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BUREAU OF RADIATION &
HAZARDOUS SITE MANAGEMENT
DIVISION OF SOLID &
HAZARDOUS MATERIALS

GENERAL ELECTRIC COMPANY
GE APPARATUS SERVICE CENTER
175 MILENS ROAD
TONAWANDA, NEW YORK

SUPPLEMENTAL SEWER INVESTIGATION REPORT

APRIL 14, 2000

Prepared for:
GENERAL ELECTRIC COMPANY
E RIVER ROAD
SCHENECTADY, NEW YORK

Prepared by:
DAMES & MOORE
A DAMES & MOORE GROUP COMPANY

DAMES & MOORE
A DAMES & MOORE GROUP COMPANY

646 Plank Road, Suite 202
Clifton Park, New York 12065
518 688 0015 Tel
518 688 0022 Fax

April 14, 2000

New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

Attention: Mr. Frank Shattuck, P.E.
Regional Solid and Hazardous
Materials Engineer

Re: Supplemental Sewer Investigation Report
GE Apparatus Service Center
Tonawanda, New York

Dear Mr. Shattuck:

1.0 INTRODUCTION

On behalf of General Electric Company (GE), Dames & Moore is pleased to submit this *Supplemental Sewer Investigation Report* to the New York State Department of Environmental Conservation (NYSDEC). This report summarizes the results of a supplemental investigation of the sewers at GE's Apparatus Service Center in Tonawanda, New York.

The investigation was conducted in accordance with Dames & Moore's November 17, 1999 work plan, entitled *Supplemental Sewer Investigation Work Plan (Work Plan)*, which was approved by NYSDEC on January 5, 2000. This report is being submitted in partial fulfillment of the terms of GE's *6 NYCRR Part 373 Hazardous Waste Management Permit* (*373 Permit*), dated May 1996.

Section 2.0 of this report provides background information for this project. Section 3.0 presents objectives of the project. Section 4.0 describes the completed scope of work. Section 5.0 presents the investigative results. Section 6.0 contains the conclusions.

2.0 BACKGROUND

This section presents background information about the sewer systems and the results of previous investigations of the sewers at the site.

2.1 SEWER SYSTEMS

Separate sanitary and storm sewers serve GE's Tonawanda service shop. Figure 1 reflects Dames & Moore's current understanding of the sewer systems at the site. The sewer systems drain to the sanitary and storm sewer manholes near the southwest corner of the building. From there, both systems feed into the municipal sewer systems that flow beneath Milens Road. The municipal sanitary sewer discharges to Tonawanda's wastewater treatment plant, and the municipal storm sewer ultimately discharges to the Niagara River.

2.1.1 Sanitary Sewer

The depth of the sanitary sewers that serve GE's Tonawanda service shop, which are shown in green in Figure 1, varies from approximately three to nine feet below the ground surface. The sanitary sewer system at the site includes one manhole near the southwest corner of the building.

The floor drains in the steam cleaning and paint booth area in the building discharge through an oil/water separator to the four-inch diameter sanitary sewer on the east side of the building. As shown in Figure 1, wastewater in this four-inch sewer flows to the sanitary sewer manhole near the southwest corner of the building. An inactive oil/water separator in the south end of the building connects to the four-inch sewer pipe south of the building. The plumbing from the rest rooms and locker rooms on the west side of the building discharges to a six-inch tile sanitary sewer west of the building. Wastewater in this six-inch pipe also flows to the sanitary sewer manhole near the southwest corner of the building.

Sanitary wastewater flows away from the on-site manhole to the southwest toward Milens Road, where the sanitary sewer connects to the municipal sanitary sewer system.

2.1.2 Storm Sewer

The storm sewers at GE's Tonawanda service center, which are shown in blue in Figure 1, are at approximately the same depth as the sanitary sewers. The storm sewer system at the site includes three manholes (STMH-1, STMH-2, and STMH-3) and three catch basins (CB-1, CB-2, and CB-3).

As shown in Figure 1, a floor drain and a trench drain near the rail bay in the building are connected to a six-inch tile storm sewer on the east side of the building. According to GE's records, the five other floor drains inside the building that connected to the storm sewer have been sealed.

Approximately 130 feet south of the rail spur, the diameter of the storm sewer increases to eight inches. The diameter of the pipe increases to ten inches where the sewer passes beneath the southwest corner of the building. Roof drains discharge to this storm sewer at three locations east of the building.

Near the southeast corner of the building, the ten-inch pipe turns west at storm sewer manhole STMH-3 and slopes to the west toward manhole STMH-2. The truck bay trench and another set of roof drains connect to the sewer between these two manholes. A twelve-inch lateral, which enters STMH-2 from the north, carries storm water from roof drains on the west side of the building. Flow leaves STMH-2 to the west through a fifteen-inch pipe that connects to manhole STMH-1 near the southwest corner of the building. A six-inch tile storm sewer line runs south from the west side of the building to STMH-1. A fifteen-inch pipe exits STMH-1 and slopes to the southwest, toward Milens Road, where it connects to the municipal storm sewer system.

All three catch basins drain to STMH-1. Dames & Moore has not determined the diameter of the pipe that connects catch basin CB-1, which is west of the building, to STMH-1. Catch basin CB-2, which is near the southwest corner of the building, discharges through a ten-inch pipe, and CB-3, which is south of the building, discharges through a six-inch pipe.

2.1.3 Abandoned Sewers

As shown in Figure 1, portions of the sanitary and storm sewers were abandoned in 1978 during the construction of the addition to the building. The records that Dames & Moore has reviewed do not indicate whether these lines were removed or plugged and left in place.

2.2 PREVIOUS STUDIES

While several studies have focused on the soil around the building, few have addressed the quality of the water and sediments in the sewers at GE's Tonawanda service shop. This section summarizes the available information from previous investigations of the water and sediments in the sewers.

2.2.1 Environmental Study at Buffalo Service Shop (LMS, 1987)

In February 1987, Lawler, Matusky, and Skelly (LMS) submitted a report, entitled *Environmental Study at Buffalo Service Shop*, to GE. They reported elevated concentrations of polychlorinated biphenyls (PCBs) in water samples collected from these seven locations:

- The two oil/water separators east and south of the building;
- The rail bay drainage sump in the north end of the building;
- The three stormwater manholes; and
- An unspecified air compressor accumulator discharge point.

The highest concentration of PCBs that LMS reported was 740 µg/L in the effluent from the oil/water separator south of the building, which is currently inactive.

2.2.2 Industrial Shop Process and Sewer System Characterization (GES, 1997)

On February 4, 1997, Groundwater & Environmental Services, Inc. (GES) submitted a report, entitled *Industrial Shop Process and Sewer System Characterization*, to GE. GES collected grab samples of wastewater for PCB analysis from five locations in the on-site sewer system. The concentrations of PCBs detected in these five samples were:

- 0.18 µg/L in the effluent from the oil/water interceptor south of the building, which is currently inactive;
- Less than the detection limit of 0.06 µg/L at a sanitary sewer cleanout west of the building;
- 0.6 µg/L at a storm sewer cleanout west of the building;
- 0.5 µg/L in the on-site sanitary sewer manhole; and
- 7.0 µg/L in the effluent from the oil/water separator east of the building, which discharges to the sanitary sewer.

2.2.3 RCRA Facility Investigation

In accordance with GE's *373 Permit* for the Tonawanda facility, GE has conducted a RCRA Facility Investigation (RFI) at the site. The RFI included the evaluation and investigation of portions of the sewers at the site.

The December 4, 1996 *RFI Work Plan* called for the collection and analysis of a sediment sample from the storm sewer manhole near the southwest corner of the building (STMH-1). The sample was to be analyzed for PCBs and volatile organic compounds (VOCs). No other

sediment sampling from the sewers was included in the *RFI Work Plan*. However, because no sediments were found in manhole STMH-1, a sediment sample could not be collected. The water sample collected from manhole STMH-1 had only traces of one VOC (0.68 µg/L bromodichloromethane). No PCBs were detected in this water sample.

The *RFI Report* was submitted to NYSDEC on April 2, 1999. NYSDEC's comments on the *RFI Report* were provided to GE in a letter dated October 5, 1999. NYSDEC requested that GE submit a work plan to further evaluate the quality of the sediment in the storm sewer manholes and catch basins at the site. In response to NYSDEC's request, GE developed the November 17, 1999 *Supplemental Sewer Investigation Work Plan*, which was approved by NYSDEC in a letter dated January 5, 2000.

3.0 OBJECTIVES

The three objectives of the supplemental investigation of the sewers were to:

- Evaluate whether sediments have accumulated in the storm sewer manhole (STMH-1) near the southwest corner of the building, and, if sediments are present, evaluate the quality of these sediments.
- Evaluate the presence and quality of sediments in the three catch basins at the site and in the other two storm sewer manholes along the south side of the building.
- Further evaluate whether there have been historical releases from the building that may have had impacted the subsurface near where former sewer or drain lines and bedding material exit the building adjacent to the foundation, so that these areas can be addressed during the Corrective Measure process.

4.0 SCOPE OF WORK

The scope of work for this investigation consisted of these three tasks:

Task 1 – Investigation of storm sewer manholes and catch basins

Task 2 – Review of site records

Task 3 – Preparation of letter report

The remainder of this section describes these three tasks.

4.1 TASK 1 – INVESTIGATION OF STORM SEWER MANHOLES AND CATCH BASINS

In accordance with the *Work Plan*, on January 25, 2000, Dames & Moore inspected the three manholes and one of the three catch basins connected to the storm sewer to evaluate these locations for the presence of sediments. However, the accumulated snow and ice prevented access to catch basins CB-2, which is near the southwest corner of the building, and CB-3, which is south of the building. These two catch basins were subsequently inspected and sampled on February 29, 2000.

During the inspections, Dames & Moore removed the covers or grates from the manholes and catch basins and observed the interiors of the catch basins and manholes for the presence of sediments and olfactory evidence of contamination. If sediments were observed, Dames & Moore collected samples and placed the samples in appropriate sample containers. In accordance with the NYSDEC-approved *Work Plan*, Dames & Moore did not collect water samples from the manholes or catch basins.

The sediment samples were submitted to Columbia Analytical Services (CAS) of Rochester, New York. CAS analyzed the samples for VOCs (EPA Method 8260) and PCBs (EPA Method 8082). The analytical laboratory provided an Analytical Services Protocol (ASP) Category B deliverable package. The laboratory results are attached to this report. The results were then validated by Dames & Moore's chemist in accordance with the *Quality Assurance Project Plan* previously approved by the NYSDEC for the RFI scope of work. The Data Validation report, which is in Attachment 2, indicated that the laboratory results contained no significant anomalies.

4.2 TASK 2 – REVIEW OF SITE RECORDS

In accordance with the *Work Plan*, Dames & Moore conducted an additional review of GE's records at the Tonawanda service shop. The objective of the review was to evaluate whether there may have been historical releases from the building that may have impacted the subsurface near where former sewer or drain lines and bedding material exit the building adjacent to the foundation.

Dames & Moore reviewed available site records pertaining to the locations and operational history of sewers and drains from the building and potential releases associated with these sewer and drains. The records that we reviewed included site drawings and engineering specifications.

Dames & Moore also interviewed GE personnel to gather additional information regarding the sewer system.

4.3 TASK 3 – PREPARATION OF LETTER REPORT

Dames & Moore has prepared this letter report to document the Supplemental Sewer Investigation.

5.0 RESULTS

This section summarizes the results of the supplemental investigation of the sewer systems at GE's Tonawanda site.

5.1 SAMPLING OF CATCH BASINS AND MANHOLES

Dames & Moore inspected the three storm sewer manholes (STMH-1, STMH-2, and STMH-3) and one catch basin (CB-1) on January 25, 2000. Dames & Moore returned to the site on February 29, 2000 to inspect catch basins CB-2 and CB-3, when access to the catch basins was not prevented by snow and ice. The locations of the manholes and catch basins are shown in Figure 1.

Dames & Moore collected sediment samples from all three catch basins. No sediment sample was collected from manhole STMH-1, which contained approximately two inches of flowing water, but no sediments. This finding was consistent with the observations at this location during the RFI. Manhole STMH-2 contained approximately three inches of water, which was flowing slowly, and just enough sediment to allow a twelve-ounce sediment sample to be scraped from the base of the manhole. Manhole STMH-3 contained approximately one to two inches of water, which did not appear to be flowing. Approximately two inches of brown, silty sediment had collected around the sides of the manhole. The sediment on the northwest side of the manhole was black gravel and silt with a sheen and a sweet odor. Dames & Moore collected a sample of this black material. As shown in Figure 1, the northwest side of STMH-3 is on the inside corner of a turn and is therefore less likely to be scoured by flows in the sewer. Thus, the black material is believed to represent sediments that have been deposited over a long period of time.

The analytical results for the sediment samples that were collected from the storm sewer manholes and catch basins are summarized in Table 1. The laboratory analytical results are in

Attachment 1. The data validation report, which indicates that the data meets the data quality objectives, is in Attachment 2.

Volatile Organic Compounds

As shown in Table 1, VOCs were not detected in the sediment sample from CB-1. Traces of acetone, toluene, and xylenes were detected in the sediment samples from CB-2 and CB-3.

No sediment sample was collected from STMH-1, which contained no sediment. No VOCs were detected in the sediment sample from STMH-2. The concentration of total VOCs detected in the sediment sample from STMH-3, which is near the southeast corner of the building, was 1,966 mg/kg. Most of the VOCs detected in STMH-3 were chlorinated benzene compounds.

Polychlorinated Biphenyls

PCBs were detected in the sediment samples from all three catch basins. The concentrations of PCBs detected in the catch basins ranged from 0.1 mg/kg at CB-1 (west of the building) to 1.6 mg/kg at CB-3 (south of the building).

PCBs were also detected in the sediment samples collected from manholes STMH-2 and STMH-3. The concentration of PCBs detected in the sediment sample from manhole STMH-3, which is near the southeast corner of the building, was 41,300 mg/kg. The PCB concentration detected in the sediment sample from manhole STMH-2, which is immediately downstream of STMH-3, was 20.7 mg/kg.

5.2 SUPPLEMENTAL REVIEW OF SITE RECORDS

During our supplemental review of GE's site records, Dames & Moore reviewed several documents that had not been reviewed during the RFI. Most of these documents were historical drawings of the on-site storm and sanitary sewers. None of these documents had evidence of historical spills that may have impacted the sewers or sewer bedding material.

Two of the documents that Dames & Moore reviewed indicated two possible connections from floor drains in the building to the storm sewer. These connections are shown in Figure 1. A 1974 drawing by George H. Drake Inc. Plumbing, entitled *General Electric Apparatus Service Shop, Town of Tonawanda, N.Y., Exhibit B*, shows a catch basin in the rail bay that is connected to the storm sewer. A conversation between Dames & Moore and GE personnel in January 2000 indicated that the catch basin in the rail bay currently appears to be active.

The 1974 drawing also shows a drinking fountain in the northern end of the building that is connected to the storm sewer. A 1997 report by GES, entitled *Industrial Shop Process and Sewer System Characterization,* stated that a dye tracer released into a floor drain in the north end of the building had been detected in manhole STMH-3, indicating that the floor drain discharged to the storm sewer. The floor drain mentioned in the GES report appears to be in the same place as the drinking fountain shown in the 1974 drawing. Figure 1 reflects Dames & Moore's current understanding of the connections from the building interior to the storm sewer east of the building. The *CMS Final Report*, which will be submitted to NYSDEC in April 2000, will address these possible connections to the storm sewer.

6.0 CONCLUSIONS

Based on the data generated during the supplemental investigation of the sewers at GE's Tonawanda Service Shop, Dames & Moore concludes:

- The sediments in the catch basins and storm sewer manholes contain PCBs. The highest concentrations of PCBs were found in sediments from the storm sewer manhole southeast of the building. At the other four locations, only trace or relatively low concentrations of PCBs were detected in the sediments.

- VOCs (mostly chlorinated benzene compounds) were detected in the sediment sample collected from the storm sewer manhole near the southeast corner of the building. Traces of toluene and xylenes were found in sediment samples collected from two of the other four sampling locations.

- The sediments with the highest concentrations of PCBs and VOCs were on the northwest side of storm sewer manhole STMH-3. As stormwater flowing south in the storm sewer turns a corner in STMH-3 and begins flowing west, sediments are likely to be deposited on the northwest side of the manhole and to remain there. Thus, the impacted sediments in STMH-3 are probably not being transported beyond STMH-3 by the storm water in the storm sewer.

- The documents reviewed during this investigation suggest that a floor drain in the northern end of the building and a trench in the rail bay may currently discharge to the storm sewer.

The *CMS Final Report*, which will be submitted to NYSDEC in April 2000, will examine options for addressing the VOC- and PCB-containing sediments in the storm sewer south of the

building. The corrective measure alternatives for GE's Tonawanda shop will include steps to prevent the sewers from becoming impacted with VOCs or PCBs in the future.

oOo

GE and Dames & Moore appreciate the NYSDEC's assistance with this project. If you have any questions or comments, please call us.

Very truly yours,
DAMES & MOORE

Teresa M. Misiolek
Project Manager

Don Porterfield, P.E.
Senior Engineer

Attachments: 1 Laboratory Analytical Results
2 Data Validation Report

copy: Mr. Roger Murphy
Supervisor, Western Engineering Section
NYSDEC
50 Wolf Road
Albany, New York 12233

Mr. J. Reidy
US EPA
Region 2
290 Broadway
New York, New York 10007-1866

Ms. Dawn Varacchi, GE
Mr. Tony Hejmanowski, GE
Scott Sklenar, P.G., Dames & Moore

TABLE 1

SUMMARY OF DETECTED COMPOUNDS
SUPPLEMENTAL SEWER INVESTIGATION

GE APPARATUS SERVICE CENTER
TONAWANDA, NEW YORK

Analyte	CB-1 (West of Building)	CB-2 (Southwest of Building)	CB-3 (South of Building)	STMH-1 (Near Southwest Corner of Building)	STMH –2 (South of Building)	STMH-3 (Near Southeast Corner of Building)
VOCs (mg/kg)						
Acetone	ND	0.012 J	0.012 J	NS	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	NS	ND	14
1,3-Dichlorobenzene	ND	ND	ND	NS	ND	450 E
1,4-Dichlorobenzene	ND	ND	ND	NS	ND	190 E
Toluene	ND	0.0032 J	0.0057 J	NS	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	NS	ND	10
1,2,4-Trichlorobenzene	ND	ND	ND	NS	ND	1,300 E
m-, p-Xylenes	ND	0.0015 J	0.0014 J	NS	ND	ND
o-Xylene	ND	ND	0.0027 J	NS	ND	2.2 J
Total VOCs	**ND**	**0.0167 J**	**0.0218 J**	**NS**	**ND**	**1966**
PCBs (mg/kg)						
PCB 1254	ND	ND	ND	NS	14	36,000
PCB 1260	0.1	1.3	1.6	NS	6.7	5,300
Total PCBs	**0.1**	**1.3**	**1.6**	**NS**	**20.7**	**41,300**

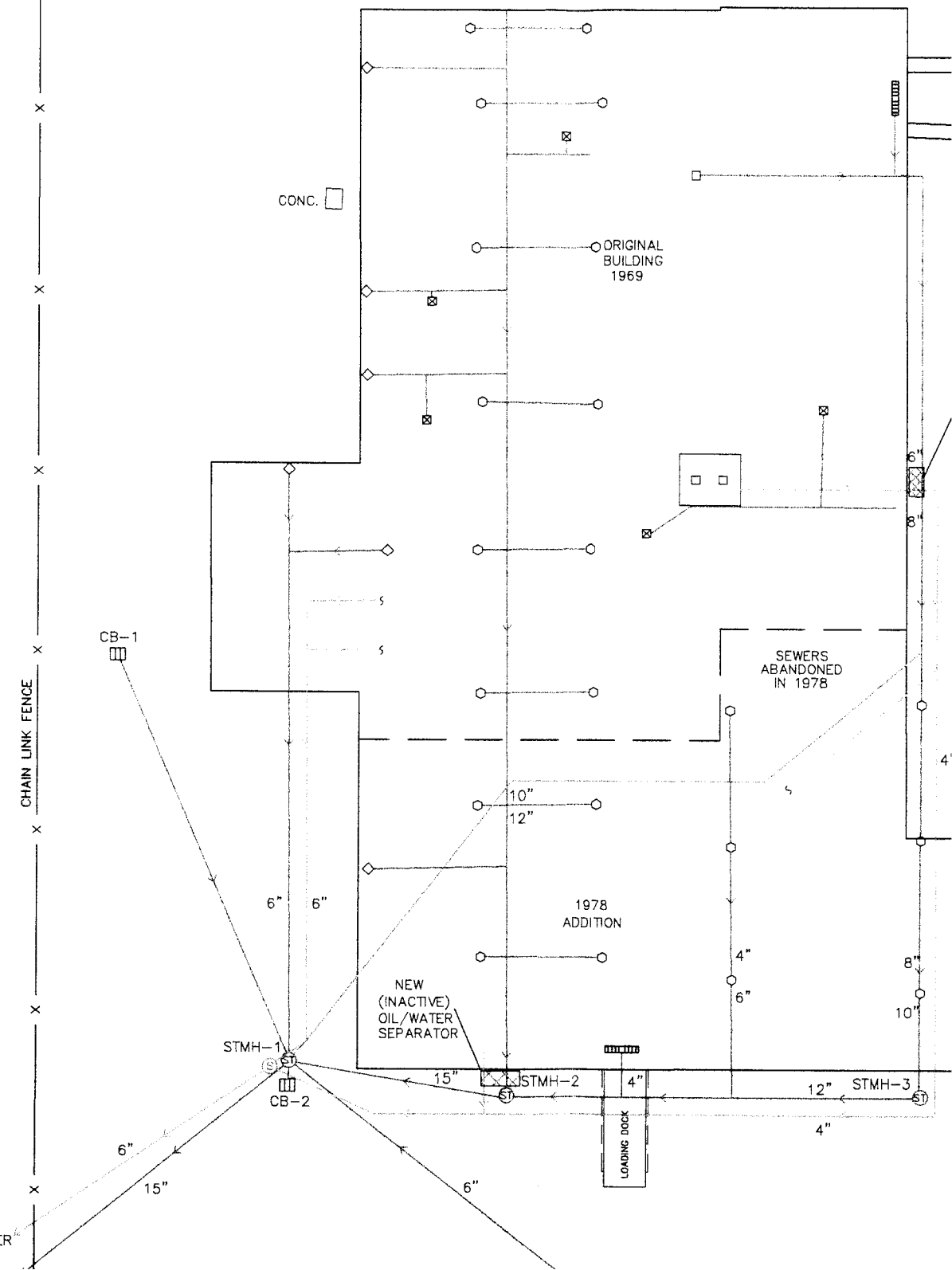
Explanations: A "J" flag indicates an estimated value that is less than the method detection limit.
An "E" flag indicates an estimated value that exceeds the calibration range of the analytical instrument.
ND = Not Detected
NS = Not Sampled

Note: No sample was collected from manhole STMH-1, which contained no sediment.

EXPLANATION

- ST – STORM MANHOLE
- S – SANITARY MANHOLE
- CB – CATCH BASIN
- ——— – STORM SEWER
- ——— – SANITARY SEWER
- ▭▭▭ – TRENCH
- □ – FLOOR DRAIN
- ⊠ – PLUGGED FLOOR DRAIN
- ····· – ABANDONED STORM SEWER
- ····· – ABANDONED SANITARY SEWER
- ◇ – HUB DRAIN 6" ABOVE FLOOR
- ○ – ROOF DRAIN

SOURCES: "MAP OF GENERAL ELECTRIC SERVICE CENTER PROPERTY, PART OF LOT 45, TOWNSHIP 12, RANGE 8, TOWN OF TONAWANDA, ERIE COUNTY, NEW YORK" KRIEBEL ASSOCIATES, JULY 29, 1998. "GENERAL ELECTRIC COMPANY APPARATUS SERVICE BUSINESS DIVISION SERVICE SHOP ADDITION, TOWN OF TONAWANDA, NEW YORK, PLUMBING & DRAINAGE FLOOR PLAN AND SITE PLAN" CANNON DESIGN, INC, APRIL 1, 1977. "GENERAL ELECTRIC APPARATUS SERVICE SHOP, TOWN OF TONAWANDA, NEW YORK, EXHIBIT B" GEORGE H. DRAKE INC. PLUMBING, SEPTEMBER 10, 1974.



03/31/00

ATTACHMENT 1

LABORATORY ANALYTICAL RESULTS

Columbia Analytical Services inc.

A FULL SERVICE ENVIRONMENTAL LABORATORY

March 22, 2000

Mr. Don Porterfield
Dames & Moore
646 Plank Rd.
Suite 202
Clifton Park, NY 12065

PROJECT:GE-TONAWANDA
Submission #:R2001022

Dear Mr. Porterfield:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 03/15/00 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at (716) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Mark S. Wilson

Mark Wilson
Client Service Manager

Enc.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director prior to report submittal. Michael K. Pe

1 Mustard St. • Suite 250 • Rochester, NY 14609 • Tele:(716)288-5380 • Fax:(716)288-8475

CASE NARRATIVE

COMPANY: Dames & Moore
GE-Tonawanda
SUBMISSION #: R20001022

Dames & Moore soil samples were collected on 02/29/00 and received at CAS on 02/29/00 in good condition.

VOLATILE ORGANICS

Soil samples were analyzed for the Target Compound List (TCL) Volatile Organics plus dichloro and trichlorobenzenes by EPA Method 8260B from SW-846.

All initial and continuing calibrations were compliant.

All blank spike recoveries were within QC limits.

All surrogate standard recoveries were within QC limits except for BFB in samples CB-2 and CB-3. These samples were reanalyzed as CB-2RE and CB-3RE to confirm QC outliers.

Internal standard areas were outside limits for samples CB-2, CB-3, CB-2RE and CB-3RE.

All samples were analyzed within the required holding times.

No analytical or QC problems were encountered with these analyses.

PCB's

Soil samples were analyzed for the Target Compound List (TCL) of PCB's by EPA Method 8082 from SW-846.

All initial and continuing calibrations were compliant.

All blank spike recoveries were within QC limits.

All surrogate standard recoveries were within QC limits except for sample B-3. This sample was reinjected to confirm this QC outlier.

All samples were analyzed within the required holding times.

No analytical or QC problems were encountered with these analyses.

1 Mustard Street, Suite 250 ▪ Rochester, NY 14609-6925 ▪ Telephone (716) 288-5380 ▪ Fax (716) 288-8475

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG #: CB-2	BATCH COMPLETE: __yes_____	DATE REVISED:
SUBMISSIO R2001022	DISKETTE REQUESTED: Y___ N__x__	DATE DUE: 03/29/00
CLIENT: Dames & Moore	DATE: 03/01/00	PROTOCOL: 846
CLIENT REP: Mark Wilson	CUSTODY SEAL: PRESENT/ABSENT:	SHIPPING No.:
PROJECT: GE-TONAWANDA	CHAIN OF CUSTODY: PRESENT/ABSENT:	

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLE	DATE RECEIVE	pH (SOLIDS)	% SOLIDS	REMARKS AMPLE CONDITIO
361736	CB-3	SOIL	8260/8082	2/29/00	2/29/00			
361737	CB-2	SOIL	8260/8082	2/29/00	2/29/00			
361738	TRIP BLANK	WATER	8260	2/29/00	2/29/00			
			8260=TCL+di+triclbenzenes					

CCIA

Columbia Analytical Services inc.

Effective 04/01/96

CAS LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. For further explanation see case narrative / cover letter.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

N - Spiked sample recovery not within control limits.
(Flag the entire batch - Inorganic analysis only)

* - Duplicate analysis not within control limits.
(Flag the entire batch - Inorganic analysis only)

- Also used to qualify Organics QC data outside limits.

D - Spike diluted out.

S - Reported value determined by Method of Standard Additions. (MSA)

X - As specified in the case narrative.

CAS Lab ID # for State Certifications

NY ID # in Rochester:	10145	NJ ID # in Rochester:	73004
CT ID # in Rochester:	PH0556	RI ID # in Rochester:	158
MA ID # in Rochester:	M-NY032	NH ID # in Rochester:	294198-A
OH EPA # in Rochester:	VAP	AIHA # in Rochester:	7889

Columbia Analytical Services INC.
An Employee-Owned Company

1 Mustard St., Suite 250, Rochester, NY 14609-6925
(716) 288-5380 • FAX (716) 288-8475

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

DATE 2/28/00 (P) PAGE 1 OF 1

PROJECT NAME GE-TONAWANDA
PROJECT MANAGER/CONTACT Don Porterfield
COMPANY/ADDRESS Dames+Moore
6416 Plank Road Suite 202 Clifton Park NY 12065
TEL (518) 688 0015 FAX (518) 688-0022
SAMPLER'S SIGNATURE Jennifer Christy

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	FOR OFFICE USE ONLY LAB I.D.	SAMPLE MATRIX	# OF CONTAINERS	GC/MS VOA's ☒ 8260 ☐ 624 ☐ 95-1	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ 95-2	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/PCB's ☐ 8081 ☐ 608 ☐ 95-3	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (LIST BELOW)	METALS, DISSOLVED (LIST BELOW)	PCB 8082	% Solids	Chlorobenzenes				PRESERVATION pH < 2.0	pH > 12	Other
CB-3	2/28/00	11:00		GRAB	2	1										1	X	X						
CB-2	2/28/00	11:30		GRAB	2	1										1	X	X					ICE	
TRIP BLANK					1	1																		

RELINQUISHED BY:
Signature: Jennifer Christy
Printed Name: Jennifer Christy
Firm: DAMES
Date/Time: 2/25/00

RECEIVED BY:
Signature: J. Pettit
Printed Name:
Firm: DAMES
Date/Time: 2/29/00 1615

RELINQUISHED BY:
Signature: J. Pettit
Printed Name:
Firm: DAMES
Date/Time: 2/29/00 5:15P

RECEIVED BY:
Signature: Rochelle Bogert
Printed Name: Rochelle Bogert
Firm: CAS
Date/Time: 2-29-00 17:15

RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS
__ 24 hr. __ 48 hr. __ 5 day
X Standard (10-15 working days)
__ Provide Verbal Preliminary Results
X Provide FAX Preliminary Results
Requested Report Date _____

REPORT REQUIREMENTS
__ 1. Routine Report
__ 2. Routine Rep. w/CASE Narrative
__ 3. EPA Level III Validatable Package
__ 4. N.J. Reduced Deliverables Level IV
X 5. NY ASP/CLP Deliverables *
__ 6. Site specific QC.

INVOICE INFORMATION:
P.O. #:
Bill To:

SAMPLE RECEIPT:
Shipping Via: CAS
Shipping #:
Temperature: 1°
Submission No: A2000622

SPECIAL INSTRUCTIONS/COMMENTS:
METALS X Date on sample jars should be 2/28/00 NOT 2/27/00. (P)
ORGANICS: ☐ TCL ☐ PPL ☐ AE Only ☐ BN Only ☐ Special List
SAMPLES FOR CHLOROBENZENES w/ VOC 8260

* Category deliverables - per initial work scope.

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Check Form

Project/Client Dames + Moore Submission Number R2-1022

Cooler received on 2-29-00 by: HE COURIER: (CAS) UPS FEDEX CD&L CLIENT

1. Were custody seals on outside of cooler? (YES) / NO : Date ✓ : Signature ✓
2. Were custody papers properly filled out (ink, signed, etc.)? (YES) NO
3. Did all bottles arrive in good condition (unbroken)? (YES) NO
4. Were VOA vials checked for absence of air bubbles, and noted if so? (YES) NO
5. Were Ice or Ice packs present? (YES) NO
6. Where did the bottles originate? (CAS/ROC, CLIENT)
7. Temperature of cooler(s) upon receipt: 10

Is the temperature within 0° - 6° C?:	Yes ☒	Yes ☐	Yes ☐	Yes ☐	Yes ☐
If No, Explain Below	No ☐	No ☐	No ☐	No ☐	No ☐

Date/Time Temperatures Taken: 2-29-00 17:22

Thermometer ID: IR-Gun Temp Blank Sample Bottle Cooler Temp. (IR Gun)

If out of Temperature, Client Approval to Run Samples _____

Cooler Breakdown: Date: 3/1/00 by: KB

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct bottles used for the tests indicated? (YES) NO

Explain any discrepancies: _____

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO_3					
2	H_2SO_4					
5-9*	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH _____

*If pH adjustment is required, use NaOH and/or H_2SO_4

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				

Other Comments:

0004

INTERNAL CHAINS

CLIENT NAME: Dames & Moore

SDG#: SUBMISSION: R2001022 DATE REC'D: 02/29/00 17:15

	ORDER #	RELINQUISED BY	RECEIVED BY	DATE	TIME	PH
8260B.	361736	RB	DL	3/1/00	11:32	
8260B.	361737	↓	↓	↓	↓	
8260B.	361738	↓	↓	↓	↓	<2

0005

INTERNAL CHAINS

CLIENT NAME: Dames & Moore

#: SUBMISSION: R2001022 DATE REC'D: 02/29/00 17:15

	ORDER #	RELINQUISED BY	RECEIVED BY	DATE	TIME
8082.	361736	RKB	TEB	3/1/00	11:00
8082.	361737	↓	↓	↓	↓

0006

INTERNAL CHAINS

CLIENT NAME: Dames & Moore

SDG#: SUBMISSION: R2001022 DATE REC'D: 02/29/00 17:15

	ORDER #	RELINQUISED BY	RECEIVED BY	DATE	TIME
PERCENT SOLIDS	361736	RB	BB	3/1/00	16:00
PERCENT SOLIDS	361737	↓		↓	↓

VOLATILE ORGANICS

QC SUMMARY

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B

LABORATORY REFERENCE SPIKE SUMMARY

REFERENCE ORDER #: 364327 ANALYTICAL RUN # : 48407

DATE ANALYZED : 03/09/00
ANALYTICAL DILUTION: 1.0

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
ACETONE	20	65	21 - 165
BENZENE	20	95	37 - 151
BROMODICHLOROMETHANE	20	96	35 - 155
BROMOFORM	20	99	45 - 169
BROMOMETHANE	20	138	10 - 242
2-BUTANONE (MEK)	20	91	25 - 162
CARBON DISULFIDE	20	92	45 - 148
CARBON TETRACHLORIDE	20	107	70 - 140
CHLOROBENZENE	20	105	37 - 160
CHLOROETHANE	20	116	53 - 149
CHLOROFORM	20	101	51 - 138
CHLOROMETHANE	20	123	10 - 273
DIBROMOCHLOROMETHANE	20	96	53 - 149
1,3-DICHLOROBENZENE	20	108	71 - 157
1,2-DICHLOROBENZENE	20	107	71 - 157
1,4-DICHLOROBENZENE	20	107	71 - 157
1,1-DICHLOROETHANE	20	92	59 - 155
1,2-DICHLOROETHANE	20	100	49 - 155
1,1-DICHLOROETHENE	20	88	10 - 234
CIS-1,2-DICHLOROETHENE	20	93	54 - 156
TRANS-1,2-DICHLOROETHENE	20	98	54 - 156
1,2-DICHLOROPROPANE	20	92	10 - 210
CIS-1,3-DICHLOROPROPENE	20	93	10 - 227
TRANS-1,3-DICHLOROPROPENE	20	99	17 - 183
ETHYLBENZENE	20	103	37 - 162
2-HEXANONE	20	83	22 - 155
METHYLENE CHLORIDE	20	107	10 - 221
4-METHYL-2-PENTANONE (MIBK)	20	97	46 - 157
STYRENE	20	109	66 - 144
1,1,2,2-TETRACHLOROETHANE	20	96	46 - 157
TETRACHLOROETHENE	20	104	64 - 148
TOLUENE	20	106	47 - 150
1,2,4-TRICHLOROBENZENE	20	105	71 - 157
1,2,3-TRICHLOROBENZENE	20	102	71 - 157
1,1,1-TRICHLOROETHANE	20	98	52 - 162
1,1,2-TRICHLOROETHANE	20	100	52 - 150
TRICHLOROETHENE	20	99	71 - 157
VINYL CHLORIDE	20	131	10 - 251
O-XYLENE	20	107	71 - 135
M+P-XYLENE	40	104	71 - 135

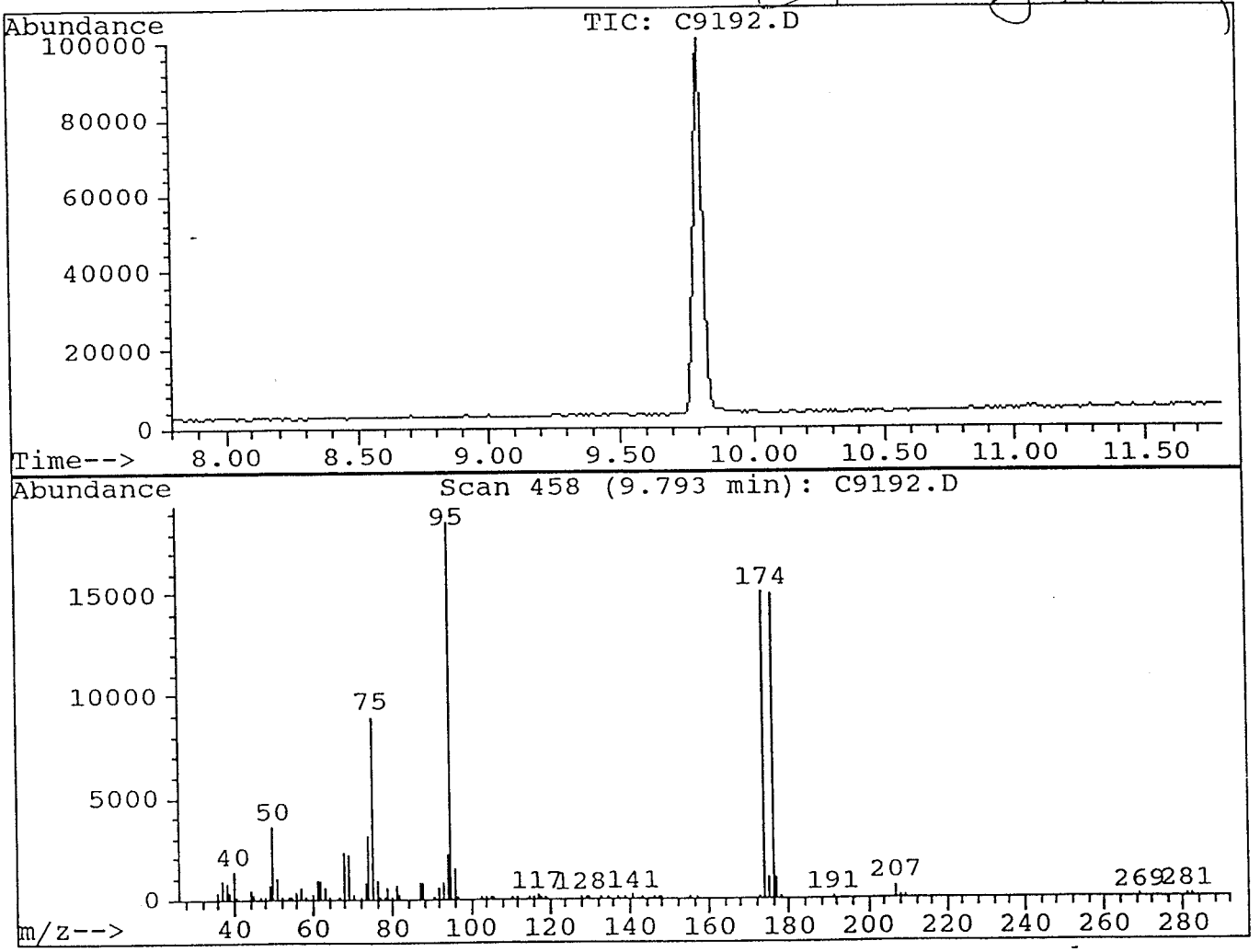
0009

BFB

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9192.D
Acq On : 9 Feb 100 11:32 am
Sample : TUNE CHECK
Misc :

Vial: 5
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa



Peak Apex is scan: 458

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	3552	PASS
75	95	30	60	48.2	8953	PASS
95	95	100	100	100.0	18576	PASS
96	95	5	9	7.8	1450	PASS
173	174	0	2	0.5	70	PASS
174	95	50	100	80.8	15009	PASS
175	174	5	9	7.0	1055	PASS
176	174	95	101	99.2	14886	PASS
177	176	5	9	6.4	956	PASS

C9192.D SOIL0113.M Wed Feb 09 11:45:26 2000

0009A

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: CAS/ROCH Contract: DAMES

Lab Code: 10145 Case No.: R-1022 SAS No.: _____ SDG No.: CB-2

Lab File ID: C9594.D Lab Sample ID: 364326 1.0

Date Analyzed: 03/09/00 Time Analyzed: 11:28

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) Y

Instrument ID: MS#5

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	QC/REF	364327 1.0	C9595.D	12:06
02	TRIP BLK	361738 1.0	C9597.D	13:45
03	CB-3	361736 1.0	C9598.D	14:23
04	CB-2	361737 1.0	C9599.D	15:00
05	CB-3RE	361736 1.0	C9608.D	20:43
06	CB-2RE	361737 1.0	C9609.D	21:20

COMMENTS

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: DAMES

Lab Code: 10145 Case No.: R-1022 SAS No.: _____ SDG No.: CB-2

Lab File ID: C9192.D BFB Injection Date: 02/09/00

Instrument ID: MS#5 BFB Injection Time: 11:32

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.1
75	30.0 - 66.0% of mass 95	48.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.4 (0.5)1
174	50.0 - 120.0% of mass 95	80.8
175	4.0 - 9.0% of mass 174	5.7 (7.0)1
176	93.0 - 101.0% of mass 174	80.1 (99.2)1
177	5.0 - 9.0% of mass 176	5.1 (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:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD5	5PPB	C9194.D	02/09/00	12:34
02	VSTD20	20PPB	C9195.D	02/09/00	13:11
03	VSTD50	50PPB	C9196.D	02/09/00	13:49
04	VSTD100	100PPB	C9197.D	02/09/00	14:26
05	VSTD150	150PPB	C9198.D	02/09/00	15:04
06	VSTD200	200PPB	C9199.D	02/09/00	15:41

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: DAMES

Lab Code: 10145 Case No.: R-1022 SAS No.: _____ SDG No.: CB-2

Lab File ID: C9591.D BFB Injection Date: 03/09/00

Instrument ID: MS#5 BFB Injection Time: 09:37

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	24.1
75	30.0 - 66.0% of mass 95	58.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	74.6
175	4.0 - 9.0% of mass 174	6.2 (8.3)1
176	93.0 - 101.0% of mass 174	71.5 (95.8)1
177	5.0 - 9.0% of mass 176	5.0 (7.0)2

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

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

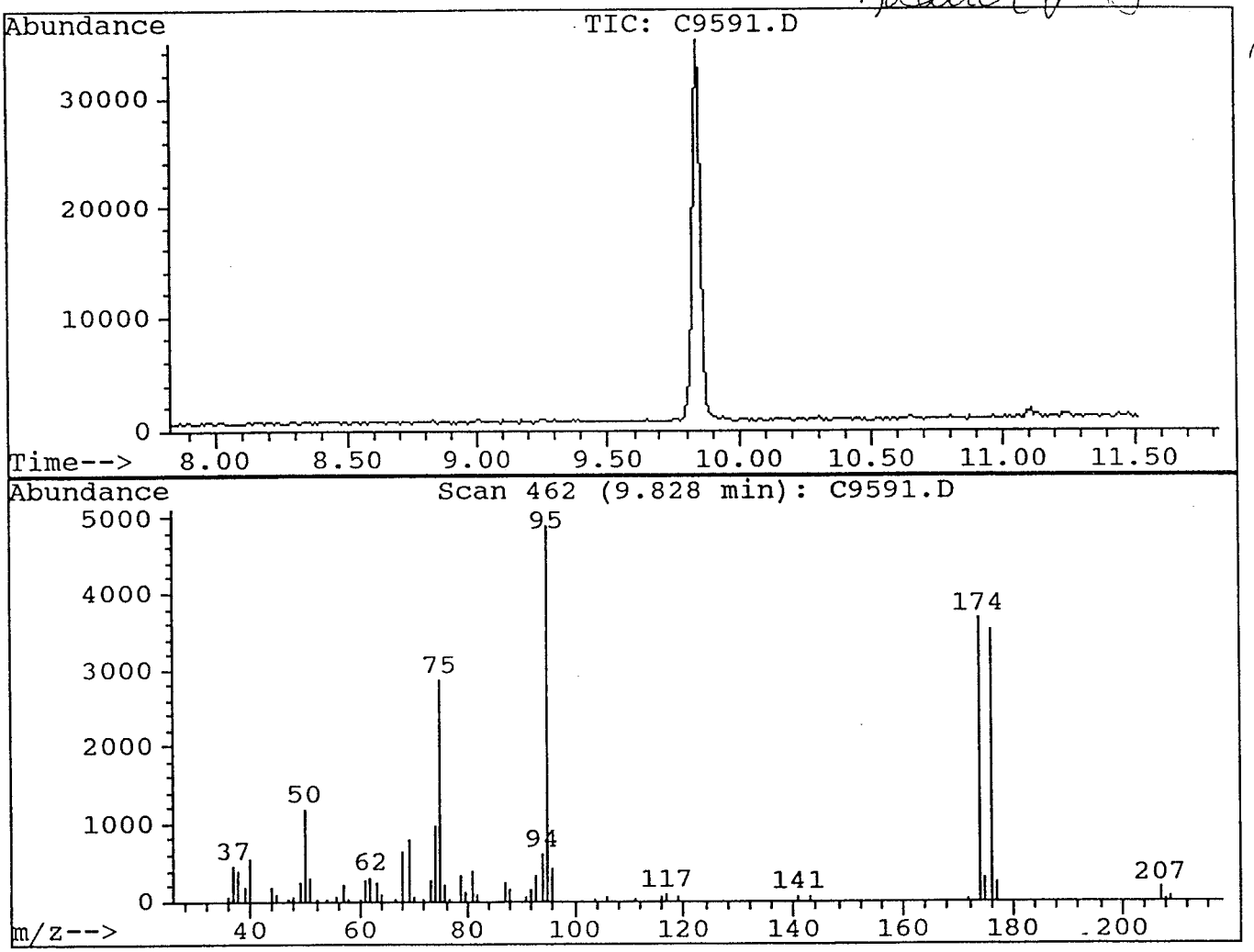
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	CCV	C9593.D	03/09/00	10:47
02	VBLK01	364326 1.0	C9594.D	03/09/00	11:28
03	QC/REF	364327 1.0	C9595.D	03/09/00	12:06
04	TRIP BLK	361738 1.0	C9597.D	03/09/00	13:45
05	CB-3	361736 1.0	C9598.D	03/09/00	14:23
06	CB-2	361737 1.0	C9599.D	03/09/00	15:00
07	CB-3RE	361736 1.0	C9608.D	03/09/00	20:43
08	CB-2RE	361737 1.0	C9609.D	03/09/00	21:20

BFB

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9591.D
Acq On : 9 Mar 100 9:37 am
Sample : TUNE CHECK
Misc :

Vial: 2
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa



Peak Apex is scan: 462

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.1	1181	PASS
75	95	30	60	58.4	2859	PASS
95	95	100	100	100.0	4899	PASS
96	95	5	9	8.3	405	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	74.6	3654	PASS
175	174	5	9	8.3	305	PASS
176	174	95	101	95.8	3502	PASS
177	176	5	9	7.0	246	PASS

0012

C9591.D SOIL0209.M Thu Mar 09 09:49:24 2000

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: DAMES

Lab Code: 10145 Case No.: R-1022 SAS No.: _____ SDG No.: CB-2

Lab File ID (Standard): C9593.D Date Analyzed: 03/09/00

Instrument ID: MS#5 Time Analyzed: 10:47

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): Y

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	27500	9.52	32836	10.85	41185	16.33
	UPPER LIMIT	55000	9.02	65672	10.35	82370	15.83
	LOWER LIMIT	13750	10.02	16418	11.35	20593	16.83
	EPA SAMPLE NO.						
01	VBLK01	23590	9.52	28136	10.85	35245	16.33
02	QC/REF	21970	9.52	24995	10.85	34411	16.33
03	TRIP BLK	23179	9.54	26287	10.86	36278	16.35
04	CB-3	14928	9.53	18489	10.87	20187 *	16.34
05	CB-2	24322	9.53	29649	10.86	29290	16.34
06	CB-3RE	13969	9.53	15870 *	10.84	17629 *	16.33
07	CB-2RE	15788	9.52	17942	10.84	19011 *	16.33

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = d5-Chlorobenze
IS4 = d4-1,4-Dichlorobenzene

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 to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: DAMES

Lab Code: 10145 Case No.: R-1022 SAS No.: _____ SDG No.: CB-2

Lab File ID (Standard): C9593.D Date Analyzed: 03/09/00

Instrument ID: MS#5 Time Analyzed: 10:47

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): Y

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	28584	21.01				
	UPPER LIMIT	57168	20.51				
	LOWER LIMIT	14292	21.51				
	EPA SAMPLE NO.						
01	VBLK01	23160	21.00				
02	QC/REF	24609	21.01				
03	TRIP BLK	22986	21.03				
04	CB-3	9207 *	21.01				
05	CB-2	15117	21.02				
06	CB-3RE	7684 *	21.00				
07	CB-2RE	7379 *	21.01				

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = d5-Chlorobenze
IS4 = d4-1,4-Dichlorobenzene

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 to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

VOLATILE ORGANICS

SAMPLE DATA

0014A

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-3

Date Sampled : 02/29/00 **Order #:** 361736 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 79.2

DATE ANALYZED : 03/09/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	6.6 J	UG/KG
BENZENE	5.0	6.3 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.3 U	UG/KG
BROMOFORM	5.0	6.3 U	UG/KG
BROMOMETHANE	5.0	6.3 U	UG/KG
2-BUTANONE (MEK)	10	13 U	UG/KG
CARBON DISULFIDE	10	13 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.3 U	UG/KG
CHLOROBENZENE	5.0	6.3 U	UG/KG
CHLOROETHANE	5.0	6.3 U	UG/KG
CHLOROFORM	5.0	6.3 U	UG/KG
CHLOROMETHANE	5.0	6.3 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.3 U	UG/KG
1,3-DICHLOROBENZENE	5.0	6.3 U	UG/KG
1,2-DICHLOROBENZENE	5.0	6.3 U	UG/KG
1,4-DICHLOROBENZENE	5.0	6.3 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.3 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.3 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.3 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.3 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.3 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.3 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.3 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.3 U	UG/KG
ETHYLBENZENE	5.0	6.3 U	UG/KG
2-HEXANONE	10	13 U	UG/KG
METHYLENE CHLORIDE	5.0	6.3 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	13 U	UG/KG
STYRENE	5.0	6.3 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.3 U	UG/KG
TETRACHLOROETHENE	5.0	6.3 U	UG/KG
TOLUENE	5.0	2.4 J	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	6.3 U	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	6.3 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.3 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.3 U	UG/KG
TRICHLOROETHENE	5.0	6.3 U	UG/KG
VINYL CHLORIDE	5.0	6.3 U	UG/KG
O-XYLENE	5.0	6.3 U	UG/KG
M+P-XYLENE	5.0	1.4 J	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	72 *	%0014B

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-3

Date Sampled : 02/29/00 **Order #:** 361736 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 79.2

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 03/09/00			
ANALYTICAL DILUTION:	1.00			Dry Weight
TOLUENE-D8		(81 - 117 %)	86	%
DIBROMOFLUOROMETHANE		(80 - 120 %)	115	%

0015
3/23

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9598.D Vial: 9
Acq On : 9 Mar 100 2:23 pm Operator: HERRING
Sample : 361736 1.0 Inst : 5971 - In
Misc : DAMES R-1022 8260B.TCCL Multiplr: 1.00
Quant Time: Mar 14 14:40 19100

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Fri Mar 10 13:29:12 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.53	168	14928	50.00	ppb		0.02
34) 1,4-Difluorobenzene	10.87	114	18489	50.00	ppb		0.04
55) d5-Chlorobenze	16.34	117	20187	50.00	ppb		0.03
69) d4-1,4-Dichlorobenzene	21.01	152	9207	50.00	ppb		0.03
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.46	113	10472	57.70	ppb		115.41%
53) surr3,Toluene-d8	13.59	98	21919	42.86	ppb		85.72%
54) surr2,bfb	18.66	95	10954	35.77	ppb		71.54% *
Target Compounds							Qvalue
~~9) Acrolein~~	~~5.38~~	~~56~~	~~12~~	~~0.96~~	~~ppb~~		~~99~~
12) Acetone	5.54	43	640	5.21	ppb	#	74 J
49) Toluene	13.71	91	1293	1.88	ppb	#	82 J
64) (m+p)Xylene	16.81	106	323	1.09	ppb		97 J
65) o-Xylene	17.60	106	251	0.81	ppb	#	64 J
75) 1,3,5-Trimethylbenzene	19.52	105	883	1.84	ppb	#	79
79) 1,2,4-Trimethylbenzene	20.28	105	1321	2.76	ppb		91
90) Naphthalen	25.69	128	2427	4.89	ppb		95

RJH 3/14

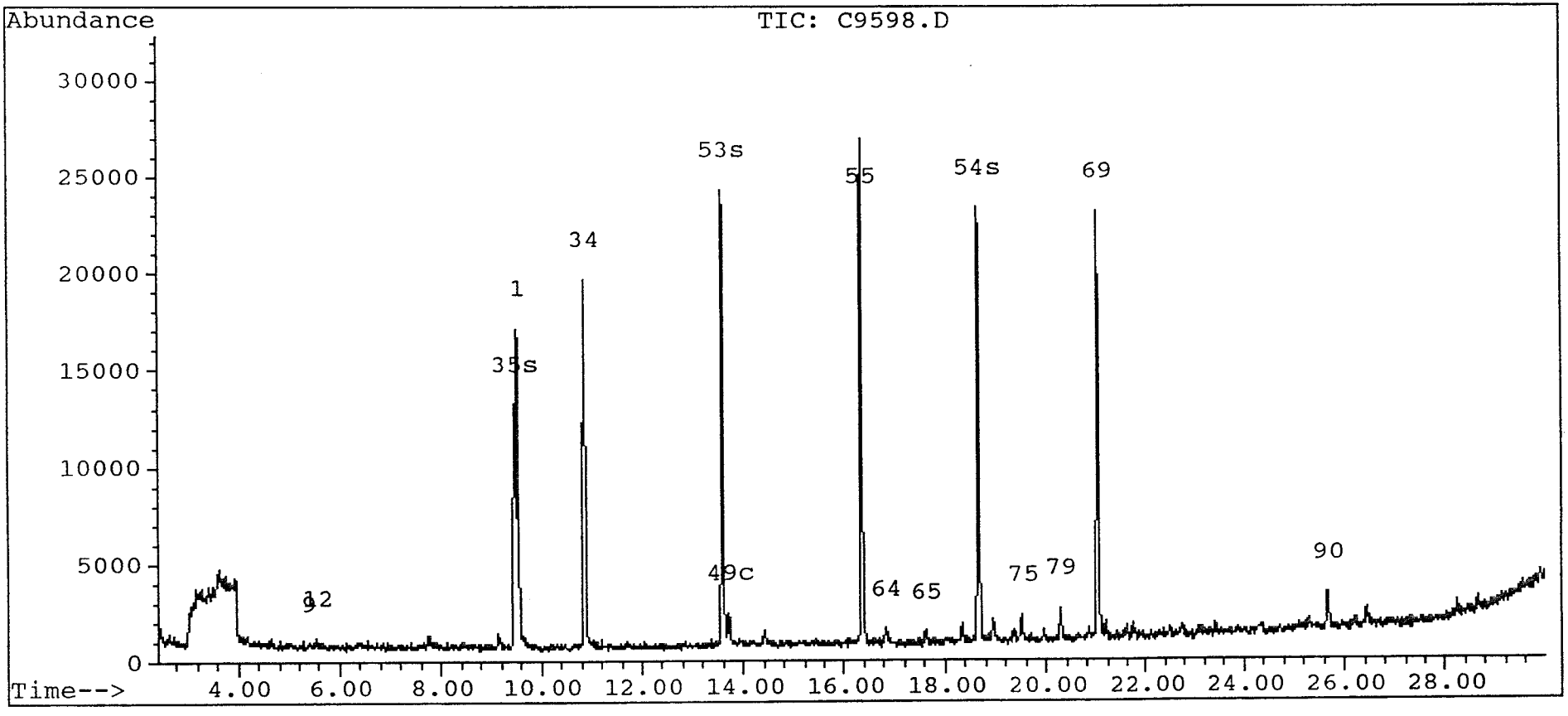
0016

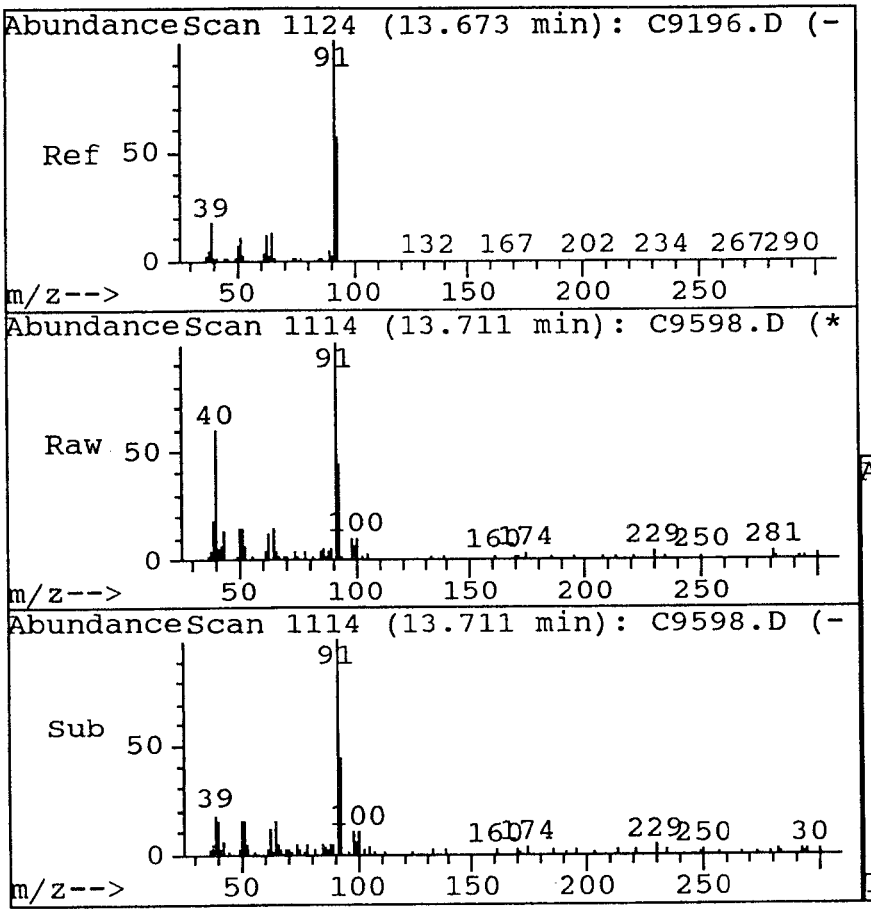
(#) = qualifier out of range (m) = manual integration
C9598.D SOIL0209.M Tue Mar 14 14:46:55 2000

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9598.D
Acq On : 9 Mar 100 2:23 pm
Sample : 361736 1.0
Misc : DAMES R-1022 8260B.TCCL
Quant Time: Mar 14 14:40 19100

Vial: 9
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Fri Mar 10 13:29:12 2000
Response via : Multiple Level Calibration

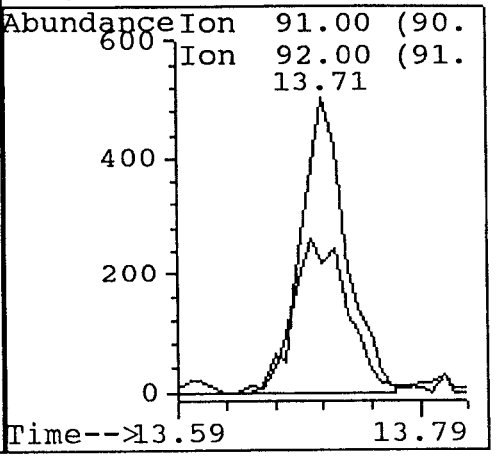




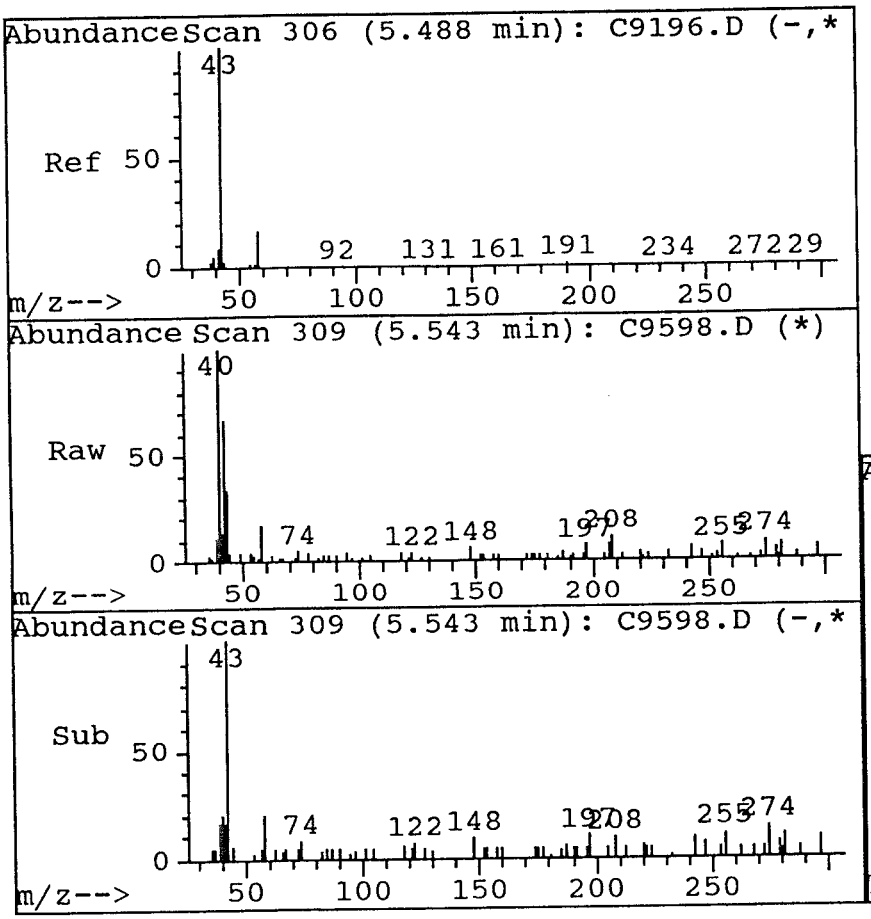
#49
Toluene
Concen: 1.88 ppb
RT: 13.71 min Scan# 1114
Delta R.T. 0.03 min
Lab File: C9598.D
Acq: 9 Mar 100 2:23 pm

Tgt Ion:91 Resp: 1293

Ion	Ratio	Lower	Upper
91	100		
92	43.5	45.4	68.1#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



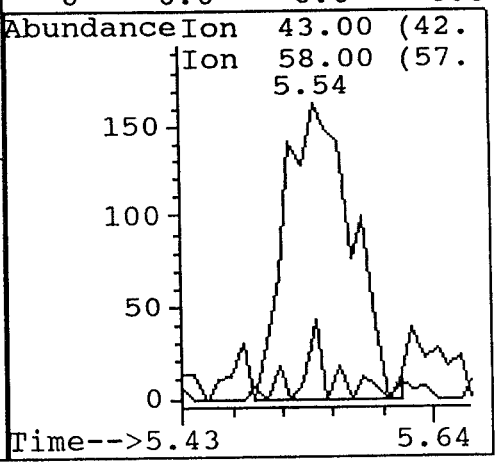
00168
~~00167~~ 3/15



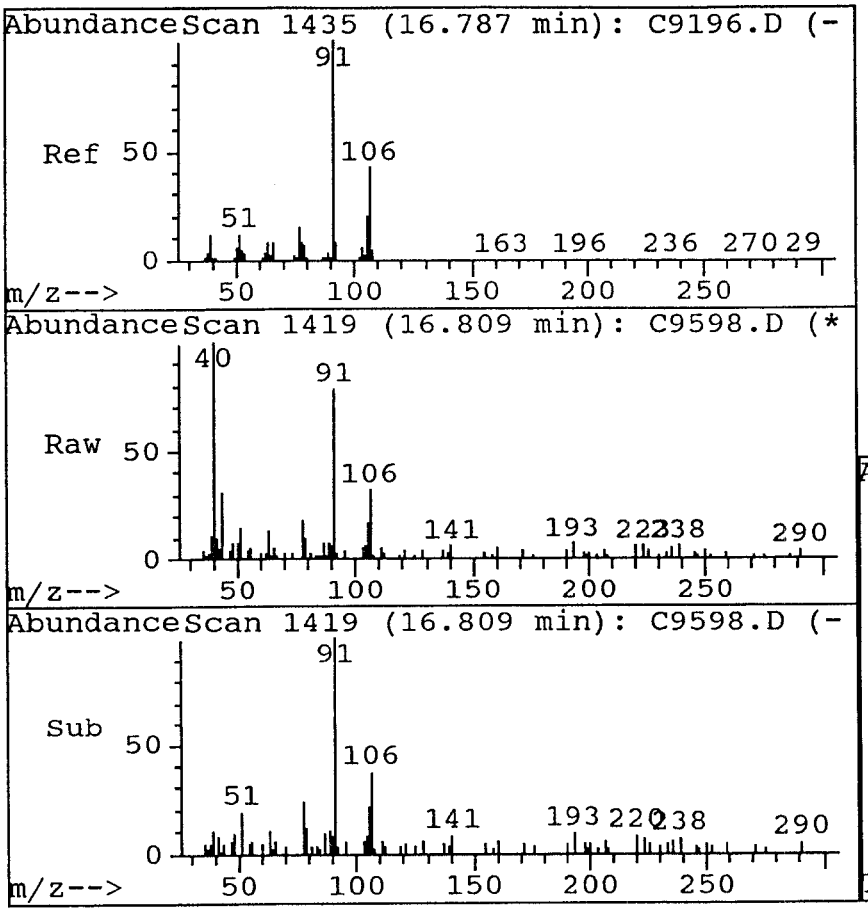
#12
Acetone
Concen: 5.21 ppb
RT: 5.54 min Scan# 309
Delta R.T. 0.05 min
Lab File: C9598.D
Acq: 9 Mar 100 2:23 pm

Tgt Ion:43 Resp: 640

Ion	Ratio	Lower	Upper
43	100		
58	26.4	12.3	18.4#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



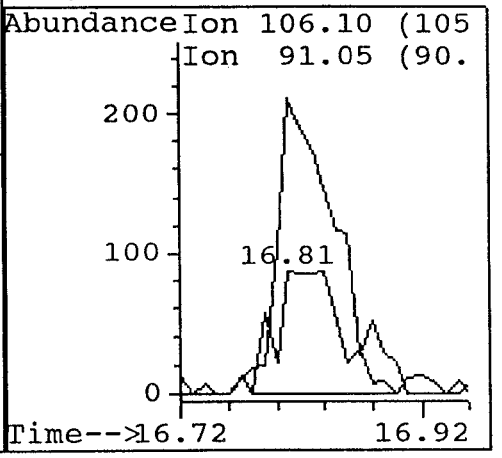
0017

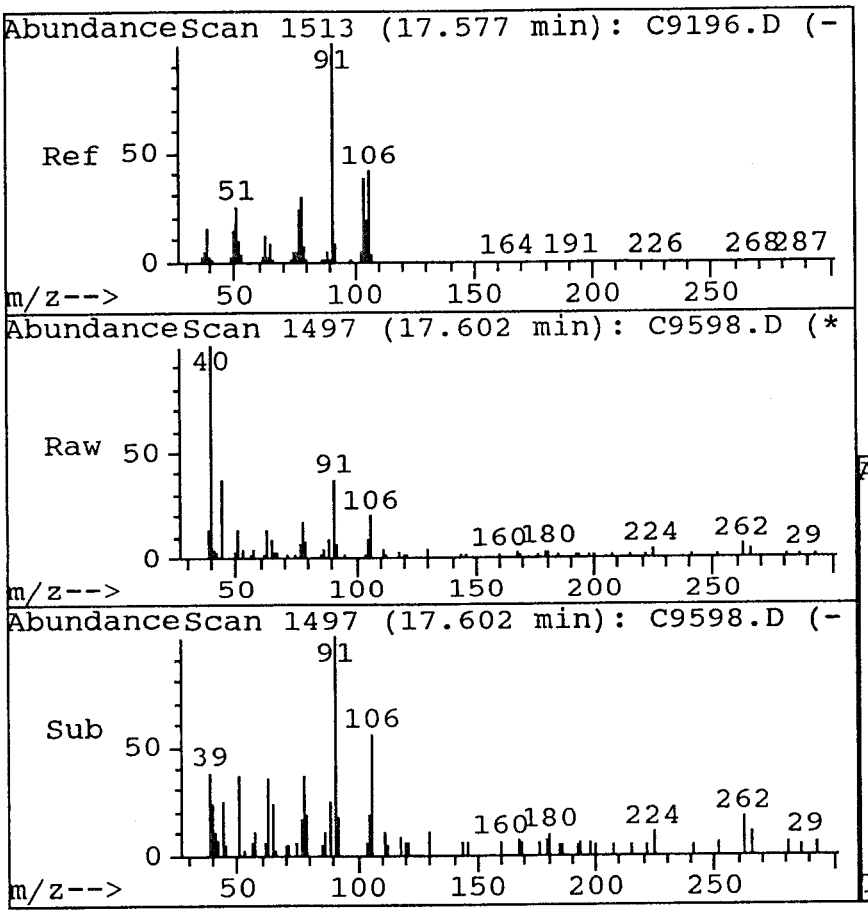


#64
(m+p)Xylene
Concen: 1.09 ppb
RT: 16.81 min Scan# 1419
Delta R.T. 0.02 min
Lab File: C9598.D
Acq: 9 Mar 100 2:23 pm

Tgt Ion:106.1 Resp: 323

Ion	Ratio	Lower	Upper
106	100		
91	245.3	192.2	288.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

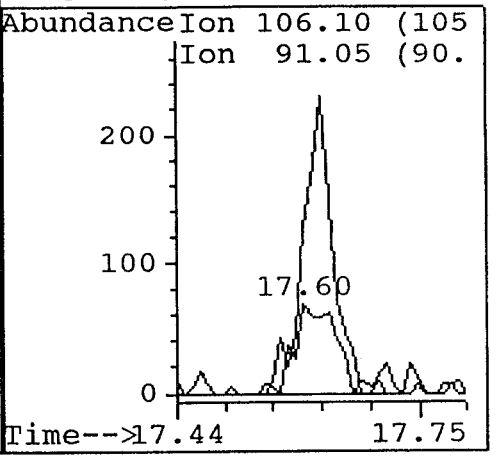




#65
o-Xylene
Concen: 0.81 ppb
RT: 17.60 min Scan# 1497
Delta R.T. 0.03 min
Lab File: C9598.D
Acq: 9 Mar 100 2:23 pm

Tgt Ion:106.1 Resp: 251

Ion	Ratio	Lower	Upper
106	100		
91	182.6	196.4	294.5#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



0018

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-3

Date Sampled : 02/29/00 **Order #:** 361736 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 79.2

DATE ANALYZED : 03/09/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	12 J	UG/KG
BENZENE	5.0	6.3 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.3 U	UG/KG
BROMOFORM	5.0	6.3 U	UG/KG
BROMOMETHANE	5.0	6.3 U	UG/KG
2-BUTANONE (MEK)	10	13 U	UG/KG
CARBON DISULFIDE	10	13 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.3 U	UG/KG
CHLOROBENZENE	5.0	6.3 U	UG/KG
CHLOROETHANE	5.0	6.3 U	UG/KG
CHLOROFORM	5.0	6.3 U	UG/KG
CHLOROMETHANE	5.0	6.3 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.3 U	UG/KG
1,3-DICHLOROBENZENE	5.0	6.3 U	UG/KG
1,2-DICHLOROBENZENE	5.0	6.3 U	UG/KG
1,4-DICHLOROBENZENE	5.0	6.3 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.3 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.3 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.3 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.3 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.3 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.3 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.3 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.3 U	UG/KG
ETHYLBENZENE	5.0	6.3 U	UG/KG
2-HEXANONE	10	13 U	UG/KG
METHYLENE CHLORIDE	5.0	6.3 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	13 U	UG/KG
STYRENE	5.0	6.3 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.3 U	UG/KG
TETRACHLOROETHENE	5.0	6.3 U	UG/KG
TOLUENE	5.0	5.7 J	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	6.3 U	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	6.3 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.3 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.3 U	UG/KG
TRICHLOROETHENE	5.0	6.3 U	UG/KG
VINYL CHLORIDE	5.0	6.3 U	UG/KG
O-XYLENE	5.0	2.7 J	UG/KG
M+P-XYLENE	5.0	2.7 J	UG/KG

0019

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	66 *	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-3

Date Sampled : 02/29/00 **Order #:** 361736 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 79.2

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 03/09/00			
ANALYTICAL DILUTION:	1.00			Dry Weight
TOLUENE-D8	(81 - 117 %)		89	%
DIBROMOFLUOROMETHANE	(80 - 120 %)		117	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9608.D Vial: 19
Acq On : 9 Mar 100 8:43 pm Operator: HERRING
Sample : 361736 1.0 Inst : 5971 - In
Misc : DAMES R-1022 8260B.TCCL Multiplr: 1.00
Quant Time: Mar 9 21:13 19100

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.53	168	13969	50.00	ppb		0.02
34) 1,4-Difluorobenzene	10.84	114	15870	50.00	ppb		0.02
55) d5-Chlorobenze	16.33	117	17629	50.00	ppb		0.02
69) d4-1,4-Dichlorobenzene	21.00	152	7684	50.00	ppb		0.02
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.46	113	9135	58.64	ppb		117.29%
53) surr3,Toluene-d8	13.57	98	19427	44.26	ppb		88.52%
54) surr2,bfb	18.65	95	8707	33.12	ppb		66.25%
Target Compounds							Qvalue
~~9) Acrolein~~	~~5.24~~	~~56~~	~~14~~	~~1.20~~	~~ppb~~	~~#~~	~~15~~
12) Acetone	5.52	43	1104	9.61	ppb	#	86 J
~~15) Acetonitrile~~	~~5.92~~	~~39~~	~~41~~	~~12.77~~	~~ppb~~	~~#~~	~~1~~
~~18) TBA~~	~~6.53~~	~~59~~	~~53~~	~~1.99~~	~~ppb~~	~~#~~	~~49~~
~~26) 2-Butanone~~	~~8.62~~	~~43~~	~~470~~	~~5.51~~	~~ppb~~	~~#~~	~~81~~
~~31) Tetrahydrofuran~~	~~9.14~~	~~42~~	~~518~~	~~12.82~~	~~ppb~~	~~#~~	~~74~~
~~58) Iso-Butyl Alcohol~~	~~9.99~~	~~43~~	~~37~~	~~4.52~~	~~ppb~~		~~73~~
49) Toluene	13.70	91	2683	4.54	ppb		92 J
64) (m+p)Xylene	16.81	106	551	2.14	ppb	#	64 J
65) o-Xylene	17.60	106	560	2.06	ppb	#	34 J
75) 1,3,5-Trimethylbenzene	19.49	105	1253	3.12	ppb		87
79) 1,2,4-Trimethylbenzene	20.27	105	1787	4.47	ppb		97
~~80) sec-Butylbenzene~~	~~20.27~~	~~105~~	~~1743~~	~~3.19~~	~~ppb~~	~~#~~	~~62~~
~~87) Nitrobenzene~~	~~23.88~~	~~77~~	~~120~~	~~6.91~~	~~ppb~~	~~#~~	~~32~~
90) Naphthalen	25.67	128	2321	5.60	ppb		97

RJH 3/14

Replicate

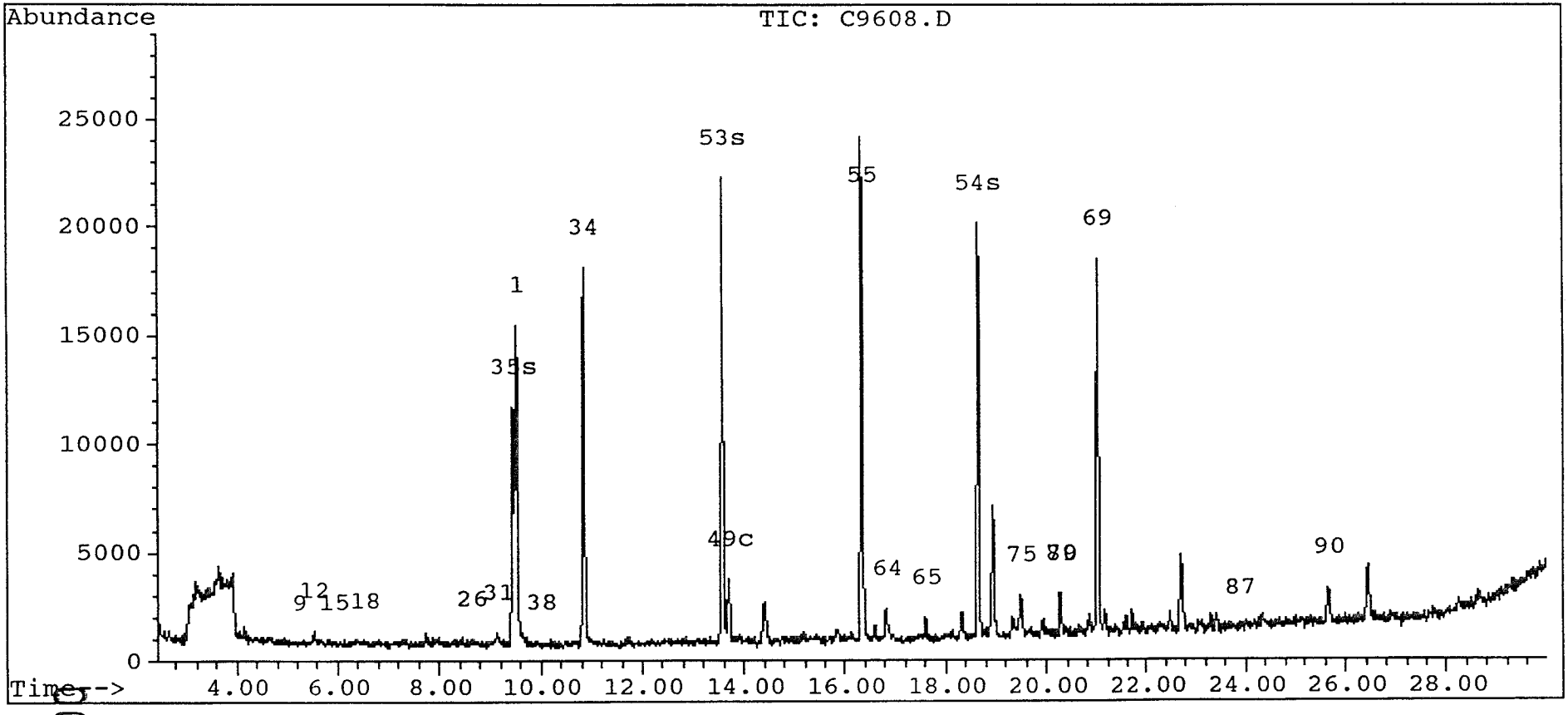
0021

(#) = qualifier out of range (m) = manual integration
C9608.D SOIL0209.M Thu Mar 09 21:13:25 2000 Page 1

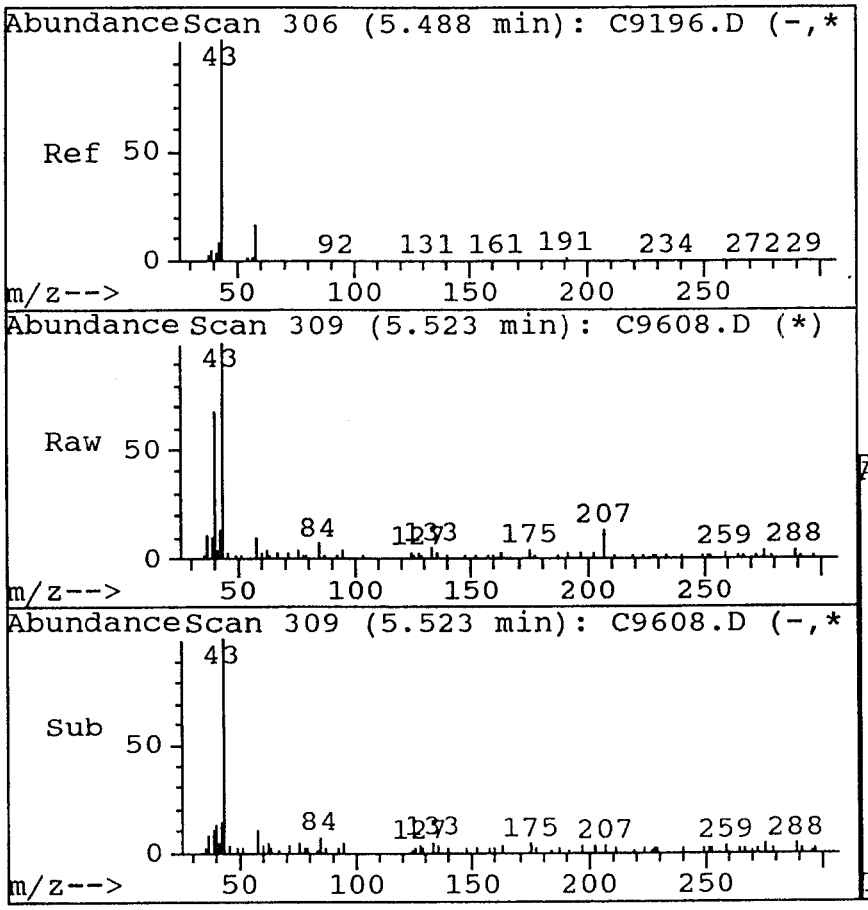
Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9608.D
Acq On : 9 Mar 100 8:43 pm
Sample : 361736 1.0
Misc : DAMES R-1022 8260B.TCCL
Quant Time: Mar 9 21:13 19100

Vial: 19
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
Response via : Multiple Level Calibration



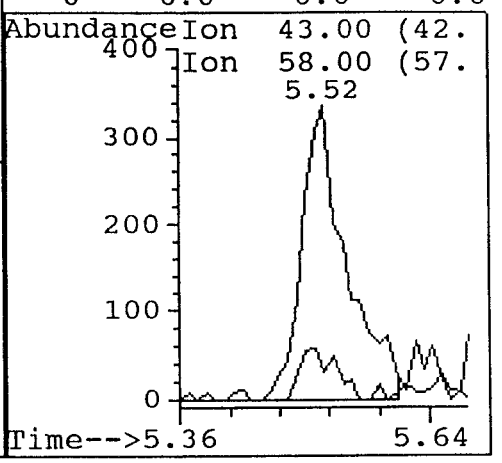
0209



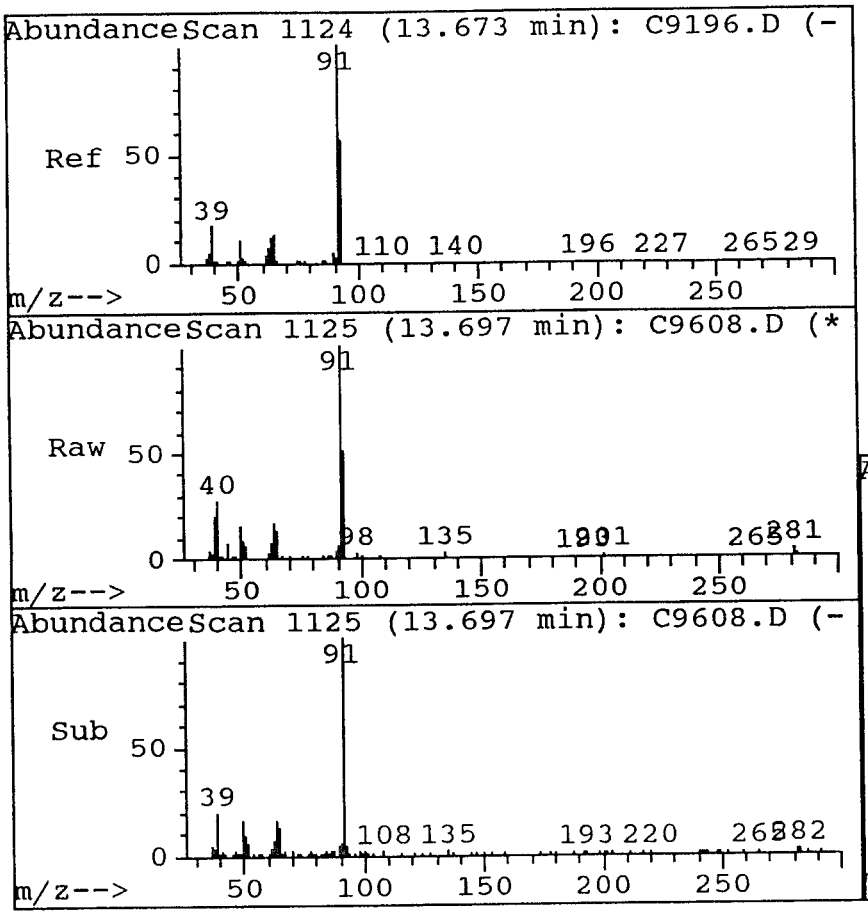
#12
Acetone
Concen: 9.61 ppb
RT: 5.52 min Scan# 309
Delta R.T. 0.03 min
Lab File: C9608.D
Acq: 9 Mar 100 8:43 pm

Tgt Ion:43 Resp: 1104

Ion	Ratio	Lower	Upper
43	100		
58	9.6	12.3	18.4#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



