	152	851868	47.01 ug		98
44) Dimethylphthalate	15.25	163	713876	47.90 ug		99
45) 2,6-Dinitrotoluene	15.42	165	151304	47.25 ug		88
46) Acenaphthene	15.76	153	468214	45.74 ug		94
47) 3-Nitroaniline	15.71	138	159780	42.27 ug		96
48) 2,4-Dinitrophenol	15.93	184	60807	35.06 ug		78
49) Dibenzofuran	16.10	168	732975	48.07 ug		94
50) 2,4-Dinitrotoluene	16.24	165	216538	46.14 ug		98
51) 4-Nitrophenol	16.15	109	104400	50.61 ug	#	49
52) Fluorene	16.83	166	519265	47.69 ug		96
53) 4-Chlorophenyl-phenylether	16.82	204	222116	45.71 ug		99
54) Diethylphthalate	16.72	149	756071	48.64 ug		97
55) 4-Nitroaniline	17.02	138	191778	45.26 ug	#	75
58) 4,6-Dinitro-2-methylphenol	17.09	198	107764	43.63 ug		100
59) N-Nitrosodiphenylamine (1)	17.11	169	380991	48.79 ug		97
60) 1,2-Diphenylhydrazine	17.15	77	544217	48.85 ug	m	100
61) 4-Bromophenyl-phenylether	17.82	248	179707	48.64 ug		98
62) Hexachlorobenzene	18.13	284	198920	47.83 ug		97
63) Pentachlorophenol	18.53	266	97145	40.34 ug		97
64) Phenanthrene	18.81	178	700051	46.89 ug		99
65) Carbazole	19.26	167	825163	47.96 ug		98
66) Anthracene	18.90	178	724597	48.10 ug		99
67) Di-n-butylphthalate	20.03	149	1244926	48.58 ug		98
68) Fluoranthene	21.24	202	867132	46.89 ug		84
69) Kepone	23.05	272	503902	55.80 ug		98
71) Benzidine	21.59	184	355499	49.74 ug		100
72) Pyrene	21.71	202	798394	46.44 ug		79
74) Butylbenzylphthalate	23.06	149	357207	41.62 ug		97
75) 3,3'-Dichlorobenzidine	24.12	252	312594	46.59 ug		98
76) Benzo(a)anthracene	24.13	228	684509	45.11 ug		99
77) Chrysene	24.23	228	505754	41.64 ug		98
78) bis(2-Ethylhexyl)phthalate	24.21	149	537426	45.79 ug		92
80) Di-n-octylphthalate	25.37	149	1262988	48.60 ug		98
81) Benzo(b)fluoranthene	26.21	252	857961	45.86 ug		91
82) Benzo(k)fluoranthene	26.25	252	546750	50.81 ug		92

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 26 150a
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83)	Benzo(a)pyrene	26.80	252	707948	48.24 ug		92
84)	Indeno(1,2,3-cd)pyrene	29.29	276	832897	48.72 ug	#	63
85)	Dibenzo(a,h)anthracene	29.29	278	710709	49.21 ug		85
86)	Benzo(g,h,i)perylene	30.00	276	817825	48.82 ug	#	79

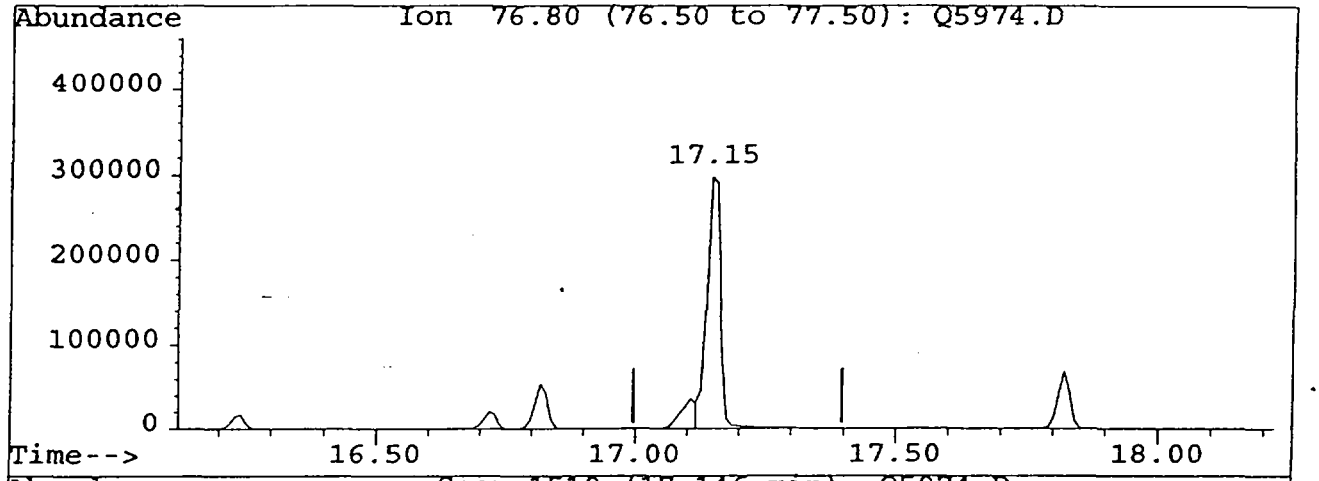
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

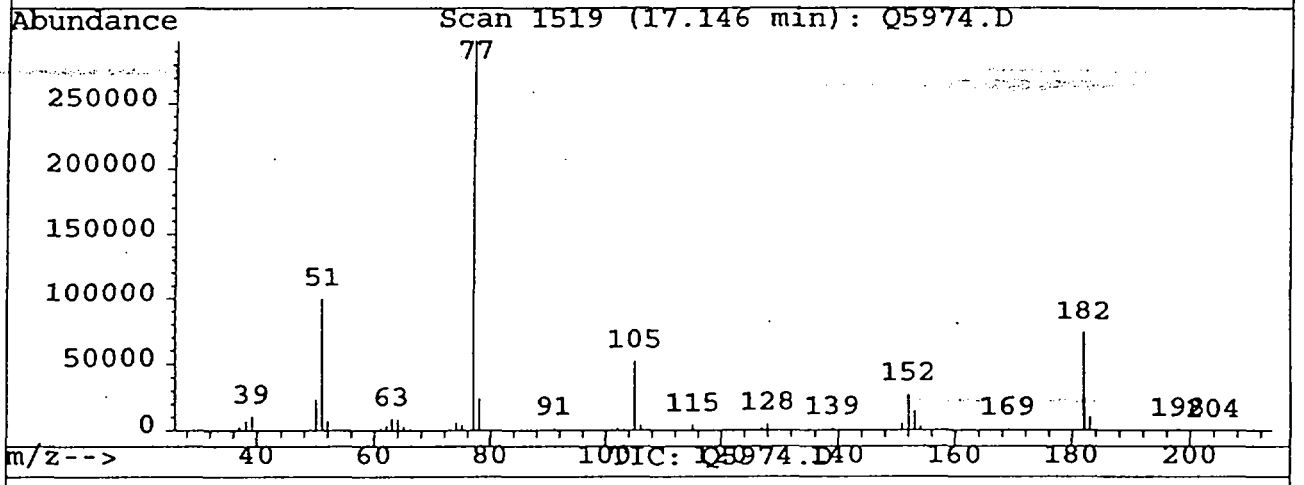
Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 20 0151
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration





(60) 1,2-Diphenylhydrazine (T)
17.15min 48.85ug m
response 544217

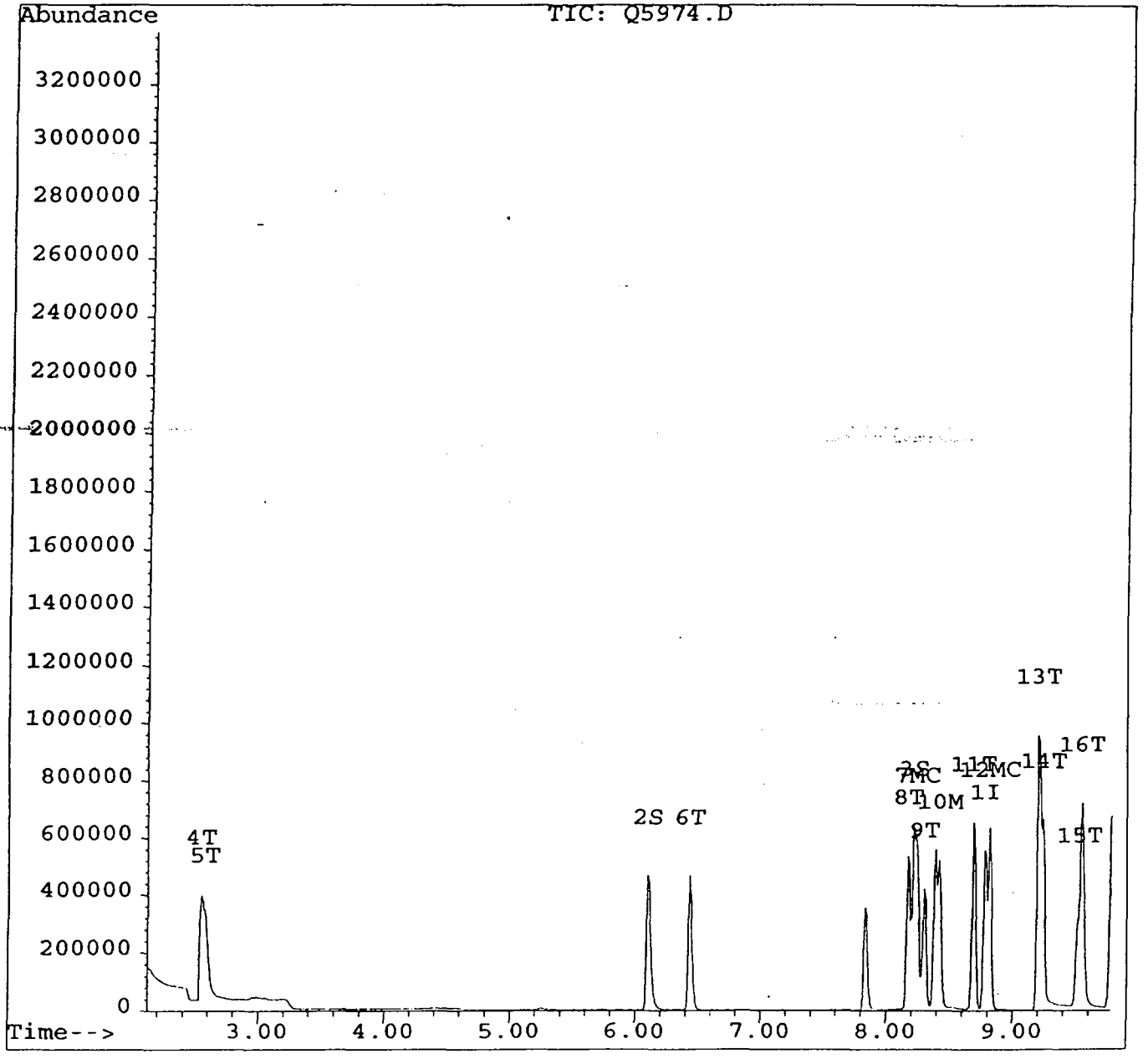
Ion	Exp%	Act%
76.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