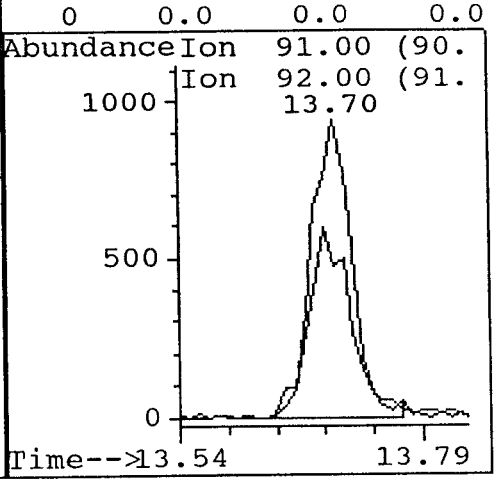
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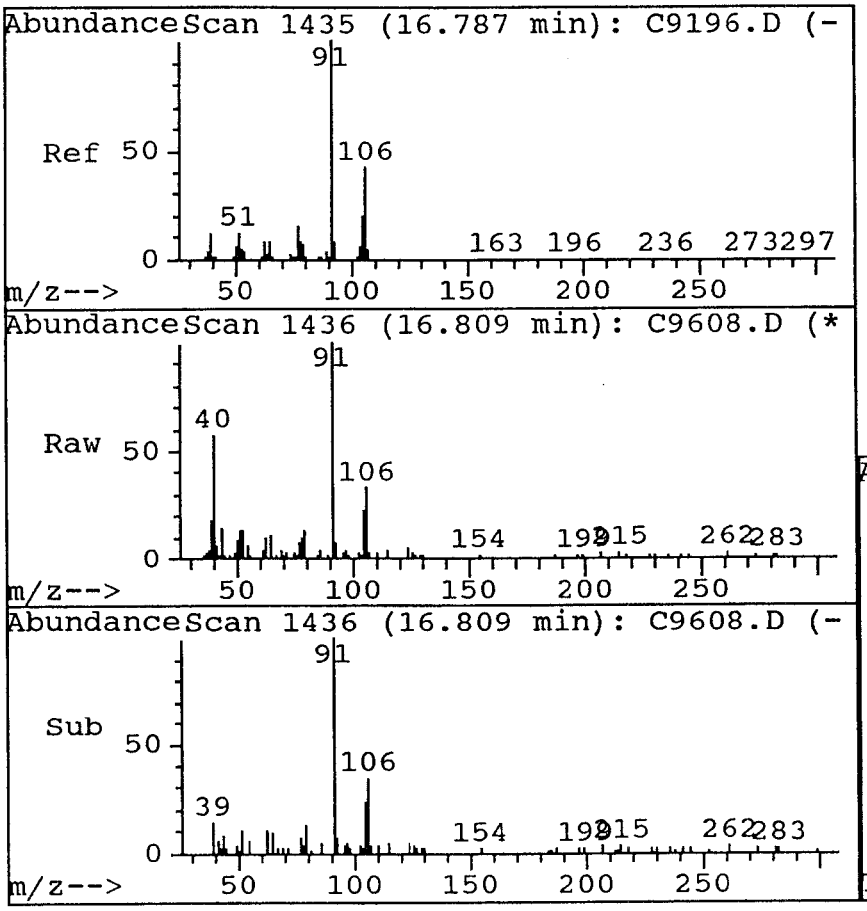
#49
Toluene
Concen: 4.54 ppb
RT: 13.70 min Scan# 1125
Delta R.T. 0.02 min
Lab File: C9608.D
Acq: 9 Mar 100 8:43 pm

Tgt Ion:91 Resp: 2683

Ion	Ratio	Lower	Upper
91	100		
92	50.5	45.4	68.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0



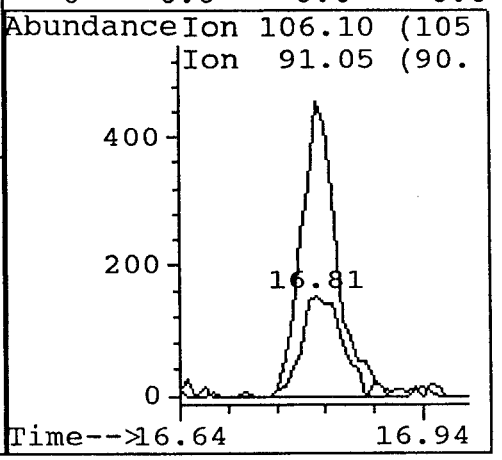
0024



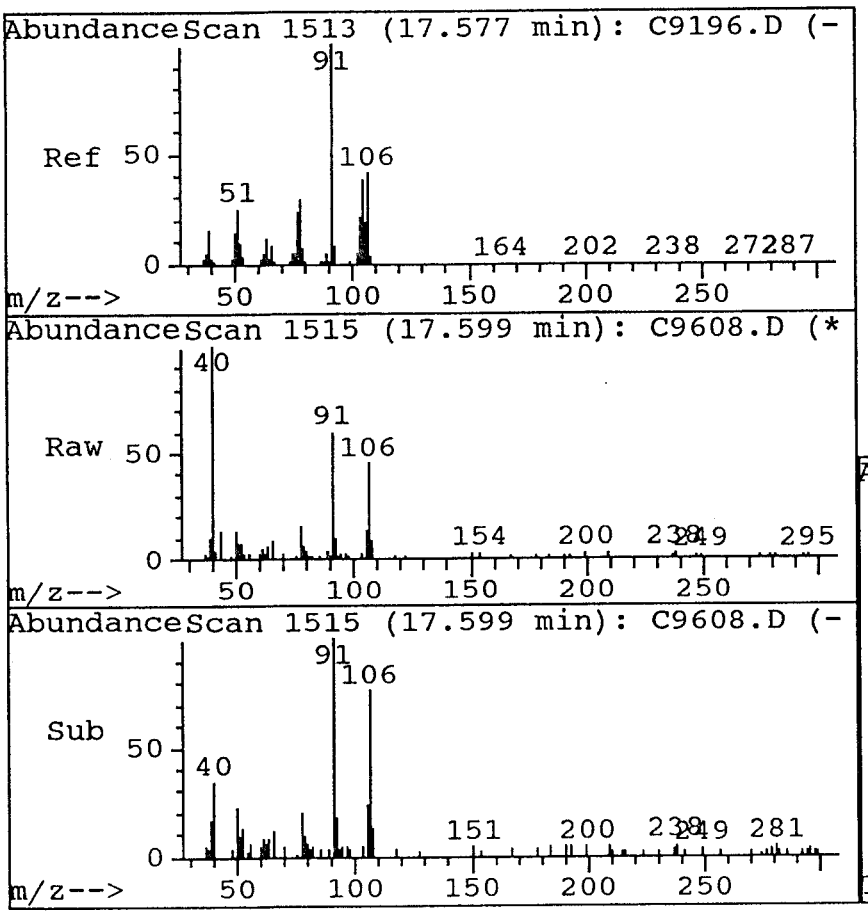
#64
(m+p)Xylene
Concen: 2.14 ppb
RT: 16.81 min Scan# 1436
Delta R.T. 0.02 min
Lab File: C9608.D
Acq: 9 Mar 100 8:43 pm

Tgt Ion:106.1 Resp: 551

Ion	Ratio	Lower	Upper
106	100		
91	300.7	192.2	288.3#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



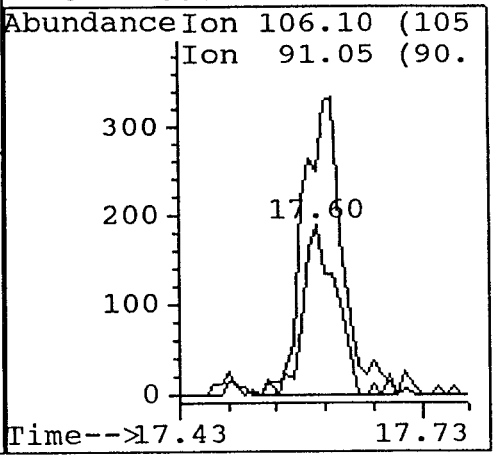
0025



#65
o-Xylene
Concen: 2.06 ppb
RT: 17.60 min Scan# 1515
Delta R.T. 0.02 min
Lab File: C9608.D
Acq: 9 Mar 100 8:43 pm

Tgt Ion:106.1 Resp: 560

Ion	Ratio	Lower	Upper
106	100		
91	132.1	196.4	294.5#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



0026

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-2

Date Sampled : 02/29/00 **Order #:** 361737 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 80.4

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/09/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	6.1 J	UG/KG
BENZENE	5.0	6.2 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.2 U	UG/KG
BROMOFORM	5.0	6.2 U	UG/KG
BROMOMETHANE	5.0	6.2 U	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.2 U	UG/KG
CHLOROBENZENE	5.0	6.2 U	UG/KG
CHLOROETHANE	5.0	6.2 U	UG/KG
CHLOROFORM	5.0	6.2 U	UG/KG
CHLOROMETHANE	5.0	6.2 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.2 U	UG/KG
1,3-DICHLOROBENZENE	5.0	6.2 U	UG/KG
1,2-DICHLOROBENZENE	5.0	6.2 U	UG/KG
1,4-DICHLOROBENZENE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.2 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.2 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
ETHYLBENZENE	5.0	6.2 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
METHYLENE CHLORIDE	5.0	6.2 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	6.2 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.2 U	UG/KG
TETRACHLOROETHENE	5.0	6.2 U	UG/KG
TOLUENE	5.0	6.2 U	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	6.2 U	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	6.2 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.2 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.2 U	UG/KG
TRICHLOROETHENE	5.0	6.2 U	UG/KG
VINYL CHLORIDE	5.0	6.2 U	UG/KG
O-XYLENE	5.0	6.2 U	UG/KG
M+P-XYLENE	5.0	6.2 U	UG/KG

0027

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	66 *	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-2

Date Sampled : 02/29/00 **Order #:** 361737 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 80.4

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 03/09/00			
ANALYTICAL DILUTION:	1.00			Dry Weight
TOLUENE-D8		(81 - 117 %)	85	%
DIBROMOFLUOROMETHANE		(80 - 120 %)	124 *	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9599.D
Acq On : 9 Mar 100 3:00 pm
Sample : 361737 1.0
Misc : DAMES R-1022 8260B.TCCL
Quant Time: Mar 15 9:09 19100

Vial: 10
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Fri Mar 10 13:29:12 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)	
1) Pentafluorobenzene	9.53	168	24322	50.00	ppb		0.03	
34) 1,4-Difluorobenzene	10.86	114	29649	50.00	ppb		0.03	
55) d5-Chlorobenze	16.34	117	29290	50.00	ppb		0.03	
69) d4-1,4-Dichlorobenzene	21.02	152	15117	50.00	ppb		0.04	
System Monitoring Compounds							%Recovery	
35) surr4,Dibrflmethane	9.46	113	18004	61.87	ppb		123.73%	*
53) surr3,Toluene-d8	13.58	98	34909	42.57	ppb		85.14%	
54) surr2,bfb	18.66	95	16265	33.12	ppb		66.24%	*
Target Compounds							Qvalue	
12) Acetone	5.52	43	972	4.86	ppb	#	63	J
49) Toluene	13.70	91	720	0.65	ppb	#	82	J
90) Naphthalen	25.68	128	27665	33.95	ppb		98	

RJH 3/15

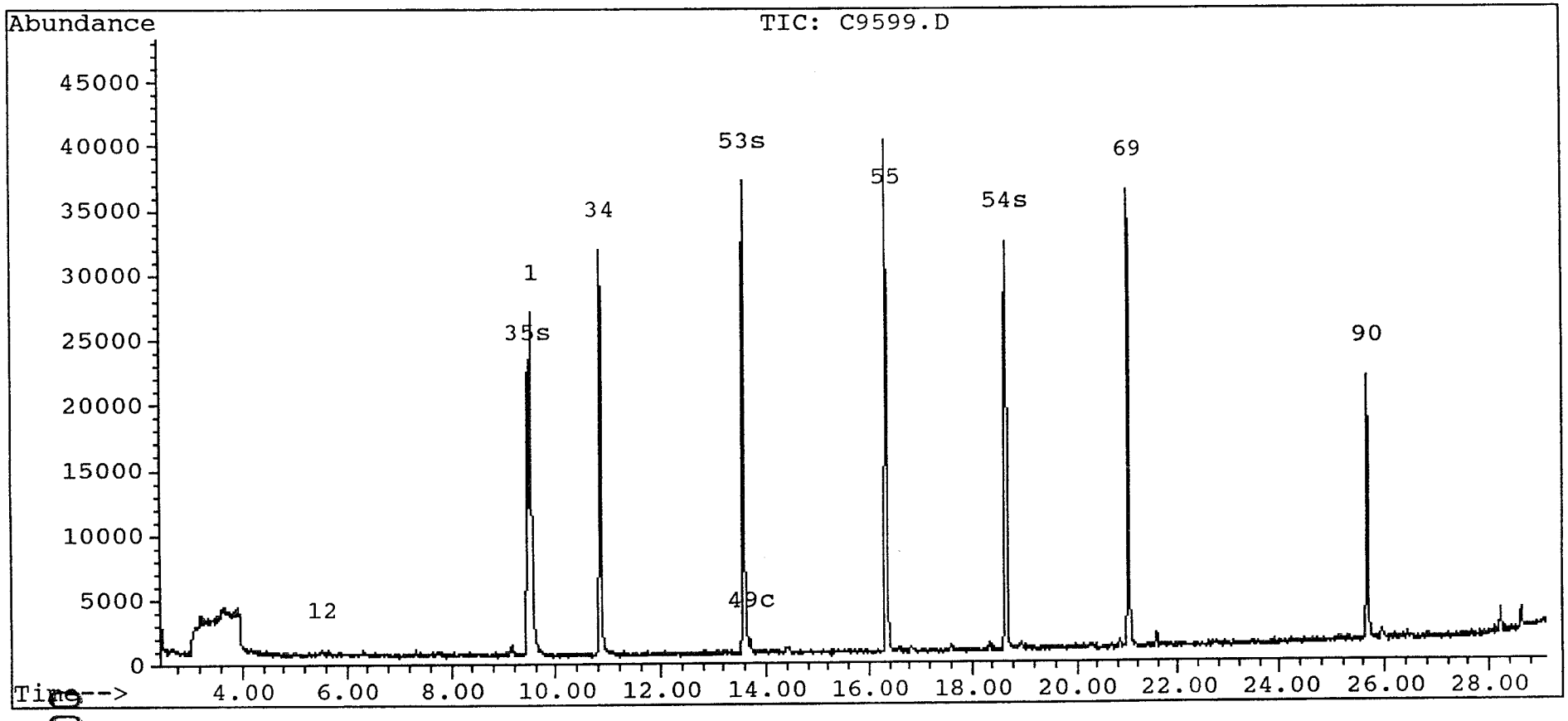
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(#) = qualifier out of range (m) = manual integration
C9599.D SOIL0209.M Wed Mar 15 09:09:59 2000

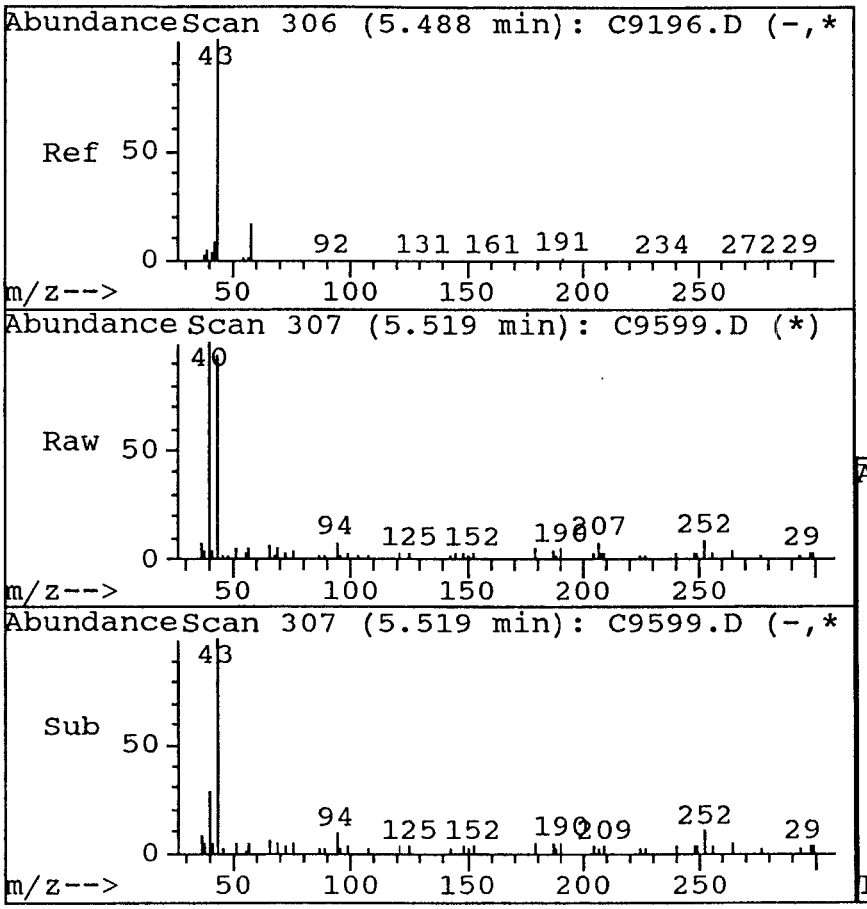
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Acq On : 9 Mar 100 3:00 pm
Sample : 361737 1.0
Misc : DAMES R-1022 8260B.TCCL
Quant Time: Mar 15 9:09 19100

Vial: 10
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Fri Mar 10 13:29:12 2000
Response via : Multiple Level Calibration



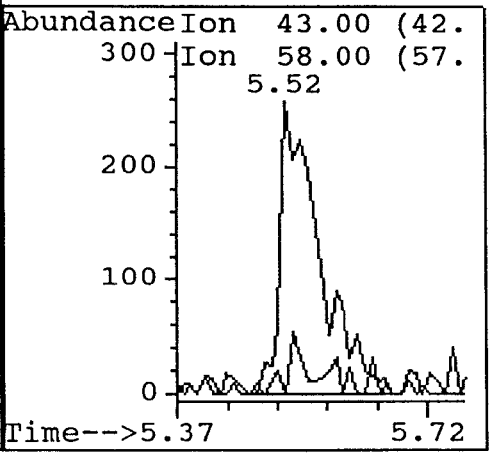
030



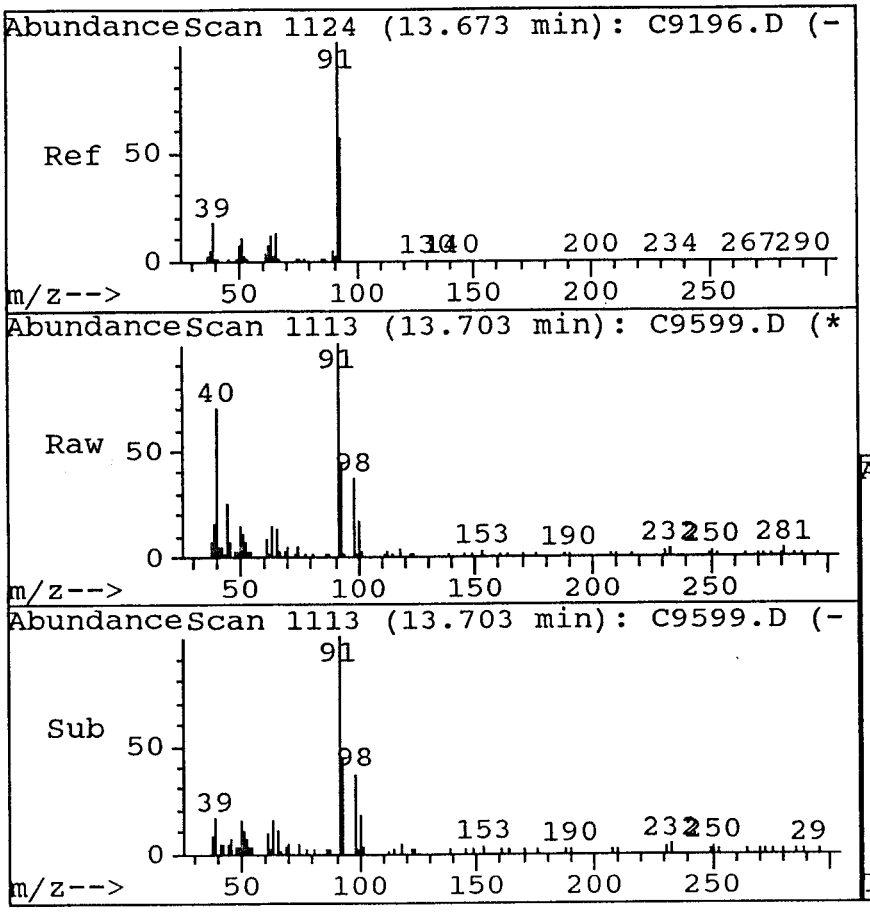
#12
Acetone
Concen: 4.86 ppb
RT: 5.52 min Scan# 307
Delta R.T. 0.02 min
Lab File: C9599.D
Acq: 9 Mar 100 3:00 pm

Tgt Ion:43 Resp: 972

Ion	Ratio	Lower	Upper
43	100		
58	0.0	12.3	18.4#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



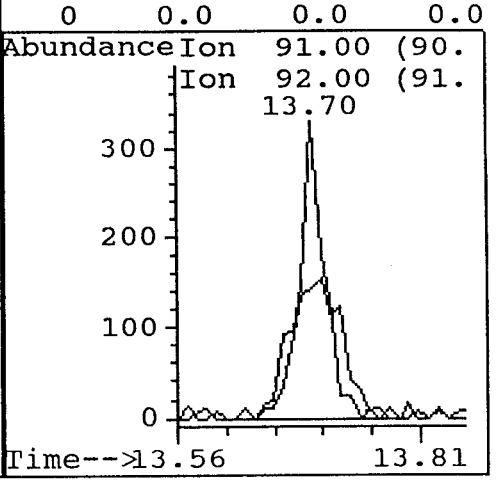
0031



#49
Toluene
Concen: 0.65 ppb
RT: 13.70 min Scan# 1113
Delta R.T. 0.03 min
Lab File: C9599.D
Acq: 9 Mar 100 3:00 pm

Tgt Ion:91 Resp: 720

Ion	Ratio	Lower	Upper
91	100		
92	43.8	45.4	68.1#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



0032

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-2

Date Sampled : 02/29/00 **Order #:** 361737 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 80.4

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/09/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	12 J	UG/KG
BENZENE	5.0	6.2 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.2 U	UG/KG
BROMOFORM	5.0	6.2 U	UG/KG
BROMOMETHANE	5.0	6.2 U	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.2 U	UG/KG
CHLOROBENZENE	5.0	6.2 U	UG/KG
CHLOROETHANE	5.0	6.2 U	UG/KG
CHLOROFORM	5.0	6.2 U	UG/KG
CHLOROMETHANE	5.0	6.2 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.2 U	UG/KG
1,3-DICHLOROBENZENE	5.0	6.2 U	UG/KG
1,2-DICHLOROBENZENE	5.0	6.2 U	UG/KG
1,4-DICHLOROBENZENE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.2 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.2 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
ETHYLBENZENE	5.0	6.2 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
METHYLENE CHLORIDE	5.0	6.2 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	6.2 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.2 U	UG/KG
TETRACHLOROETHENE	5.0	6.2 U	UG/KG
TOLUENE	5.0	3.2 J	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	6.2 U	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	6.2 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.2 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.2 U	UG/KG
TRICHLOROETHENE	5.0	6.2 U	UG/KG
VINYL CHLORIDE	5.0	6.2 U	UG/KG
O-XYLENE	5.0	6.2 U	UG/KG
M+P-XYLENE	5.0	1.5 J	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	61	%

0033

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-2

Date Sampled : 02/29/00 **Order #:** 361737 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 80.4

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 03/09/00			
ANALYTICAL DILUTION:	1.00			Dry Weight
TOLUENE-D8	(81 - 117 %)		90	%
DIBROMOFLUOROMETHANE	(80 - 120 %)		119	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9609.D
Acq On : 9 Mar 100 9:20 pm
Sample : 361737 1.0
Misc : DAMES R-1022 8260B.TCCL
Quant Time: Mar 9 21:50 19100

Vial: 20
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.52	168	15788	50.00	ppb		0.02
34) 1,4-Difluorobenzene	10.84	114	17942	50.00	ppb		0.02
55) d5-Chlorobenze	16.33	117	19011	50.00	ppb		0.01
69) d4-1,4-Dichlorobenzene	21.01	152	7379	50.00	ppb		0.03
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.45	113	10479	59.50	ppb		119.01%
53) surr3,Toluene-d8	13.56	98	22223	44.78	ppb		89.56%
54) surr2,bfb	18.65	95	9093	30.60	ppb		61.19% *
Target Compounds							Qvalue
~~9) Acrolein~~	~~5.24~~	~~56~~	~~15~~	~~1.14~~	~~ppb~~		~~96~~
12) Acetone	5.51	43	1216	9.36	ppb		94 J
~~15) Acetonitrile~~	~~5.94~~	~~39~~	~~35~~	~~9.65~~	~~ppb~~	~~#~~	~~1~~
~~18) TBA~~	~~6.50~~	~~59~~	~~48~~	~~1.59~~	~~ppb~~	~~#~~	~~57~~
~~26) 2-Butanone~~	~~8.64~~	~~43~~	~~544~~	~~5.64~~	~~ppb~~		~~98~~
~~31) Tetrahydrofuran~~	~~9.14~~	~~42~~	~~479~~	~~10.49~~	~~ppb~~	~~#~~	~~67~~
~~98) Iso-Butyl Alcohol~~	~~10.04~~	~~43~~	~~27~~	~~2.91~~	~~ppb~~		~~74~~
49) Toluene	13.69	91	1737	2.60	ppb	#	82 J
64) (m+p)Xylene	16.80	106	331	1.19	ppb	#	66 J
79) 1,2,4-Trimethylbenzene	20.27	105	401	1.04	ppb		100
~~87) Nitrobenzene~~	~~23.79~~	~~77~~	~~117~~	~~7.02~~	~~ppb~~	~~#~~	~~32~~
90) Naphthalen	25.66	128	37944	95.40	ppb		98

Replicate

RJH 3/14

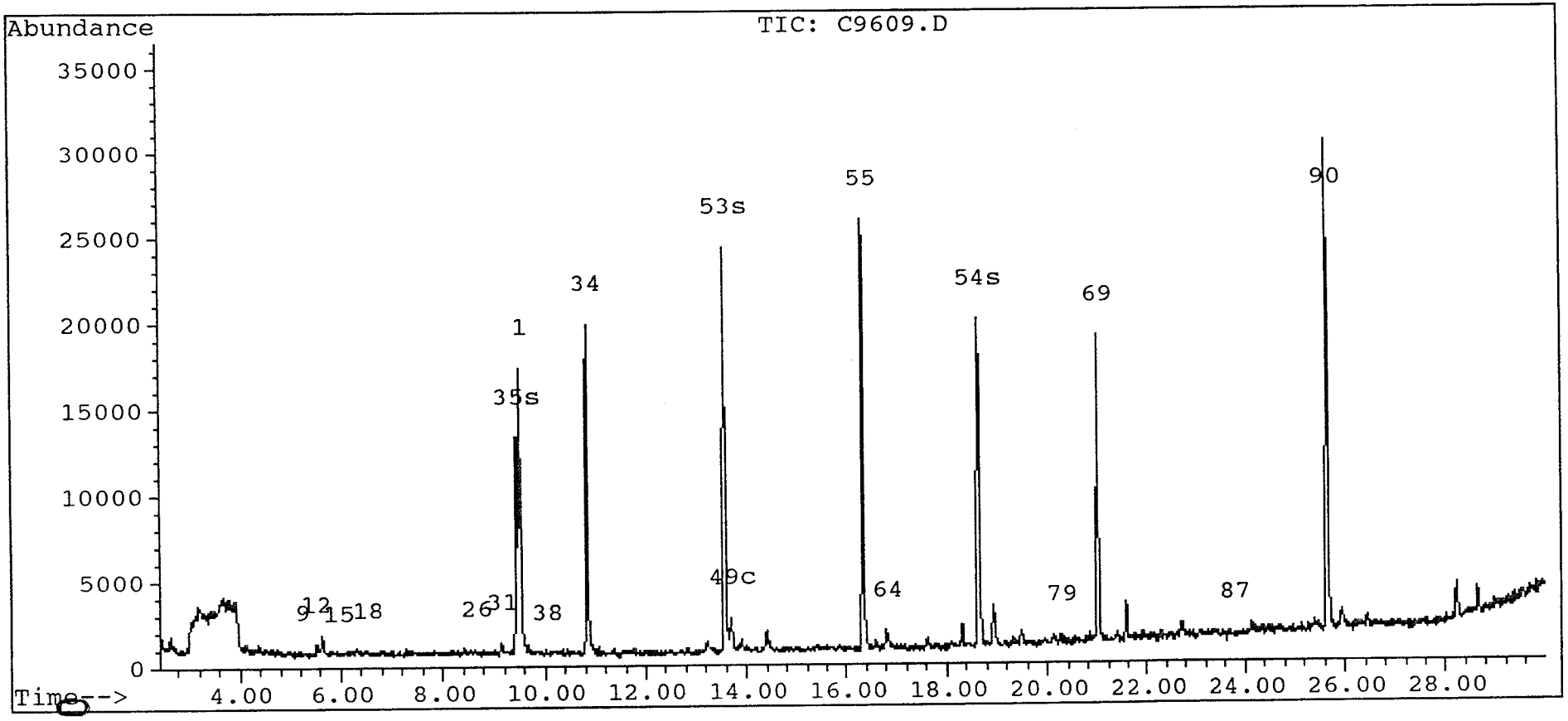
~~0035~~

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

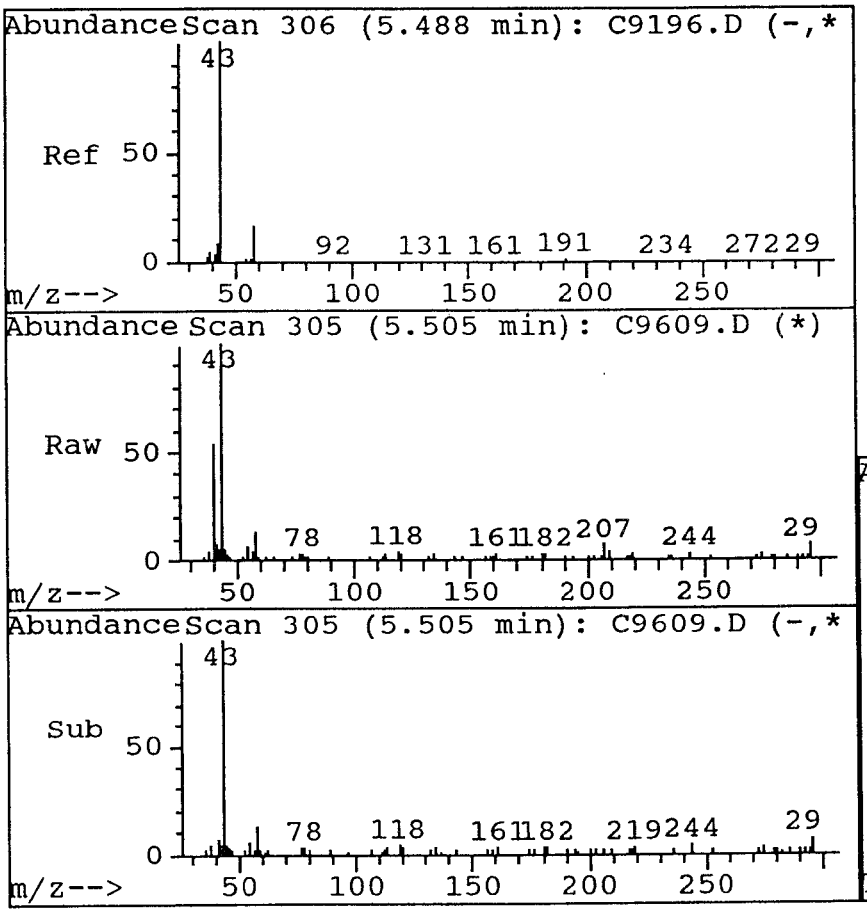
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Acq On : 9 Mar 100 9:20 pm
Sample : 361737 1.0
Misc : DAMES R-1022 8260B.TCCL
Quant Time: Mar 9 21:50 19100

Vial: 20
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
Response via : Multiple Level Calibration



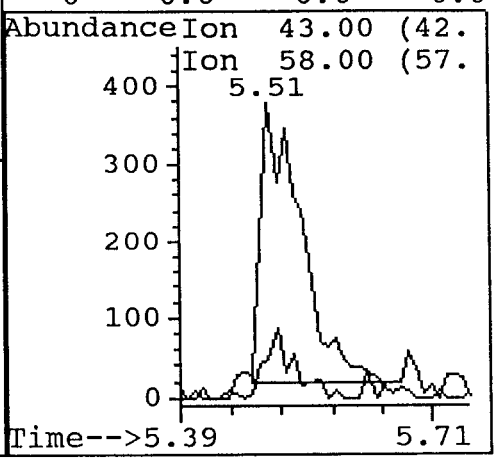
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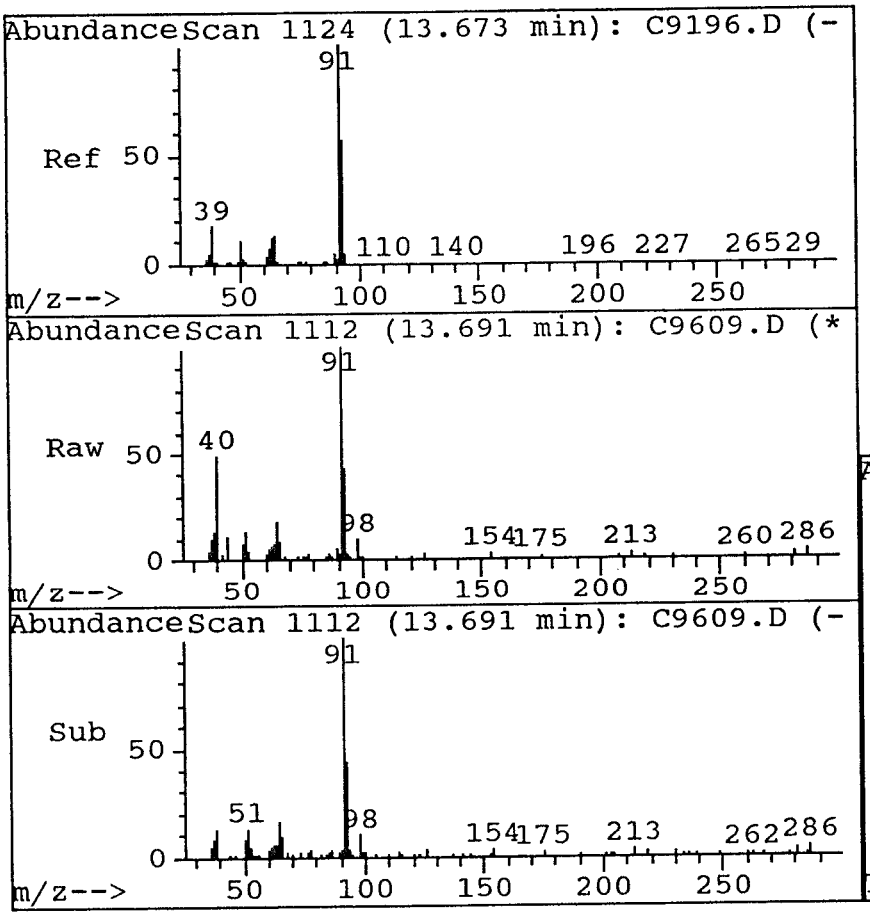
#12
Acetone
Concen: 9.36 ppb
RT: 5.51 min Scan# 305
Delta R.T. 0.01 min
Lab File: C9609.D
Acq: 9 Mar 100 9:20 pm

Tgt Ion:43 Resp: 1216

Ion	Ratio	Lower	Upper
43	100		
58	12.7	12.3	18.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0



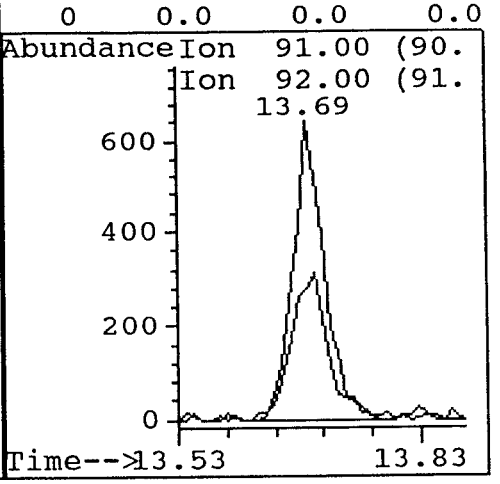
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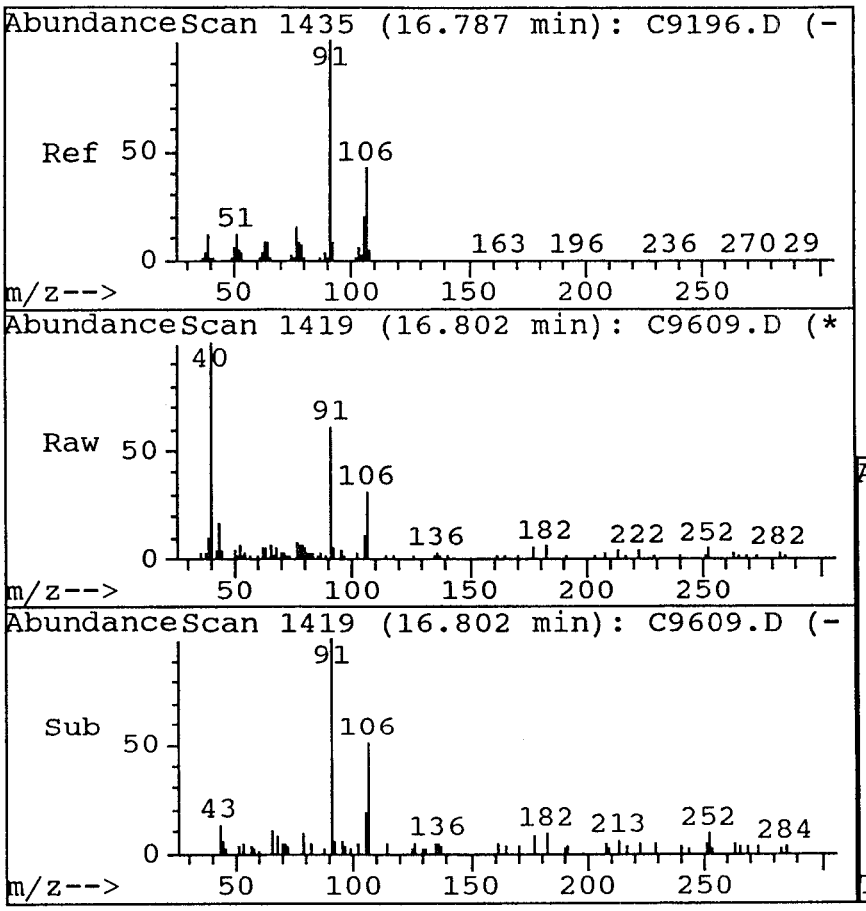
#49
Toluene
Concen: 2.60 ppb
RT: 13.69 min Scan# 1112
Delta R.T. 0.01 min
Lab File: C9609.D
Acq: 9 Mar 100 9:20 pm

Tgt Ion:91 Resp: 1737

Ion	Ratio	Lower	Upper
91	100		
92	43.4	45.4	68.1#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



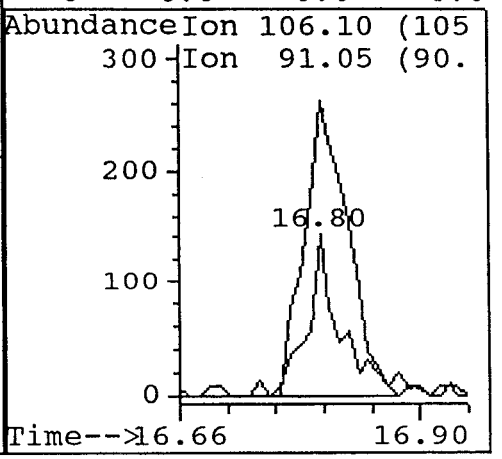
0038



#64
(m+p)Xylene
Concen: 1.19 ppb
RT: 16.80 min Scan# 1419
Delta R.T. 0.01 min
Lab File: C9609.D
Acq: 9 Mar 100 9:20 pm

Tgt Ion:106.1 Resp: 331

Ion	Ratio	Lower	Upper
106	100		
91	183.2	192.2	288.3#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



0039

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : TRIP BLANK

Date Sampled : 02/29/00 **Order #:** 361738 **Sample Matrix:** WATER
Date Received: 02/29/00 **Submission #:** R2001022 **Analytical Run** 48407

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/09/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

0040

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	101	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : TRIP BLANK

Date Sampled : 02/29/00 **Order #:** 361738 **Sample Matrix:** WATER
Date Received: 02/29/00 **Submission #:** R2001022 **Analytical Run** 48407

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 03/09/00			
ANALYTICAL DILUTION:	1.00			
TOLUENE-D8	(88 - 110 %)		99	%
DIBROMOFLUOROMETHANE	(86 - 118 %)		106	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9597.D
Acq On : 9 Mar 100 1:45 pm
Sample : 361738 1.0
Misc : DAMES R-1022 8260B.TCCL
Quant Time: Mar 9 14:15 19100

Vial: 8
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	9.54	168	23179	50.00	ppb	0.03
34) 1,4-Difluorobenzene	10.86	114	26287	50.00	ppb	0.03
55) d5-Chlorobenze	16.35	117	36278	50.00	ppb	0.04
69) d4-1,4-Dichlorobenzene	21.03	152	22986	50.00	ppb	0.05
System Monitoring Compounds						%Recovery
35) surr4,Dibrflmethane	9.46	113	13642	52.87	ppb	105.74%
53) surr3,Toluene-d8	13.58	98	36141	49.71	ppb	99.42%
54) surr2,bfb	18.67	95	22038	50.61	ppb	101.23%
Target Compounds						Qvalue
~~12) Acetone~~	~~5.53~~	~~43~~	~~391~~	~~2.05~~	~~ppb~~	~~# 63~~
~~15) Acetonitrile~~	~~6.00~~	~~39~~	~~34~~	~~6.38~~	~~ppb~~	~~# 1~~
~~23) Vinyl Acetate~~	~~7.79~~	~~42~~	~~74~~	~~1.43~~	~~ppb~~	~~100~~
~~26) 2-Butanone~~	~~8.63~~	~~43~~	~~188~~	~~1.33~~	~~ppb~~	~~# 65~~
~~31) Tetrahydrofuran~~	~~9.15~~	~~42~~	~~639~~	~~9.53~~	~~ppb~~	~~# 66~~
~~38) Iso-Butyl Alcohol~~	~~10.09~~	~~43~~	~~52~~	~~3.83~~	~~ppb~~	~~91~~
~~87) Nitrobenzene~~	~~23.90~~	~~77~~	~~57~~	~~1.10~~	~~ppb~~	~~# 32~~

RJH 3/15

0042

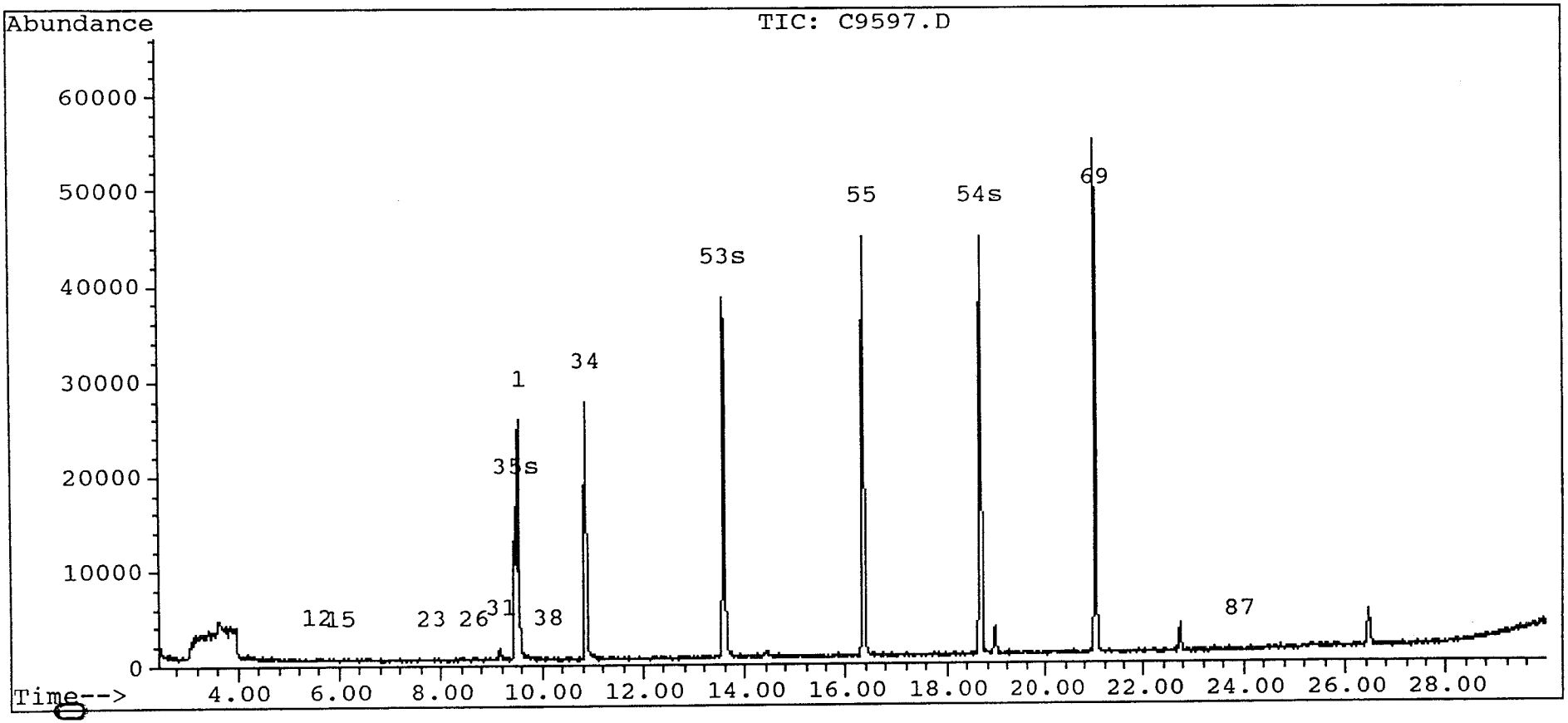
(#) = qualifier out of range (m) = manual integration
C9597.D SOIL0209.M Thu Mar 09 14:17:58 2000

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9597.D
Acq On : 9 Mar 100 1:45 pm
Sample : 361738 1.0
Misc : DAMES R-1022 8260B.TCCL
Quant Time: Mar 9 14:15 19100

Vial: 8
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
Response via : Multiple Level Calibration



0043

VOLATILE ORGANICS

STANDARDS DATA

8260B COMPOUND LIST

Concentration	5 PPB Std#1	20 PPB Std#2	50 PPB Std#3	100 PPB Std#4	150 PPB Std#5	200 PPB Std#6
Dichlorodifluoromethane	5.0	20	50	100	150	200
Chloromethane	5.0	20	50	100	150	200
Vinyl Chloride	5.0	20	50	100	150	200
Bromomethane	5.0	20	50	100	150	200
Chloroethane	5.0	20	50	100	150	200
Trichlorofluoromethane	5.0	20	50	100	150	200
Diethyl Ether	5.0	20	50	100	150	200
Acrolein	25	100	250	500	750	1000
Freon 113	5.0	20	50	100	150	200
1,1-Dichloroethene	5.0	20	50	100	150	200
Acetone	5.0	20	50	100	150	200
Iodomethane	5.0	20	50	100	150	200
Carbon Disulfide	5.0	20	50	100	150	200
Acetonitrile	5.0	20	50	500	750	1000
Allyl Chloride	5.0	20	50	100	150	200
Methylene Chloride	5.0	20	50	100	150	200
tert-Butyl Alcohol	100	400	1000	2000	3000	4000
Methyl-tert-Butyl Ether	5.0	20	50	100	150	200
Acrylonitrile	25	100	250	500	750	1000
trans-1,2 Dichlorooethene	5.0	20	50	100	150	200
1,1-Dichloroethane	5.0	20	50	100	150	200
Vinyl Acetate	5.0	20	50	100	150	200
2-Chloro-1,3- Butadiene	5.0	20	50	100	150	200
2,2-Dichloropropane	5.0	20	50	100	150	200
2-Butanone	5.0	20	50	100	150	200
cis-1,2-Dichloroethene	5.0	20	50	100	150	200
Propionitrile	5.0	20	50	400	600	800
Methacrylonitrile	5.0	20	50	100	150	200
Bromochloromethane	5.0	20	50	100	150	200
THF	5.0	20	50	100	150	200
Chloroform	5.0	20	50	100	150	200
1,1,1-Trichloroethane	5.0	20	50	100	150	200
Carbontetrachloride	5.0	20	50	100	150	200
1,1-Dichloropropene	5.0	20	50	100	150	200
Isobutyl Alcohol	100	400	1000	2000	3000	4000
Benzene	5.0	20	50	100	150	200
1,2-Dichloroethane	5.0	20	50	100	150	200
n-Heptane	5.0	20	50	100	150	200
Trichloroethene	5.0	20	50	100	150	200
1,2-Dichloropropane	5.0	20	50	100	150	200
Methyl Methacrylate	5.0	20	50	100	150	200
Dibromomethane	5.0	20	50	100	150	200
1,4-Dioxane	100	400	1000	2000	3000	4000
Surr4,Dibromofluoromethane	50	50	50	50	50	50
Surr3,Toluene-d8	50	50	50	50	50	50
Surr2,BFB	50	50	50	50	50	50

	5 PPB Std#1	20 PPB Std#2	50 PPB Std#3	100 PPB Std#4	150 PPB Std#5	200 PPB Std#6
Bromodichloromethane	5.0	20	50	100	150	200
2-Chloroethyl Vinyl Ether	5.0	20	50	100	150	200
cis-1,2-Dichloropropene	5.0	20	50	100	150	200
4-Methyl- 2 -Pentanone	5.0	20	50	100	150	200
Toluene	5.0	20	50	100	150	200
trans-1,2-Dichloropropene	5.0	20	50	100	150	200
Ethyl Methacrylate	5.0	20	20	100	150	200
1,1,2-Trichloroethane	5.0	20	50	100	150	200
Tetrachloroethene	5.0	20	50	100	150	200
2-Hexanone	5.0	20	50	100	150	200
1,3-Dichloropropane	5.0	20	50	100	150	200
Dibromochloromethane	5.0	20	50	100	150	200
1,2-Dibromoethane	5.0	20	50	100	150	200
Chlorobenzene	5.0	20	50	100	150	200
1,1,1,2-Tetrachloroethane	5.0	20	50	100	150	200
Ethylbenzene	5.0	20	50	100	150	200
(m+p) Xylene	10	40	100	200	300	400
o-Xylene	5.0	20	50	100	150	200
Styrene	5.0	20	50	100	150	200
Bromoform	5.0	20	50	100	150	200
Isopropylbenzene	5.0	20	50	100	150	200
Cyclohexanone	100	400	1000	2000	3000	4000
1,1,2,2-Tetrachloroethane	5.0	20	50	100	150	200
1,2,3-Trichloropropane	5.0	20	50	100	150	200
Trans -1,4- Dichlorobutene	5.0	20	20	100	150	200
n-Propylbenzene	5.0	20	50	100	150	200
Bromobenzene	5.0	20	50	100	150	200
1,3,5-Trimethylbenzene	5.0	20	50	100	150	200
2-Chlorotoluene	5.0	20	50	100	150	200
4-Chlorotoluene	5.0	20	50	100	150	200
tert-Butylbenzene	5.0	20	50	100	150	200
1,2,4-Trimethylbenzene	5.0	20	50	100	150	200
sec-Butylbenzene	5.0	20	50	100	150	200
p-Isopropyltoluene	5.0	20	50	100	150	200
1,3-Dichlorobenzene	5.0	20	50	100	150	200
1,4-Dichlorobenzene	5.0	20	50	100	150	200
n-Butylbenzene	5.0	20	50	100	150	200
1,2-Dichlorobenzene	5.0	20	50	100	150	200
1,2-Dibromo-3-Chloropropane	5.0	20	50	100	150	200
Nitrobenzene	10	40	100	200	300	400
1,2,4-Trichlorobenzene	5.0	20	50	100	150	200
Hexachlorobutadiene	5.0	20	50	100	150	200
Naphthalene	5.0	20	50	100	150	200
1,2,3-Trichlorobenzene	5.0	20	50	100	150	200

CC

0045

Response Factor Report 5971 - In

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Feb 09 20:02:50 2000
Response via : Initial Calibration

Calibration Files
5 =C9194.D 20 =C9195.D 50 =C9196.D
100 =C9197.D 150 =C9198.D 200 =C9199.D

		Compound	5	20	50	100	150	200	Avg	%RSD
1)		Pentafluorobenzene	ISTD							
2)		Dichlorodifluoromet	0.929	0.950	0.869	0.810	0.843	0.746	0.858	8.84
3)	p	Chloromethane	0.768	0.739	0.739	0.671	0.735	0.688	0.723	5.04
4)	c	Vinyl Chloride	0.830	0.844	0.828	0.764	0.829	0.778	0.812	4.03
5)		Bromomethane	0.442	0.480	0.462	0.464	0.523	0.505	0.479	6.27
6)		Chloroethane	0.317	0.279	0.275	0.266	0.297	0.289	0.287	6.35
7)		Trichlorofluorometh	1.049	1.073	1.068	1.100	1.274	1.173	1.123	7.65
8)		Diethyl Ether	0.296	0.267	0.266	0.254	0.278	0.275	0.273	5.24
9)		Acrolein	0.040	0.040	0.039	0.040	0.047	0.043	0.042	6.78
10)		FREON 113	0.290	0.237	0.219	0.211	0.240	0.218	0.236	12.32
11)	c	1,1-Diclethene	0.363	0.351	0.307	0.317	0.375	0.386	0.350	9.04
12)		Acetone		0.390	0.442	0.418	0.435	0.371	0.411	7.30
13)		Iodomethane	0.543	0.611	0.596	0.657	0.709	0.671	0.631	9.48
14)		Carbon Disulfide	1.369	1.512	1.345	1.466	1.606	1.593	1.482	7.40
15)		Acetonitrile	0.009	0.011	0.014	0.011	0.013	0.011	0.011	14.51
16)		Allyl Chloride	0.170	0.163	0.173	0.164	0.190	0.191	0.175	7.22
17)		Methylene Chloride	0.481	0.466	0.450	0.422	0.456	0.451	0.454	4.26
18)		TBA	0.087	0.092	0.100	0.093	0.108	0.092	0.095	7.96
19)		Methyl-t-Butyl Ethe	1.119	1.094	1.082	0.992	1.114	1.091	1.082	4.27
20)		Acrylonitrile	0.111	0.130	0.135	0.130	0.144	0.132	0.130	8.34
21)		trans-1,2-Dichloroe	0.423	0.337	0.332	0.303	0.345	0.350	0.348	11.54
22)	p	1,1-Diclethane	0.852	0.822	0.811	0.779	0.887	0.873	0.837	4.86
23)		Vinyl Acetate	0.143	0.105	0.114	0.095	0.106	0.106	0.111	14.82
24)		2-Chloro-1,3-butadi	0.818	0.788	0.768	0.719	0.820	0.813	0.788	4.98
25)		2,2-Dichloropropane	0.925	0.886	0.839	0.824	0.955	0.932	0.893	5.95
26)		2-Butanone	0.266	0.312	0.316	0.292	0.341	0.306	0.305	8.28
27)		cis-1,2-Dichloroeth	0.407	0.408	0.397	0.394	0.427	0.436	0.411	4.06
28)		Propionitrile	0.044	0.051	0.058	0.055	0.062	0.056	0.054	11.13
29)		Methacrylonitrile	0.145	0.143	0.151	0.140	0.159	0.151	0.148	4.49
30)		Bromochloromethane	0.267	0.281	0.288	0.277	0.318	0.303	0.289	6.41
31)		Tetrahydrofuran		0.169	0.158	0.123	0.144	0.129	0.145	13.44
32)	c	Chloroform	1.068	1.039	1.005	0.949	1.047	1.038	1.025	4.12
33)		1,1,1-Trichloroetha	1.022	0.965	0.924	0.873	1.053	1.017	0.976	6.96
34)		1,4-Difluorobenzene	ISTD							
35)	s	surr4,Dibrflmethane	0.468	0.492	0.487	0.499	0.495	0.503	0.491	2.57
36)		Carbontetrachloride	0.817	0.733	0.710	0.651	0.775	0.749	0.739	7.71
37)		1,1-Dichloropropene	0.604	0.495	0.458	0.442	0.492	0.481	0.495	11.53
38)		Iso-Butyl Alcohol	0.021	0.025	0.027	0.027	0.029	0.026	0.026	9.40
39)		Benzene	1.305	1.290	1.154	1.098	1.167	1.137	1.192	7.14
40)		1,2-Dichloroethane	0.939	1.040	0.991	0.975	1.046	1.029	1.003	4.20
41)		Trichloroethene	0.468	0.483	0.455	0.423	0.469	0.444	0.457	4.64
42)	c	1,2-Diclpropane	0.382	0.391	0.368	0.349	0.379	0.385	0.376	3.99

0046

(#) = Out of Range

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Feb 09 20:02:50 2000
Response via : Initial Calibration

Calibration Files
5 =C9194.D 20 =C9195.D 50 =C9196.D
100 =C9197.D 150 =C9198.D 200 =C9199.D

		Compound	5	20	50	100	150	200	Avg	%RSD
43)		Methyl Methacrylate	0.298	0.333	0.317	0.326	0.354	0.339	0.328	5.86
44)		Dibromomethane	0.376	0.416	0.395	0.390	0.421	0.408	0.401	4.30
45)		Bromodichloromethan	0.831	0.842	0.780	0.743	0.863	0.849	0.818	5.64
46)		2-Chloroethylvinyl	0.146	0.160	0.164	0.173	0.190	0.184	0.170	9.55
47)		cis-1,3-Dichloropro	0.744	0.748	0.713	0.684	0.757	0.753	0.733	3.90
48)		4-Methyl-2-Pentanon	0.614	0.630	0.635	0.658	0.704	0.661	0.650	4.86
49)	c	Toluene	1.984	1.965	1.845	1.713	1.891	1.785	1.864	5.61
50)		trans-1,3-Dichlorop	0.836	0.936	0.923	0.878	0.961	0.936	0.912	5.09
51)		Ethyl Methacrylate	0.666	0.796	0.806	0.797	0.876	0.850	0.799	9.07
52)		1,1,2-Trichloroetha	0.409	0.427	0.401	0.369	0.407	0.395	0.401	4.83
53)	s	surr3,Toluene-d8	1.355	1.364	1.370	1.388	1.393	1.426	1.383	1.85
54)	s	surr2,bfb	0.762	0.831	0.842	0.847	0.859	0.829	0.828	4.15
55)		d5-Chlorobenze	----------ISTD----------							
56)		Tetrachloroethene	0.594	0.519	0.472	0.442	0.486	0.451	0.494	11.35
57)		2-Hexanone	0.340	0.426	0.444	0.467	0.479	0.435	0.432	11.34
58)		1,3-Dichloropropane	0.718	0.685	0.639	0.622	0.666	0.640	0.662	5.33
59)		Dibromochloromethan	0.645	0.686	0.617	0.598	0.638	0.618	0.634	4.81
60)		1,2-Dibromoethane	0.517	0.516	0.491	0.466	0.501	0.498	0.498	3.80
61)	p	Chlorobenzene	1.241	1.212	1.130	1.035	1.131	1.057	1.134	7.18
62)		1,1,1,2-Tetrachloro	0.583	0.558	0.516	0.485	0.532	0.511	0.531	6.62
63)	c	Ethylbenzene	2.437	2.334	2.178	1.981	2.123	2.001	2.176	8.33
64)		(m+p)Xylene	0.851	0.800	0.730	0.655	0.709	0.645	0.732	11.06
65)		o-Xylene	0.860	0.858	0.766	0.695	0.749	0.693	0.770	9.70
66)		Styrene	1.394	1.359	1.260	1.179	1.261	1.178	1.272	7.06
67)	p	Bromoform	0.628	0.651	0.607	0.585	0.628	0.586	0.614	4.26
68)		Isopropylbenzene	2.285	2.195	2.136	1.951	2.112	1.920	2.100	6.70
69)		d4-1,4-Dichlorobenzen	----------ISTD----------							
70)	p	1,1,2,2-Tetrachloro	1.217	1.144	1.094	0.989	1.096	1.035	1.096	7.34
71)		1,2,3-Trichloroprop	0.400	0.361	0.347	0.330	0.368	0.344	0.358	6.87
72)		Trans-1,4-Dichloro-	0.446	0.444	0.451	0.423	0.480	0.439	0.447	4.23
73)		n-Propylbenzene	4.662	4.253	4.049	3.567	4.060	3.678	4.045	9.81
74)		Bromobenzene	1.147	1.018	0.965	0.884	0.998	0.949	0.994	8.89
75)		1,3,5-Trimethylbenz	2.938	2.664	2.608	2.306	2.656	2.492	2.611	8.02
76)		2-Chlorotoluene	2.921	2.651	2.515	2.274	2.575	2.393	2.555	8.76
77)		4-Chlorotoluene	2.928	3.029	2.864	2.601	2.955	2.777	2.859	5.34
78)		tert-Butylbenzene	2.426	2.292	2.187	1.950	2.261	2.098	2.203	7.50
79)		1,2,4-Trimethylbenz	2.887	2.588	2.605	2.335	2.676	2.520	2.602	6.98
80)		sec-Butylbenzene	3.998	3.598	3.601	3.183	3.599	3.334	3.552	7.85
81)		p-Isopropyltoluene	2.867	2.631	2.635	2.368	2.697	2.549	2.624	6.27
82)		1,3-Dclbenz	2.131	1.845	1.735	1.549	1.744	1.617	1.770	11.58
83)		1,4-Dclbenz	2.087	1.885	1.743	1.547	1.781	1.646	1.782	10.62
84)		n-Butylbenzene	3.039	2.883	2.889	2.588	2.934	2.688	2.837	5.8

0047

(#) = Out of Range

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Feb 09 20:02:50 2000
Response via : Initial Calibration

Calibration Files
5 =C9194.D 20 =C9195.D 50 =C9196.D
100 =C9197.D 150 =C9198.D 200 =C9199.D

	Compound	5	20	50	100	150	200	Avg	%RSD
85)	1,2-Dclbenz	2.030	1.846	1.783	1.578	1.751	1.637	1.771	9.05
86)	1,2-Dibromo-3-chlor	0.337	0.328	0.330	0.324	0.352	0.321	0.332	3.42
87)	Nitrobenzene	0.076	0.095	0.112	0.117	0.143	0.136	0.113	22.09
88)	1,2,4-Tcbenzene	1.267	1.133	1.177	1.073	1.148	1.127	1.154	5.63
89)	Hexachlorobt	0.927	0.817	0.790	0.701	0.804	0.728	0.794	9.96
90)	Naphthalen	2.637	2.606	2.768	2.560	2.878	2.722	2.695	4.36
91)	1,2,3-Tclbenzene	1.313	1.196	1.190	1.075	1.214	1.143	1.188	6.64
92)	TOTAL XYLENE							0.000	-1.00

0048

(#) = Out of Range

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9194.D
Acq On : 9 Feb 100 12:34 pm
Sample : 5PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 13:04 19100

Vial: 7
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.49	168	42355	50.00	ppb		0.04
34) 1,4-Difluorobenzene	10.82	114	49275	50.00	ppb		0.05
55) d5-Chlorobenze	16.31	117	60017	50.00	ppb		0.06
69) d4-1,4-Dichlorobenzene	20.97	152	40120	50.00	ppb		0.06
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.42	113	23038	61.48	ppb		122.96%
53) surr3,Toluene-d8	13.54	98	66787	56.42	ppb		112.85%
54) surr2,bfb	18.62	95	37532	67.45	ppb		134.89%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.71	85	3935	4.39	ppb	#	94
3) Chloromethane	3.01	50	3252	3.59	ppb		99
4) Vinyl Chloride	3.21	62	3517	5.01	ppb		93
5) Bromomethane	3.80	94	1870	5.68	ppb		97
6) Chloroethane	3.98	64	1343	3.15	ppb		94
7) Trichlorofluoromethane	4.47	101	4442	5.79	ppb		94
8) Diethyl Ether	5.00	59	1255	2.88	ppb	#	77
9) Acrolein	5.23	56	857	12.64	ppb	#	81
10) FREON 113	5.43	85	1229	5.51	ppb	#	68
11) 1,1-Diclethene	5.41	96	1539	3.55	ppb	#	92
12) Acetone	5.49	43	1934	4.01	ppb	#	72
13) Iodomethane	5.68	142	2298	3.44	ppb		71
14) Carbon Disulfide	5.81	76	5800	2.57	ppb		98
15) Acetonitrile	5.99	39	190	12.77	ppb	#	1
16) Allyl Chloride	6.06	76	718	2.54	ppb	#	46
17) Methylene Chloride	6.29	84	2036	3.45	ppb	#	78
18) TBA	6.47	59	7392	74.79	ppb		99
19) Methyl-t-Butyl Ether	6.80	73	4738	3.54	ppb		94
20) Acrylonitrile	6.71	53	2345	9.89	ppb	#	90
21) trans-1,2-Dichloroethene	6.80	96	1793	3.83	ppb	#	73
22) 1,1-Diclethane	7.54	63	3610	3.07	ppb	#	92
23) Vinyl Acetate	7.62	42	604	4.56	ppb		85
24) 2-Chloro-1,3-butadiene	7.71	53	3463	3.68	ppb	#	76
25) 2,2-Dichloropropane	8.59	77	3917	4.73	ppb		96
26) 2-Butanone	8.60	43	1125	2.18	ppb	#	85
27) cis-1,2-Dichloroethene	8.59	96	1722	2.95	ppb		85
28) Propionitrile	8.68	54	1129	12.35	ppb	#	87
29) Methacrylonitrile	8.97	67	616	2.37	ppb		59
30) Bromochloromethane	9.01	128	1132	3.25	ppb	#	64
31) Tetrahydrofuran	9.11	42	1568	5.38	ppb		91
32) Chloroform	9.15	83	4524	4.23	ppb		96
33) 1,1,1-Trichloroethane	9.48	97	4329	5.58	ppb	#	1
36) Carbontetrachloride	9.80	117	4028	10.14	ppb		100

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

0049

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9194.D
Acq On : 9 Feb 100 12:34 pm
Sample : 5PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 13:04 19100

Vial: 7
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37) 1,1-Dichloropropene	9.79	75	2977	6.76	ppb	#	83
38) Iso-Butyl Alcohol	9.95	43	2107	68.31	ppb		78
39) Benzene	10.15	78	6430	4.37	ppb		97
40) 1,2-Dichloroethane	10.16	62	4628	7.05	ppb	#	93
41) Trichloroethene	11.32	95	2308	6.07	ppb		92
42) 1,2-Diclpropane	11.71	63	1882	3.85	ppb		100
43) Methyl Methacrylate	11.88	69	1468	4.22	ppb		93
44) Dibromomethane	11.92	93	1852	6.21	ppb		88
45) Bromodichloromethane	12.20	83	4093	7.02	ppb	#	90
46) 2-Chloroethylvinyl Ether	12.73	63	717	3.48	ppb	#	62
47) cis-1,3-Dichloropropene	13.02	75	3666	5.37	ppb		97
48) 4-Methyl-2-Pentanone	13.28	43	3025	3.76	ppb		98
49) Toluene	13.67	91	9777	6.01	ppb		98
50) trans-1,3-Dichloropropene	14.05	75	4117	5.79	ppb		95
51) Ethyl Methacrylate	14.20	69	3282	4.19	ppb		82
52) 1,1,2-Trichloroethane	14.40	83	2017	5.24	ppb		95
56) Tetrachloroethene	14.72	166	3566	9.40	ppb	#	88
57) 2-Hexanone	14.85	43	2043	2.78	ppb	#	84
58) 1,3-Dichloropropane	14.72	76	4308	4.91	ppb		90
59) Dibromochloromethane	15.16	129	3869	6.43	ppb		90
60) 1,2-Dibromoethane	15.41	107	3103	5.57	ppb		96
61) Chlorobenzene	16.36	112	7449	5.39	ppb		97
62) 1,1,1,2-Tetrachloroethane	16.51	131	3498	7.22	ppb		93
63) Ethylbenzene	16.56	91	14625	6.54	ppb		89
64) (m+p)Xylene	16.79	106	10215	12.60	ppb		90
65) o-Xylene	17.58	106	5159	6.14	ppb		80
66) Styrene	17.59	104	8369	5.94	ppb		85
67) Bromoform	17.97	173	3771	9.48	ppb		97
68) Isopropylbenzene	18.30	105	13711	6.78	ppb		96
70) 1,1,2,2-Tetrachloroethane	18.87	83	4884	3.92	ppb	#	91
71) 1,2,3-Trichloropropane	18.97	110	1606	5.23	ppb		92
72) Trans-1,4-Dichloro-2-Buten	18.98	53	1788	3.98	ppb		86
73) n-Propylbenzene	19.13	91	18703	4.77	ppb		97
74) Bromobenzene	18.94	156	4603	6.03	ppb	#	65
75) 1,3,5-Trimethylbenzene	19.48	105	11788	5.06	ppb		91
76) 2-Chlorotoluene	19.33	91	11720	4.99	ppb		97
77) 4-Chlorotoluene	19.33	91	11749	4.46	ppb		97
78) tert-Butylbenzene	20.15	119	9734	4.81	ppb		98
79) 1,2,4-Trimethylbenzene	20.24	105	11582	5.04	ppb		93
80) sec-Butylbenzene	20.60	105	16039	4.82	ppb		98
81) p-Isopropyltoluene	20.88	119	11502	4.74	ppb		94
82) 1,3-Dclbenz	20.85	146	8550	6.44	ppb		93
83) 1,4-Dclbenz	20.85	146	8374	6.19	ppb		94
84) n-Butylbenzene	21.73	91	12191	4.72	ppb		92

0050

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9194.D Vial: 7
Acq On : 9 Feb 100 12:34 pm Operator: HERRING
Sample : 5PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Soil Calibration Multiplr: 1.00
Quant Time: Feb 9 13:04 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85) 1,2-Dclbenz	21.80	146	8145	6.23	ppb	#	93
86) 1,2-Dibromo-3-chloropropan	23.38	157	1352	6.60	ppb	#	73
87) Nitrobenzene	23.82	77	608	5.71	ppb	#	85
88) 1,2,4-Tcbenzene	25.12	180	5084	7.44	ppb		94
89) Hexachlorobt	25.47	225	3720	9.79	ppb		91
90) Naphthalen	25.64	128	10578	5.19	ppb		97
91) 1,2,3-Tclbenzene	26.18	180	5267	7.49	ppb		87

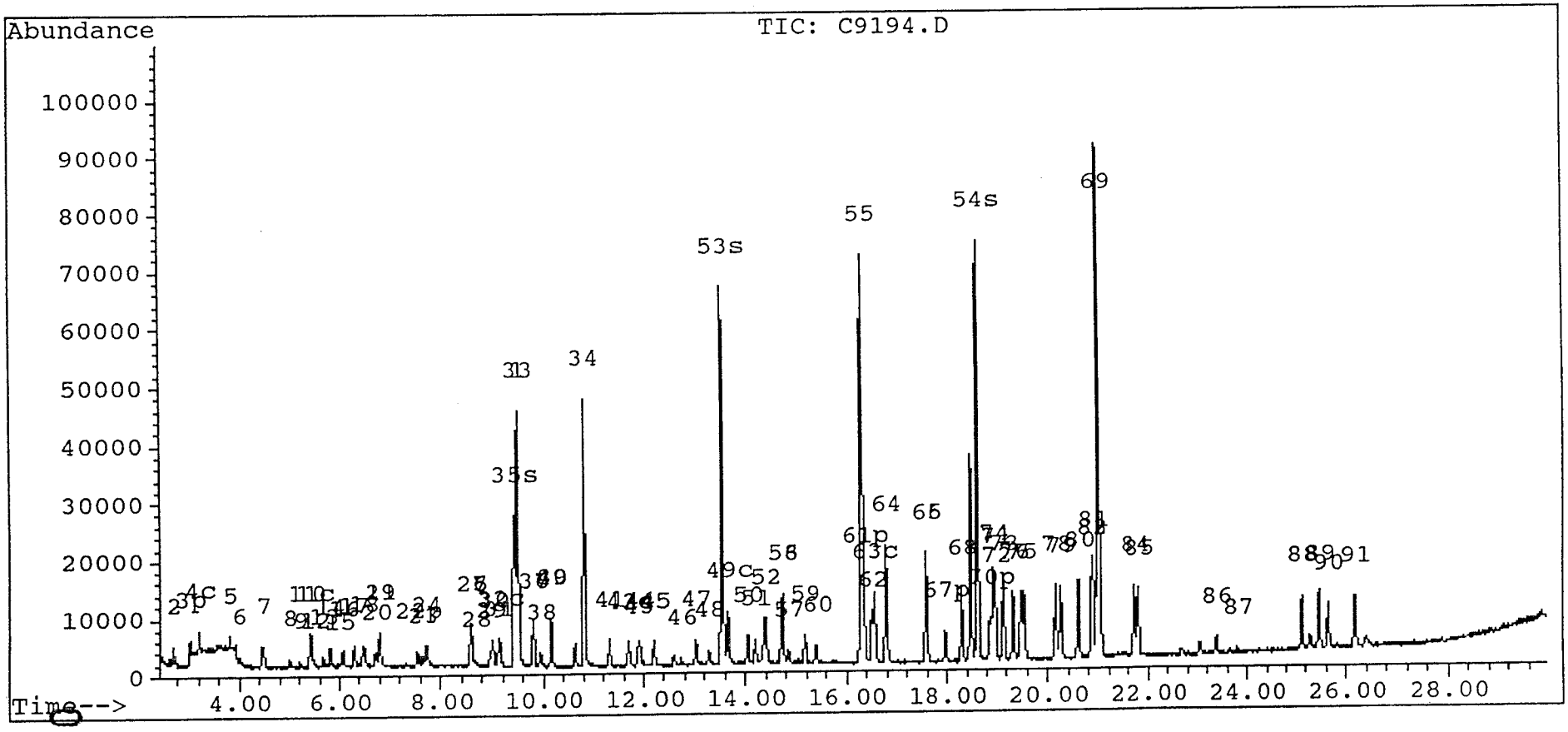
0051

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

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9194.D
Acq On : 9 Feb 100 12:34 pm
Sample : 5PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 13:04 19100

Vial: 7
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration



0052

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9195.D Vial: 8
Acq On : 9 Feb 100 1:11 pm Operator: HERRING
Sample : 20PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Soil Calibration Multiplr: 1.00
Quant Time: Feb 9 13:41 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.50	168	35015	50.00	ppb		0.05
34) 1,4-Difluorobenzene	10.82	114	40187	50.00	ppb		0.05
55) d5-Chlorobenze	16.31	117	50380	50.00	ppb		0.07
69) d4-1,4-Dichlorobenzene	20.98	152	35714	50.00	ppb		0.07
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.43	113	19786	64.74	ppb		129.49%
53) surr3,Toluene-d8	13.54	98	54832	56.80	ppb		113.60%
54) surr2,bfb	18.62	95	33398	73.59	ppb		147.18%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.72	85	13312	17.95	ppb		96
3) Chloromethane	3.02	50	10350	13.80	ppb		90
4) Vinyl Chloride	3.22	62	11816	20.35	ppb		95
5) Bromomethane	3.80	94	6726	24.70	ppb		97
6) Chloroethane	3.99	64	3901	11.08	ppb		92
7) Trichlorofluoromethane	4.47	101	15028	23.71	ppb		97
8) Diethyl Ether	5.00	59	3737	10.37	ppb		90
9) Acrolein	5.21	56	2797	49.90	ppb		95
10) FREON 113	5.43	85	3320	18.01	ppb		85
11) 1,1-Diclethene	5.42	96	4918	13.74	ppb	#	77
12) Acetone	5.49	43	5460	13.69	ppb	#	85
13) Iodomethane	5.68	142	8551	15.48	ppb		74
14) Carbon Disulfide	5.82	76	21174	11.34	ppb	#	92
15) Acetonitrile	5.99	39	790	64.22	ppb		84
16) Allyl Chloride	6.06	76	2280	9.77	ppb		76
17) Methylene Chloride	6.29	84	6520	13.37	ppb		87
18) TBA	6.48	59	25634	313.71	ppb		93
19) Methyl-t-Butyl Ether	6.80	73	15321	13.83	ppb	#	92
20) Acrylonitrile	6.71	53	9072	46.29	ppb	#	89
21) trans-1,2-Dichloroethene	6.80	96	4720	12.21	ppb		93
22) 1,1-Diclethane	7.54	63	11517	11.85	ppb	#	96
23) Vinyl Acetate	7.63	42	1476	13.47	ppb	#	70
24) 2-Chloro-1,3-butadiene	7.72	53	11037	14.19	ppb		88
25) 2,2-Dichloropropane	8.59	77	12409	18.14	ppb	#	88
26) 2-Butanone	8.60	43	4372	10.24	ppb		92
27) cis-1,2-Dichloroethene	8.59	96	5713	11.83	ppb		97
28) Propionitrile	8.67	54	4278	56.59	ppb	#	90
29) Methacrylonitrile	8.96	67	2007	9.34	ppb		80
30) Bromochloromethane	9.01	128	3940	13.69	ppb	#	75
31) Tetrahydrofuran	9.11	42	2372	9.85	ppb	#	79
32) Chloroform	9.14	83	14552	16.46	ppb		99
33) 1,1,1-Trichloroethane	9.50	97	13516	21.08	ppb	#	34
36) Carbontetrachloride	9.80	117	11779	36.36	ppb		96

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

0053

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9195.D
Acq On : 9 Feb 100 1:11 pm
Sample : 20PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 13:41 19100

Vial: 8
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37) 1,1-Dichloropropene	9.79	75	7950	22.14	ppb		94
38) Iso-Butyl Alcohol	9.93	43	8184	325.31	ppb		81
39) Benzene	10.16	78	20730	17.26	ppb		98
40) 1,2-Dichloroethane	10.17	62	16715	31.20	ppb	#	93
41) Trichloroethene	11.32	95	7759	25.00	ppb		96
42) 1,2-Diclpropane	11.71	63	6278	15.73	ppb		91
43) Methyl Methacrylate	11.89	69	5348	18.87	ppb		90
44) Dibromomethane	11.93	93	6695	27.53	ppb	#	86
45) Bromodichloromethane	12.21	83	13534	28.46	ppb		97
46) 2-Chloroethylvinyl Ether	12.73	63	2580	15.34	ppb	#	79
47) cis-1,3-Dichloropropene	13.02	75	12023	21.58	ppb		100
48) 4-Methyl-2-Pentanone	13.28	43	10127	15.42	ppb		94
49) Toluene	13.67	91	31589	23.80	ppb		99
50) trans-1,3-Dichloropropene	14.04	75	15053	25.96	ppb		97
51) Ethyl Methacrylate	14.19	69	12802	20.02	ppb		87
52) 1,1,2-Trichloroethane	14.40	83	6871	21.88	ppb		93
56) Tetrachloroethene	14.73	166	10468	32.87	ppb	#	85
57) 2-Hexanone	14.84	43	8584	13.94	ppb		95
58) 1,3-Dichloropropane	14.72	76	13798	18.74	ppb		91
59) Dibromochloromethane	15.17	129	13825	27.36	ppb		97
60) 1,2-Dibromoethane	15.41	107	10403	22.23	ppb		90
61) Chlorobenzene	16.37	112	24418	21.05	ppb		96
62) 1,1,1,2-Tetrachloroethane	16.51	131	11242	27.63	ppb	#	87
63) Ethylbenzene	16.56	91	47037	25.06	ppb		95
64) (m+p)Xylene	16.79	106	32238	47.38	ppb		82
65) o-Xylene	17.58	106	17295	24.53	ppb		84
66) Styrene	17.59	104	27384	23.14	ppb		86
67) Bromoform	17.98	173	13112	39.27	ppb		94
68) Isopropylbenzene	18.30	105	44228	26.05	ppb		99
70) 1,1,2,2-Tetrachloroethane	18.87	83	16348	14.74	ppb	#	91
71) 1,2,3-Trichloropropane	18.97	110	5152	18.85	ppb		88
72) Trans-1,4-Dichloro-2-Buten	18.97	53	6339	15.85	ppb		99
73) n-Propylbenzene	19.13	91	60750	17.42	ppb		99
74) Bromobenzene	18.95	156	14540	21.41	ppb	#	78
75) 1,3,5-Trimethylbenzene	19.48	105	38061	18.35	ppb		91
76) 2-Chlorotoluene	19.33	91	37877	18.12	ppb		98
77) 4-Chlorotoluene	19.54	91	43271	18.46	ppb		94
78) tert-Butylbenzene	20.15	119	32749	18.17	ppb		88
79) 1,2,4-Trimethylbenzene	20.25	105	36970	18.09	ppb		86
80) sec-Butylbenzene	20.60	105	51404	17.37	ppb		96
81) p-Isopropyltoluene	20.88	119	37579	17.39	ppb	#	91
82) 1,3-Dclbenz	20.85	146	26352	22.30	ppb		94
83) 1,4-Dclbenz	21.03	146	26927	22.38	ppb		93
84) n-Butylbenzene	21.72	91	41188	17.92	ppb		97

0054

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9195.D
Acq On : 9 Feb 100 1:11 pm
Sample : 20PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 13:41 19100

Vial: 8
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85) 1,2-Dclbenz	21.80	146	26370	22.66	ppb		94
86) 1,2-Dibromo-3-chloropropan	23.39	157	4684	25.67	ppb	#	79
87) Nitrobenzene	23.81	77	2721	28.70	ppb		92
88) 1,2,4-Tcbenzene	25.11	180	16183	26.61	ppb		100
89) Hexachlorobt	25.46	225	11667	34.50	ppb		87
90) Naphthalen	25.64	128	37230	20.53	ppb		100
91) 1,2,3-Tclbenzene	26.17	180	17090	27.31	ppb		99

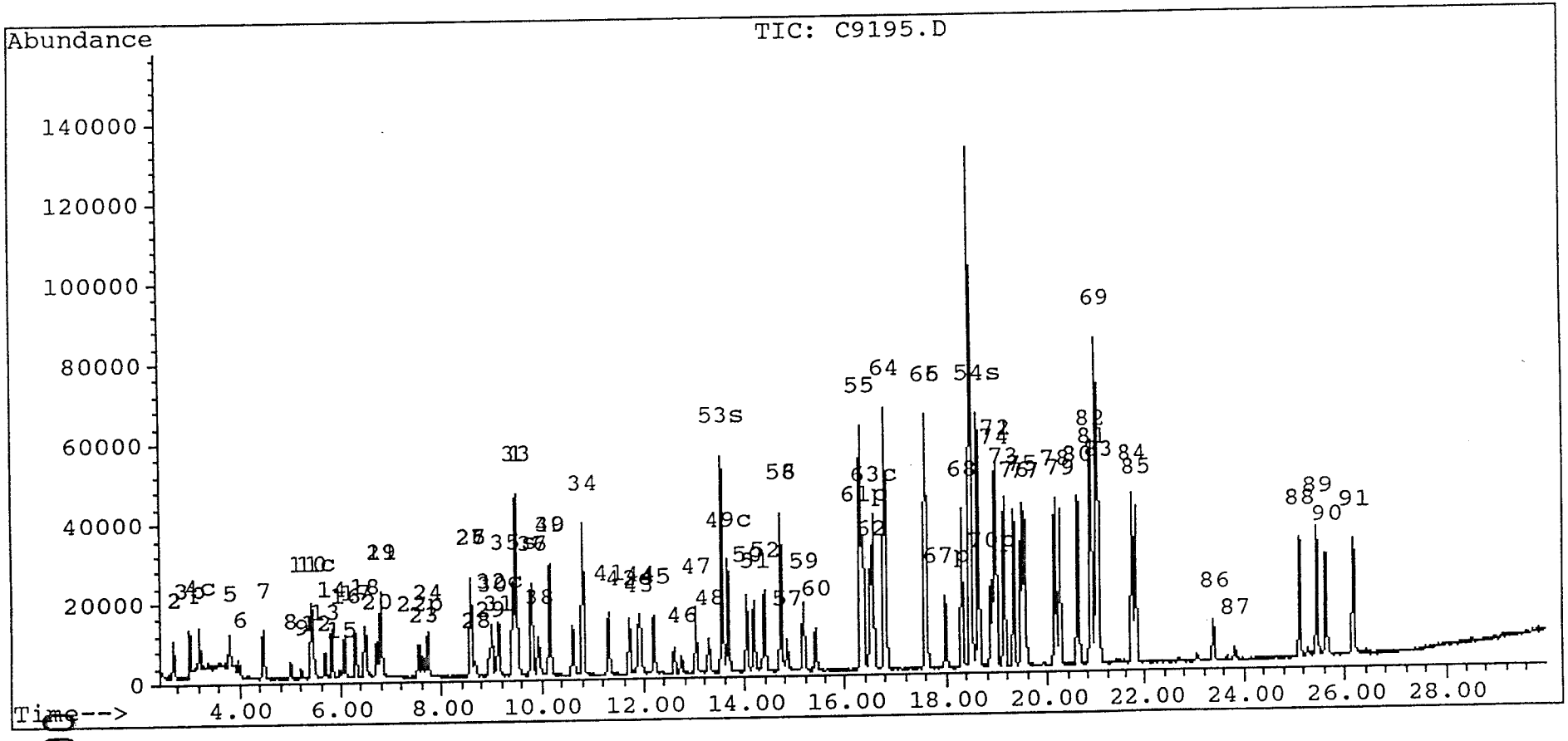
(#) = qualifier out of range (m) = manual integration

0055

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9195.D
Acq On : 9 Feb 100 1:11 pm
Sample : 20PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 13:41 19100