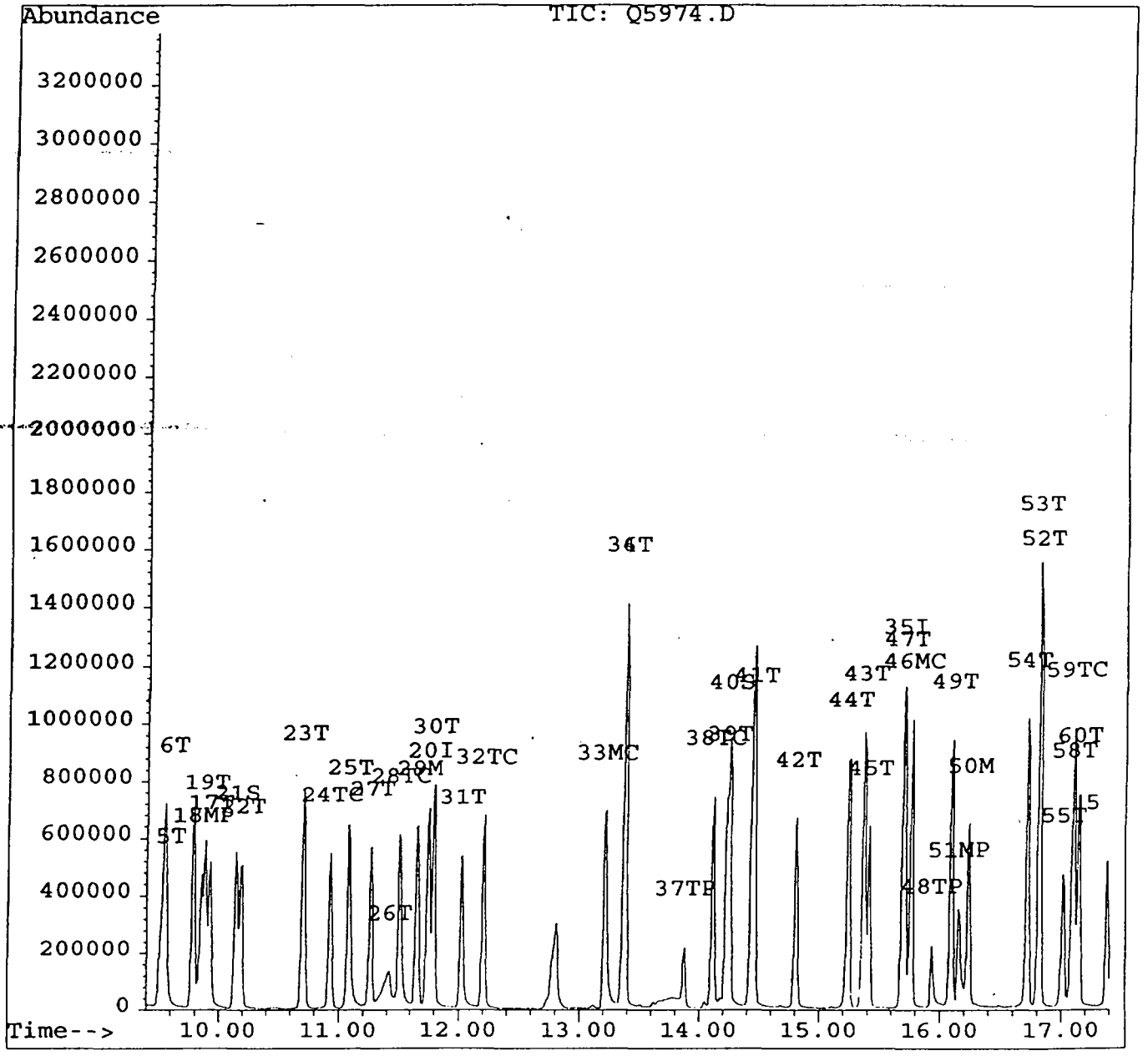


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

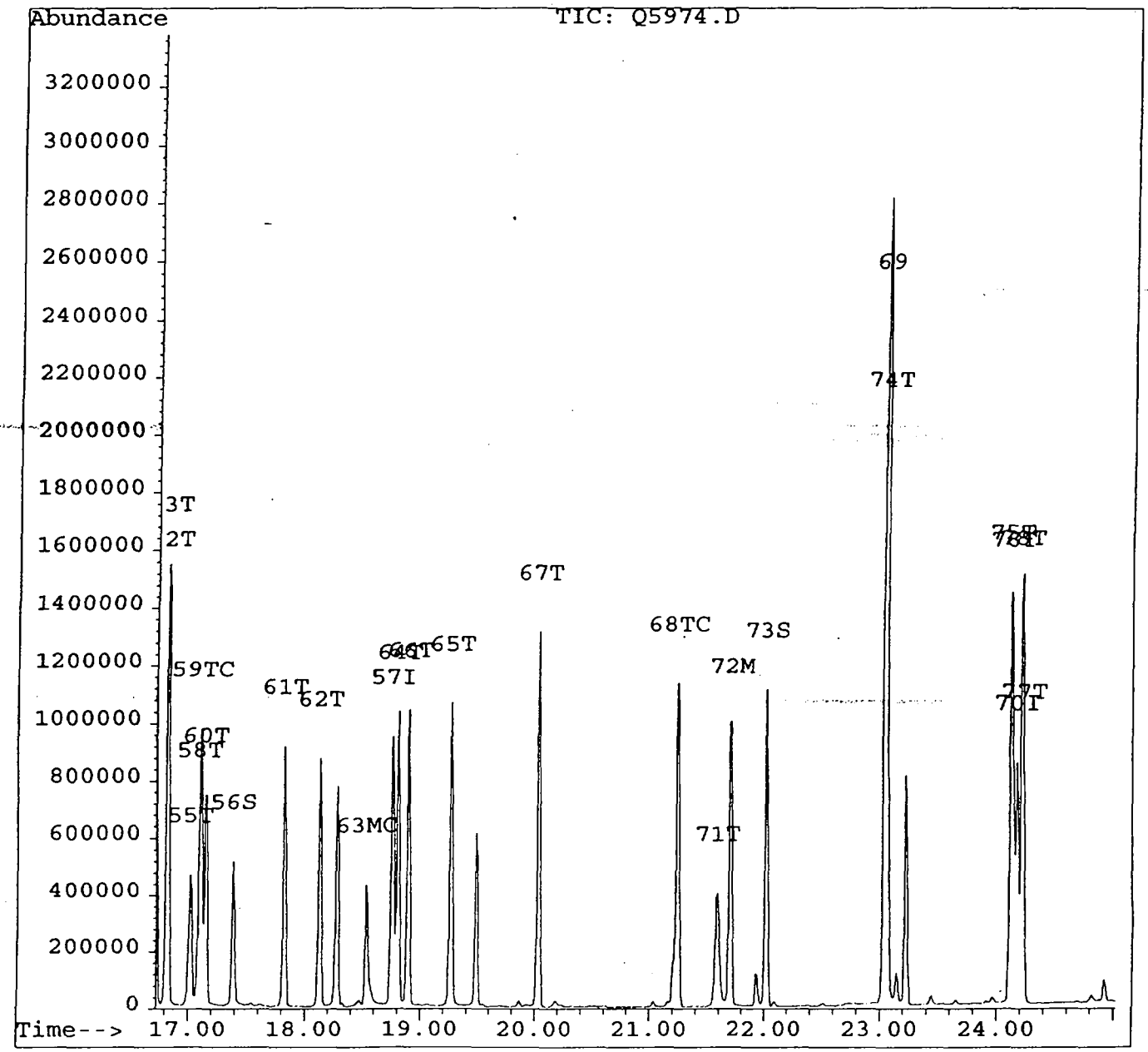


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

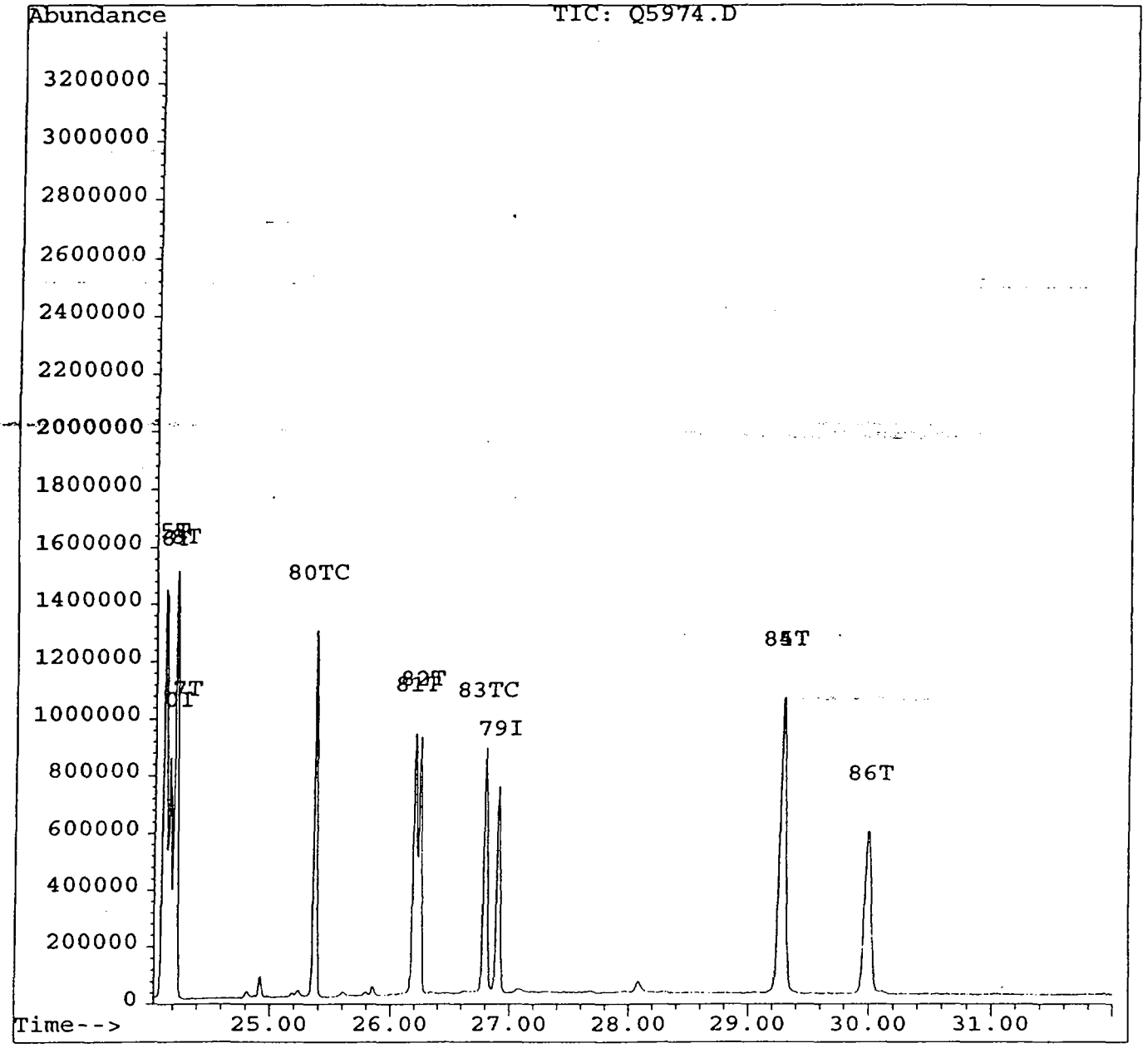


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387
Quant Time: Oct 29 12:59 1999

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Fri Oct 29 13:00:15 1999
Response via : Multiple Level Calibration

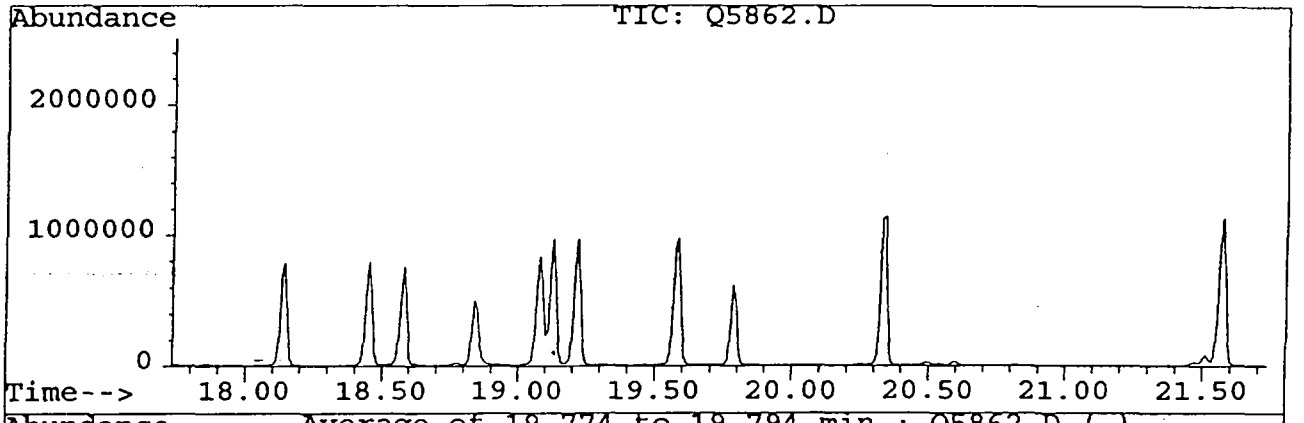


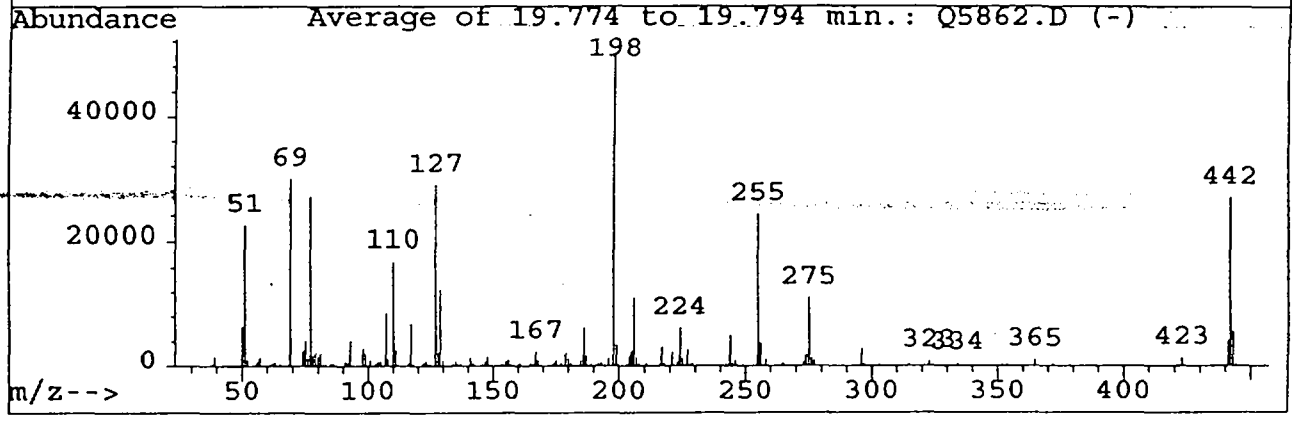
DFTPP NYSDEC '91 ASP

Data File : C:\HPCHEM\MSQ\Q5862.D
Acq On : 22 Oct 99 15:00 hrs
Sample : SSTD050N7
Misc : SSTD050N7 ; SWC ; 1 ; LLW ; Q0382

Vial: 26
Operator: C.LOMBARDI
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration





Peak Apex is scan: 1725

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.2	22603	PASS
68	69	0	2	0.5	153	PASS
69	198	0	100	60.1	30059	PASS
70	69	0	2	0.7	208	PASS
127	198	40	60	58.1	29081	PASS
197	198	0	1	0.3	142	PASS
198	198	100	100	100.0	50054	PASS
199	198	5	9	6.9	3472	PASS
275	198	10	30	22.3	11175	PASS
365	198	1	100	2.1	1057	PASS
441	443	0	100	75.6	4187	PASS
442	198	40	110	54.0	27005	PASS
443	442	17	23	20.5	5538	PASS

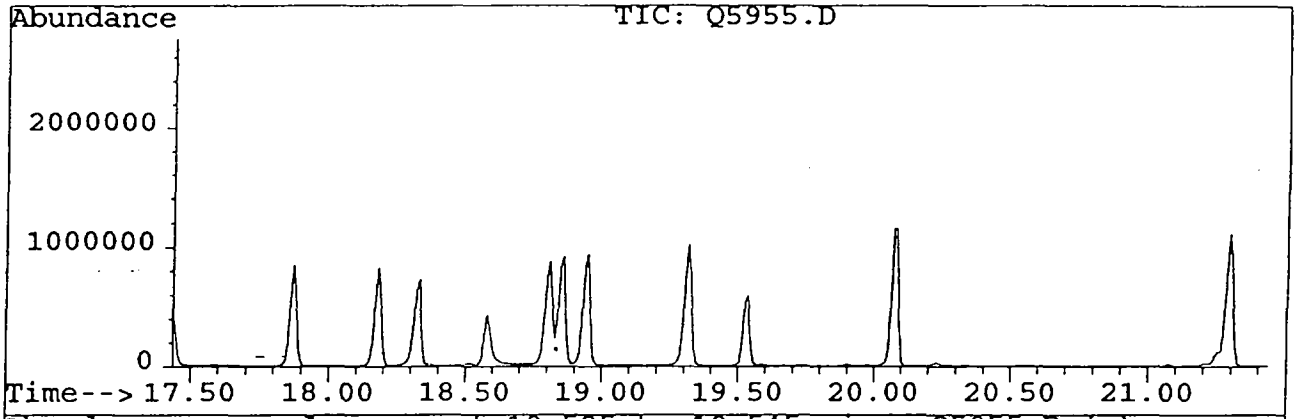
DFTPP NYSDEC '91 ASP

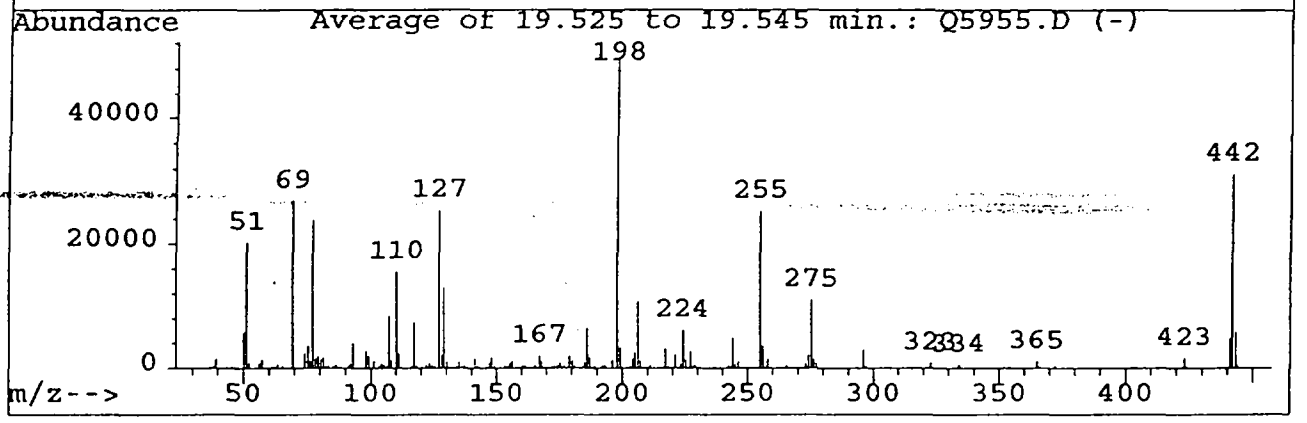
0157

Data File : C:\HPCHEM\MSQ\Q5955.D
Acq On : 28 Oct 99 08:52 hrs
Sample : SSTD050P1
Misc : SSTD050P1 ; SWC ; 1 ; LLS ; Q0386

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration





Peak Apex is scan: 1746

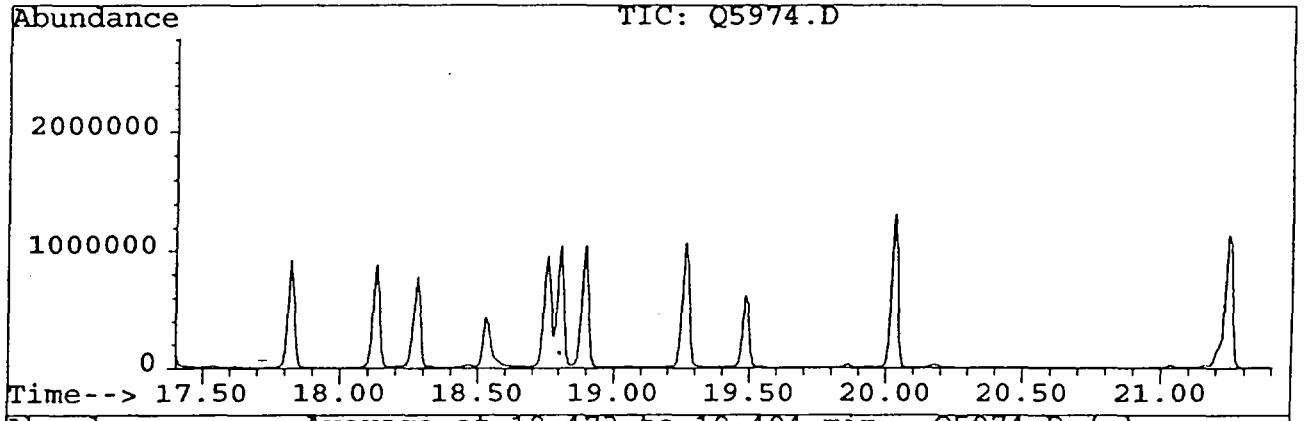
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.8	20325	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	54.1	26927	PASS
70	69	0	2	0.6	172	PASS
127	198	40	60	51.2	25464	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	49768	PASS
199	198	5	9	6.9	3427	PASS
275	198	10	30	22.2	11070	PASS
365	198	1	100	2.3	1138	PASS
441	443	0	100	82.5	4870	PASS
442	198	40	110	62.7	31181	PASS
443	442	17	23	18.9	5903	PASS

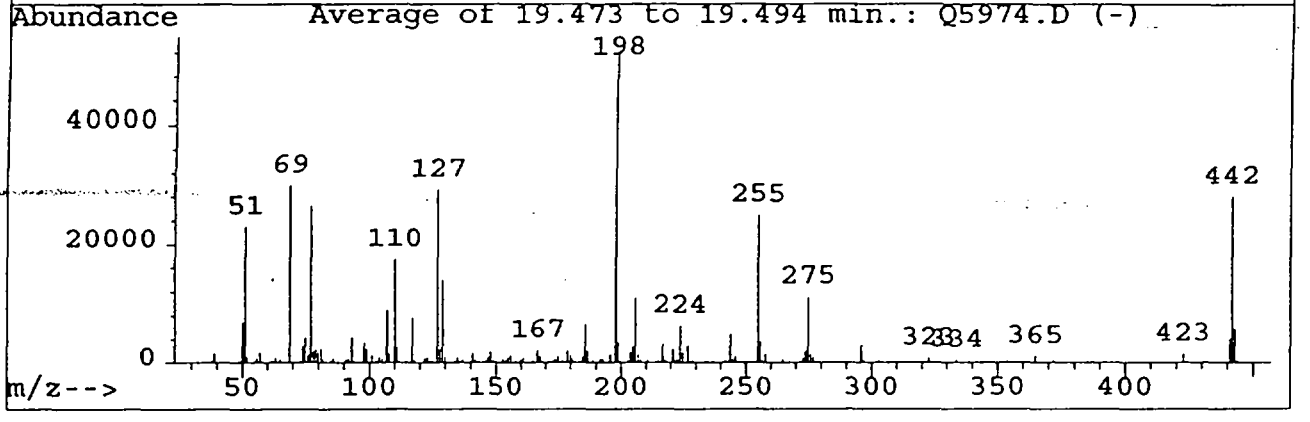
DFTPP NYSDEC '91 ASP

Data File : C:\HPCHEM\MSQ\Q5974.D
Acq On : 29 Oct 99 08:38 hrs
Sample : SSTD050P3
Misc : SSTD050P3 ; SWC ; 1 ; LLS ; Q0387

Vial: 26
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration





Peak Apex is scan: 1746

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.3	23098	PASS
68	69	0	2	0.4	122	PASS
69	198	0	100	57.6	30015	PASS
70	69	0	2	0.6	189	PASS
127	198	40	60	56.2	29298	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	52101	PASS
199	198	5	9	6.8	3565	PASS
275	198	10	30	21.3	11080	PASS
365	198	1	100	2.2	1148	PASS
441	443	0	100	70.6	4103	PASS
442	198	40	110	53.9	28076	PASS
443	442	17	23	20.7	5813	PASS

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKJQ

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: SBLKJQ

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5964

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKJQ

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: SBLKJQ

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5964

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	6	J
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	20	J
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	21	J
117-84-0	Di-n-octylphthalate	32	J
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5964.D
Acq On : 28 Oct 99 15:08 hrs
Sample : 102299-B01
Misc : SBLKJQ ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 15:40 1999

Vial: 9
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.86	152	183954	40.00 ug	0.02
20) Naphthalene-d8	11.81	136	761041	40.00 ug	0.00
35) Acenaphthene-d10	15.76	164	444755	40.00 ug	0.01
57) Phenanthrene-d10	18.81	188	728491	40.00 ug	0.00
70) Chrysene-d12	24.22	240	736889	40.00 ug	0.00
79) Perylene-d12	26.97	264	587955	40.00 ug	0.00
System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	6.21	112	732858	111.17 ug	55.58%
3) Phenol-d5	8.29	99	1090667	146.58 ug	73.29%
21) Nitrobenzene-d5	10.21	82	544907	66.23 ug	66.23%
40) 2-Fluorobiphenyl	14.31	172	870480	76.69 ug	76.69%
56) 2,4,6-Tribromophenol	17.45	330	272925	125.44 ug	62.72%
73) Terphenyl-d14	22.08	244	1202539	61.57 ug	61.57%
Target Compounds					Qvalue
54) Diethylphthalate	16.77	149	5786	5.88 ug	100
67) Di-n-butylphthalate	20.08	149	32342	20.36 ug	94
78) bis(2-Ethylhexyl)phthalate	24.26	149	20564	21.35 ug	90
80) Di-n-octylphthalate	25.42	149	54505	32.03 ug	93

All spectra and manual integrations for this sample have been reviewed and approved.