Vial: 8
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration



0056

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9196.D Vial: 9
Acq On : 9 Feb 100 1:49 pm Operator: HERRING
Sample : 50PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Soil Calibration Multiplr: 1.00
Quant Time: Feb 9 14:19 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.50	168	36593	50.00	ppb		0.05
34) 1,4-Difluorobenzene	10.83	114	43515	50.00	ppb		0.06
55) d5-Chlorobenze	16.31	117	55561	50.00	ppb		0.06
69) d4-1,4-Dichlorobenzene	20.98	152	38638	50.00	ppb		0.06
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.43	113	21201	64.07	ppb		128.14%
53) surr3,Toluene-d8	13.54	98	59623	57.04	ppb		114.08%
54) surr2,bfb	18.63	95	36636	74.55	ppb		149.10%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.71	85	31797	41.03	ppb	#	95
3) Chloromethane	3.02	50	27025	34.49	ppb		100
4) Vinyl Chloride	3.22	62	30290	49.93	ppb		94
5) Bromomethane	3.80	94	16916	59.45	ppb		97
6) Chloroethane	3.99	64	10077	27.39	ppb		98
7) Trichlorofluoromethane	4.47	101	39078	58.99	ppb		97
8) Diethyl Ether	5.00	59	9752	25.88	ppb		98
9) Acrolein	5.21	56	7222	123.30	ppb		99
10) FREON 113	5.43	85	7996	41.50	ppb		97
11) 1,1-Diclethene	5.42	96	11244	30.06	ppb	#	67
12) Acetone	5.49	43	16168	38.79	ppb	#	85
13) Iodomethane	5.69	142	21810	37.77	ppb		78
14) Carbon Disulfide	5.82	76	49226	25.22	ppb		99
15) Acetonitrile	5.98	39	2489	193.61	ppb		63
16) Allyl Chloride	6.07	76	6326	25.93	ppb		70
17) Methylene Chloride	6.28	84	16454	32.28	ppb		89
18) TBA	6.47	59	73326	858.67	ppb		93
19) Methyl-t-Butyl Ether	6.79	73	39585	34.19	ppb	#	91
20) Acrylonitrile	6.70	53	24725	120.71	ppb	#	95
21) trans-1,2-Dichloroethene	6.80	96	12136	30.04	ppb		99
22) 1,1-Diclethane	7.54	63	29686	29.22	ppb		99
23) Vinyl Acetate	7.61	42	4189	36.58	ppb	#	65
24) 2-Chloro-1,3-butadiene	7.71	53	28111	34.57	ppb		87
25) 2,2-Dichloropropane	8.59	77	30705	42.96	ppb		93
26) 2-Butanone	8.59	43	11557	25.91	ppb		92
27) cis-1,2-Dichloroethene	8.59	96	14541	28.80	ppb		92
28) Propionitrile	8.67	54	12763	161.56	ppb		94
29) Methacrylonitrile	8.96	67	5508	24.52	ppb		90
30) Bromochloromethane	9.01	128	10549	35.08	ppb	#	79
31) Tetrahydrofuran	9.10	42	5790	23.01	ppb	#	83
32) Chloroform	9.15	83	36786	39.82	ppb		94
33) 1,1,1-Trichloroethane	9.50	97	33823	50.48	ppb		89
36) Carbontetrachloride	9.81	117	30886	88.04	ppb		100

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

0057

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9196.D
Acq On : 9 Feb 100 1:49 pm
Sample : 50PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 14:19 19100

Vial: 9
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37) 1,1-Dichloropropene	9.79	75	19950	51.31	ppb		96
38) Iso-Butyl Alcohol	9.94	43	23115	848.55	ppb		97
39) Benzene	10.16	78	50196	38.59	ppb		95
40) 1,2-Dichloroethane	10.17	62	43137	74.37	ppb	#	93
41) Trichloroethene	11.32	95	19812	58.95	ppb		91
42) 1,2-Diclpropane	11.71	63	16017	37.07	ppb		97
43) Methyl Methacrylate	11.88	69	13781	44.90	ppb		98
44) Dibromomethane	11.92	93	17175	65.22	ppb		89
45) Bromodichloromethane	12.20	83	33961	65.96	ppb		98
46) 2-Chloroethylvinyl Ether	12.73	63	7155	39.29	ppb	#	83
47) cis-1,3-Dichloropropene	13.02	75	31008	51.41	ppb		95
48) 4-Methyl-2-Pentanone	13.28	43	27642	38.88	ppb		100
49) Toluene	13.67	91	80285	55.86	ppb		94
50) trans-1,3-Dichloropropene	14.04	75	40181	64.00	ppb		92
51) Ethyl Methacrylate	14.19	69	35069	50.64	ppb		93
52) 1,1,2-Trichloroethane	14.39	83	17441	51.28	ppb		96
56) Tetrachloroethene	14.72	166	26237	74.70	ppb	#	86
57) 2-Hexanone	14.84	43	24686	36.35	ppb		96
58) 1,3-Dichloropropane	14.72	76	35522	43.75	ppb		89
59) Dibromochloromethane	15.17	129	34265	61.50	ppb		100
60) 1,2-Dibromoethane	15.41	107	27293	52.89	ppb		99
61) Chlorobenzene	16.36	112	62773	49.07	ppb		95
62) 1,1,1,2-Tetrachloroethane	16.51	131	28675	63.91	ppb	#	88
63) Ethylbenzene	16.56	91	121015	58.45	ppb		94
64) (m+p)Xylene	16.79	106	81165	108.17	ppb		77
65) o-Xylene	17.58	106	42558	54.74	ppb		80
66) Styrene	17.60	104	69980	53.63	ppb		88
67) Bromoform	17.98	173	33717	91.56	ppb		99
68) Isopropylbenzene	18.31	105	118651	63.36	ppb		95
70) 1,1,2,2-Tetrachloroethane	18.87	83	42255	35.21	ppb	#	90
71) 1,2,3-Trichloropropane	18.98	110	13409	45.34	ppb		100
72) Trans-1,4-Dichloro-2-Buten	18.98	53	17414	40.23	ppb		83
73) n-Propylbenzene	19.14	91	156439	41.46	ppb		99
74) Bromobenzene	18.95	156	37278	50.73	ppb	#	74
75) 1,3,5-Trimethylbenzene	19.48	105	100783	44.91	ppb		94
76) 2-Chlorotoluene	19.33	91	97173	42.97	ppb		95
77) 4-Chlorotoluene	19.55	91	110651	43.64	ppb		92
78) tert-Butylbenzene	20.15	119	84504	43.34	ppb		85
79) 1,2,4-Trimethylbenzene	20.25	105	100653	45.52	ppb		95
80) sec-Butylbenzene	20.60	105	139132	43.45	ppb		94
81) p-Isopropyltoluene	20.89	119	101804	43.54	ppb		93
82) 1,3-Dclbenz	20.85	146	67028	52.42	ppb		94
83) 1,4-Dclbenz	21.03	146	67336	51.72	ppb		93
84) n-Butylbenzene	21.72	91	111627	44.90	ppb		97

0058

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9196.D Vial: 9
Acq On : 9 Feb 100 1:49 pm Operator: HERRING
Sample : 50PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Soil Calibration Multiplr: 1.00
Quant Time: Feb 9 14:19 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85) 1,2-Dclbenz	21.80	146	68910	54.74	ppb	#	93
86) 1,2-Dibromo-3-chloropropan	23.38	157	12762	64.65	ppb	#	82
87) Nitrobenzene	23.81	77	8629	84.13	ppb		94
88) 1,2,4-Tcbenzene	25.11	180	45483	69.12	ppb		97
89) Hexachlorobt	25.46	225	30510	83.38	ppb	#	84
90) Naphthalen	25.64	128	106955	54.50	ppb		100
91) 1,2,3-Tclbenzene	26.17	180	45997	67.94	ppb		99

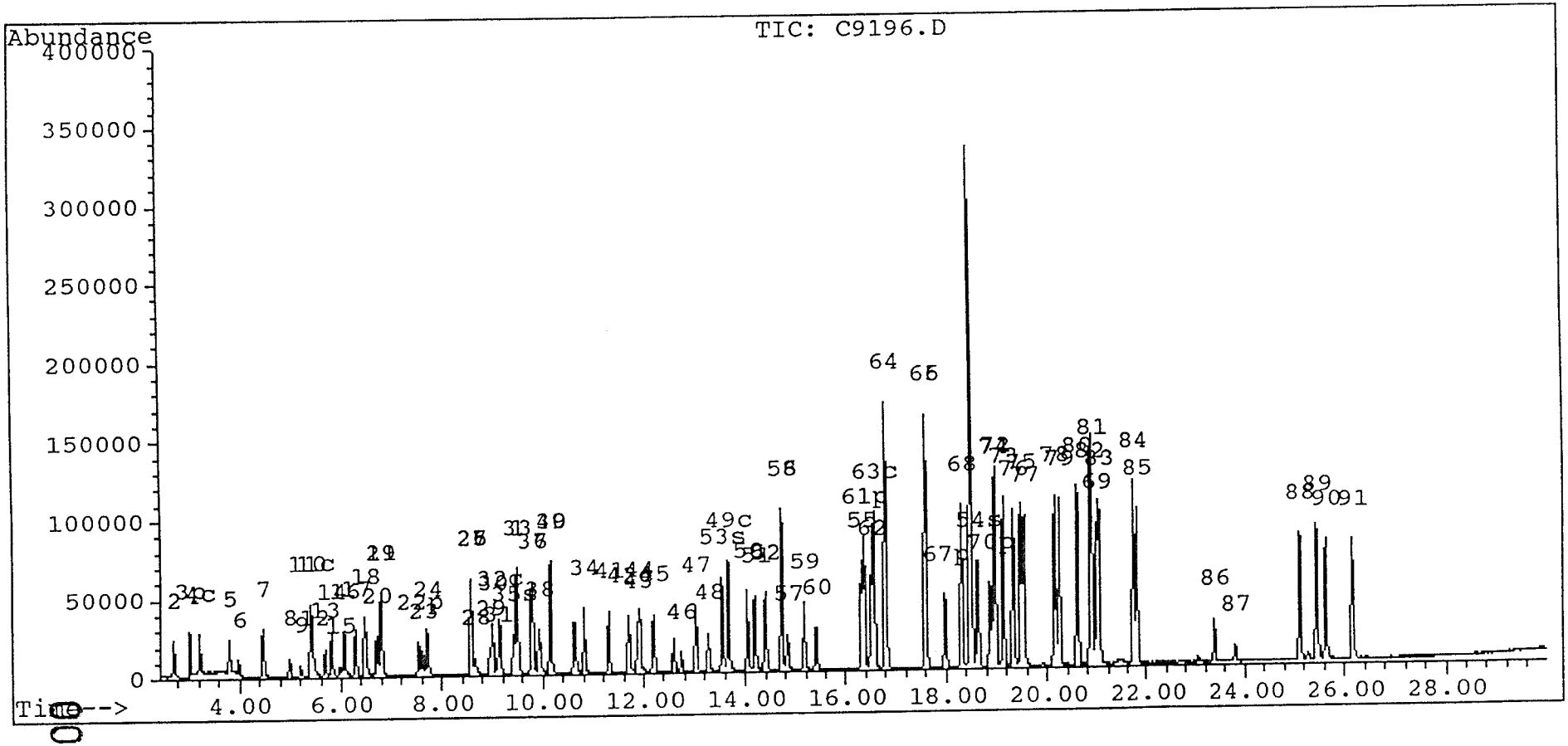
0059

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

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9196.D
Acq On : 9 Feb 100 1:49 pm
Sample : 50PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 14:19 19100

Vial: 9
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration



0909

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9197.D Vial: 10
Acq On : 9 Feb 100 2:26 pm Operator: HERRING
Sample : 100PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Soil Calibration Multiplr: 1.00
Quant Time: Feb 9 14:56 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.50	168	37902	50.00	ppb		0.05
34) 1,4-Difluorobenzene	10.83	114	43724	50.00	ppb		0.05
55) d5-Chlorobenze	16.31	117	56645	50.00	ppb		0.06
69) d4-1,4-Dichlorobenzene	20.98	152	40083	50.00	ppb		0.06
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.43	113	21811	65.60	ppb		131.19%
53) surr3,Toluene-d8	13.54	98	60705	57.80	ppb		115.59%
54) surr2,bfb	18.62	95	37022	74.98	ppb		149.95%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.71	85	61418	76.51	ppb		99
3) Chloromethane	3.02	50	50842	62.64	ppb		99
4) Vinyl Chloride	3.22	62	57887	92.12	ppb		96
5) Bromomethane	3.80	94	35172	119.35	ppb		99
6) Chloroethane	3.99	64	20157	52.89	ppb		93
7) Trichlorofluoromethane	4.48	101	83353	121.47	ppb		99
8) Diethyl Ether	5.00	59	19242	49.31	ppb		92
9) Acrolein	5.21	56	15320	252.52	ppb		93
10) FREON 113	5.43	85	15969	80.02	ppb		76
11) 1,1-Diclethene	5.42	96	24059	62.09	ppb	#	71
12) Acetone	5.49	43	31683	73.39	ppb	#	89
13) Iodomethane	5.69	142	49833	83.32	ppb		73
14) Carbon Disulfide	5.82	76	111125	54.97	ppb		100
15) Acetonitrile	5.98	39	4176	313.62	ppb	#	43
16) Allyl Chloride	6.07	76	12415	49.13	ppb		79
17) Methylene Chloride	6.29	84	32023	60.66	ppb		89
18) TBA	6.47	59	140616	1589.79	ppb		95
19) Methyl-t-Butyl Ether	6.79	73	75205	62.70	ppb		94
20) Acrylonitrile	6.70	53	49193	231.87	ppb	#	90
21) trans-1,2-Dichloroethene	6.79	96	22983	54.93	ppb		94
22) 1,1-Diclethane	7.54	63	59031	56.10	ppb	#	95
23) Vinyl Acetate	7.62	42	7164	60.40	ppb		90
24) 2-Chloro-1,3-butadiene	7.72	53	54489	64.70	ppb		88
25) 2,2-Dichloropropane	8.59	77	62436	84.34	ppb		92
26) 2-Butanone	8.59	43	22121	47.88	ppb		99
27) cis-1,2-Dichloroethene	8.59	96	29843	57.08	ppb		94
28) Propionitrile	8.67	54	24814	303.26	ppb		98
29) Methacrylonitrile	8.95	67	10647	45.76	ppb		98
30) Bromochloromethane	9.01	128	21003	67.44	ppb	#	75
31) Tetrahydrofuran	9.10	42	9304	35.70	ppb		90
32) Chloroform	9.14	83	71940	75.19	ppb		94
33) 1,1,1-Trichloroethane	9.49	97	66175	95.35	ppb	#	80
36) Carbontetrachloride	9.80	117	56909	161.44	ppb		99

0061

(#) = qualifier out of range (m) = manual integration
C9197.D SOIL0209.M Wed Feb 09 14:57:11 2000

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9197.D
Acq On : 9 Feb 100 2:26 pm
Sample : 100PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 14:56 19100

Vial: 10
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37) 1,1-Dichloropropene	9.79	75	38621	98.86	ppb		95
38) Iso-Butyl Alcohol	9.94	43	47302	1728.14	ppb		96
39) Benzene	10.16	78	96050	73.49	ppb		99
40) 1,2-Dichloroethane	10.17	62	85260	146.29	ppb	#	93
41) Trichloroethene	11.31	95	37001	109.58	ppb		95
42) 1,2-Diclpropane	11.71	63	30525	70.31	ppb		92
43) Methyl Methacrylate	11.89	69	28492	92.39	ppb		90
44) Dibromomethane	11.93	93	34120	128.95	ppb	#	87
45) Bromodichloromethane	12.20	83	65003	125.65	ppb		97
46) 2-Chloroethylvinyl Ether	12.73	63	15143	82.75	ppb	#	89
47) cis-1,3-Dichloropropene	13.03	75	59847	98.74	ppb		99
48) 4-Methyl-2-Pentanone	13.28	43	57537	80.54	ppb		97
49) Toluene	13.67	91	149828	103.74	ppb		97
50) trans-1,3-Dichloropropene	14.04	75	76737	121.65	ppb		94
51) Ethyl Methacrylate	14.19	69	69737	100.23	ppb		92
52) 1,1,2-Trichloroethane	14.40	83	32246	94.36	ppb		90
56) Tetrachloroethene	14.72	166	50120	139.97	ppb	#	87
57) 2-Hexanone	14.84	43	52892	76.39	ppb		98
58) 1,3-Dichloropropane	14.72	76	70509	85.19	ppb		91
59) Dibromochloromethane	15.17	129	67800	119.36	ppb		99
60) 1,2-Dibromoethane	15.41	107	52767	100.31	ppb		100
61) Chlorobenzene	16.36	112	117309	89.94	ppb		97
62) 1,1,1,2-Tetrachloroethane	16.51	131	54931	120.08	ppb	#	89
63) Ethylbenzene	16.56	91	224477	106.35	ppb		98
64) (m+p)Xylene	16.79	106	148425	194.03	ppb		83
65) o-Xylene	17.58	106	78705	99.29	ppb		83
66) Styrene	17.60	104	133591	100.42	ppb		85
67) Bromoform	17.98	173	66240	176.43	ppb		99
68) Isopropylbenzene	18.30	105	221042	115.78	ppb		95
70) 1,1,2,2-Tetrachloroethane	18.87	83	79245	63.65	ppb	#	93
71) 1,2,3-Trichloropropane	18.97	110	26438	86.17	ppb		89
72) Trans-1,4-Dichloro-2-Buten	18.98	53	33905	75.51	ppb		70
73) n-Propylbenzene	19.13	91	285924	73.04	ppb		100
74) Bromobenzene	18.94	156	70896	93.00	ppb	#	73
75) 1,3,5-Trimethylbenzene	19.48	105	184825	79.39	ppb		94
76) 2-Chlorotoluene	19.33	91	182287	77.70	ppb		98
77) 4-Chlorotoluene	19.54	91	208485	79.26	ppb		95
78) tert-Butylbenzene	20.15	119	156323	77.28	ppb		85
79) 1,2,4-Trimethylbenzene	20.25	105	187188	81.60	ppb		93
80) sec-Butylbenzene	20.60	105	255192	76.83	ppb		95
81) p-Isopropyltoluene	20.88	119	189862	78.28	ppb	#	92
82) 1,3-Dclbenz	20.85	146	124215	93.64	ppb		94
83) 1,4-Dclbenz	20.85	146	124011	91.83	ppb		95
84) n-Butylbenzene	21.72	91	207463	80.44	ppb		99

0062

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9197.D
Acq On : 9 Feb 100 2:26 pm
Sample : 100PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 14:56 19100

Vial: 10
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85)	1,2-Dclbenz	21.80	146	126529	96.89	ppb		92
86)	1,2-Dibromo-3-chloropropan	23.38	157	25995	126.93	ppb	#	82
87)	Nitrobenzene	23.81	77	18742	176.14	ppb	#	82
88)	1,2,4-Tcbenzene	25.11	180	86033	126.02	ppb		98
89)	Hexachlorobt	25.46	225	56219	148.10	ppb		89
90)	Naphthalen	25.64	128	205188	100.79	ppb		99
91)	1,2,3-Tclbenzene	26.17	180	86168	122.68	ppb		94

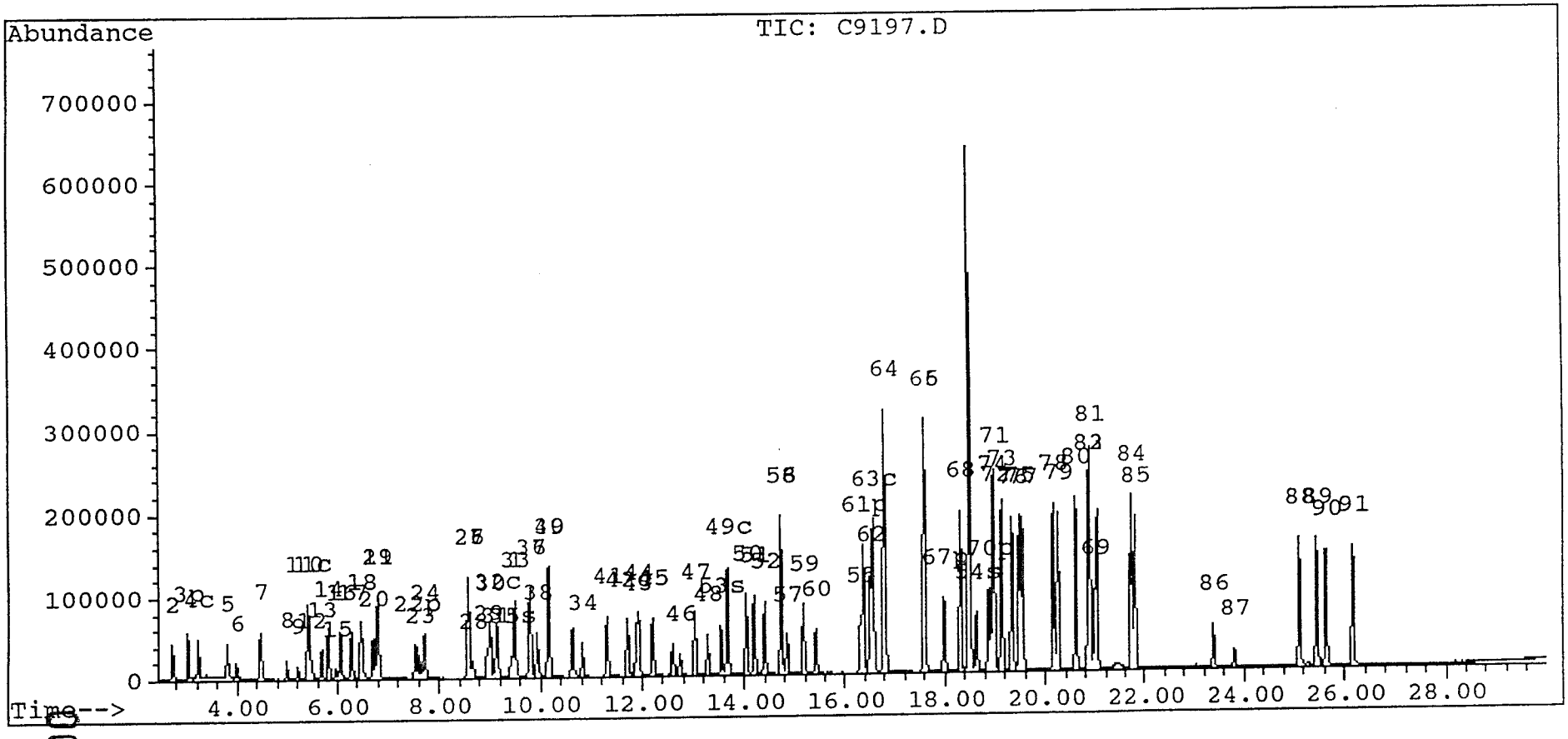
0063

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

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9197.D
Acq On : 9 Feb 100 2:26 pm
Sample : 100PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 14:56 19100

Vial: 10
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration



5064

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9198.D Vial: 11
Acq On : 9 Feb 100 3:04 pm Operator: HERRING
Sample : 150PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Soil Calibration Multiplr: 1.00
Quant Time: Feb 9 15:34 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.50	168	37763	50.00	ppb		0.05
34) 1,4-Difluorobenzene	10.83	114	45042	50.00	ppb		0.05
55) d5-Chlorobenze	16.31	117	59983	50.00	ppb		0.07
69) d4-1,4-Dichlorobenzene	20.98	152	40508	50.00	ppb		0.07
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.43	113	22317	65.15	ppb		130.31%
53) surr3,Toluene-d8	13.54	98	62749	58.00	ppb		115.99%
54) surr2,bfb	18.62	95	38689	76.06	ppb		152.12%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.71	85	95450	119.34	ppb		99
3) Chloromethane	3.02	50	83218	102.90	ppb		98
4) Vinyl Chloride	3.21	62	93942	150.04	ppb		99
5) Bromomethane	3.81	94	59243	201.77	ppb		98
6) Chloroethane	3.99	64	33664	88.66	ppb		92
7) Trichlorofluoromethane	4.47	101	144319	211.09	ppb		98
8) Diethyl Ether	4.99	59	31534	81.10	ppb		99
9) Acrolein	5.21	56	26538	439.04	ppb		99
10) FREON 113	5.42	85	27201	136.81	ppb		82
11) 1,1-Diclethene	5.42	96	42442	109.94	ppb		81
12) Acetone	5.48	43	49304	114.63	ppb	#	85
13) Iodomethane	5.68	142	80336	134.82	ppb		80
14) Carbon Disulfide	5.82	76	181893	90.31	ppb		99
15) Acetonitrile	5.97	39	7411	558.63	ppb	#	49
16) Allyl Chloride	6.07	76	21551	85.60	ppb		64
17) Methylene Chloride	6.29	84	51693	98.28	ppb		89
18) TBA	6.47	59	245477	2785.55	ppb		93
19) Methyl-t-Butyl Ether	6.79	73	126226	105.63	ppb	#	92
20) Acrylonitrile	6.70	53	81374	384.96	ppb	#	92
21) trans-1,2-Dichloroethene	6.80	96	39098	93.79	ppb		88
22) 1,1-Diclethane	7.54	63	100435	95.81	ppb		99
23) Vinyl Acetate	7.62	42	11956	101.17	ppb		85
24) 2-Chloro-1,3-butadiene	7.72	53	92900	110.71	ppb		87
25) 2,2-Dichloropropane	8.59	77	108167	146.65	ppb	#	90
26) 2-Butanone	8.58	43	38648	83.96	ppb		99
27) cis-1,2-Dichloroethene	8.58	96	48346	92.80	ppb		88
28) Propionitrile	8.67	54	42006	515.26	ppb		98
29) Methacrylonitrile	8.96	67	18027	77.76	ppb		90
30) Bromochloromethane	9.01	128	36012	116.05	ppb	#	79
31) Tetrahydrofuran	9.10	42	16279	62.69	ppb		89
32) Chloroform	9.15	83	118670	124.49	ppb		96
33) 1,1,1-Trichloroethane	9.50	97	119252	172.46	ppb	#	70
36) Carbontetrachloride	9.81	117	104727	288.40	ppb		98

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9198.D
Acq On : 9 Feb 100 3:04 pm
Sample : 150PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 15:34 19100

Vial: 11
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37) 1,1-Dichloropropene	9.79	75	66442	165.09	ppb		94
38) Iso-Butyl Alcohol	9.94	43	77199	2737.88	ppb		99
39) Benzene	10.16	78	157717	117.15	ppb		99
40) 1,2-Dichloroethane	10.17	62	141319	235.39	ppb	#	93
41) Trichloroethene	11.32	95	63393	182.24	ppb		95
42) 1,2-Diclpropane	11.70	63	51262	114.61	ppb		100
43) Methyl Methacrylate	11.88	69	47793	150.45	ppb		93
44) Dibromomethane	11.92	93	56930	208.87	ppb		88
45) Bromodichloromethane	12.20	83	116583	218.75	ppb	#	97
46) 2-Chloroethylvinyl Ether	12.73	63	25616	135.89	ppb	#	90
47) cis-1,3-Dichloropropene	13.02	75	102240	163.75	ppb		96
48) 4-Methyl-2-Pentanone	13.28	43	95104	129.23	ppb		96
49) Toluene	13.67	91	255457	171.70	ppb		99
50) trans-1,3-Dichloropropene	14.04	75	129891	199.88	ppb		92
51) Ethyl Methacrylate	14.19	69	118347	165.11	ppb		90
52) 1,1,2-Trichloroethane	14.40	83	54942	156.08	ppb		95
56) Tetrachloroethene	14.72	166	87370	230.42	ppb		88
57) 2-Hexanone	14.84	43	86141	117.48	ppb		100
58) 1,3-Dichloropropane	14.72	76	119832	136.72	ppb		95
59) Dibromochloromethane	15.17	129	114720	190.72	ppb		99
60) 1,2-Dibromoethane	15.41	107	90192	161.91	ppb		97
61) Chlorobenzene	16.36	112	203535	147.37	ppb		97
62) 1,1,1,2-Tetrachloroethane	16.50	131	95680	197.52	ppb	#	87
63) Ethylbenzene	16.56	91	382038	170.93	ppb		96
64) (m+p)Xylene	16.79	106	255015	314.82	ppb		74
65) o-Xylene	17.58	106	134835	160.64	ppb		75
66) Styrene	17.60	104	226868	161.04	ppb		88
67) Bromoform	17.98	173	113094	284.47	ppb		96
68) Isopropylbenzene	18.31	105	380121	188.03	ppb		95
70) 1,1,2,2-Tetrachloroethane	18.87	83	133233	105.90	ppb	#	95
71) 1,2,3-Trichloropropane	18.98	110	44772	144.40	ppb		95
72) Trans-1,4-Dichloro-2-Buten	18.98	53	58383	128.66	ppb		74
73) n-Propylbenzene	19.13	91	493440	124.73	ppb		97
74) Bromobenzene	18.95	156	121332	157.49	ppb	#	70
75) 1,3,5-Trimethylbenzene	19.48	105	322765	137.18	ppb		93
76) 2-Chlorotoluene	19.33	91	312874	131.96	ppb		95
77) 4-Chlorotoluene	19.55	91	359158	135.11	ppb		96
78) tert-Butylbenzene	20.15	119	274785	134.42	ppb		85
79) 1,2,4-Trimethylbenzene	20.24	105	325196	140.28	ppb		91
80) sec-Butylbenzene	20.60	105	437347	130.29	ppb		95
81) p-Isopropyltoluene	20.88	119	327774	133.73	ppb	#	93
82) 1,3-Dclbenz	20.85	146	211969	158.12	ppb		95
83) 1,4-Dclbenz	21.03	146	216426	158.58	ppb		93
84) n-Butylbenzene	21.72	91	356557	136.80	ppb		97

0066

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9198.D Vial: 11
Acq On : 9 Feb 100 3:04 pm Operator: HERRING
Sample : 150PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Soil Calibration Multiplr: 1.00
Quant Time: Feb 9 15:34 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85)	1,2-Dclbenz	21.80	146	212804	161.24	ppb		93
86)	1,2-Dibromo-3-chloropropan	23.39	157	42817	206.88	ppb	#	81
87)	Nitrobenzene	23.80	77	34689	322.58	ppb	#	83
88)	1,2,4-Tcbenzene	25.12	180	139553	202.28	ppb		99
89)	Hexachlorobt	25.46	225	97677	254.62	ppb		87
90)	Naphthalen	25.64	128	349735	170.00	ppb		98
91)	1,2,3-Tclbenzene	26.17	180	147475	207.76	ppb		95

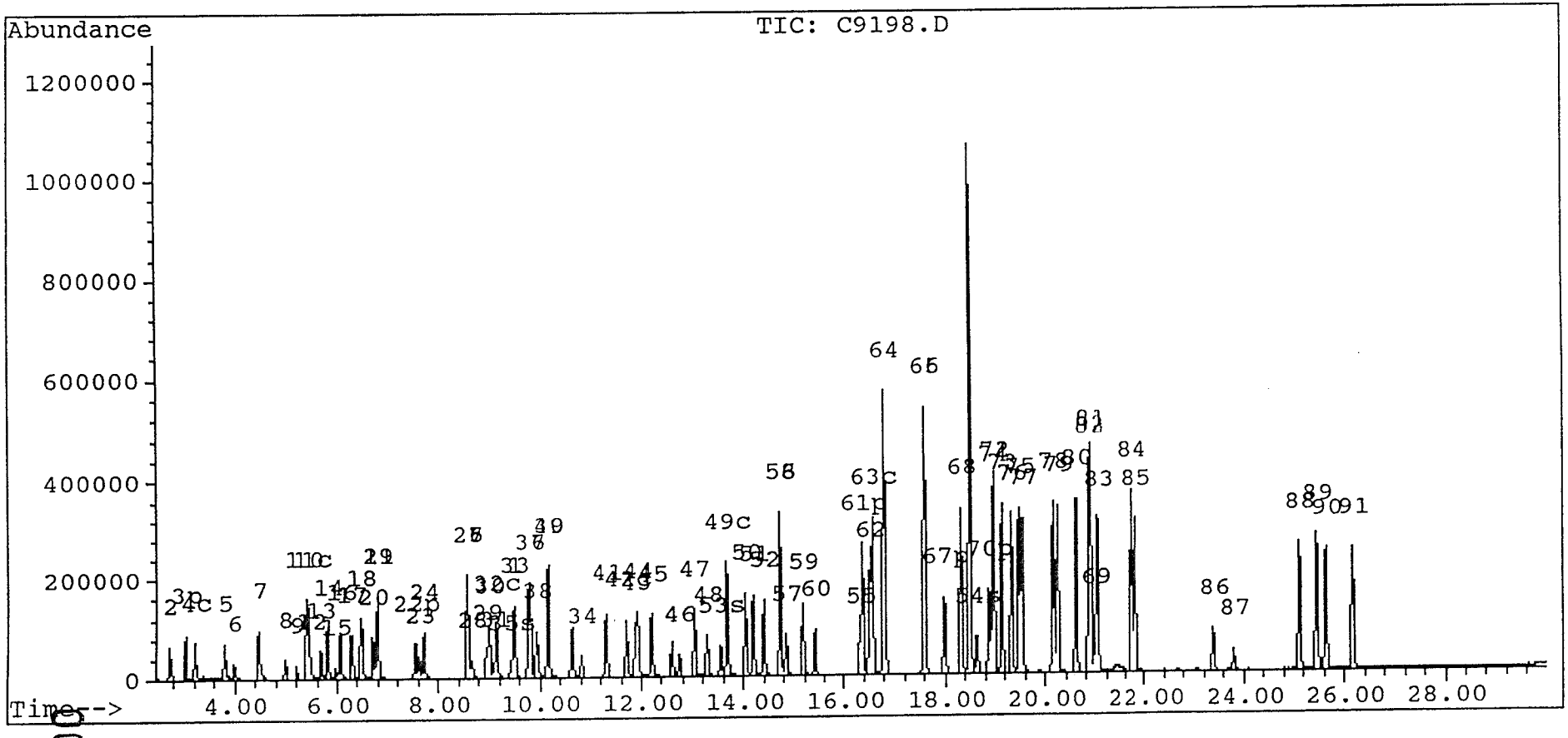
0067

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

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9198.D
Acq On : 9 Feb 100 3:04 pm
Sample : 150PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 15:34 19100

Vial: 11
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration



0068

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9199.D Vial: 12
Acq On : 9 Feb 100 3:41 pm Operator: HERRING
Sample : 200PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Soil Calibration Multiplr: 1.00
Quant Time: Feb 9 19:55 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Thu Feb 10 11:40:56 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.50	168	42240	50.00	ppb		0.05
34) 1,4-Difluorobenzene	10.83	114	49984	50.00	ppb		0.05
55) d5-Chlorobenze	16.30	117	65936	50.00	ppb		0.06
69) d4-1,4-Dichlorobenzene	20.98	152	43295	50.00	ppb		0.06
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.43	113	25154	66.18	ppb		132.35%
53) surr3,Toluene-d8	13.55	98	71286	59.37	ppb		118.74%
54) surr2,bfb	18.62	95	41428	73.39	ppb		146.78%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.72	85	126083	140.93	ppb		98
3) Chloromethane	3.02	50	116164	128.42	ppb		97
4) Vinyl Chloride	3.22	62	131500	187.77	ppb		98
5) Bromomethane	3.80	94	85303	259.73	ppb		97
6) Chloroethane	3.99	64	48835	114.98	ppb		99
7) Trichlorofluoromethane	4.48	101	198209	259.19	ppb		99
8) Diethyl Ether	4.99	59	46487	106.89	ppb		99
9) Acrolein	5.21	56	36497	539.80	ppb		97
10) FREON 113	5.43	85	36855	165.71	ppb		78
11) 1,1-Diclethene	5.42	96	65293	151.21	ppb		82
12) Acetone	5.48	43	62740	130.40	ppb	#	90
13) Iodomethane	5.69	142	113450	170.21	ppb		82
14) Carbon Disulfide	5.82	76	269173	119.48	ppb		99
15) Acetonitrile	5.97	39	9268	624.56	ppb	#	48
16) Allyl Chloride	6.07	76	32271	114.60	ppb		69
17) Methylene Chloride	6.29	84	76149	129.43	ppb		87
18) TBA	6.47	59	311924	3164.40	ppb		98
19) Methyl-t-Butyl Ether	6.79	73	184303	137.89	ppb	#	94
20) Acrylonitrile	6.70	53	111867	473.13	ppb	#	89
21) trans-1,2-Dichloroethene	6.79	96	59153	126.85	ppb		96
22) 1,1-Diclethane	7.54	63	147582	125.86	ppb	#	97
23) Vinyl Acetate	7.62	42	17969	135.94	ppb		92
24) 2-Chloro-1,3-butadiene	7.72	53	137289	146.27	ppb		91
25) 2,2-Dichloropropane	8.59	77	157459	190.85	ppb		92
26) 2-Butanone	8.58	43	51731	100.47	ppb		99
27) cis-1,2-Dichloroethene	8.58	96	73703	126.48	ppb		92
28) Propionitrile	8.67	54	56647	621.20	ppb		97
29) Methacrylonitrile	8.96	67	25432	98.08	ppb		95
30) Bromochloromethane	9.01	128	51267	147.70	ppb	#	79
31) Tetrahydrofuran	9.10	42	21843	75.20	ppb		93
32) Chloroform	9.15	83	175401	164.50	ppb		99
33) 1,1,1-Trichloroethane	9.50	97	171840	222.17	ppb	#	67
36) Carbontetrachloride	9.81	117	149764	371.65	ppb		97

0069

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9199.D
Acq On : 9 Feb 100 3:41 pm
Sample : 200PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 19:55 19100

Vial: 12
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Thu Feb 10 11:40:56 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue	
37) 1,1-Dichloropropene	9.79	75	96111	215.20	ppb		96	
38) Iso-Butyl Alcohol	9.94	43	103443	3305.91	ppb		98	
39) Benzene	10.16	78	227323	152.15	ppb		98	
40) 1,2-Dichloroethane	10.17	62	205769	308.85	ppb	#	94	
41) Trichloroethene	11.31	95	88838	230.14	ppb		94	
42) 1,2-Diclpropane	11.71	63	76917	154.97	ppb		100	
43) Methyl Methacrylate	11.88	69	67802	192.33	ppb		97	
44) Dibromomethane	11.92	93	81563	269.66	ppb	#	89	
45) Bromodichloromethane	12.20	83	169648	286.85	ppb	#	99	
46) 2-Chloroethylvinyl Ether	12.73	63	36792	175.87	ppb		94	
47) cis-1,3-Dichloropropene	13.02	75	150587	217.34	ppb		100	
48) 4-Methyl-2-Pentanone	13.28	43	132158	161.82	ppb		94	
49) Toluene	13.67	91	356879	216.15	ppb		99	
50) trans-1,3-Dichloropropene	14.05	75	187182	259.57	ppb		94	
51) Ethyl Methacrylate	14.20	69	169991	213.71	ppb		89	
52) 1,1,2-Trichloroethane	14.40	83	78943	202.08	ppb		94	
56) Tetrachloroethene	14.72	166	118978	285.45	ppb	#	87	
57) 2-Hexanone	14.84	43	114825	142.47	ppb		97	
58) 1,3-Dichloropropane	14.72	76	168695	175.09	ppb		91	
59) Dibromochloromethane	15.17	129	163090	246.66	ppb		100	
60) 1,2-Dibromoethane	15.41	107	131422	214.62	ppb		100	
61) Chlorobenzene	16.36	112	278795	183.63	ppb		97	
62) 1,1,1,2-Tetrachloroethane	16.50	131	134677	252.93	ppb	#	88	
63) Ethylbenzene	16.56	91	527763	214.80	ppb		95	
64) (m+p)Xylene	16.78	106	340378	382.26	ppb		75	
65) o-Xylene	17.57	106	182686	198.00	ppb		78	
66) Styrene	17.59	104	310630	200.59	ppb	#	84	
67) Bromoform	17.98	173	154661	353.90	ppb	m	0	RJH
68) Isopropylbenzene	18.30	105	506483	227.91	ppb		95	
70) 1,1,2,2-Tetrachloroethane	18.87	83	179195	133.26	ppb	#	93	
71) 1,2,3-Trichloropropane	18.97	110	59507	179.57	ppb		93	
72) Trans-1,4-Dichloro-2-Buten	18.98	53	76041	156.79	ppb		72	
73) n-Propylbenzene	19.13	91	637026	150.66	ppb		99	
74) Bromobenzene	18.94	156	164333	199.57	ppb	#	71	
75) 1,3,5-Trimethylbenzene	19.48	105	431639	171.65	ppb		93	
76) 2-Chlorotoluene	19.33	91	414437	163.54	ppb		96	
77) 4-Chlorotoluene	19.54	91	480857	169.25	ppb		94	
78) tert-Butylbenzene	20.15	119	363375	166.32	ppb		86	
79) 1,2,4-Trimethylbenzene	20.25	105	436364	176.12	ppb		93	
80) sec-Butylbenzene	20.60	105	577431	160.95	ppb		95	
81) p-Isopropyltoluene	20.89	119	441455	168.51	ppb		95	
82) 1,3-Dclbenz	20.86	146	279962	195.39	ppb		95	
83) 1,4-Dclbenz	21.03	146	285120	195.46	ppb		93	
84) n-Butylbenzene	21.73	91	465528	167.11	ppb		98	

0070

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9199.D Vial: 12
Acq On : 9 Feb 100 3:41 pm Operator: HERRING
Sample : 200PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Soil Calibration Multiplr: 1.00
Quant Time: Feb 9 19:55 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Thu Feb 10 11:40:56 2000
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85)	1,2-Dclbenz	21.80	146	283450	200.95	ppb		93
86)	1,2-Dibromo-3-chloropropan	23.38	157	55539	251.07	ppb	#	81
87)	Nitrobenzene	23.80	77	46974	408.71	ppb	#	84
88)	1,2,4-Tcbenzene	25.12	180	195144	264.65	ppb		99
89)	Hexachlorobt	25.46	225	126124	307.61	ppb		88
90)	Naphthalen	25.64	128	471337	214.36	ppb		99
91)	1,2,3-Tclbenzene	26.17	180	197874	260.82	ppb		97

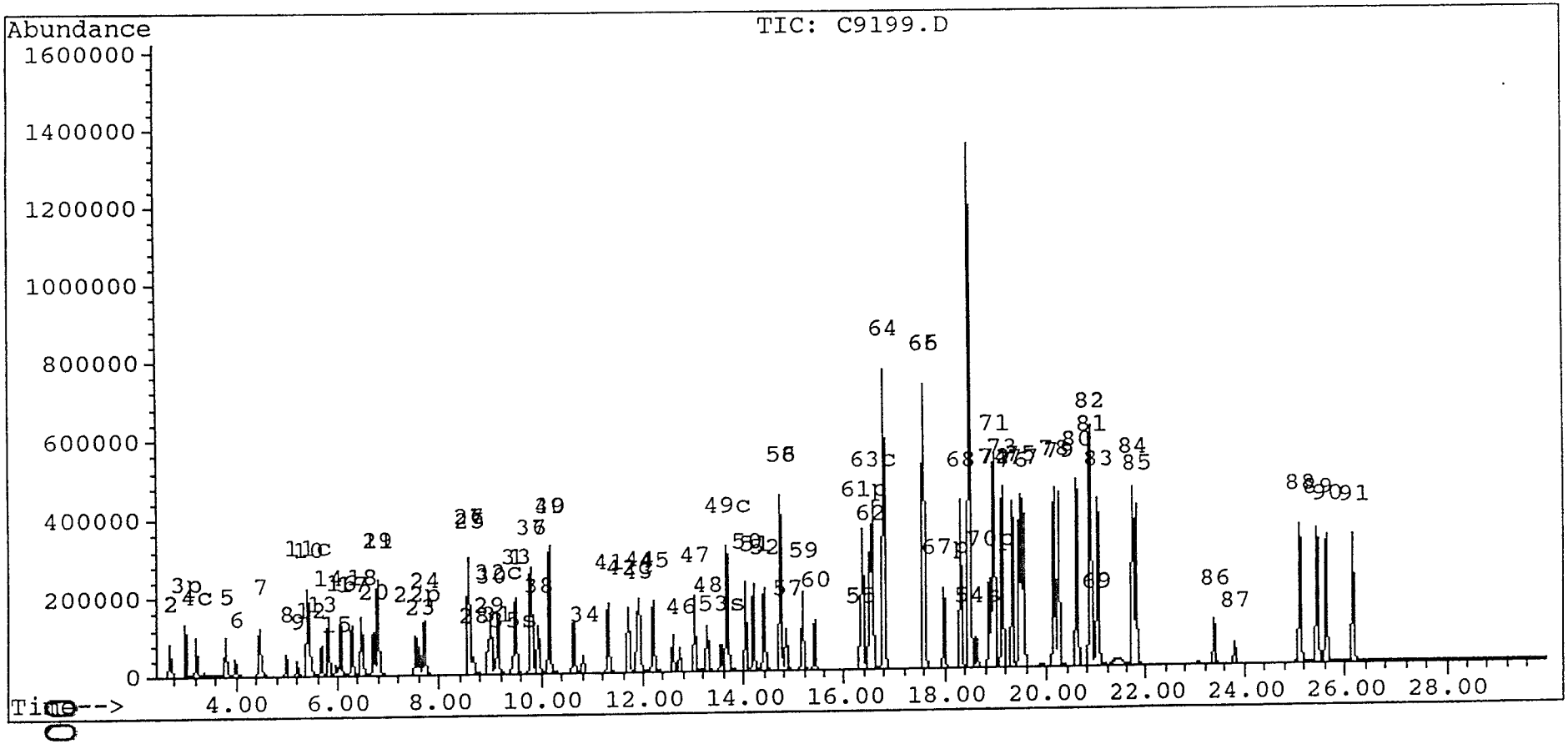
0071

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

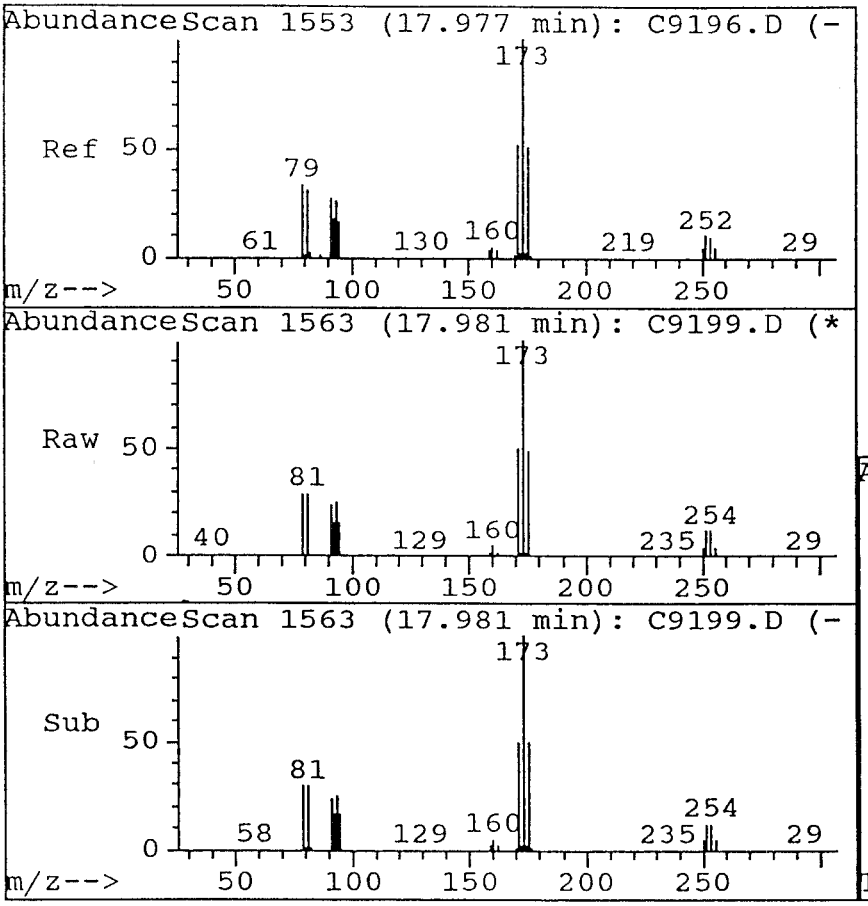
Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9199.D
Acq On : 9 Feb 100 3:41 pm
Sample : 200PPB
Misc : 5035 by 8260B Initial Soil Calibration
Quant Time: Feb 9 19:55 19100

Vial: 12
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Thu Feb 10 11:40:56 2000
Response via : Multiple Level Calibration



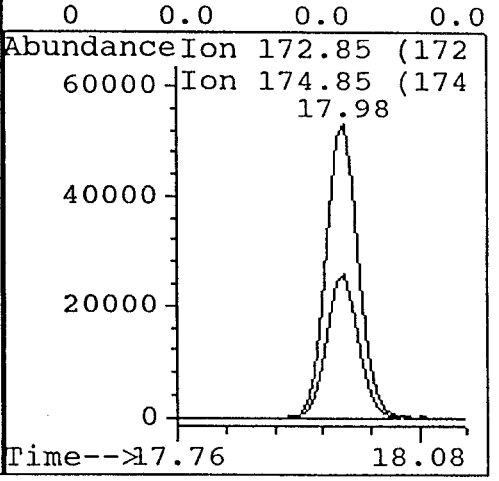
0072



#67
Bromoform
Concen: 353.90 ppb m
RT: 17.98 min Scan# 1563
Delta R.T. 0.06 min
Lab File: C9199.D
Acq: 9 Feb 100 3:41 pm

Tgt Ion:172.85 Resp: 154661

Ion	Ratio	Lower	Upper
173	100		
175	49.0	41.1	61.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0



RJH

0073

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9593.D
Acq On : 9 Mar 100 10:47 am
Sample : CCV
Misc :

Vial: 4
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
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		Pentafluorobenzene	1.000	1.000	0.0	75	0.01
2		Dichlorodifluoromethane	0.858	0.970	-13.0	84	0.02
3	p	Chloromethane	0.723	0.767	-6.1	78	0.01
4	c	Vinyl Chloride	0.812	0.968	-19.2	88	0.01
5		Bromomethane	0.479	0.608	-26.8#	99	0.01
6		Chloroethane	0.287	0.287	-0.0	78	0.01
7		Trichlorofluoromethane	1.123	1.352	-20.5	95	0.02
8		Diethyl Ether	0.273	0.262	3.9	74	0.02
9		Acrolein	0.042	0.047	-12.6	89	0.02
10		FREON 113	0.236	0.276	-17.1	95	0.02
11	c	1,1-Diclethene	0.350	0.370	-5.8	91	0.01
12		Acetone	0.411	0.512	-24.6	87	0.01
13		Iodomethane	0.631	0.765	-21.2	96	0.01
		Carbon Disulfide	1.482	1.534	-3.5	86	0.02
		Acetonitrile	0.011	0.008	32.0#	43#	0.02
16		Allyl Chloride	0.175	0.191	-9.4	83	0.00
17		Methylene Chloride	0.454	0.456	-0.5	76	0.02
18		TBA	0.095	0.100	-4.6	75	0.03
19		Methyl-t-Butyl Ether	1.082	1.087	-0.4	75	0.02
20		Acrylonitrile	0.130	0.132	-1.2	73	0.02
21		trans-1,2-Dichloroethene	0.348	0.345	1.1	78	0.02
22	p	1,1-Diclethane	0.837	0.857	-2.3	79	0.03
23		Vinyl Acetate	0.111	0.125	-11.8	82	0.02
24		2-Chloro-1,3-butadiene	0.788	0.823	-4.6	81	0.01
25		2,2-Dichloropropane	0.893	0.936	-4.8	84	0.03
26		2-Butanone	0.305	0.347	-13.6	83	0.03
27		cis-1,2-Dichloroethene	0.411	0.397	3.6	75	0.02
28		Propionitrile	0.054	0.055	-0.7	71	0.03
29		Methacrylonitrile	0.148	0.146	1.5	73	0.01
30		Bromochloromethane	0.289	0.305	-5.5	80	0.01
31		Tetrahydrofuran	0.145	0.153	-5.5	72	0.03
32	c	Chloroform	1.025	1.077	-5.1	80	0.02
33		1,1,1-Trichloroethane	0.976	1.010	-3.5	82	0.02
34		1,4-Difluorobenzene	1.000	1.000	0.0	75	0.02
35	s	surr4,Dibrflmethane	0.491	0.529	-7.8	82	0.01
36		Carbontetrachloride	0.739	0.796	-7.7	85	0.02
37		1,1-Dichloropropene	0.495	0.498	-0.6	82	0.01
		Iso-Butyl Alcohol	0.026	0.027	-3.3	76	0.01
		Benzene	1.192	1.129	5.2	74	0.01
		1,2-Dichloroethane	1.003	1.048	-4.5	80	0.01
41		Trichloroethene	0.457	0.465	-1.7	77	0.01

0074

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9593.D Vial: 4
Acq On : 9 Mar 100 10:47 am Operator: HERRING
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
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)
42	c	1,2-Diclpropane	0.376	0.346	7.9	71	0.03
43		Methyl Methacrylate	0.328	0.320	2.2	76	0.02
44		Dibromomethane	0.401	0.413	-2.9	79	0.02
45		Bromodichloromethane	0.818	0.784	4.2	76	0.02
46		2-Chloroethylvinyl Ether	0.170	0.158	7.0	72	0.02
47		cis-1,3-Dichloropropene	0.733	0.721	1.7	76	0.01
48		4-Methyl-2-Pentanone	0.650	0.670	-3.1	80	0.02
49	c	Toluene	1.864	1.914	-2.7	78	0.02
50		trans-1,3-Dichloropropene	0.912	0.909	0.3	74	0.02
51		Ethyl Methacrylate	0.799	0.840	-5.2	79	0.02
52		1,1,2-Trichloroethane	0.401	0.404	-0.6	76	0.01
53	s	surr3,Toluene-d8	1.383	1.325	4.2	73	0.02
54	s	surr2,bfb	0.828	0.801	3.3	72	0.02
		d5-Chlorobenze	1.000	1.000	0.0	74	0.02
56		Tetrachloroethene	0.494	0.545	-10.3	86	0.02
57		2-Hexanone	0.432	0.503	-16.4	84	0.02
58		1,3-Dichloropropane	0.662	0.670	-1.3	78	0.02
59		Dibromochloromethane	0.634	0.645	-1.8	77	0.02
60		1,2-Dibromoethane	0.498	0.511	-2.5	77	0.02
61	p	Chlorobenzene	1.134	1.204	-6.1	79	0.03
62		1,1,1,2-Tetrachloroethane	0.531	0.533	-0.5	77	0.02
63	c	Ethylbenzene	2.176	2.287	-5.1	78	0.02
64		(m+p)Xylene	0.732	0.774	-5.7	79	0.02
65		o-Xylene	0.770	0.826	-7.3	80	0.03
66		Styrene	1.272	1.381	-8.6	81	0.03
67	p	Bromoform	0.614	0.635	-3.3	78	0.02
68		Isopropylbenzene	2.100	2.316	-10.3	80	0.02
69		d4-1,4-Dichlorobenzene	1.000	1.000	0.0	74	0.03
70	p	1,1,2,2-Tetrachloroethane	1.096	1.130	-3.1	76	0.03
71		1,2,3-Trichloropropane	0.358	0.361	-0.8	77	0.02
72		Trans-1,4-Dichloro-2-Butene	0.447	0.486	-8.6	80	0.02
73		n-Propylbenzene	4.045	4.432	-9.6	81	0.02
74		Bromobenzene	0.994	1.033	-4.0	79	0.02
75		1,3,5-Trimethylbenzene	2.611	2.857	-9.4	81	0.03
76		2-Chlorotoluene	2.555	2.744	-7.4	81	0.03
77		4-Chlorotoluene	2.859	3.202	-12.0	83	0.02
78		tert-Butylbenzene	2.203	2.397	-8.8	81	0.02
		1,2,4-Trimethylbenzene	2.602	2.930	-12.6	83	0.03
80		sec-Butylbenzene	3.552	3.984	-12.2	82	0.02
81		p-Isopropyltoluene	2.624	3.097	-18.0	87	0.02

0075

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9593.D Vial: 4
Acq On : 9 Mar 100 10:47 am Operator: HERRING
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
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)
82	1,3-Dclbenz	1.770	1.970	-11.3	84	0.03
83	1,4-Dclbenz	1.782	1.957	-9.9	83	0.03
84	n-Butylbenzene	2.837	3.420	-20.6	88	0.02
85	1,2-Dclbenz	1.771	1.899	-7.2	79	0.03
86	1,2-Dibromo-3-chloropropane	0.332	0.353	-6.2	79	0.03
87	Nitrobenzene	0.113	0.113	-0.4	75	0.03
88	1,2,4-Tcbenzene	1.154	1.324	-14.7	83	0.02
89	Hexachlorobt	0.794	0.921	-15.9	86	0.02
90	Naphthalen	2.695	2.909	-8.0	78	0.02
91	1,2,3-Tclbenzene	1.188	1.323	-11.3	82	0.02
92	TOTAL XYLENE	0.000	0.000	0.0	0#	-0.70#

0076

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9593.D Vial: 4
Acq On : 9 Mar 100 10:47 am Operator: HERRING
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Mar 9 11:17 19100

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.52	168	27500	50.00	ppb		0.01
34) 1,4-Difluorobenzene	10.85	114	32836	50.00	ppb		0.02
55) d5-Chlorobenze	16.33	117	41185	50.00	ppb		0.02
69) d4-1,4-Dichlorobenzene	21.01	152	28584	50.00	ppb		0.03
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.45	113	17379	53.92	ppb		107.84%
53) surr3,Toluene-d8	13.56	98	43494	47.89	ppb		95.78%
54) surr2,bfb	18.65	95	26308	48.37	ppb		96.74%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.73	85	26665	56.51	ppb		97
3) Chloromethane	3.04	50	21104	53.07	ppb		97
4) Vinyl Chloride	3.23	62	26620	59.59	ppb		96
5) Bromomethane	3.83	94	16714	63.40	ppb		96
6) Chloroethane	4.01	64	7901	50.02	ppb		94
7) Trichlorofluoromethane	4.50	101	37190	60.23	ppb		98
8) Diethyl Ether	5.02	59	7210	48.05	ppb		89
9) Acrolein	5.23	56	6460	281.50	ppb		99
10) FREON 113	5.46	85	7593	58.56	ppb		79
11) 1,1-Diclethene	5.44	96	10188	52.92	ppb		99
12) Acetone	5.51	43	14091	62.30	ppb		98
13) Iodomethane	5.71	142	21044	60.62	ppb		93
14) Carbon Disulfide	5.85	76	42196	51.77	ppb		98
15) Acetonitrile	6.00	39	1074	169.98	ppb		100
16) Allyl Chloride	6.09	76	5266	54.70	ppb		87
17) Methylene Chloride	6.31	84	12550	50.24	ppb		95
18) TBA	6.50	59	54898	1046.34	ppb		99
19) Methyl-t-Butyl Ether	6.81	73	29879	50.21	ppb		99
20) Acrylonitrile	6.72	53	18120	253.01	ppb		89
21) trans-1,2-Dichloroethene	6.82	96	9474	49.44	ppb		89
22) 1,1-Diclethane	7.57	63	23557	51.15	ppb		94
23) Vinyl Acetate	7.65	42	3426	55.88	ppb	#	70
24) 2-Chloro-1,3-butadiene	7.74	53	22646	52.28	ppb		97
25) 2,2-Dichloropropane	8.61	77	25737	52.38	ppb		95
26) 2-Butanone	8.61	43	9539	56.78	ppb	#	86
27) cis-1,2-Dichloroethene	8.61	96	10910	48.22	ppb		95
28) Propionitrile	8.70	54	9023	302.22	ppb	#	91
29) Methacrylonitrile	8.98	67	4017	49.27	ppb		96
30) Bromochloromethane	9.03	128	8394	52.77	ppb		93
31) Tetrahydrofuran	9.13	42	4197	52.75	ppb	#	87
32) Chloroform	9.17	83	29606	52.54	ppb		94
33) 1,1,1-Trichloroethane	9.52	97	27778	51.76	ppb		100
36) Carbontetrachloride	9.83	117	26138	53.85	ppb		95

0077

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9593.D
Acq On : 9 Mar 100 10:47 am
Sample : CCV
Misc :
Quant Time: Mar 9 11:17 19100

Vial: 4
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37) 1,1-Dichloropropene	9.81	75	16358	50.30	ppb		97
38) Iso-Butyl Alcohol	9.95	43	17519	1033.46	ppb		94
39) Benzene	10.18	78	37087	47.39	ppb		96
40) 1,2-Dichloroethane	10.19	62	34423	52.24	ppb		99
41) Trichloroethene	11.34	95	15271	50.87	ppb		99
42) 1,2-Diclpropane	11.74	63	11354	46.03	ppb		100
43) Methyl Methacrylate	11.91	69	10523	48.90	ppb		97
44) Dibromomethane	11.95	93	13549	51.44	ppb		97
45) Bromodichloromethane	12.23	83	25730	47.90	ppb		96
46) 2-Chloroethylvinyl Ether	12.75	63	5177	46.50	ppb	#	88
47) cis-1,3-Dichloropropene	13.04	75	23670	49.16	ppb		92
48) 4-Methyl-2-Pentanone	13.30	43	22008	51.53	ppb		98
49) Toluene	13.69	91	62839	51.34	ppb		94
50) trans-1,3-Dichloropropene	14.07	75	29852	49.86	ppb		99
51) Ethyl Methacrylate	14.22	69	27579	52.58	ppb		98
52) 1,1,2-Trichloroethane	14.42	83	13262	50.32	ppb		90
56) Tetrachloroethene	14.74	166	22445	55.14	ppb		99
57) 2-Hexanone	14.86	43	20707	58.20	ppb		92
58) 1,3-Dichloropropane	14.74	76	27593	50.63	ppb		97
59) Dibromochloromethane	15.19	129	26554	50.88	ppb		96
60) 1,2-Dibromoethane	15.43	107	21031	51.24	ppb		99
61) Chlorobenzene	16.39	112	49592	53.07	ppb		98
62) 1,1,1,2-Tetrachloroethane	16.53	131	21955	50.23	ppb		94
63) Ethylbenzene	16.59	91	94201	52.56	ppb		97
64) (m+p)Xylene	16.82	106	63723	105.73	ppb		97
65) o-Xylene	17.60	106	34037	53.66	ppb		87
66) Styrene	17.62	104	56887	54.31	ppb		98
67) Bromoform	18.01	173	26144	51.67	ppb		92
68) Isopropylbenzene	18.33	105	95394	55.15	ppb		97
70) 1,1,2,2-Tetrachloroethane	18.90	83	32287	51.54	ppb		99
71) 1,2,3-Trichloropropane	19.00	110	10322	50.39	ppb		100
72) Trans-1,4-Dichloro-2-Buten	19.00	53	13881	54.31	ppb		92
73) n-Propylbenzene	19.16	91	126696	54.79	ppb		96
74) Bromobenzene	18.97	156	29533	51.99	ppb		92
75) 1,3,5-Trimethylbenzene	19.51	105	81655	54.71	ppb		97
76) 2-Chlorotoluene	19.36	91	78434	53.70	ppb		100
77) 4-Chlorotoluene	19.57	91	91529	56.00	ppb		98
78) tert-Butylbenzene	20.18	119	68505	54.41	ppb		98
79) 1,2,4-Trimethylbenzene	20.28	105	83748	56.31	ppb		98
80) sec-Butylbenzene	20.62	105	113881	56.08	ppb		97
81) p-Isopropyltoluene	20.91	119	88525	59.00	ppb		99
82) 1,3-Dclbenz	20.88	146	56322	55.66	ppb		97
83) 1,4-Dclbenz	21.06	146	55944	54.93	ppb		97
84) n-Butylbenzene	21.75	91	97767	60.28	ppb		98

0078

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9593.D
Acq On : 9 Mar 100 10:47 am
Sample : CCV
Misc :
Quant Time: Mar 9 11:17 19100

Vial: 4
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) 1,2-Dclbenz	21.83	146	54285	53.62	ppb	97
86) 1,2-Dibromo-3-chloropropan	23.41	157	10077	53.08	ppb	98
87) Nitrobenzene	23.84	77	6486	100.42	ppb	94
88) 1,2,4-Tcbenzene	25.15	180	37838	57.34	ppb	97
89) Hexachlorobt	25.49	225	26317	57.94	ppb	90
90) Naphthalen	25.67	128	83163	53.98	ppb	100
91) 1,2,3-Tclbenzene	26.21	180	37815	55.66	ppb	97

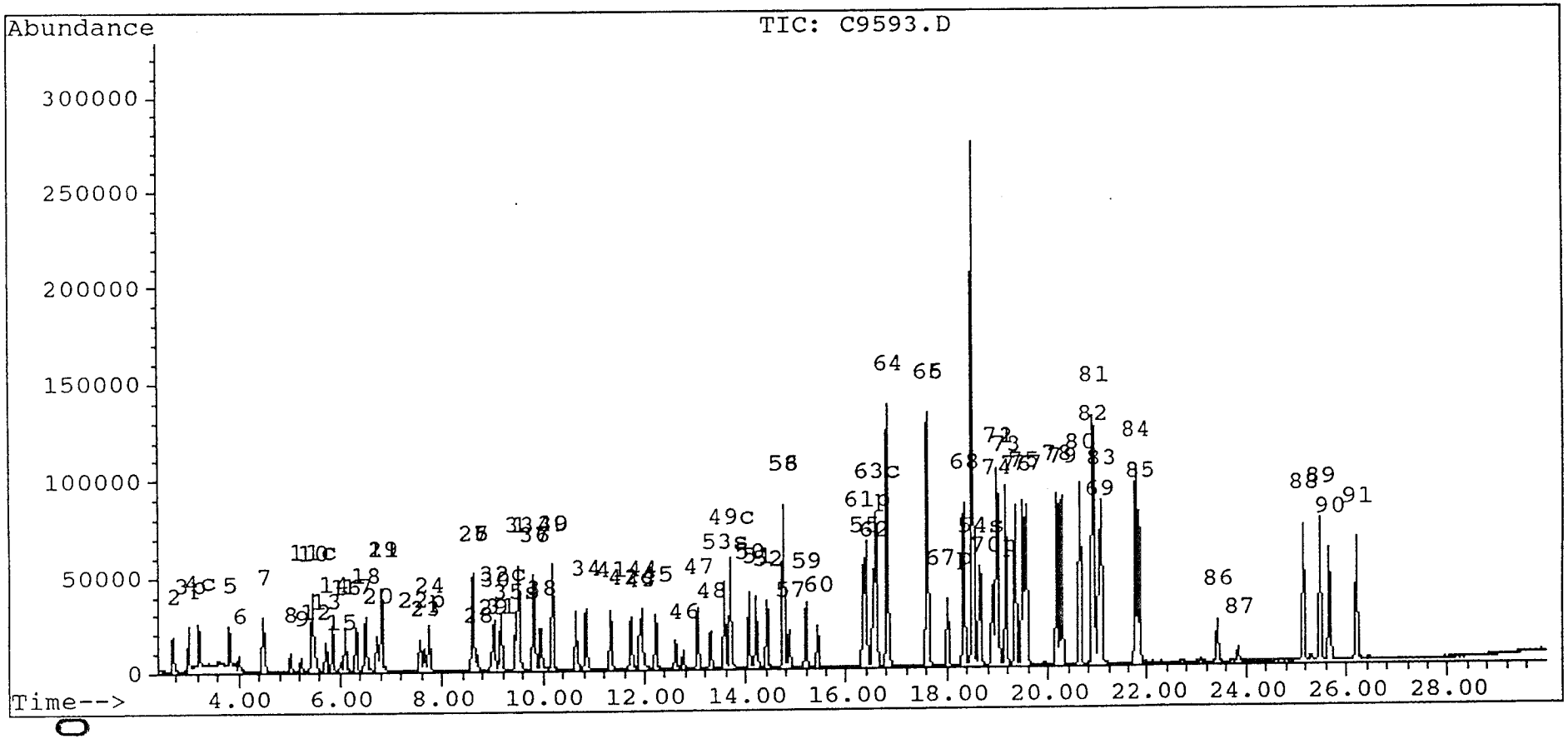
0079

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

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9593.D
Acq On : 9 Mar 100 10:47 am
Sample : CCV
Misc :
Quant Time: Mar 9 11:17 19100

Vial: 4
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
Response via : Multiple Level Calibration



0800

VOLATILE ORGANICS

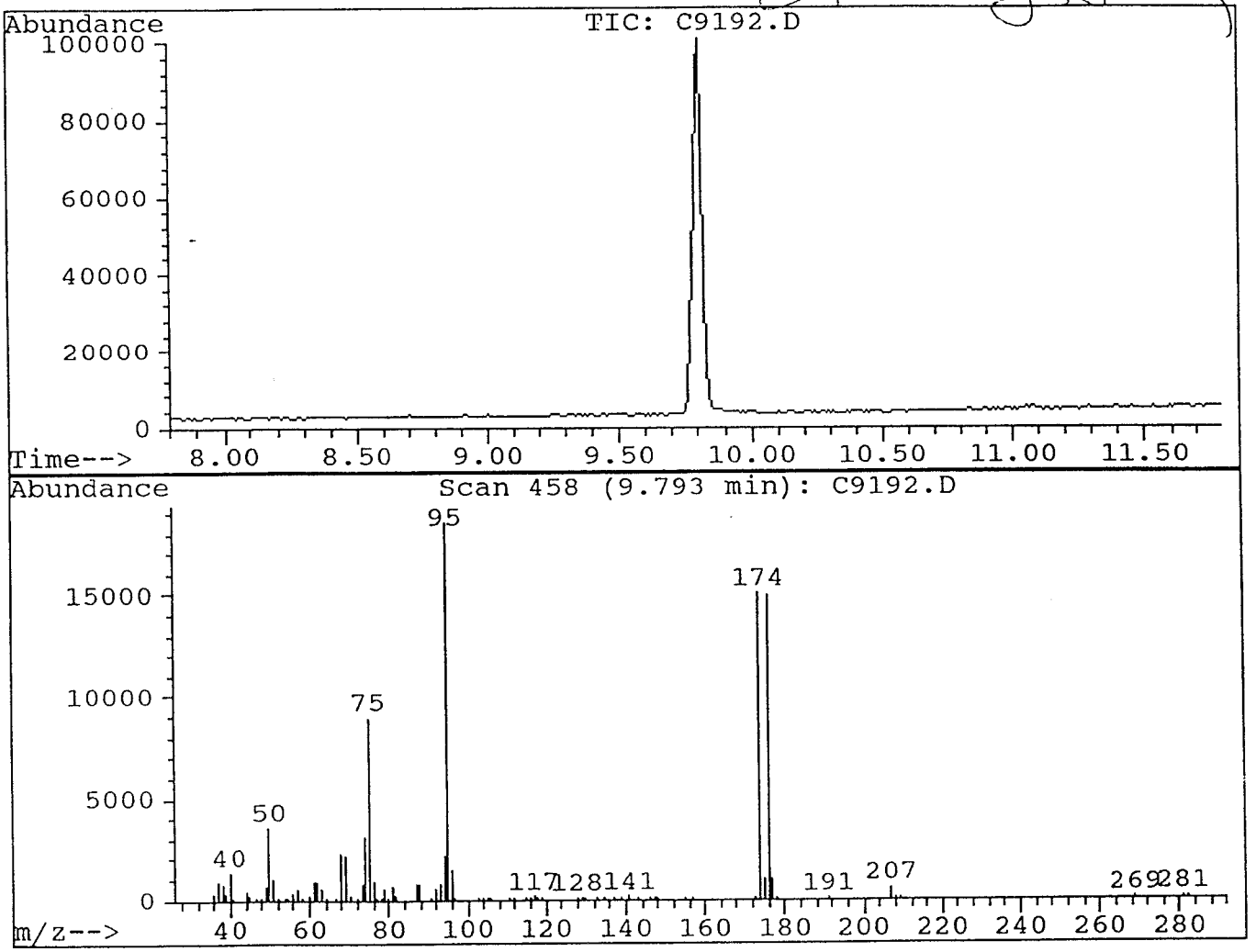
RAW QC DATA

BFB

Data File : J:\ACQUDATA\MSVOA5\DATA\020900\C9192.D
Acq On : 9 Feb 100 11:32 am
Sample : TUNE CHECK
Misc :

Vial: 5
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa



Peak Apex is scan: 458

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	3552	PASS
75	95	30	60	48.2	8953	PASS
95	95	100	100	100.0	18576	PASS
96	95	5	9	7.8	1450	PASS
173	174	0	2	0.5	70	PASS
174	95	50	100	80.8	15009	PASS
175	174	5	9	7.0	1055	PASS
176	174	95	101	99.2	14886	PASS
177	176	5	9	6.4	956	PASS

0082

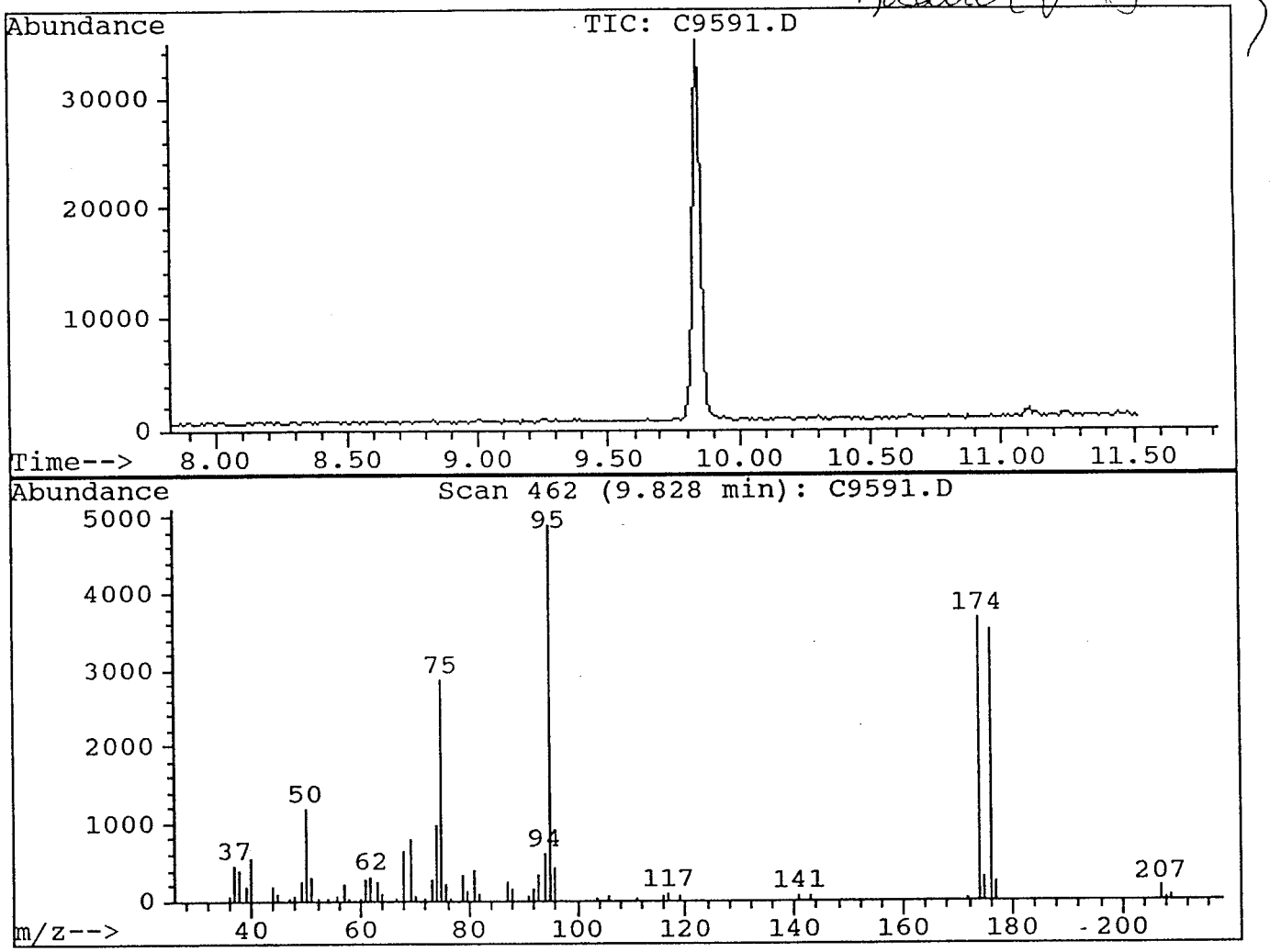
C9192.D SOIL0113.M Wed Feb 09 11:45:26 2000

BFB

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9591.D
Acq On : 9 Mar 100 9:37 am
Sample : TUNE CHECK
Misc :

Vial: 2
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa



Peak Apex is scan: 462

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.1	1181	PASS
75	95	30	60	58.4	2859	PASS
95	95	100	100	100.0	4899	PASS
96	95	5	9	8.3	405	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	74.6	3654	PASS
175	174	5	9	8.3	305	PASS
176	174	95	101	95.8	3502	PASS
177	176	5	9	7.0	246	PASS

C9591.D SOIL0209.M Thu Mar 09 09:49:24 2000

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 364326 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 48407

DATE ANALYZED : 03/09/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROBENZENE	5.0	1.2 J	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	95	%
TOLUENE-D8	(88 - 110 %)	98	%

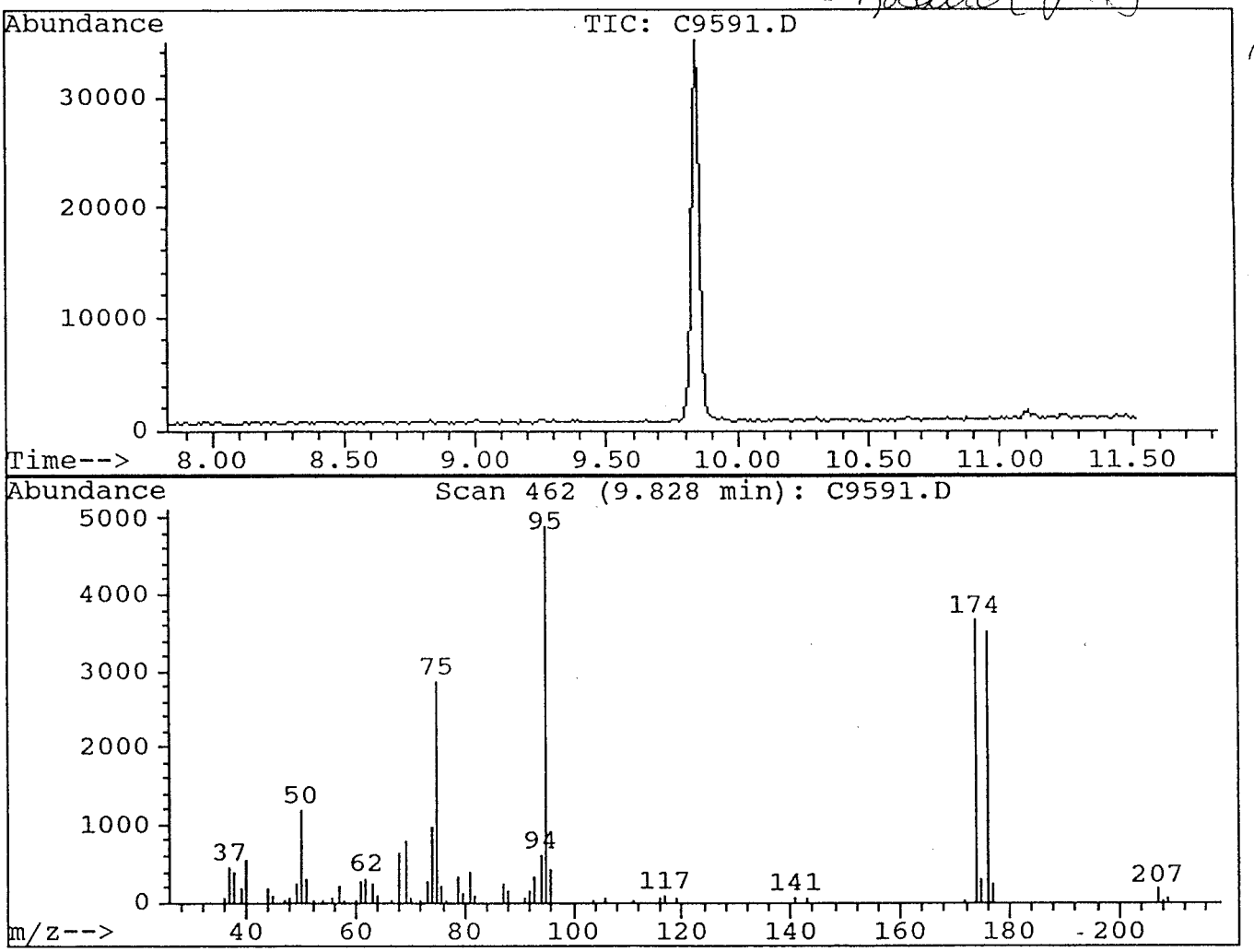
0084

BFB

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9591.D
Acq On : 9 Mar 100 9:37 am
Sample : TUNE CHECK
Misc :

Vial: 2
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0209.M
Title : 8260voa



Peak Apex is scan: 462

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.1	1181	PASS
75	95	30	60	58.4	2859	PASS
95	95	100	100	100.0	4899	PASS
96	95	5	9	8.3	405	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	74.6	3654	PASS
175	174	5	9	8.3	305	PASS
176	174	95	101	95.8	3502	PASS
177	176	5	9	7.0	246	PASS

C9591.D SOIL0209.M Thu Mar 09 09:49:24 2000

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 364326 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 48407

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/09/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROBENZENE	5.0	1.2 J	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	95	%
TOLUENE-D8	(88 - 110 %)	98	%

0084

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 364326 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 48407

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 03/09/00			
ANALYTICAL DILUTION:	1.00			
DIBROMOFLUOROMETHANE	(86 - 118 %)		109	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9594.D
Acq On : 9 Mar 100 11:28 am
Sample : 364326 1.0
Misc : MET BLK
Quant Time: Mar 9 12:02 19100

Vial: 5
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Fri Mar 10 13:29:12 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.52	168	23590	50.00	ppb		0.00
34) 1,4-Difluorobenzene	10.85	114	28136	50.00	ppb		0.02
55) d5-Chlorobenze	16.33	117	35245	50.00	ppb		0.02
69) d4-1,4-Dichlorobenzene	21.00	152	23160	50.00	ppb		0.02
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.45	113	14994	54.29	ppb		108.59%
53) surr3,Toluene-d8	13.57	98	37966	48.79	ppb		97.57%
54) surr2,bfb	18.64	95	22063	47.34	ppb		94.68%
Target Compounds							Qvalue
12) Acetone	5.53	43	437	2.25	ppb	#	71
26) 2-Butanone	8.57	43	183	1.27	ppb	#	86
89) Hexachlorobt	25.49	225	407	1.11	ppb	#	81
90) Naphthalen	25.67	128	1754	1.41	ppb	#	90
91) 1,2,3-Tclbenzene	26.20	180	650	1.18	ppb		94

RJH 3/15

0086

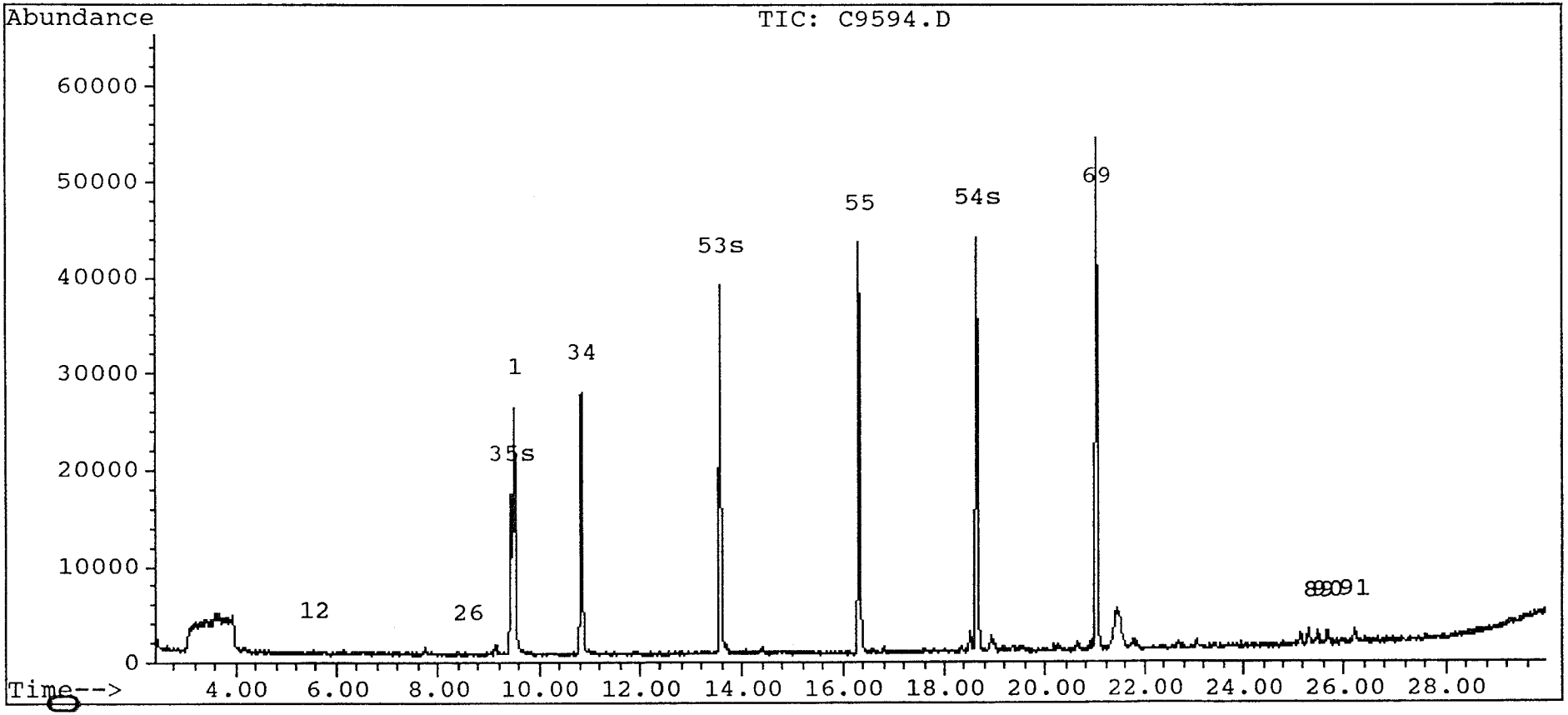
(#) = qualifier out of range (m) = manual integration