By: _____ Date: 10/29/99

Secondary review: M. Cuba Date: 10/29/99

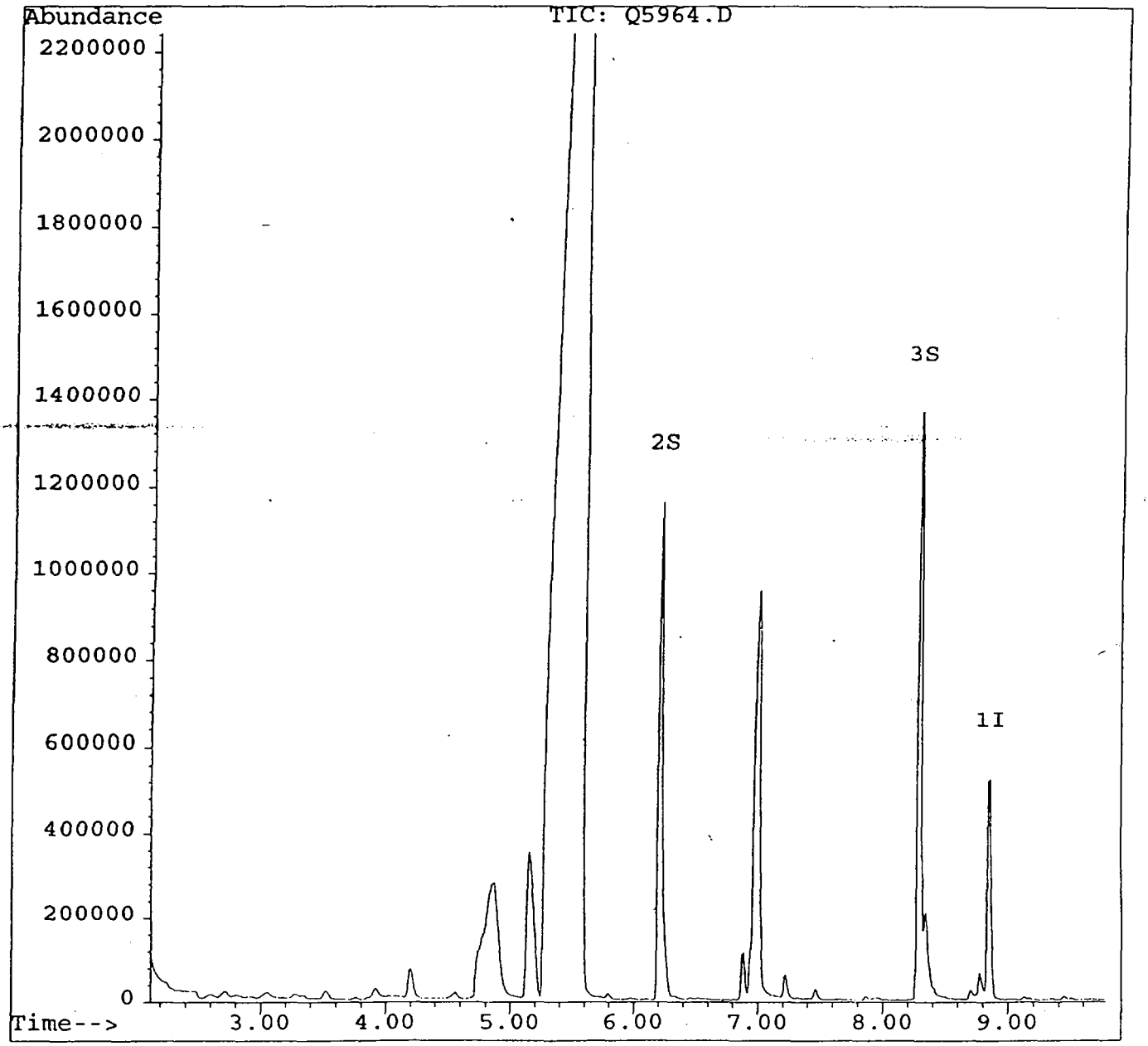
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5964.D
Acq On : 28 Oct 99 15:08 hrs
Sample : 102299-B01
Misc : SBLKJQ ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 15:40 1999

Vial: 9
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration



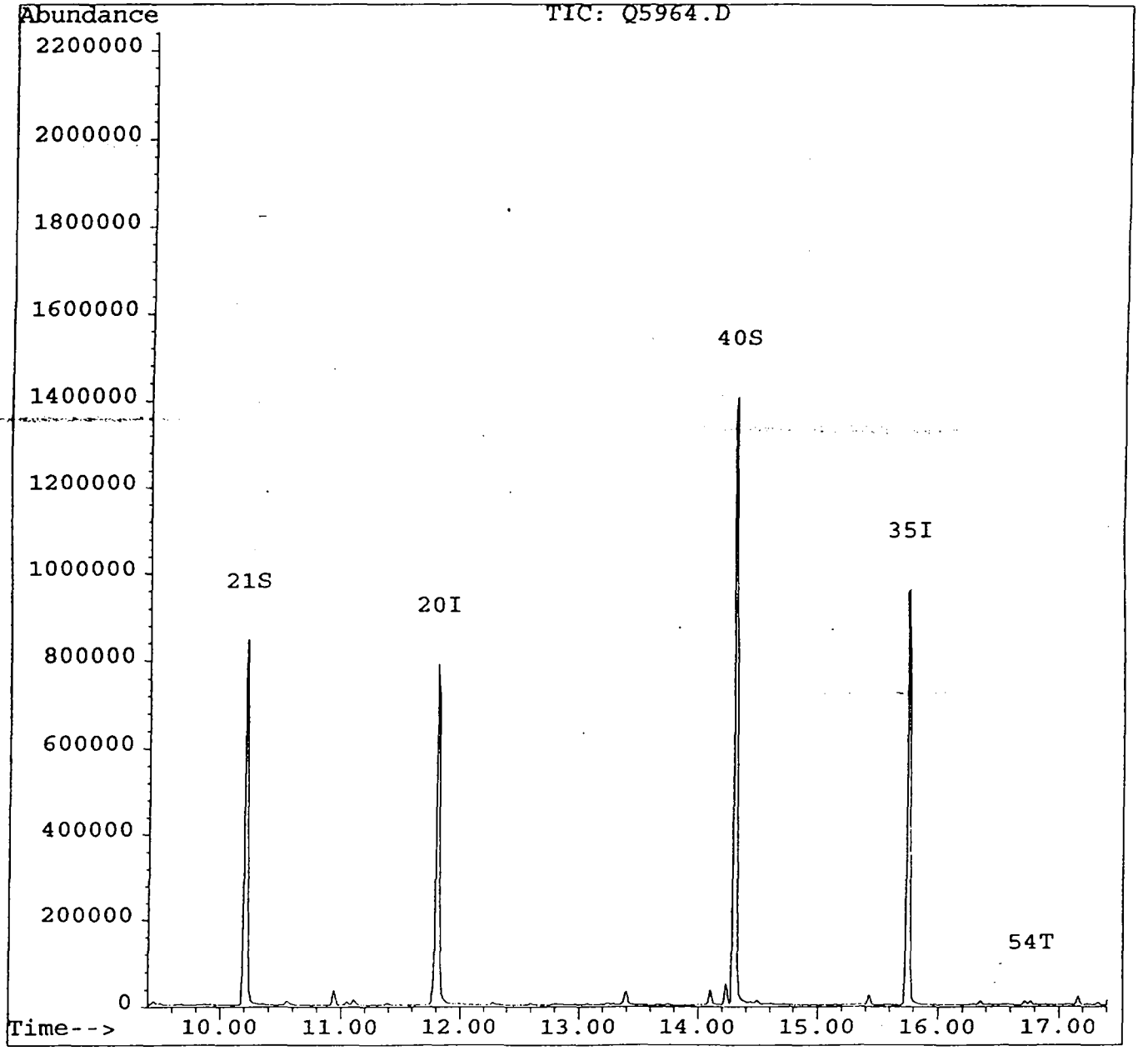
Quantitation Report

0163

Data File : C:\HPCHEM\MSQ\Q5964.D
Acq On : 28 Oct 99 15:08 hrs
Sample : 102299-B01
Misc : SBLKJQ ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 15:40 1999

Vial: 9
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

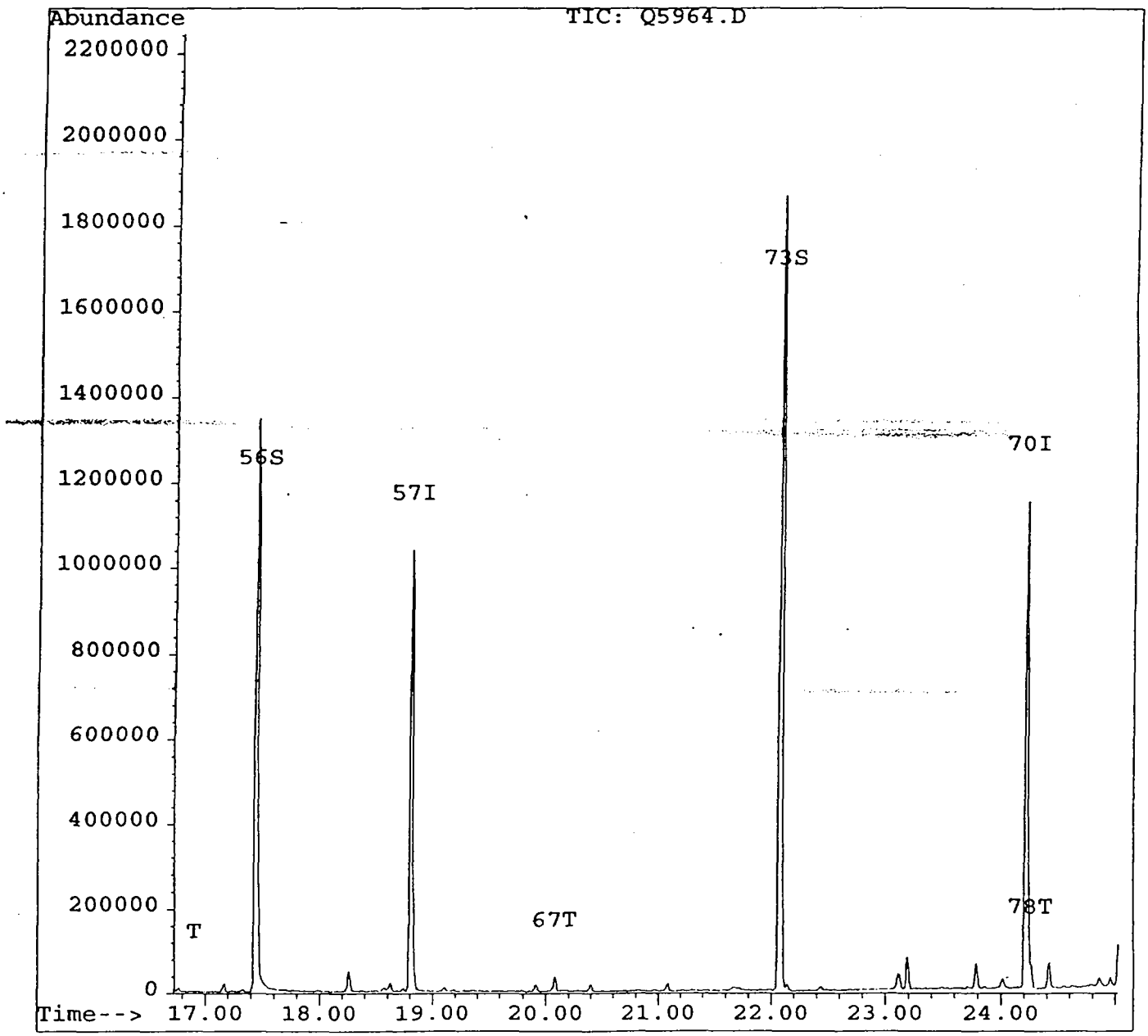


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5964.D
Acq On : 28 Oct 99 15:08 hrs
Sample : 102299-B01
Misc : SBLKJQ ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 15:40 1999