Quantitat Report

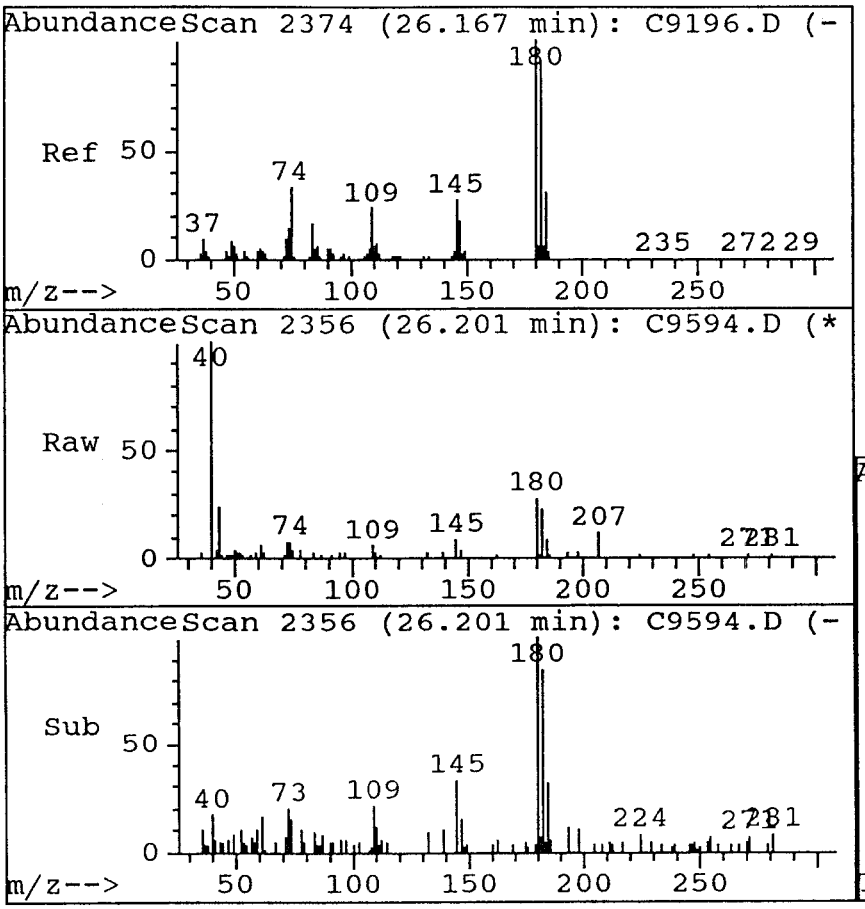
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Acq On : 9 Mar 100 11:28 am
Sample : 364326 1.0
Misc : MET BLK
Quant Time: Mar 9 12:02 19100

Vial: 5
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Fri Mar 10 13:29:12 2000
Response via : Multiple Level Calibration



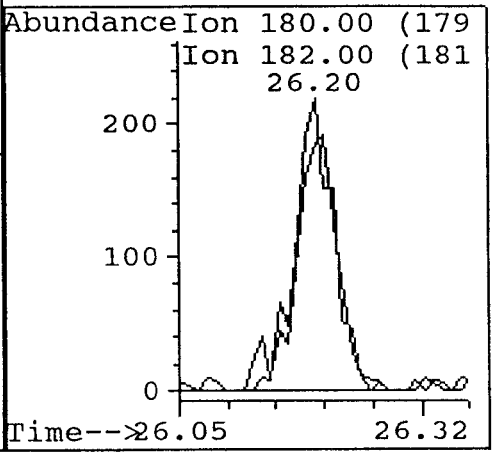
0087



#91
1,2,3-Tclbenzene
Concen: 1.18 ppb
RT: 26.20 min Scan# 2356
Delta R.T. 0.02 min
Lab File: C9594.D
Acq: 9 Mar 100 11:28 am

Tgt Ion:180 Resp: 650

Ion	Ratio	Lower	Upper
180	100		
182	84.9	72.5	108.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0



0088

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Project Reference:
Client Sample ID : QC Ref

Date Sampled : 03/14/00 Order #: 364327 Sample Matrix: WATER
Date Received: / / Submission #: Analytical Run 48407

DATE ANALYZED : 03/09/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	20	20 U	UG/L
BENZENE	5.0	19	UG/L
BROMODICHLOROMETHANE	5.0	19	UG/L
BROMOFORM	5.0	20	UG/L
BROMOMETHANE	5.0	28	UG/L
2-BUTANONE (MEK)	10	18	UG/L
CARBON DISULFIDE	10	18	UG/L
CARBON TETRACHLORIDE	5.0	21	UG/L
CHLOROBENZENE	5.0	21	UG/L
CHLOROETHANE	5.0	23	UG/L
CHLOROFORM	5.0	20	UG/L
CHLOROMETHANE	5.0	25	UG/L
DIBROMOCHLOROMETHANE	5.0	19	UG/L
1,3-DICHLOROBENZENE	5.0	22	UG/L
1,2-DICHLOROBENZENE	5.0	21	UG/L
1,4-DICHLOROBENZENE	5.0	21	UG/L
1,1-DICHLOROETHANE	5.0	18	UG/L
1,2-DICHLOROETHANE	5.0	20	UG/L
1,1-DICHLOROETHENE	5.0	18	UG/L
CIS-1,2-DICHLOROETHENE	5.0	18	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	20	UG/L
1,2-DICHLOROPROPANE	5.0	18	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	19	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	20	UG/L
ETHYLBENZENE	5.0	21	UG/L
2-HEXANONE	10	16	UG/L
METHYLENE CHLORIDE	5.0	21	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	19	UG/L
STYRENE	5.0	22	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	19	UG/L
TETRACHLOROETHENE	5.0	21	UG/L
TOLUENE	5.0	21	UG/L
1,2,4-TRICHLOROBENZENE	5.0	21	UG/L
1,2,3-TRICHLOROBENZENE	5.0	20	UG/L
1,1,1-TRICHLOROETHANE	5.0	20	UG/L
1,1,2-TRICHLOROETHANE	5.0	20	UG/L
TRICHLOROETHENE	5.0	20	UG/L
VINYL CHLORIDE	5.0	26	UG/L
O-XYLENE	5.0	21	UG/L
M+P-XYLENE	5.0	42	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	109	%

0089

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Project Reference:
Client Sample ID : QC Ref

Date Sampled : 03/14/00 **Order #:** 364327 **Sample Matrix:** WATER
Date Received: / / **Submission #:** **Analytical Run** 48407

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 03/09/00			
ANALYTICAL DILUTION:	1.00			
TOLUENE-D8	(88 - 110 %)		103	%
DIBROMOFLUOROMETHANE	(86 - 118 %)		100	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9595.D
Acq On : 9 Mar 100 12:06 pm
Sample : 364327 1.0
Misc : QC/REF
Quant Time: Mar 10 10:46 19100

Vial: 6
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Fri Mar 10 13:29:12 2000
Response via : Multiple Level Calibration

RJH 3/15

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.52	168	21970	50.00	ppb		0.01
34) 1,4-Difluorobenzene	10.85	114	24995	50.00	ppb		0.03
55) d5-Chlorobenze	16.33	117	34411	50.00	ppb		0.02
69) d4-1,4-Dichlorobenzene	21.01	152	24609	50.00	ppb		0.03
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.45	113	12303	50.15	ppb		100.29%
53) surr3,Toluene-d8	13.57	98	35736	51.69	ppb		103.38%
54) surr2,bfb	18.66	95	22606	54.60	ppb		109.20%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.73	85	12021	31.89	ppb	#	94
3) Chloromethane	3.03	50	7833	24.66	ppb		99
4) Vinyl Chloride	3.23	62	9322	26.12	ppb		92
5) Bromomethane	3.82	94	5805	27.56	ppb		90
6) Chloroethane	4.01	64	2918	23.12	ppb		96
7) Trichlorofluoromethane	4.49	101	11638	23.59	ppb		93
9) Acrolein	5.24	56	4314	235.30	ppb		97
10) FREON 113	5.46	85	1619	15.63	ppb	#	54
11) 1,1-Diclethene	5.44	96	2711	17.63	ppb		96
12) Acetone	5.53	43	2359	13.06	ppb	#	85
13) Iodomethane	5.71	142	5545	19.99	ppb		84
14) Carbon Disulfide	5.84	76	12023	18.47	ppb		97
17) Methylene Chloride	6.31	84	4262	21.35	ppb		86
18) TBA	6.50	59	43116	1028.63	ppb		98
19) Methyl-t-Butyl Ether	6.82	73	9564	20.12	ppb		94
20) Acrylonitrile	6.73	53	10477	183.11	ppb		98
21) trans-1,2-Dichloroethene	6.82	96	2994	19.56	ppb	#	73
22) 1,1-Diclethane	7.57	63	6768	18.39	ppb	#	86
23) Vinyl Acetate	7.64	42	715	14.60	ppb	#	75
25) 2,2-Dichloropropane	8.61	77	7464	19.01	ppb		94
26) 2-Butanone	8.61	43	2439	18.17	ppb		93
27) cis-1,2-Dichloroethene	8.61	96	3358	18.58	ppb		99
30) Bromochloromethane	9.04	128	2431	19.13	ppb		93
32) Chloroform	9.17	83	9116	20.25	ppb		91
33) 1,1,1-Trichloroethane	9.52	97	8427	19.66	ppb	#	20
36) Carbontetrachloride	9.84	117	7881	21.33	ppb		95
37) 1,1-Dichloropropene	9.82	75	5155	20.82	ppb		97
39) Benzene	10.19	78	11344	19.04	ppb		100
40) 1,2-Dichloroethane	10.20	62	10025	19.99	ppb		99
41) Trichloroethene	11.35	95	4543	19.88	ppb		89
42) 1,2-Diclpropane	11.75	63	3444	18.34	ppb		88
44) Dibromomethane	11.95	93	4036	20.13	ppb	#	80
45) Bromodichloromethane	12.23	83	7821	19.13	ppb		94

0091

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9595.D Vial: 6
Acq On : 9 Mar 100 12:06 pm Operator: HERRING
Sample : 364327 1.0 Inst : 5971 - In
Misc : QC/REF Multiplr: 1.00
Quant Time: Mar 10 10:46 19100

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Fri Mar 10 13:29:12 2000
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	2-Chloroethylvinyl Ether	12.76	63	2350	27.73	ppb	#	78
47)	cis-1,3-Dichloropropene	13.05	75	6841	18.67	ppb	#	90
48)	4-Methyl-2-Pentanone	13.31	43	6289	19.35	ppb		96
49)	Toluene	13.70	91	19838	21.29	ppb		93
50)	trans-1,3-Dichloropropene	14.07	75	9008	19.76	ppb		96
52)	1,1,2-Trichloroethane	14.43	83	3996	19.92	ppb		95
56)	Tetrachloroethene	14.75	166	7080	20.82	ppb		95
57)	2-Hexanone	14.88	43	4923	16.56	ppb		88
58)	1,3-Dichloropropane	14.76	76	8455	18.57	ppb		94
59)	Dibromochloromethane	15.20	129	8413	19.29	ppb		97
60)	1,2-Dibromoethane	15.43	107	6364	18.56	ppb		99
61)	Chlorobenzene	16.39	112	16402	21.01	ppb		97
62)	1,1,1,2-Tetrachloroethane	16.53	131	7317	20.03	ppb		97
63)	Ethylbenzene	16.59	91	30861	20.61	ppb		100
64)	(m+p)Xylene	16.81	106	21005	41.71	ppb		94
65)	o-Xylene	17.61	106	11389	21.49	ppb		86
66)	Styrene	17.63	104	19163	21.89	ppb		93
67)	Bromoform	18.01	173	8376	19.81	ppb		97
68)	Isopropylbenzene	18.33	105	30877	21.37	ppb		99
70)	1,1,2,2-Tetrachloroethane	18.90	83	10367	19.22	ppb		86
71)	1,2,3-Trichloropropane	19.01	110	3205	18.17	ppb		99
73)	n-Propylbenzene	19.16	91	43075	21.64	ppb		98
74)	Bromobenzene	18.98	156	9698	19.83	ppb		97
75)	1,3,5-Trimethylbenzene	19.51	105	27059	21.06	ppb		100
76)	2-Chlorotoluene	19.36	91	25375	20.18	ppb		98
77)	4-Chlorotoluene	19.58	91	30678	21.80	ppb		93
78)	tert-Butylbenzene	20.18	119	22901	21.13	ppb		91
79)	1,2,4-Trimethylbenzene	20.27	105	26785	20.92	ppb		95
80)	sec-Butylbenzene	20.63	105	36821	21.06	ppb		100
81)	p-Isopropyltoluene	20.92	119	27096	20.98	ppb		98
82)	1,3-Dclbenz	20.89	146	18841	21.63	ppb		92
83)	1,4-Dclbenz	21.07	146	18781	21.42	ppb		100
84)	n-Butylbenzene	21.75	91	29158	20.88	ppb		98
85)	1,2-Dclbenz	21.83	146	18678	21.43	ppb		97
86)	1,2-Dibromo-3-chloropropan	23.42	157	2866	17.54	ppb		93
88)	1,2,4-Tcbenzene	25.15	180	11956	21.05	ppb		95
89)	Hexachlorobt	25.50	225	8632	22.08	ppb		99
90)	Naphthalen	25.68	128	24659	18.59	ppb		99
91)	1,2,3-Tclbenzene	26.21	180	11973	20.47	ppb		94

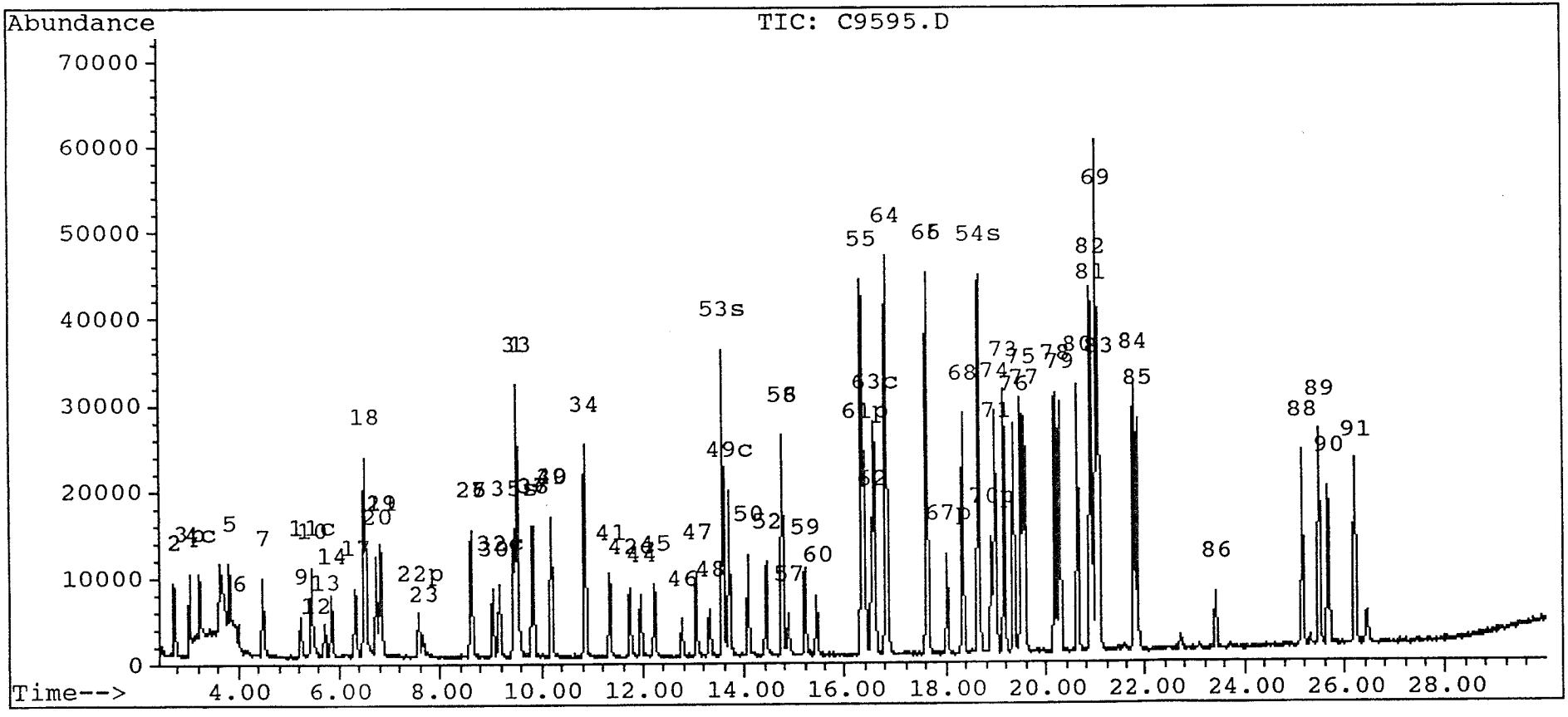
0092

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

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9595.D
Acq On : 9 Mar 100 12:06 pm
Sample : 364327 1.0
Misc : QC/REF
Quant Time: Mar 10 10:46 19100

Vial: 6
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Fri Mar 10 13:29:12 2000
Response via : Multiple Level Calibration



3/9/00 \030900\C... TUNE0209.M SOIL0209.M

1	BLK		C9590	–	
°	TUNE CHECK (9:37)		C9591	YT	
1	CCV		C9592	NC	VC 4
1	CCV	27500, 32836, 41185, 28584	C9593	YC	
2	MET BLK	13750 16418 20592 14427	C9594	YM	
3	QC/REF		C9595	YQ	
4	3603205 1.0 [redacted] R-1146 8260B.TCLH		C9596	Y	
PAK2 5	361738 1.0 (TB) [DAMES R-1022 8260B.TCL]		C9597	Y	
6	361736 1.0		C9598	(Y)	rpt for Matrix
7	361737 1.0		C9599	(Y)	rpt for Matrix
8	361556 1.0 [redacted] R-1010 8260B.TCLH]		C9600	Y	
9	556 1.0 MS		C9601	YQ	SWR34
10	556 1.0 MSD		C9602	YQ	IS2+SWR34
PAK2 11	3603066 0.82 [redacted] R-1132 8260B.TCMT		C9603	N	SWR34
12	C67 0.84		C9604	Y	
13	C68 0.90		C9605	Y	
14	C69 0.91		C9606	Y	
15	070 0.75		C9607	Y	
16	361736 1.0 [DAMES R-1022 REPL]		C9608	(Y)	AS REPL.
17	737 1.0		C9609	(Y)	AS REPL.

Rodenticide Herring

Surr: MSV2055D, 2 µL dilute

Targets + Gases MSV3053A, 5 mL / 50 mL CCV → 5 mL purge

HSL/Acrolein MSV3053B, 5 mL / 50 mL CCV → 5 mL purge

8260 Ref. MSV3062D, 5 mL / 5 mL

HSL Ref. MSV3062A 5 mL / 5 mL

PCB's

QC SUMMARY

COLUMBIA ANALYTICAL SERVICES

QUALITY CONTROL SUMMARY BLANK SPIKE RECOVERY

SOIL/SEDIMENT

Spiked Order No. : 361736

Client ID:

Test: 8082 PCB'S

Analytical Units: UG/KG

Run Number : 48054

			BLANK SPIKE		QC LIMITS
ANALYTE	SPIKE ADDED	SAMPLE CONCENT.	FOUND	% REC.	REC.
PCB 1260	167	0	167	100	8 - 127

METHOD BLANK SUMMARY

Lab Name: Columbia Analytical Services
Contract: DAMES
Lab Code: 10145 Case No.: R2001022
SAS No.: SDG No.: CB-2
Lab Sample ID.: 361930
Lab File ID: CS950, ZS950
Matrix: (soil/water): SOIL
Level: (low/med)
Date Extracted: 3/1/00
Extraction: (Sepf/Cont/Sonc) SONC
Date Analyzed: (1) 3/2/00
Date Analyzed: (2) 3/2/00
Time Analyzed: (1) 9:46:00 AM
Time Analyzed: (2) 9:46:00 AM
Instument ID: (1) 5890C
Instument ID: (2) 5890C
GC Column ID: (1) DB-1701
GC Column ID: (2) DB-17

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
1	PBLK1MS	361931 BS	3/2/00	3/2/00
2	CB-3	361736	3/2/00	3/2/00
3	CB-2	361737	3/2/00	3/2/00
4				
5				
6				
7				
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25				

COMMENTS:

0096

PCB's

SAMPLE DATA

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-3

Date Sampled : 02/29/00 **Order #:** 361736 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 79.2

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 03/01/00			
DATE ANALYZED : 03/02/00			
ANALYTICAL DILUTION: 10.00			Dry Weight
PCB 1016	33	420 U	UG/KG
PCB 1221	33	420 U	UG/KG
PCB 1232	33	420 U	UG/KG
PCB 1242	33	420 U	UG/KG
PCB 1248	33	420 U	UG/KG
PCB 1254	33	420 U	UG/KG
PCB 1260	33	1600	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	92	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	88	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200\CS952.D Vial: 5
Acq On : 2 Mar 2000 11:07 am Operator: DROOT
Sample : 361736 10.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 12:01 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.20	49919	8.805 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	8.80%#
37) S SURR2,DECACHLOROBIPHENYL	21.48	73241	9.149 ug/l
Spiked Amount 100.000		Recovery =	9.15%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.00	110846	324.458 ug/l
33) L7c PCB 1260{2}	16.37	166374	408.065 ug/l
34) L7c PCB 1260{3}	18.02	320436	476.483 ug/l
35) L7C PCB 1260{4}	20.10	78854	444.999 ug/l
36) L7C PCB 1260{5}	20.94	16168	209.981 ug/l
Sum PCB 1260		692678	1863.986 ug/l
Average PCB 1260			372.797 ug/l

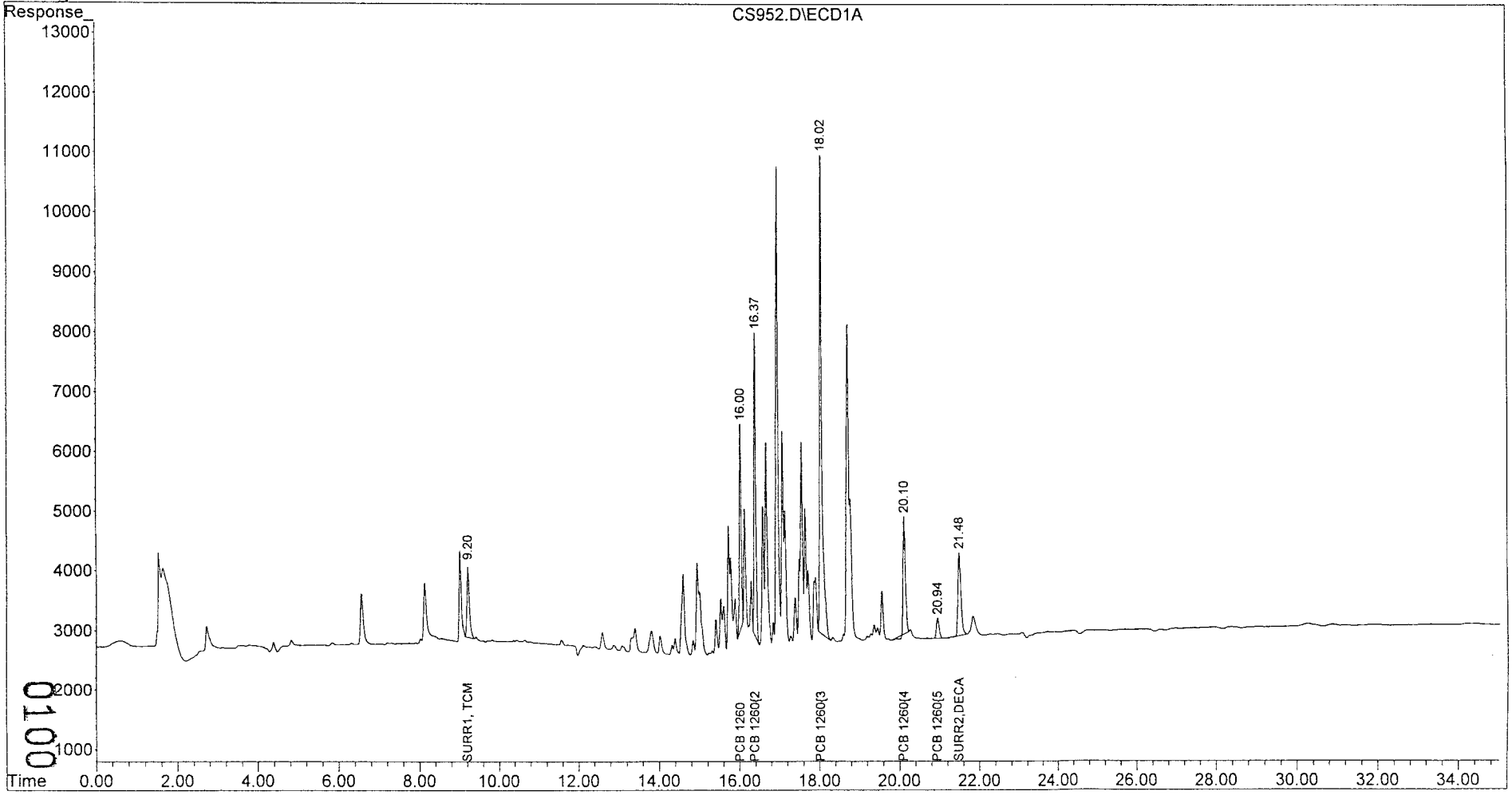
0099

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\030200\CS952.D Vial: 5
Acq On : 2 Mar 2000 11:07 am Operator: DROOT
Sample : 361736 10.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 12:01 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS952.D Vial: 55
Acq On : 2 Mar 2000 11:07 am Operator: DROOT
Sample : 361736 10.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 12:00 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.61	126489	12.837 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	12.84%#
37) S SURR2,DECACHLOROBIPHENYL	23.57	193892	14.205 ug/l
Spiked Amount 100.000		Recovery =	14.21%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.35	174322	483.746 ug/l
33) L7c PCB 1260{2}	16.66	233141	359.908 ug/l
34) L7c PCB 1260{3}	16.83	280690	429.365 ug/l
35) L7C PCB 1260{4}	18.02	25654	281.451 ug/l
36) L7C PCB 1260{5}	18.61	554240	521.245 ug/l
Sum PCB 1260		1268047	2075.715 ug/l
Average PCB 1260			415.143 ug/l

0101

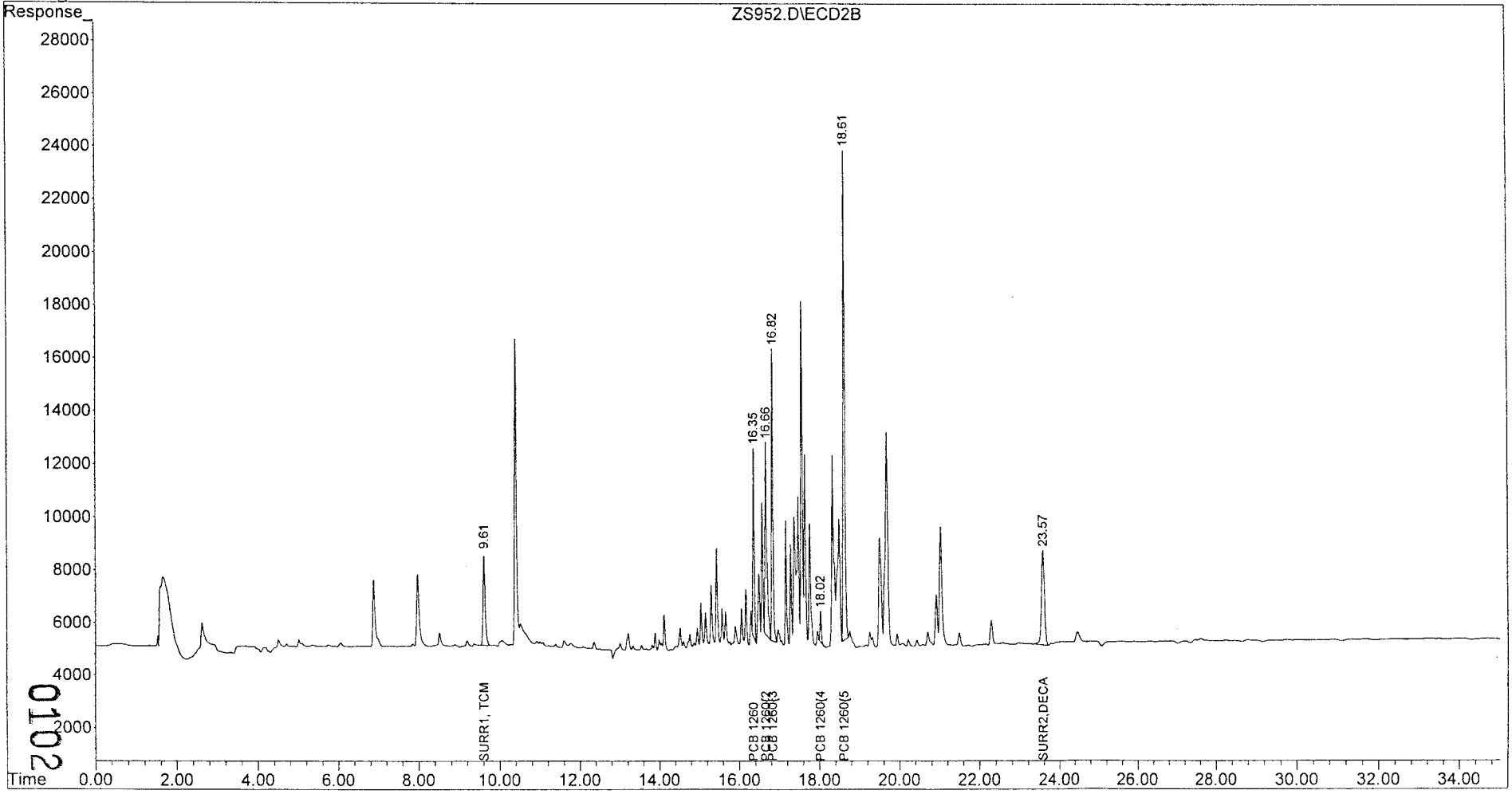
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitat Report

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS952.D Vial: 55
Acq On : 2 Mar 2000 11:07 am Operator: DROOT
Sample : 361736 10.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 12:00 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-2

Date Sampled : 02/29/00 **Order #:** 361737 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 80.4

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 03/01/00			
DATE ANALYZED : 03/02/00			
ANALYTICAL DILUTION: 10.00			Dry Weight
PCB 1016	33	410 U	UG/KG
PCB 1221	33	410 U	UG/KG
PCB 1232	33	410 U	UG/KG
PCB 1242	33	410 U	UG/KG
PCB 1248	33	410 U	UG/KG
PCB 1254	33	410 U	UG/KG
PCB 1260	33	1300	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	97	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	119	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200\CS953.D Vial: 6
Acq On : 2 Mar 2000 11:48 am Operator: DROOT
Sample : 361737 10.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 13:33 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.20	67557	11.916 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	11.92%#
37) S SURR2,DECACHLOROBIPHENYL	21.48	77602	9.694 ug/l m
Spiked Amount 100.000		Recovery =	9.69%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.01	81668	239.052 ug/l
33) L7c PCB 1260{2}	16.37	121890	298.958 ug/l
34) L7c PCB 1260{3}	18.02	230162	342.247 ug/l m
35) L7C PCB 1260{4}	20.10	79721	449.889 ug/l
36) L7C PCB 1260{5}	20.95	17462	226.792 ug/l
Sum PCB 1260		530902	1556.938 ug/l
Average PCB 1260			311.388 ug/l

0104

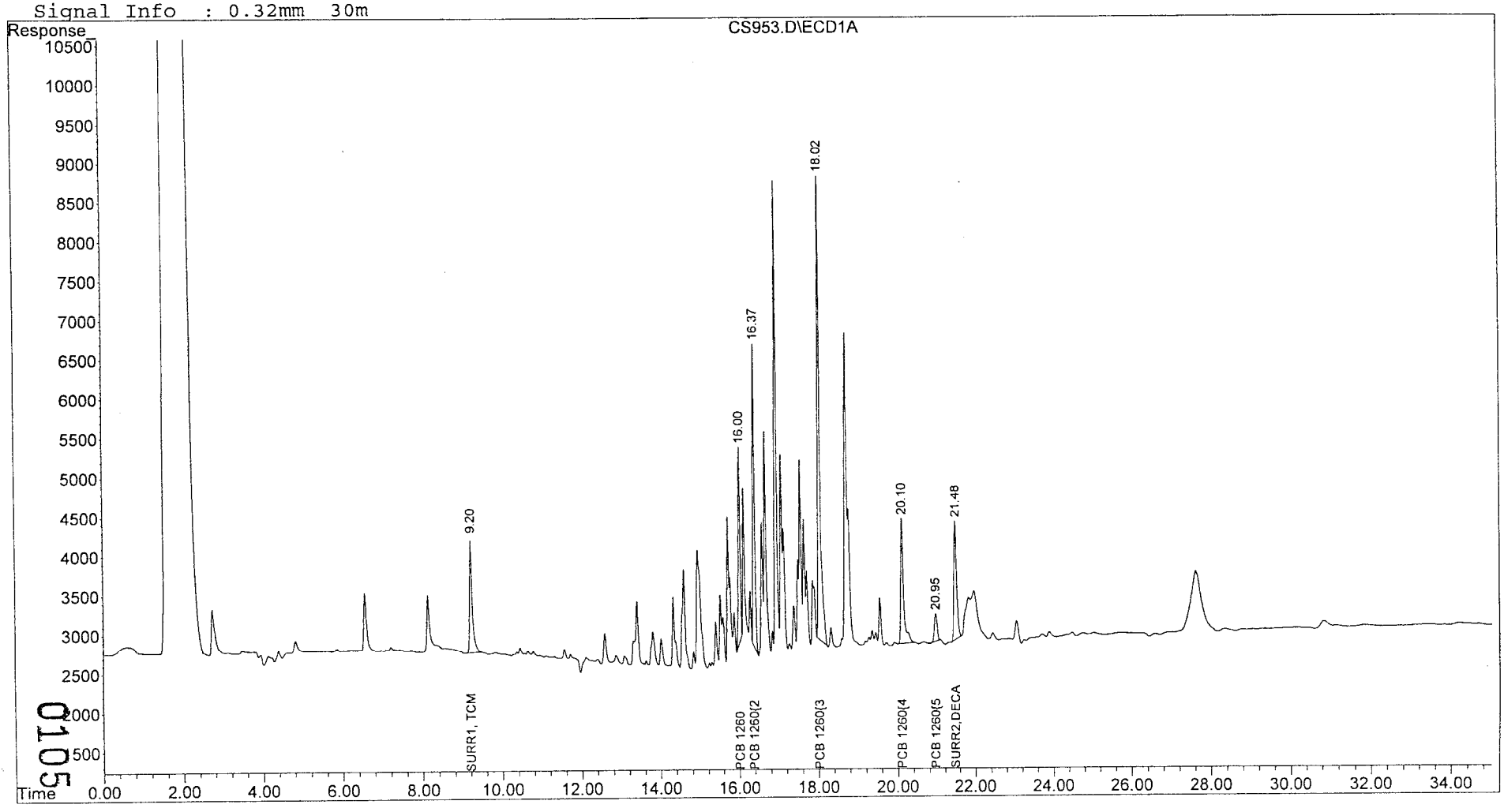
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\030200\CS953.D Vial: 6
Acq On : 2 Mar 2000 11:48 am Operator: DROOT
Sample : 361737 10.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 13:33 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



Q105

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS953.D Vial: 56
Acq On : 2 Mar 2000 11:48 am Operator: DROOT
Sample : 361737 10.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 13:33 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
1) S SURR1, TCMX	9.61	135309	13.732	ug/l	
Spiked Amount 100.000 Range 60 - 150		Recovery =	13.73%#		
37) S SURR2,DECACHLOROBIPHENYL	23.57	210678	15.434	ug/l	
Spiked Amount 100.000		Recovery =	15.43%		
Target Compounds					
Sum PCB 1016		0	N.D.	ug/l	
Average PCB 1016			0.000	ug/l	
Sum PCB 1221		0	N.D.	ug/L	
Average PCB 1221			0.000	ug/L	
Sum PCB 1232		0	N.D.	ug/l	
Average PCB 1232			0.000	ug/l	
Sum PCB 1242		0	N.D.	ug/l	
Average PCB 1242			0.000	ug/l	
Sum PCB 1248		0	N.D.	ug/l	
Average PCB 1248			0.000	ug/l	
Sum PCB 1254		0	N.D.	ug/l	
Average PCB 1254			0.000	ug/l	
32) L7c PCB 1260	16.35	130552	362.286	ug/l	
33) L7c PCB 1260{2}	16.66	147626	227.895	ug/l	m
34) L7c PCB 1260{3}	16.82	192924	295.111	ug/l	m
35) L7C PCB 1260{4}	18.02	20819	228.401	ug/l	
36) L7C PCB 1260{5}	18.61	381486	358.775	ug/l	
Sum PCB 1260		873407	1472.468	ug/l	
Average PCB 1260			294.494	ug/l	

0106

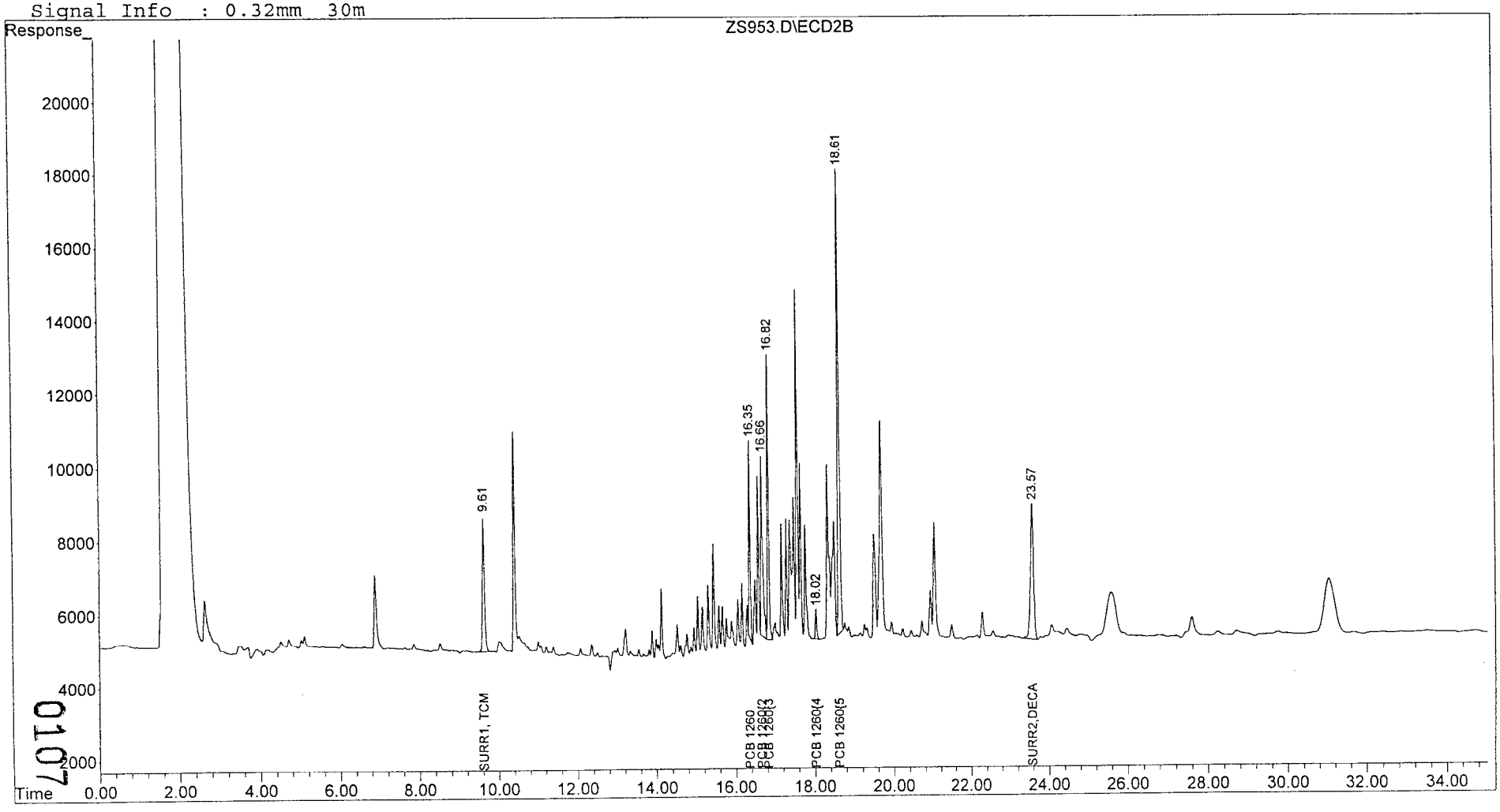
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS953.D Vial: 56
Acq On : 2 Mar 2000 11:48 am Operator: DROOT
Sample : 361737 10.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 13:33 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0107

PCB's

STANDARDS DATA

Calibration Level Concentrations
Columbia Analytical Services

Jan-00 Pesticide/PCB Analyte	Calib. Mix	Level #1 ppb	Level #2 ppb	Level #3 ppb	Level #4 ppb	Level #5 ppb
alpha-bhc	Ind A	80	40	20	10	5
gamma-bhc	Ind A	80	40	20	10	5
DDD	Ind A	160	80	40	20	10
DDT	Ind A	160	80	40	20	10
Dieldrin	Ind A	160	80	40	20	10
Endosulfan I	Ind A	80	40	20	10	5
Endrin	Ind A	160	80	40	20	10
Heptachlor	Ind A	80	40	20	10	5
Methoxychlor	Ind A	800	400	200	100	50
Surrogate-DCB	Ind A	160	80	40	20	10
Surrogate-TCMX	Ind A	80	40	20	10	5
Aldrin	Ind B	80	40	20	10	5
beta-bhc	Ind B	80	40	20	10	5
delta-bhc	Ind B	80	40	20	10	5
DDE	Ind B	160	80	40	20	10
alpha-chlordane	Ind B	80	40	20	10	5
gamma-chlordane	Ind B	80	40	20	10	5
Endosulfan II	Ind B	160	80	40	20	10
Endosulfan Sulfate	Ind B	160	80	40	20	10
Endrin Aldehyde	Ind B	160	80	40	20	10
Endrin Ketone	Ind B	160	80	40	20	10
Heptachlor Epoxide	Ind B	80	40	20	10	5
Surrogate-DCB	Ind B	160	80	40	20	10
Surrogate-TCMX	Ind B	80	40	20	10	5
PCB 1016	1016	1000	750	500	250	100
PCB 1221	1221	1000		500		200
PCB 1232	1232	1000		500		100
PCB 1242	1242	1000		500		100
PCB 1248	1248	1000		500		100
PCB 1254	1254	1000		500		100
PCB 1260	1260	1000	750	500	250	100
Chlordane(Tech)	Chlor.	500	250	100	50	25
Toxaphene	Tox.	1000	750	500	250	100
Kepone	K/F mix	5000	4000	3000	2000	1000
Famphur	K/F mix	500	400	300	200	100

Response Factor Report 5890C

Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000

Calibration Files
1 =CS892.D 2 =CS891.D 3 =CS890.D
4 =CS889.D 5 =CS888.D

		Compound	1	2	3	4	5	Avg		%RSD
1)	S	SURR1, TCMX	5.987	5.719	5.669	6.078	5.579	5.806	E3	3.70
2)	L1c	PCB 1016	1.440	1.462	1.514	1.661	1.423	1.500	E2	6.41
3)	L1c	PCB 1016{2}	2.997	3.041	3.172	3.572	3.497	3.256	E2	8.11
4)	L1c	PCB 1016{3}	2.454	2.448	2.512	2.751	2.688	2.571	E2	5.44
5)	L1c	PCB 1016{4}	1.848	1.815	1.830	1.937	1.805	1.847	E2	2.86
6)	L1c	PCB 1016{5}	1.723	1.715	1.770	1.913	1.880	1.800	E2	5.06
7)	L2c	PCB 1221			7.380			7.380	E1	0.00
8)	L2c	PCB 1221{2}			3.674			3.674	E1	0.00
9)	L2c	PCB 1221{3}			2.141			2.141	E2	0.00
10)		PCB 1221{4}						0.000	0	-1.00
11)		PCB 1221{5}						0.000	0	-1.00
12)	L3c	PCB 1232			1.806			1.806	E2	0.00
13)	L3c	PCB 1232{2}			1.481			1.481	E2	0.00
14)	L3c	PCB 1232{3}			2.216			2.216	E2	0.00
15)	L3c	PCB 1232{4}			1.397			1.397	E2	0.00
16)	L3c	PCB 1232{5}			9.528			9.528	E1	0.00
17)	L4c	PCB 1242			1.331			1.331	E2	0.00
18)	L4c	PCB 1242{2}			2.430			2.430	E2	0.00
19)	L4c	PCB 1242{3}			3.786			3.786	E2	0.00
20)	L4c	PCB 1242{4}			2.005			2.005	E2	0.00
21)	L4c	PCB 1242{5}			1.636			1.636	E2	0.00
22)	L5c	PCB 1248			1.405			1.405	E2	0.00
23)	L5c	PCB 1248{2}			2.784			2.784	E2	0.00
	L5c	PCB 1248{3}			1.058			1.058	E2	0.00
25)	L5c	PCB 1248{4}			3.390			3.390	E2	0.00
26)	L5c	PCB 1248{5}			2.684			2.684	E2	0.00
27)	L6c	PCB 1254			1.024			1.024	E2	0.00
28)	L6c	PCB 1254{2}			3.911			3.911	E1	0.00
29)	L6c	PCB 1254{3}			1.052			1.052	E2	0.00
30)	L6c	PCB 1254{4}			1.941			1.941	E2	0.00
31)	L6c	PCB 1254{5}			3.712			3.712	E2	0.00
32)	L7c	PCB 1260	3.166	3.215	3.416	3.854	4.066	3.543	E2	11.26
33)	L7c	PCB 1260{2}	3.814	3.855	4.077	4.534	4.806	4.217	E2	10.34
34)	L7c	PCB 1260{3}	6.422	6.413	6.725	7.251	7.836	6.930	E2	8.81
35)	L7C	PCB 1260{4}	1.649	1.660	1.772	1.846	2.334	1.852	E2	15.20
36)	L7C	PCB 1260{5}	7.351	7.329	7.700	8.366	9.250	7.999	E1	10.19
37)	S	SURR2,DECACHLOROBIPHE	7.679	7.615	8.005	8.364	8.923	8.117	E3	6.65

0110

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400\CS888.D Vial: 1
Acq On : 24 Feb 2000 4:09 pm Operator: DROOT
Sample : AR1660L01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:46 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:45:14 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.20	111584	19.682 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	19.68%#
37) S SURR2,DECACHLOROBIPHENYL	21.48	178459	22.292 ug/l
Spiked Amount 100.000		Recovery =	22.29%
Target Compounds			
2) L1c PCB 1016	10.56	14234	94.003 ug/l
3) L1c PCB 1016{2}	11.55	34971	110.262 ug/l
4) L1c PCB 1016{3}	13.82	26875	106.984 ug/l
5) L1c PCB 1016{4}	14.03	18046	98.623 ug/l
6) L1c PCB 1016{5}	14.59	18801	106.215 ug/l
Sum PCB 1016		112927	516.087 ug/l
Average PCB 1016			103.217 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.01	40663	119.026 ug/l
33) L7c PCB 1260{2}	16.38	48060	117.876 ug/l
34) L7c PCB 1260{3}	18.03	78365	116.527 ug/l
35) L7C PCB 1260{4}	20.11	23340	131.714 ug/l
36) L7C PCB 1260{5}	20.94	9250	120.132 ug/l
Sum PCB 1260		199677	605.275 ug/l
Average PCB 1260			121.055 ug/l

0111

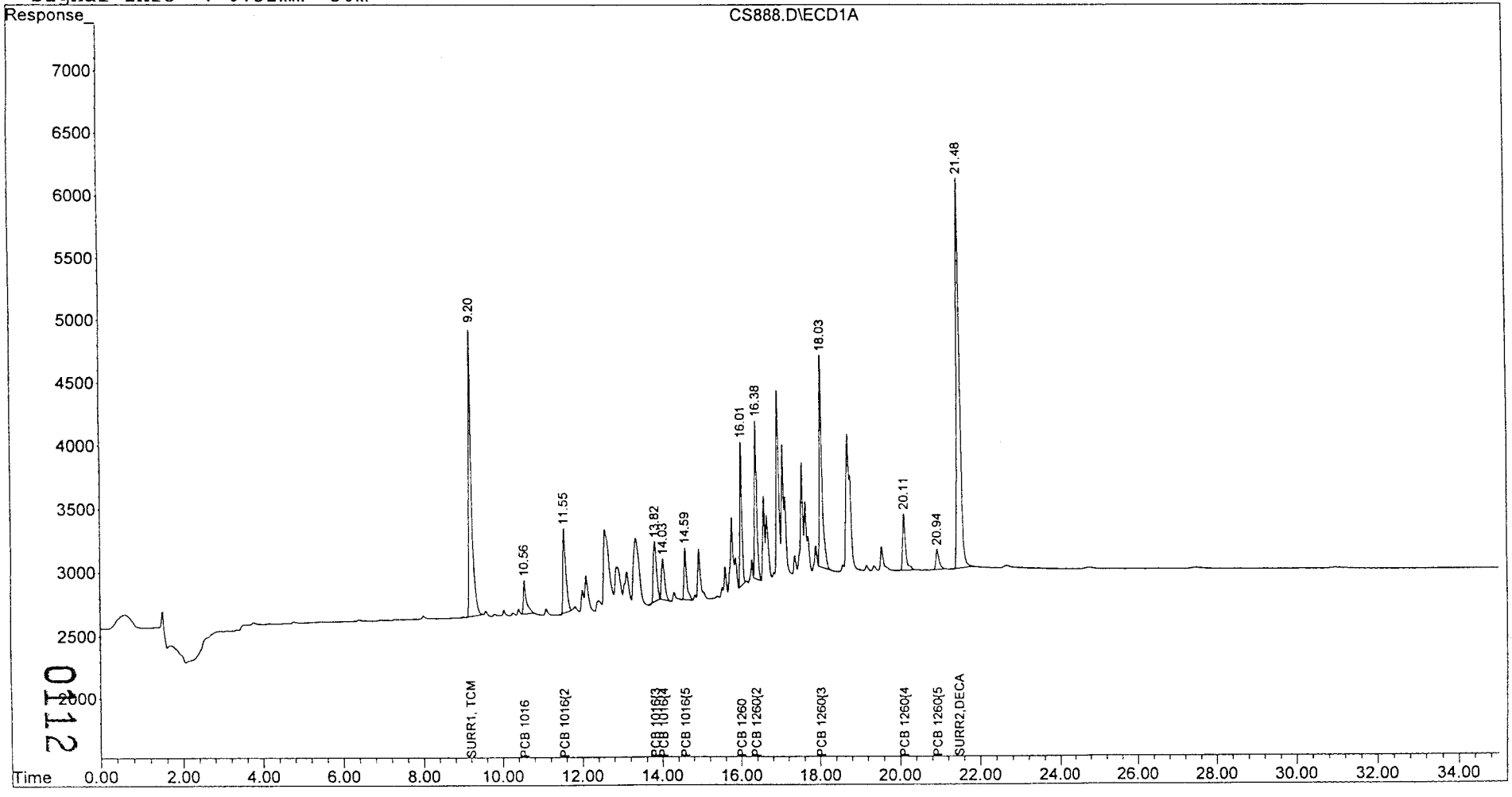
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Quantitatio. eport

Data F. : C:\HPCHEM\2\DATA\022400\CS888.D al: 1
Acq On : 24 Feb 2000 4:09 pm Operator: DROOT
Sample : AR1660L01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:46 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:45:14 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



012

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400\CS889.D
Acq On : 24 Feb 2000 4:50 pm
Sample : AR1660ML1
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:43 2000 Quant Results File: F0224C.RES

Vial: 2
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Feb 24 11:48:32 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022300\CS852.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.20	243110	68.776 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	68.78%
37) S SURR2,DECACHLOROBIPHENYL	21.48	334563	63.122 ug/l
Spiked Amount 100.000		Recovery =	63.12%
Target Compounds			
2) L1c PCB 1016	10.56	41524	430.687 ug/l
3) L1c PCB 1016{2}	11.55	89309	430.925 ug/l
4) L1c PCB 1016{3}	13.82	68773	427.830 ug/l
5) L1c PCB 1016{4}	14.02	48414	427.072 ug/l
6) L1c PCB 1016{5}	14.59	47831	416.849 ug/l
Sum PCB 1016		295851	2133.364 ug/l
Average PCB 1016			426.673 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.01	96347	413.058 ug/l
33) L7c PCB 1260{2}	16.38	113353	412.876 ug/l
34) L7c PCB 1260{3}	18.03	181283	408.115 ug/l
35) L7C PCB 1260{4}	20.11	46152	407.807 ug/l
36) L7C PCB 1260{5}	20.94	20916	420.097 ug/l
Sum PCB 1260		458051	2061.953 ug/l
Average PCB 1260			412.391 ug/l

0113

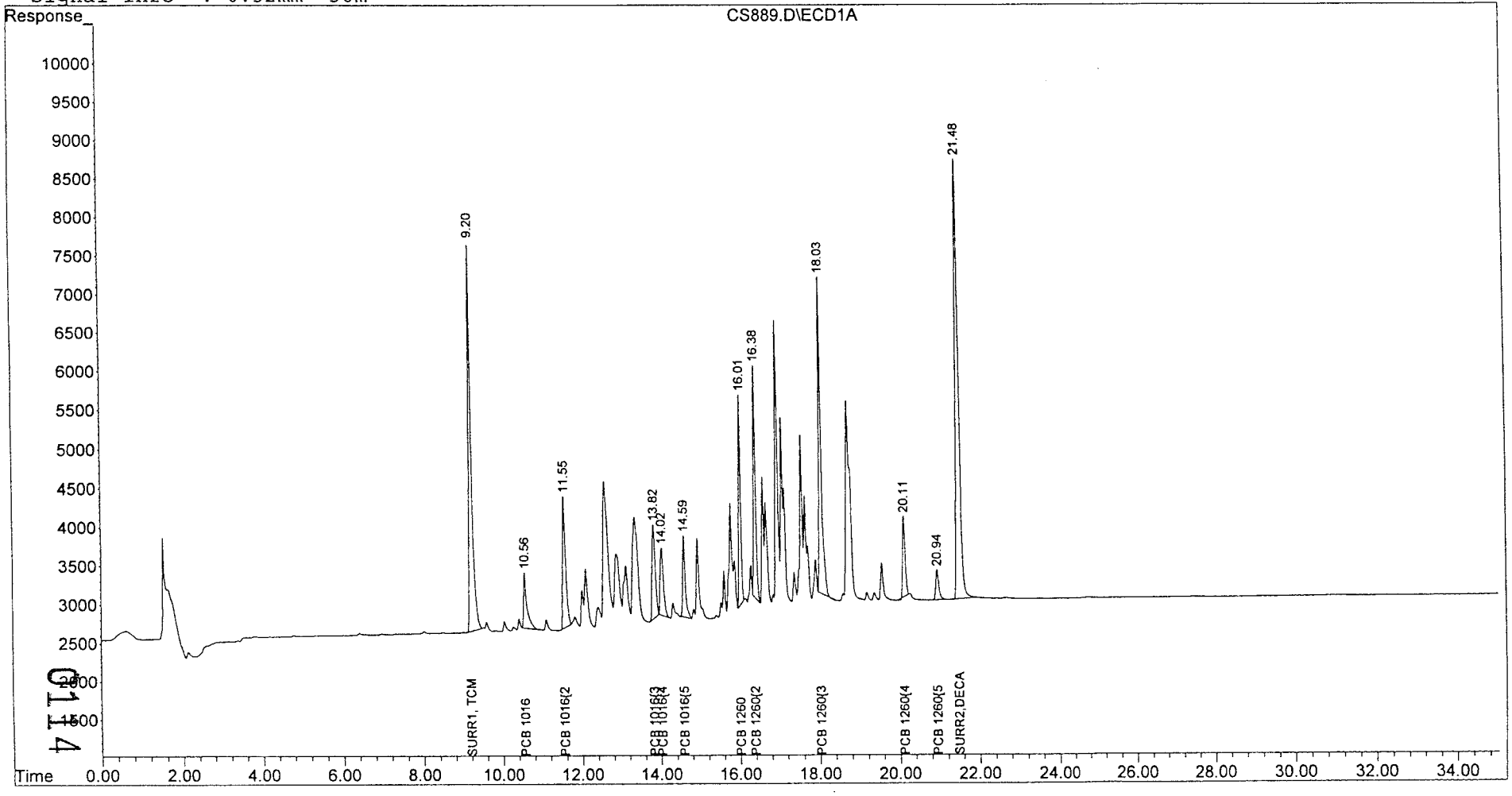
(f)=RT Delta > 1/2 Window (m)=manual int.

Data F. : C:\HPCHEM\2\DATA\022400\CS889.D
Acq On : 24 Feb 2000 4:50 pm
Sample : AR1660ML1
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:43 2000 Quant Results File: F0224C.RES

al: 2
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Feb 24 11:48:32 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



CS889.D F0224C.M Fri Feb 25 07:57:14 2000

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400\CS890.D
Acq On : 24 Feb 2000 5:30 pm
Sample : AR1660M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:43 2000 Quant Results File: F0224C.RES

Vial: 3
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:43:33 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022300\CS852.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	340157	96.231 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	96.23%
37) S SURR2,DECACHLOROBIPHENYL	21.47	480325	90.623 ug/l
Spiked Amount 100.000		Recovery =	90.62%
Target Compounds			
2) L1c PCB 1016	10.55	75713	785.291 ug/l
3) L1c PCB 1016{2}	11.55	158581	765.166 ug/l
4) L1c PCB 1016{3}	13.81	125603	781.368 ug/l
5) L1c PCB 1016{4}	14.02	91488	807.043 ug/l
6) L1c PCB 1016{5}	14.58	88505	771.326 ug/l
Sum PCB 1016		539891	3910.193 ug/l
Average PCB 1016			782.039 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.00	170817	732.325 ug/l
33) L7c PCB 1260{2}	16.38	203857	742.528 ug/l
34) L7c PCB 1260{3}	18.02	336252	756.990 ug/l
35) L7C PCB 1260{4}	20.10	88600	782.881 ug/l
36) L7C PCB 1260{5}	20.93	38498	773.240 ug/l
Sum PCB 1260		838024	3787.964 ug/l
Average PCB 1260			757.593 ug/l

0115

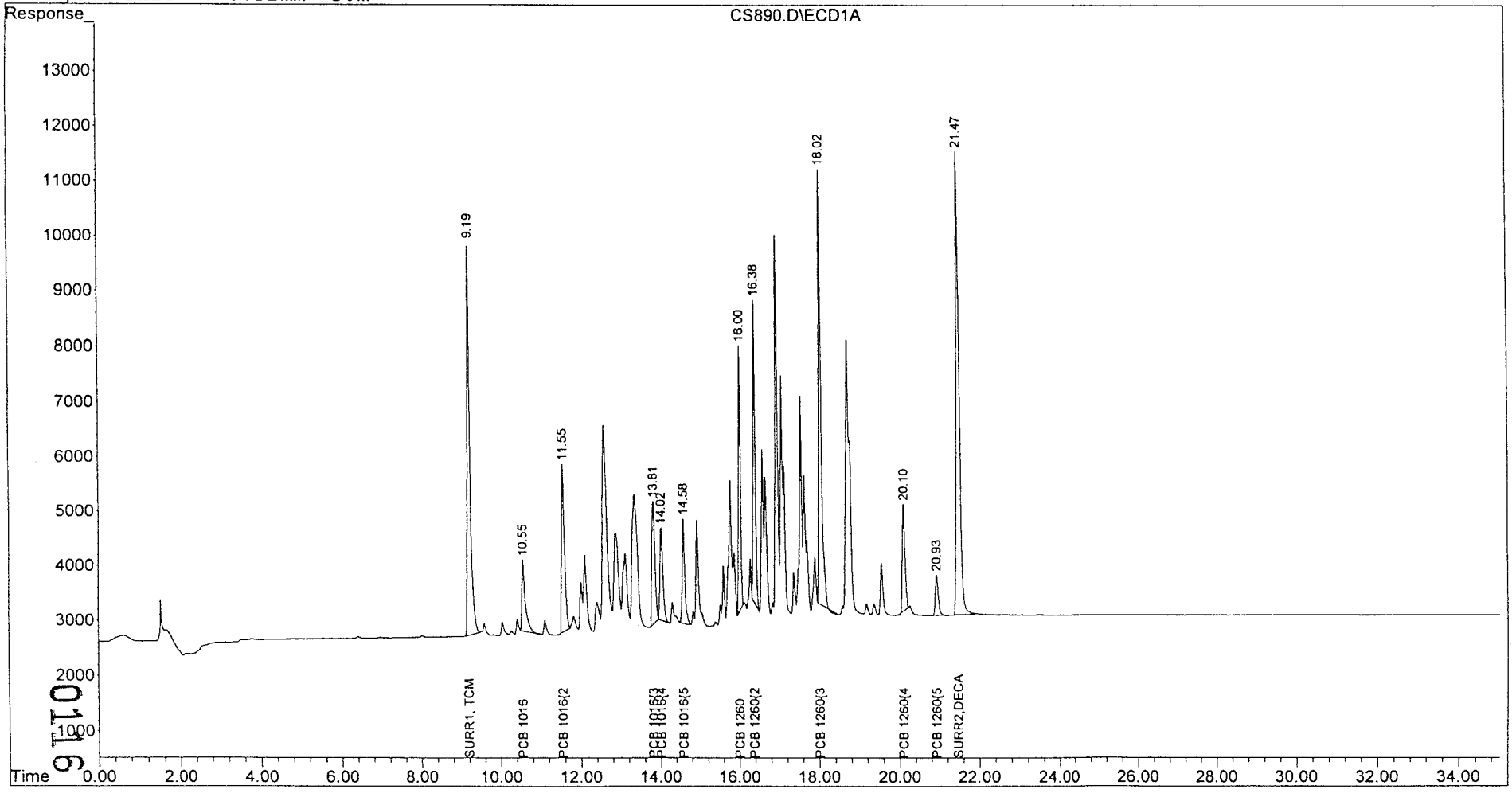
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitati eport

Data F. : C:\HPCHEM\2\DATA\022400\CS890.D al: 3
Acq On : 24 Feb 2000 5:30 pm Operator: DROOT
Sample : AR1660M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:43 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:43:33 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0116

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400\CS891.D Vial: 4
Acq On : 24 Feb 2000 6:11 pm Operator: DROOT
Sample : AR1660MH1 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:44 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:44:10 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	457537	80.705 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	80.70%
37) S SURR2,DECACHLOROBIPHENYL	21.47	609190	76.097 ug/l
Spiked Amount 100.000		Recovery =	76.10%
Target Compounds			
2) L1c PCB 1016	10.55	109685	724.344 ug/l
3) L1c PCB 1016{2}	11.55	228040	719.004 ug/l
4) L1c PCB 1016{3}	13.81	183625	730.971 ug/l
5) L1c PCB 1016{4}	14.01	136118	743.907 ug/l
6) L1c PCB 1016{5}	14.58	128620	726.625 ug/l
Sum PCB 1016		786088	3644.851 ug/l
Average PCB 1016			728.970 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.00	241101	705.730 ug/l
33) L7c PCB 1260{2}	16.37	289115	709.111 ug/l
34) L7c PCB 1260{3}	18.02	480989	715.221 ug/l
35) L7C PCB 1260{4}	20.10	124480	702.483 ug/l
36) L7C PCB 1260{5}	20.93	54965	713.867 ug/l
Sum PCB 1260		1190649	3546.412 ug/l
Average PCB 1260			709.282 ug/l

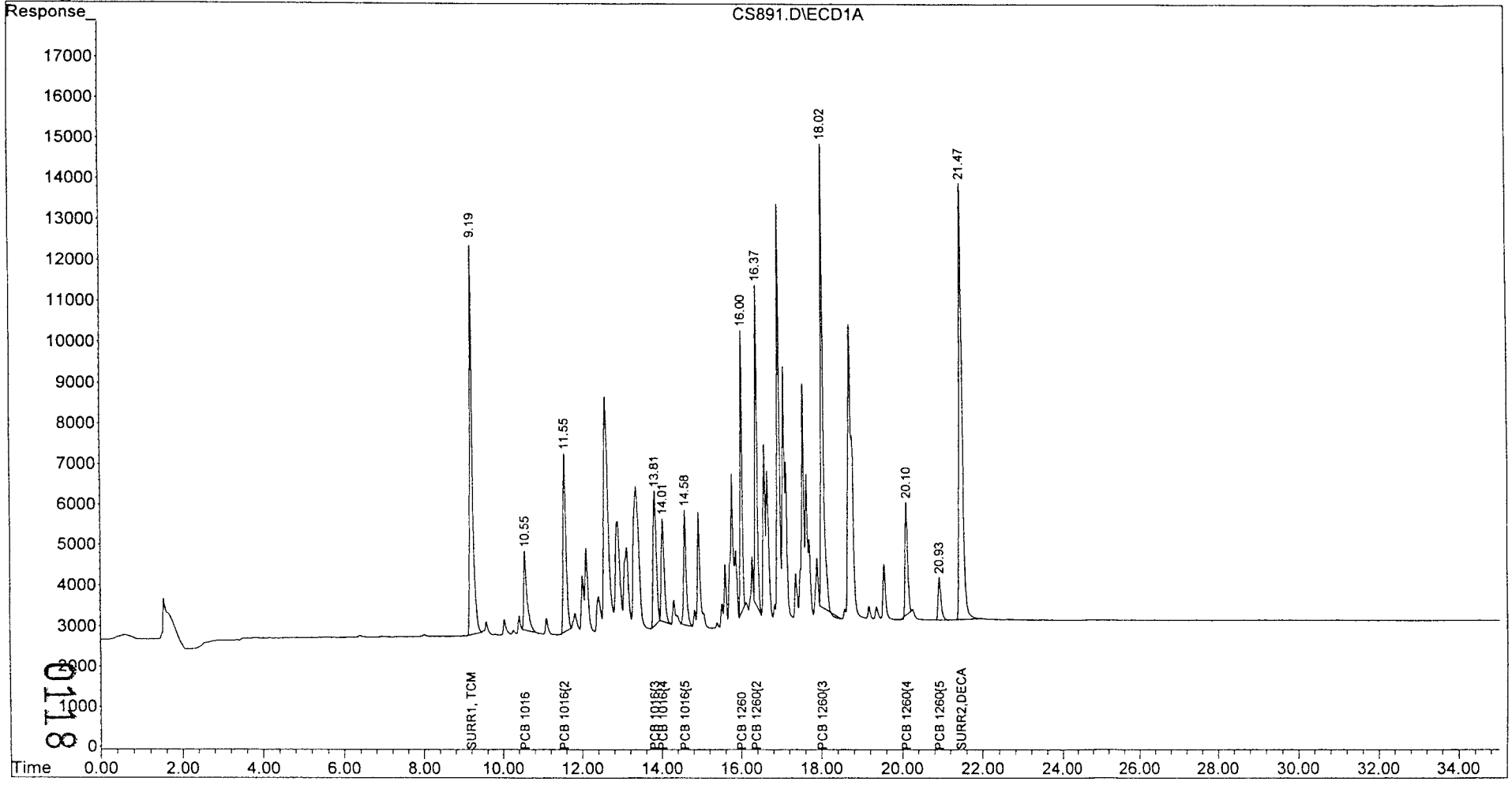
0117

(f)=RT Delta > 1/2 Window (m)=manual int.

Data F. : C:\HPCHEM\2\DATA\022400\CS891.D al: 4
Acq On : 24 Feb 2000 6:11 pm Operator: DROOT
Sample : AR1660MH1 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:44 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:44:10 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400\CS892.D
Acq On : 24 Feb 2000 6:51 pm
Sample : AR1660H01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:45 2000 Quant Results File: F0224C.RES

Vial: 5
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:44:41 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	598684	105.602 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery = 105.60%	
37) S SURR2,DECACHLOROBIPHENYL	21.47	767910	95.924 ug/l
Spiked Amount 100.000		Recovery = 95.92%	
Target Compounds			
2) L1c PCB 1016	10.55	144024	951.114 ug/l
3) L1c PCB 1016{2}	11.55	299683	944.893 ug/l
4) L1c PCB 1016{3}	13.81	245370	976.766 ug/l
5) L1c PCB 1016{4}	14.01	184764	1009.766 ug/l
6) L1c PCB 1016{5}	14.58	172331	973.565 ug/l
Sum PCB 1016		1046172	4856.103 ug/l
Average PCB 1016			971.221 ug/l
Sum PCB 1221		0	N.D. ug/L
...erage PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.00	316621	926.785 ug/l
33) L7c PCB 1260{2}	16.37	381426	935.522 ug/l
34) L7c PCB 1260{3}	18.02	642210	954.954 ug/l
35) L7C PCB 1260{4}	20.10	164905	930.613 ug/l
36) L7C PCB 1260{5}	20.93	73507	954.691 ug/l
Sum PCB 1260		1578669	4702.565 ug/l
Average PCB 1260			940.513 ug/l

0119

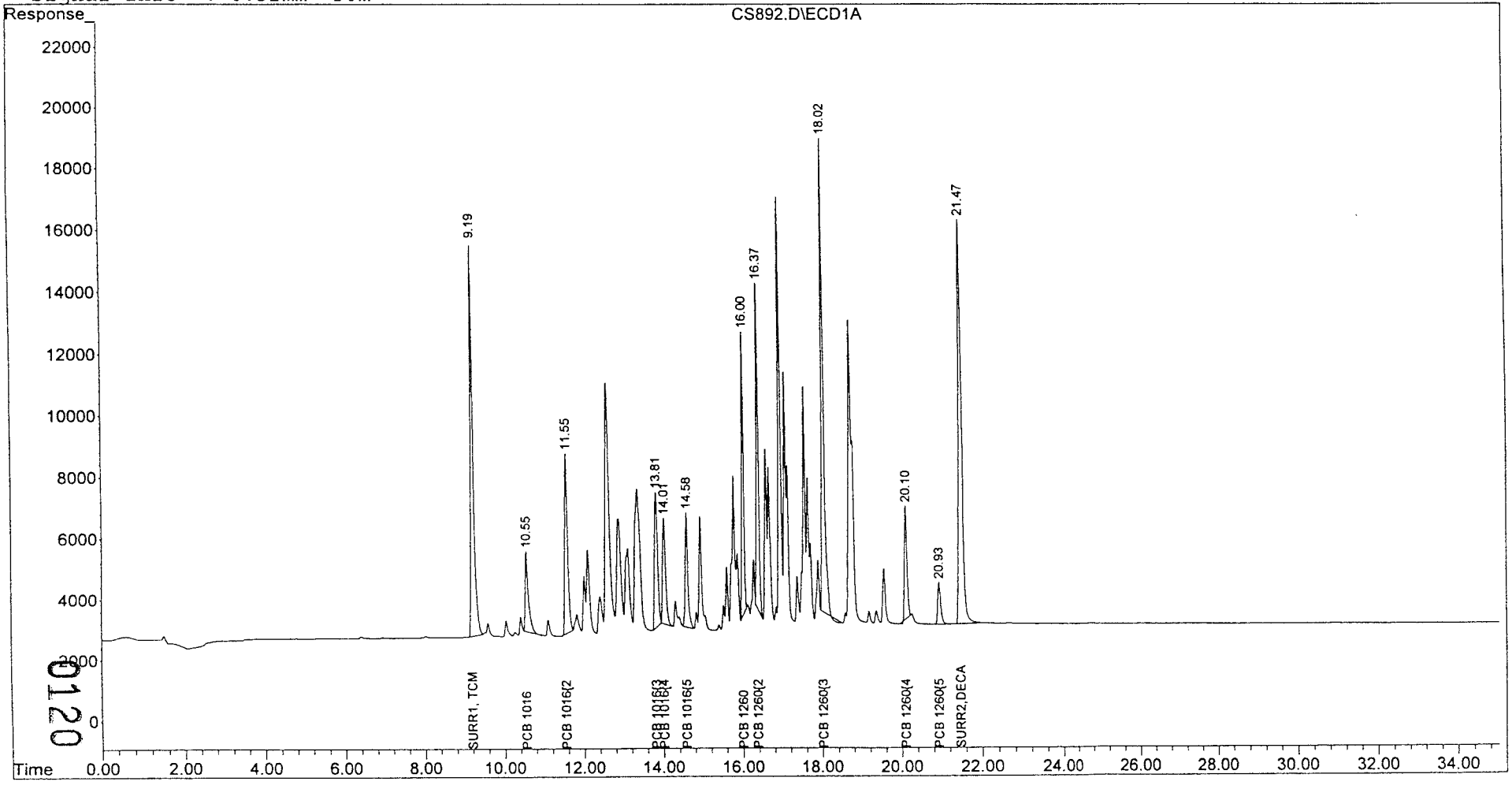
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitatio eport

Data F : C:\HPCHEM\2\DATA\022400\CS892.D .al: 5
Acq On : 24 Feb 2000 6:51 pm Operator: DROOT
Sample : AR1660H01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:45 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:44:41 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0120

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400\CS893.D
Acq On : 24 Feb 2000 7:32 pm
Sample : AR1221M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:46 2000 Quant Results File: F0224C.RES

Vial: 6
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:46:09 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	329529	58.125 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	58.13%#
37) S SURR2,DECACHLOROBIPHENYL	21.48	474864	59.318 ug/l
Spiked Amount 100.000		Recovery =	59.32%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
7) L2c PCB 1221	10.04	36898	813.274 ug/l
8) L2c PCB 1221{2}	10.41	18371	800.519 ug/l
9) L2c PCB 1221{3}	10.55	107071	732.353 ug/l
Sum PCB 1221		162341	2346.147 ug/L
Average PCB 1221			782.049 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

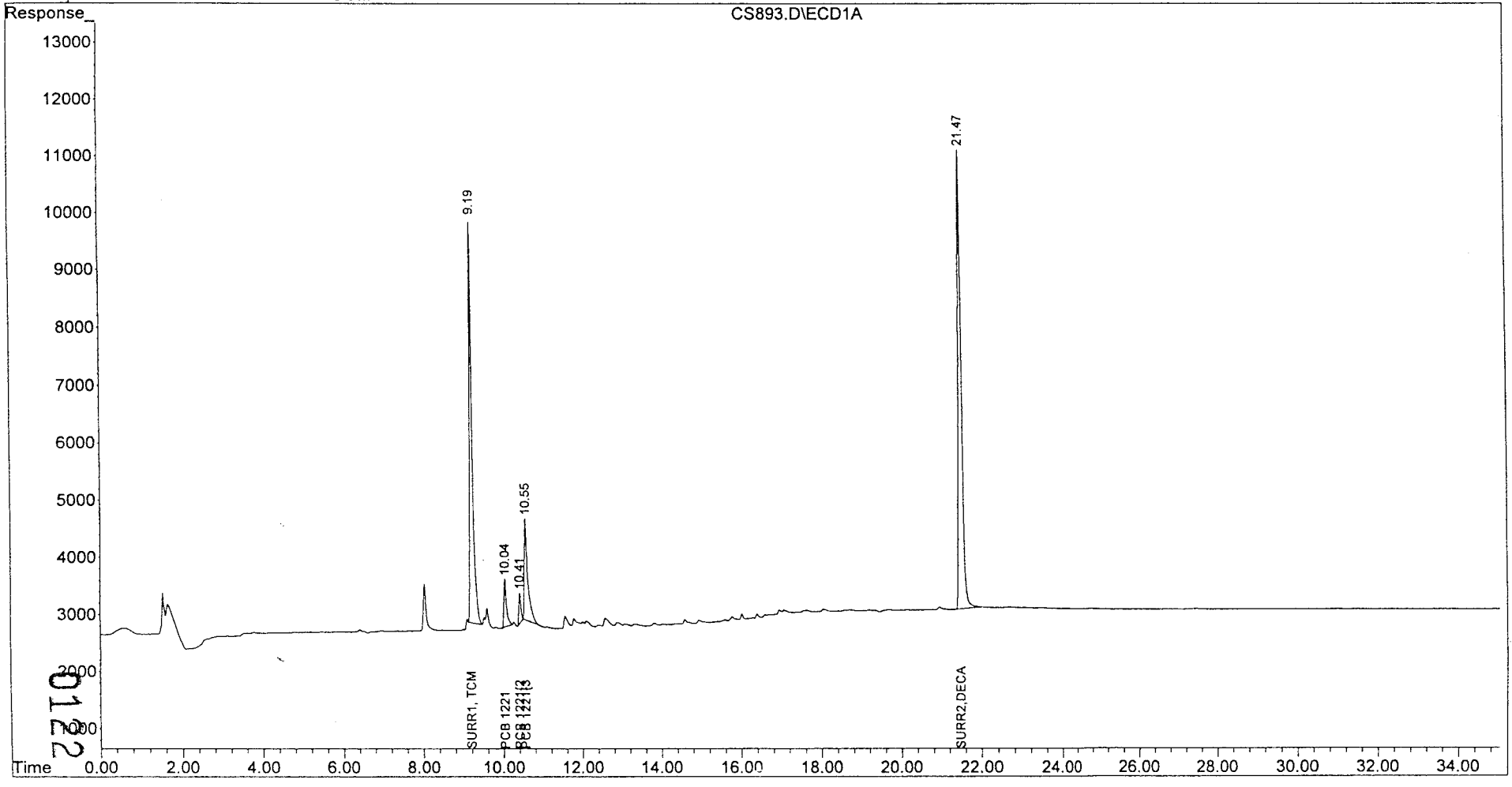
0121

(f)=RT Delta > 1/2 Window (m)=manual int.

Data F. : C:\HPCHEM\2\DATA\022400\CS893.D .al: 6
Acq On : 24 Feb 2000 7:32 pm Operator: DROOT
Sample : AR1221M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:46 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:46:09 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0122

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400\CS894.D
Acq On : 24 Feb 2000 8:13 pm
Sample : AR1232M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:47 2000 Quant Results File: F0224C.RES

Vial: 7
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:47:33 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS893.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.20	331940	60.439 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	60.44%
37) S SURR2,DECACHLOROBIPHENYL	21.47	463062	58.509 ug/l
Spiked Amount 100.000		Recovery =	58.51%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
12) L3c PCB 1232	10.55	90276	707.170 ug/l
13) L3c PCB 1232{2}	11.55	74057	721.948 ug/l
L3c PCB 1232{3}	12.58	110820	762.356 ug/l
L3c PCB 1232{4}	14.59	69833	742.716 ug/l
16) L3c PCB 1232{5}	15.02	47639	742.276 ug/l
Sum PCB 1232		392625	3676.467 ug/l
Average PCB 1232			735.293 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0123

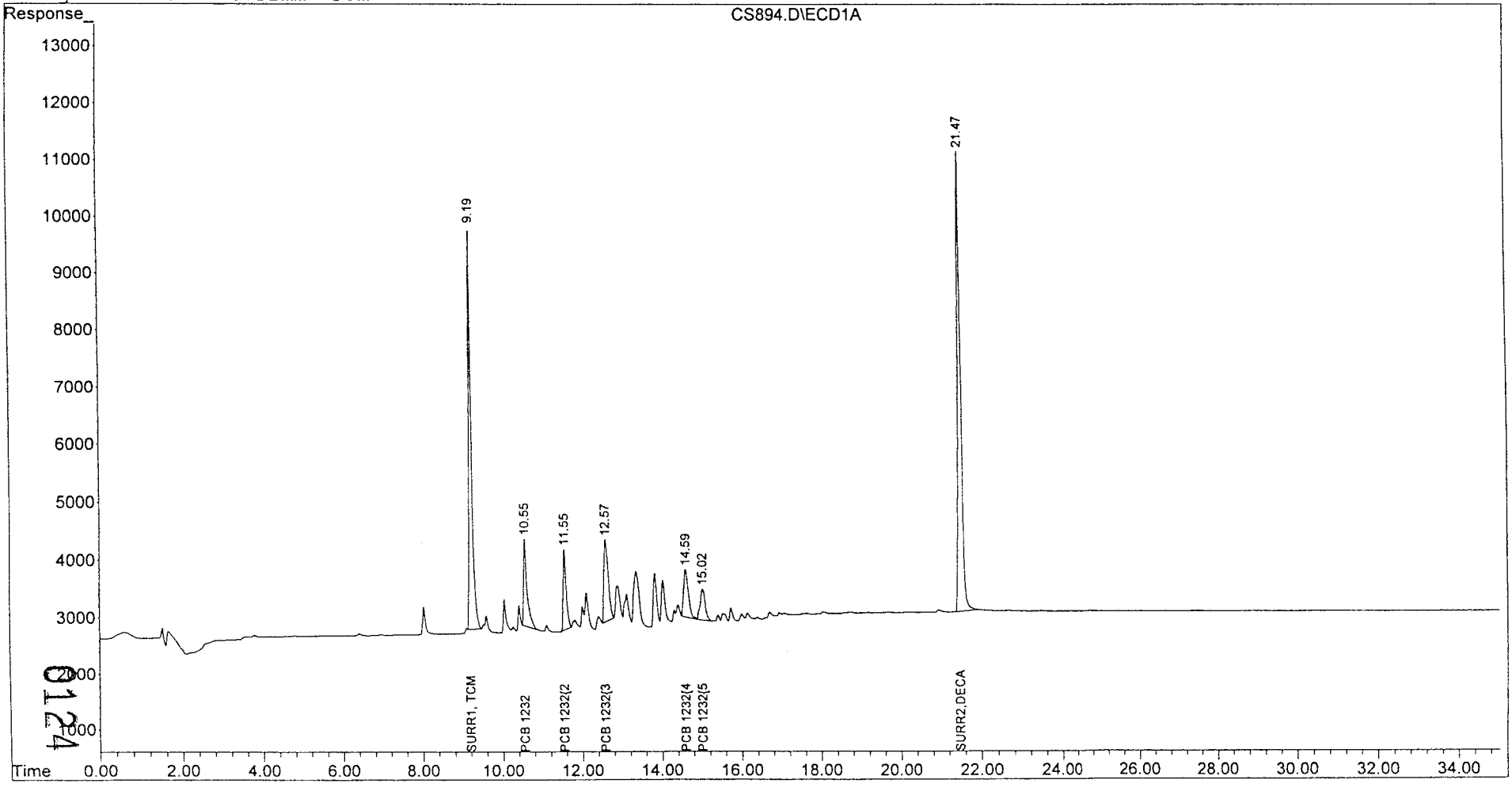
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitatic eport

Data F_ : C:\HPCHEM\2\DATA\022400\CS894.D _al: 7
Acq On : 24 Feb 2000 8:13 pm Operator: DROOT
Sample : AR1232M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:47 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:47:33 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



8124

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400\CS895.D
Acq On : 24 Feb 2000 8:53 pm
Sample : AR1242M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:48 2000 Quant Results File: F0224C.RES

Vial: 8
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:48:15 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS894.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	336312	60.790 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	60.79%
37) S SURR2,DECACHLOROBIPHENYL	21.47	447738	58.014 ug/l
Spiked Amount 100.000		Recovery =	58.01%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
) L4c PCB 1242	10.55	66538	687.112 ug/l
18) L4c PCB 1242{2}	11.55	121478	677.675 ug/l
19) L4c PCB 1242{3}	12.58	189316	703.066 ug/l
20) L4c PCB 1242{4}	13.82	100228	672.380 ug/l
21) L4c PCB 1242{5}	14.02	81779	694.058 ug/l
Sum PCB 1242		559340	3434.292 ug/l
Average PCB 1242			686.858 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

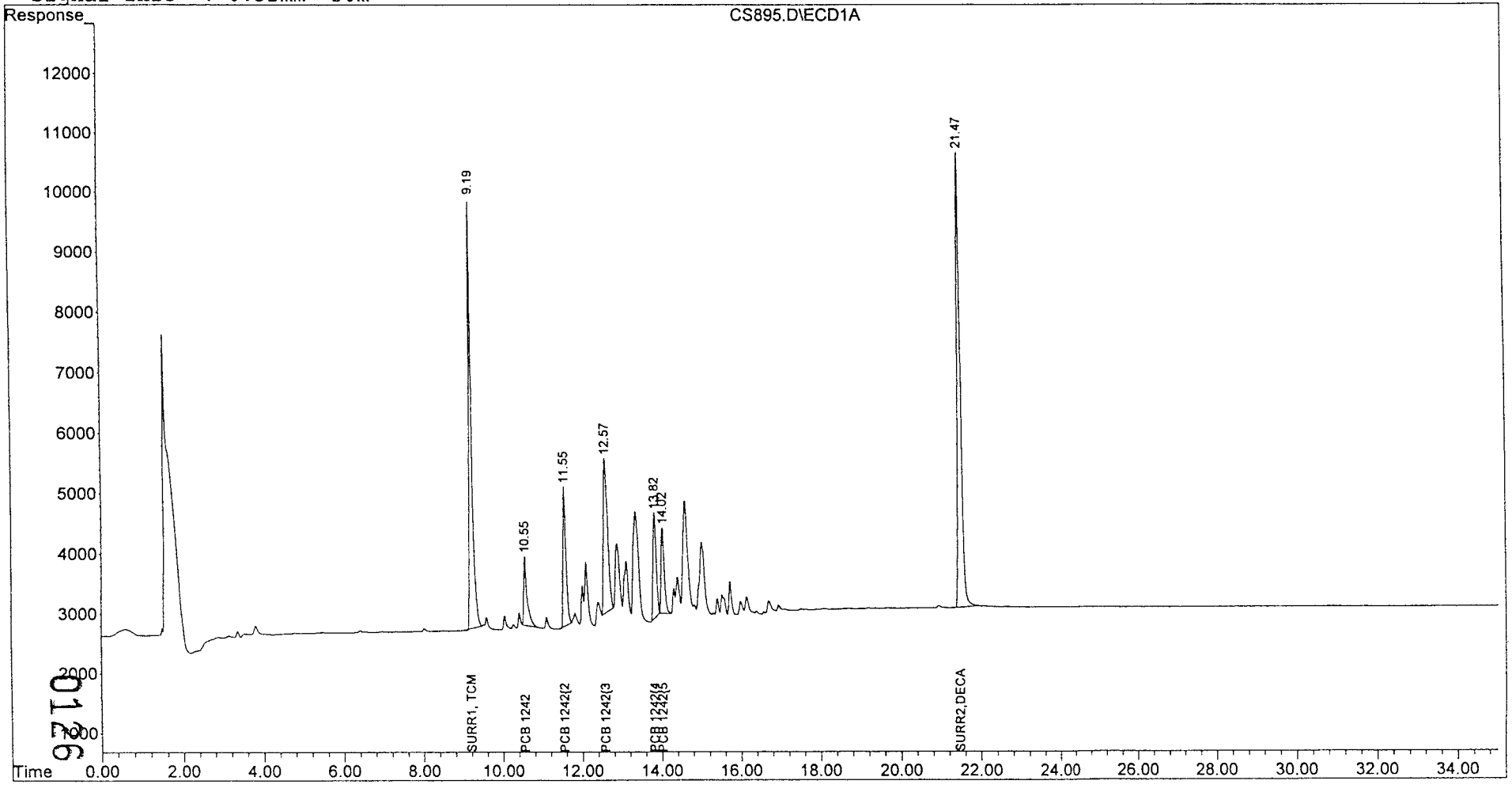
0125

(f)=RT Delta > 1/2 Window (m)=manual int.

Data F: : C:\HPCHEM\2\DATA\022400\CS895.D .al: 8
Acq On : 24 Feb 2000 8:53 pm Operator: DROOT
Sample : AR1242M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:48 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:48:15 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0126

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400\CS896.D
Acq On : 24 Feb 2000 9:34 pm
Sample : AR1248M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:49 2000 Quant Results File: F0224C.RES

Vial: 9
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:48:58 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS895.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	366295	65.349 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	65.35%
37) S SURR2,DECACHLOROBIPHENYL	21.47	497144	66.621 ug/l
Spiked Amount 100.000		Recovery =	66.62%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
22) L5c PCB 1248	11.55	70262	705.494 ug/l
23) L5c PCB 1248{2}	12.57	139218	760.548 ug/l
24) L5c PCB 1248{3}	12.85	52924	786.756 ug/l
25) L5c PCB 1248{4}	13.81	169506	711.977 ug/l
26) L5c PCB 1248{5}	14.01	134209	724.794 ug/l
Sum PCB 1248		566120	3689.569 ug/l
Average PCB 1248			737.914 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

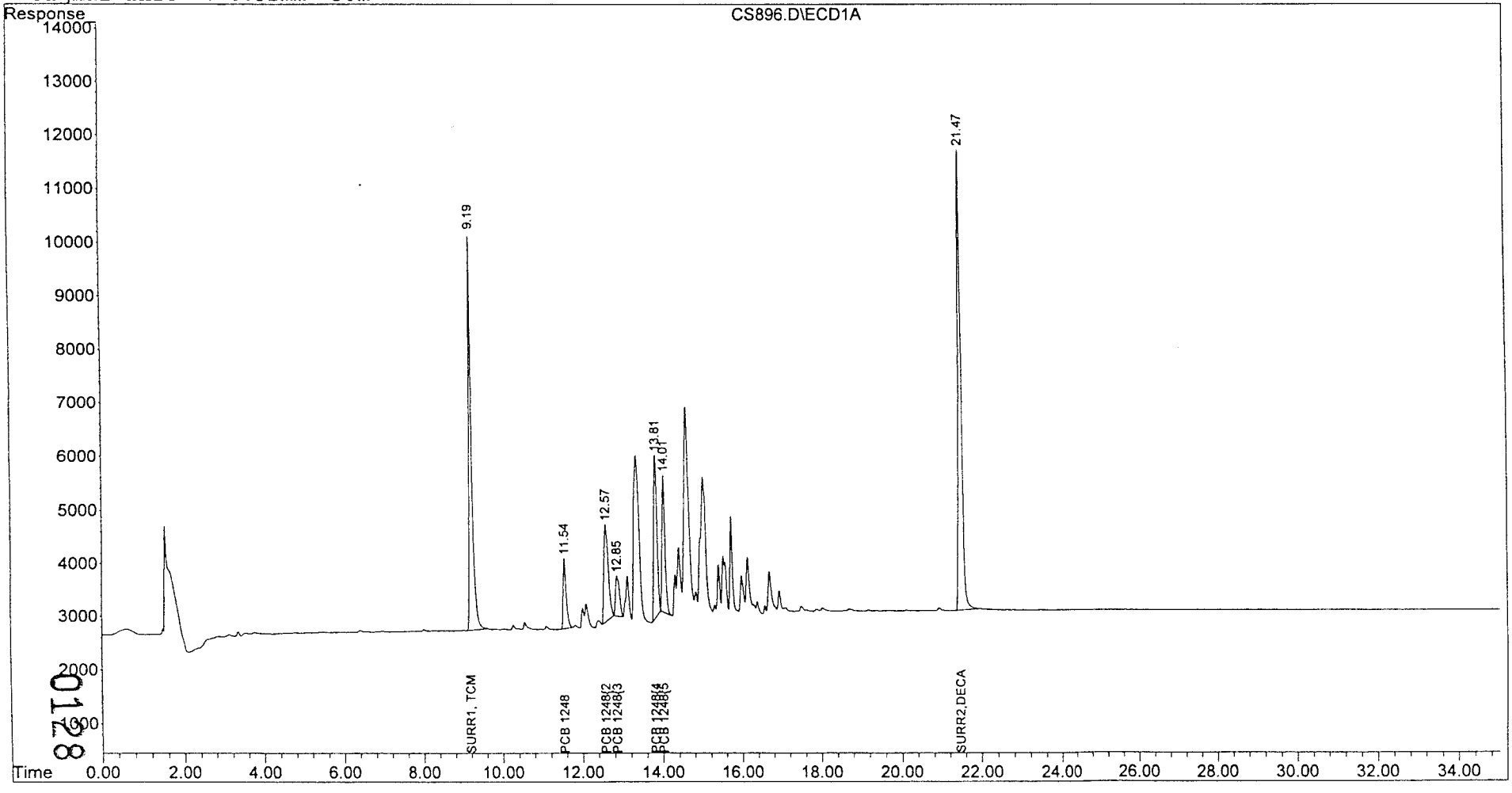
0127

(f)=RT Delta > 1/2 Window (m)=manual int.

Data F. : C:\HPCHEM\2\DATA\022400\CS896.D al: 9
Acq On : 24 Feb 2000 9:34 pm Operator: DROOT
Sample : AR1248M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:49 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:48:58 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0128

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400\CS897.D Vial: 10
Acq On : 24 Feb 2000 10:14 pm Operator: DROOT
Sample : AR1254M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:50 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:49:58 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS896.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	359628	58.908 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	58.91%#
37) S SURR2,DECACHLOROBIPHENYL	21.47	474743	57.296 ug/l
Spiked Amount 100.000		Recovery =	57.30%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
27) L6c PCB 1254	13.81	51206	772.644 ug/l
28) L6c PCB 1254{2}	14.01	19557	836.252 ug/l
29) L6c PCB 1254{3}	15.40	52605	807.808 ug/l
30) L6c PCB 1254{4}	16.13	97030	841.406 ug/l
31) L6c PCB 1254{5}	16.93	185605	767.004 ug/l
Sum PCB 1254		406003	4025.114 ug/l
Average PCB 1254			805.023 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

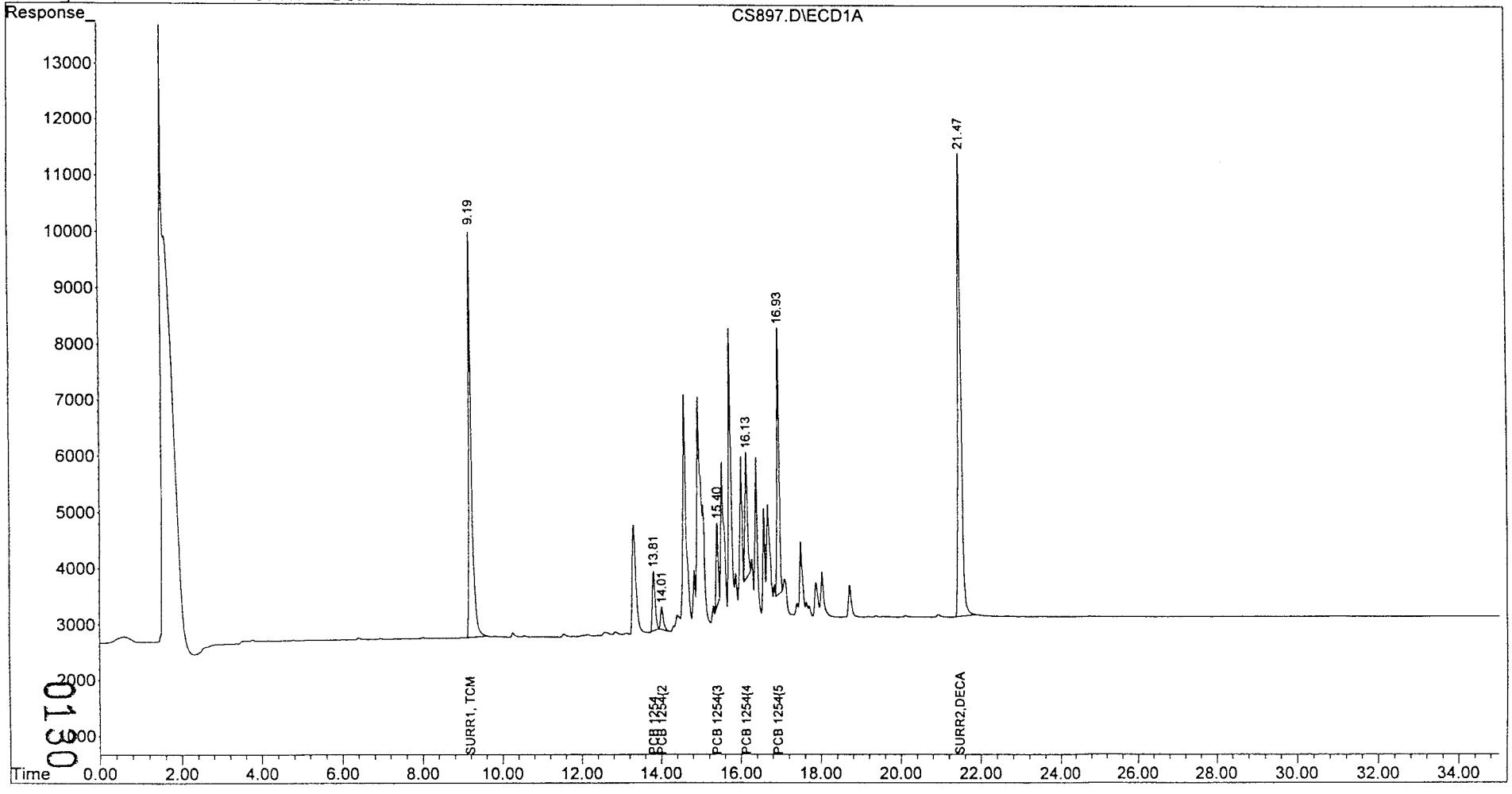
0129

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Fi : C:\HPCHEM\2\DATA\022400\CS897.D al: 10
Acq On : 24 Feb 2000 10:14 pm Operator: DROOT
Sample : AR1254M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:50 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:49:58 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0130

Response Factor Report 5890C

Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:41:20 2000

Calibration Files
1 =ZS892.D 2 =ZS891.D 3 =ZS890.D
4 =ZS889.D 5 =ZS888.D

	Compound	1	2	3	4	5	Avg	%RSD
1)	S SURR1, TCMX	1.011	1.056	0.985	1.081	1.154	1.058 E4	6.22
2)	L1c PCB 1016	2.003	2.162	2.072	2.350	2.583	2.234 E2	10.51
3)	L1c PCB 1016{2}	4.820	5.300	5.339	6.365	7.486	5.862 E2	18.23
4)	L1c PCB 1016{3}	0.830	0.901	0.880	1.026	1.197	0.967 E3	15.24
5)	L1c PCB 1016{4}	2.182	2.387	2.368	2.777	3.064	2.556 E2	13.98
6)	L1c PCB 1016{5}	2.337	2.560	2.540	3.009	3.446	2.778 E2	16.08
7)	L2c PCB 1221			1.453			1.453 E2	0.00
8)	L2c PCB 1221{2}			1.024			1.024 E2	0.00
9)	L2c PCB 1221{3}			2.569			2.569 E2	0.00
10)	PCB 1221{4}						0.000 0	-1.00
11)	PCB 1221{5}						0.000 0	-1.00
12)	L3c PCB 1232			2.240			2.240 E2	0.00
13)	L3c PCB 1232{2}			2.791			2.791 E2	0.00
14)	L3c PCB 1232{3}			4.239			4.239 E2	0.00
15)	L3c PCB 1232{4}			5.577			5.577 E1	0.00
16)	L3c PCB 1232{5}			9.033			9.033 E1	0.00
17)	L4c PCB 1242			2.021			2.021 E2	0.00
18)	L4c PCB 1242{2}			4.642			4.642 E2	0.00
19)	L4c PCB 1242{3}			7.715			7.715 E2	0.00
20)	L4c PCB 1242{4}			1.357			1.357 E2	0.00
21)	L4c PCB 1242{5}			1.984			1.984 E2	0.00
22)	L5c PCB 1248			2.642			2.642 E2	0.00
23)	L5c PCB 1248{2}			5.410			5.410 E1	0.00
24)	L5c PCB 1248{3}			2.432			2.432 E2	0.00
25)	L5c PCB 1248{4}			1.527			1.527 E2	0.00
26)	L5c PCB 1248{5}			7.054			7.054 E1	0.00
27)	L6c PCB 1254			2.229			2.229 E2	0.00
28)	L6c PCB 1254{2}			1.559			1.559 E2	0.00
29)	L6c PCB 1254{3}			4.833			4.833 E2	0.00
30)	L6c PCB 1254{4}			5.615			5.615 E2	0.00
31)	L6c PCB 1254{5}			2.463			2.463 E2	0.00
32)	L7c PCB 1260	3.443	3.650	3.604	4.251	4.924	3.975 E2	15.43
33)	L7c PCB 1260{2}	5.932	6.497	6.478	7.799	9.223	7.186 E2	18.50
34)	L7c PCB 1260{3}	6.023	6.588	6.537	7.835	9.290	7.255 E2	18.18
35)	L7C PCB 1260{4}	0.897	0.967	0.911	1.052	0.966	0.959 E2	6.38
36)	L7C PCB 1260{5}	1.029	1.109	1.063	1.235	1.380	1.163 E3	12.38
37)	S SURR2,DECACHLOROBIPHE	1.335	1.429	1.365	1.526	1.705	1.472 E4	10.17

0131

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400.SEC\ZS888.D
Acq On : 24 Feb 2000 4:09 pm
Sample : AR1660L01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:28 2000 Quant Results File: R0224C.RES

Vial: 51
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:20:25 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022300.SEC\ZS852.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.60	230857	20.858 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	20.86%#
37) S SURR2,DECACHLOROBIPHENYL	23.56	341099	23.315 ug/l
Spiked Amount 100.000		Recovery =	23.32%
Target Compounds			
2) L1c PCB 1016	11.29	25832	107.015 ug/l m
3) L1c PCB 1016{2}	12.35	74862	127.199 ug/l
4) L1c PCB 1016{3}	13.20	119664	121.955 ug/l
5) L1c PCB 1016{4}	15.29	30636	117.863 ug/l
6) L1c PCB 1016{5}	15.43	34462	122.724 ug/l
Sum PCB 1016		285455	596.756 ug/l
Average PCB 1016			119.351 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.35	49244	122.048 ug/l
33) L7c PCB 1260{2}	16.66	92225	128.980 ug/l
34) L7c PCB 1260{3}	16.83	92900	129.428 ug/l
35) L7C PCB 1260{4}	18.02	9658	96.272 ug/l
36) L7C PCB 1260{5}	18.61	137977	119.282 ug/l
Sum PCB 1260		382004	596.011 ug/l
Average PCB 1260			119.202 ug/l

0132

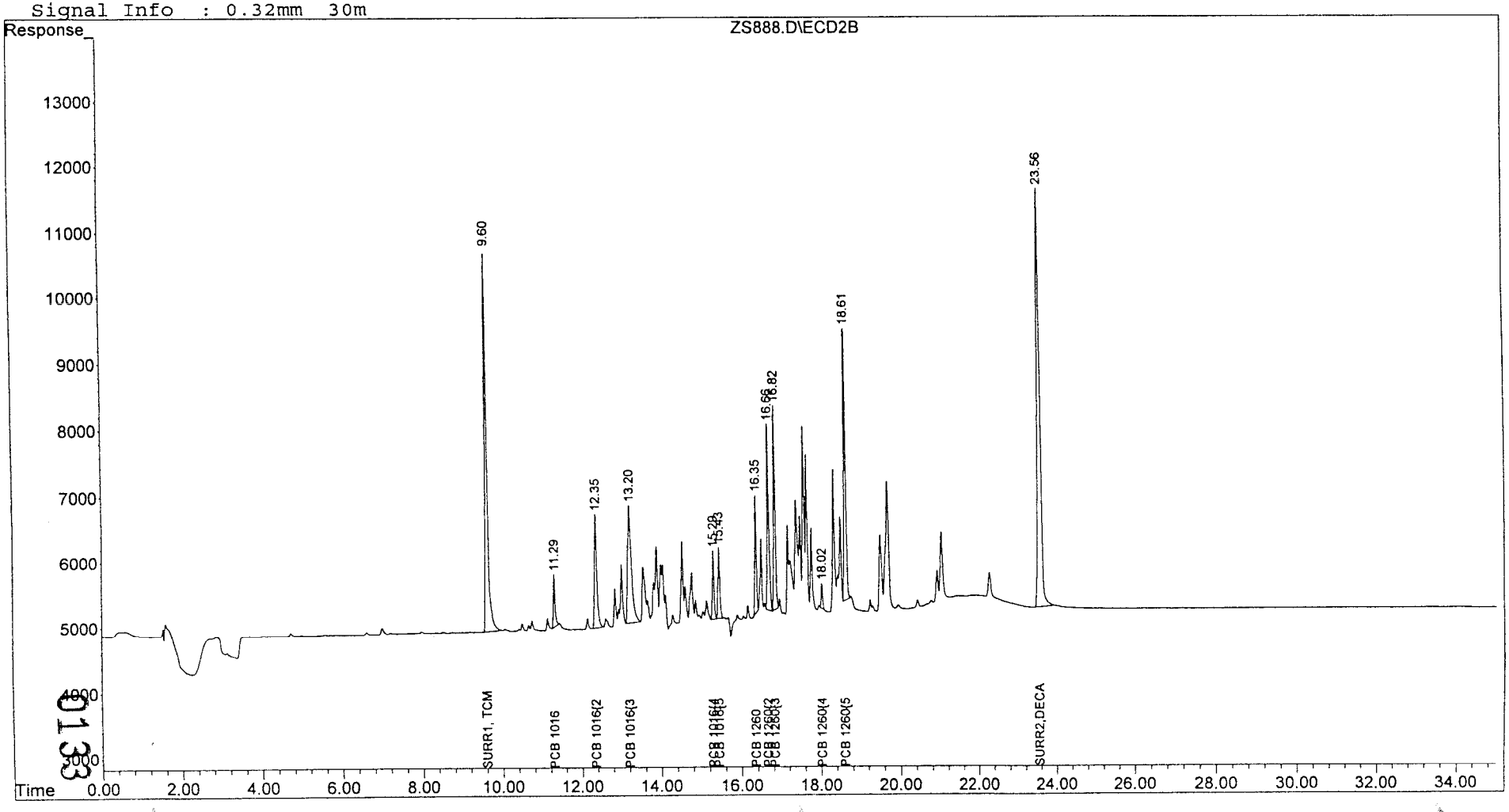
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data Fi. : C:\HPCHEM\2\DATA\022400.SEC\ZS888.D ..l: 51
Acq On : 24 Feb 2000 4:09 pm Operator: DROOT
Sample : AR1660L01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:28 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:20:25 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



01133

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400.SEC\ZS889.D Vial: 52
Acq On : 24 Feb 2000 4:50 pm Operator: DROOT
Sample : AR1660ML1 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:21 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:21:38 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022300.SEC\ZS852.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.60	432468	39.074 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	39.07%#
37) S SURR2,DECACHLOROBIPHENYL	23.56	610566	41.733 ug/l
Spiked Amount 100.000		Recovery =	41.73%
Target Compounds			
2) L1c PCB 1016	11.29	58751	243.390 ug/l
3) L1c PCB 1016{2}	12.35	159121	270.362 ug/l
4) L1c PCB 1016{3}	13.20	256428	261.339 ug/l
5) L1c PCB 1016{4}	15.29	69435	267.135 ug/l
6) L1c PCB 1016{5}	15.43	75224	267.887 ug/l
Sum PCB 1016		618960	1310.113 ug/l
Average PCB 1016			262.023 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.35	106286	263.421 ug/l
33) L7c PCB 1260{2}	16.66	194979	272.685 ug/l
34) L7c PCB 1260{3}	16.82	195886	272.909 ug/l
35) L7C PCB 1260{4}	18.02	26308	262.242 ug/l
36) L7C PCB 1260{5}	18.61	308804	266.965 ug/l
Sum PCB 1260		832263	1338.222 ug/l
Average PCB 1260			267.644 ug/l

0134

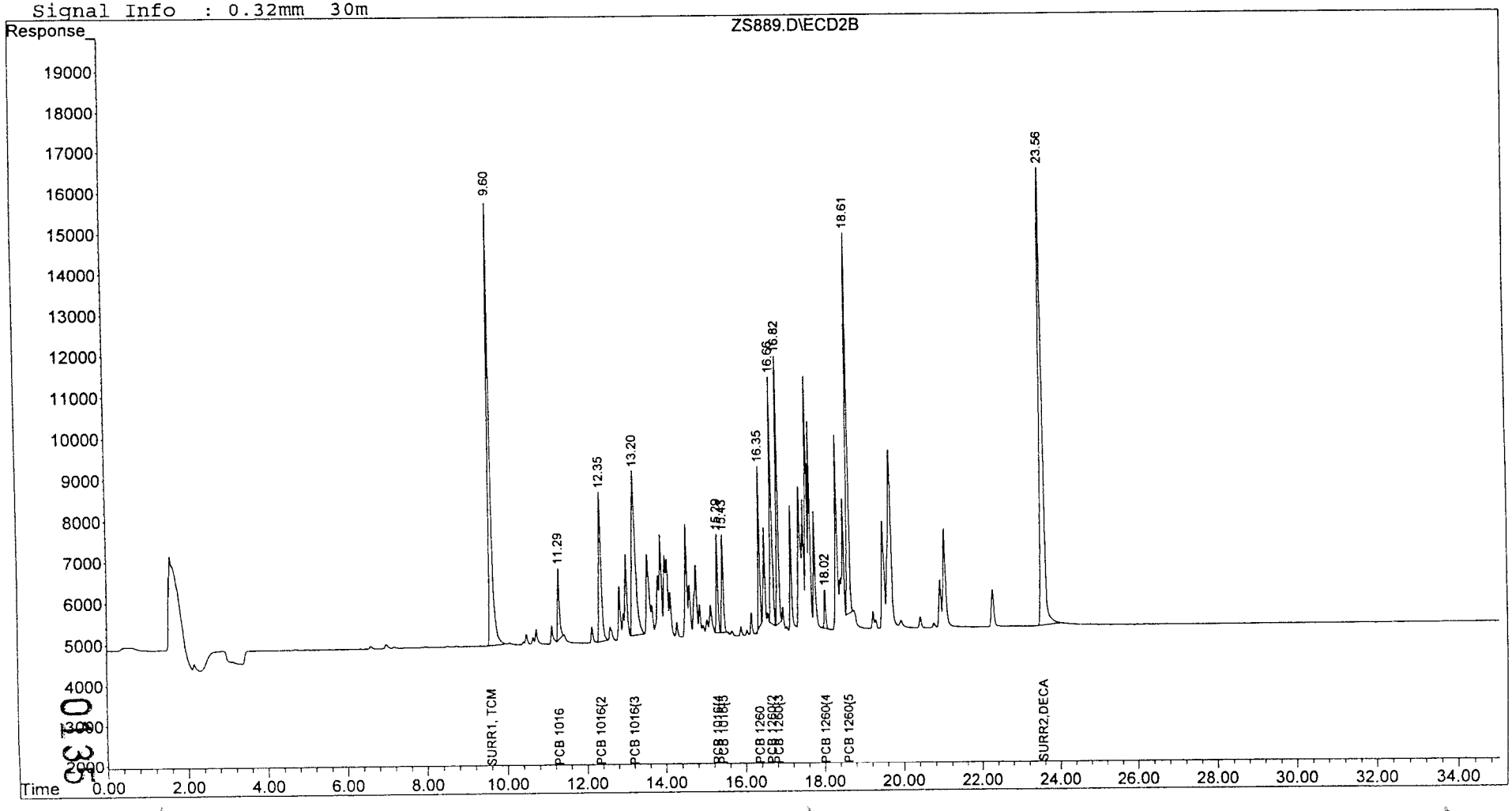
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data Fi : C:\HPCHEM\2\DATA\022400.SEC\ZS889.D .l: 52
Acq On : 24 Feb 2000 4:50 pm Operator: DROOT
Sample : AR1660ML1 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:21 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:21:38 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400.SEC\ZS890.D Vial: 53
Acq On : 24 Feb 2000 5:30 pm Operator: DROOT
Sample : AR1660M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:26 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:22:07 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022300.SEC\ZS852.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.60	591206	53.416 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	53.42%#
37) S SURR2,DECACHLOROBIPHENYL	23.55	818990	55.979 ug/l
Spiked Amount 100.000		Recovery =	55.98%
Target Compounds			
2) L1c PCB 1016	11.29	103585	429.122 ug/l
3) L1c PCB 1016{2}	12.35	266943	453.563 ug/l
4) L1c PCB 1016{3}	13.20	440143	448.572 ug/l
5) L1c PCB 1016{4}	15.29	118382	455.447 ug/l
6) L1c PCB 1016{5}	15.43	126998	452.263 ug/l
Sum PCB 1016		1056052	2238.968 ug/l
Average PCB 1016			447.794 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.35	180179	446.557 ug/l
33) L7c PCB 1260{2}	16.66	323890	452.972 ug/l
34) L7c PCB 1260{3}	16.82	326867	455.392 ug/l
35) L7C PCB 1260{4}	18.02	45575	454.302 ug/l
36) L7C PCB 1260{5}	18.61	531650	459.617 ug/l
Sum PCB 1260		1408160	2268.841 ug/l
Average PCB 1260			453.768 ug/l

0136

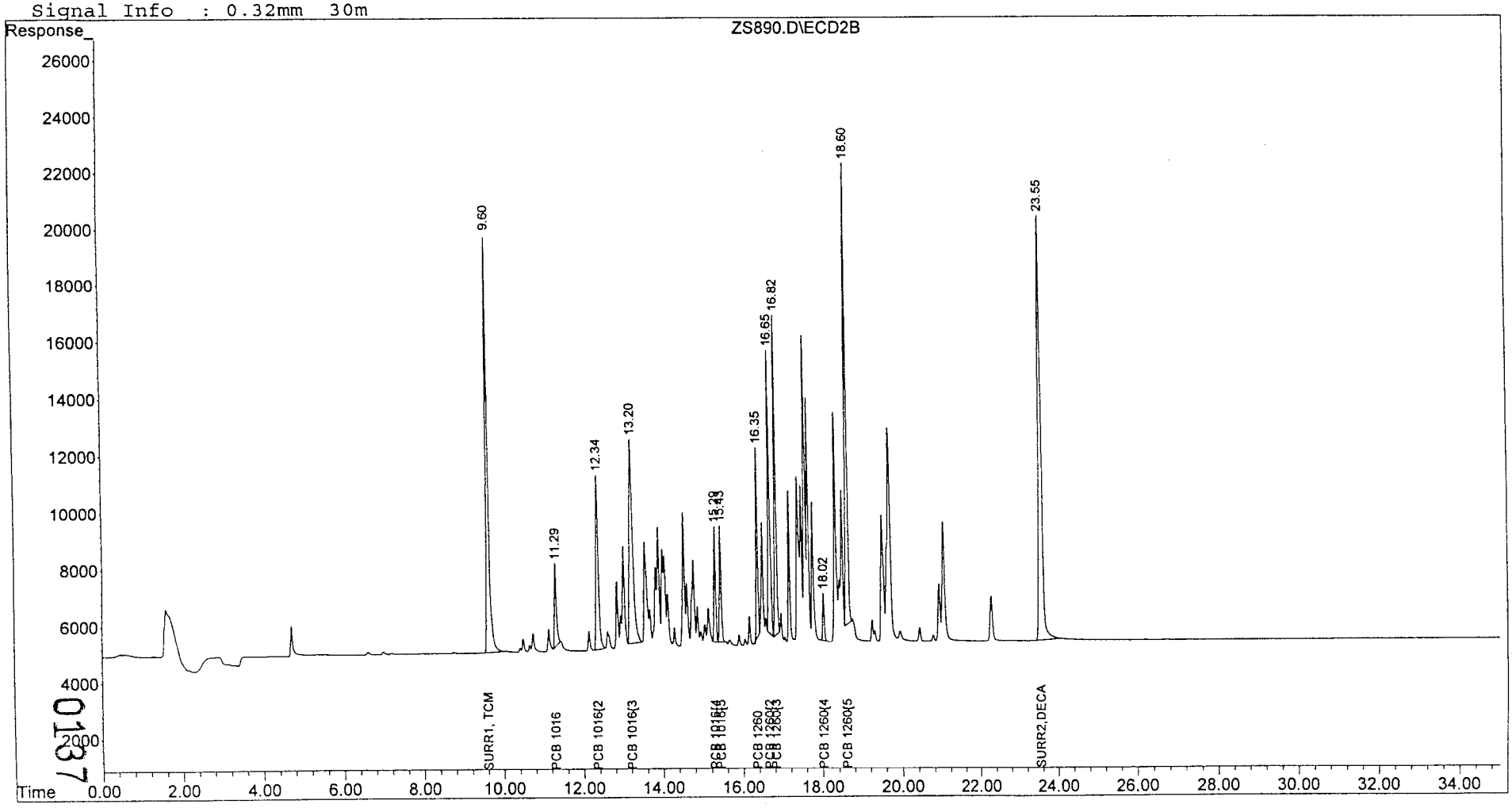
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data Fi : C:\HPCHEM\2\DATA\022400.SEC\ZS890.D .l: 53
Acq On : 24 Feb 2000 5:30 pm Operator: DROOT
Sample : AR1660M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:26 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:22:07 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0137

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400.SEC\ZS891.D
Acq On : 24 Feb 2000 6:11 pm
Sample : AR1660MH1
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:27 2000 Quant Results File: R0224C.RES

Vial: 54
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:27:02 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.60	845008	85.758 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	85.76%
37) S SURR2,DECACHLOROBIPHENYL	23.55	1142803	83.723 ug/l
Spiked Amount 100.000		Recovery =	83.72%
Target Compounds			
2) L1c PCB 1016	11.29	162134	782.615 ug/l
3) L1c PCB 1016{2}	12.35	397477	744.498 ug/l
4) L1c PCB 1016{3}	13.20	675671	767.558 ug/l
5) L1c PCB 1016{4}	15.29	179034	756.168 ug/l
6) L1c PCB 1016{5}	15.43	192013	755.964 ug/l
Sum PCB 1016		1606328	3806.804 ug/l
Average PCB 1016			761.361 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.35	273735	759.621 ug/l
33) L7c PCB 1260{2}	16.65	487303	752.266 ug/l
34) L7c PCB 1260{3}	16.82	494130	755.859 ug/l
35) L7C PCB 1260{4}	18.02	72489	795.277 ug/l
36) L7C PCB 1260{5}	18.60	832095	782.559 ug/l
Sum PCB 1260		2159753	3845.582 ug/l
Average PCB 1260			769.116 ug/l

0138

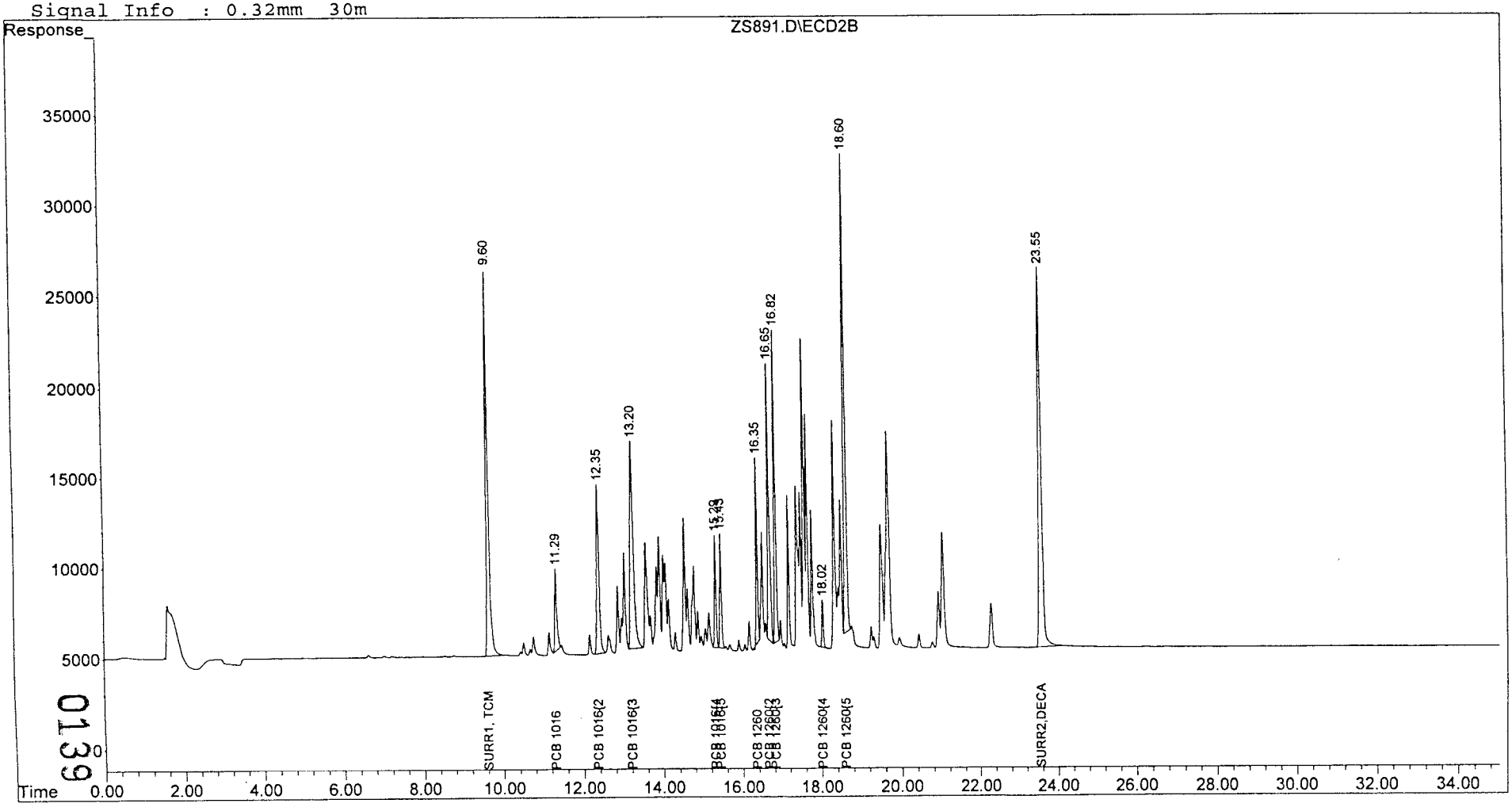
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data Fi : C:\HPCHEM\2\DATA\022400.SEC\ZS891.D .l: 54
Acq On : 24 Feb 2000 6:11 pm Operator: DROOT
Sample : AR1660MH1 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:27 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:27:02 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0139

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400.SEC\ZS892.D
Acq On : 24 Feb 2000 6:51 pm
Sample : AR1660H01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:28 2000 Quant Results File: R0224C.RES

Vial: 55
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:27:36 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.60	1010979	102.602 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	102.60%
37) S SURR2,DECACHLOROBIPHENYL	23.55	1334800	97.789 ug/l
Spiked Amount 100.000		Recovery =	97.79%
Target Compounds			
2) L1c PCB 1016	11.29	200254	966.620 ug/l
3) L1c PCB 1016{2}	12.34	482008	902.830 ug/l
4) L1c PCB 1016{3}	13.20	830098	942.986 ug/l
5) L1c PCB 1016{4}	15.29	218192	921.558 ug/l
6) L1c PCB 1016{5}	15.43	233681	920.015 ug/l
Sum PCB 1016		1964233	4654.008 ug/l
Average PCB 1016			930.802 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.35	344347	955.569 ug/l
33) L7c PCB 1260{2}	16.65	593217	915.768 ug/l
34) L7c PCB 1260{3}	16.82	602275	921.286 ug/l
35) L7C PCB 1260{4}	18.02	89677	983.837 ug/l
36) L7C PCB 1260{5}	18.60	1028992	967.734 ug/l
Sum PCB 1260		2658506	4744.194 ug/l
Average PCB 1260			948.839 ug/l

0140

(f)=RT Delta > 1/2 Window (m)=manual int.

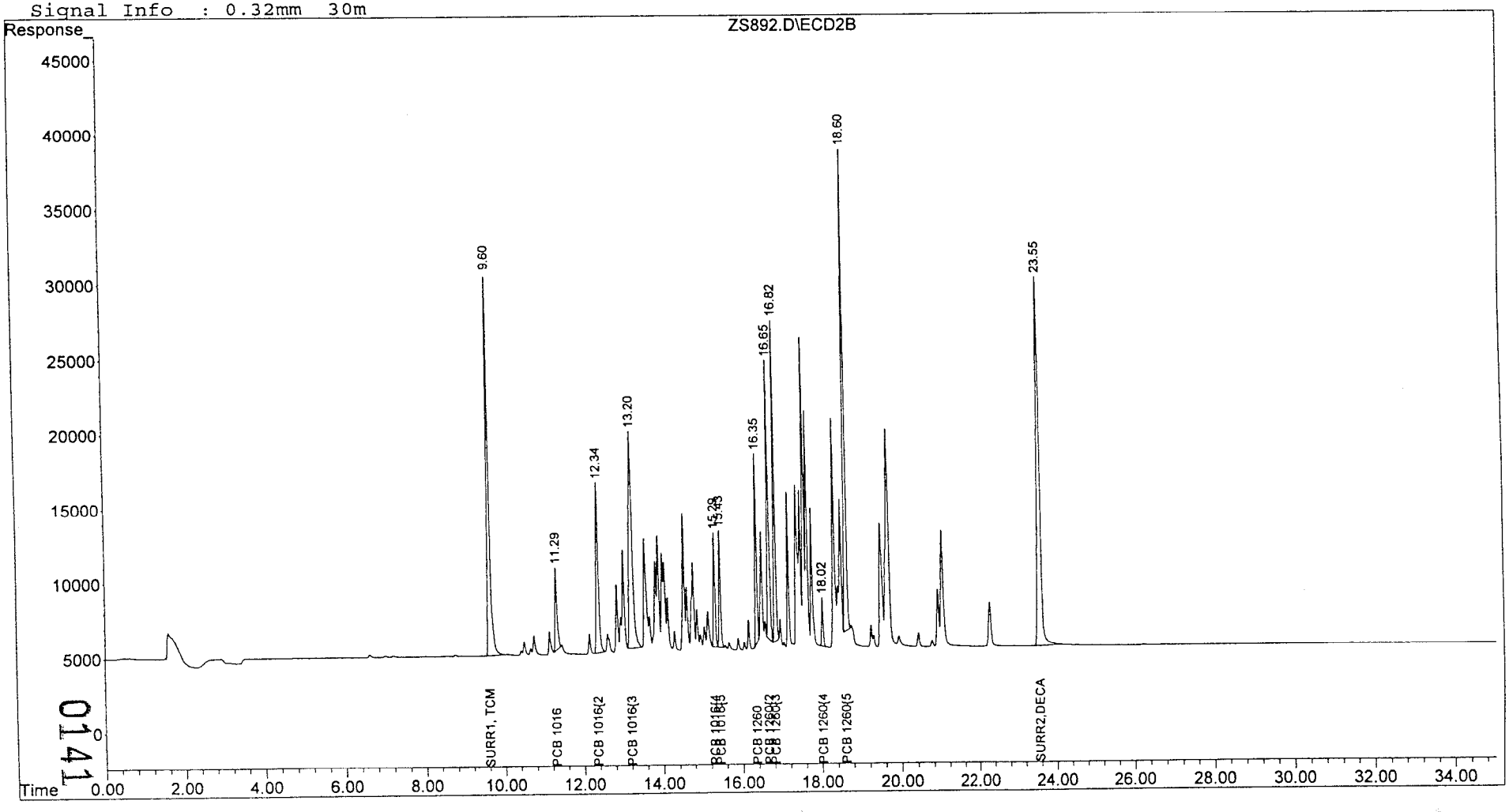
Quantitation Report

Data Fi. : C:\HPCHEM\2\DATA\022400.SEC\ZS892.D
Acq On : 24 Feb 2000 6:51 pm
Sample : AR1660H01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:28 2000 Quant Results File: R0224C.RES

\ .l: 55
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:27:36 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0141

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400.SEC\ZS893.D
Acq On : 24 Feb 2000 7:32 pm
Sample : AR1221M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:37 2000 Quant Results File: R0224C.RES

Vial: 56
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:29:08 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S SURR1, TCMX	9.60	605584	61.459	ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	61.46%	
37) S SURR2,DECACHLOROBIPHENYL	23.55	856181	62.725	ug/l
Spiked Amount 100.000		Recovery =	62.72%	
Target Compounds				
Sum PCB 1016		0	N.D.	ug/l
Average PCB 1016			0.000	ug/l
7) L2c PCB 1221	10.73	72637	469.514	ug/l
8) L2c PCB 1221{2}	11.12	51218	461.625	ug/l
9) L2c PCB 1221{3}	11.29	128438	445.190	ug/l
Sum PCB 1221		252292	1376.330	ug/L
Average PCB 1221			458.777	ug/L
Sum PCB 1232		0	N.D.	ug/l
Average PCB 1232			0.000	ug/l
Sum PCB 1242		0	N.D.	ug/l
Average PCB 1242			0.000	ug/l
Sum PCB 1248		0	N.D.	ug/l
Average PCB 1248			0.000	ug/l
Sum PCB 1254		0	N.D.	ug/l
Average PCB 1254			0.000	ug/l
Sum PCB 1260		0	N.D.	ug/l
Average PCB 1260			0.000	ug/l

0142

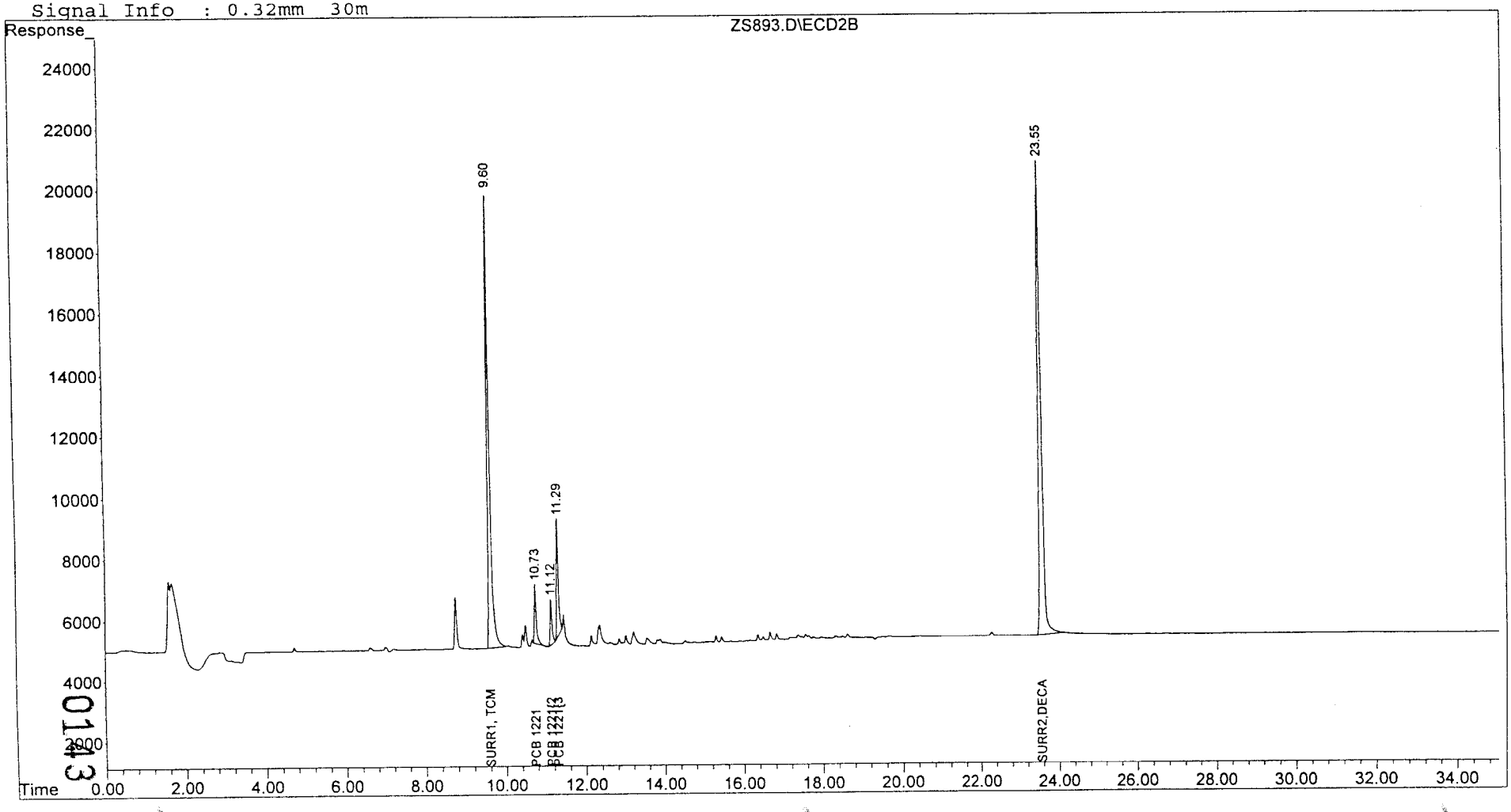
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data Fi_ : C:\HPCHEM\2\DATA\022400.SEC\ZS893.D \ .l: 56
Acq On : 24 Feb 2000 7:32 pm Operator: DROOT
Sample : AR1221M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:37 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:29:08 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400.SEC\ZS894.D Vial: 57
Acq On : 24 Feb 2000 8:13 pm Operator: DROOT
Sample : AR1232M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:38 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:37:44 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS893.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.60	587223	58.181 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	58.18%#
37) S SURR2,DECACHLOROBIPHENYL	23.55	827093	57.962 ug/l
Spiked Amount 100.000		Recovery =	57.96%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
12) L3c PCB 1232	11.29	111984	397.739 ug/l
13) L3c PCB 1232{2}	12.35	139548	421.874 ug/l
L3c PCB 1232{3}	13.20	211960	417.446 ug/l
15) L3c PCB 1232{4}	15.04	27885	347.191 ug/l
16) L3c PCB 1232{5}	15.15	45165	370.596 ug/l
Sum PCB 1232		536541	1954.845 ug/l
Average PCB 1232			390.969 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0144

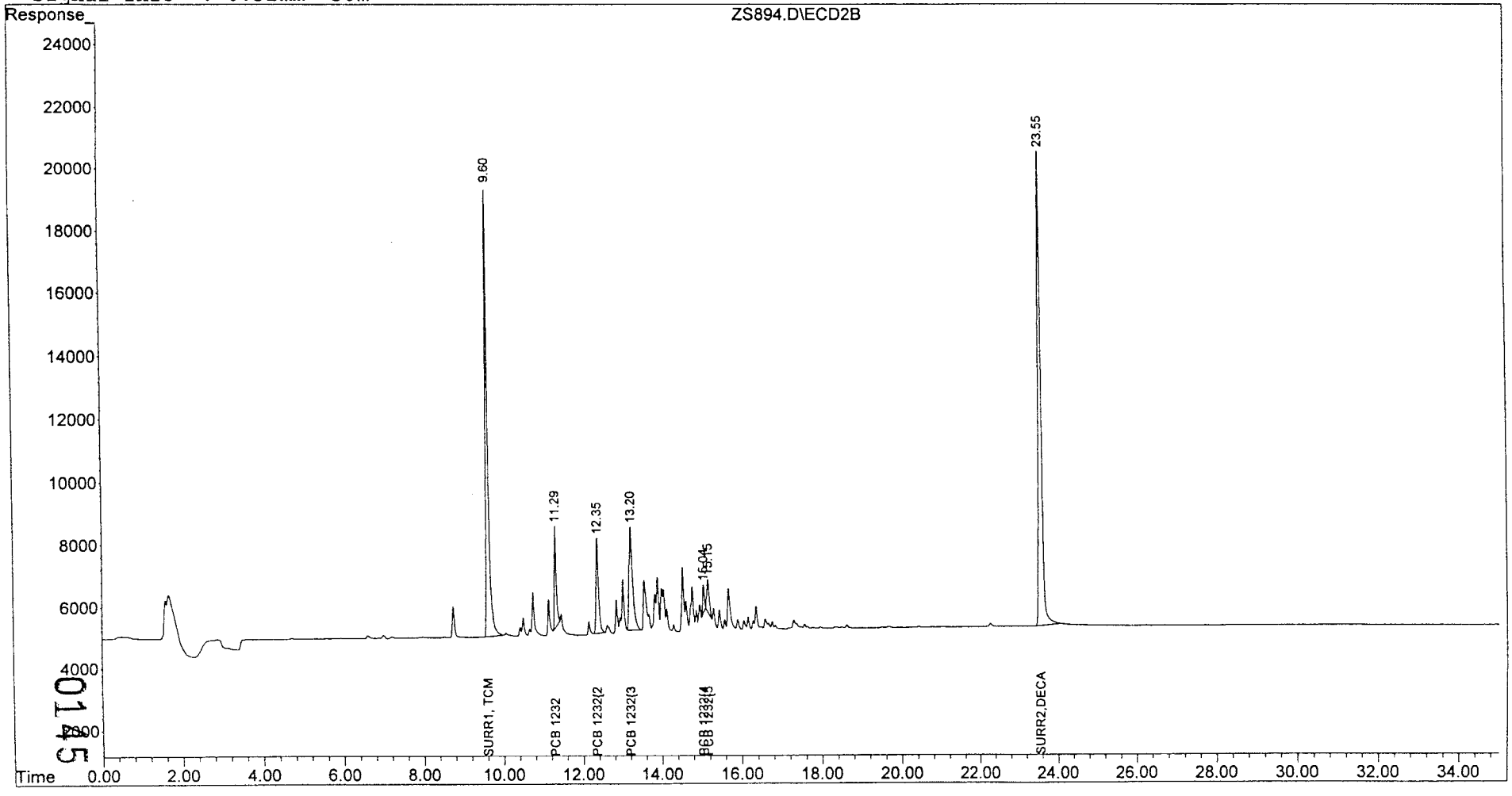
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data Fi_ : C:\HPCHEM\2\DATA\022400.SEC\ZS894.D \ .l: 57
Acq On : 24 Feb 2000 8:13 pm Operator: DROOT
Sample : AR1232M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:38 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:37:44 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0145

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400.SEC\ZS895.D
Acq On : 24 Feb 2000 8:53 pm
Sample : AR1242M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:38 2000 Quant Results File: R0224C.RES

Vial: 58
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:38:28 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS894.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.60	654511	66.875 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	66.88%
37) S SURR2,DECACHLOROBIPHENYL	23.55	908173	65.882 ug/l
Spiked Amount 100.000		Recovery =	65.88%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
17) L4c PCB 1242	11.29	101049	507.408 ug/l
18) L4c PCB 1242{2}	12.35	232076	525.971 ug/l
19) L4c PCB 1242{3}	13.20	385744	523.647 ug/l
20) L4c PCB 1242{4}	15.04	67872	452.139 ug/l
21) L4c PCB 1242{5}	15.15	99195	473.979 ug/l
Sum PCB 1242		885936	2483.144 ug/l
Average PCB 1242			496.629 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0146

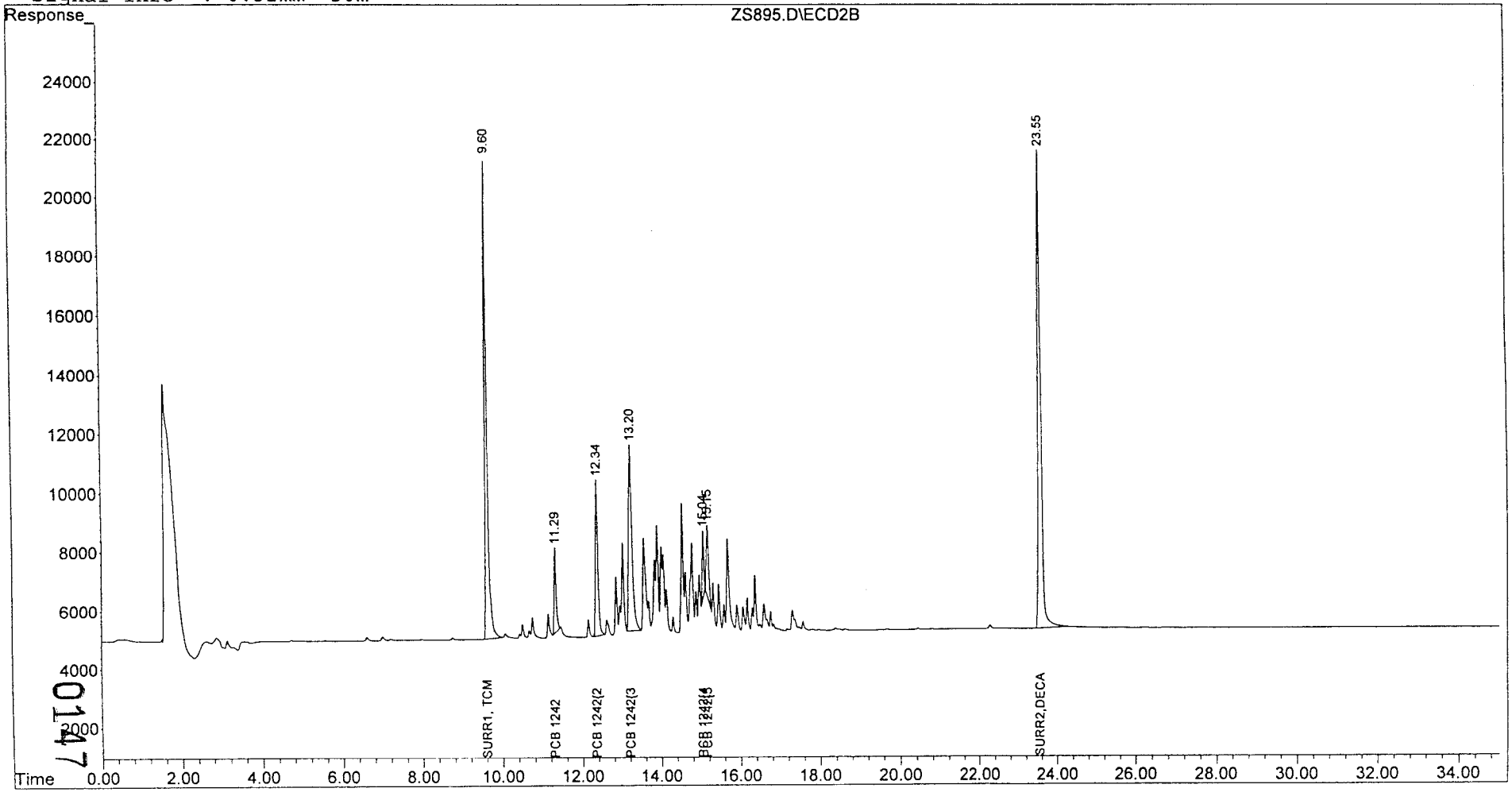
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data Fi : C:\HPCHEM\2\DATA\022400.SEC\ZS895.D . .l: 58
Acq On : 24 Feb 2000 8:53 pm Operator: DROOT
Sample : AR1242M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:38 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:38:28 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0147

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400.SEC\ZS896.D Vial: 59
Acq On : 24 Feb 2000 9:34 pm Operator: DROOT
Sample : AR1248M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:39 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:39:11 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS895.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.60	687410	63.016 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	63.02%
37) S SURR2,DECACHLOROBIPHENYL	23.55	937319	61.926 ug/l
Spiked Amount 100.000		Recovery =	61.93%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
22) L5c PCB 1248	12.34	132118	511.655 ug/l
23) L5c PCB 1248{2}	13.66	27051	489.427 ug/l
24) L5c PCB 1248{3}	15.43	121622	506.813 ug/l
25) L5c PCB 1248{4}	15.89	76366	511.016 ug/l
26) L5c PCB 1248{5}	16.75	35269	491.336 ug/l m
Sum PCB 1248		392427	2510.248 ug/l
Average PCB 1248			502.050 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0148

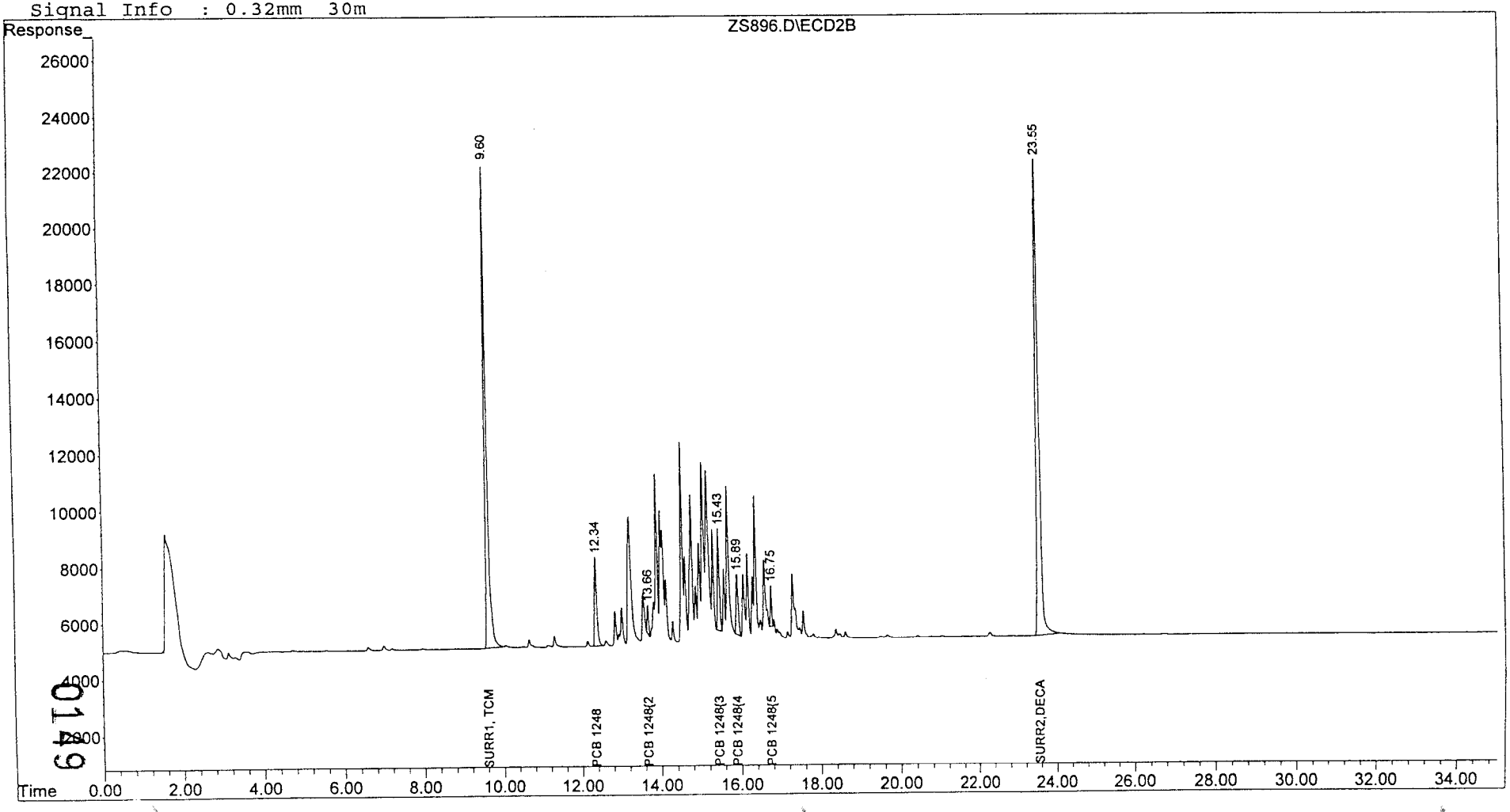
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data Fi : C:\HPCHEM\2\DATA\022400.SEC\ZS896.D .l: 59
Acq On : 24 Feb 2000 9:34 pm Operator: DROOT
Sample : AR1248M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:39 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:39:11 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0179

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\022400.SEC\ZS897.D Vial: 60
Acq On : 24 Feb 2000 10:14 pm Operator: DROOT
Sample : AR1254M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 25 7:40 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:40:09 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS896.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.60	628934	54.896 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	54.90%#
37) S SURR2,DECACHLOROBIPHENYL	23.55	856433	54.822 ug/l
Spiked Amount 100.000		Recovery =	54.82%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
27) L6c PCB 1254	13.88	111461	483.305 ug/l
28) L6c PCB 1254{2}	15.04	77938	474.937 ug/l
29) L6c PCB 1254{3}	15.29	241670	504.465 ug/l
30) L6c PCB 1254{4}	15.43	280751	502.527 ug/l
31) L6c PCB 1254{5}	15.89	123156	505.577 ug/l
Sum PCB 1254		834977	2470.812 ug/l
Average PCB 1254			494.162 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0150

(f)=RT Delta > 1/2 Window (m)=manual int.

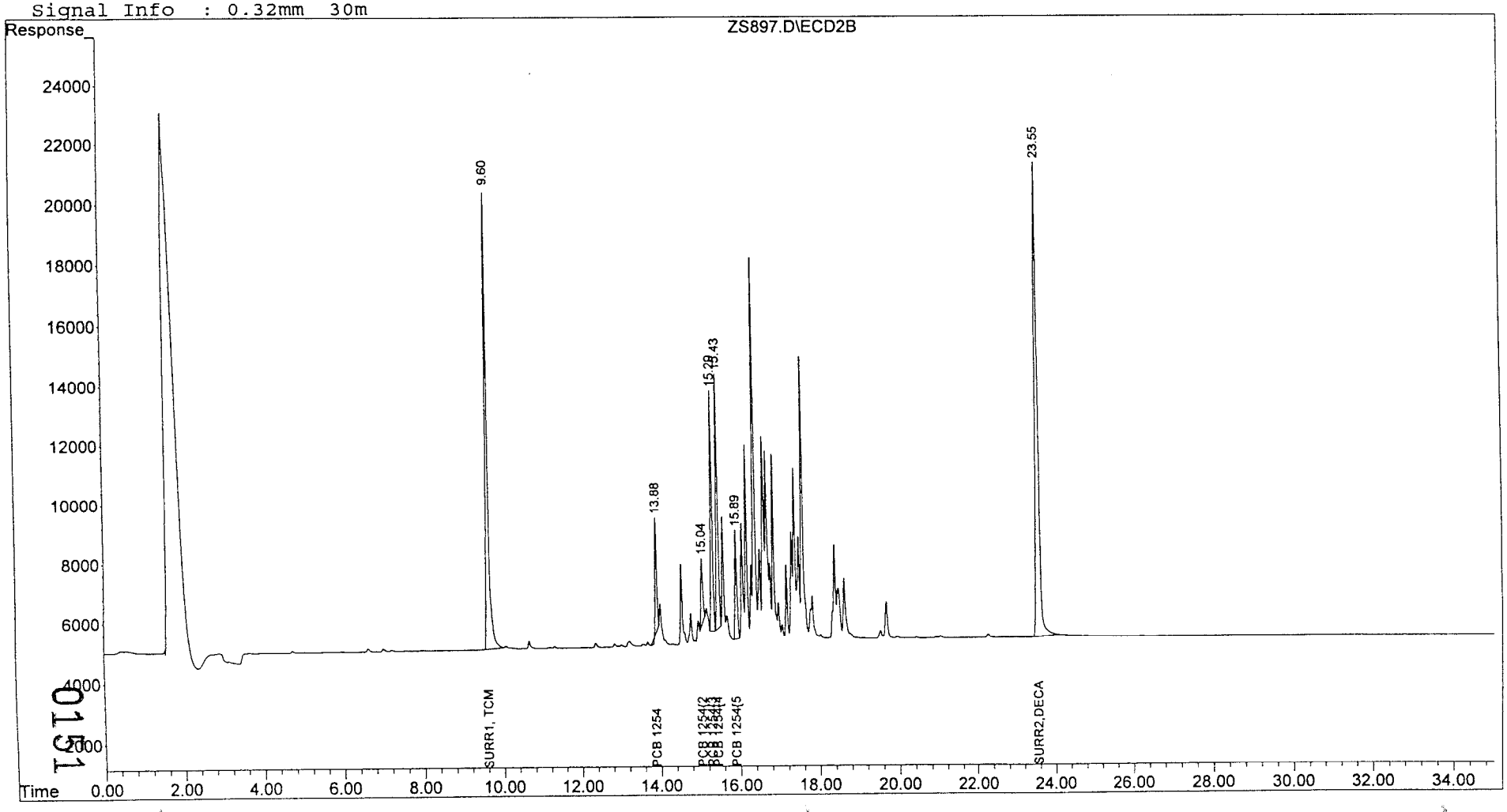
Quantitation Report

Data Fi : C:\HPCHEM\2\DATA\022400.SEC\ZS897.D
Acq On : 24 Feb 2000 10:14 pm
Sample : AR1254M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Feb 25 7:40 2000 Quant Results File: R0224C.RES

Vial: 60
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:40:09 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0151

8D- PESTICIDE SEQUENCE SUMMARY
Evaluation of Retention Time Shift for DCB and TCMX

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract: DAMES

Lab Code: 10145 Case No.: R2001022 SAS No.: _____ SDG No.: CB-2

Instrument ID: HP5890-C GC Column ID.: DB-1701

Mean Surrogate RT from Init. Calibration

Init Calib Date(s): 2/24/00 TCX: 9.20 DCB: 21.48

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	PIBLK11	PIBLK11	3/1/00	8:25	9.19	21.48
02	AR1660M12	AR1660M12	3/1/00	9:06	9.20	21.48
03	PBLK1	361930 BLK	3/1/00	9:46	9.20	21.48
04	PBLK1MS	361931 BS	3/1/00	10:27	9.20	21.48
05	CB-3	361736 (1/10)	3/1/00	11:07	9.20	21.48
06	CB-2	361737 (1/10)	3/1/00	11:48	9.20	21.48
07	PIBLK12	PIBLK12	3/1/00	12:29	9.20	21.48
08	AR1660M13	AR1660M13	3/1/00	13:09	9.20	21.48
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

TCX = SURR1,TCMX (+/- 0.05 MINUTES)
DCB = SURR2,Decachlorobiphenyl (+/- 0.10 MINUTES)
# Column used to flag retention time values with an asterik
* Values outside of QC limits

FORM VIII PEST 3/90

0152

8D- PESTICIDE SEQUENCE SUMMARY
Evaluation of Retention Time Shift for DCB and TCMX

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract: DAMES

Lab Code: 10145 Case No.: R2001022 SAS No.: _____ SDG No.: CB-2

Instrument ID: HP5890-C GC Column ID.: DB-17

Mean Surrogate RT from Init. Calibration

Init Calib Date(s): 2/24/00 TCX: 9.61 DCB: 23.57

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	PIBLK11	PIBLK11	3/1/00	8:25	9.61	23.57
02	AR1660M12	AR1660M12	3/1/00	9:06	9.61	23.57
03	PBLK1	361930 BLK	3/1/00	9:46	9.61	23.57
04	PBLK1MS	361931 BS	3/1/00	10:27	9.61	23.57
05	CB-3	361736 (1/10)	3/1/00	11:07	9.61	23.57
06	CB-2	361737 (1/10)	3/1/00	11:48	9.61	23.57
07	PIBLK12	PIBLK12	3/1/00	12:29	9.61	23.57
08	AR1660M13	AR1660M13	3/1/00	13:09	9.61	23.57
09						
10						
11						
12						
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25						
26						
27						
28						
29						
30						

TCX = SURR1,TCMX (+/- 0.05 MINUTES)
DCB = SURR2,Decachlorobiphenyl (+/- 0.10 MINUTES)
# Column used to flag retention time values with an asterik
* Values outside of QC limits

FORM VIII PEST 3/90

0153

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030200\CS949.D
Acq On : 2 Mar 2000 9:06 am
Sample : AR1660M12
Misc : CALIBRATION CHECK
IntFile : events.e

Vial: 2
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	S	SURR1, TCMX	5.806	5.808	E3	-0.0	102	0.00
2	L1c	PCB 1016	150.028	152.041		-1.3	100	0.00
3	L1c	PCB 1016{2}	325.568	321.525		1.2	101	0.00
4	L1c	PCB 1016{3}	257.050	261.428		-1.7	104	0.00
5	L1c	PCB 1016{4}	184.669	178.886		3.1	98	0.00
6	L1c	PCB 1016{5}	180.034	167.094		7.2	94	0.00
32	L7c	PCB 1260	354.348	357.693		-0.9	105	0.00
33	L7c	PCB 1260{2}	421.727	416.047		1.3	102	0.00
34	L7c	PCB 1260{3}	692.963	685.616		1.1	102	0.00
35	L7C	PCB 1260{4}	185.218	164.561		11.2	93	0.00
36	L7C	PCB 1260{5}	79.989	71.390		10.8	93	0.00
37	S	SURR2,DECACHLOROBIPHENYL	8.117	7.502	E3	7.6	94	0.00

0154

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200\CS949.D
Acq On : 2 Mar 2000 9:06 am
Sample : AR1660M12
Misc : CALIBRATION CHECK
IntFile : events.e
Quant Time: Mar 2 9:42 2000 Quant Results File: F0224C.RES

Vial: 2
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.20	348488	61.469 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	61.47%
37) S SURR2,DECACHLOROBIPHENYL	21.48	450145	56.230 ug/l
Spiked Amount 100.000		Recovery =	56.23%
Target Compounds			
2) L1c PCB 1016	10.55	76021	502.028 ug/l
3) L1c PCB 1016{2}	11.55	160763	506.879 ug/l
4) L1c PCB 1016{3}	13.82	130714	520.345 ug/l
5) L1c PCB 1016{4}	14.02	89443	488.821 ug/l
6) L1c PCB 1016{5}	14.59	83547	471.989 ug/l
Sum PCB 1016		540487	2490.063 ug/l
Average PCB 1016			498.013 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.01	178847	523.505 ug/l
33) L7c PCB 1260{2}	16.38	208024	510.219 ug/l
34) L7c PCB 1260{3}	18.03	342808	509.749 ug/l
35) L7C PCB 1260{4}	20.11	82280	464.334 ug/l
36) L7C PCB 1260{5}	20.94	35695	463.598 ug/l
Sum PCB 1260		847654	2471.405 ug/l
Average PCB 1260			494.281 ug/l

0155

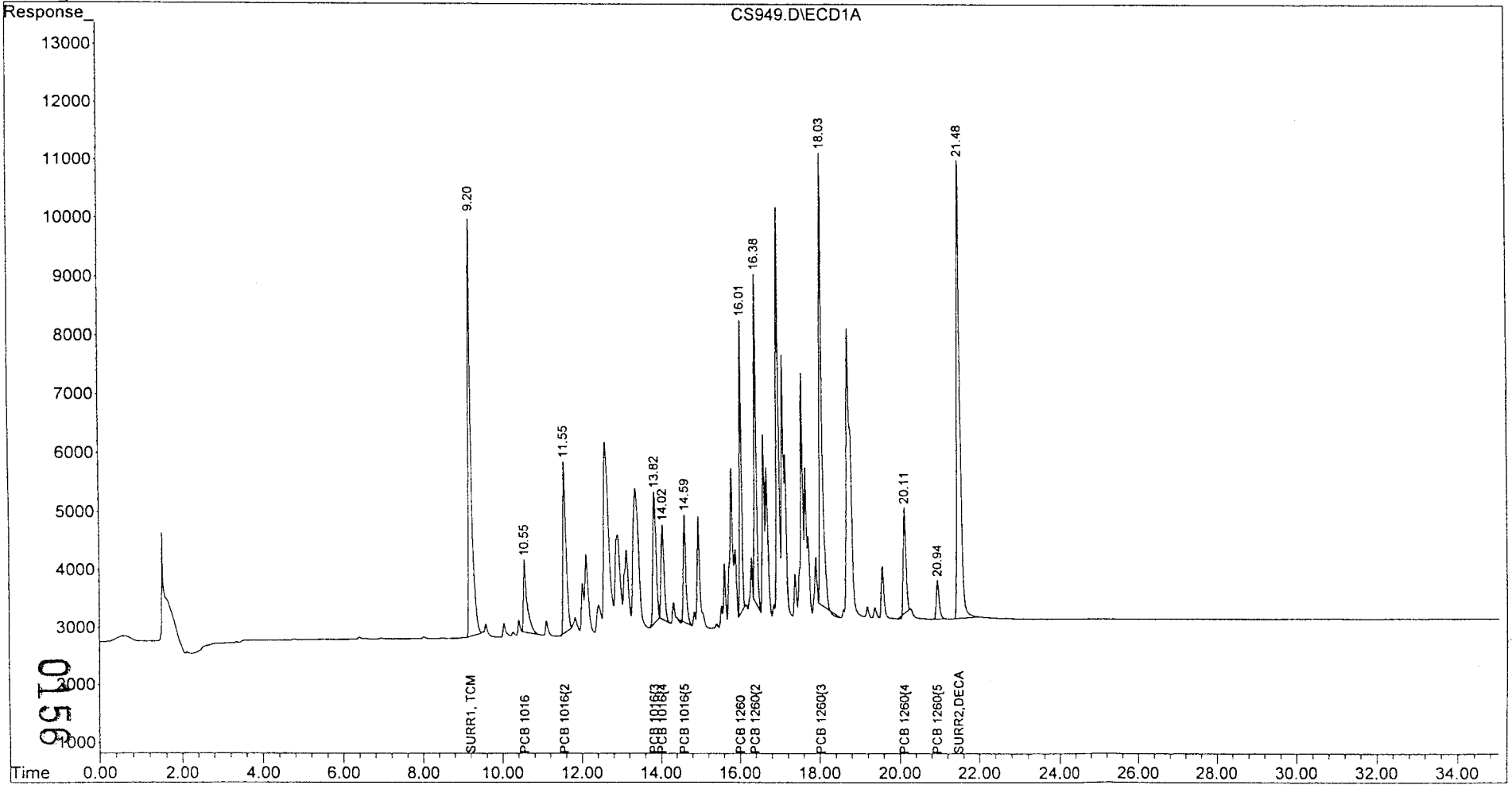
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitati eport

Data File : C:\HPCHEM\2\DATA\030200\CS949.D Vial: 2
Acq On : 2 Mar 2000 9:06 am Operator: DROOT
Sample : AR1660M12 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 9:42 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0156

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030200\CS955.D
Acq On : 2 Mar 2000 1:09 pm
Sample : AR1660M13
Misc : CALIBRATION CHECK
IntFile : events.e

Vial: 8
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	S	SURR1, TCMX	5.806	6.097	E3	-5.0	108	0.00
2	L1c	PCB 1016	150.028	159.747		-6.5	105	0.00
3	L1c	PCB 1016{2}	325.568	335.913		-3.2	106	0.00
4	L1c	PCB 1016{3}	257.050	270.825		-5.4	108	0.00
5	L1c	PCB 1016{4}	184.669	189.640		-2.7	104	0.00
6	L1c	PCB 1016{5}	180.034	185.399		-3.0	105	0.00
32	L7c	PCB 1260	354.348	366.437		-3.4	107	0.00
33	L7c	PCB 1260{2}	421.727	430.615		-2.1	106	0.00
34	L7c	PCB 1260{3}	692.963	720.418		-4.0	107	0.00
35	L7C	PCB 1260{4}	185.218	180.564		2.5	102	0.00
36	L7C	PCB 1260{5}	79.989	76.062		4.9	99	0.01
37	S	SURR2,DECACHLOROBIPHENYL	8.117	7.885	E3	2.9	99	0.01

0157

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200\CS955.D Vial: 8
Acq On : 2 Mar 2000 1:09 pm Operator: DROOT
Sample : AR1660M13 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 13:49 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.20	365830	64.529 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery = 64.53%	
37) S SURR2,DECACHLOROBIPHENYL	21.48	473127	59.101 ug/l
Spiked Amount 100.000		Recovery = 59.10%	
Target Compounds			
2) L1c PCB 1016	10.56	79873	527.473 ug/l
3) L1c PCB 1016{2}	11.55	167956	529.562 ug/l
4) L1c PCB 1016{3}	13.82	135412	539.048 ug/l
5) L1c PCB 1016{4}	14.02	94820	518.209 ug/l
6) L1c PCB 1016{5}	14.59	92700	523.696 ug/l
Sum PCB 1016		570762	2637.987 ug/l
Average PCB 1016			527.597 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.01	183219	536.302 ug/l
33) L7c PCB 1260{2}	16.38	215308	528.084 ug/l
34) L7c PCB 1260{3}	18.03	360209	535.624 ug/l
35) L7C PCB 1260{4}	20.11	90282	509.491 ug/l
36) L7C PCB 1260{5}	20.94	38031	493.940 ug/l
Sum PCB 1260		887048	2603.441 ug/l
Average PCB 1260			520.688 ug/l

0158

(f)=RT Delta > 1/2 Window (m)=manual int.