Vial: 9
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

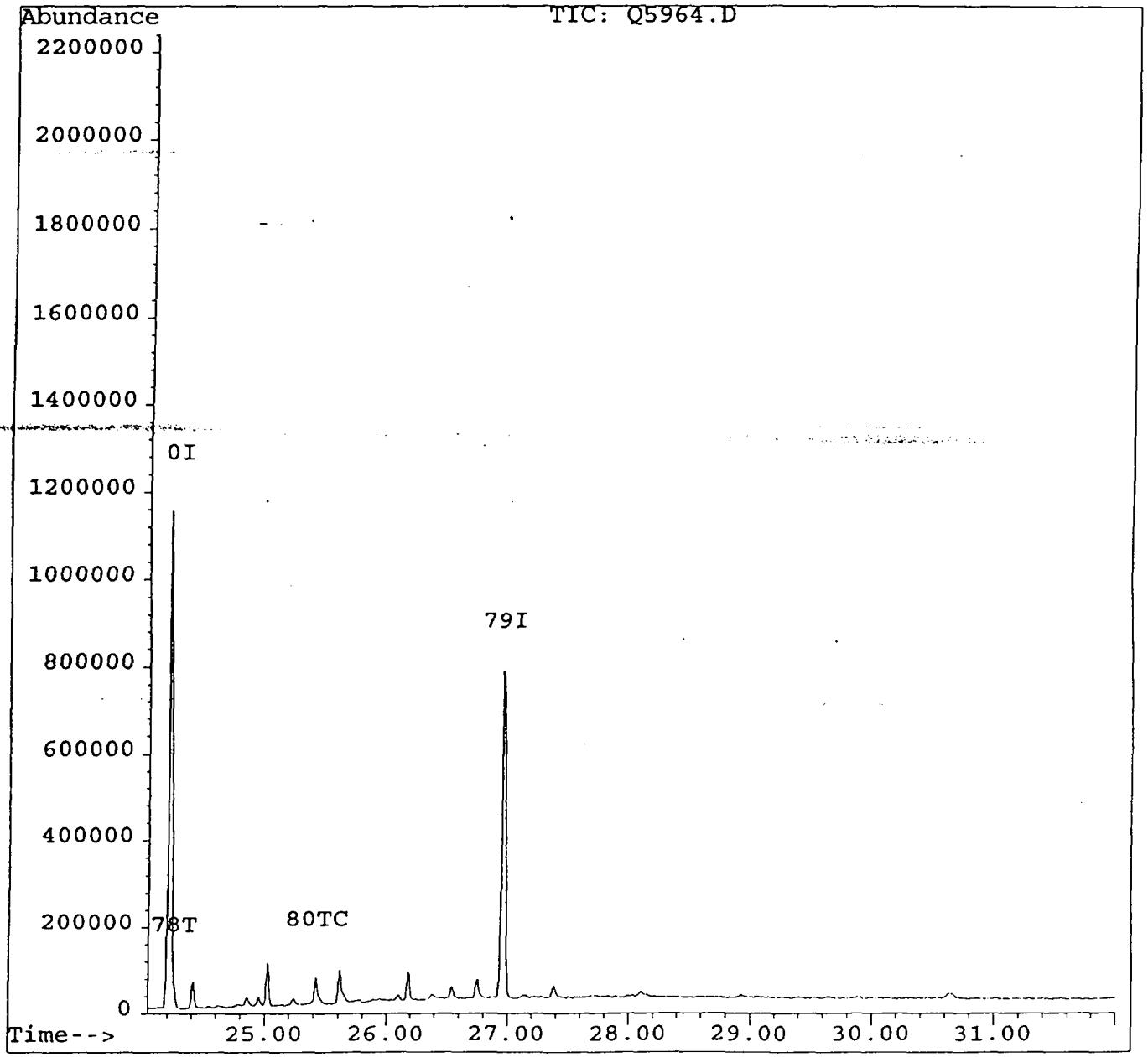


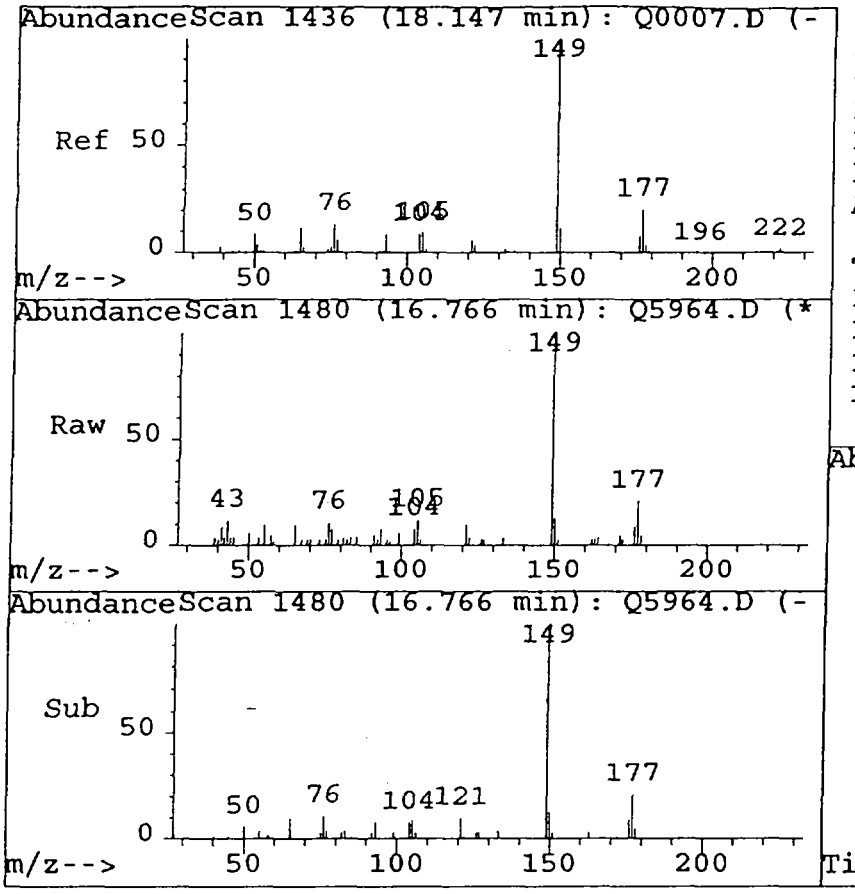
Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5964.D
Acq On : 28 Oct 99 15:08 hrs
Sample : 102299-B01
Misc : SBLKJQ ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 28 15:40 1999

Vial: 9
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

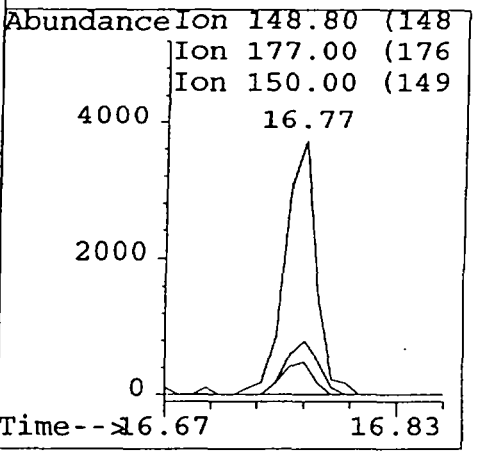


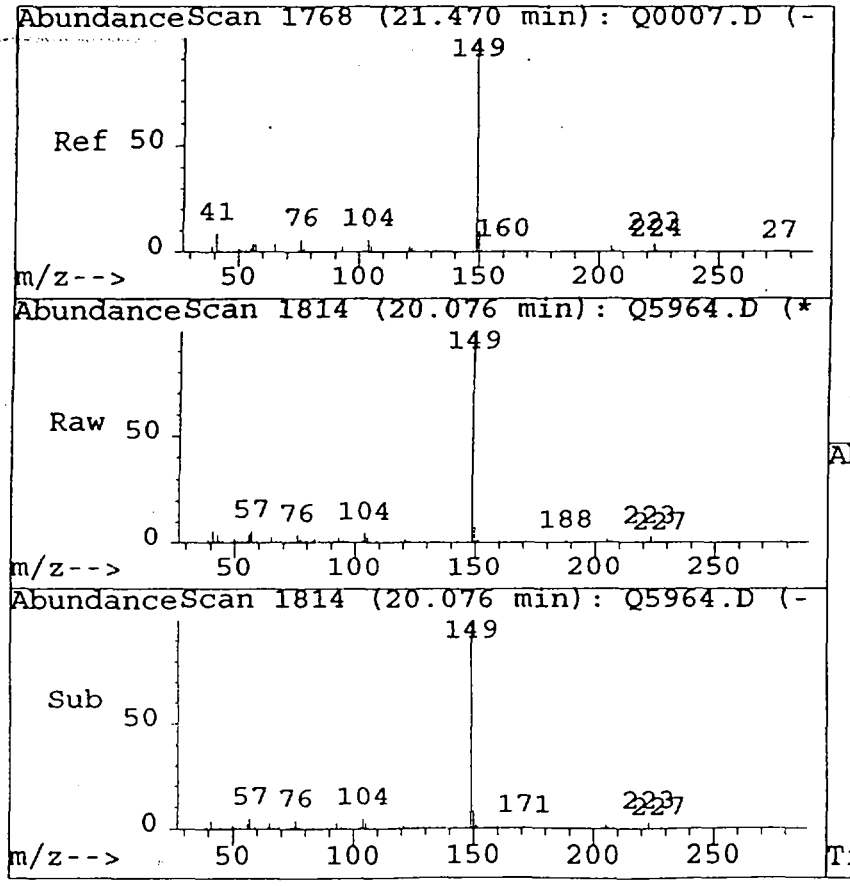


#54
Diethylphthalate
Concen: 5.88 ug
RT: 16.77 min Scan# 1480
Delta R.T. -0.00 min
Lab File: Q5964.D
Acq: 28 Oct 99 15:08 hrs

Tgt Ion:148.8 Resp: 5786

Ion	Ratio	Lower	Upper
149	100		
177	21.4	1.5	41.5
150	13.1	0.0	32.9
0	0.0	0.0	0.0

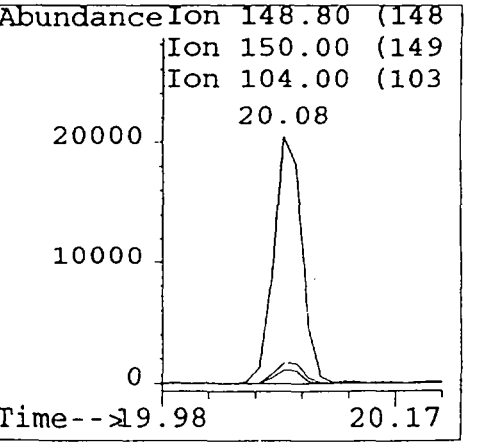


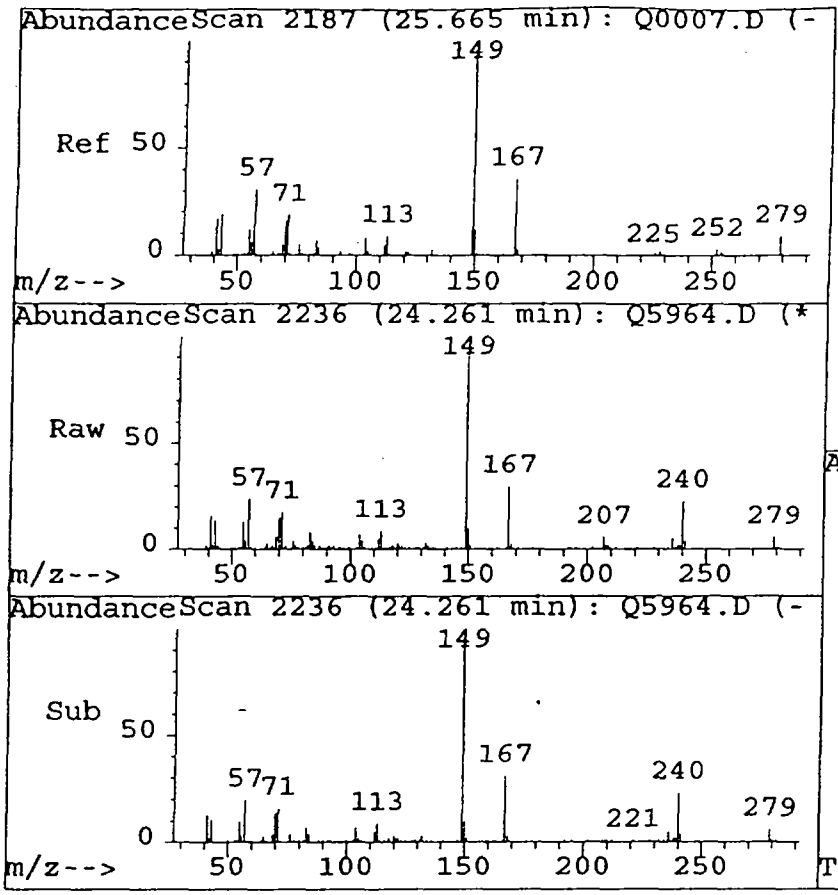


#67
Di-n-butylphthalate
Concen: 20.36 ug
RT: 20.08 min Scan# 1814
Delta R.T. -0.01 min
Lab File: Q5964.D
Acq: 28 Oct 99 15:08 hrs