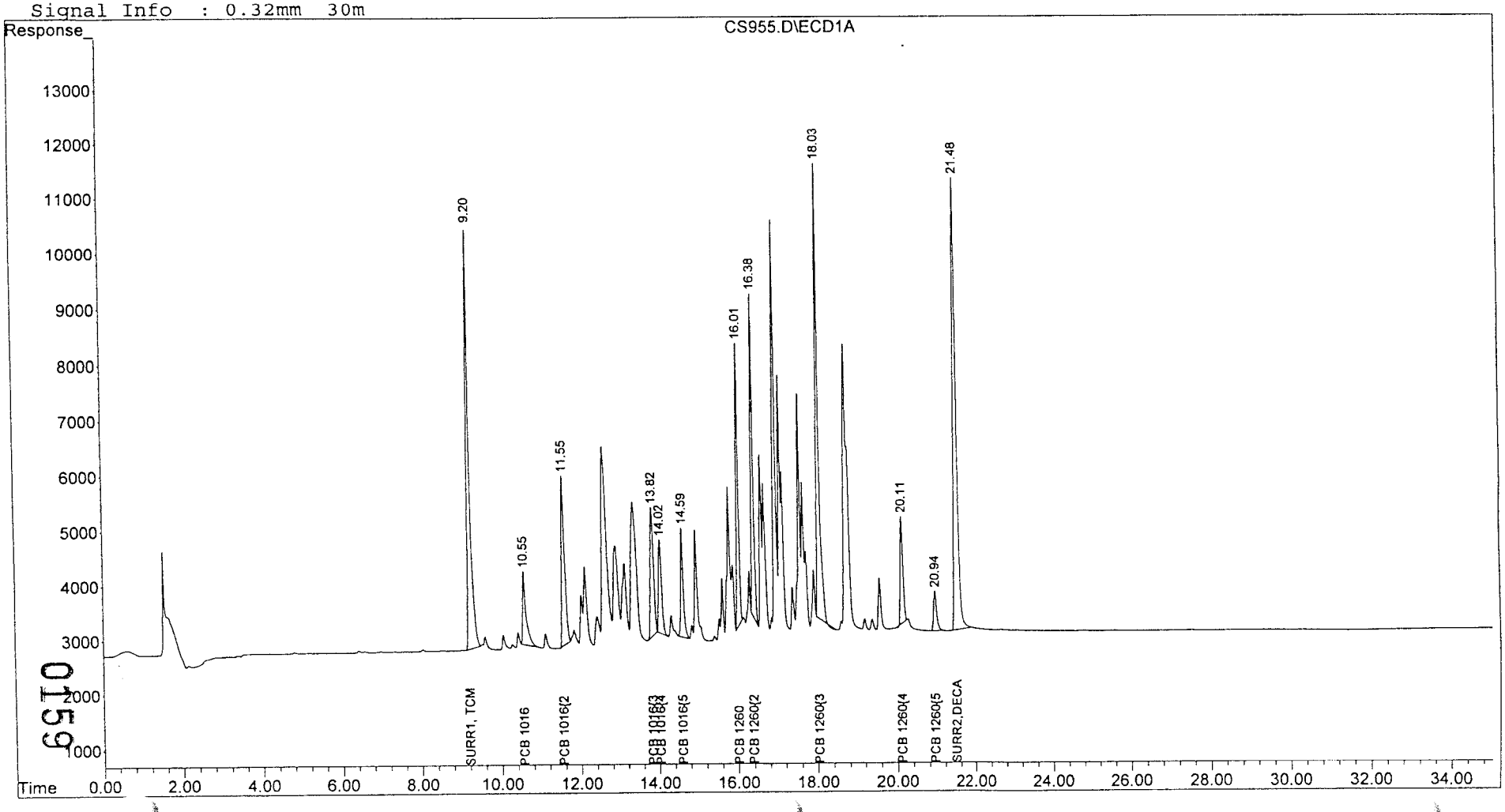
Quantitation Report

Data File : C:\HPCHEM\2\DATA\030200\CS955.D
Acq On : 2 Mar 2000 1:09 pm
Sample : AR1660M13
Misc : CALIBRATION CHECK
IntFile : events.e
Quant Time: Mar 2 13:49 2000 Quant Results File: F0224C.RES

Vial: 8
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0159

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS949.D
Acq On : 2 Mar 2000 9:06 am
Sample : AR1660M12
Misc : CALIBRATION CHECK
IntFile : events.e

Vial: 52
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	S	SURR1, TCMX	10.576	10.943	E3	-3.5	111	0.00
2	L1c	PCB 1016	223.385	224.238		-0.4	108	0.00
3	L1c	PCB 1016{2}	586.193	575.898		1.8	108	0.00
4	L1c	PCB 1016{3}	966.726	948.465		1.9	108	0.00
5	L1c	PCB 1016{4}	255.554	252.807		1.1	107	0.00
6	L1c	PCB 1016{5}	277.842	271.598		2.2	107	0.00
32	L7c	PCB 1260	397.455	385.327		3.1	107	0.00
33	L7c	PCB 1260{2}	718.580	686.597		4.5	106	0.00
34	L7c	PCB 1260{3}	725.478	692.564		4.5	106	0.00
35	L7C	PCB 1260{4}	95.858	98.605		-2.9	108	0.01
36	L7C	PCB 1260{5}	1.163	1.131	E3	2.8	106	0.01
37	S	SURR2,DECACHLOROBIPHENYL	14.720	13.926	E3	5.4	102	0.00

0160

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS949.D Vial: 52
Acq On : 2 Mar 2000 9:06 am Operator: DROOT
Sample : AR1660M12 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 9:42 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.61	656598	66.636 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	66.64%
37) S SURR2,DECACHLOROBIPHENYL	23.57	835587	61.216 ug/l
Spiked Amount 100.000		Recovery =	61.22%
Target Compounds			
2) L1c PCB 1016	11.30	112119	541.196 ug/l
3) L1c PCB 1016{2}	12.35	287949	539.346 ug/l
4) L1c PCB 1016{3}	13.21	474233	538.725 ug/l
5) L1c PCB 1016{4}	15.30	126404	533.879 ug/l
6) L1c PCB 1016{5}	15.44	135799	534.648 ug/l
Sum PCB 1016		1136503	2687.794 ug/l
Average PCB 1016			537.559 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.36	192664	534.645 ug/l
33) L7c PCB 1260{2}	16.66	343298	529.961 ug/l
34) L7c PCB 1260{3}	16.83	346282	529.699 ug/l
35) L7C PCB 1260{4}	18.03	49302	540.894 ug/l
36) L7C PCB 1260{5}	18.62	565253	531.603 ug/l
Sum PCB 1260		1496799	2666.802 ug/l
Average PCB 1260			533.360 ug/l

0161

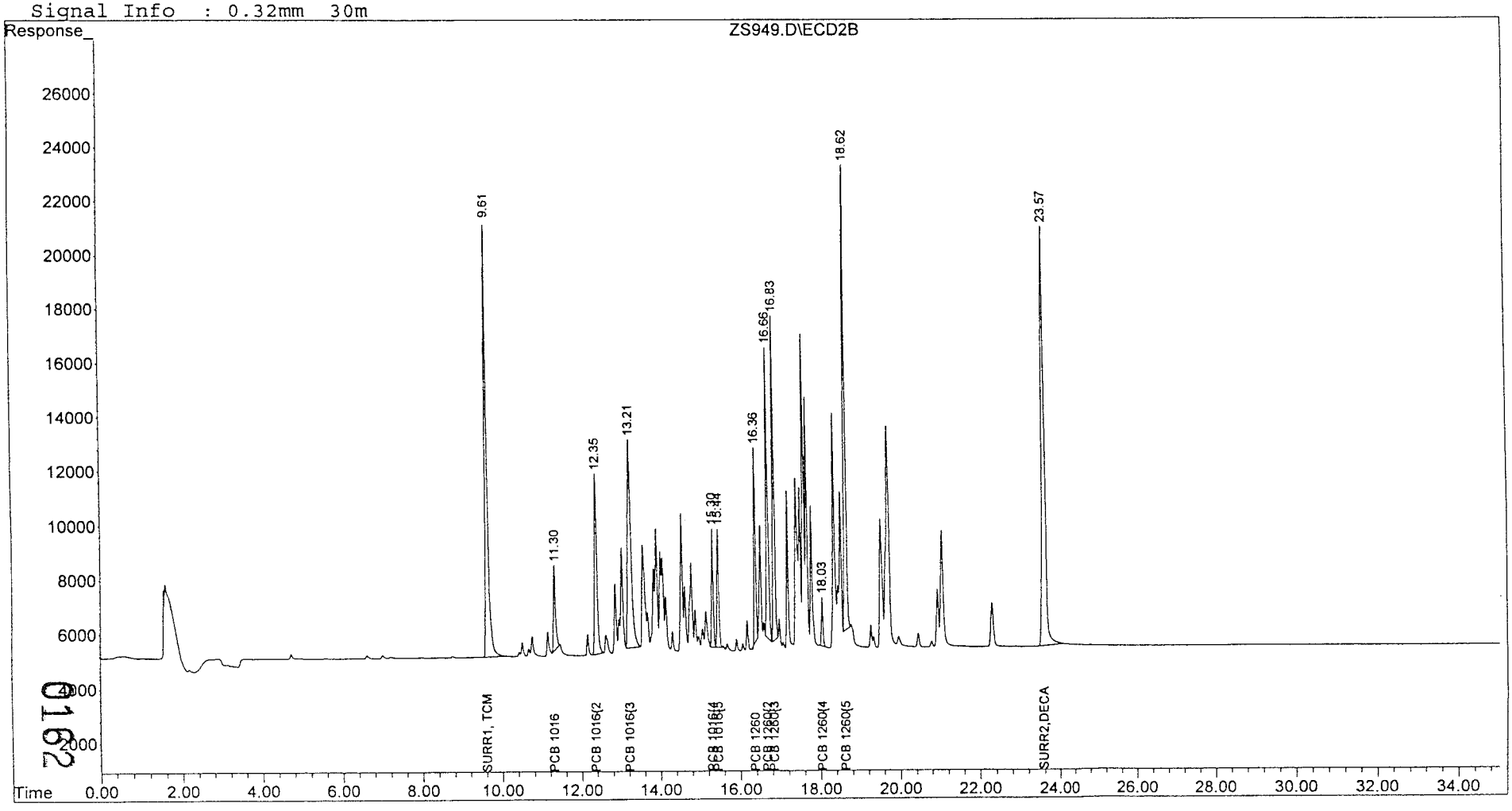
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitatic eport

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS949.D Vial: 52
Acq On : 2 Mar 2000 9:06 am Operator: DROOT
Sample : AR1660M12 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 9:42 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0162

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS955.D
Acq On : 2 Mar 2000 1:09 pm
Sample : AR1660M13
Misc : CALIBRATION CHECK
IntFile : events.e

Vial: 58
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	S	SURR1, TCMX	10.576	10.970	E3	-3.7	111	0.00
2	L1c	PCB 1016	223.385	227.924		-2.0	110	0.00
3	L1c	PCB 1016{2}	586.193	574.162		2.1	108	0.00
4	L1c	PCB 1016{3}	966.726	968.511		-0.2	110	0.00
5	L1c	PCB 1016{4}	255.554	253.402		0.8	107	0.00
6	L1c	PCB 1016{5}	277.842	273.086		1.7	108	0.00
32	L7c	PCB 1260	397.455	385.840		2.9	107	0.00
33	L7c	PCB 1260{2}	718.580	684.618		4.7	106	0.00
34	L7c	PCB 1260{3}	725.478	702.858		3.1	108	0.00
35	L7C	PCB 1260{4}	95.858	98.188		-2.4	108	0.01
36	L7C	PCB 1260{5}	1.163	1.174	E3	-0.9	110	0.01
37	S	SURR2,DECACHLOROBIPHENYL	14.720	14.948	E3	-1.5	110	0.00

0163

(#) = Out of Range SPCC's out = 0 CCC's out = 0
ZS955.D R0224C.M Thu Mar 02 13:49:13 2000

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS955.D Vial: 58
Acq On : 2 Mar 2000 1:09 pm Operator: DROOT
Sample : AR1660M13 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 13:48 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.61	658174	66.796 ug/l
Spiked Amount 100.000 Range	60 - 150	Recovery =	66.80%
37) S SURR2,DECACHLOROBIPHENYL	23.57	896884	65.707 ug/l
Spiked Amount 100.000		Recovery =	65.71%
Target Compounds			
2) L1c PCB 1016	11.30	113962	550.091 ug/l
3) L1c PCB 1016{2}	12.35	287081	537.720 ug/l
4) L1c PCB 1016{3}	13.21	484256	550.111 ug/l
5) L1c PCB 1016{4}	15.30	126701	535.135 ug/l
6) L1c PCB 1016{5}	15.44	136543	537.577 ug/l
Sum PCB 1016		1148543	2710.635 ug/l
Average PCB 1016			542.127 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.36	192920	535.357 ug/l
33) L7c PCB 1260{2}	16.66	342309	528.434 ug/l
34) L7c PCB 1260{3}	16.83	351429	537.572 ug/l
35) L7C PCB 1260{4}	18.03	49094	538.607 ug/l
36) L7C PCB 1260{5}	18.62	586906	551.967 ug/l
Sum PCB 1260		1522658	2691.937 ug/l
Average PCB 1260			538.387 ug/l

0164

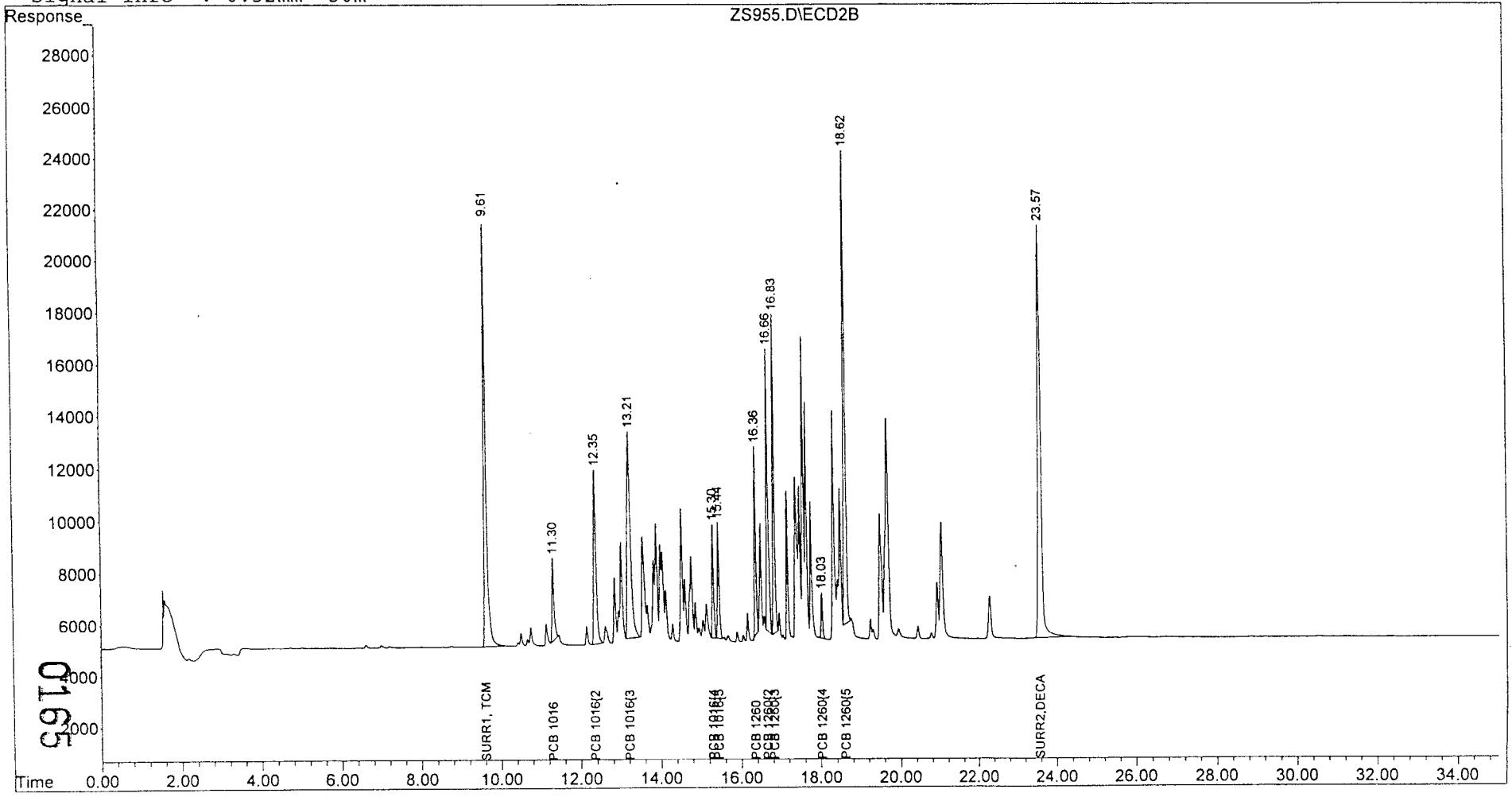
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS955.D Vial: 58
Acq On : 2 Mar 2000 1:09 pm Operator: DROOT
Sample : AR1660M13 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 13:48 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

NYSDEC SAMPLE NO
PBLK1MS

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract DAMES

Lab Code: 10145 Case No.: R2001022 SAS No.: SDG NO.: CB-2
Lab Sample ID: 361931 BS Date(s) Analyzed: 3/2/00
Instrument ID (1): 5890C Instrument ID (2): 5890C
GC Column (1): DB-1701 (ID): 0.32 (mm) GC Column (2): DB-17 (ID): 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	16.01	15.93	16.07	171		
AR1260	2	16.38	16.31	16.45	168		
	3	18.03	17.95	18.09	172		
COLUMN 1	4	20.11	20.03	20.17	161		
	5	20.94	20.86	21.00	162	166.7	
	1	16.36	16.28	16.42	196		
	2	16.66	16.59	16.73	193		
	3	16.83	16.75	16.89	194		
	4	18.03	17.95	18.09	200		
COLUMN 2	5	18.62	18.54	18.68	200	196.5	17.9
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						

At least 3 peaks are required for identification of multicomponent analytes

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

NYSDEC SAMPLE NO
CB-3 (1/10)

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract DAMES

Lab Code: 10145 Case No.: R2001022 SAS No.: SDG NO.: CB-2
Lab Sample ID: 361736 (1/10) Date(s) Analyzed: 3/2/00
Instrument ID (1): 5890C Instrument ID (2): 5890C
GC Column (1): DB-1701 (ID): 0.32 (mm) GC Column (2): DB-17 (ID): 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	16.00	15.93	16.07	1366		
AR1260	2	16.37	16.31	16.45	1717		
	3	18.02	17.95	18.09	2005		
COLUMN 1	4	20.10	20.03	20.17	1873		
	5	20.94	20.86	21.00	884	1569.0	
	1	16.35	16.28	16.42	2036		
	2	16.66	16.59	16.73	1515		
	3	16.83	16.75	16.89	1807		
	4	18.02	17.95	18.09	1185		
COLUMN 2	5	18.61	18.54	18.68	2194	1747.2	11.4
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						

At least 3 peaks are required for identification of multicomponent analytes

FORM X-CLP-PEST-2
B-135 10/95

0167

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

NYSDEC SAMPLE NO
CB-2 (1/10)

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract DAMES

Lab Code: 10145 Case No.: R2001022 SAS No.: SDG NO.: CB-2
Lab Sample ID: 361737 (1/10) Date(s) Analyzed: 3/2/00
Instrument ID (1): 5890C Instrument ID (2): 5890C
GC Column (1): DB-1701 (ID): 0.32 (mm) GC Column (2): DB-17 (ID): 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	16.01	15.93	16.07	991		
AR1260	2	16.37	16.31	16.45	1239		
	3	18.02	17.95	18.09	1419		
COLUMN 1	4	20.10	20.03	20.17	1865		
	5	20.95	20.86	21.00	940	1291.0	
	1	16.35	16.28	16.42	1502		
	2	16.66	16.59	16.73	945		
	3	16.82	16.75	16.89	1224		
	4	18.02	17.95	18.09	947		
COLUMN 2	5	18.61	18.54	18.68	1487	1221.0	5.7
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						

At least 3 peaks are required for identification of multicomponent analytes

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200\CS948.D Vial: 1
Acq On : 2 Mar 2000 8:25 am Operator: DROOT
Sample : PIBLK11 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 9:05 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	118132	20.837 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	20.84%#
37) S SURR2,DECACHLOROBIPHENYL	21.48	163946	20.479 ug/l
Spiked Amount 100.000		Recovery =	20.48%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0169

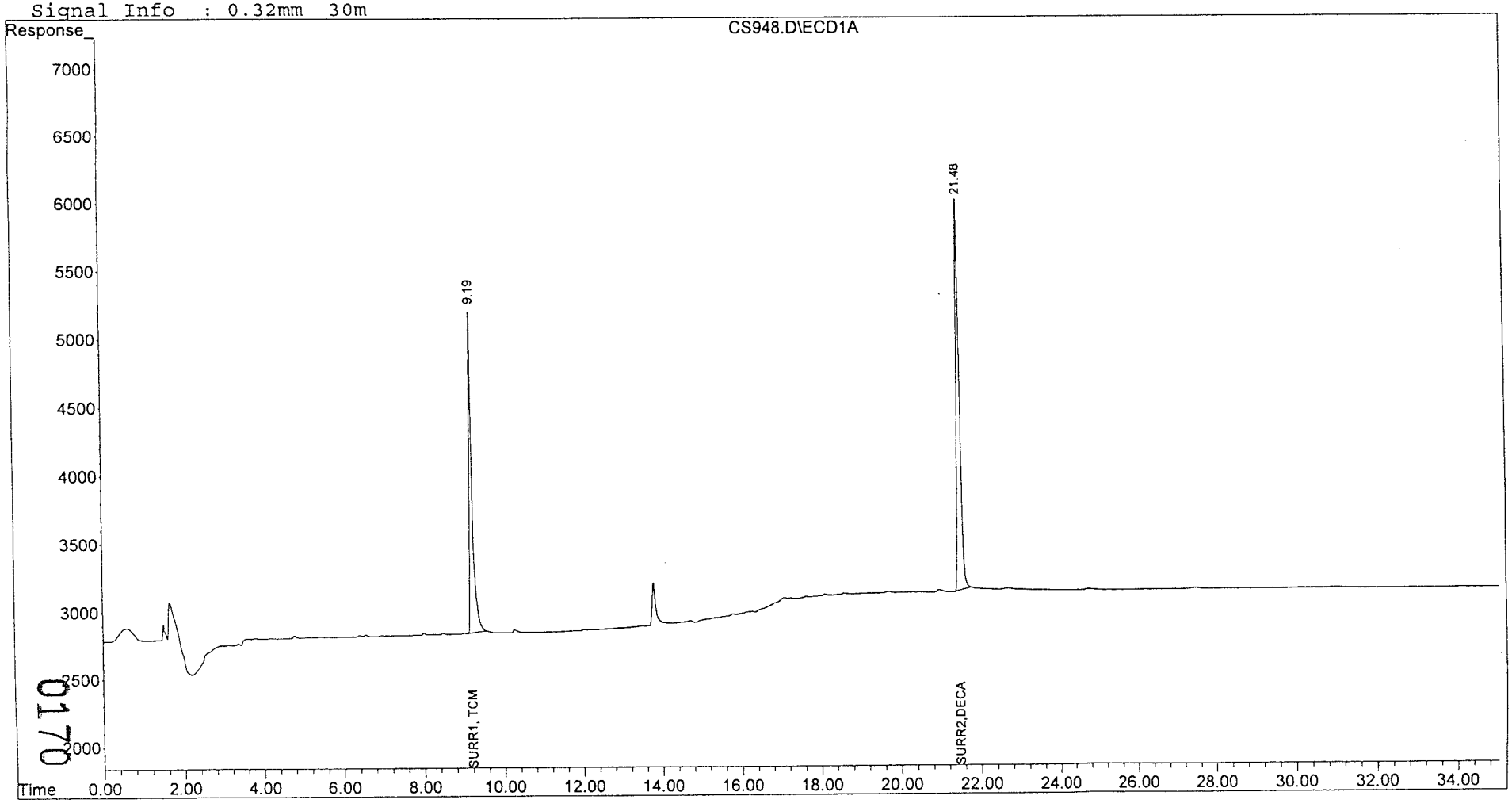
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\030200\CS948.D
Acq On : 2 Mar 2000 8:25 am
Sample : PIBLK11
Misc : INSTRUMENT BLK
IntFile : events.e
Quant Time: Mar 2 9:05 2000 Quant Results File: F0224C.RES

Vial: 1
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



017D

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200\CS954.D Vial: 7
Acq On : 2 Mar 2000 12:29 pm Operator: DROOT
Sample : PIBLK12 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 13:31 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.20	120359	21.230 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	21.23%#
37) S SURR2,DECACHLOROBIPHENYL	21.48	163518	20.426 ug/l
Spiked Amount 100.000		Recovery =	20.43%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0171

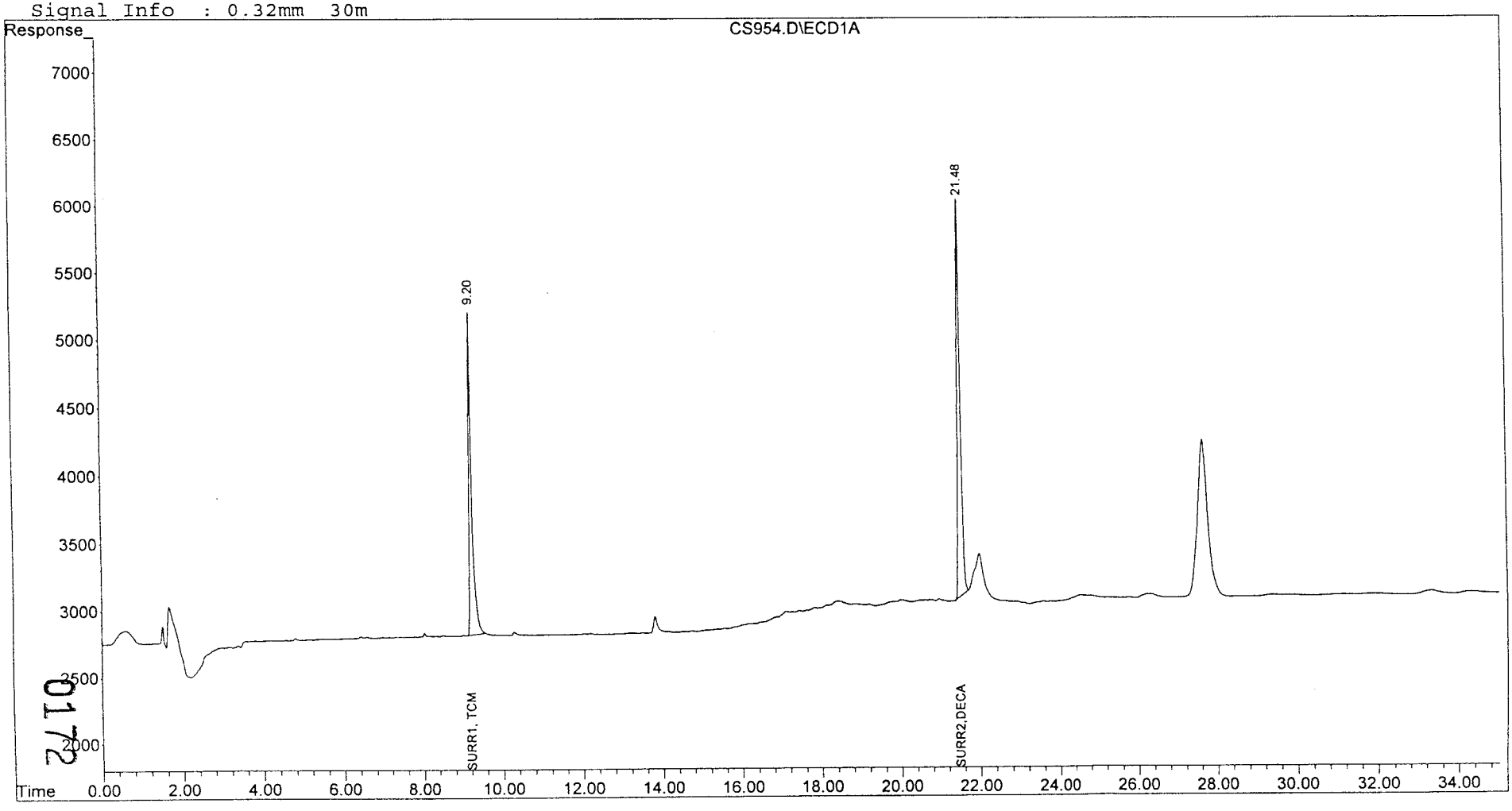
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\030200\CS954.D
Acq On : 2 Mar 2000 12:29 pm
Sample : PIBLK12
Misc : INSTRUMENT BLK
IntFile : events.e
Quant Time: Mar 2 13:31 2000 Quant Results File: F0224C.RES

Vial: 7
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS948.D Vial: 51
Acq On : 2 Mar 2000 8:25 am Operator: DROOT
Sample : PIBLK11 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 9:05 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.61	256282	26.009 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	26.01%#
37) S SURR2,DECACHLOROBIPHENYL	23.57	358940	26.296 ug/l
Spiked Amount 100.000		Recovery =	26.30%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0173

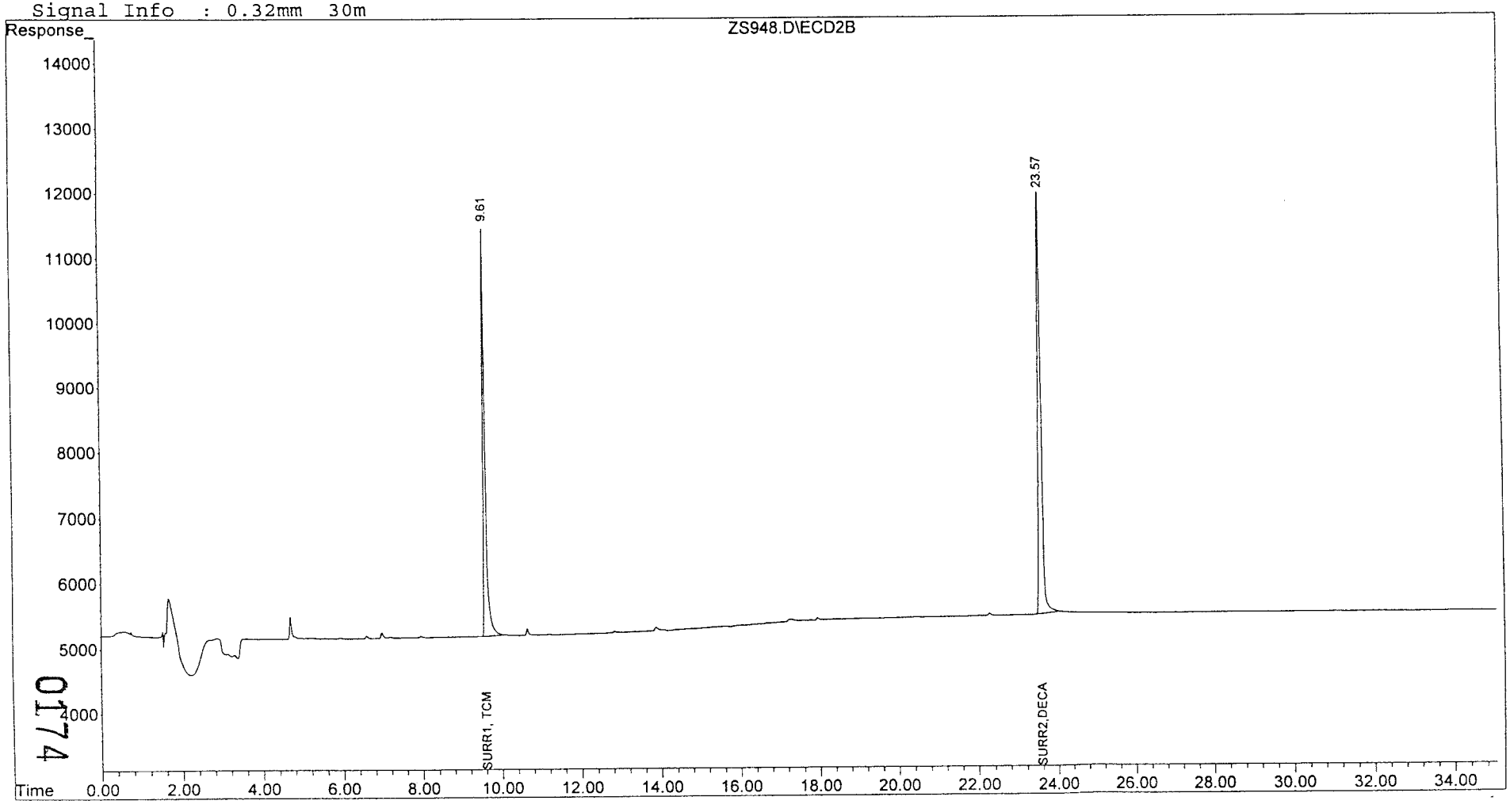
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS948.D
Acq On : 2 Mar 2000 8:25 am
Sample : PIBLK11
Misc : INSTRUMENT BLK
IntFile : events.e
Quant Time: Mar 2 9:05 2000 Quant Results File: R0224C.RES

Vial: 51
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0174

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS954.D Vial: 57
Acq On : 2 Mar 2000 12:29 pm Operator: DROOT
Sample : PIBLK12 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 13:29 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S SURR1, TCMX	9.61	244422	24.806	ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	24.81%#	
37) S SURR2,DECACHLOROBIPHENYL	23.57	356575	26.123	ug/l
Spiked Amount 100.000		Recovery =	26.12%	
Target Compounds				
Sum PCB 1016		0	N.D.	ug/l
Average PCB 1016			0.000	ug/l
Sum PCB 1221		0	N.D.	ug/L
Average PCB 1221			0.000	ug/L
Sum PCB 1232		0	N.D.	ug/l
Average PCB 1232			0.000	ug/l
Sum PCB 1242		0	N.D.	ug/l
Average PCB 1242			0.000	ug/l
Sum PCB 1248		0	N.D.	ug/l
Average PCB 1248			0.000	ug/l
Sum PCB 1254		0	N.D.	ug/l
Average PCB 1254			0.000	ug/l
Sum PCB 1260		0	N.D.	ug/l
Average PCB 1260			0.000	ug/l

0175

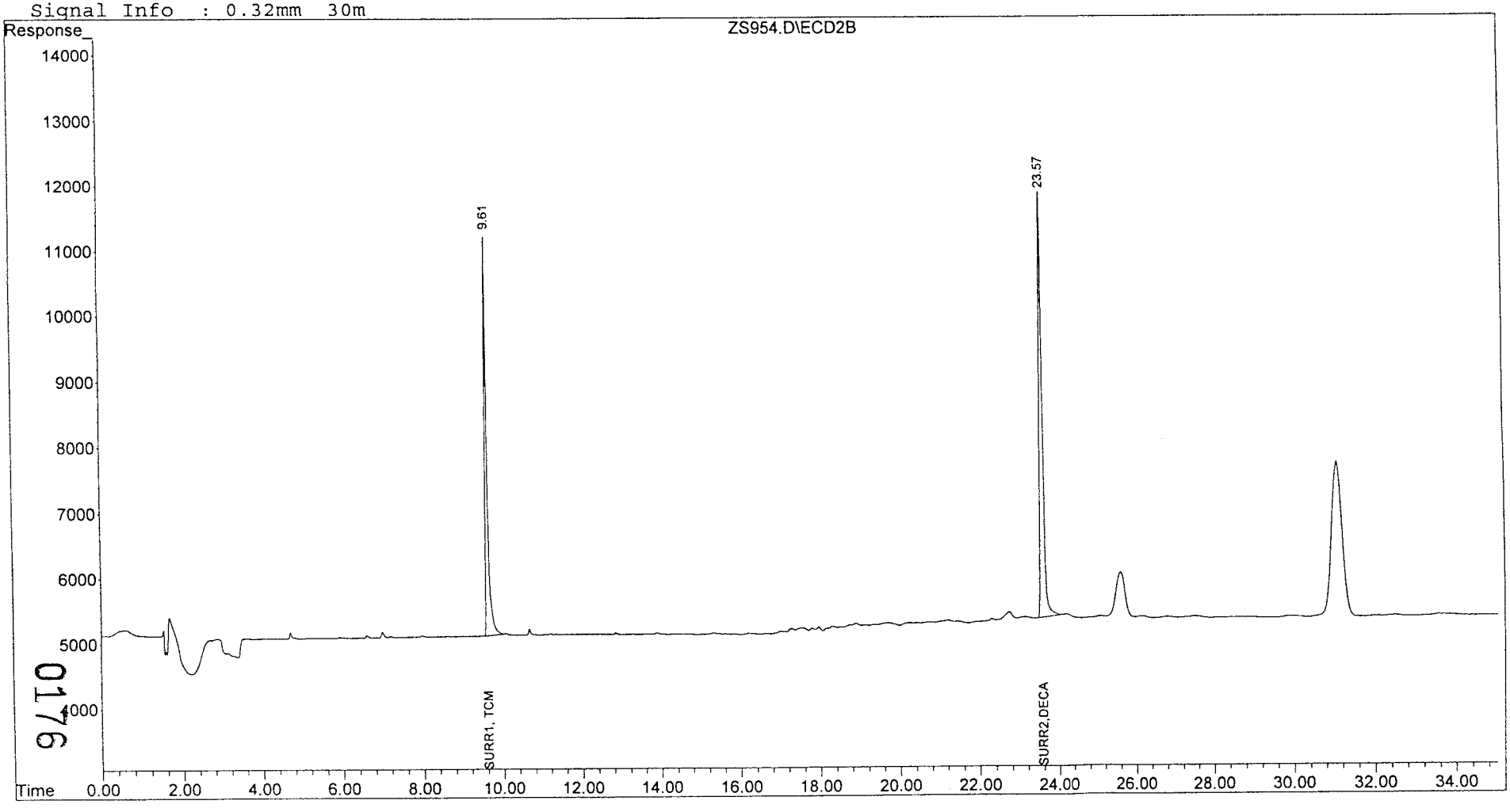
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitati eport

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS954.D Vial: 57
Acq On : 2 Mar 2000 12:29 pm Operator: DROOT
Sample : PIBLK12 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 13:29 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0176

PCB's

RAW QC DATA

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 03/22/00

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 361930 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 03/01/00			
DATE ANALYZED : 03/02/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
PCB 1016	33	33 U	UG/KG
PCB 1221	33	33 U	UG/KG
PCB 1232	33	33 U	UG/KG
PCB 1242	33	33 U	UG/KG
PCB 1248	33	33 U	UG/KG
PCB 1254	33	33 U	UG/KG
PCB 1260	33	33 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	77	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	96	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200\CS950.D Vial: 3
Acq On : 2 Mar 2000 9:46 am Operator: DROOT
Sample : 361930 1.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES 8082 BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 11:05 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.20	545294	96.184 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	96.18%
37) S SURR2,DECACHLOROBIPHENYL	21.48	612407	76.499 ug/l
Spiked Amount 100.000		Recovery =	76.50%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

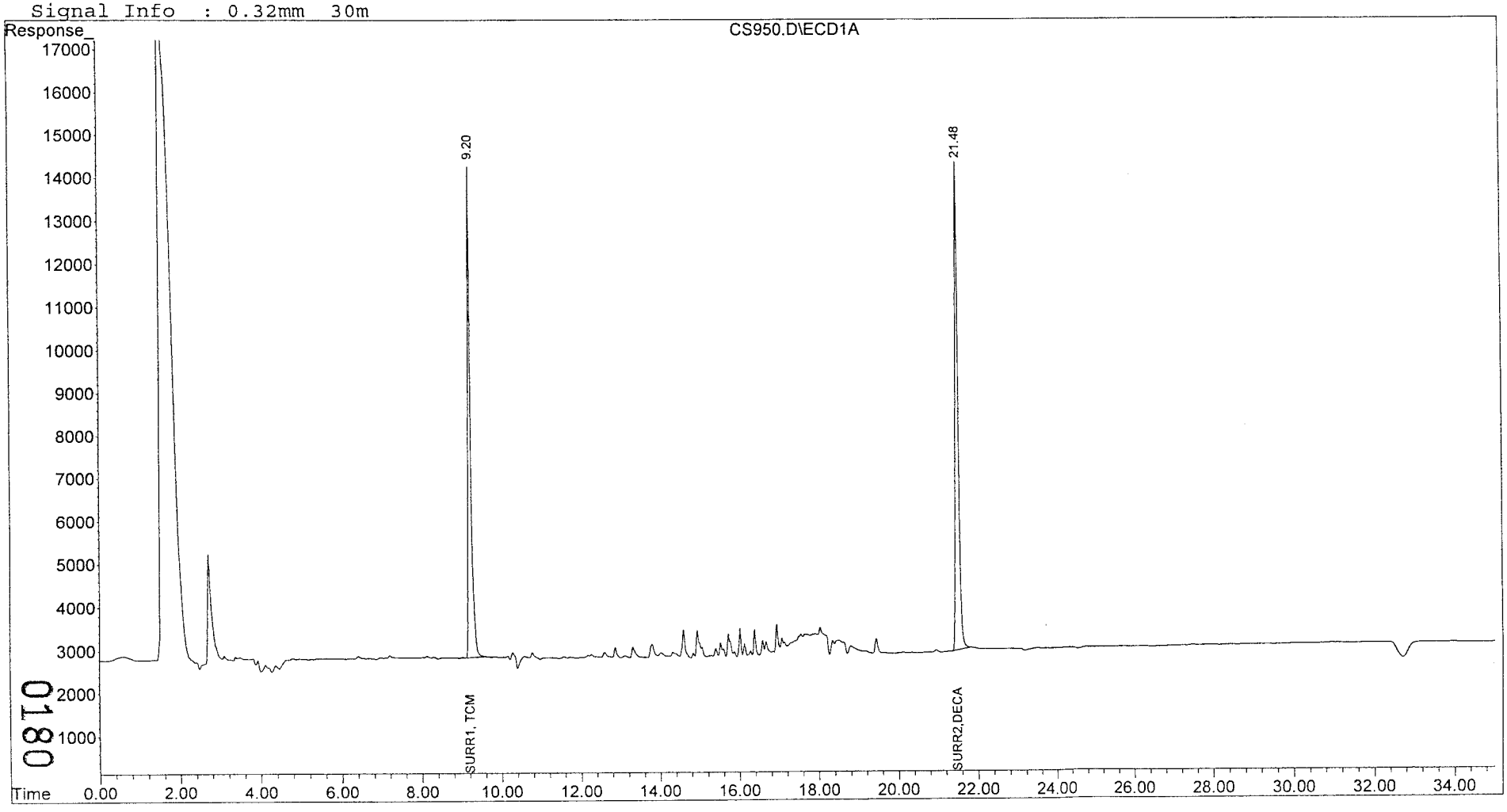
0179

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\030200\CS950.D Vial: 3
Acq On : 2 Mar 2000 9:46 am Operator: DROOT
Sample : 361930 1.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES 8082 BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 11:05 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0180

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS950.D Vial: 53
Acq On : 2 Mar 2000 9:46 am Operator: DROOT
Sample : 361930 1.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES 8082 BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 11:06 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.61	998521	101.337 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	101.34%
37) S SURR2,DECACHLOROBIPHENYL	23.57	1179261	86.394 ug/l
Spiked Amount 100.000		Recovery =	86.39%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0181

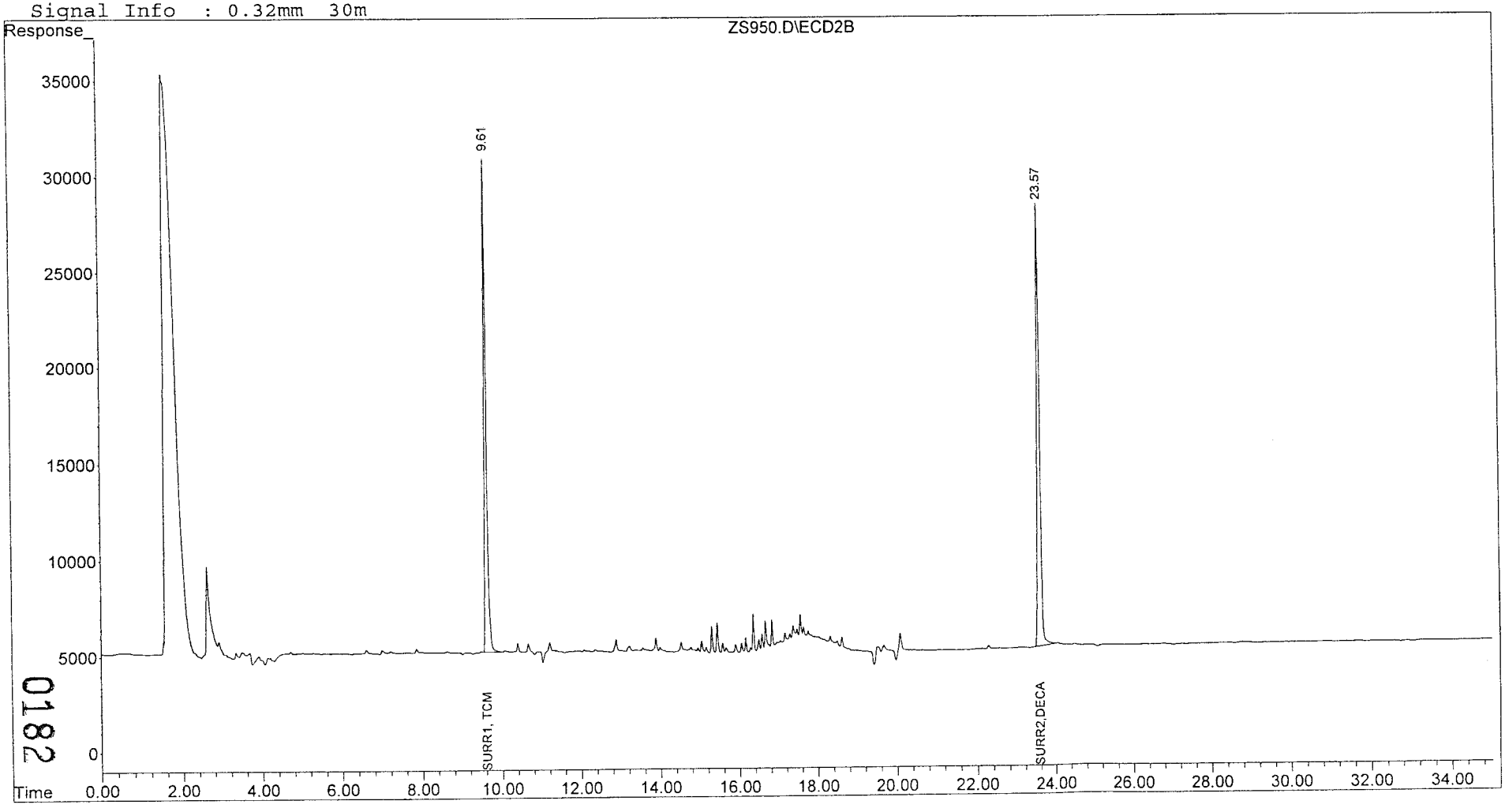
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS950.D
Acq On : 2 Mar 2000 9:46 am
Sample : 361930 1.0
Misc : 03/01/00 3.0 DAMES 8082 BLK
IntFile : events.e
Quant Time: Mar 2 11:06 2000 Quant Results File: R0224C.RES

Vial: 53
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0182

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 03/22/00

Project Reference:
Client Sample ID : BLANK SPIKE

Date Sampled : 03/01/00 **Order #:** 361931 **Sample Matrix:** SOIL/SEDIMENT
Date Received: / / **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 03/01/00			
DATE ANALYZED : 03/02/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
PCB 1016	33	33 U	UG/KG
PCB 1221	33	33 U	UG/KG
PCB 1232	33	33 U	UG/KG
PCB 1242	33	33 U	UG/KG
PCB 1248	33	33 U	UG/KG
PCB 1254	33	33 U	UG/KG
PCB 1260	33	170	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	82	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	94	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200\CS951.D
Acq On : 2 Mar 2000 10:27 am
Sample : 361931 1.0
Misc : 03/01/00 3.0 DAMES 8082 BLKSPK
IntFile : events.e
Quant Time: Mar 2 11:06 2000 Quant Results File: F0224C.RES

Vial: 4
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400\CS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.20	530828	93.632 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	93.63%
37) S SURR2,DECACHLOROBIPHENYL	21.48	654649	81.776 ug/l
Spiked Amount 100.000		Recovery =	81.78%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.01	175322	513.189 ug/l
33) L7c PCB 1260{2}	16.38	204948	502.676 ug/l
34) L7c PCB 1260{3}	18.03	346151	514.720 ug/l
35) L7C PCB 1260{4}	20.11	85473	482.350 ug/l
36) L7C PCB 1260{5}	20.94	37517	487.266 ug/l
Sum PCB 1260		849412	2500.202 ug/l
Average PCB 1260			500.040 ug/l

0184

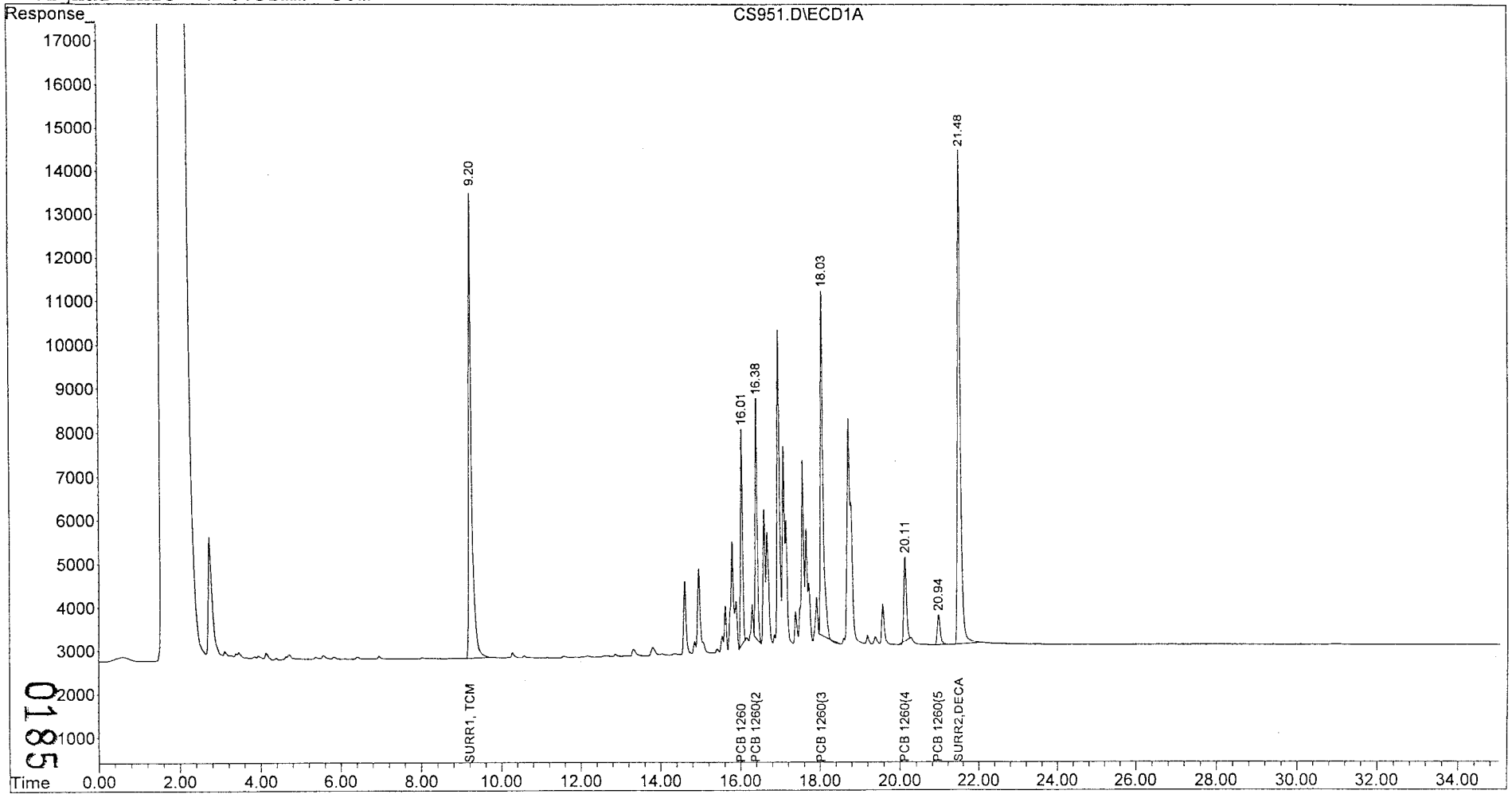
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\030200\CS951.D Vial: 4
Acq On : 2 Mar 2000 10:27 am Operator: DROOT
Sample : 361931 1.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES 8082 BLKSPK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 11:06 2000 Quant Results File: F0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Feb 25 07:51:08 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0185

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS951.D Vial: 54
Acq On : 2 Mar 2000 10:27 am Operator: DROOT
Sample : 361931 1.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES 8082 BLKSPK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 11:07 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\022400.SEC\ZS890.D
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.61	991684	100.643 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	100.64%
37) S SURR2,DECACHLOROBIPHENYL	23.57	1337109	97.958 ug/l
Spiked Amount 100.000		Recovery =	97.96%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.36	211990	588.277 ug/l
33) L7c PCB 1260{2}	16.66	374937	578.803 ug/l
34) L7c PCB 1260{3}	16.83	380423	581.924 ug/l
35) L7C PCB 1260{4}	18.03	54639	599.443 ug/l
36) L7C PCB 1260{5}	18.62	637423	599.477 ug/l
Sum PCB 1260		1659413	2947.924 ug/l
Average PCB 1260			589.585 ug/l

0186

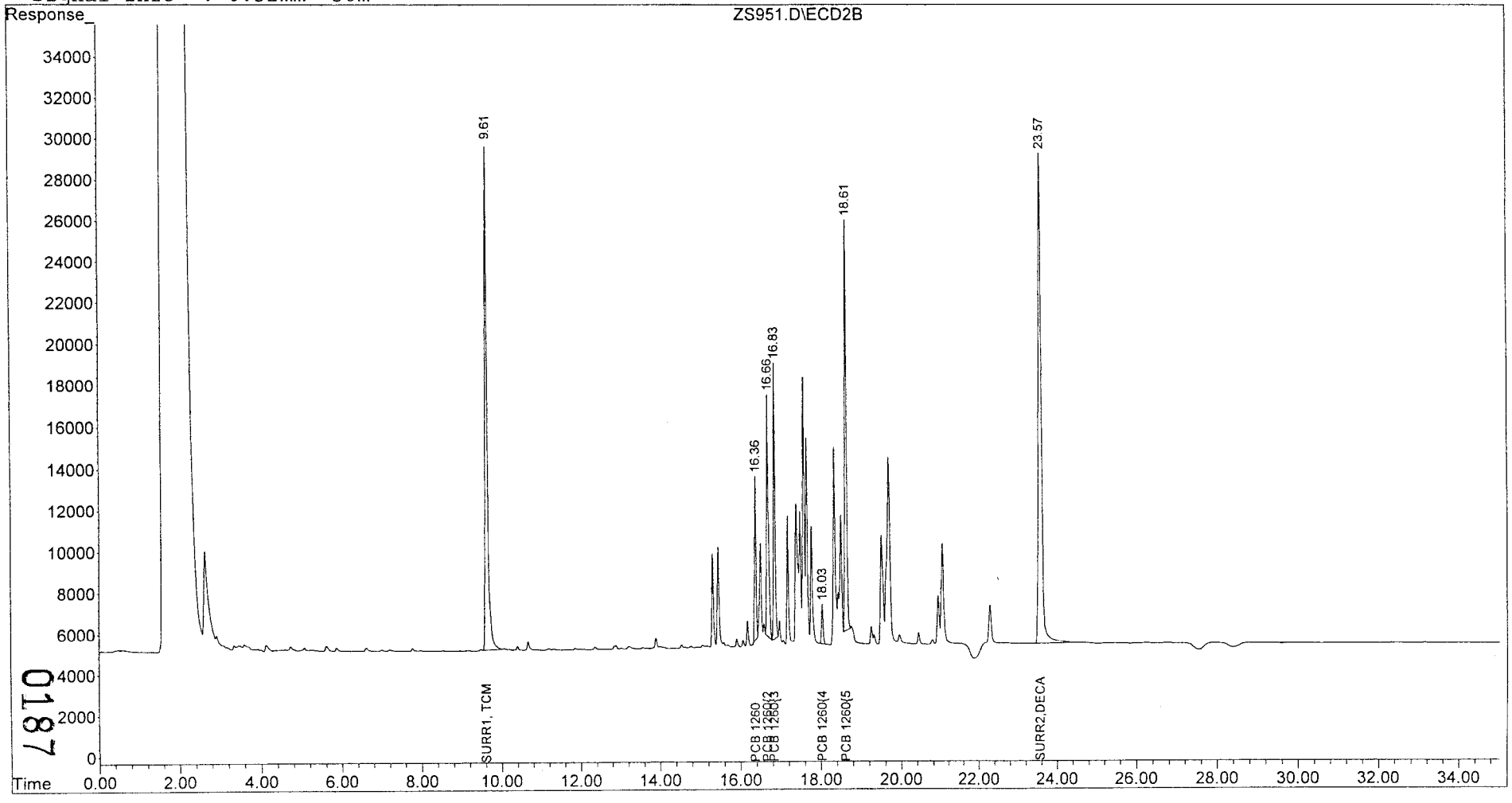
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\030200.SEC\ZS951.D Vial: 54
Acq On : 2 Mar 2000 10:27 am Operator: DROOT
Sample : 361931 1.0 Inst : 5890C
Misc : 03/01/00 3.0 DAMES 8082 BLKSPK Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 2 11:07 2000 Quant Results File: R0224C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0224C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Mar 01 10:14:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0224C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0187

CLIENT: ~~EPA-3~~ AMES JOB #: R000102 48054 3073 METHOD #: 8082 EXTRACTION #: 3550

Sample number	Initial Wt. or Volume	Appearance	Conc. Date	Final Volume	Primary Clean-up	Date	Dilution	Date	Comments	Date Done
blk	30.0g	Na_2SO_4	3/1/00	10ml					361930	3/6/00
mkgk	30.0g	"	/	/					361931	/
361736	30.0g	black soil					1:0	3/1/00	oil spill	/
361737	30.0g	"					1:00	/	"	

Date Extracted: 3/1/00
Client: EPA-3 AMES
Job #: R000102
Method: 8082
Compound List: 1+3

Extraction Technician: KM
Spike Witness: NR
Concentration Technician: DM
Clean-up Technician: DM
Ext. # 3520 – Time Started: ____
Time Stopped: ____

SURROGATE: 1ml 50ug/10ml surrogate (DCB, TCMX) in acetone 2/16/00 DA 0-355-195-A exp 8/16/00

SPIKE: 1ml AR1660 spike 6ppm AR1660 in acetone 8/16/00

SOLVENT LOT #: Hex: 34328 Acetone 84787

METHOD SUMMARY:
30.0g soil +60g Na_2SO_4 sonicated w/ 100ml Hex/Acetone 1:1 3x 3 min

C1042

2 copies: 12-964 12-1022

DATE PRINTED: 03/06/00

SOLIDS REPORT

Review Date 3/16 Mgr CS

RUN #: 48111 ANALYSIS DATE: 03/03/2000 ASSIGNED TO :
TEMPLATE: DWPS
TEST :

CUP#	ORDER #	SUBMISSION	CONTROL TYPE	GROSS(g) TARE(g) DIFF(g)		% SOLID	DISH ID	LS JOB#	LS LOC#
1	362374	R2 0	ICBW	(1.2900-1.2900)=0.0000	DRY*100 =	1.00	1		
				(1.2900-1.2900)=0.0000	WET				
2	360804	R2000964	ESMP	(10.4100-1.2900)=9.1200	DRY*100 =	89.80	3		
				(11.4400-1.2900)=10.1500	WET				
3	362375	R2 0	DUPE	(10.5600-1.2800)=9.2800	DRY*100 =	90.20	5		
				(11.5700-1.2800)=10.2900	WET				
4	360805	R2000964	ESMP	(10.8700-1.2800)=9.5900	DRY*100 =	89.70	6		
				(11.9700-1.2800)=10.6900	WET				
5	361641	R2001014	ESMP	(10.3600-1.2900)=9.0700	DRY*100 =	87.00	7		
				(11.7200-1.2900)=10.4300	WET				
6	361642	R2001014	ESMP	(10.7800-1.2800)=9.5000	DRY*100 =	86.30	8		
				(12.2900-1.2800)=11.0100	WET				
7	361643	R2001014	ESMP	(10.7200-1.2700)=9.4500	DRY*100 =	88.30	10		
				(11.9700-1.2700)=10.7000	WET				
8	361644	R2001014	ESMP	(10.3200-1.2800)=9.0400	DRY*100 =	88.90	12		
				(11.4500-1.2800)=10.1700	WET				
9	357960	R2000784	ESMP	(10.2400-1.2600)=8.9800	DRY*100 =	73.20	13		
				(13.5300-1.2600)=12.2700	WET				
10	357961	R2000784	ESMP	(9.8200-1.2800)=8.5400	DRY*100 =	77.20	14		
				(12.3400-1.2800)=11.0600	WET				
11	357962	R2000784	ESMP	(8.7100-1.2900)=7.4200	DRY*100 =	69.80	15		
				(11.9200-1.2900)=10.6300	WET				
12	357963	R2000784	ESMP	(8.8600-1.2800)=7.5800	DRY*100 =	72.50	17		
				(11.7300-1.2800)=10.4500	WET				
13	357964	R2000784	ESMP	(8.8500-1.3000)=7.5500	DRY*100 =	75.40	18		
				(11.3100-1.3000)=10.0100	WET				
14	360955	R2000973	ESMP	(2.3400-2.3400)=0.0000	DRY*100 =	1.00	111		
				(22.8400-2.3400)=20.5000	WET				
15	361736	R2001022	ESMP	(10.7200-1.2600)=9.4600	DRY*100 =	79.20	19		
				(13.2100-1.2600)=11.9500	WET				
16	361737	R2001022	ESMP	(10.4800-1.2700)=9.2100	DRY*100 =	80.40	20		
				(12.7200-1.2700)=11.4500	WET				
17	361889	R2001047	ESMP	(8.8300-1.2800)=7.5500	DRY*100 =	73.60	21		
				(11.5400-1.2800)=10.2600	WET				
18	362376	R2 0	DUPE	(9.1300-1.3100)=7.8200	DRY*100 =	71.50	22		
				(12.2400-1.3100)=10.9300	WET				
19	361890	R2001047	ESMP	(7.5300-1.2800)=6.2500	DRY*100 =	61.40	32		
				(11.4500-1.2800)=10.1700	WET				
20	361891	R2001047	ESMP	(8.1700-1.2700)=6.9000	DRY*100 =	67.90	33		
				(11.4300-1.2700)=10.1600	WET				
21	360938	R2000971	ESMP	(2.8800-2.3200)=0.5600	DRY*100 =	2.77	101		
				(22.5600-2.3200)=20.2400	WET				
22	361758	R2001024	ESMP	(6.9500-1.3000)=5.6500	DRY*100 =	55.30	35		
				(11.5100-1.3000)=10.2100	WET				
23	361759	R2001024	ESMP	(9.9700-1.2800)=8.6900	DRY*100 =	81.00	36		
				(12.0100-1.2800)=10.7300	WET				
24	362377	R2 0	DUPE	(10.3500-1.3000)=9.0500	DRY*100 =	81.40	37		
				(12.4200-1.3000)=11.1200	WET				
25	361980	R2001048	ESMP	(9.5200-1.2700)=8.2500	DRY*100 =	77.70	39		
				(11.8900-1.2700)=10.6200	WET				

0189

DATE PRINTED: 03/06/00

SOLIDS REPORT

RUN #: 48111 ANALYSIS DATE: 03/03/2000 ASSIGNED TO :
TEMPLATE: DWPS
TEST :

CUP#	ORDER #	SUBMISSION	CONTROL TYPE	GROSS(g)	TARE(g)	DIFF(g)		% SOLID	DISH ID	LS JOB#	LS LOC#
26	361987	R2001050	ESMP	(11.2800-1.2800)=10.0000			DRY*100 =	90.20	40		
				(12.3600-1.2800)=11.0800			WET				

12-964 12-1022

Run #: 48111
Analyte: PERCENT SOL. 160.0 PERCENT SOLIDS
Printed: 03/06/00 14:31

TYPE	SUBMISSION	ORDER #	MATRIX	REPORTED RESULT	DILUTION	PQL	% RECOVERY	% RSD	DATE ANALYZED	QC	PKG #
BLK6		362374	SOIL/SEDIM	1.00	1.0	1.0		195.6	03/03/2000		
ESMP	9912000964	360804	SOIL/SEDIM	89.8	1.0	1.0			03/03/2000		4
LDUP		362375	SOIL/SEDIM	90.2	1.0	1.0		0.43	03/03/2000		
ESMP	9912000964	360805	SOIL/SEDIM	89.7	1.0	1.0			03/03/2000		4
ESMP	9912001014	361641	SOIL/SEDIM	87.0	1.0	1.0			03/03/2000		2
ESMP	9912001014	361642	SOIL/SEDIM	86.3	1.0	1.0			03/03/2000		2
ESMP	9912001014	361643	SOIL/SEDIM	88.3	1.0	1.0			03/03/2000		2
ESMP	9912001014	361644	SOIL/SEDIM	88.9	1.0	1.0			03/03/2000		2
ESMP	9912000784	357960	SOIL/SEDIM	73.2	1.0	1.0			03/03/2000		2
ESMP	9912000784	357961	SOIL/SEDIM	77.2	1.0	1.0			03/03/2000		2
ESMP	9912000784	357962	SOIL/SEDIM	69.8	1.0	1.0			03/03/2000		2
ESMP	9912000784	357963	SOIL/SEDIM	72.5	1.0	1.0			03/03/2000		2
ESMP	9912000784	357964	SOIL/SEDIM	75.4	1.0	1.0			03/03/2000		2
ESMP	9912000973	360955	SOIL/SEDIM	1.00	1.0	1.0			03/03/2000	RUN	2
ESMP	9912001022	361736	SOIL/SEDIM	79.2	1.0	1.0			03/03/2000	RUN	5
ESMP	9912001022	361737	SOIL/SEDIM	80.4	1.0	1.0			03/03/2000	RUN	5
ESMP	9912001047	361889	SOIL/SEDIM	73.6	1.0	1.0			03/03/2000		1
LDUP		362376	SOIL/SEDIM	71.5	1.0	1.0		2.83	03/03/2000		
ESMP	9912001047	361890	SOIL/SEDIM	61.4	1.0	1.0			03/03/2000		1
ESMP	9912001047	361891	SOIL/SEDIM	67.9	1.0	1.0			03/03/2000		1
ESMP	9912000971	360938	SOIL/SEDIM	2.77	1.0	1.0			03/03/2000	RUN	2
ESMP	9912001024	361758	SOLID	55.3	1.0	1.0			03/03/2000		2
ESMP	9912001024	361759	SOLID	81.0	1.0	1.0			03/03/2000		2
LDUP		362377	SOLID	81.4	1.0	1.0		0.47	03/03/2000		
ESMP	9912001048	361980	SOIL/SEDIM	77.7	1.0	1.0			03/03/2000		1
ESMP	9912001050	361987	SOIL/SEDIM	90.2	1.0	1.0			03/03/2000		1

Records printed: 26

0191

(1)

Dry Weight Percent Solids

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

Analyst: aperry

Date: 3/3/00

"S" weight initial: 10.00 final: 10.00

Job Number	Client	Dish I.D.	Wet Weight (g)		Dry Weight (g)	Percent Solid
				Gross	1.29	
ICB		1	1.29	Tare		
				Diff.		
			11.44	Gross	10.41	
360804	R2-964	3	1.29	Tare		
				Diff.		
			11.57	Gross	10.56	
dup		5	1.28	Tare		
				Diff.		
			11.97	Gross	10.87	
360805		6	1.28	Tare		
				Diff.		
			11.72	Gross	10.36	
361641	R2-1014	7	1.29	Tare		
				Diff.		
			12.29	Gross	10.78	
361642		8	1.28	Tare		
				Diff.		
			11.97	Gross	10.72	
361643		10	1.27	Tare		
				Diff.		
CCB3			11.45	Gross	10.32	
361644		12	1.28	Tare		
				Diff.		

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0192

(2)

Dry Weight Percent Solids

Analyst: APerry

Date: 3/3/00

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

"S" weight initial: _____ final: _____

Job Number	Client	Dish I.D.	Wet Weight (g)		Dry Weight (g)	Percent Solid
357960	(R2-784)	13	13.53	Gross	10.24	
			1.26	Tare		
				Diff.		
357961		14	1234	Gross	9.82	
			1.28	Tare		
				Diff.		
357962		15	11.92	Gross	8.71	
			1.29	Tare		
				Diff.		
CCB		16		Gross	1.28	
			1.29	Tare		
				Diff.		
357963	R2-784	17	11.73	Gross	8.86	
			1.28	Tare		
				Diff.		
357964		18	11.31	Gross	8.85	
			1.30	Tare		
				Diff.		
360955	~~R2-973~~ CCB3 R2-973	111	22.84	Gross	2.34	
			2.34	Tare		
				Diff.		
361736	R2-1022	19	13.21	Gross	10.72	
			1.26	Tare		
				Diff.		

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0193

(3)

Dry Weight Percent Solids

Analyst: APerry

Date: 3/3/00

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

"S" weight initial: _____ final: _____

Job Number	Client	Dish I.D.	Wet Weight (g)		Dry Weight (g)	Percent Solid
361737	R2-1022	20	12.72	Gross	10.48	
			1.27	Tare		
				Diff.		
361889	R2-1047	21	11.54	Gross	8.83	
			1.28	Tare		
				Diff.		
dup		22	12.24	Gross	9.13	
			1.31	Tare		
				Diff.		
361890		32	11.45	Gross	7.53	
			1.28	Tare		
				Diff.		
ave 3&3 361891		33	11.43	Gross	8.17	
			1.27	Tare		
				Diff.		
360938	R2-971	101	22.56	Gross	2.88	
			2.32	Tare		
				Diff.		
CCB		34		Gross	1.27	
			1.28	Tare		
				Diff.		
361758	R2-1024	35	11.51	Gross	6.95	
			1.30	Tare		
				Diff.		

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0194

(4)

Dry Weight Percent Solids

Analyst: A Perry

Date: 3/3/00

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

"S" weight initial: _____ final: _____

Job Number	Client	Dish I.D.	Wet Weight (g)		Dry Weight (g)	Percent Solid
361759	RZ-1024	36	12.01	Gross	9.97	
			1.28	Tare		
				Diff.		
dup	↓	37	12.42	Gross	10.35	
			1.30	Tare		
				Diff.		
361980	RZ-1048	39	11.89	Gross	9.52	
			1.27	Tare		
				Diff.		
361987	RZ-1050	40	12.36	Gross	11.28	
			1.28	Tare		
				Diff.		
CCB		41		Gross	1.28	
			1.28	Tare		
				Diff.		
				Gross		
				Tare		
				Diff.		
				Gross		
				Tare		
				Diff.		
				Gross		
				Tare		
				Diff.		
				Gross		
				Tare		
				Diff.		

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0195

Columbia Analytical Services
1 Mustard St., Rochester, NY 14608-0859

General Chemistry Analytical Run Cover Sheet

Analyst: D. Zimpfer Date: 3/6/00

Analysis: DWRS Instrument: top loader

Quality Control:

	Log Book #	Log Book Date	Stock Sol (m/Ls)	Stock Sol (mg/L)	Final Vol (mLs)	True Value (mg/L)
a) Standards Prep.:						
b) I/CCV Preparation:						
c) LCS Preparation:						
d) Matrix Spike Prep.:						

Instrument log filled in? (Y) *(N)*

Comments:

Packages:

a) Chains Signed? (Y) (N)

b) Copy and attach Standards Preparation.

Production:

	Start Time	End Time	Total (minutes)
Preparation Time :			
Analytical Time:			
Finish Time:			

# of Samples (including Mtx QC): _____
Repeats due to Sample: _____
Repeats due to Error: _____

Comments:

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Columbia Analytical Services inc.

A FULL SERVICE ENVIRONMENTAL LABORATORY

February 28, 2000

Mr. Don Porterfield
Dames & Moore
6 Century Hill Drive
Latham, NY 12110

PROJECT:GE-TONAWANDA
Submission #:R2000664

Dear Mr. Porterfield

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (716) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Mark Wilson
Client Service Manager

Enc.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director prior to report submittal.

1 Mustard St.• Suite 250 • Rochester, NY 14609 • Tele:(716)288-5380 • Fax:(716)288-8475

CASE NARRATIVE

COMPANY: Dames & Moore
GE-Tonawanda
SUBMISSION #: R2000664

Dames & Moore soil samples were collected on 01/25/00 and received at CAS on 01/26/00 in good condition. See the CLP Batching Form for sample ID cross references.

VOLATILE ORGANICS

Soil samples were analyzed for the Target Compound List (TCL) of Volatile Organics plus chlorinated benzenes by EPA Method 8260B from SW-846.

Sample CB-1 was analyzed for site specific QC. All matrix spike recoveries and RPD were within QC limits.

Sample STMH-3 contained several chlorinated benzenes above the calibration range of the method and they have been flagged "E" as estimated. These were not reanalyzed as these compounds were not initially requested and could not be repeated within the required holding time.

All initial and continuing calibrations were compliant.

All blank spike recoveries were within QC limits.

All surrogate standard recoveries were within QC limits.

All Internal standard areas were within QC limits.

All samples were analyzed within the required holding times.

No other analytical or QC problems were encountered with these analyses.

PCB's

Soil samples were analyzed for the Target Compound List (TCL) of PCB's by EPA Method 8082 from SW-846.

Sample CB-1 was analyzed for site specific QC. Both matrix spike recoveries were within QC limits. RPD was within QC limits

All initial and continuing calibrations were compliant.

All blank spike recoveries were within QC limits.

All surrogate standard recoveries were within QC limits except for samples STMH-2 and STMH-3 where surrogates were diluted out.

All samples were analyzed within the required holding times.

0001

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG #: CB-1 CASE No.:	BATCH COMPLETE: __yes_____	DATE REVISED:
SUBMISSIO R2000664	DISKETTE REQUESTED: Y___ N__x__	DATE DUE: 02/27/00
CLIENT: Dames & Moore	DATE: 01/27/00	PROTOCOL: 846
CLIENT REP: Mark Wilson	CUSTODY SEAL: PRESENT/ABSENT:	SHIPPING No.:
PROJECT: GE-TONAWANDA	CHAIN OF CUSTODY: PRESENT/ABSENT:	

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLE	DATE RECEIVE	pH (SOLIDS)	% SOLIDS	REMARKS AMPLE CONDITIO
355896	CB-1	SOIL	8260/8082	1/25/00	1/26/00			
355897	STMH-2	SOIL	8260/8082	1/25/00	1/26/00			
355898	STMH-3	SOIL	8260/8082	1/25/00	1/26/00			
355899	TRIP BLANK	WATER	8260	1/25/00	1/26/00			

355896.XLS 1/27/00

Columbia Analytical Services Inc.

Effective 04/01/96

CAS LIST OF QUALIFIERS

(The basis of this proposal are the EPA-CLP Qualifiers)

U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. For further explanation see case narrative / cover letter.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

N - Spiked sample recovery not within control limits.
(Flag the entire batch - Inorganic analysis only)

* - Duplicate analysis not within control limits.
(Flag the entire batch - Inorganic analysis only)

- Also used to qualify Organics QC data outside limits.

D - Spike diluted out.

S - Reported value determined by Method of Standard Additions. (MSA)

X - As specified in the case narrative.

CAS Lab ID # for State Certifications

NY ID # in Rochester:	10145	NJ ID # in Rochester:	73004
CT ID # in Rochester:	PH0556	RI ID # in Rochester:	158
MA ID # in Rochester:	M-NY032	NH ID # in Rochester:	294198-A
OH EPA # in Rochester:	VAP	AIHA # in Rochester:	7889

Columbia Analytical Services INC.
An Employee-Owned Company

1 Mustard St., Suite 250, Rochester, NY 14609-6925
(716) 288-5380 • FAX (716) 288-8475

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

DATE 01-25-00 PAGE 1 OF 1

PROJECT NAME GE-TONAWANDA
PROJECT MANAGER/CONTACT Don Porterfield - Dames+Moore
COMPANY/ADDRESS 646 Plank Road
Suite 203 Clifton Park, NY 12065
TEL (518) 688-0015 FAX (518) 688-0015
SAMPLER'S SIGNATURE [signature]

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	FOR OFFICE USE ONLY LAB I.D.	SAMPLE MATRIX	# OF CONTAINERS	GC/MS VOA's ☒ 8260 ☐ 624 ☐ 95-1*	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ 95-2	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/PCB's ☐ 8081 ☐ 608 ☐ 95-3	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (LIST BELOW)	METALS, DISSOLVED (LIST BELOW)	% solids	PRESERVATION pH < 2.0	PRESERVATION pH > 12	PRESERVATION Other
CB-1	01/25/00	910	355896	SED	3	1			1							1			
STMH-2	↓	1000	897	↓	↓	↓			↓							↓			
STMH-3	↓	1030	898	↓	↓	↓			↓							↓			
Trip Blank	01-25	--	899	Water	3	3													

RELINQUISHED BY:
Signature [signature]
Printed Name Mark Colmerauer
Firm DAMES/URS
Date/Time 01-26-00 1400

RECEIVED BY:
Signature [signature]
Printed Name J. Brith
Firm CAS
Date/Time 1/26/00 1400

RELINQUISHED BY:
Signature [signature]
Printed Name J. Brith
Firm CAS
Date/Time 1/26/00 345P

RECEIVED BY:
Signature [signature]
Printed Name Gregory O. Garrison
Firm CAS
Date/Time 1-26-00 15:45

RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS
__ 24 hr. __ 48 hr. __ 5 day
☒ Standard (10-15 working days)
__ Provide Verbal Preliminary Results
__ Provide FAX Preliminary Results
Requested Report Date _____

REPORT REQUIREMENTS
__ 1. Routine Report
__ 2. Routine Rep. w/CASE Narrative
__ 3. EPA Level III Validatable Package
__ 4. N.J. Reduced Deliverables Level IV
☒ 5. NY ASP/CLP Deliverables *
__ 6. Site specific QC.

INVOICE INFORMATION:
P.O. #:
Bill To:

SAMPLE RECEIPT:
Shipping Via: CAS
Shipping #:
Temperature: 6°
Submission No: A2000664

SPECIAL INSTRUCTIONS/COMMENTS:
METALS
ORGANICS: ☐ TCL ☐ PPL ☐ AE Only ☐ BN Only ☐ Special List
* ASP Categ B deliverable

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Check Form

Project/Client Dames Submission Number R2-664

Cooler received on 1-26-00 by: MF COURIER: (CAS) UPS FEDEX CD&L CLIENT

1. Were custody seals on outside of cooler? YES (NO): Date___ : Signature
2. Were custody papers properly filled out (ink, signed, etc.)? (YES) NO
3. Did all bottles arrive in good condition (unbroken)? (YES) NO
4. Were VOA vials checked for absence of air bubbles, and noted if so? (YES) NO — All Trip Blank Vials have head space
5. Were (Ice) or **Ice packs** present? (YES) NO
6. Where did the bottles originate? (CAS/ROC,) CLIENT
7. Temperature of cooler(s) upon receipt: 6.0

Is the temperature within 0° - 6° C?:	Yes ☒	Yes ☐	Yes ☐	Yes ☐	Yes ☐
If No, Explain Below	No ☐	No ☐	No ☐	No ☐	No ☐

Date/Time Temperatures Taken: 1-26-00 15:45

Thermometer ID: 161 (Temp Blank) Sample Bottle Cooler Temp. IR Gun

If out of Temperature, Client Approval to Run Samples_____

Cooler Breakdown: Date: 1-27-00 by: MF

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct bottles used for the tests indicated? (YES) NO

Explain any discrepancies: _____

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO_3					
2	H_2SO_4					
5-9*	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH_____

*If pH adjustment is required, use NaOH and/or H_2SO_4

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				

Other Comments:

0005

INTERNAL CHAINS

CLIENT NAME: Dames & Moore

SDG#: SUBMISSION: R2000664 DATE REC'D: 01/26/00 1545

	ORDER #	RELINQUISED BY	RECEIVED BY	DATE	TIME	PH
8260B.	355896 QC	[illegible]	[illegible]	1-27-00	0750	
8260B.	355897	↓	↓	↓	↓	
8260B.	355898					
8260B.	355899					

INTERNAL CHAINS

CLIENT NAME: Dames & Moore

G#: SUBMISSION: R2000664 DATE REC'D: 01/26/00 1545

	ORDER #	RELINQUISED BY	RECEIVED BY	DATE	TIME
8082.	355896 QC	GE	DM	1-27-00	9:55 11/27
8082.	355897	↓	/	↓	/
8082.	355898	↓	/	↓	/

VOLATILE ORGANICS

QC SUMMARY

COLUMBIA ANALYTICAL SERVICES

QUALITY CONTROL SUMMARY MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
SOIL/SEDIMENT

Spiked Order No. : 355896 Dames & Moore

Client ID: CB-1

Test: 8260B

Analytical Units: UG/KG

Run Number : 47939

Percent Solid : 63.8

			MATRIX SPIKE		MATRIX SPIKE DUP.			QC LIMITS	
ANALYTE	SPIKE ADDED	SAMPLE CONCENT.	FOUND	% REC.	FOUND	% REC.	RPD	RPD	REC.
BENZENE	78.4	0	69.0	88	73.7	94	7	21	66 - 142
CHLOROBENZENE	78.4	0	75.2	96	76.8	98	2	21	60 - 133
1,1-DICHLOROETHENE	78.4	0	65.8	84	70.5	90	7	22	59 - 172
TOLUENE	78.4	0	75.2	96	76.8	98	2	21	59 - 139
TRICHLOROETHENE	78.4	0	72.1	92	72.1	92	0	24	62 - 137

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B

LABORATORY REFERENCE SPIKE SUMMARY

REFERENCE ORDER #: 361284 ANALYTICAL RUN # : 47939

DATE ANALYZED : 01/27/00
ANALYTICAL DILUTION: 1.0

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
ACETONE	20	143	21 - 165
BENZENE	20	110	37 - 151
BROMODICHLOROMETHANE	20	105	35 - 155
BROMOFORM	20	95	45 - 169
BROMOMETHANE	20	71	10 - 242
2-BUTANONE (MEK)	20	129	25 - 162
CARBON DISULFIDE	20	98	45 - 148
CARBON TETRACHLORIDE	20	111	70 - 140
CHLOROBENZENE	20	109	37 - 160
CHLOROETHANE	20	134	53 - 149
CHLOROFORM	20	110	51 - 138
CHLOROMETHANE	20	130	10 - 273
DIBROMOCHLOROMETHANE	20	106	53 - 149
1,3-DICHLOROBENZENE	20	107	71 - 157
1,2-DICHLOROBENZENE	20	107	71 - 157
1,4-DICHLOROBENZENE	20	107	71 - 157
1,1-DICHLOROETHANE	20	109	59 - 155
1,2-DICHLOROETHANE	20	112	49 - 155
1,1-DICHLOROETHENE	20	125	10 - 234
CIS-1,2-DICHLOROETHENE	20	106	54 - 156
TRANS-1,2-DICHLOROETHENE	20	108	54 - 156
1,2-DICHLOROPROPANE	20	103	10 - 210
CIS-1,3-DICHLOROPROPENE	20	108	10 - 227
TRANS-1,3-DICHLOROPROPENE	20	102	17 - 183
ETHYLBENZENE	20	110	37 - 162
2-HEXANONE	20	116	22 - 155
METHYLENE CHLORIDE	20	108	10 - 221
4-METHYL-2-PENTANONE (MIBK)	20	104	46 - 157
STYRENE	20	109	66 - 144
1,1,2,2-TETRACHLOROETHANE	20	103	46 - 157
TETRACHLOROETHENE	20	115	64 - 148
TOLUENE	20	113	47 - 150
1,2,4-TRICHLOROBENZENE	20	103	71 - 157
1,2,3-TRICHLOROBENZENE	20	102	71 - 157
1,1,1-TRICHLOROETHANE	20	109	52 - 162
1,1,2-TRICHLOROETHANE	20	106	52 - 150
TRICHLOROETHENE	20	110	71 - 157
VINYL CHLORIDE	20	130	10 - 251
O-XYLENE	20	110	71 - 135
M+P-XYLENE	40	115	71 - 135

0010

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: CAS\ROCH Contract: DAMES&M

Lab Code: 10145 Case No.: R2-664 SAS No.: _____ SDG No.: CB-1

Lab File ID: Y5791.D Lab Sample ID: 361282 125

Date Analyzed: 01/27/00 Time Analyzed: 12:08

GC Column: HP624 ID: 0.2 (mm) Heated Purge: (Y/N) N

Instrument ID: GCMS#3

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VREF01	361284 1	Y5792.D	12:46
02	STMH-3	355898 500.0	Y5803.D	19:53

COMMENTS

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

Lab Name: CAS/ROCH Contract: DAMES&M

Lab Code: 10145 Case No.: R20-664 SAS No.: _____ SDG No.: CB-1

Lab File ID: C9021.D Lab Sample ID: 361280 1

Date Analyzed: 01/27/00 Time Analyzed: 11:39

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) Y

Instrument ID: MS#5

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VREF02	361281 1	C9022.D	12:18
02	CB-1	355896 1.0	C9025.D	14:32
03	CB-1MS	361278 1	C9026.D	15:12
04	CB-1MSD	361279 1	C9027.D	15:52
05	TRIP BLANK	355899 1.0	C9029.D	17:11
06	STMH-2	355897 1.0	C9030.D	17:51

COMMENTS

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: DAMES&M

Lab Code: 10145 Case No.: R20-664 SAS No.: _____ SDG No.: CB-1

Lab File ID: C8845.D BFB Injection Date: 01/13/00

Instrument ID: MS#5 BFB Injection Time: 11:15

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	25.2
75	30.0 - 66.0% of mass 95	47.9
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	0.7 (1.1)1
174	50.0 - 120.0% of mass 95	63.1
175	4.0 - 9.0% of mass 174	4.2 (6.6)1
176	93.0 - 101.0% of mass 174	62.4 (98.9)1
177	5.0 - 9.0% of mass 176	4.5 (7.2)2

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

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

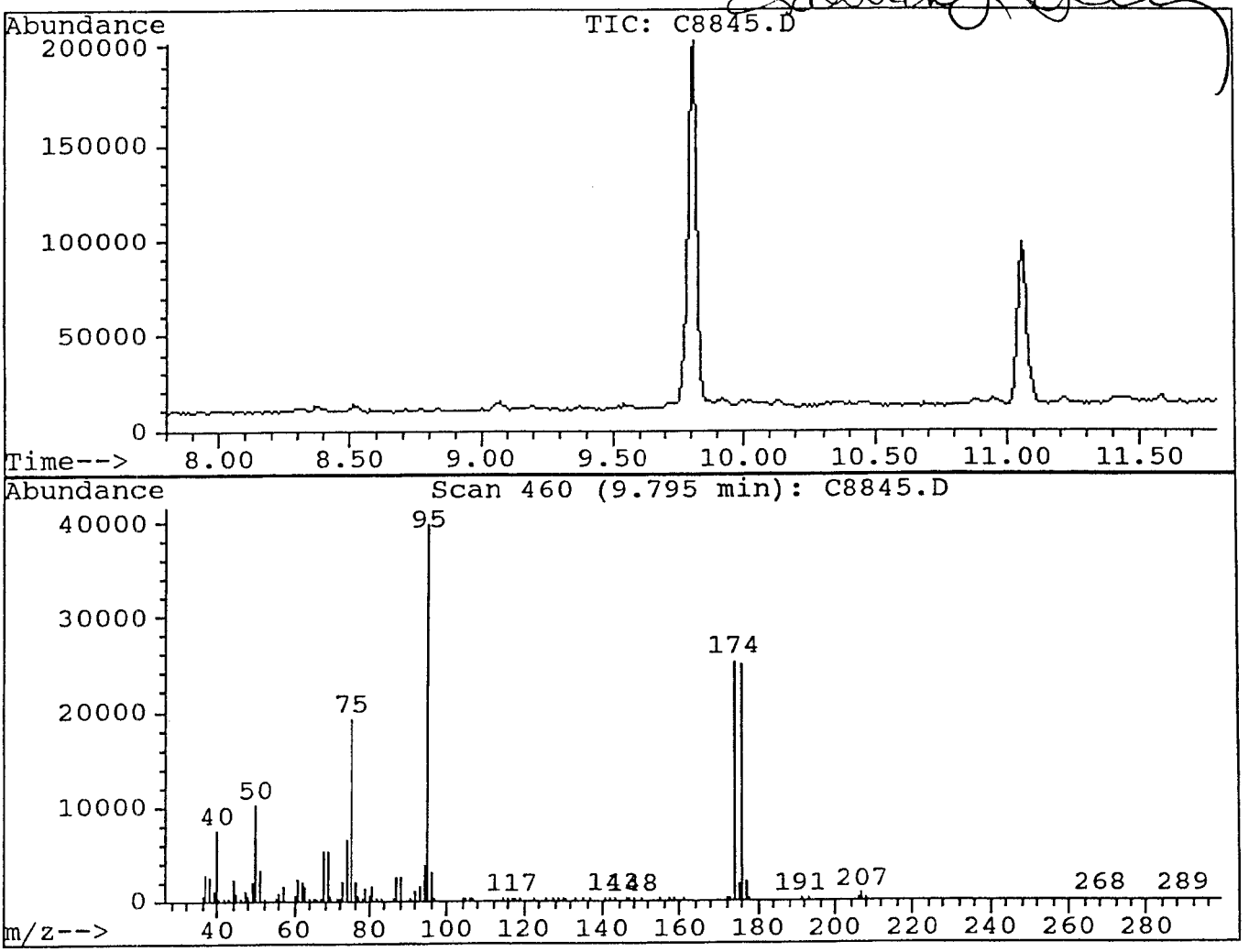
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	5PPB	5PPB	C8846.D	01/13/00	11:36
02	20PPB	20PPB	C8848.D	01/13/00	12:53
03	50PPB	50PPB	C8849.D	01/13/00	13:31
04	100PPB	100PPB	C8850.D	01/13/00	14:10
05	150PPB	150PPB	C8851.D	01/13/00	14:48
06	200PPB	200PPB	C8852.D	01/13/00	15:27

BFB

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8845.D
Acq On : 13 Jan 100 11:15 am
Sample : TUNE CHECK
Misc :

Vial: 2
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\EXP0106.M
Title : 8260voa



Peak Apex is scan: 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.2	10052	PASS
75	95	30	60	47.9	19144	PASS
95	95	100	100	100.0	39952	PASS
96	95	5	9	7.3	2917	PASS
173	174	0	2	1.1	265	PASS
174	95	50	100	63.1	25216	PASS
175	174	5	9	6.6	1675	PASS
176	174	95	101	98.9	24944	PASS
177	176	5	9	7.2	1804	PASS

0015

C8845.D EXP0106.M Thu Jan 13 11:28:43 2000

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: CAS\ROCH Contract: DAMES&M

Lab Code: 10145 Case No.: R20-664 SAS No.: _____ SDG No.: CB-1

Lab File ID: Y5732.D BFB Injection Date: 01/24/00

Instrument ID: GCMS#3 BFB Injection Time: 10:22

GC Column: HP624 ID: 0.20 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	15.9
75	30.0 - 66.0% of mass 95	45.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	84.1
175	4.0 - 9.0% of mass 174	6.4 (7.6)1
176	93.0 - 101.0% of mass 174	82.3 (97.8)1
177	5.0 - 9.0% of mass 176	6.0 (7.3)2

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

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	STD#4	100PPB	Y5737.D	01/24/00	14:51
02	STD#5	150PPB	Y5738.D	01/24/00	15:28
03	STD#6	200PPB	Y5739.D	01/24/00	16:05
04	STD#1	5PPB	Y5743.D	01/24/00	18:34
05	STD#2	20PPB	Y5744.D	01/24/00	19:12
06	STD#3	50PPB	Y5745.D	01/24/00	19:49

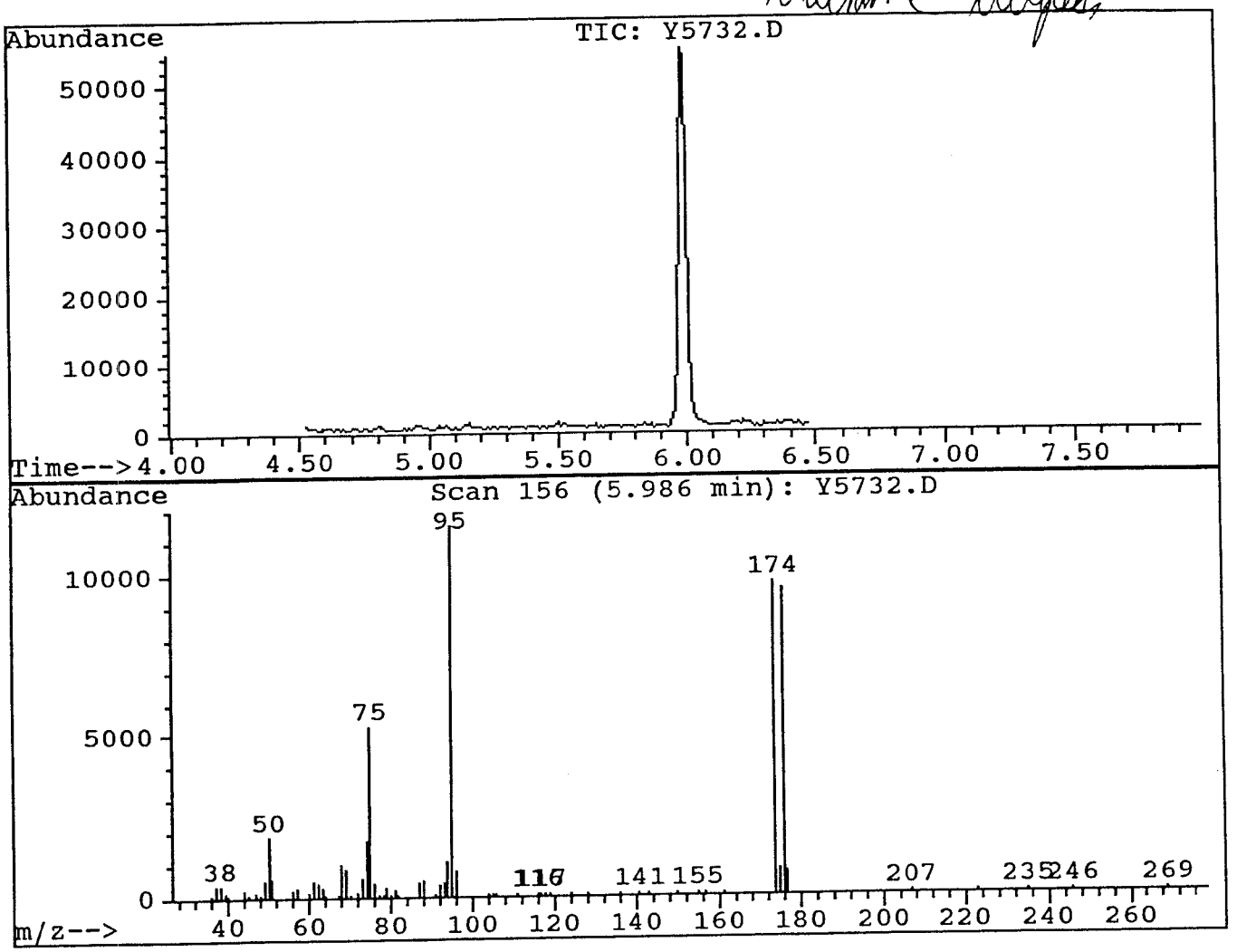
BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5732.D
Acq On : 24 Jan 100 10:22 am
Sample : TUNE CHECK
Misc :

Vial: 87
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0120.M
Title : 8260voa

William C Allgeier



Peak Apex is scan: 156

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.9	1839	PASS
75	95	30	60	45.6	5271	PASS
95	95	100	100	100.0	11551	PASS
96	95	5	9	6.7	772	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	84.1	9719	PASS
175	174	5	9	7.6	735	PASS
176	174	95	101	97.8	9503	PASS
177	176	5	9	7.3	689	PASS

0017

Y5732.D EXP0120.M Mon Jan 24 10:31:01 2000

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CAS\ROCH Contract: DAMES&M

Lab Code: 10145 Case No.: R2-664 SAS No.: _____ SDG No.: CB-1

Lab File ID: Y5788.D BFB Injection Date: 01/27/00

Instrument ID: GCMS#3 BFB Injection Time: 10:15

GC Column: HP624 ID: 0.20 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	15.7
75	30.0 - 66.0% of mass 95	58.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	97.8
175	4.0 - 9.0% of mass 174	6.7 (6.9)1
176	93.0 - 101.0% of mass 174	96.4 (98.5)1
177	5.0 - 9.0% of mass 176	6.5 (6.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD01	CCV	Y5789.D	01/27/00	10:50
02	VBLK01	361282 125	Y5791.D	01/27/00	12:08
03	VREF01	361284 1	Y5792.D	01/27/00	12:46
04	STMH-3	355898 500.0	Y5803.D	01/27/00	19:53

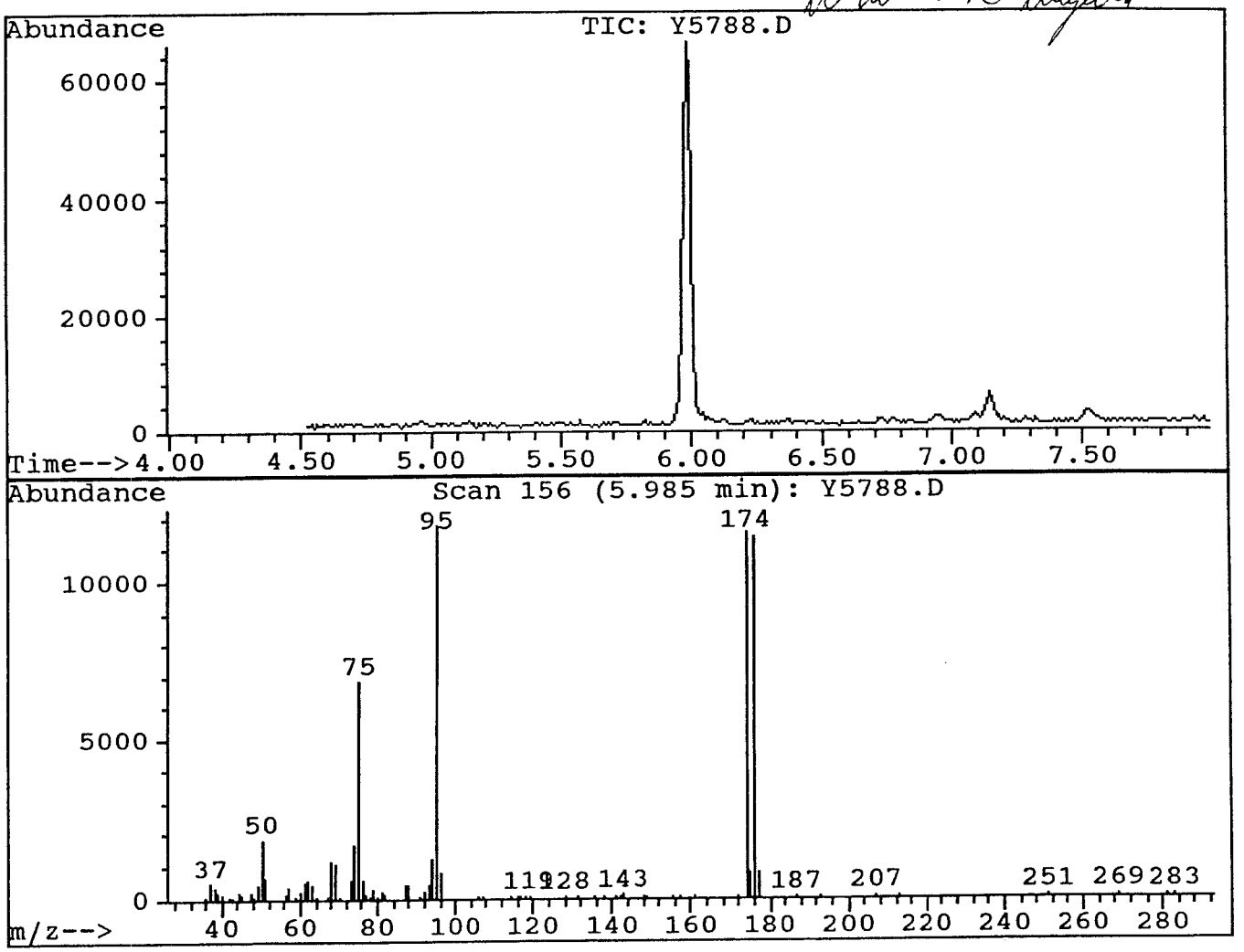
BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5788.D
Acq On : 27 Jan 100 10:15 am
Sample : TUNE CHECK
Misc :

Vial: 43
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa

William C Allgeier



Peak Apex is scan: 156

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.7	1851	PASS
75	95	30	60	58.1	6854	PASS
95	95	100	100	100.0	11794	PASS
96	95	5	9	6.4	750	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	97.8	11539	PASS
175	174	5	9	6.9	793	PASS
176	174	95	101	98.5	11371	PASS
177	176	5	9	6.8	770	PASS

0019

Y5788.D EXP0124.M Thu Jan 27 10:24:49 2000

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: DAMES&M

Lab Code: 10145 Case No.: R20-664 SAS No.: _____ SDG No.: CB-1

Lab File ID: C9018.D BFB Injection Date: 01/27/00

Instrument ID: MS#5 BFB Injection Time: 09:58

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	24.6
75	30.0 - 66.0% of mass 95	47.7
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	0.6 (0.8)1
174	50.0 - 120.0% of mass 95	66.8
175	4.0 - 9.0% of mass 174	4.4 (6.6)1
176	93.0 - 101.0% of mass 174	64.4 (96.5)1
177	5.0 - 9.0% of mass 176	4.4 (6.8)2

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

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

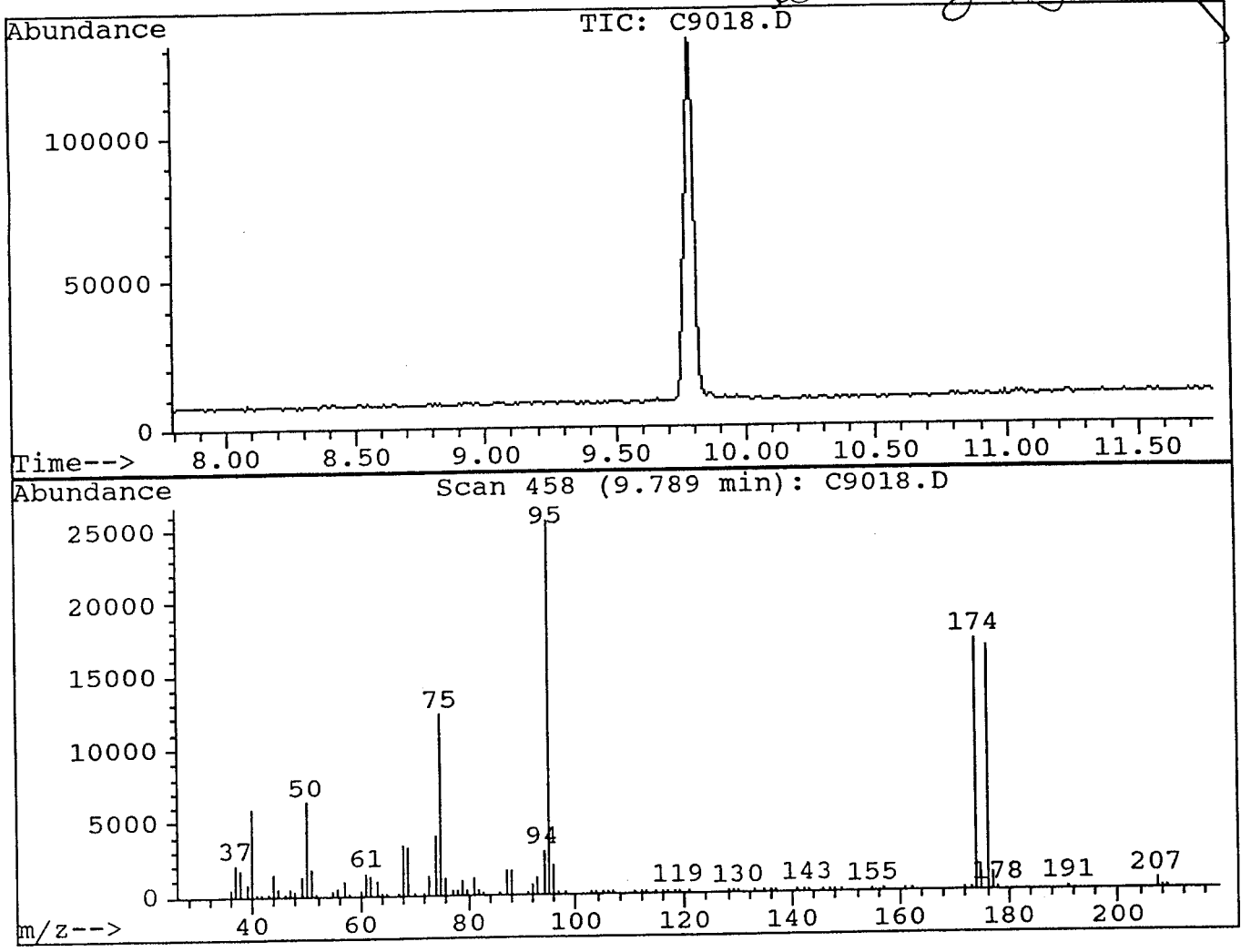
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD02	CCV	C9019.D	01/27/00	10:19
02	VBLK02	361280 1	C9021.D	01/27/00	11:39
03	VREF02	361281 1	C9022.D	01/27/00	12:18
04	CB-1	355896 1.0	C9025.D	01/27/00	14:32
05	CB-1MS	361278 1	C9026.D	01/27/00	15:12
06	CB-1MSD	361279 1	C9027.D	01/27/00	15:52
07	TRIP BLANK	355899 1.0	C9029.D	01/27/00	17:11
08	STMH-2	355897 1.0	C9030.D	01/27/00	17:51

BFB

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9018.D
Acq On : 27 Jan 100 9:58 am
Sample : TUNE CHECK
Misc :

Vial: 2
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa



Peak Apex is scan: 458

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.6	6280	PASS
75	95	30	60	47.7	12185	PASS
95	95	100	100	100.0	25560	PASS
96	95	5	9	7.0	1794	PASS
173	174	0	2	0.8	141	PASS
174	95	50	100	66.8	17064	PASS
175	174	5	9	6.6	1120	PASS
176	174	95	101	96.5	16472	PASS
177	176	5	9	6.8	1127	PASS

0021

C9018.D SOIL0113.M Thu Jan 27 10:11:29 2000

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS\ROCH Contract: DAMES&MOORE

Lab Code: 10145 Case No.: R2-664 SAS No.: _____ SDG No.: CB-1

Lab File ID (Standard): Y5789.D Date Analyzed: 01/27/00

Instrument ID: GCMS#3 Time Analyzed: 10:50

GC Column: HP624 ID: 0.20 (mm) Heated Purge (Y/N): N

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	284713	6.77	438389	7.90	313202	12.88
	UPPER LIMIT	569426	6.27	876778	7.40	626404	12.38
	LOWER LIMIT	142357	7.27	219195	8.40	156601	13.38
	EPA SAMPLE NO.						
01	VBLK01	235608	6.77	354796	7.91	322686	12.89
02	VREF01	239357	6.77	360614	7.90	326145	12.89
03	STMH-3	231983	6.76	343513	7.89	315295	12.88

IS1 = Pentafluorobenzene
IS2 = 1,4 - Difluorobenzene
IS3 = d5 - Chlorobenzene
IS4 = d4 - Dichlorobenzene

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 to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS\ROCH Contract: DAMES&MOORE

Lab Code: 10145 Case No.: R2-664 SAS No.: _____ SDG No.: CB-1

Lab File ID (Standard): Y5789.D Date Analyzed: 01/27/00

Instrument ID: GCMS#3 Time Analyzed: 10:50

GC Column: HP624 ID: 0.20 (mm) Heated Purge (Y/N): N

		IS4 AREA	#	RT	#	AREA	#	RT	#	AREA	#	RT	#
	12 HOUR STD	178215		17.26									
	UPPER LIMIT	356430		16.76									
	LOWER LIMIT	89108		17.76									
	EPA SAMPLE NO.												
01	VBLK01	181154		17.27									
02	VREF01	186612		17.27									
03	STMH-3	183377		17.26									

IS1 = Pentafluorobenzene
IS2 = 1,4 - Difluorobenzene
IS3 = d5 - Chlorobenzene
IS4 = d4 - Dichlorobenzene

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 to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: DAMES&MOORE

Lab Code: 10145 Case No.: R20-664 SAS No.: _____ SDG No.: CB-1

Lab File ID (Standard): C9019.D Date Analyzed: 01/27/00

Instrument ID: MS#5 Time Analyzed: 10:19

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): Y

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	78413	9.48	142235	10.81	157067	16.28
	UPPER LIMIT	156826	8.98	284470	10.31	314134	15.78
	LOWER LIMIT	39207	9.98	71118	11.31	78534	16.78
	EPA SAMPLE NO.						
01	VBLK02	77925	9.48	136302	10.81	147706	16.28
02	VREF02	72311	9.48	126519	10.81	145740	16.28
03	CB-1	67333	9.48	118478	10.80	116194	16.28
04	CB-1MS	69441	9.49	123427	10.80	124172	16.28
05	CB-1MSD	68460	9.48	123945	10.80	123615	16.28
06	TRIP BLANK	75711	9.47	136235	10.80	142684	16.28
07	STMH-2	68240	9.47	122816	10.80	125483	16.28

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = d5-Chlorobenze
IS4 = d4-1,4-Dichlorobenzene

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 to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: DAMES&MOORE

Lab Code: 10145 Case No.: R20-664 SAS No.: _____ SDG No.: CB-1

Lab File ID (Standard): C9019.D Date Analyzed: 01/27/00

Instrument ID: MS#5 Time Analyzed: 10:19

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): Y

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	73212	20.96				
	UPPER LIMIT	146424	20.46				
	LOWER LIMIT	36606	21.46				
	EPA SAMPLE NO.						
01	VBLK02	58602	20.95				
02	VREF02	66287	20.96				
03	CB-1	34130*	20.95				
04	CB-1MS	42022	20.95				
05	CB-1MSD	40100	20.95				
06	TRIP BLANK	56686	20.95				
07	STMH-2	49382	20.95				

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = d5-Chlorobenze
IS4 = d4-1,4-Dichlorobenzene

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 to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

VOLATILE ORGANICS

SAMPLE DATA

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-1

Date Sampled : 01/25/00 **Order #:** 355896 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 63.8

DATE ANALYZED : 01/27/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	20 J	UG/KG
BENZENE	5.0	7.8 U	UG/KG
BROMODICHLOROMETHANE	5.0	7.8 U	UG/KG
BROMOFORM	5.0	7.8 U	UG/KG
BROMOMETHANE	5.0	7.8 U	UG/KG
2-BUTANONE (MEK)	10	16 U	UG/KG
CARBON DISULFIDE	10	16 U	UG/KG
CARBON TETRACHLORIDE	5.0	7.8 U	UG/KG
CHLOROBENZENE	5.0	7.8 U	UG/KG
CHLOROETHANE	5.0	7.8 U	UG/KG
CHLOROFORM	5.0	7.8 U	UG/KG
CHLOROMETHANE	5.0	7.8 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	7.8 U	UG/KG
1,3-DICHLOROBENZENE	5.0	7.8 U	UG/KG
1,2-DICHLOROBENZENE	5.0	7.8 U	UG/KG
1,4-DICHLOROBENZENE	5.0	7.8 U	UG/KG
1,1-DICHLOROETHANE	5.0	7.8 U	UG/KG
1,2-DICHLOROETHANE	5.0	7.8 U	UG/KG
1,1-DICHLOROETHENE	5.0	7.8 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	7.8 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	7.8 U	UG/KG
1,2-DICHLOROPROPANE	5.0	7.8 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	7.8 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	7.8 U	UG/KG
ETHYLBENZENE	5.0	7.8 U	UG/KG
2-HEXANONE	10	16 U	UG/KG
METHYLENE CHLORIDE	5.0	7.8 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	16 U	UG/KG
STYRENE	5.0	7.8 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	7.8 U	UG/KG
TETRACHLOROETHENE	5.0	7.8 U	UG/KG
TOLUENE	5.0	7.8 U	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	7.8 U	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	7.8 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	7.8 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	7.8 U	UG/KG
TRICHLOROETHENE	5.0	7.8 U	UG/KG
VINYL CHLORIDE	5.0	7.8 U	UG/KG
O-XYLENE	5.0	7.8 U	UG/KG
M+P-XYLENE	5.0	7.8 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	76	%

0027

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-1

Date Sampled : 01/25/00 **Order #:** 355896 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 63.8

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 01/27/00			
ANALYTICAL DILUTION:	1.00			Dry Weight
TOLUENE-D8		(81 - 117 %)	98	%
DIBROMOFLUOROMETHANE		(80 - 120 %)	105	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9025.D Vial: 9
Acq On : 27 Jan 100 2:32 pm Operator: HERRING
Sample : 355896 1.0 Inst : 5971 - In
Misc : DAMES R20-664 8260B.TCLH Multiplr: 1.00
Quant Time: Jan 27 15:05 19100

SDG CB-1
EBA: CB-1

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.48	168	67333	50.00	ppb		0.00
34) 1,4-Difluorobenzene	10.80	114	118478	50.00	ppb		0.00
55) d5-Chlorobenze	16.28	117	116194	50.00	ppb		0.00
69) d4-1,4-Dichlorobenzene	20.95	152	34130	50.00	ppb		0.00
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.41	113	47202	52.39	ppb		104.78%
53) surr3,Toluene-d8	13.53	98	139704	49.09	ppb		98.18%
54) surr2,bfb	18.60	95	50822	37.98	ppb		75.97%
Target Compounds							Qvalue
12) Acetone	5.48	43	9790	12.77	ppb	#	89
18) ~~TBA~~	6.46	59	297	~~1.89~~	ppb	#	1
26) ~~2-Butanone~~	8.57	43	1166	~~1.42~~	ppb	#	88
28) ~~Propionitrile~~	8.90	54	149	~~1.03~~	ppb		95
31) ~~Tetrahydrofuran~~	9.09	42	3841	~~8.30~~	ppb		90 NT
38) ~~Iso-Butyl Alcohol~~	10.31	43	80	~~1.08~~	ppb		67

SDG

2-14-00

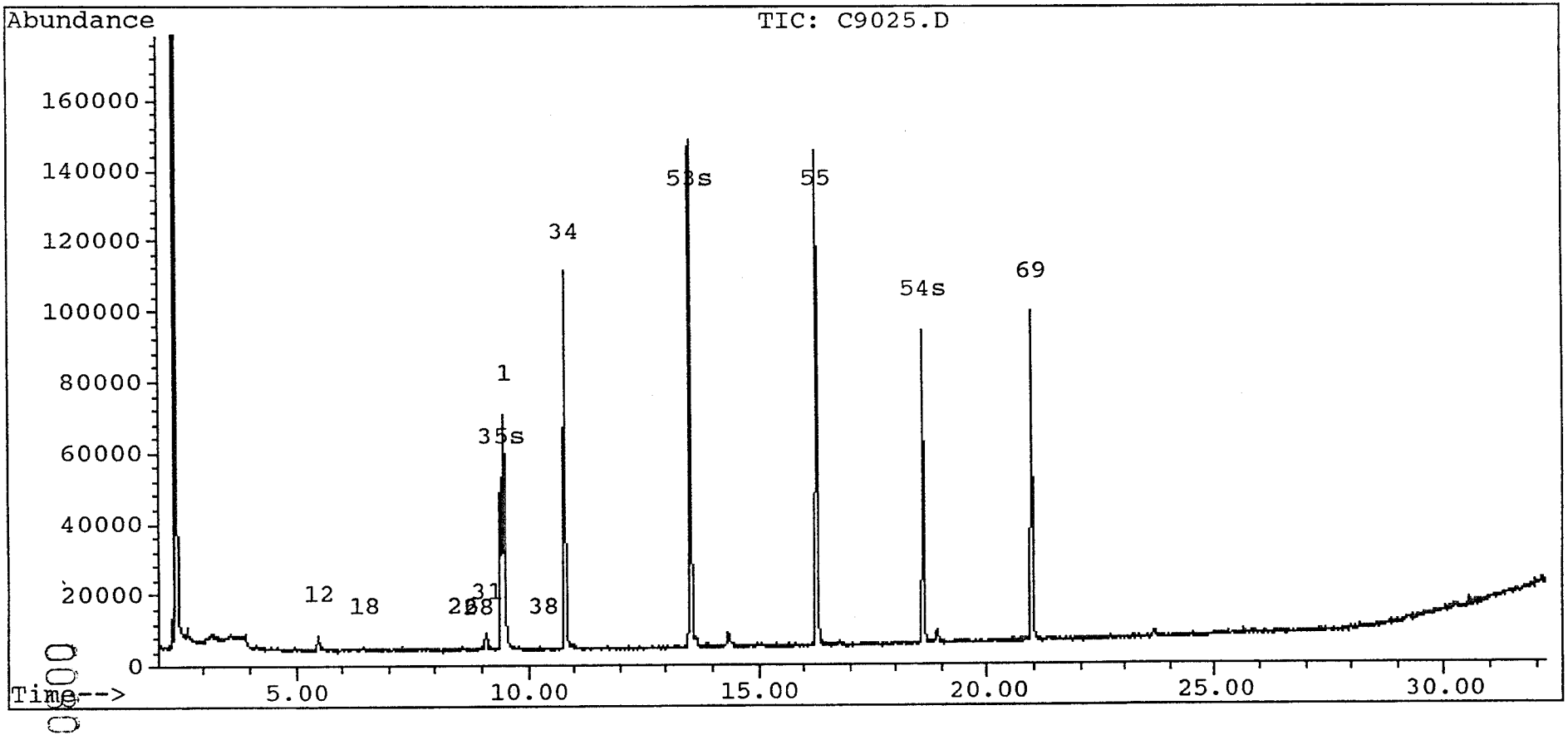
0029

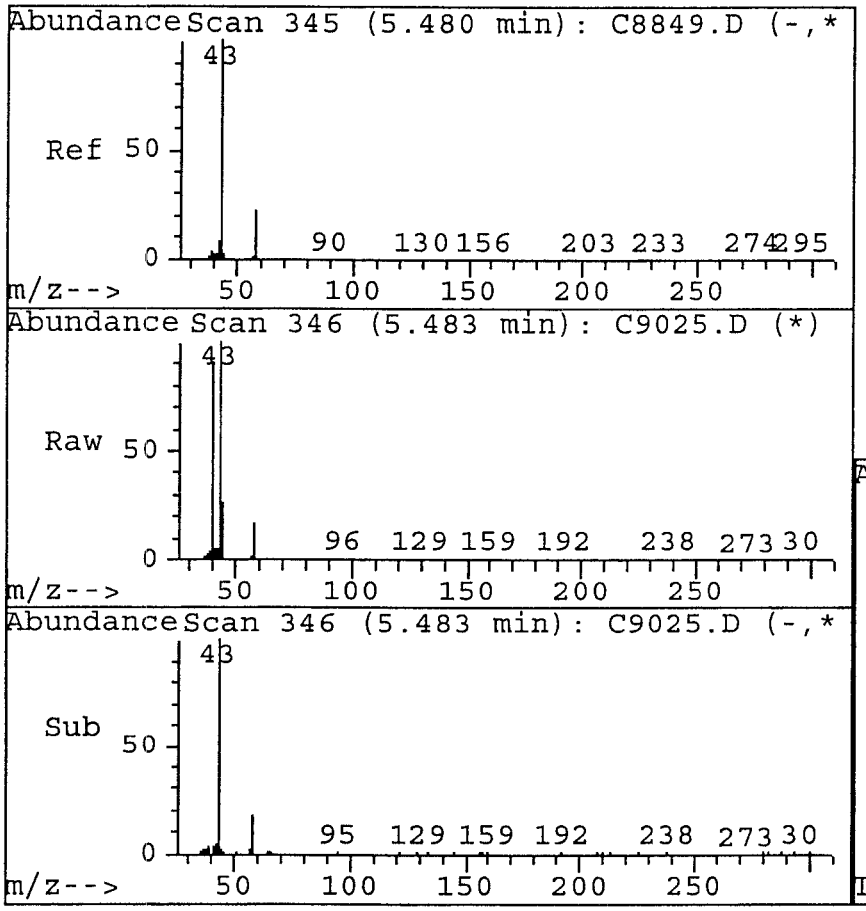
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Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9025.D
Acq On : 27 Jan 100 2:32 pm
Sample : 355896 1.0
Misc : DAMES R20-664 8260B.TCLH
Quant Time: Jan 27 15:05 19100

Vial: 9
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration

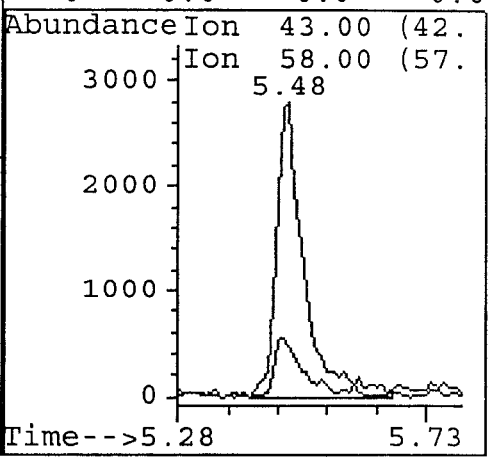




#12
Acetone
Concen: 12.77 ppb
RT: 5.48 min Scan# 346
Delta R.T. 0.01 min
Lab File: C9025.D
Acq: 27 Jan 100 2:32 pm

Tgt Ion:43 Resp: 9790

Ion	Ratio	Lower	Upper
43	100		
58	17.1	18.1	27.1#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



0031

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : STMH-2

Date Sampled : 01/25/00 **Order #:** 355897 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 83.1

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/27/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	24 U	UG/KG
BENZENE	5.0	6.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.0 U	UG/KG
BROMOFORM	5.0	6.0 U	UG/KG
BROMOMETHANE	5.0	6.0 U	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.0 U	UG/KG
CHLOROBENZENE	5.0	6.0 U	UG/KG
CHLOROETHANE	5.0	6.0 U	UG/KG
CHLOROFORM	5.0	4.3 J	UG/KG
CHLOROMETHANE	5.0	6.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.0 U	UG/KG
1,3-DICHLOROBENZENE	5.0	6.0 U	UG/KG
1,2-DICHLOROBENZENE	5.0	6.0 U	UG/KG
1,4-DICHLOROBENZENE	5.0	6.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.0 U	UG/KG
ETHYLBENZENE	5.0	6.0 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
METHYLENE CHLORIDE	5.0	6.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	6.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.0 U	UG/KG
TETRACHLOROETHENE	5.0	6.0 U	UG/KG
TOLUENE	5.0	6.0 U	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	6.0 U	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	6.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.0 U	UG/KG
TRICHLOROETHENE	5.0	6.0 U	UG/KG
VINYL CHLORIDE	5.0	6.0 U	UG/KG
O-XYLENE	5.0	6.0 U	UG/KG
M+P-XYLENE	5.0	6.0 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	92	%

0032

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : STMH-2

Date Sampled : 01/25/00 **Order #:** 355897 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 83.1

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 01/27/00			
ANALYTICAL DILUTION:	1.00			Dry Weight
TOLUENE-D8	(81 - 117 %)		98	%
DIBROMOFLUOROMETHANE	(80 - 120 %)		100	%

0033

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9030.D
Acq On : 27 Jan 100 5:51 pm
Sample : 355897 1.0
Misc : DAMES R20-664 8260B.TCLH
Quant Time: Jan 27 18:23 19100

Vial: 14
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

SMH-2

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.47	168	68240	50.00	ppb		0.00
34) 1,4-Difluorobenzene	10.80	114	122816	50.00	ppb		0.00
55) d5-Chlorobenze	16.28	117	125483	50.00	ppb		0.00
69) d4-1,4-Dichlorobenzene	20.95	152	49382	50.00	ppb		0.00
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.40	113	46605	49.90	ppb		99.80%
53) surr3,Toluene-d8	13.52	98	144422	48.95	ppb		97.91%
54) surr2,bfb	18.60	95	63533	45.81	ppb		91.61%
Target Compounds							Qvalue
12) ~~Acetone~~	5.49	43	1473	~~1.90~~	ppb		98
15) ~~Acetonitrile~~	5.97	39	131	~~5.46~~	ppb	#	1
18) TBA	6.46	59	366	~~2.30~~	ppb	#	44
28) ~~Propionitrile~~	8.62	54	233	~~1.58~~	ppb	#	65
31) ~~Tetrahydrofuran~~	9.08	42	4137	~~8.82~~	ppb		93
32) Chloroform	9.12	83	6265	3.64	ppb		91
38) ~~Iso-Butyl Alcoh~~ol	9.98	43	84	~~1.09~~	ppb		88
87) ~~Nitrobenzene~~	23.78	77	176	~~1.34~~	ppb	#	35
90) Naphthalen	25.61	128	3910	1.56	ppb	#	91

2-14-00

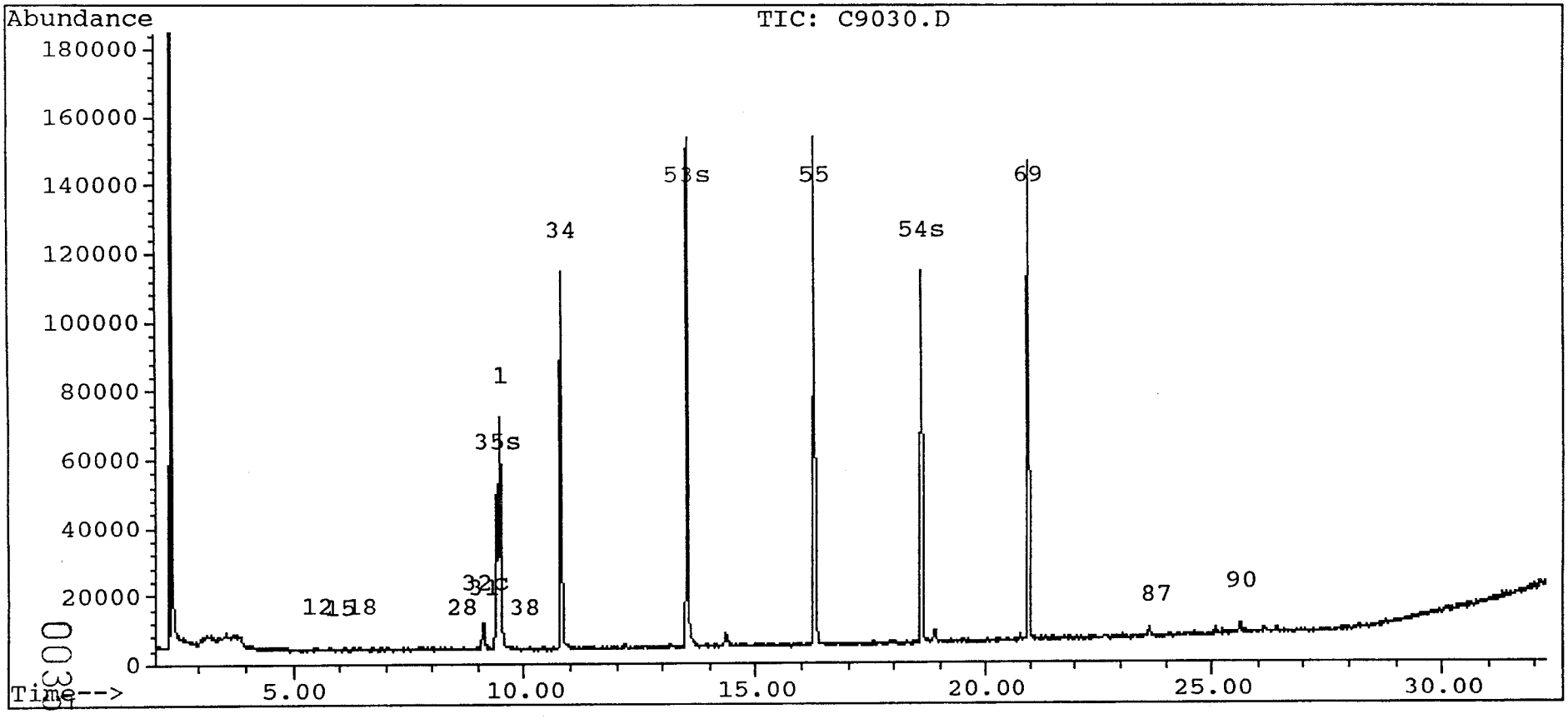
0034

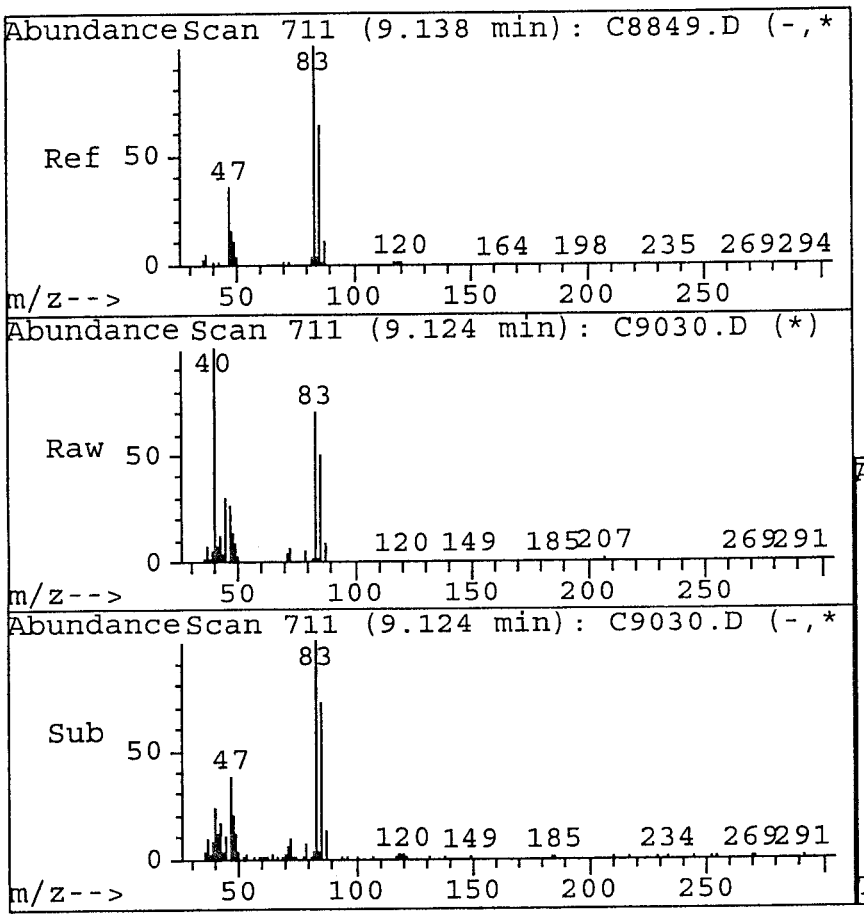
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C9030.D SOIL0113.M Thu Jan 27 18:23:39 2000

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9030.D Vial: 14
Acq On : 27 Jan 100 5:51 pm Operator: HERRING
Sample : 355897 1.0 Inst : 5971 - In
Misc : DAMES R20-664 8260B.TCLH Multiplr: 1.00
Quant Time: Jan 27 18:23 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration

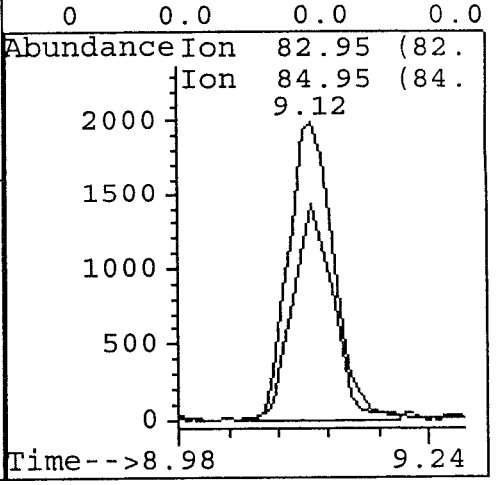




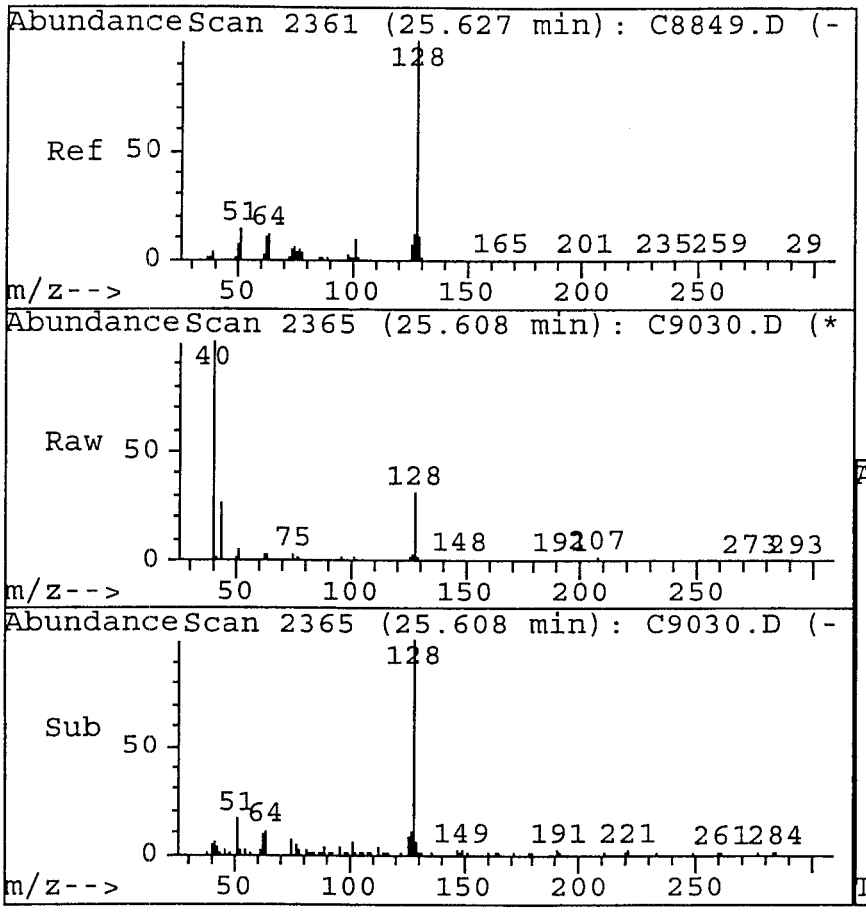
#32
Chloroform
Concen: 3.64 ppb
RT: 9.12 min Scan# 711
Delta R.T. -0.00 min
Lab File: C9030.D
Acq: 27 Jan 100 5:51 pm

Tgt Ion:82.95 Resp: 6265

Ion	Ratio	Lower	Upper
83	100		
85	71.8	51.6	77.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0



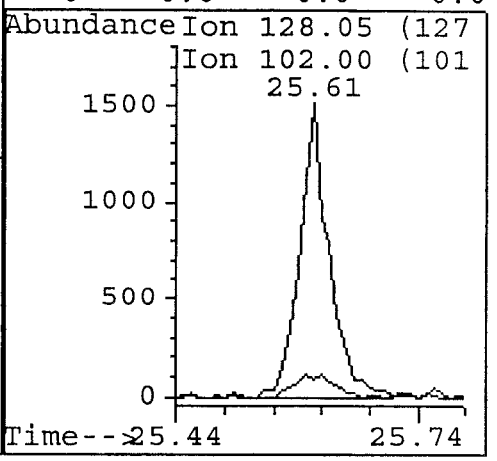
0036



#90
Naphthalen
Concen: 1.56 ppb
RT: 25.61 min Scan# 2365
Delta R.T. -0.00 min
Lab File: C9030.D
Acq: 27 Jan 100 5:51 pm

Tgt Ion:128.05 Resp: 3910

Ion	Ratio	Lower	Upper
128	100		
102	5.6	7.0	10.5#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



0037

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : STMH-3

Date Sampled : 01/25/00 **Order #:** 355898 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 62.3

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/27/00			
ANALYTICAL DILUTION: 500.00			Dry Weight
ACETONE	20	16000 U	UG/KG
BENZENE	5.0	4000 U	UG/KG
BROMODICHLOROMETHANE	5.0	4000 U	UG/KG
BROMOFORM	5.0	4000 U	UG/KG
BROMOMETHANE	5.0	4000 U	UG/KG
2-BUTANONE (MEK)	10	8000 U	UG/KG
CARBON DISULFIDE	10	8000 U	UG/KG
CARBON TETRACHLORIDE	5.0	4000 U	UG/KG
CHLOROBENZENE	5.0	4000 U	UG/KG
CHLOROETHANE	5.0	4000 U	UG/KG
CHLOROFORM	5.0	4000 U	UG/KG
CHLOROMETHANE	5.0	4000 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	4000 U	UG/KG
1,3-DICHLOROBENZENE	5.0	450000 E	UG/KG
1,2-DICHLOROBENZENE	5.0	14000	UG/KG
1,4-DICHLOROBENZENE	5.0	190000 E	UG/KG
1,1-DICHLOROETHANE	5.0	4000 U	UG/KG
1,2-DICHLOROETHANE	5.0	4000 U	UG/KG
1,1-DICHLOROETHENE	5.0	4000 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	4000 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	4000 U	UG/KG
1,2-DICHLOROPROPANE	5.0	4000 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	4000 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	4000 U	UG/KG
ETHYLBENZENE	5.0	4000 U	UG/KG
2-HEXANONE	10	8000 U	UG/KG
METHYLENE CHLORIDE	5.0	4000 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	8000 U	UG/KG
STYRENE	5.0	4000 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	4000 U	UG/KG
TETRACHLOROETHENE	5.0	4000 U	UG/KG
TOLUENE	5.0	4000 U	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	1300000 E	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	10000	UG/KG
1,1,1-TRICHLOROETHANE	5.0	4000 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	4000 U	UG/KG
TRICHLOROETHENE	5.0	4000 U	UG/KG
VINYL CHLORIDE	5.0	4000 U	UG/KG
O-XYLENE	5.0	2200 J	UG/KG
M+P-XYLENE	5.0	4000 U	UG/KG

0038

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	99	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : STMH-3

Date Sampled : 01/25/00 **Order #:** 355898 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 62.3

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 01/27/00				
ANALYTICAL DILUTION: 500.00				Dry Weight
TOLUENE-D8	(81 - 117 %)		99	%
DIBROMOFLUOROMETHANE	(80 - 120 %)		102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5803.D
Acq On : 27 Jan 100 7:53 pm
Sample : 355898 500.0
Misc : DAMES R20-00-645 8260B.
Quant Time: Jan 27 20:21 19100

Vial: 58
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.76	168	231983	50.00	ppb		-0.02
34) 1,4 - Difluorobenzene	7.89	114	343513	50.00	ppb		-0.02
51) d5 - Chlorobenzene	12.88	117	315295	50.00	ppb		-0.02
73) d4 - Dichlorobenzene	17.26	152	183377	50.00	ppb		-0.02
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	6.63	113	113093	51.05	ppb		102.10%
57) surr3,Toluene-d8	10.34	98	401432	49.74	ppb		99.48%
58) surr2,bfb	15.06	95	180657	49.51	ppb		99.02%
Target Compounds							Qvalue
5) ~~Bromomethane~~	2.14	94	75	~~5.43~~	ppb	#	2
12) Acetone	3.33	43	564	1.25	ppb	#	48
32) ~~Tetrahydrofuran~~	6.32	42	2948	~~5.96~~	ppb		99
60) ~~2-Hexanone~~	11.61	43	9752	~~9.91~~	ppb	#	27
68) o-Xylene	14.10	106	9117	2.91	ppb		87
72) ~~Cyclohexanone~~	14.91	55	976	~~34.19~~	ppb	#	29
74) ~~1,1,2,2-Tetrachloroethane~~	15.38	83	3454	~~1.37~~	ppb	#	42
83) 1,2,4-Trimethylbenzene	16.64	105	8933	1.21	ppb		96
86) 1,3-Dclbenz	17.13	146	2548946	561.79	ppb	NT	99
87) 1,4-Dclbenz	17.30	146	1128282	242.27	ppb	NT	99
88) ~~n-Butylbenzene~~	18.05	91	9747	~~1.46~~	ppb	#	58
89) 1,2-Dclbenz	18.00	146	75540	17.12	ppb	NT	100
91) ~~Nitrobenzene~~	19.86	77	161	~~24.18~~	ppb	#	26
92) 1,2,4-Tcbenzene	21.18	180	4878612	1674.48	ppb	NT	99
94) Naphthalen	21.61	128	69785	11.66	ppb	NT	98
95) 1,2,3-Tclbenzene	22.09	180	33591	12.78	ppb	NT	96

2-14-00

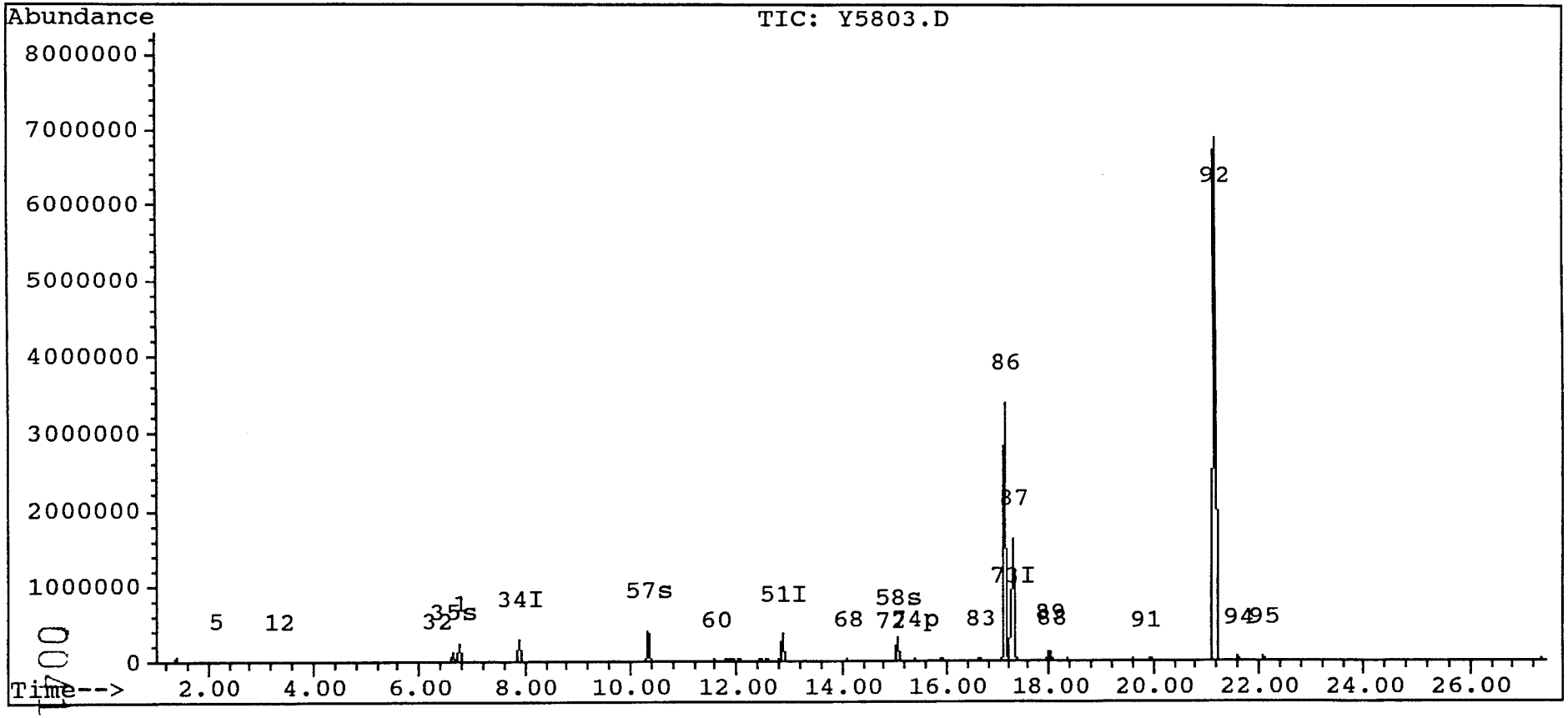
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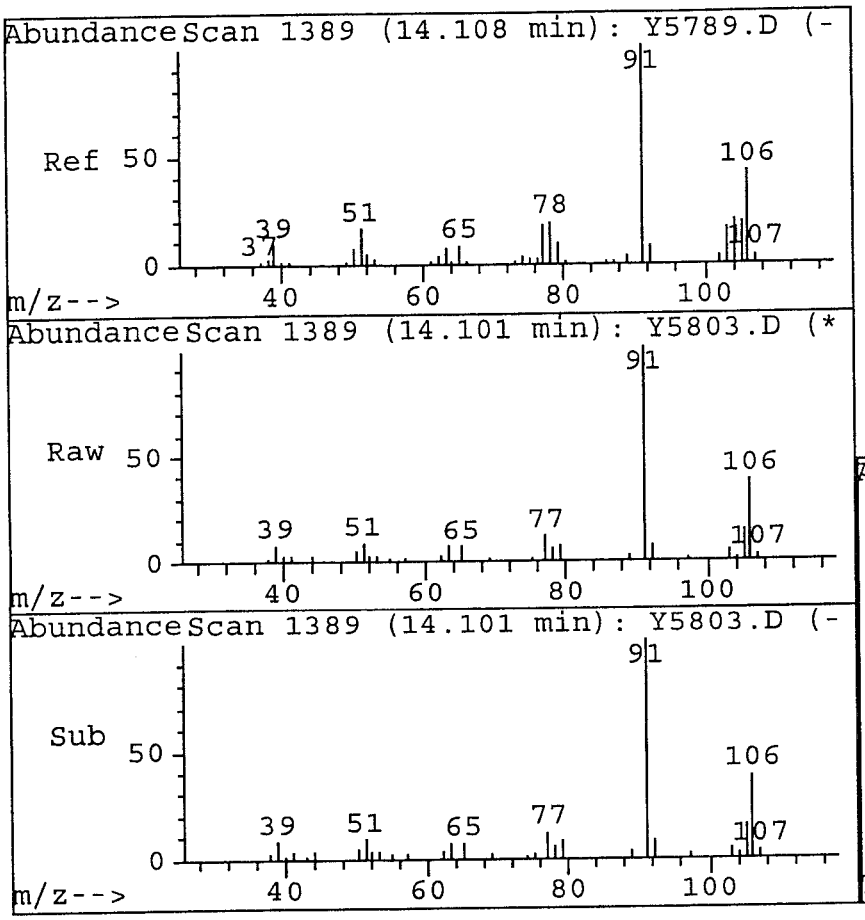
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Y5803.D EXP0124.M Thu Jan 27 20:20:53 2000

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5803.D Vial: 58
Acq On : 27 Jan 100 7:53 pm Operator: ALLGEIER
Sample : 355898 500.0 Inst : 5970 - In
Misc : DAMES R20-00-645 8260B. Multiplr: 1.00
Quant Time: Jan 27 20:21 19100

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
Response via : Multiple Level Calibration

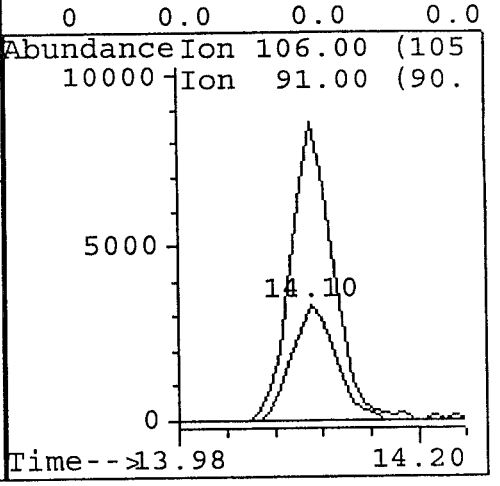




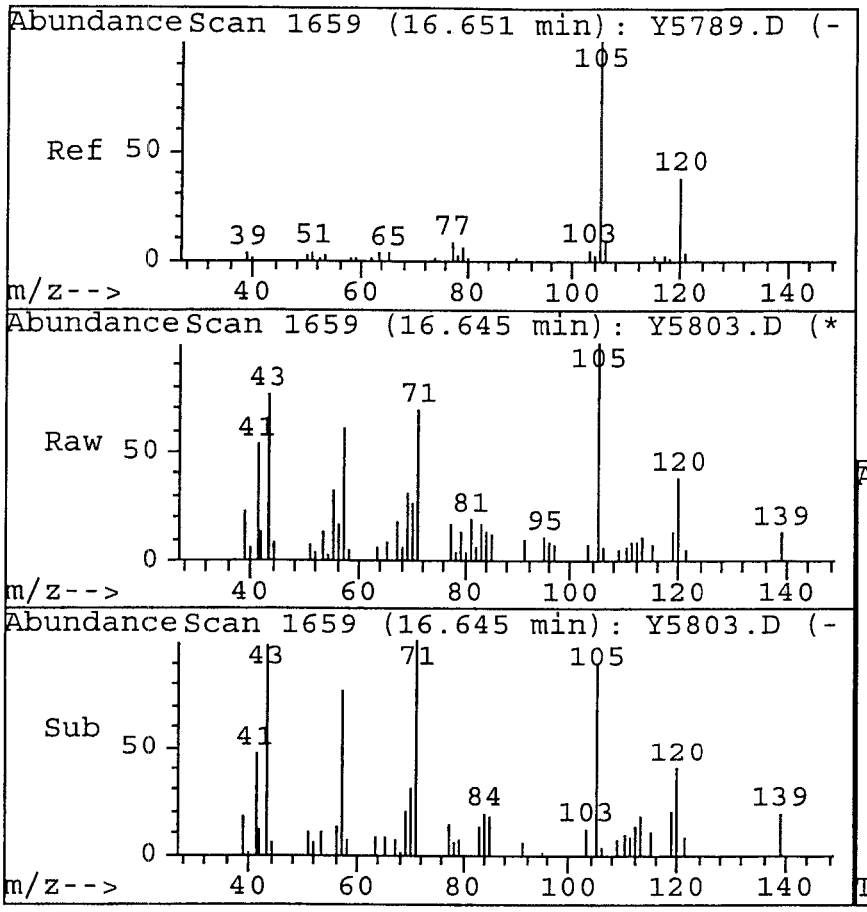
#68
o-Xylene
Concen: 2.91 ppb
RT: 14.10 min Scan# 1389
Delta R.T. -0.02 min
Lab File: Y5803.D
Acq: 27 Jan 100 7:53 pm

Tgt Ion:106 Resp: 9117

Ion	Ratio	Lower	Upper
106	100		
91	261.3	191.8	287.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0



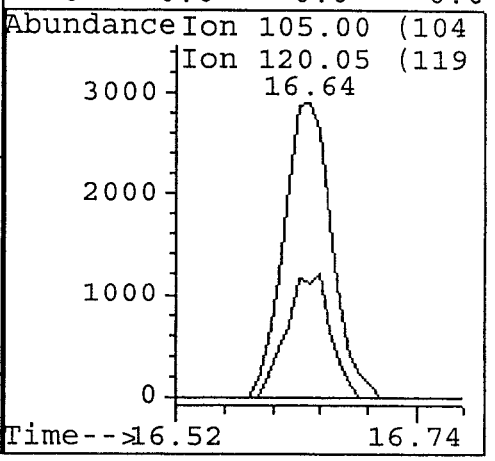
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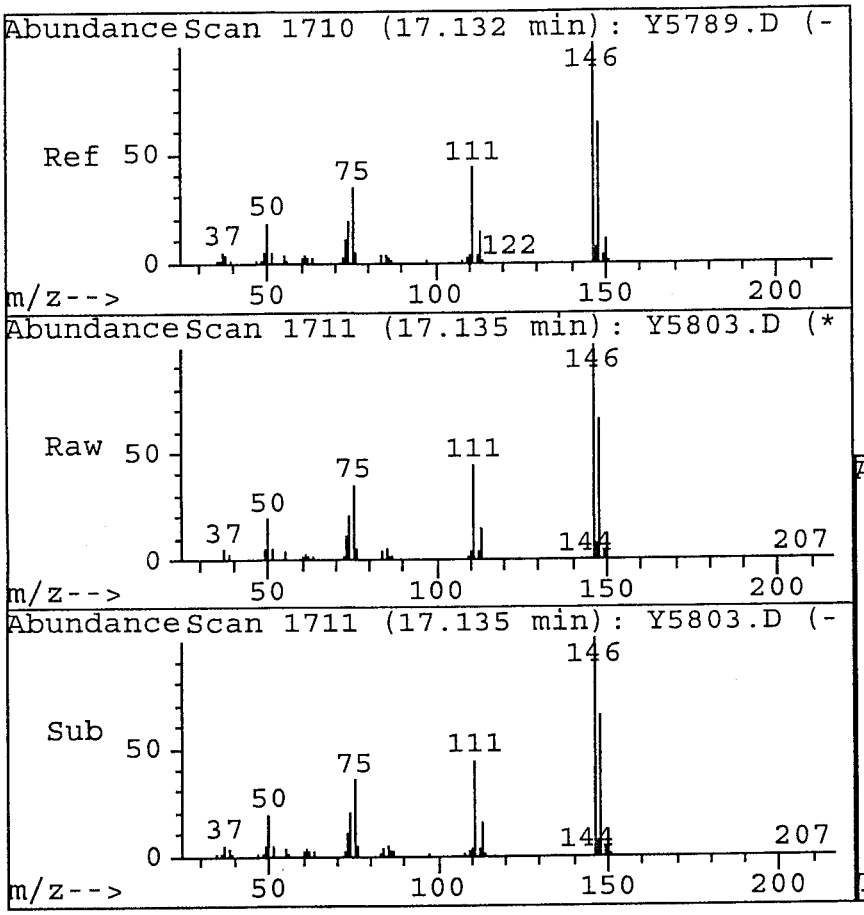
#83
1,2,4-Trimethylbenzene
Concen: 1.21 ppb
RT: 16.64 min Scan# 1659
Delta R.T. -0.02 min
Lab File: Y5803.D
Acq: 27 Jan 100 7:53 pm

Tgt Ion:105 Resp: 8933

Ion	Ratio	Lower	Upper
105	100		
120	38.3	32.7	49.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



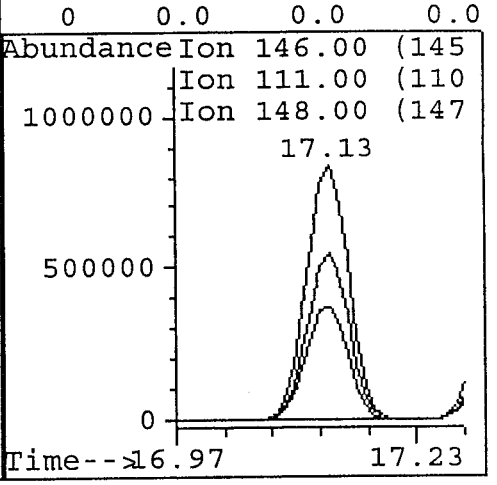
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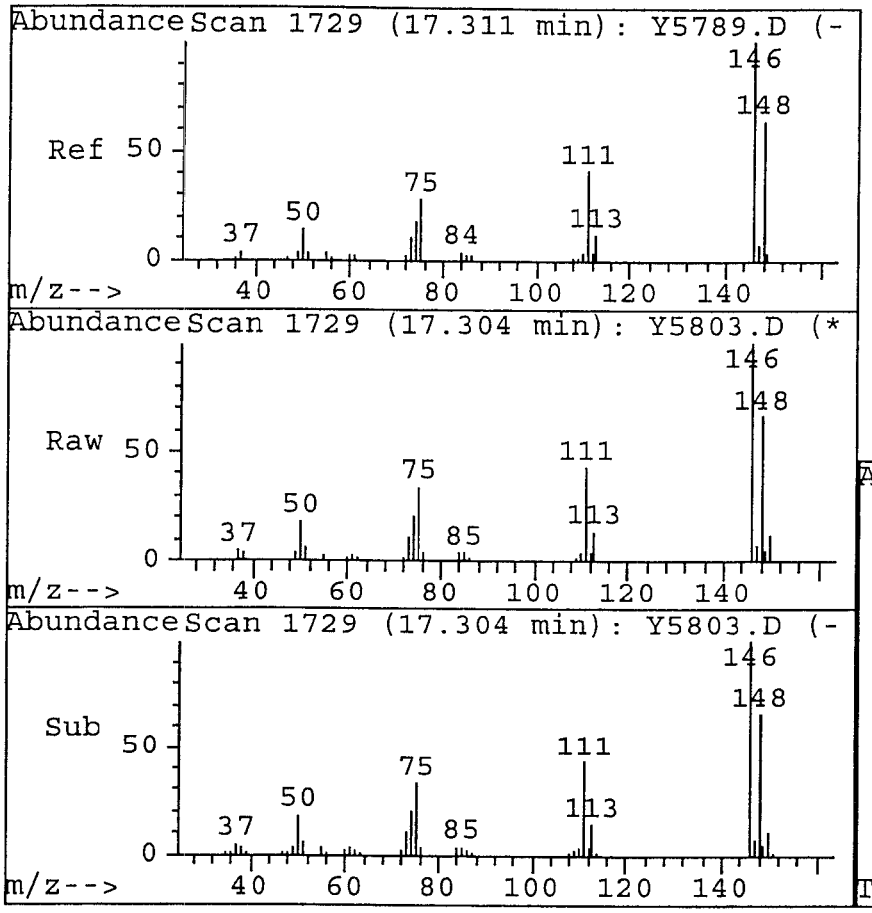
#86
1,3-Dclbenz
Concen: 561.79 ppb
RT: 17.13 min Scan# 1711
Delta R.T. -0.02 min
Lab File: Y5803.D
Acq: 27 Jan 100 7:53 pm

Tgt Ion:146 Resp: 2548946

Ion	Ratio	Lower	Upper
146	100		
111	44.3	35.3	53.0
148	65.2	51.4	77.1
0	0.0	0.0	0.0



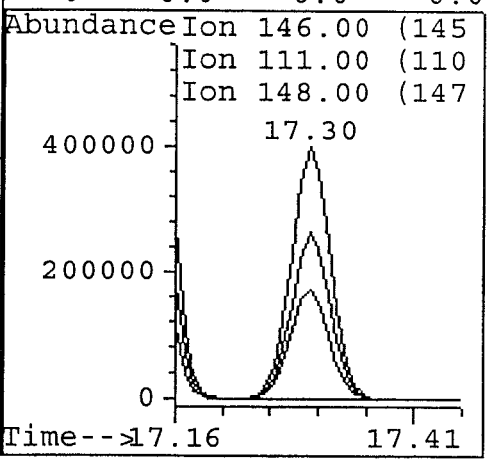
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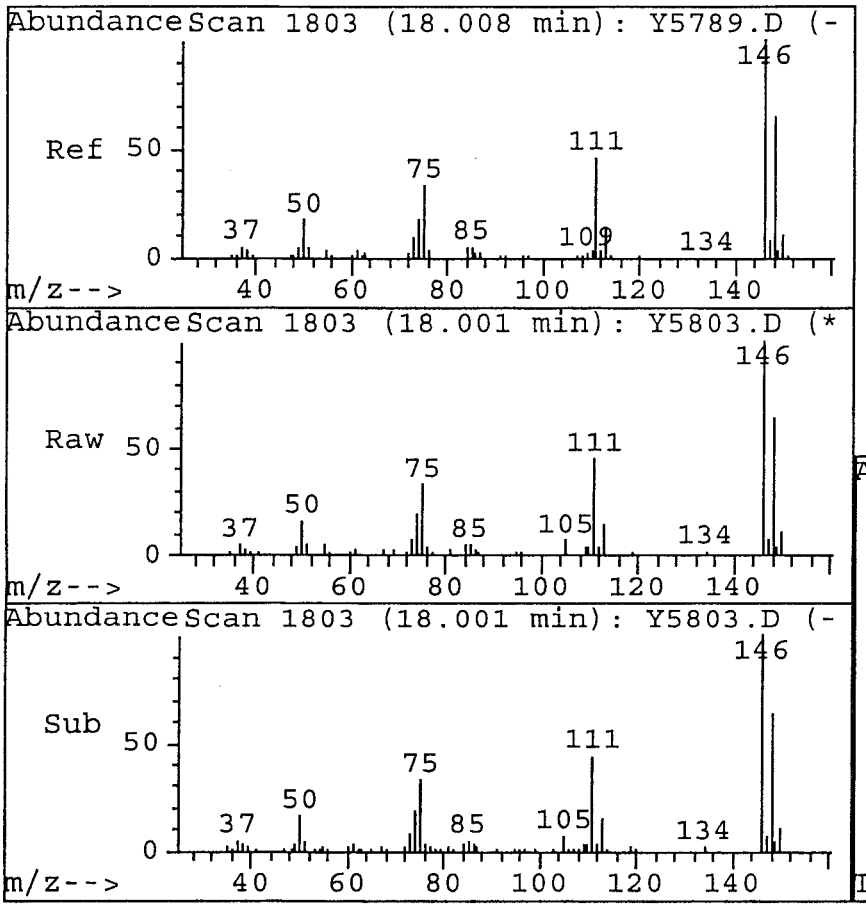
#87
1,4-Dclbenz
Concen: 242.27 ppb
RT: 17.30 min Scan# 1729
Delta R.T. -0.02 min
Lab File: Y5803.D
Acq: 27 Jan 100 7:53 pm

Tgt Ion:146 Resp: 1128282

Ion	Ratio	Lower	Upper
146	100		
111	43.2	34.5	51.7
148	65.6	51.5	77.2
0	0.0	0.0	0.0



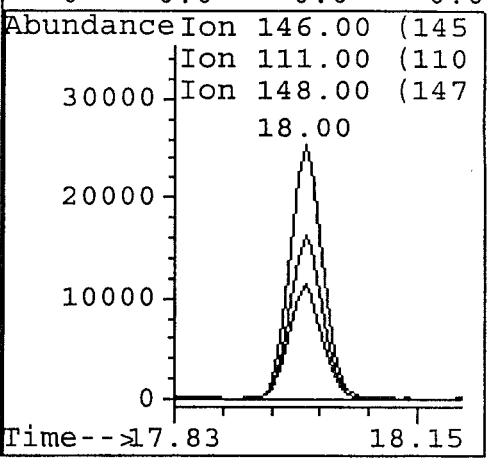
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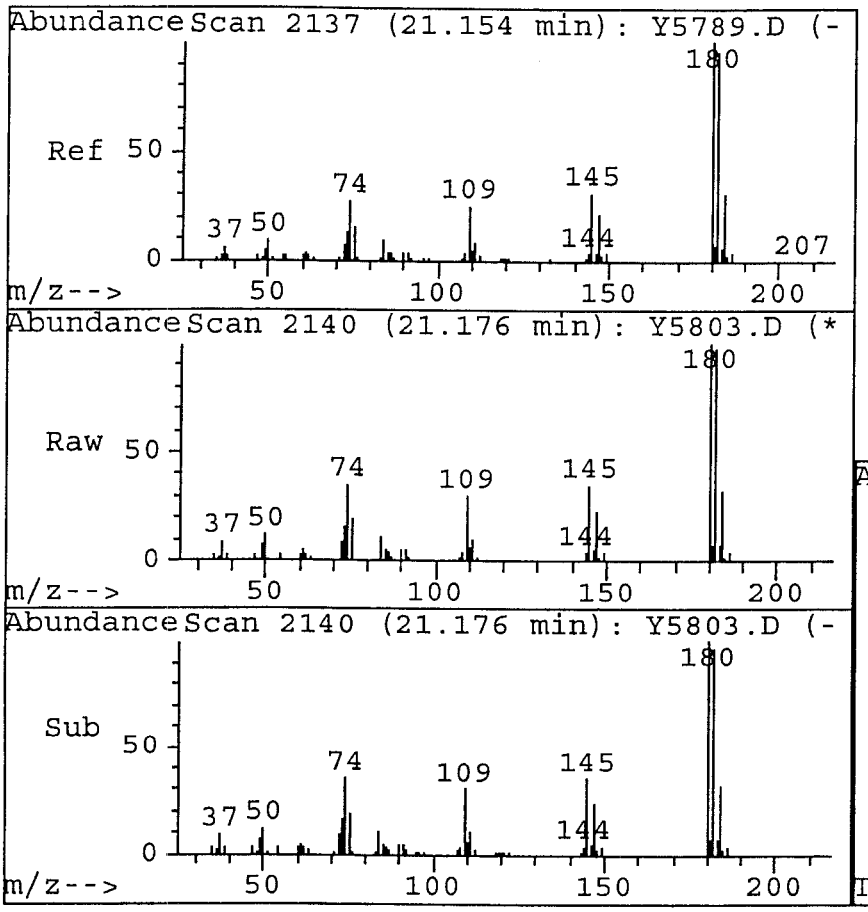
#89
1,2-Dclbenz
Concen: 17.12 ppb
RT: 18.00 min Scan# 1803
Delta R.T. -0.02 min
Lab File: Y5803.D
Acq: 27 Jan 100 7:53 pm

Tgt Ion:146 Resp: 75540

Ion	Ratio	Lower	Upper
146	100		
111	45.4	36.8	55.1
148	64.1	51.5	77.2
0	0.0	0.0	0.0



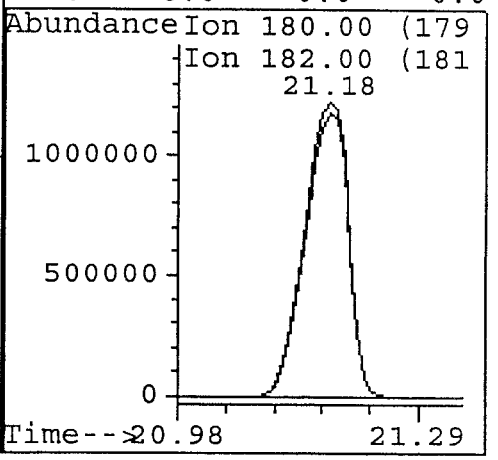
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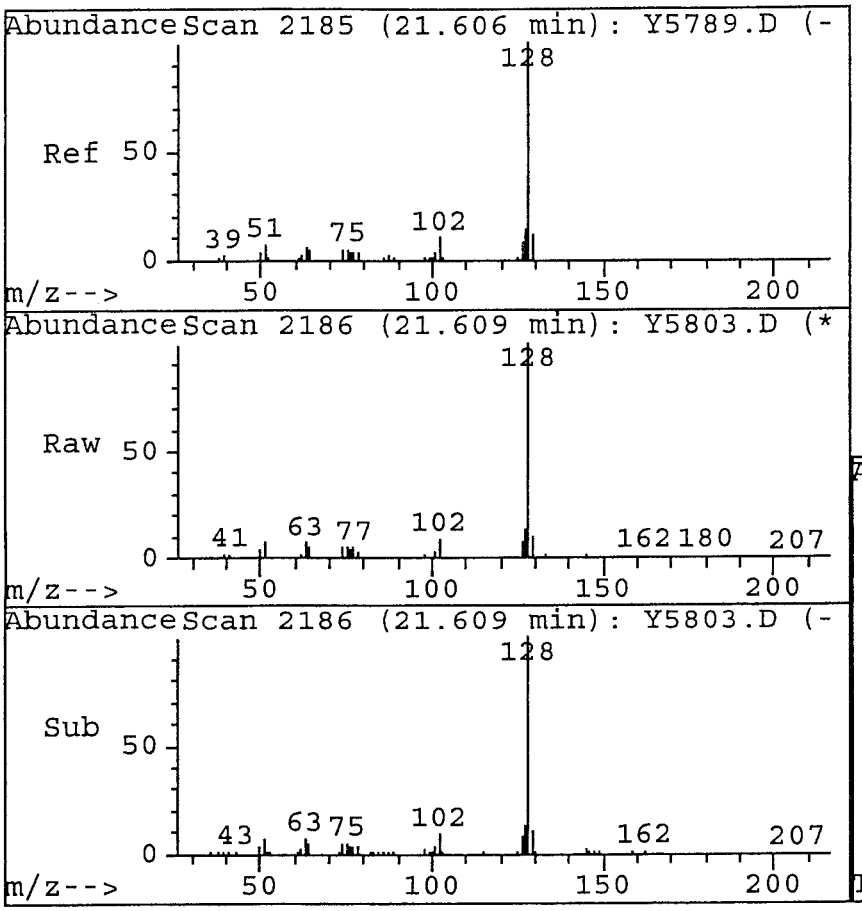
#92
1,2,4-Tcbenzene
Concen: 1674.48 ppb
RT: 21.18 min Scan# 2140
Delta R.T. 0.01 min
Lab File: Y5803.D
Acq: 27 Jan 100 7:53 pm

Tgt Ion:180 Resp: 4878612

Ion	Ratio	Lower	Upper
180	100		
182	96.9	76.6	114.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0



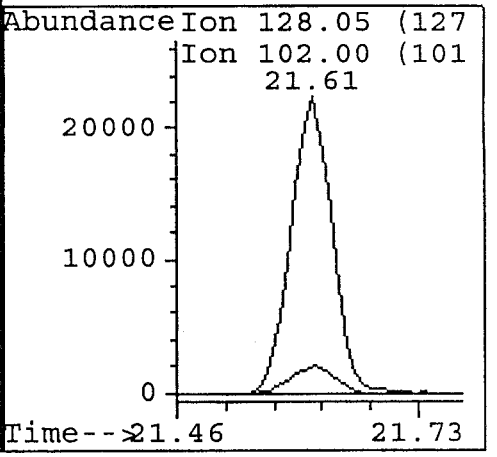
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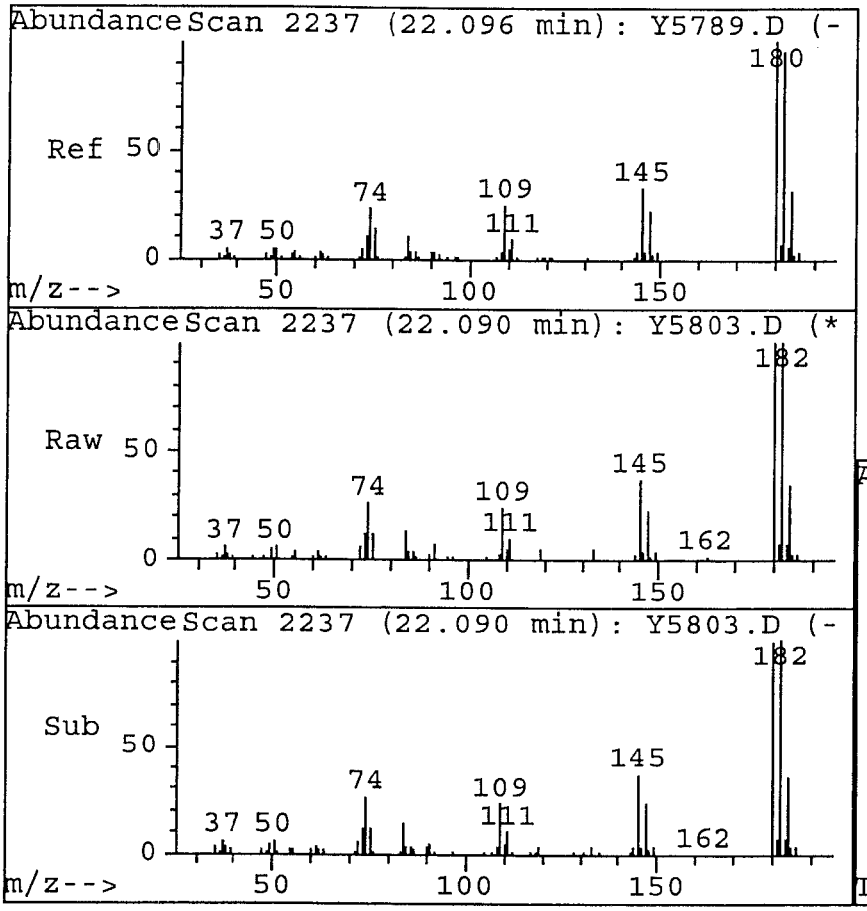
#94
Naphthalen
Concen: 11.66 ppb
RT: 21.61 min Scan# 2186
Delta R.T. -0.01 min
Lab File: Y5803.D
Acq: 27 Jan 100 7:53 pm

Tgt Ion:128.05 Resp: 69785

Ion	Ratio	Lower	Upper
128	100		
102	8.8	7.8	11.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0



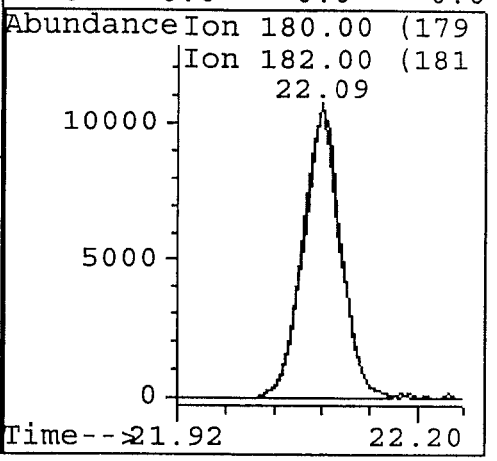
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#95
1,2,3-Tclbenzene
Concen: 12.78 ppb
RT: 22.09 min Scan# 2237
Delta R.T. -0.02 min
Lab File: Y5803.D
Acq: 27 Jan 100 7:53 pm

Tgt Ion:180 Resp: 33591

Ion	Ratio	Lower	Upper
180	100		
182	100.7	77.8	116.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0



0049

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : TRIP BLANK

Date Sampled : 01/25/00 **Order #:** 355899 **Sample Matrix:** WATER
Date Received: 01/26/00 **Submission #:** R2000664 **Analytical Run** 47939

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/27/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	94	%

0050

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : TRIP BLANK

Date Sampled : 01/25/00 **Order #:** 355899 **Sample Matrix:** WATER
Date Received: 01/26/00 **Submission #:** R2000664 **Analytical Run** 47939

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 01/27/00				
ANALYTICAL DILUTION: 1.00				
TOLUENE-D8	(88 - 110 %)		100	%
DIBROMOFLUOROMETHANE	(86 - 118 %)		102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9029.D
Acq On : 27 Jan 100 5:11 pm
Sample : 355899 1.0
Misc : DAMES R20-664 8260B.TCLH TRIP BLANK
Quant Time: Jan 27 17:43 19100

Vial: 13
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.47	168	75711	50.00	ppb		0.00
34) 1,4-Difluorobenzene	10.80	114	136235	50.00	ppb		0.00
55) d5-Chlorobenze	16.28	117	142684	50.00	ppb		0.00
69) d4-1,4-Dichlorobenzene	20.95	152	56686	50.00	ppb		0.00
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.40	113	52669	50.84	ppb		101.68%
53) surr3,Toluene-d8	13.52	98	163099	49.84	ppb		99.68%
54) surr2,bfb	18.59	95	71962	46.77	ppb		93.55%
Target Compounds							Qvalue
12) ~~Acetone~~	5.48	43	1856	~~2.15~~	ppb		93
18) ~~TBA~~	6.47	59	340	~~1.92~~	ppb	#	36
26) ~~2-Butanone~~	8.57	43	1591	1.72	ppb	#	63
31) ~~Tetrahydrofuran~~	9.07	42	4810	~~9.24~~	ppb		89

2-14-00

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

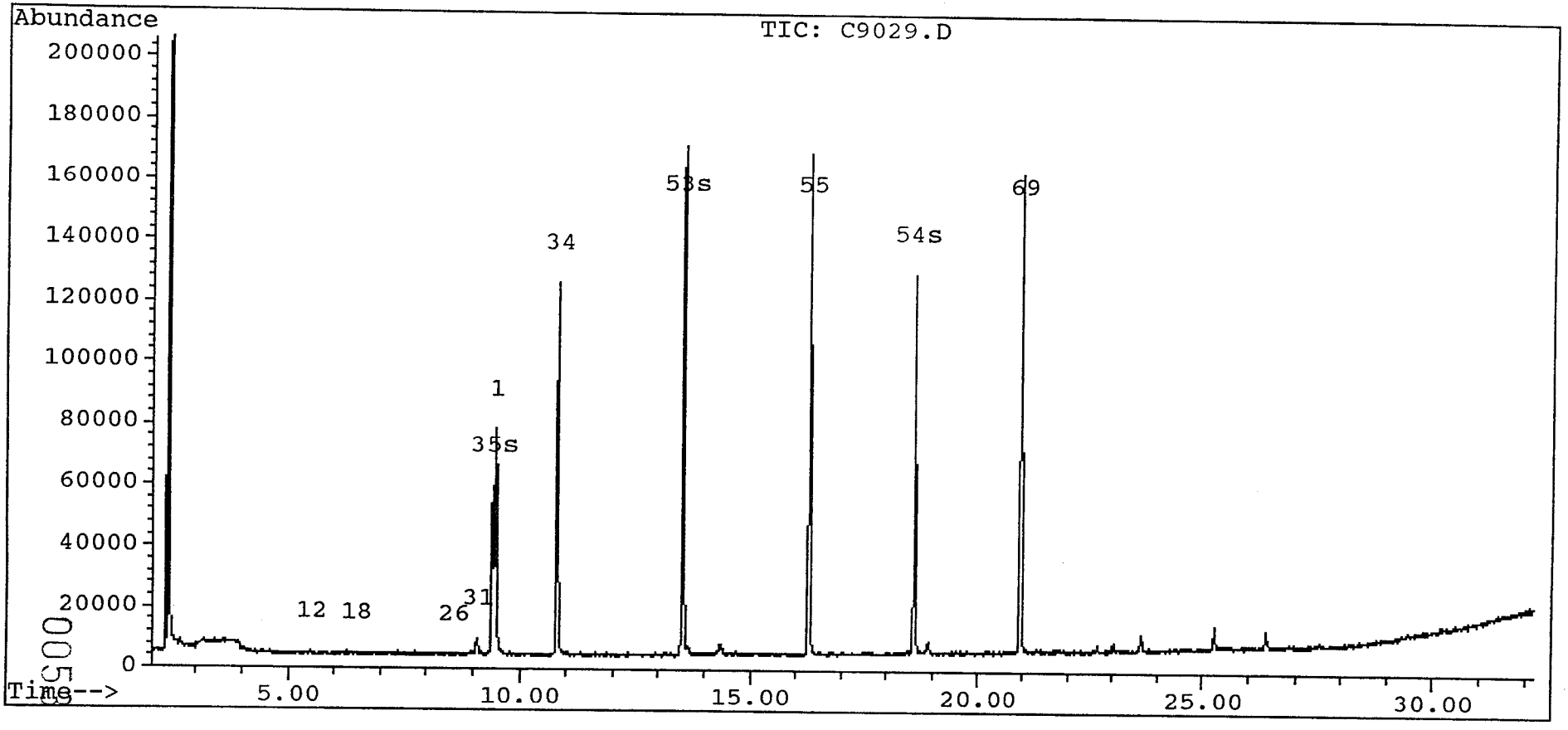
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Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9029.D
Acq On : 27 Jan 100 5:11 pm
Sample : 355899 1.0
Misc : DAMES R20-664 8260B.TCLH
Quant Time: Jan 27 17:43 19100

Vial: 13
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration



VOLATILE ORGANICS

STANDARDS DATA

8260B COMPOUND LIST

Concentration	5 PPB Std#1	20 PPB Std#2	50 PPB Std#3	100 PPB Std#4	150 PPB Std#5	200 PPB Std#6
Dichlorodifluoromethane	5.0	20	50	100	150	200
Chloromethane	5.0	20	50	100	150	200
Vinyl Chloride	5.0	20	50	100	150	200
Bromomethane	5.0	20	50	100	150	200
Chloroethane	5.0	20	50	100	150	200
Trichlorofluoromethane	5.0	20	50	100	150	200
Diethyl Ether	5.0	20	50	100	150	200
Acrolein	25	100	250	500	750	1000
Freon 113	5.0	20	50	100	150	200
1,1-Dichloroethene	5.0	20	50	100	150	200
Acetone	5.0	20	50	100	150	200
Iodomethane	5.0	20	50	100	150	200
Carbon Disulfide	5.0	20	50	100	150	200
Acetonitrile	5.0	20	50	500	750	1000
Allyl Chloride	5.0	20	50	100	150	200
Methylene Chloride	5.0	20	50	100	150	200
tert-Butyl Alcohol	100	400	1000	2000	3000	4000
Methyl-tert-Butyl Ether	5.0	20	50	100	150	200
Acrylonitrile	25	100	250	500	750	1000
trans-1,2 Dichlorooethene	5.0	20	50	100	150	200
1,1-Dichloroethane	5.0	20	50	100	150	200
Vinyl Acetate	5.0	20	50	100	150	200
2-Chloro-1,3- Butadiene	5.0	20	50	100	150	200
2,2-Dichloropropane	5.0	20	50	100	150	200
2-Butanone	5.0	20	50	100	150	200
cis-1,2-Dichloroethene	5.0	20	50	100	150	200
Propionitrile	5.0	20	50	400	600	800
Methacrylonitrile	5.0	20	50	100	150	200
Bromochloromethane	5.0	20	50	100	150	200
THF	5.0	20	50	100	150	200
Chloroform	5.0	20	50	100	150	200
1,1,1-Trichloroethane	5.0	20	50	100	150	200
Carbontetrachloride	5.0	20	50	100	150	200
1,1-Dichloropropene	5.0	20	50	100	150	200
Isobutyl Alcohol	100	400	1000	2000	3000	4000
Benzene	5.0	20	50	100	150	200
1,2-Dichloroethane	5.0	20	50	100	150	200
n-Heptane	5.0	20	50	100	150	200
Trichloroethene	5.0	20	50	100	150	200
1,2-Dichloropropane	5.0	20	50	100	150	200
Methyl Methacrylate	5.0	20	50	100	150	200
Dibromomethane	5.0	20	50	100	150	200
1,4-Dioxane	100	400	1000	2000	3000	4000
Surr4,Dibromofluoromethane	50	50	50	50	50	50
Surr3,Toluene-d8	50	50	50	50	50	50
Surr2,BFB	50	50	50	50	50	50