Tgt Ion:148.8 Resp: 32342

Ion	Ratio	Lower	Upper
149	100		
150	8.2	0.0	31.5
104	5.3	0.0	25.2
0	0.0	0.0	0.0

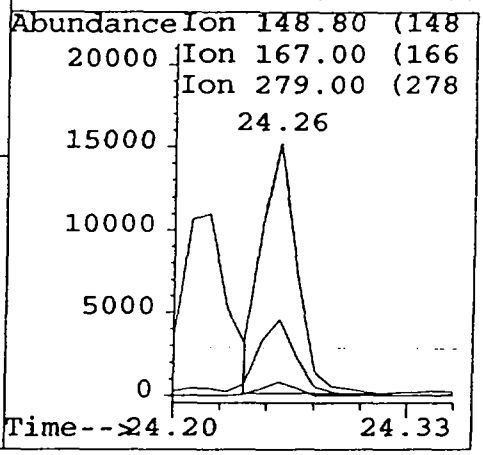


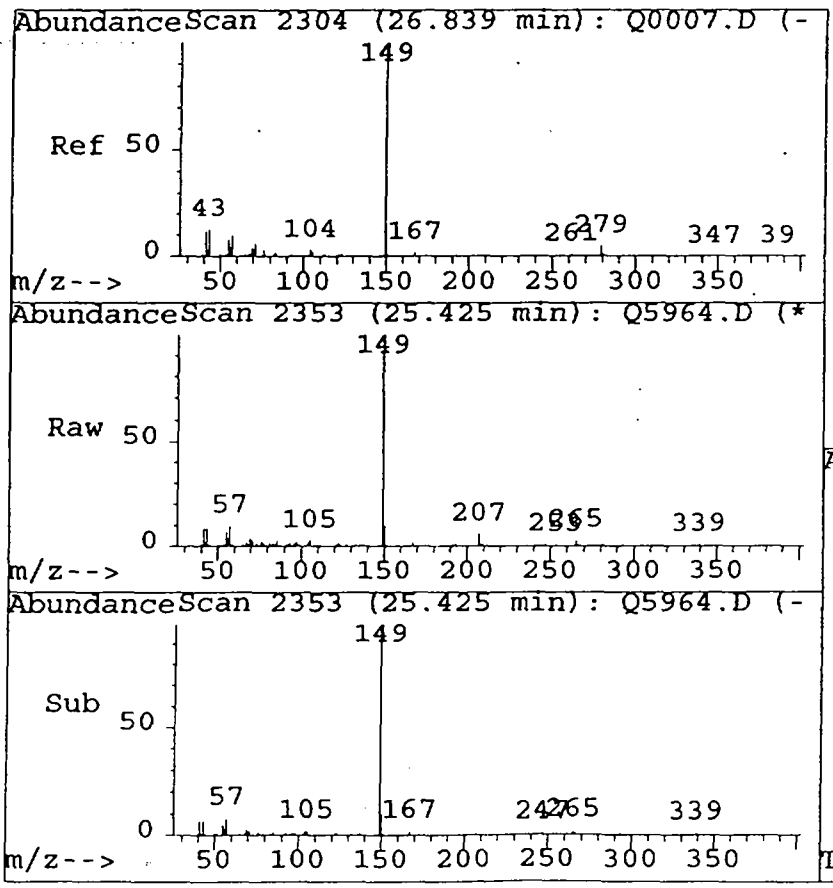


#78
bis(2-Ethylhexyl)phthalate
Concen: 21.35 ug
RT: 24.26 min Scan# 2236
Delta R.T. 0.00 min
Lab File: Q5964.D
Acq: 28 Oct 99 15:08 hrs

Tgt Ion:148.8 Resp: 20564

Ion	Ratio	Lower	Upper
149	100		
167	30.4	16.4	56.4
279	5.6	0.0	28.7
0	0.0	0.0	0.0

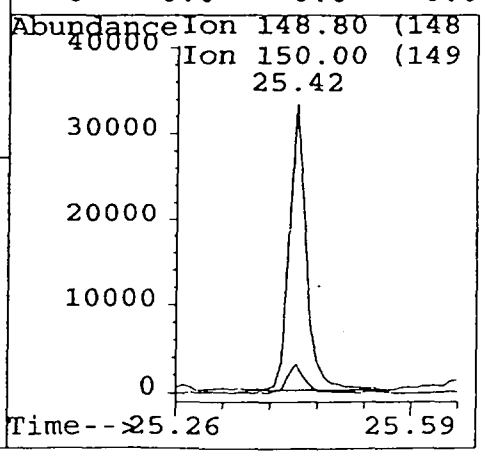




#80
Di-n-octylphthalate
Concen: 32.03 ug
RT: 25.42 min Scan# 2353
Delta R.T. 0.02 min
Lab File: Q5964.D
Acq: 28 Oct 99 15:08 hrs

Tgt Ion:148.8 Resp: 54505

Ion	Ratio	Lower	Upper
149	100		
150	9.4	0.0	32.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0



1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKJQFMS

Lab Name: STL/CT Contract: _____

Lab Code: IEACT Case No.: 2732A SAS No.: _____ SDG No.: A2732

Matrix: (soil/water) SOIL Lab Sample ID: SBLKJQFMS

Sample wt/vol: 30 (g/mL) G Lab File ID: >Q5965

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 10/22/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/28/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1200	J
83-32-9	Acenaphthene	1000	
51-28-5	2,4-Dinitrophenol	860	J
100-02-7	4-Nitrophenol	1300	J
132-64-9	Dibenzofuran	1200	
121-14-2	2,4-Dinitrotoluene	1200	
84-66-2	Diethylphthalate	1100	B
7005-72-3	4-Chlorophenyl-phenylether	1100	
86-73-7	Fluorene	1100	
100-01-6	4-Nitroaniline	1400	J
534-52-1	4,6-Dinitro-2-methylphenol	1100	J
86-30-6	N-Nitrosodiphenylamine (1)	1300	
101-55-3	4-Bromophenyl-phenylether	1300	
118-74-1	Hexachlorobenzene	1300	
87-86-5	Pentachlorophenol	970	J
85-01-8	Phenanthrene	1300	
120-12-7	Anthracene	1100	
86-74-8	Carbazole	1400	
84-74-2	Di-n-butylphthalate	1400	B
206-44-0	Fluoranthene	1400	
129-00-0	Pyrene	1300	
85-68-7	Butylbenzylphthalate	1800	
91-94-1	3,3'-Dichlorobenzidine	810	
56-55-3	Benzo(a)anthracene	1200	
218-01-9	Chrysene	1200	
117-81-7	bis(2-Ethylhexyl)phthalate	1300	B
117-84-0	Di-n-octylphthalate	1300	B
205-99-2	Benzo(b)fluoranthene	1200	
207-08-9	Benzo(k)fluoranthene	1300	
50-32-8	Benzo(a)pyrene	1200	
193-39-5	Indeno(1,2,3-cd)pyrene	1600	
53-70-3	Dibenzo(a,h)anthracene	1600	
191-24-2	Benzo(g,h,i)perylene	1600	

(1) - Cannot be separated from Diphenylamine

Quantitation Report

0170

Data File : C:\HPCHEM\MSQ\Q5965.D
Acq On : 28 Oct 99 15:50 hrs
Sample : 102299-B01FMS
Misc : SBLKJQFMS ; SWC ; 1 ; LLS
Quant Time: Oct 29 8:20 1999

Vial: 10
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

All spectral manual integrations for this sample have been reviewed and approved.
By: [signature] Date: 10/28/99
Secondary review: [signature] Date: 10/29/99

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.86	152	163664	40.00	ug	0.02
20) Naphthalene-d8	11.82	136	590840	40.00	ug	0.02
35) Acenaphthene-d10	15.76	164	388127	40.00	ug	0.02
57) Phenanthrene-d10	18.83	188	596659	40.00	ug	0.02
70) Chrysene-d12	24.23	240	518611	40.00	ug	0.01
79) Perylene-d12	26.98	264	476220	40.00	ug	0.02

System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	6.21	112	791679	134.98	ug	67.49%
3) Phenol-d5	8.31	99	1018072	153.78	ug	76.89%
21) Nitrobenzene-d5	10.23	82	502228	78.63	ug	78.63%
40) 2-Fluorobiphenyl	14.32	172	701551	70.83	ug	70.83%
56) 2,4,6-Tribromophenol	17.46	330	317644	167.30	ug	83.65%
73) Terphenyl-d14	22.08	244	1135239	82.59	ug	82.59%

Target Compounds							Qvalue
4) Pyridine	2.67	52	192111	760.31	ug	#	67
5) N-Nitrosodimethylamine	2.71	42	178930	1056.39	ug	#	71
7) Phenol	8.33	94	438539	1165.08	ug		85
8) Aniline	8.25	93	549399	1149.78	ug		99
9) bis(2-Chloroethyl)ether	8.38	63	204722	1137.94	ug		100
10) 2-Chlorophenol	8.51	128	382672	1336.53	ug		86
11) 1,3-Dichlorobenzene	8.77	146	371438	1090.53	ug		97
12) 1,4-Dichlorobenzene	8.90	146	339976	1117.16	ug		99
13) Benzyl alcohol	9.29	108	254282	1311.69	ug		96
14) 1,2-Dichlorobenzene	9.31	146	339345	1229.96	ug		96
15) bis(2-Chloroisopropyl)ethe	9.59	45	321938	1351.06	ug	#	55
16) 2-Methylphenol	9.63	108	291200	1126.29	ug		97
17) Hexachloroethane	10.00	117	121963	998.18	ug		84
18) N-Nitroso-di-n-propylamine	9.93	70	231602	1326.72	ug		92
19) 4-Methylphenol	9.97	108	333458	1323.51	ug		98
22) Nitrobenzene	10.27	77	357211	1123.05	ug		93
23) Isophorone	10.79	82	814227	1130.30	ug		90
24) 2-Nitrophenol	11.01	139	273717	1178.84	ug		90
25) 2,4-Dimethylphenol	11.16	107	325237	1085.19	ug		96
26) Benzoic acid	11.49	122	95811	445.03	ug		98
27) bis(2-Chloroethoxy)methane	11.33	93	505084	1204.86	ug		98
28) 2,4-Dichlorophenol	11.57	162	374175	1360.30	ug		96
29) 1,2,4-Trichlorobenzene	11.73	180	299141	1173.07	ug		99
30) Naphthalene	11.86	128	903804	1200.58	ug		99
31) 4-Chloroaniline	12.09	127	354368	938.24	ug		98
32) Hexachlorobutadiene	12.27	225	164331	1132.95	ug		99
33) 4-Chloro-3-methylphenol	13.26	107	420269	1372.63	ug		99

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5965.D
Acq On : 28 Oct 99 15:50 hrs
Sample : 102299-B01FMS
Misc : SBLKJQFMS ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 29 8:20 1999

Vial: 10 ~~0171~~
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	2-Methylnaphthalene	13.45	142	577425	1178.02	ug		98
36)	2,4,5-Trichlorotoluene	13.44	159	279009	966.95	ug		98
37)	Hexachlorocyclopentadiene	13.94	237	20603	246.35	ug		100
38)	2,4,6-Trichlorophenol	14.18	196	240553	1105.95	ug		100
39)	2,4,5-Trichlorophenol	14.29	196	245064	1167.31	ug		99
41)	2-Chloronaphthalene	14.53	162	711188	1300.12	ug		98
42)	2-Nitroaniline	14.88	65	254350	1205.65	ug		92
43)	Acenaphthylene	15.43	152	993562	992.44	ug		98
44)	Dimethylphthalate	15.30	163	1008118	1224.47	ug		99
45)	2,6-Dinitrotoluene	15.48	165	215553	1218.54	ug		91
46)	Acenaphthene	15.83	153	590855	1044.77	ug		96
47)	3-Nitroaniline	15.78	138	248574	1190.31	ug		95
48)	2,4-Dinitrophenol	16.01	184	82231	858.30	ug		87
49)	Dibenzofuran	16.16	168	986871	1171.64	ug		94
50)	2,4-Dinitrotoluene	16.31	165	300797	1160.26	ug		94
51)	4-Nitrophenol	16.24	109	149811	1314.65	ug	#	48
52)	Fluorene	16.89	166	684662	1138.10	ug		97
53)	4-Chlorophenyl-phenylether	16.89	204	299655	1116.18	ug		95
54)	Diethylphthalate	16.79	149	977276	1138.01	ug		100
55)	4-Nitroaniline	17.10	138	320524	1369.23	ug	#	77
58)	4,6-Dinitro-2-methylphenol	17.17	198	143596	1145.47	ug		100
59)	N-Nitrosodiphenylamine (1)	17.18	169	527033	1329.73	ug		95
60)	1,2-Diphenylhydrazine	17.22	77	690244	1220.68	ug	m	100
61)	4-Bromophenyl-phenylether	17.89	248	248712	1326.23	ug		93
62)	Hexachlorobenzene	18.20	284	282870	1340.00	ug		91
63)	Pentachlorophenol	18.61	266	118610	970.40	ug		98
64)	Phenanthrene	18.88	178	983237	1297.48	ug		98
65)	Carbazole	19.34	167	1192785	1365.94	ug		97
66)	Anthracene	18.97	178	843535	1103.17	ug		99
67)	Di-n-butylphthalate	20.09	149	1781568	1369.63	ug		99
68)	Fluoranthene	21.31	202	1286057	1370.08	ug		78
71)	Benzidine	21.61	184	5719	13.85	ug		100
72)	Pyrene	21.77	202	1253027	1261.76	ug		76
74)	Butylbenzylphthalate	23.12	149	912110	1839.69	ug		88
75)	3,3'-Dichlorobenzidine	24.18	252	315437	813.94	ug		98
76)	Benzo(a)anthracene	24.20	228	1091052	1244.68	ug		98
77)	Chrysene	24.29	228	820695	1169.78	ug		99
78)	bis(2-Ethylhexyl)phthalate	24.27	149	874782	1290.40	ug		99
80)	Di-n-octylphthalate	25.43	149	1842302	1336.71	ug		100
81)	Benzo(b)fluoranthene	26.27	252	1179215	1188.40	ug		91
82)	Benzo(k)fluoranthene	26.32	252	745362	1306.19	ug		92
83)	Benzo(a)pyrene	26.87	252	980090	1259.28	ug		91
84)	Indeno(1,2,3-cd)pyrene	29.43	276	1430732	1577.93	ug	#	60

(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

Quantitation Report

0172 ce

Data File : C:\HPCHEM\MSQ\Q5965.D
Acq On : 28 Oct 99 15:50 hrs
Sample : 102299-B01FMS
Misc : SBLKJQFMS ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 29 8:20 1999

Vial: 10
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85) Dibenzo(a,h)anthracene	29.43	278	1208064	1577.12	ug		82
86) Benzo(g,h,i)perylene	30.14	276	1459096	1642.52	ug	#	77

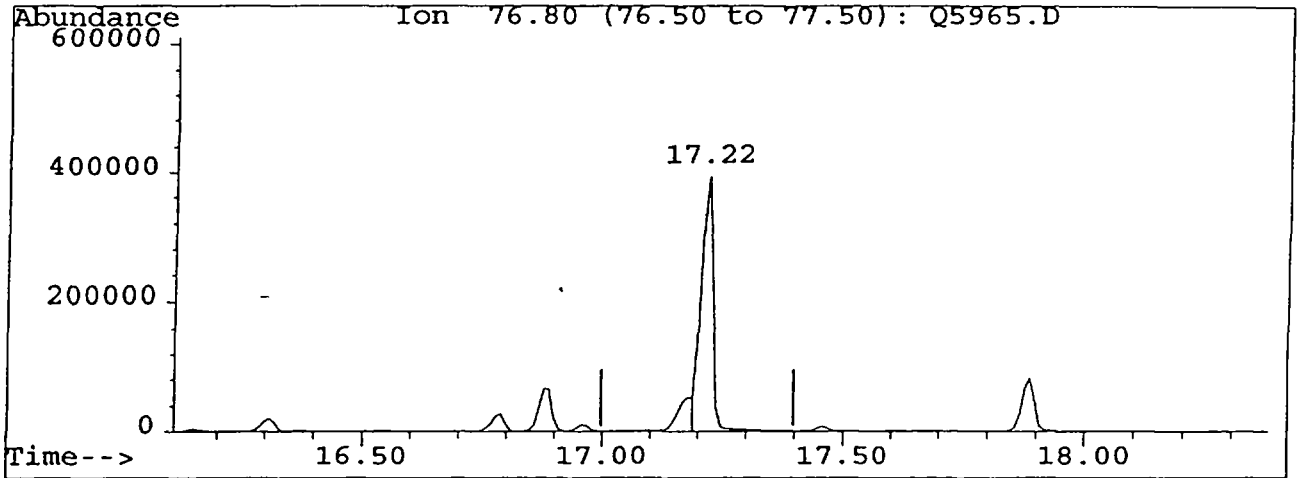
(#)=qualifier out of range (m)=manual integration (E)=exceeded max. cal.

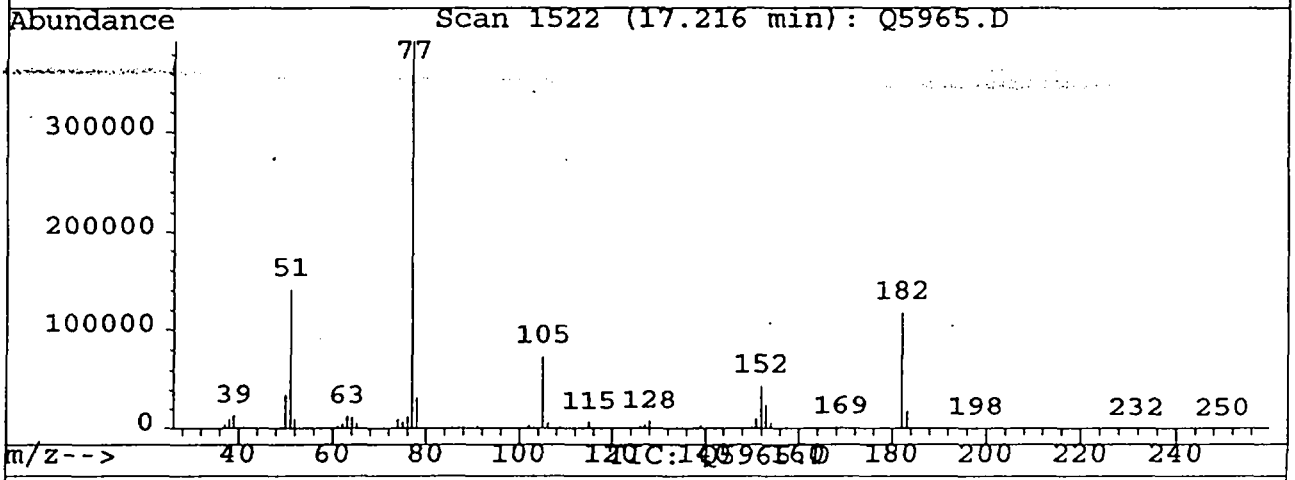
Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5965.D
Acq On : 28 Oct 99 15:50 hrs
Sample : 102299-B01FMS
Misc : SBLKJQFMS ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 29 8:20 1999

Vial: 10
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration





(60) 1,2-Diphenylhydrazine (T)
17.22min 1220.68ug m
response 690244

Ion	Exp%	Act%
76.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

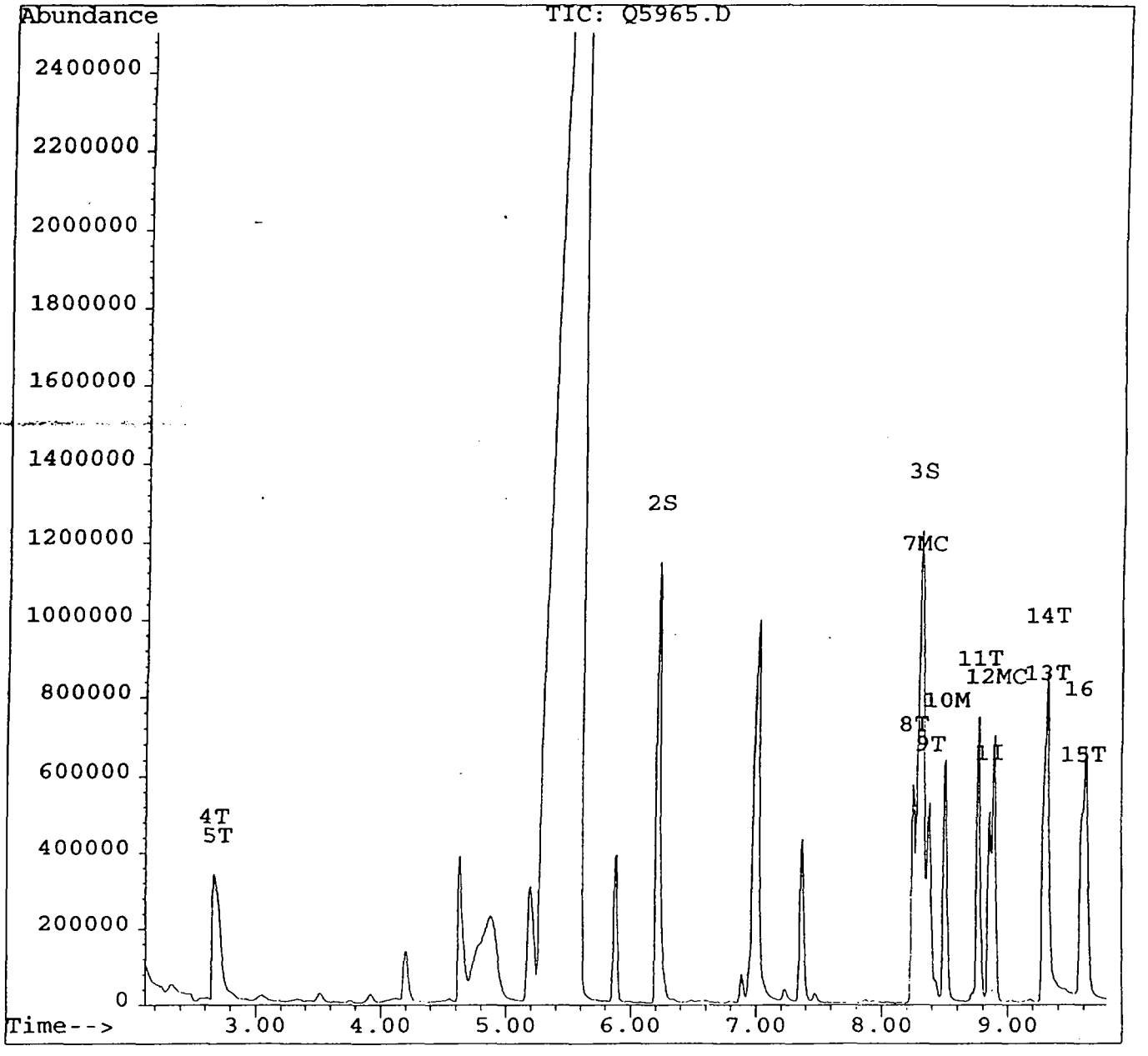
SB 10/28

Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5965.D
Acq On : 28 Oct 99 15:50 hrs
Sample : 102299-B01FMS
Misc : SBLKJQFMS ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 29 8:20 1999

Vial: 10
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration

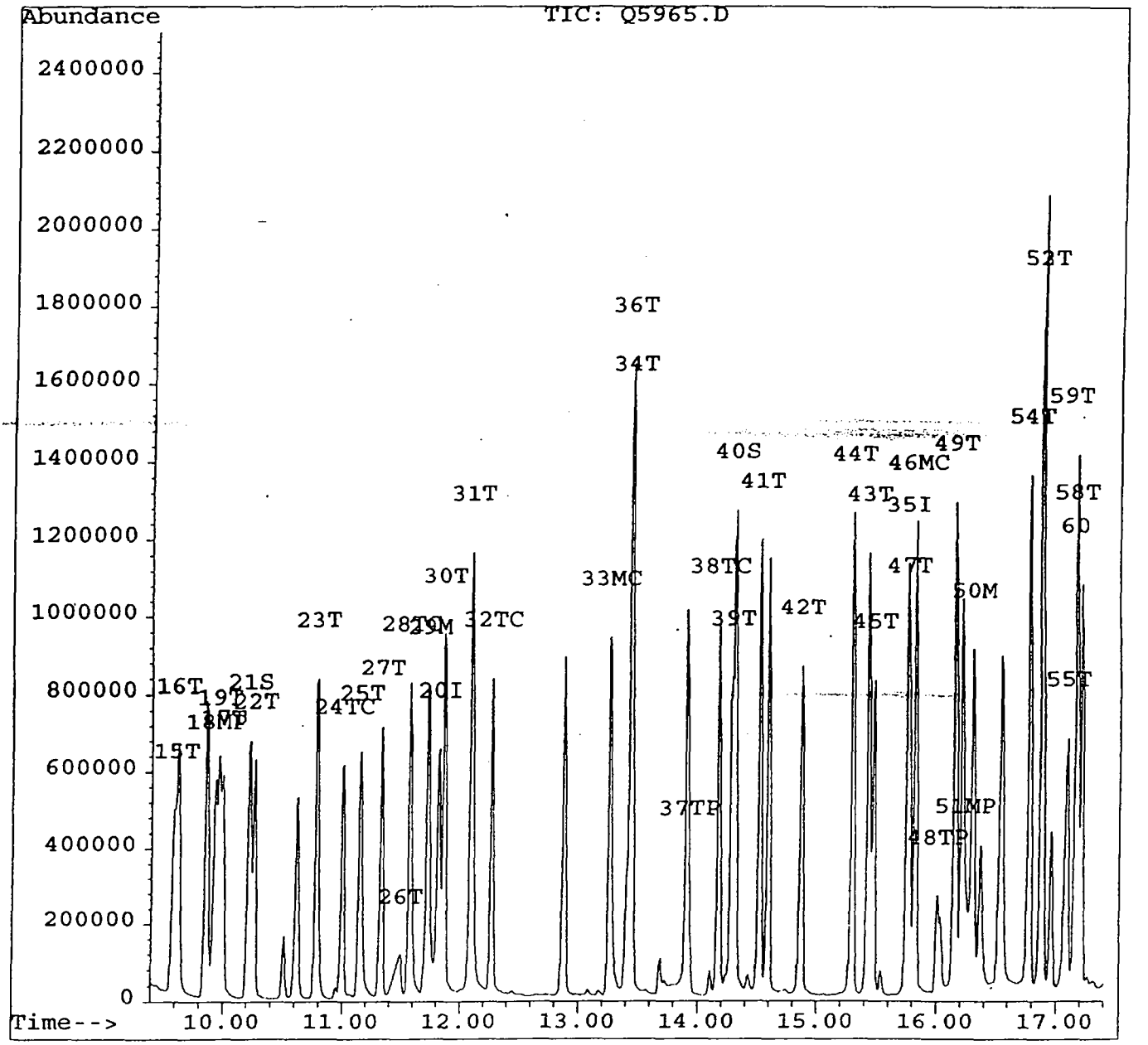


Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5965.D
Acq On : 28 Oct 99 15:50 hrs
Sample : 102299-B01FMS
Misc : SBLKJQFMS ; SWC ; 1 ; LLS ; Q0386
Quant Time: Oct 29 8:20 1999

Vial: 10
Operator: J.Bennett
Inst : HP5971Q
Multiplr: 16.67

Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5965.D
Acq On : 28 Oct 99 15:50 hrs
Sample : 102299-B01FMS
Misc : SBLKJQFMS ; SWC ; 1 ; LLS ; Q0386
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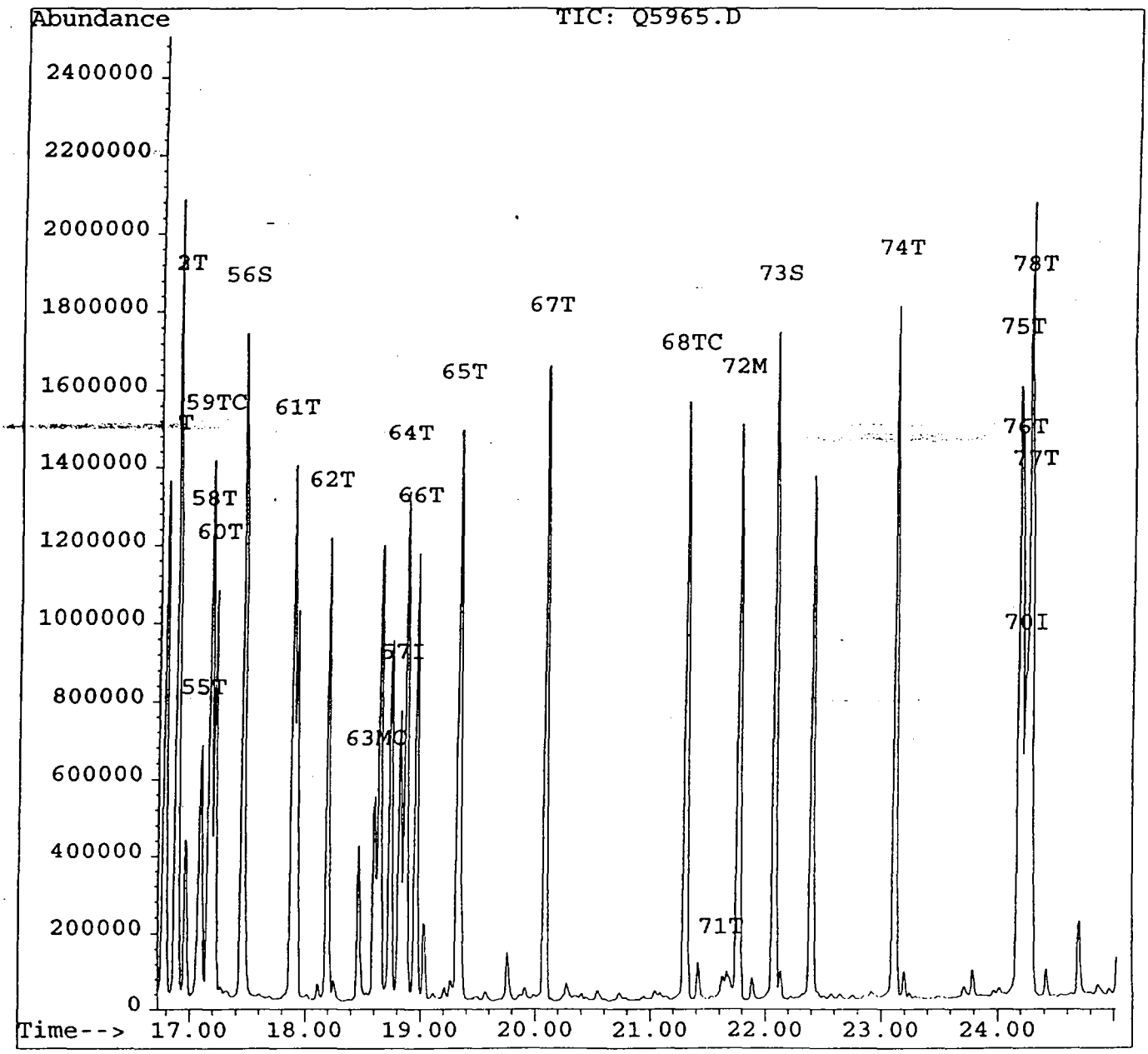
Method : C:\HPCHEM\1\METHODS\MSQSOC.M
Title : SOP BNA Calibration
Last Update : Thu Oct 28 12:46:59 1999
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\MSQ\Q5965.D
Acq On : 28 Oct 99 15:50 hrs
Sample : 102299-B01FMS
Misc : SBLKJQFMS ; SWC ; 1 ; LLS ; Q0386
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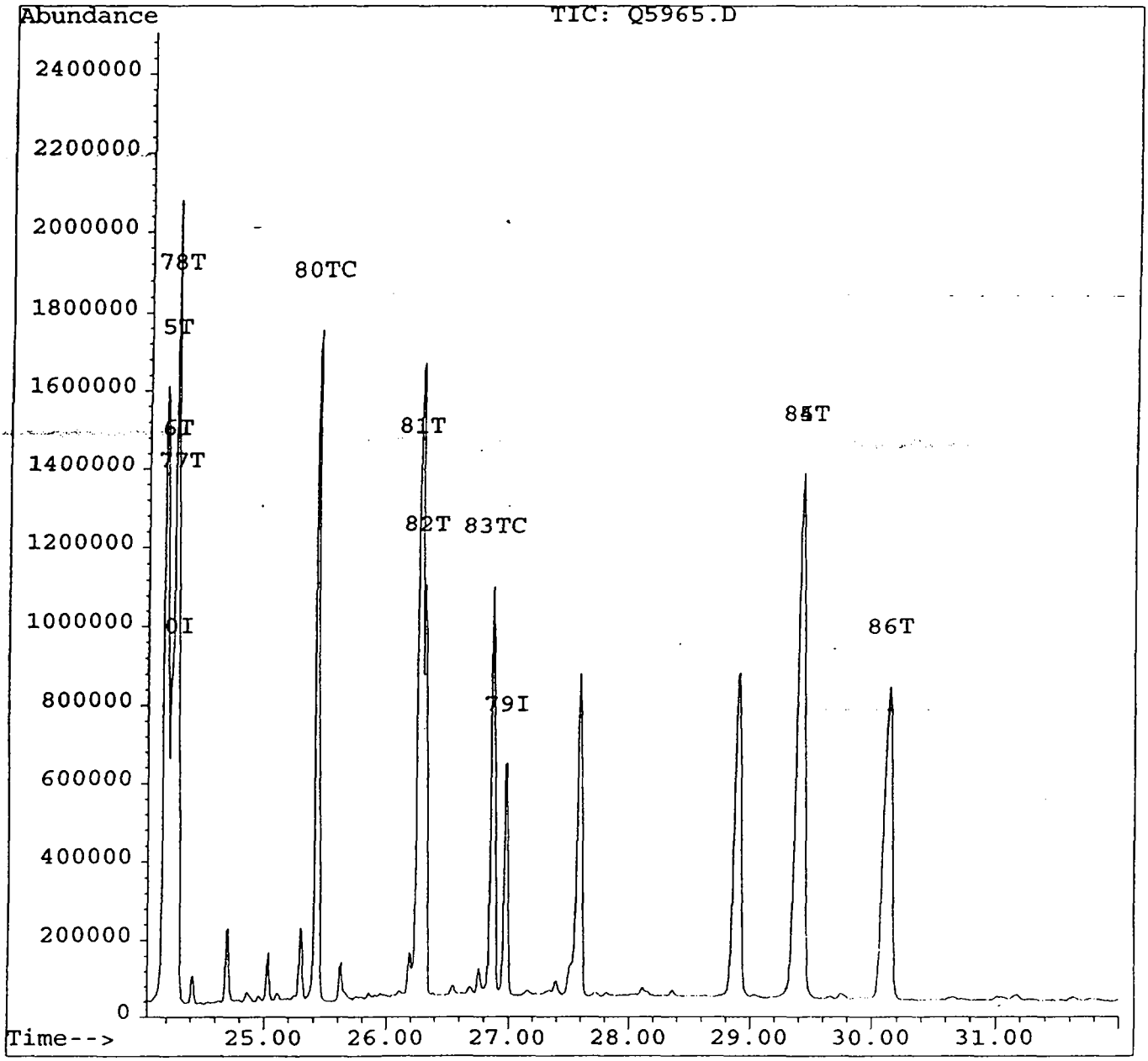

Organic Sample Preparation Log

Parameter	SW846 LLS BNA	Ext. Meth	Sonc	Na2SO4 Lot #	N18593	Extraction Date	10/22/99
Corr. MS/MSD				Alumina Lot	—	Completion Date	10/22/99 / 10-24-99
Surrogate By	SBW			Reagent H2O Lot	—	Surrogate Code	
Spike By	SBW	MeCl2 Lot #	—	H2SO4 Lot #	—	Spike Code MS	081699:16:01
Extracted By	CJM / SBW	Acetone Lot#		NaOH Lot #	—	FMS	101199:18:02,03,04
Int. Conc By		1:1 MeCL2 Acet. Lot#	102099:80:1	Cont.EXT Start time	—		
Final Conc By	SBW / [illegible]			Cont. EXT Stop time	—	Witness	CJM

Client	STLSample #	Sign Out COC	Init pH/Cl2	Vol/Wt Extracted	Surr. Volume (uls)	Matrix Spike Volume (uls)	C/U	Final Extract Volume (mls)	Soil pH	% Solids Info: Tare Wt.	Wet Wt.	Dry Wt.	% Solids (dec)	Location: Ref	Tray	Slot	Comments
Blank	102299 B01	N/A	N/A	30g	500	N/A	N/A	1ml		—	—	—	—	29			J
↓	↓ B01FMS	↓	↓	30g	↓	100x3	↓	↓						↓			
	B03			30g		N/A		1mL		—	—	—	—				
QEI	2786A 01			30g				1ml		1.27	11.97	11.45					
↓	↓ 02			30g				↓		1.30	14.62	14.05					
	03			30g						1.26	12.02	11.23					
↓	↓ 04			30g				↓		1.26	12.40	~~11.23~~	11.86 JW	10-25-99			
STL	2732A 01			30g				1mL		1.28	12.52	5.23					
↓	↓ 02			30g				↓		1.30	15.00	6.37					
	03			30g						1.29	12.87	10.36					
↓	↓ 04		↓	30g	↓	↓	↓	2mL		1.29	15.37	7.28		↓			

STL Form# SPF00102.CT Reviewed by [signature] Date: 10/27/99 STL Logbook # SP1.54 Page 4 of 9

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