5 PPB Std#1	20 PPB Std#2	50 PPB Std#3	100 PPB Std#4	150 PPB Std#5	200 PPB Std#6	CC
Bromodichloromethane	5.0	20	50	100	150	200
2-Chloroethyl Vinyl Ether	5.0	20	50	100	150	200
cis-1,2-Dichloropropene	5.0	20	50	100	150	200
4-Methyl- 2 -Pentanone	5.0	20	50	100	150	200
Toluene	5.0	20	50	100	150	200
trans-1,2-Dichloropropene	5.0	20	50	100	150	200
Ethyl Methacrylate	5.0	20	20	100	150	200
1,1,2-Trichloroethane	5.0	20	50	100	150	200
Tetrachloroethene	5.0	20	50	100	150	200
2-Hexanone	5.0	20	50	100	150	200
1,3-Dichloropropane	5.0	20	50	100	150	200
Dibromochloromethane	5.0	20	50	100	150	200
1,2-Dibromoethane	5.0	20	50	100	150	200
Chlorobenzene	5.0	20	50	100	150	200
1,1,1,2-Tetrachloroethane	5.0	20	50	100	150	200
Ethylbenzene	5.0	20	50	100	150	200
(m+p) Xylene	10	40	100	200	300	400
o-Xylene	5.0	20	50	100	150	200
Styrene	5.0	20	50	100	150	200
Bromoform	5.0	20	50	100	150	200
Isopropylbenzene	5.0	20	50	100	150	200
Cyclohexanone	100	400	1000	2000	3000	4000
1,1,2,2-Tetrachloroethane	5.0	20	50	100	150	200
1,2,3-Trichloropropane	5.0	20	50	100	150	200
Trans -1,4- Dichlorobutene	5.0	20	20	100	150	200
n-Propylbenzene	5.0	20	50	100	150	200
Bromobenzene	5.0	20	50	100	150	200
1,3,5-Trimethylbenzene	5.0	20	50	100	150	200
2-Chlorotoluene	5.0	20	50	100	150	200
4-Chlorotoluene	5.0	20	50	100	150	200
tert-Butylbenzene	5.0	20	50	100	150	200
1,2,4-Trimethylbenzene	5.0	20	50	100	150	200
sec-Butylbenzene	5.0	20	50	100	150	200
p-Isopropyltoluene	5.0	20	50	100	150	200
1,3-Dichlorobenzene	5.0	20	50	100	150	200
1,4-Dichlorobenzene	5.0	20	50	100	150	200
n-Butylbenzene	5.0	20	50	100	150	200
1,2-Dichlorobenzene	5.0	20	50	100	150	200
1,2-Dibromo-3-Chloropropane	5.0	20	50	100	150	200
Nitrobenzene	10	40	100	200	300	400
1,2,4-Trichlorobenzene	5.0	20	50	100	150	200
Hexachlorobutadiene	5.0	20	50	100	150	200
Naphthalene	5.0	20	50	100	150	200
1,2,3-Trichlorobenzene	5.0	20	50	100	150	200

0055

Response Factor Report 5971 - In

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:02:45 2000
Response via : Initial Calibration

Calibration Files
5 =C8846.D 20 =C8848.D 50 =C8849.D
100 =C8850.D 150 =C8851.D 200 =C8852.D

		Compound	5	20	50	100	150	200	Avg	%RSD
			ISTD							
1)		Pentafluorobenzene								
2)		Dichlorodifluoromet	1.188	1.132	1.099	0.884	1.050	1.000	1.059	10.15
3)	p	Chloromethane	1.084	1.109	1.107	0.949	1.106	1.069	1.071	5.77
4)	c	Vinyl Chloride	0.835	0.861	0.863	0.730	0.856	0.829	0.829	6.07
5)		Bromomethane	0.323	0.408	0.404	0.350	0.418	0.430	0.389	10.88
6)		Chloroethane	0.507	0.529	0.522	0.450	0.506	0.503	0.503	5.55
7)		Trichlorofluorometh	0.946	0.930	0.919	0.762	0.931	0.943	0.905	7.81
8)		Diethyl Ether	0.479	0.523	0.524	0.481	0.535	0.547	0.515	5.55
9)		Acrolein	0.065	0.070	0.078	0.082	0.091	0.094	0.080	13.94
10)		FREON 113	0.288	0.291	0.265	0.209	0.263	0.263	0.263	11.16
11)	c	1,1-Diclethene	0.535	0.521	0.533	0.445	0.509	0.524	0.511	6.61
12)		Acetone		0.606	0.583	0.531	0.537	0.591	0.570	5.90
13)		Iodomethane	0.759	0.782	0.805	0.779	0.804	0.805	0.789	2.36
14)		Carbon Disulfide	2.503	2.676	2.684	2.593	2.756	2.787	2.667	3.94
15)		Acetonitrile	0.017	0.018	0.017	0.015	0.019	0.020	0.018	9.96
16)		Allyl Chloride	0.336	0.341	0.324	0.301	0.337	0.362	0.333	6.06
17)		Methylene Chloride	0.748	0.726	0.688	0.625	0.698	0.693	0.696	6.03
18)		TBA	0.121	0.118	0.108	0.106	0.125	0.122	0.117	6.55
19)		Methyl-t-Butyl Ethe	1.647	1.669	1.549	1.437	1.571	1.620	1.582	5.32
20)		Acrylonitrile	0.263	0.286	0.277	0.265	0.294	0.294	0.280	4.87
21)		trans-1,2-Dichloroe	0.543	0.578	0.561	0.508	0.568	0.554	0.552	4.51
22)	p	1,1-Diclethane	1.313	1.463	1.425	1.251	1.437	1.439	1.388	6.15
23)		Vinyl Acetate	0.143	0.170	0.154	0.160	0.162	0.150	0.156	6.02
24)		2-Chloro-1,3-butadi	1.069	1.140	1.147	0.950	1.175	1.185	1.111	7.99
25)		2,2-Dichloropropane	0.995	0.983	0.946	0.841	1.043	1.052	0.977	7.89
26)		2-Butanone	0.697	0.635	0.540	0.550	0.618	0.617	0.609	9.50
27)		cis-1,2-Dichloroeth	0.670	0.716	0.703	0.624	0.719	0.706	0.690	5.29
28)		Propionitrile	0.106	0.108	0.103	0.100	0.115	0.115	0.108	5.50
29)		Methacrylonitrile	0.280	0.314	0.292	0.289	0.328	0.338	0.307	7.64
30)		Bromochloromethane	0.405	0.426	0.412	0.378	0.426	0.419	0.411	4.40
31)		Tetrahydrofuran		0.454	0.333	0.295	0.319	0.318	0.344	18.38
32)	c	Chloroform	1.334	1.302	1.267	1.110	1.274	1.286	1.262	6.21
33)		1,1,1-Trichloroetha	0.987	0.935	0.907	0.762	0.944	0.958	0.916	8.70
			ISTD							
34)		1,4-Difluorobenzene								
35)	s	surr4,Dibrflmethane	0.363	0.377	0.389	0.379	0.378	0.395	0.380	2.88
36)		Carbontetrachloride	0.451	0.422	0.415	0.318	0.406	0.405	0.403	11.12
37)		1,1-Dichloropropene	0.513	0.482	0.458	0.357	0.434	0.436	0.447	11.86
38)		Iso-Butyl Alcohol	0.034	0.032	0.030	0.028	0.032	0.032	0.031	7.12
39)		Benzene	1.642	1.582	1.564	1.251	1.488	1.440	1.495	9.30
40)		1,2-Dichloroethane	0.754	0.693	0.658	0.572	0.662	0.660	0.666	8.84
41)		Trichloroethene	0.416	0.407	0.397	0.324	0.388	0.385	0.386	8.48
42)	c	1,2-Diclpropane	0.525	0.508	0.500	0.432	0.507	0.507	0.496	6.60

(#) = Out of Range

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:02:45 2000
Response via : Initial Calibration

Calibration Files
5 =C8846.D 20 =C8848.D 50 =C8849.D
100 =C8850.D 150 =C8851.D 200 =C8852.D

		Compound	5	20	50	100	150	200	Avg	%RSD
43)		Methyl Methacrylate	0.358	0.353	0.347	0.314	0.375	0.370	0.353	6.20
44)		Dibromomethane	0.326	0.312	0.300	0.262	0.308	0.307	0.303	7.14
45)		Bromodichloromethan	0.649	0.596	0.585	0.506	0.604	0.610	0.592	8.02
46)		2-Chloroethylvinyl	0.205	0.212	0.204	0.191	0.224	0.220	0.209	5.74
47)		cis-1,3-Dichloropro	0.732	0.688	0.713	0.606	0.724	0.696	0.693	6.61
48)		4-Methyl-2-Pentanon	1.019	0.780	0.748	0.728	0.809	0.817	0.817	12.82
49)	c	Toluene	1.822	1.663	1.713	1.358	1.716	1.638	1.652	9.52
50)		trans-1,3-Dichlorop	0.759	0.722	0.735	0.629	0.754	0.730	0.721	6.59
51)		Ethyl Methacrylate	0.798	0.788	0.787	0.712	0.858	0.831	0.796	6.20
52)		1,1,2-Trichloroetha	0.436	0.405	0.386	0.330	0.398	0.389	0.391	8.94
53)	s	surr3,Toluene-d8	1.193	1.161	1.218	1.192	1.229	1.214	1.201	2.04
54)	s	surr2,bfb	0.582	0.545	0.574	0.545	0.580	0.563	0.565	2.96
55)		d5-Chlorobenze	----------ISTD----------							
56)		Tetrachloroethene	0.358	0.330	0.332	0.254	0.316	0.307	0.316	11.07
57)		2-Hexanone	0.607	0.602	0.598	0.578	0.634	0.649	0.611	4.21
58)		1,3-Dichloropropane	0.769	0.773	0.752	0.645	0.723	0.722	0.731	6.50
59)		Dibromochloromethan	0.554	0.522	0.506	0.430	0.502	0.494	0.501	8.17
60)		1,2-Dibromoethane	0.501	0.482	0.476	0.402	0.468	0.457	0.464	7.30
61)	p	Chlorobenzene	1.312	1.197	1.185	0.954	1.162	1.099	1.151	10.34
62)		1,1,1,2-Tetrachloro	0.461	0.415	0.413	0.334	0.408	0.392	0.404	10.19
63)	c	Ethylbenzene	1.996	1.915	2.001	1.529	1.908	1.830	1.863	9.42
64)		(m+p)Xylene	0.721	0.720	0.705	0.552	0.691	0.662	0.675	9.48
65)		o-Xylene	0.752	0.723	0.735	0.578	0.724	0.685	0.700	9.11
66)		Styrene	1.247	1.223	1.236	0.988	1.198	1.153	1.174	8.26
67)	p	Bromoform	0.380	0.333	0.327	0.283	0.337	0.330	0.331	9.32
68)		Isopropylbenzene	1.743	1.775	1.807	1.362	1.745	1.679	1.685	9.73
69)		d4-1,4-Dichlorobenzen	----------ISTD----------							
70)	p	1,1,2,2-Tetrachloro	1.673	1.635	1.566	1.384	1.546	1.513	1.553	6.53
71)		1,2,3-Trichloroprop	0.426	0.401	0.376	0.339	0.374	0.380	0.383	7.61
72)		Trans-1,4-Dichloro-	0.603	0.586	0.556	0.503	0.558	0.555	0.560	6.11
73)		n-Propylbenzene	5.089	5.346	5.147	4.051	4.849	4.817	4.883	9.27
74)		Bromobenzene	0.992	0.982	0.992	0.836	0.954	0.950	0.951	6.24
75)		1,3,5-Trimethylbenz	2.951	3.169	3.018	2.424	2.940	2.922	2.904	8.67
76)		2-Chlorotoluene	2.964	3.172	3.077	2.498	2.940	2.908	2.927	7.92
77)		4-Chlorotoluene	3.515	3.535	3.407	2.742	3.270	3.218	3.281	8.93
78)		tert-Butylbenzene	2.492	2.769	2.641	2.089	2.591	2.558	2.523	9.21
79)		1,2,4-Trimethylbenz	2.842	3.089	2.975	2.443	2.908	2.912	2.861	7.74
80)		sec-Butylbenzene	4.051	4.618	4.376	3.423	4.202	4.189	4.143	9.73
81)		p-Isopropyltoluene	3.045	3.359	3.130	2.489	3.067	3.062	3.025	9.50
82)		1,3-Dclbenz	1.827	1.766	1.677	1.386	1.636	1.638	1.655	9.18
83)		1,4-Dclbenz	1.938	1.780	1.698	1.402	1.648	1.643	1.685	10.50
84)		n-Butylbenzene	3.247	3.637	3.336	2.603	3.283	3.198	3.217	10.53

0057

(#) = Out of Range

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:02:45 2000
Response via : Initial Calibration

Calibration Files
5 =C8846.D 20 =C8848.D 50 =C8849.D
100 =C8850.D 150 =C8851.D 200 =C8852.D

	Compound	5	20	50	100	150	200	Avg	%RSD
85)	1,2-Dclbenz	1.733	1.749	1.668	1.388	1.605	1.631	1.629	8.03
86)	1,2-Dibromo-3-chlor	0.257	0.270	0.250	0.230	0.262	0.264	0.255	5.52
87)	Nitrobenzene	0.110	0.119	0.121	0.130	0.153	0.162	0.133	15.42
88)	1,2,4-Tcbenzene	0.937	0.941	0.831	0.696	0.848	0.857	0.852	10.50
89)	Hexachlorobt	0.523	0.572	0.483	0.355	0.456	0.452	0.474	15.57
90)	Naphthalen	2.451	2.694	2.433	2.258	2.658	2.743	2.539	7.42
91)	1,2,3-Tclbenzene	0.934	0.962	0.871	0.735	0.875	0.880	0.876	8.94
92)	TOTAL XYLENE							0.000	-1.00

0058

(#) = Out of Range

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8846.D Vial: 3
Acq On : 13 Jan 100 11:36 am Operator: HERRING
Sample : 5PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 15:17 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.50	168	117350	50.00	ppb		0.00
34) 1,4-Difluorobenzene	10.82	114	206931	50.00	ppb		0.02
55) d5-Chlorobenze	16.30	117	223669	50.00	ppb		0.01
69) d4-1,4-Dichlorobenzene	20.97	152	107136	50.00	ppb		0.01
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.42	113	75158	43.76	ppb		87.52%
53) surr3,Toluene-d8	13.54	98	246942	51.48	ppb		102.96%
54) surr2,bfb	18.61	95	120360	53.93	ppb		107.86%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.70	85	13947	5.49	ppb		99
3) Chloromethane	3.01	50	12722	5.21	ppb		99
4) Vinyl Chloride	3.20	62	9796	4.91	ppb		91
5) Bromomethane	3.80	94	3795	3.18	ppb		96
6) Chloroethane	3.98	64	5950	4.81	ppb	m	100 RJH
7) Trichlorofluoromethane	4.46	101	11101	4.71	ppb		97
8) Diethyl Ether	4.99	59	5618	4.03	ppb		89
9) Acrolein	5.21	56	3837	16.94	ppb		91
10) FREON 113	5.42	85	3377	4.26	ppb	#	66
11) 1,1-Diclethene	5.42	96	6278	4.59	ppb		94
12) Acetone	5.49	43	9550	9.11	ppb		94
13) Iodomethane	5.68	142	8911	4.00	ppb		96
14) Carbon Disulfide	5.82	76	29371	4.24	ppb		100
15) Acetonitrile	5.98	39	971	26.41	ppb	#	1
16) Allyl Chloride	6.07	76	3947	4.46	ppb		90
17) Methylene Chloride	6.29	84	8782	5.20	ppb		84
18) TBA	6.47	59	28506	247.44	ppb		94
19) Methyl-t-Butyl Ether	6.79	73	19329	4.98	ppb		96
20) Acrylonitrile	6.70	53	15457	23.36	ppb		98
21) trans-1,2-Dichloroethene	6.79	96	6374	4.07	ppb		95
22) 1,1-Diclethane	7.54	63	15412	4.08	ppb	#	98
23) Vinyl Acetate	7.63	42	1681	4.35	ppb		98
24) 2-Chloro-1,3-butadiene	7.71	53	12545	3.95	ppb		92
25) 2,2-Dichloropropane	8.59	77	11673	4.61	ppb		92
26) 2-Butanone	8.59	43	8177	7.69	ppb		99
27) cis-1,2-Dichloroethene	8.58	96	7866	4.36	ppb		97
28) Propionitrile	8.68	54	7488	36.68	ppb		91
29) Methacrylonitrile	8.96	67	3286	4.53	ppb		97
30) Bromochloromethane	9.01	128	4755	4.77	ppb		87
31) Tetrahydrofuran	9.10	42	10871	19.44	ppb		95
32) Chloroform	9.15	83	15653	4.85	ppb		100
33) 1,1,1-Trichloroethane	9.49	97	11585	4.87	ppb	#	1
36) Carbontetrachloride	9.81	117	9336	5.27	ppb		90

(#) = qualifier out of range (m) = manual integration 0059

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8846.D Vial: 3
Acq On : 13 Jan 100 11:36 am Operator: HERRING
Sample : 5PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 15:17 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 1,1-Dichloropropene	9.79	75	10611	5.24	ppb	94
38) Iso-Butyl Alcohol	9.94	43	14071	233.44	ppb	85
39) Benzene	10.16	78	33988	5.48	ppb	92
40) 1,2-Dichloroethane	10.17	62	15593	5.41	ppb	99
41) Trichloroethene	11.32	95	8614	5.12	ppb	92
42) 1,2-Diclpropane	11.71	63	10863	5.06	ppb	89
43) Methyl Methacrylate	11.88	69	7406	6.50	ppb	91
44) Dibromomethane	11.92	93	6751	5.46	ppb	95
45) Bromodichloromethane	12.19	83	13433	5.51	ppb	100
46) 2-Chloroethylvinyl Ether	12.73	63	4238	6.37	ppb	92
47) cis-1,3-Dichloropropene	13.02	75	15145	5.43	ppb	96
48) 4-Methyl-2-Pentanone	13.28	43	21085	9.46	ppb	98
49) Toluene	13.66	91	37709	6.18	ppb	96
50) trans-1,3-Dichloropropene	14.04	75	15702	5.80	ppb	100
51) Ethyl Methacrylate	14.19	69	16517	6.51	ppb	96
52) 1,1,2-Trichloroethane	14.39	83	9029	6.39	ppb	91
56) Tetrachloroethene	14.72	166	8004	5.61	ppb	90
57) 2-Hexanone	14.84	43	13576	7.54	ppb	98
58) 1,3-Dichloropropane	14.72	76	17198	5.38	ppb	100
59) Dibromochloromethane	15.17	129	12388	6.08	ppb	96
60) 1,2-Dibromoethane	15.41	107	11210	5.98	ppb	99
61) Chlorobenzene	16.36	112	29338	6.27	ppb	95
62) 1,1,1,2-Tetrachloroethane	16.50	131	10306	6.51	ppb	88
63) Ethylbenzene	16.56	91	44634	5.67	ppb	96
64) (m+p)Xylene	16.79	106	32273	11.11	ppb	93
65) o-Xylene	17.57	106	16827	5.75	ppb	100
66) Styrene	17.59	104	27887	5.59	ppb	97
67) Bromoform	17.97	173	8493	7.05	ppb	97
68) Isopropylbenzene	18.30	105	38992	5.54	ppb	100
70) 1,1,2,2-Tetrachloroethane	18.86	83	17929	6.87	ppb	100
71) 1,2,3-Trichloropropane	18.97	110	4569	7.06	ppb	96
72) Trans-1,4-Dichloro-2-Buten	18.97	53	6459	6.71	ppb	71
73) n-Propylbenzene	19.12	91	54521	5.36	ppb	97
74) Bromobenzene	18.94	156	10623	5.79	ppb	92
75) 1,3,5-Trimethylbenzene	19.47	105	31614	5.36	ppb	95
76) 2-Chlorotoluene	19.32	91	31756	5.28	ppb	94
77) 4-Chlorotoluene	19.53	91	37654	5.43	ppb	96
78) tert-Butylbenzene	20.15	119	26694	5.69	ppb	99
79) 1,2,4-Trimethylbenzene	20.24	105	30446	5.17	ppb	99
80) sec-Butylbenzene	20.59	105	43406	5.46	ppb	97
81) p-Isopropyltoluene	20.87	119	32624	5.54	ppb	98
82) 1,3-Dclbenz	20.84	146	19571	5.70	ppb	97
83) 1,4-Dclbenz	21.02	146	20758	5.92	ppb	96
84) n-Butylbenzene	21.71	91	34784	5.68	ppb	97

(#) = qualifier out of range (m) = manual integration 0060

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8846.D Vial: 3
Acq On : 13 Jan 100 11:36 am Operator: HERRING
Sample : 5PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 15:17 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85)	1,2-Dclbenz	21.79	146	18569	5.72	ppb		93
86)	1,2-Dibromo-3-chloropropan	23.37	157	2752	7.60	ppb		96
87)	Nitrobenzene	23.80	77	2365	14.39	ppb		99
88)	1,2,4-Tcbenzene	25.11	180	10040	5.93	ppb		96
89)	Hexachlorobt	25.45	225	5601	8.96	ppb	m	88
90)	Naphthalen	25.63	128	26254	6.17	ppb		100
91)	1,2,3-Tclbenzene	26.16	180	10011	6.26	ppb		90

RJH

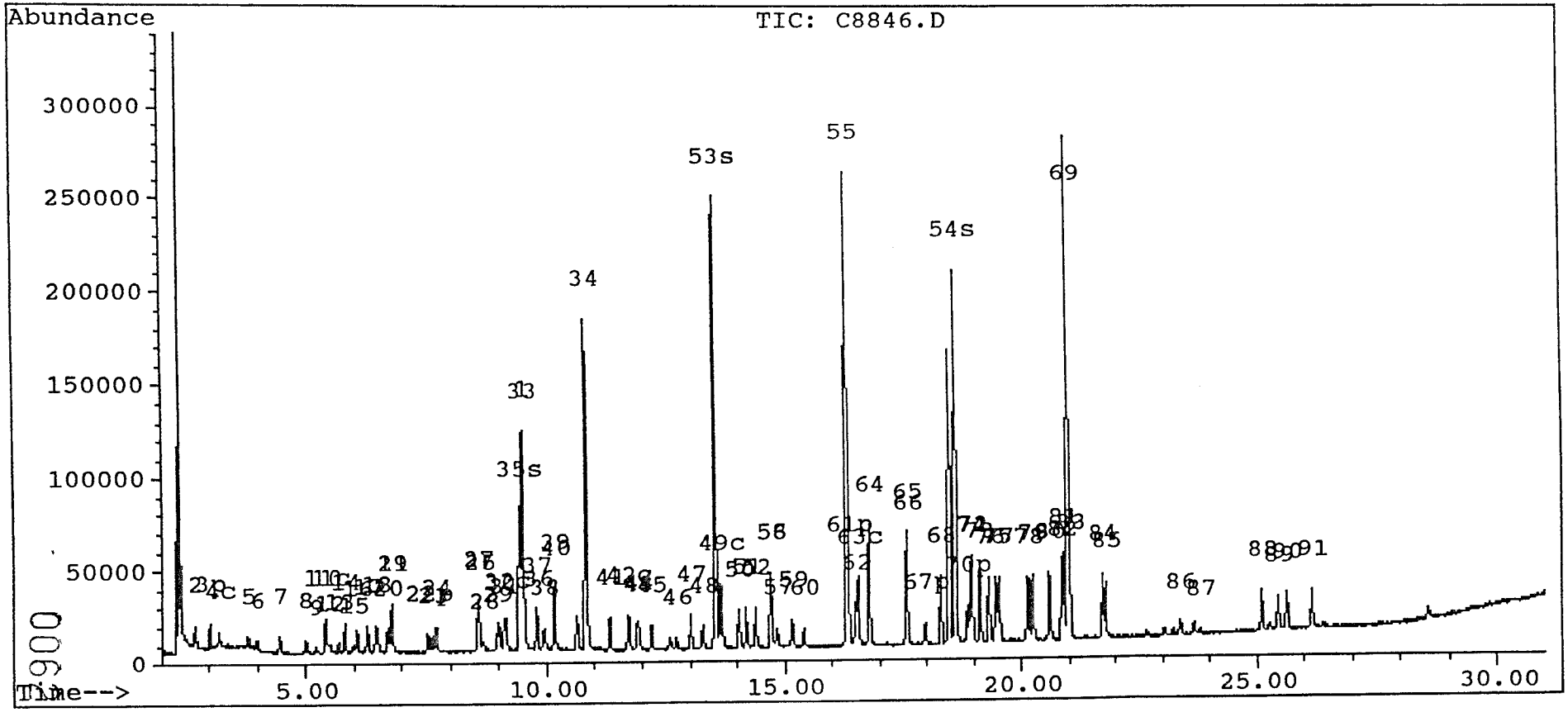
(#) = qualifier out of range (m) = manual integration

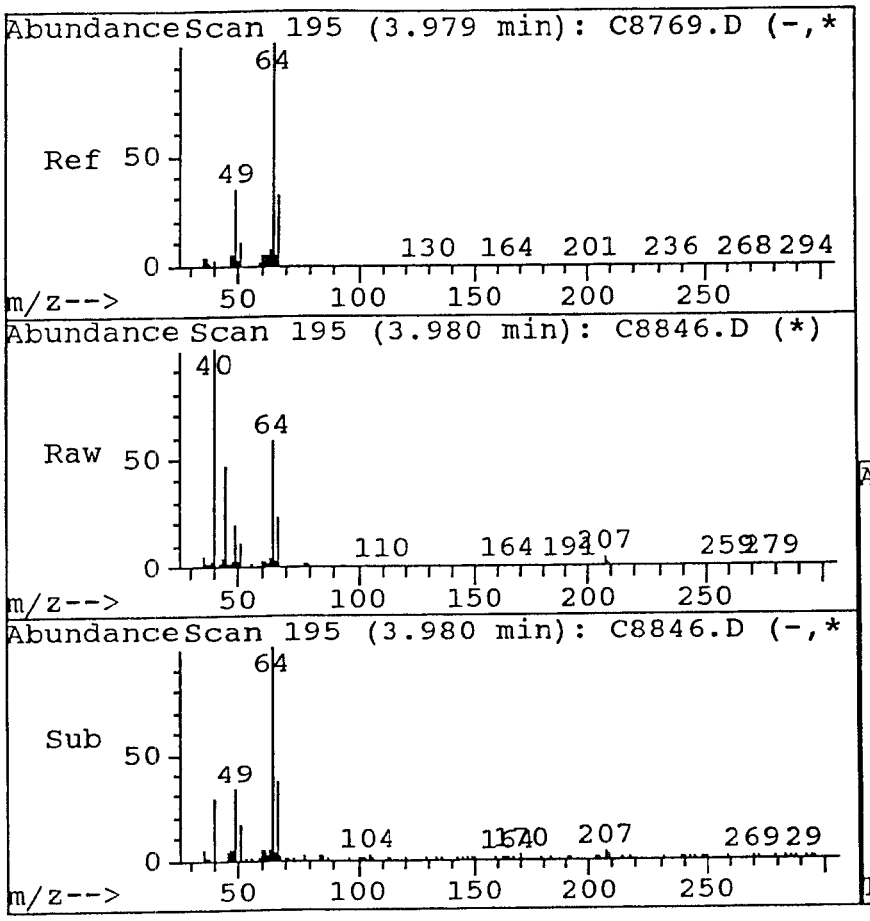
0061

Quantita n Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8846.D Vial: 3
Acq On : 13 Jan 100 11:36 am Operator: HERRING
Sample : 5PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 15:17 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

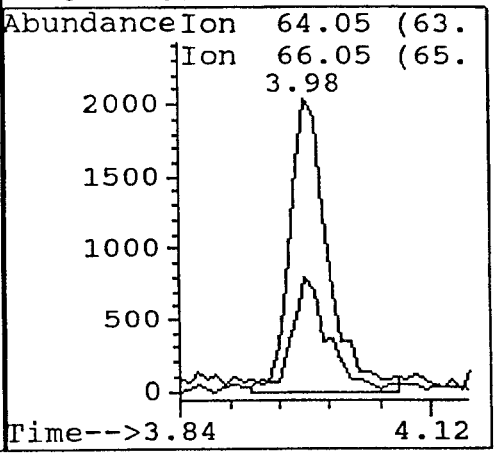




#6
Chloroethane
Concen: 4.81 ppb m
RT: 3.98 min Scan# 195
Delta R.T. 0.00 min
Lab File: C8846.D
Acq: 13 Jan 100 11:36 am

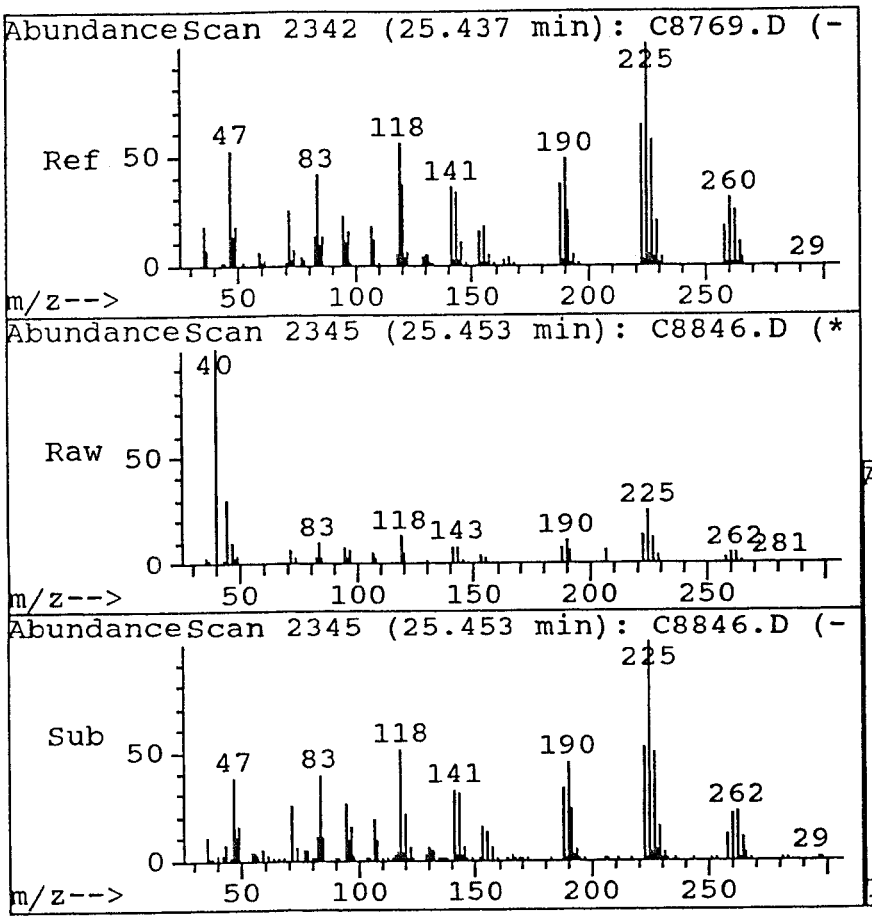
Tgt Ion:64.05 Resp: 5950

Ion	Ratio	Lower	Upper
64	100		
66	39.3	25.9	38.8#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



RJH
1/13

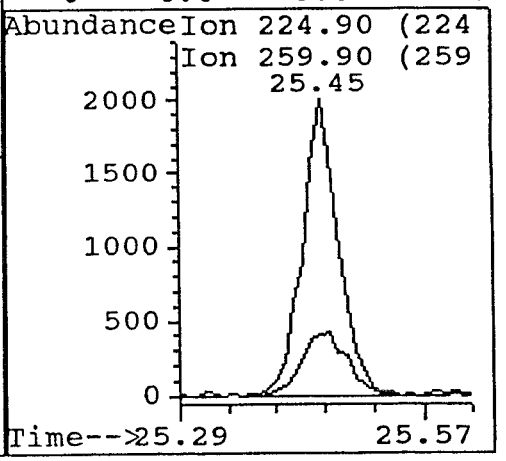
0063



#89
Hexachlorobt
Concen: 8.96 ppb m
RT: 25.45 min Scan# 2345
Delta R.T. 0.01 min
Lab File: C8846.D
Acq: 13 Jan 100 11:36 am

Tgt Ion:224.9 Resp: 5601

Ion	Ratio	Lower	Upper
225	100		
260	20.5	22.0	36.6#
0	0.0	0.0	0.0
0	0.0	0.0	0.0



RJH
1/13

0064

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8848.D Vial: 5
Acq On : 13 Jan 100 12:53 pm Operator: HERRING
Sample : 20PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 13:24 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.50	168	111453	50.00	ppb		0.00
34) 1,4-Difluorobenzene	10.82	114	209291	50.00	ppb		0.02
55) d5-Chlorobenze	16.30	117	212868	50.00	ppb		0.02
69) d4-1,4-Dichlorobenzene	20.97	152	95749	50.00	ppb		0.01
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.42	113	78873	45.41	ppb		90.81%
53) surr3,Toluene-d8	13.54	98	242907	50.07	ppb		100.14%
54) surr2,bfb	18.61	95	114039	50.52	ppb		101.04%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.70	85	50486	20.94	ppb		100
3) Chloromethane	3.01	50	49456	21.33	ppb		97
4) Vinyl Chloride	3.20	62	38397	20.25	ppb		99
5) Bromomethane	3.80	94	18204	16.06	ppb		99
6) Chloroethane	3.98	64	23599	20.09	ppb		99
7) Trichlorofluoromethane	4.46	101	41476	18.54	ppb		99
8) Diethyl Ether	4.99	59	23318	17.63	ppb		97
9) Acrolein	5.21	56	15645	72.71	ppb		92
10) FREON 113	5.42	85	12985	17.25	ppb		97
11) 1,1-Diclethene	5.41	96	23219	17.86	ppb		96
12) Acetone	5.49	43	27013	27.14	ppb		94
13) Iodomethane	5.68	142	34866	16.47	ppb		97
14) Carbon Disulfide	5.81	76	119318	18.11	ppb		99
15) Acetonitrile	5.97	39	4057	116.19	ppb	#	60
16) Allyl Chloride	6.06	76	15209	18.09	ppb		89
17) Methylene Chloride	6.28	84	32386	20.18	ppb		93
18) TBA	6.47	59	104987	959.52	ppb		98
19) Methyl-t-Butyl Ether	6.79	73	74387	20.18	ppb		98
20) Acrylonitrile	6.70	53	63646	101.26	ppb		99
21) trans-1,2-Dichloroethene	6.79	96	25789	17.33	ppb		93
22) 1,1-Diclethane	7.54	63	65226	18.16	ppb		98
23) Vinyl Acetate	7.62	42	7570	20.64	ppb		96
24) 2-Chloro-1,3-butadiene	7.72	53	50811	16.85	ppb		95
25) 2,2-Dichloropropane	8.58	77	43803	18.23	ppb		99
26) 2-Butanone	8.59	43	28316	28.05	ppb		98
27) cis-1,2-Dichloroethene	8.58	96	31914	18.63	ppb		93
28) Propionitrile	8.67	54	29011	149.63	ppb		99
29) Methacrylonitrile	8.96	67	14015	20.34	ppb		90
30) Bromochloromethane	9.01	128	18976	20.05	ppb		84
31) Tetrahydrofuran	9.10	42	20249	38.13	ppb		96
32) Chloroform	9.14	83	58060	18.93	ppb		99
33) 1,1,1-Trichloroethane	9.49	97	41667	18.44	ppb	#	20
36) Carbontetrachloride	9.80	117	35362	19.75	ppb		96

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

0065

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8848.D Vial: 5
Acq On : 13 Jan 100 12:53 pm Operator: HERRING
Sample : 20PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 13:24 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
37) 1,1-Dichloropropene	9.79	75	40349	19.72 ppb		95
38) Iso-Butyl Alcohol	9.94	43	53085	870.75 ppb		97
39) Benzene	10.16	78	132455	21.12 ppb		99
40) 1,2-Dichloroethane	10.17	62	57988	19.89 ppb		99
41) Trichloroethene	11.32	95	34065	20.02 ppb		99
42) 1,2-Diclpropane	11.71	63	42535	19.58 ppb		97
43) Methyl Methacrylate	11.88	69	29532	25.62 ppb		92
44) Dibromomethane	11.93	93	26089	20.88 ppb		96
45) Bromodichloromethane	12.20	83	49903	20.26 ppb	#	99
46) 2-Chloroethylvinyl Ether	12.73	63	17714	26.33 ppb		98
47) cis-1,3-Dichloropropene	13.02	75	57631	20.43 ppb		100
48) 4-Methyl-2-Pentanone	13.28	43	65307	28.96 ppb		100
49) Toluene	13.67	91	139216	22.56 ppb		98
50) trans-1,3-Dichloropropene	14.05	75	60446	22.06 ppb		97
51) Ethyl Methacrylate	14.20	69	65998	25.70 ppb		100
52) 1,1,2-Trichloroethane	14.40	83	33943	23.74 ppb		94
56) Tetrachloroethene	14.73	166	28094	20.70 ppb		97
57) 2-Hexanone	14.84	43	51242	29.90 ppb		97
58) 1,3-Dichloropropane	14.72	76	65854	21.64 ppb		93
59) Dibromochloromethane	15.17	129	44486	22.94 ppb		100
60) 1,2-Dibromoethane	15.41	107	41042	22.99 ppb		96
61) Chlorobenzene	16.35	112	101884	22.89 ppb		99
62) 1,1,1,2-Tetrachloroethane	16.50	131	35333	23.44 ppb		97
63) Ethylbenzene	16.55	91	163054	21.76 ppb		99
64) (m+p)Xylene	16.78	106	122573	44.33 ppb		99
65) o-Xylene	17.57	106	61592	22.13 ppb		97
66) Styrene	17.59	104	104165	21.94 ppb		98
67) Bromoform	17.97	173	28314	24.70 ppb		96
68) Isopropylbenzene	18.30	105	151136	22.56 ppb		100
70) 1,1,2,2-Tetrachloroethane	18.86	83	62605	26.83 ppb		100
71) 1,2,3-Trichloropropane	18.97	110	15340	26.51 ppb		93
72) Trans-1,4-Dichloro-2-Buten	18.97	53	22444	26.08 ppb		87
73) n-Propylbenzene	19.12	91	204756	22.54 ppb		99
74) Bromobenzene	18.94	156	37615	22.94 ppb		98
75) 1,3,5-Trimethylbenzene	19.47	105	121367	23.03 ppb		98
76) 2-Chlorotoluene	19.32	91	121475	22.61 ppb		96
77) 4-Chlorotoluene	19.53	91	135393	21.84 ppb		97
78) tert-Butylbenzene	20.14	119	106034	25.30 ppb		98
79) 1,2,4-Trimethylbenzene	20.24	105	118323	22.47 ppb		99
80) sec-Butylbenzene	20.59	105	176879	24.88 ppb		99
81) p-Isopropyltoluene	20.88	119	128661	24.44 ppb		97
82) 1,3-Dclbenz	20.85	146	67626	22.06 ppb		97
83) 1,4-Dclbenz	21.02	146	68186	21.76 ppb		96
84) n-Butylbenzene	21.72	91	139300	25.47 ppb		99

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

0066

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8848.D Vial: 5
Acq On : 13 Jan 100 12:53 pm Operator: HERRING
Sample : 20PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 13:24 19100

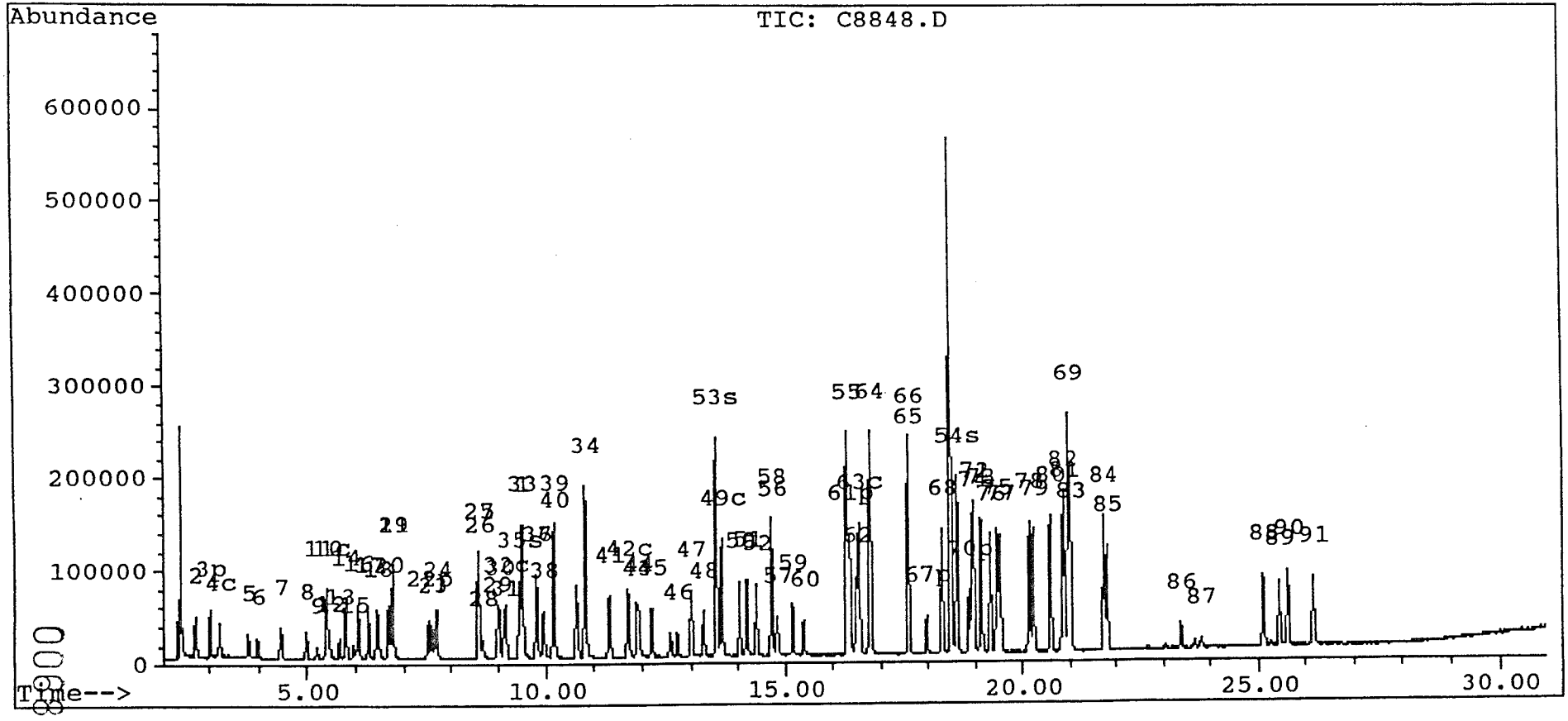
Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85)	1,2-Dclbenz	21.79	146	66985	23.10	ppb	98
86)	1,2-Dibromo-3-chloropropan	23.37	157	10337	31.94	ppb	94
87)	Nitrobenzene	23.80	77	9153	62.30	ppb	94
88)	1,2,4-Tcbenzene	25.11	180	36026	23.83	ppb	95
89)	Hexachlorobt	25.45	225	21924	39.26	ppb	95
90)	Naphthalen	25.63	128	103171	27.14	ppb	99
91)	1,2,3-Tclbenzene	26.16	180	36827	25.76	ppb	99

(#) = qualifier out of range (m) = manual integration 0067
C8848.D SOIL0113.M Thu Jan 13 16:17:13 2000 Page 3

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8848.D Vial: 5
Acq On : 13 Jan 100 12:53 pm Operator: HERRING
Sample : 20PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 13:24 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration



Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8849.D Vial: 6
Acq On : 13 Jan 100 1:31 pm Operator: HERRING
Sample : 50PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 14:03 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.50	168	115919	50.00	ppb		0.00
34) 1,4-Difluorobenzene	10.82	114	213788	50.00	ppb		0.02
55) d5-Chlorobenze	16.30	117	223764	50.00	ppb		0.01
69) d4-1,4-Dichlorobenzene	20.97	152	103863	50.00	ppb		0.00
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.42	113	83256	46.92	ppb		93.84%
53) surr3,Toluene-d8	13.54	98	260443	52.55	ppb		105.11%
54) surr2,bfb	18.61	95	122804	53.26	ppb		106.52%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.70	85	127369	50.78	ppb		99
3) Chloromethane	3.01	50	128372	53.23	ppb		100
4) Vinyl Chloride	3.20	62	100010	50.70	ppb		100
5) Bromomethane	3.80	94	46779	39.67	ppb		98
6) Chloroethane	3.98	64	60491	49.51	ppb		99
7) Trichlorofluoromethane	4.47	101	106554	45.78	ppb		99
8) Diethyl Ether	4.99	59	60697	44.13	ppb		100
9) Acrolein	5.20	56	45336	202.57	ppb		100
10) FREON 113	5.42	85	30715	39.23	ppb		99
11) 1,1-Diclethene	5.41	96	61841	45.72	ppb		94
12) Acetone	5.48	43	67604	65.31	ppb		99
13) Iodomethane	5.68	142	93261	42.37	ppb		99
14) Carbon Disulfide	5.81	76	311131	45.42	ppb		100
15) Acetonitrile	5.96	39	9927	273.35	ppb		73
16) Allyl Chloride	6.06	76	37516	42.91	ppb		99
17) Methylene Chloride	6.28	84	79747	47.78	ppb		97
18) TBA	6.46	59	250793	2203.79	ppb		100
19) Methyl-t-Butyl Ether	6.78	73	179600	46.84	ppb		98
20) Acrylonitrile	6.69	53	160480	245.49	ppb		99
21) trans-1,2-Dichloroethene	6.79	96	65036	42.01	ppb		96
22) 1,1-Diclethane	7.54	63	165181	44.21	ppb		98
23) Vinyl Acetate	7.62	42	17873	46.86	ppb		97
24) 2-Chloro-1,3-butadiene	7.71	53	132952	42.39	ppb		99
25) 2,2-Dichloropropane	8.58	77	109675	43.88	ppb		99
26) 2-Butanone	8.58	43	62573	59.60	ppb		96
27) cis-1,2-Dichloroethene	8.58	96	81523	45.76	ppb		96
28) Propionitrile	8.66	54	71898	356.55	ppb		98
29) Methacrylonitrile	8.95	67	33844	47.22	ppb		91
30) Bromochloromethane	9.00	128	47723	48.47	ppb		93
31) Tetrahydrofuran	9.09	42	38604	69.89	ppb		97
32) Chloroform	9.14	83	146836	46.03	ppb		100
33) 1,1,1-Trichloroethane	9.49	97	105112	44.72	ppb	#	77
36) Carbontetrachloride	9.80	117	88819	48.57	ppb		97

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

0069

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8849.D Vial: 6
Acq On : 13 Jan 100 1:31 pm Operator: HERRING
Sample : 50PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 14:03 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 1,1-Dichloropropene	9.79	75	97973	46.87	ppb	98
38) Iso-Butyl Alcohol	9.93	43	128911	2070.05	ppb	98
39) Benzene	10.15	78	334361	52.19	ppb	99
40) 1,2-Dichloroethane	10.16	62	140707	47.25	ppb	100
41) Trichloroethene	11.31	95	84875	48.83	ppb	96
42) 1,2-Diclpropane	11.70	63	106956	48.21	ppb	99
43) Methyl Methacrylate	11.88	69	74154	62.99	ppb	94
44) Dibromomethane	11.92	93	64225	50.32	ppb	99
45) Bromodichloromethane	12.20	83	125060	49.69	ppb	98
46) 2-Chloroethylvinyl Ether	12.72	63	43602	63.45	ppb	97
47) cis-1,3-Dichloropropene	13.02	75	152499	52.93	ppb	99
48) 4-Methyl-2-Pentanone	13.27	43	159940	69.44	ppb	99
49) Toluene	13.66	91	366129	58.07	ppb	100
50) trans-1,3-Dichloropropene	14.04	75	157095	56.14	ppb	99
51) Ethyl Methacrylate	14.19	69	168151	64.11	ppb	97
52) 1,1,2-Trichloroethane	14.39	83	82629	56.57	ppb	99
56) Tetrachloroethene	14.72	166	74193	52.01	ppb	98
57) 2-Hexanone	14.83	43	133733	74.24	ppb	99
58) 1,3-Dichloropropane	14.71	76	168221	52.58	ppb	98
59) Dibromochloromethane	15.16	129	113227	55.56	ppb	100
60) 1,2-Dibromoethane	15.40	107	106530	56.77	ppb	99
61) Chlorobenzene	16.36	112	265138	56.67	ppb	98
62) 1,1,1,2-Tetrachloroethane	16.50	131	92325	58.25	ppb	97
63) Ethylbenzene	16.56	91	447739	56.84	ppb	99
64) (m+p)Xylene	16.78	106	315335	108.50	ppb	97
65) o-Xylene	17.57	106	164443	56.21	ppb	95
66) Styrene	17.59	104	276532	55.40	ppb	97
67) Bromoform	17.97	173	73127	60.69	ppb	96
68) Isopropylbenzene	18.30	105	404250	57.41	ppb	98
70) 1,1,2,2-Tetrachloroethane	18.86	83	162683	64.27	ppb	96
71) 1,2,3-Trichloropropane	18.97	110	39024	62.16	ppb	91
72) Trans-1,4-Dichloro-2-Buten	18.97	53	57759	61.86	ppb	96
73) n-Propylbenzene	19.13	91	534613	54.26	ppb	98
74) Bromobenzene	18.94	156	103073	57.96	ppb	99
75) 1,3,5-Trimethylbenzene	19.47	105	313470	54.84	ppb	99
76) 2-Chlorotoluene	19.32	91	319638	54.85	ppb	99
77) 4-Chlorotoluene	19.54	91	353858	52.63	ppb	98
78) tert-Butylbenzene	20.15	119	274340	60.36	ppb	98
79) 1,2,4-Trimethylbenzene	20.24	105	308942	54.08	ppb	98
80) sec-Butylbenzene	20.59	105	454530	58.93	ppb	99
81) p-Isopropyltoluene	20.88	119	325069	56.92	ppb	98
82) 1,3-Dclbenz	20.85	146	174183	52.37	ppb	99
83) 1,4-Dclbenz	21.02	146	176312	51.86	ppb	98
84) n-Butylbenzene	21.72	91	346530	58.42	ppb	99

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

0070

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8849.D Vial: 6
Acq On : 13 Jan 100 1:31 pm Operator: HERRING
Sample : 50PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 14:03 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

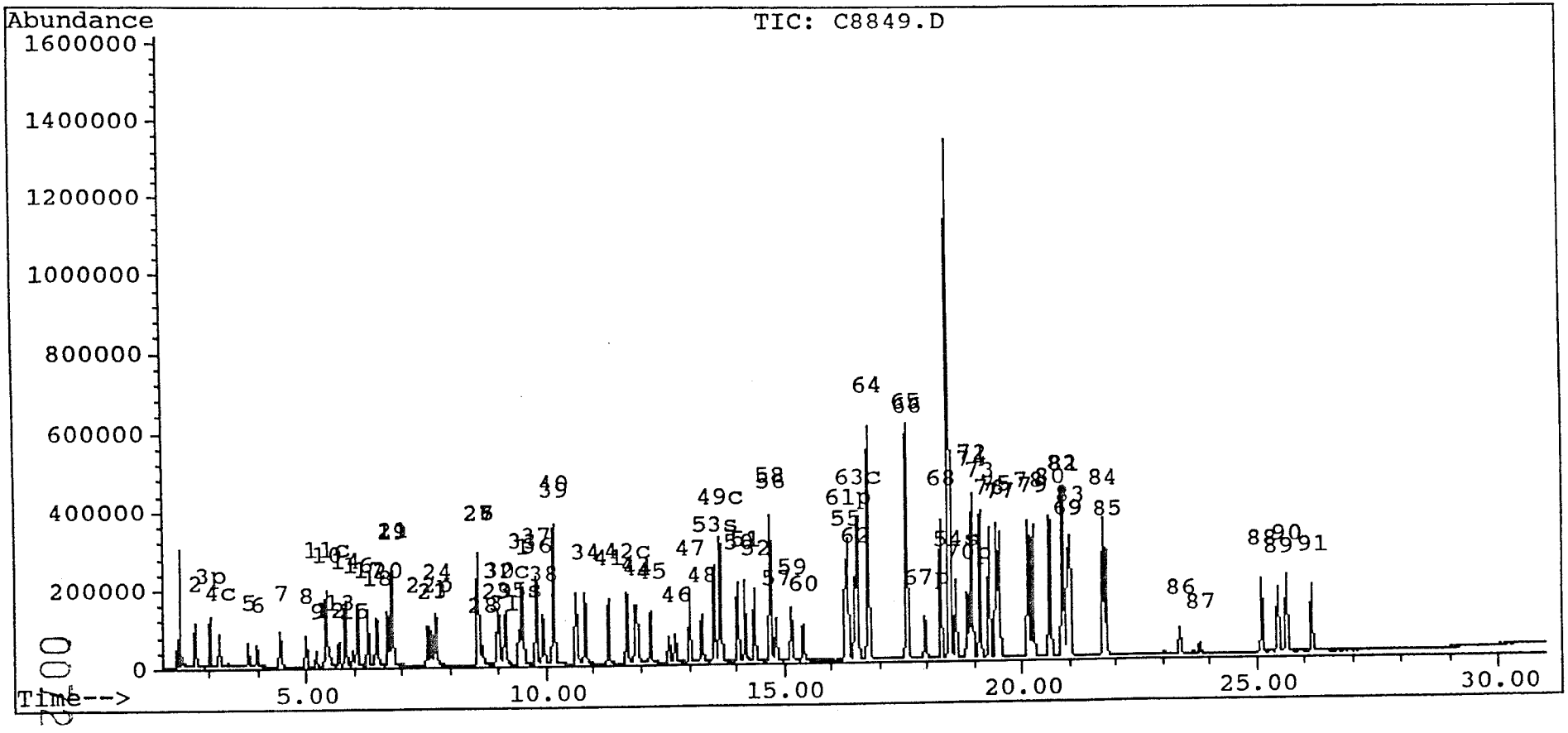
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) 1,2-Dclbenz	21.80	146	173255	55.07 ppb	100
86) 1,2-Dibromo-3-chloropropan	23.38	157	25957	73.93 ppb	100
87) Nitrobenzene	23.79	77	25220	158.24 ppb	96
88) 1,2,4-Tcbenzene	25.11	180	86329	52.63 ppb	100
89) Hexachlorobt	25.45	225	50143	82.78 ppb	98
90) Naphthalen	25.63	128	252731	61.29 ppb	99
91) 1,2,3-Tclbenzene	26.16	180	90471	58.34 ppb	97

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

Quantitat n Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8849.D Vial: 6
Acq On : 13 Jan 100 1:31 pm Operator: HERRING
Sample : 50PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 14:03 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration



Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8850.D Vial: 7
Acq On : 13 Jan 100 2:10 pm Operator: HERRING
Sample : 100PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 14:41 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	9.49	168	118084	50.00	ppb	0.00
34) 1,4-Difluorobenzene	10.81	114	228507	50.00	ppb	0.00
55) d5-Chlorobenze	16.29	117	237917	50.00	ppb	0.00
69) d4-1,4-Dichlorobenzene	20.96	152	105255	50.00	ppb	0.00
System Monitoring Compounds						%Recovery
35) surr4,Dibrflmethane	9.42	113	86593	45.66	ppb	91.32%
53) surr3,Toluene-d8	13.53	98	272281	51.40	ppb	102.81%
54) surr2,bfb	18.61	95	124461	50.50	ppb	101.00%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.70	85	208878	81.76	ppb	99
3) Chloromethane	3.00	50	224071	91.21	ppb	99
4) Vinyl Chloride	3.20	62	172506	85.85	ppb	99
5) Bromomethane	3.79	94	82559	68.73	ppb	99
6) Chloroethane	3.98	64	106262	85.38	ppb	99
7) Trichlorofluoromethane	4.46	101	180006	75.93	ppb	99
8) Diethyl Ether	4.99	59	113561	81.05	ppb	98
9) Acrolein	5.20	56	96668	424.01	ppb	98
10) FREON 113	5.42	85	49394	61.94	ppb	100
11) 1,1-Diclethene	5.41	96	105081	76.27	ppb	97
12) Acetone	5.47	43	125435	118.96	ppb	99
13) Iodomethane	5.67	142	184012	82.06	ppb	97
14) Carbon Disulfide	5.81	76	612495	87.77	ppb	100
15) Acetonitrile	5.96	39	17541	474.15	ppb	97
16) Allyl Chloride	6.06	76	70997	79.72	ppb	95
17) Methylene Chloride	6.28	84	147562	86.78	ppb	92
18) TBA	6.46	59	502213	4332.17	ppb	100
19) Methyl-t-Butyl Ether	6.78	73	339382	86.89	ppb	98
20) Acrylonitrile	6.69	53	313247	470.39	ppb	98
21) trans-1,2-Dichloroethene	6.78	96	119856	76.01	ppb	99
22) 1,1-Diclethane	7.53	63	295375	77.62	ppb	98
23) Vinyl Acetate	7.61	42	37817	97.34	ppb	93
24) 2-Chloro-1,3-butadiene	7.70	53	224383	70.23	ppb	97
25) 2,2-Dichloropropane	8.58	77	198674	78.04	ppb	99
26) 2-Butanone	8.57	43	129964	121.52	ppb	97
27) cis-1,2-Dichloroethene	8.57	96	147425	81.23	ppb	96
28) Propionitrile	8.66	54	141853	690.57	ppb	98
29) Methacrylonitrile	8.95	67	68270	93.51	ppb	98
30) Bromochloromethane	9.00	128	89237	88.98	ppb	89
31) Tetrahydrofuran	9.09	42	69652	123.78	ppb	98
32) Chloroform	9.14	83	262118	80.67	ppb	99
33) 1,1,1-Trichloroethane	9.49	97	180042	75.20	ppb	91
36) Carbontetrachloride	9.79	117	145439	74.42	ppb	100

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

0073

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8850.D Vial: 7
Acq On : 13 Jan 100 2:10 pm Operator: HERRING
Sample : 100PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 14:41 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 1,1-Dichloropropene	9.78	75	163208	73.05	ppb	99
38) Iso-Butyl Alcohol	9.93	43	251453	3777.73	ppb	99
39) Benzene	10.15	78	571907	83.52	ppb	99
40) 1,2-Dichloroethane	10.16	62	261286	82.08	ppb	98
41) Trichloroethene	11.31	95	147941	79.62	ppb	97
42) 1,2-Diclpropane	11.70	63	197309	83.21	ppb	97
43) Methyl Methacrylate	11.88	69	143278	113.87	ppb	96
44) Dibromomethane	11.92	93	119778	87.80	ppb	98
45) Bromodichloromethane	12.19	83	231090	85.91	ppb	98
46) 2-Chloroethylvinyl Ether	12.72	63	87352	118.93	ppb	96
47) cis-1,3-Dichloropropene	13.01	75	276839	89.90	ppb	100
48) 4-Methyl-2-Pentanone	13.27	43	332831	135.19	ppb	98
49) Toluene	13.66	91	620639	92.10	ppb	100
50) trans-1,3-Dichloropropene	14.03	75	287368	96.07	ppb	97
51) Ethyl Methacrylate	14.18	69	325581	116.14	ppb	99
52) 1,1,2-Trichloroethane	14.38	83	150613	96.47	ppb	98
56) Tetrachloroethene	14.71	166	120825	79.66	ppb	97
57) 2-Hexanone	14.83	43	275066	143.62	ppb	97
58) 1,3-Dichloropropane	14.71	76	306690	90.17	ppb	97
59) Dibromochloromethane	15.16	129	204508	94.37	ppb	99
60) 1,2-Dibromoethane	15.39	107	191330	95.90	ppb	99
61) Chlorobenzene	16.35	112	453741	91.21	ppb	99
62) 1,1,1,2-Tetrachloroethane	16.49	131	158937	94.32	ppb	98
63) Ethylbenzene	16.55	91	727603	86.87	ppb	99
64) (m+p)Xylene	16.77	106	525718	170.13	ppb	98
65) o-Xylene	17.56	106	274834	88.36	ppb	93
66) Styrene	17.58	104	470235	88.60	ppb	95
67) Bromoform	17.97	173	134459	104.95	ppb	99
68) Isopropylbenzene	18.29	105	648042	86.56	ppb	99
70) 1,1,2,2-Tetrachloroethane	18.86	83	291444	113.62	ppb	99
71) 1,2,3-Trichloropropane	18.96	110	71432	112.28	ppb	93
72) Trans-1,4-Dichloro-2-Buten	18.97	53	105808	111.83	ppb	93
73) n-Propylbenzene	19.12	91	852671	85.39	ppb	100
74) Bromobenzene	18.93	156	175966	97.64	ppb	99
75) 1,3,5-Trimethylbenzene	19.46	105	510307	88.10	ppb	100
76) 2-Chlorotoluene	19.31	91	525768	89.02	ppb	98
77) 4-Chlorotoluene	19.53	91	577226	84.71	ppb	98
78) tert-Butylbenzene	20.14	119	439669	95.45	ppb	100
79) 1,2,4-Trimethylbenzene	20.23	105	514235	88.82	ppb	99
80) sec-Butylbenzene	20.59	105	720492	92.18	ppb	98
81) p-Isopropyltoluene	20.87	119	524010	90.54	ppb	99
82) 1,3-Dclbenz	20.84	146	291691	86.54	ppb	99
83) 1,4-Dclbenz	21.01	146	295092	85.66	ppb	98
84) n-Butylbenzene	21.71	91	547869	91.14	ppb	99

0074

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8850.D Vial: 7
Acq On : 13 Jan 100 2:10 pm Operator: HERRING
Sample : 100PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 14:41 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

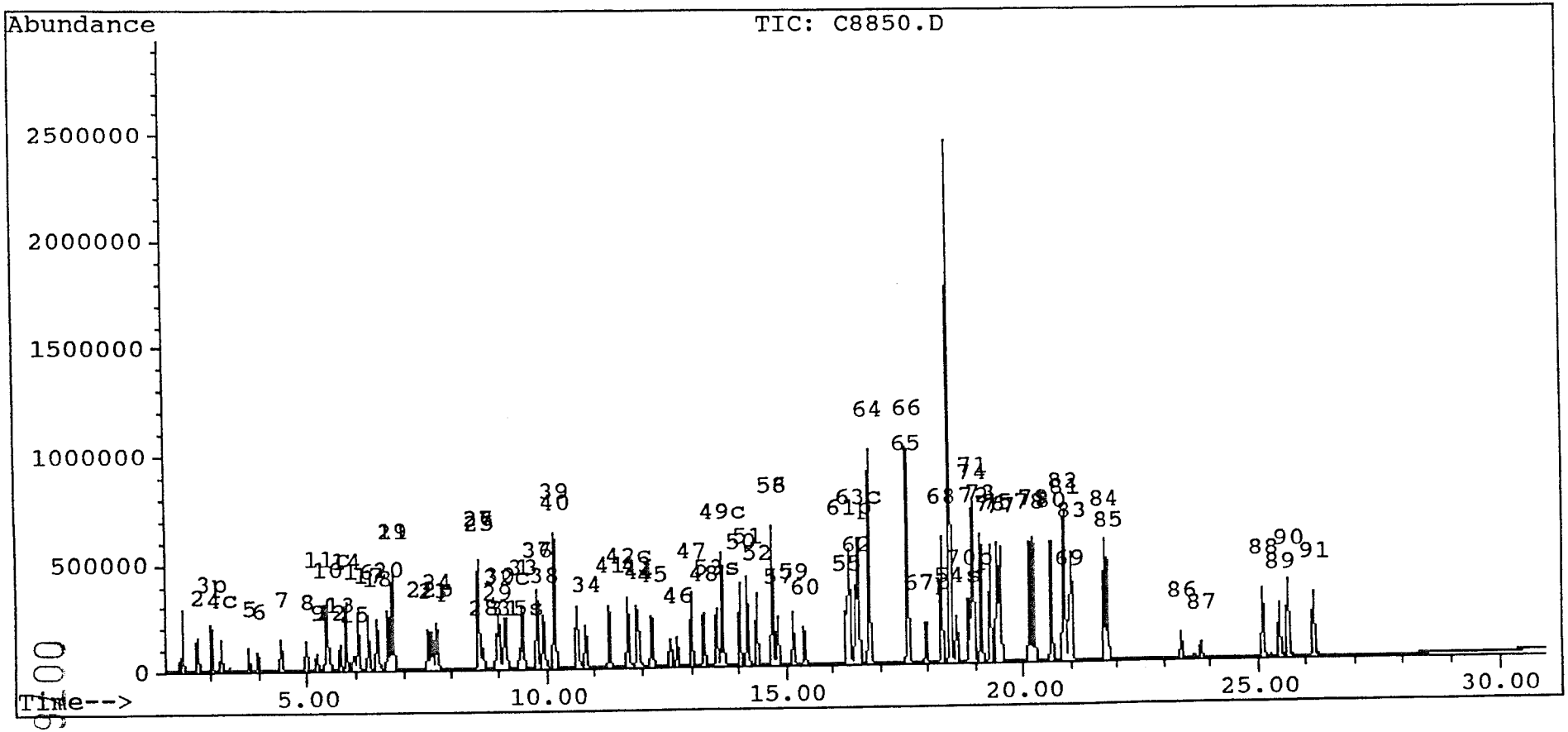
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) 1,2-Dclbenz	21.79	146	292165	91.64	ppb	98
86) 1,2-Dibromo-3-chloropropan	23.37	157	48454	136.18	ppb	93
87) Nitrobenzene	23.79	77	54676	338.52	ppb	99
88) 1,2,4-Tcbenzene	25.10	180	146470	88.12	ppb	98
89) Hexachlorobt	25.45	225	74664	121.63	ppb	97
90) Naphthalen	25.62	128	475287	113.73	ppb	99
91) 1,2,3-Tclbenzene	26.15	180	154690	98.43	ppb	99

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

Quantitat n Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8850.D Vial: 7
Acq On : 13 Jan 100 2:10 pm Operator: HERRING
Sample : 100PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 14:41 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration



Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8851.D Vial: 8
Acq On : 13 Jan 100 2:48 pm Operator: HERRING
Sample : 150PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 15:20 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	9.49	168	109448	50.00	ppb	0.00
34) 1,4-Difluorobenzene	10.81	114	208785	50.00	ppb	0.01
55) d5-Chlorobenze	16.29	117	226928	50.00	ppb	0.00
69) d4-1,4-Dichlorobenzene	20.97	152	106006	50.00	ppb	0.00
System Monitoring Compounds						%Recovery
35) surr4,Dibrflmethane	9.41	113	78985	45.58	ppb	91.16%
53) surr3,Toluene-d8	13.53	98	256564	53.01	ppb	106.02%
54) surr2,bfb	18.61	95	121009	53.74	ppb	107.48%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.70	85	344673	145.55	ppb	100
3) Chloromethane	3.00	50	363037	159.43	ppb	99
4) Vinyl Chloride	3.20	62	281112	150.94	ppb	98
5) Bromomethane	3.79	94	137169	123.20	ppb	99
6) Chloroethane	3.98	64	166056	143.95	ppb	99
7) Trichlorofluoromethane	4.46	101	305684	139.11	ppb	100
8) Diethyl Ether	4.98	59	175810	135.38	ppb	98
9) Acrolein	5.19	56	148882	704.56	ppb	99
10) FREON 113	5.42	85	86455	116.97	ppb	95
11) 1,1-Diclethene	5.40	96	167097	130.85	ppb	99
12) Acetone	5.47	43	176176	180.27	ppb	96
13) Iodomethane	5.67	142	264037	127.04	ppb	99
14) Carbon Disulfide	5.80	76	904894	139.90	ppb	99
15) Acetonitrile	5.96	39	31371	914.91	ppb	89
16) Allyl Chloride	6.05	76	110561	133.93	ppb	97
17) Methylene Chloride	6.27	84	229160	145.41	ppb	97
18) TBA	6.46	59	817617	7609.40	ppb	100
19) Methyl-t-Butyl Ether	6.78	73	515695	142.45	ppb	99
20) Acrylonitrile	6.69	53	482661	781.98	ppb	98
21) trans-1,2-Dichloroethene	6.78	96	186503	127.61	ppb	97
22) 1,1-Diclethane	7.53	63	471920	133.79	ppb	98
23) Vinyl Acetate	7.61	42	53094	147.45	ppb	95
24) 2-Chloro-1,3-butadiene	7.70	53	385831	130.30	ppb	97
25) 2,2-Dichloropropane	8.57	77	342302	145.06	ppb	99
26) 2-Butanone	8.57	43	202763	204.54	ppb	97
27) cis-1,2-Dichloroethene	8.57	96	236060	140.33	ppb	97
28) Propionitrile	8.65	54	225811	1186.03	ppb	100
29) Methacrylonitrile	8.94	67	107730	159.20	ppb	93
30) Bromochloromethane	8.99	128	139913	150.52	ppb	96
31) Tetrahydrofuran	9.08	42	104580	200.52	ppb	98
32) Chloroform	9.13	83	418361	138.92	ppb	97
33) 1,1,1-Trichloroethane	9.48	97	309954	139.67	ppb	93
36) Carbontetrachloride	9.79	117	254261	142.39	ppb	99

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

0077

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8851.D Vial: 8
Acq On : 13 Jan 100 2:48 pm Operator: HERRING
Sample : 150PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 15:20 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37) 1,1-Dichloropropene	9.78	75	271907	133.21	ppb		99
38) Iso-Butyl Alcohol	9.92	43	402602	6619.89	ppb	m	0
39) Benzene	10.14	78	931730	148.92	ppb		99
40) 1,2-Dichloroethane	10.15	62	414915	142.66	ppb		99
41) Trichloroethene	11.30	95	243301	143.32	ppb		96
42) 1,2-Diclpropane	11.70	63	317281	146.44	ppb		99
43) Methyl Methacrylate	11.87	69	234953	204.36	ppb		96
44) Dibromomethane	11.91	93	193175	154.97	ppb		98
45) Bromodichloromethane	12.19	83	378266	153.91	ppb		99
46) 2-Chloroethylvinyl Ether	12.71	63	140584	209.48	ppb		97
47) cis-1,3-Dichloropropene	13.01	75	453259	161.09	ppb		100
48) 4-Methyl-2-Pentanone	13.27	43	506939	225.36	ppb		98
49) Toluene	13.66	91	1074809	174.56	ppb		100
50) trans-1,3-Dichloropropene	14.03	75	472264	172.80	ppb		99
51) Ethyl Methacrylate	14.18	69	537110	209.69	ppb		98
52) 1,1,2-Trichloroethane	14.39	83	249047	174.58	ppb		98
56) Tetrachloroethene	14.71	166	215275	148.81	ppb		99
57) 2-Hexanone	14.83	43	431561	236.24	ppb		99
58) 1,3-Dichloropropane	14.71	76	492318	151.75	ppb		98
59) Dibromochloromethane	15.16	129	341916	165.42	ppb		98
60) 1,2-Dibromoethane	15.39	107	318293	167.26	ppb		98
61) Chlorobenzene	16.35	112	791018	166.71	ppb		97
62) 1,1,1,2-Tetrachloroethane	16.49	131	277773	172.82	ppb		98
63) Ethylbenzene	16.55	91	1298855	162.58	ppb		99
64) (m+p)Xylene	16.78	106	940699	319.17	ppb		99
65) o-Xylene	17.57	106	493203	166.24	ppb		97
66) Styrene	17.59	104	815882	161.17	ppb		99
67) Bromoform	17.97	173	229146	187.52	ppb		99
68) Isopropylbenzene	18.30	105	1187982	166.37	ppb		98
70) 1,1,2,2-Tetrachloroethane	18.86	83	491685	190.32	ppb		98
71) 1,2,3-Trichloropropane	18.96	110	118952	185.65	ppb		96
72) Trans-1,4-Dichloro-2-Buten	18.97	53	177453	186.22	ppb		96
73) n-Propylbenzene	19.12	91	1542014	153.33	ppb		98
74) Bromobenzene	18.94	156	303254	167.08	ppb		97
75) 1,3,5-Trimethylbenzene	19.47	105	935052	160.28	ppb		99
76) 2-Chlorotoluene	19.32	91	935131	157.22	ppb		100
77) 4-Chlorotoluene	19.53	91	1039974	151.54	ppb		97
78) tert-Butylbenzene	20.14	119	823847	177.58	ppb		99
79) 1,2,4-Trimethylbenzene	20.24	105	924753	158.60	ppb		99
80) sec-Butylbenzene	20.59	105	1336402	169.76	ppb		98
81) p-Isopropyltoluene	20.87	119	975455	167.35	ppb		99
82) 1,3-Dclbenz	20.84	146	520149	153.23	ppb		99
83) 1,4-Dclbenz	21.02	146	524018	151.03	ppb		98
84) n-Butylbenzene	21.71	91	1043930	172.42	ppb		98

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

0078

Quantitation Report

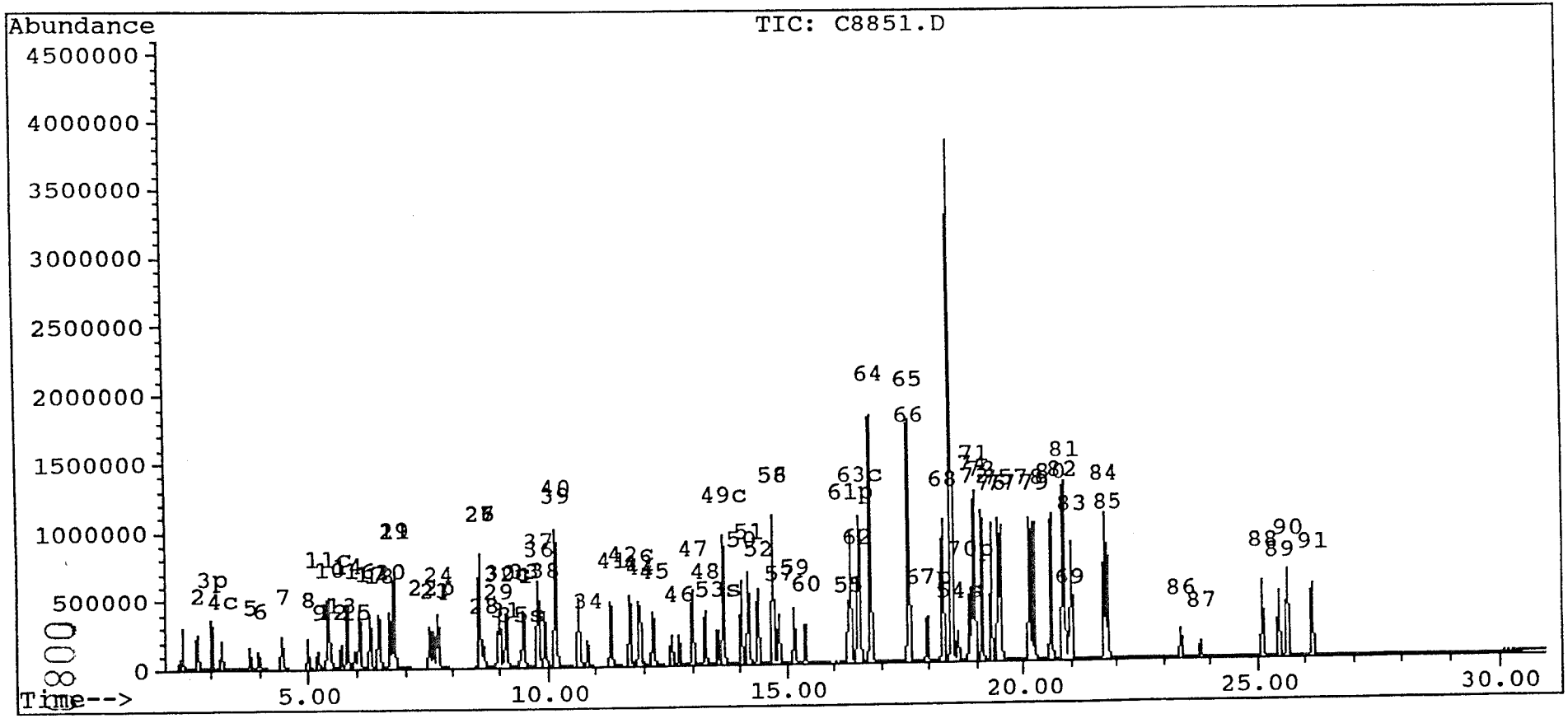
Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8851.D Vial: 8
Acq On : 13 Jan 100 2:48 pm Operator: HERRING
Sample : 150PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 15:20 19100

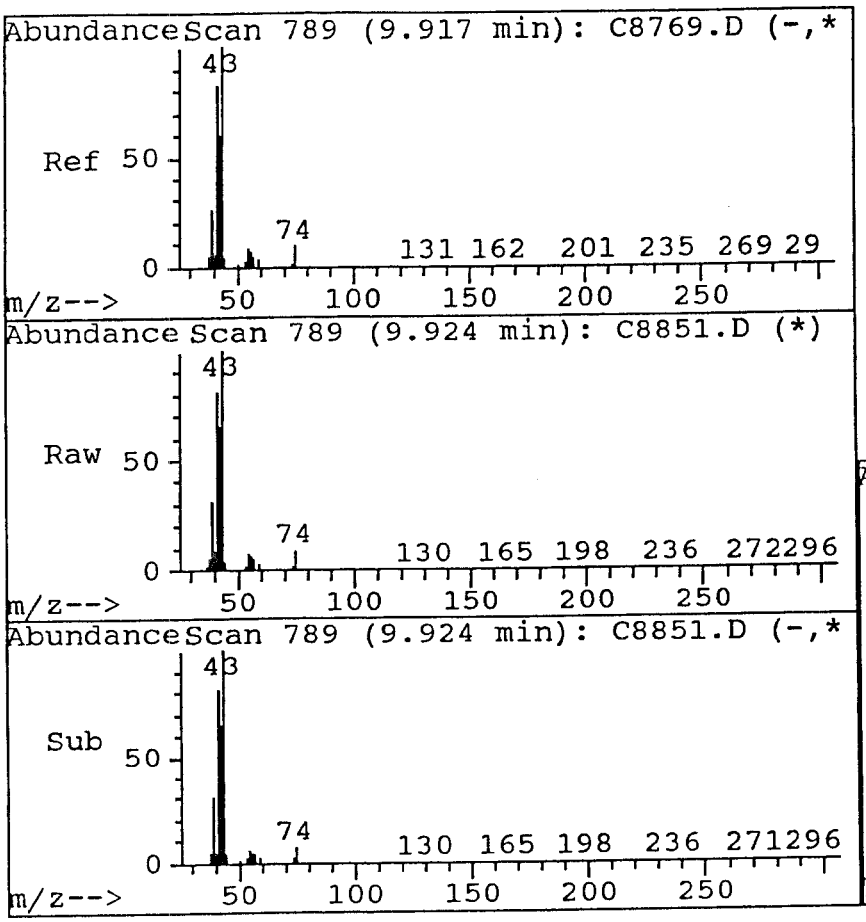
Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) 1,2-Dclbenz	21.79	146	510413	158.96	ppb	99
86) 1,2-Dibromo-3-chloropropan	23.36	157	83291	232.43	ppb	96
87) Nitrobenzene	23.79	77	97261	597.92	ppb	99
88) 1,2,4-Tcbenzene	25.10	180	269642	161.07	ppb	99
89) Hexachlorobt	25.45	225	145171	234.82	ppb	99
90) Naphthalen	25.63	128	845306	200.84	ppb	100
91) 1,2,3-Tclbenzene	26.15	180	278414	175.90	ppb	99

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8851.D Vial: 8
Acq On : 13 Jan 100 2:48 pm Operator: HERRING
Sample : 150PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 15:20 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

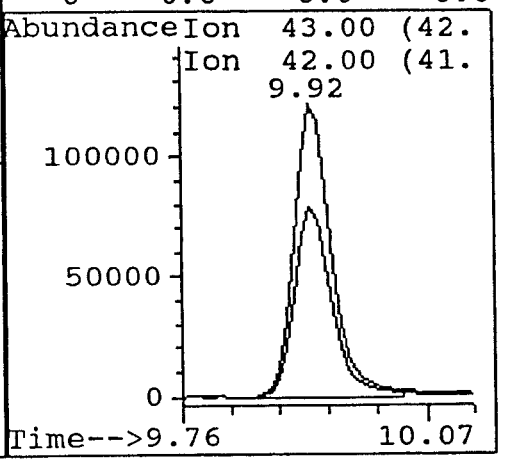




#38
Iso-Butyl Alcohol
Concen: 6619.89 ppb m
RT: 9.92 min Scan# 789
Delta R.T. 0.00 min
Lab File: C8851.D
Acq: 13 Jan 100 2:48 pm

Tgt Ion:43 Resp: 402602

Ion	Ratio	Lower	Upper
43	100		
42	65.0	32.8	98.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0



RJH 1/13

0081

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8852.D Vial: 9
Acq On : 13 Jan 100 3:27 pm Operator: HERRING
Sample : 200PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 16:02 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.48	168	118083	50.00	ppb		0.00
34) 1,4-Difluorobenzene	10.80	114	228908	50.00	ppb		0.00
55) d5-Chlorobenze	16.29	117	245656	50.00	ppb		0.00
69) d4-1,4-Dichlorobenzene	20.96	152	110800	50.00	ppb		0.00
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.41	113	90332	47.55	ppb		95.09%
53) surr3,Toluene-d8	13.53	98	277840	52.36	ppb		104.72%
54) surr2,bfb	18.60	95	128815	52.18	ppb		104.35%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.70	85	472357	184.89	ppb		100
3) Chloromethane	3.00	50	505019	205.56	ppb		100
4) Vinyl Chloride	3.20	62	391362	194.77	ppb		100
5) Bromomethane	3.79	94	203110	169.09	ppb		99
6) Chloroethane	3.97	64	237365	190.72	ppb		97
7) Trichlorofluoromethane	4.46	101	445215	187.79	ppb		97
8) Diethyl Ether	4.98	59	258489	184.49	ppb		99
9) Acrolein	5.19	56	221639	972.17	ppb		98
10) FREON 113	5.42	85	124272	155.83	ppb		99
11) 1,1-Diclethene	5.40	96	247357	179.54	ppb		99
12) Acetone	5.46	43	279025	264.63	ppb		98
13) Iodomethane	5.67	142	380044	169.49	ppb		99
14) Carbon Disulfide	5.80	76	1316504	188.65	ppb		100
15) Acetonitrile	5.95	39	46176	1248.20	ppb		94
16) Allyl Chloride	6.05	76	170764	191.74	ppb		95
17) Methylene Chloride	6.27	84	327370	192.53	ppb		96
18) TBA	6.45	59	1151350	9931.81	ppb		100
19) Methyl-t-Butyl Ether	6.77	73	765404	195.97	ppb		99
20) Acrylonitrile	6.68	53	694714	1043.23	ppb		99
21) trans-1,2-Dichloroethene	6.78	96	261503	165.84	ppb		99
22) 1,1-Diclethane	7.52	63	679614	178.58	ppb		99
23) Vinyl Acetate	7.60	42	70720	182.03	ppb		97
24) 2-Chloro-1,3-butadiene	7.70	53	559835	175.23	ppb		94
25) 2,2-Dichloropropane	8.57	77	497091	195.25	ppb		99
26) 2-Butanone	8.56	43	291522	272.58	ppb		95
27) cis-1,2-Dichloroethene	8.56	96	333467	183.74	ppb		97
28) Propionitrile	8.65	54	325189	1583.10	ppb	m	0
29) Methacrylonitrile	8.94	67	159726	218.77	ppb		98
30) Bromochloromethane	8.99	128	197751	197.18	ppb		91
31) Tetrahydrofuran	9.08	42	150427	267.33	ppb		97
32) Chloroform	9.14	83	607305	186.91	ppb		99
33) 1,1,1-Trichloroethane	9.48	97	452664	189.06	ppb		89
36) Carbontetrachloride	9.79	117	371189	189.59	ppb		99

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

0082

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8852.D Vial: 9
Acq On : 13 Jan 100 3:27 pm Operator: HERRING
Sample : 200PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 16:02 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37) 1,1-Dichloropropene	9.77	75	399481	178.50 ppb	98
38) Iso-Butyl Alcohol	9.92	43	591490	8870.75 ppb	99
39) Benzene	10.14	78	1318079	192.16 ppb	100
40) 1,2-Dichloroethane	10.15	62	604501	189.57 ppb	99
41) Trichloroethene	11.30	95	352073	189.16 ppb	95
42) 1,2-Diclpropane	11.69	63	464530	195.56 ppb	99
43) Methyl Methacrylate	11.87	69	338533	268.57 ppb	93
44) Dibromomethane	11.91	93	280743	205.42 ppb	96
45) Bromodichloromethane	12.19	83	558409	207.24 ppb	100
46) 2-Chloroethylvinyl Ether	12.72	63	201106	273.32 ppb	97
47) cis-1,3-Dichloropropene	13.01	75	636871	206.45 ppb	100
48) 4-Methyl-2-Pentanone	13.27	43	747922	303.26 ppb	99
49) Toluene	13.66	91	1499519	222.13 ppb	100
50) trans-1,3-Dichloropropene	14.03	75	668187	222.99 ppb	99
51) Ethyl Methacrylate	14.18	69	760888	270.95 ppb	99
52) 1,1,2-Trichloroethane	14.38	83	356324	227.82 ppb	100
56) Tetrachloroethene	14.71	166	301613	192.59 ppb	100
57) 2-Hexanone	14.83	43	637415	322.33 ppb	98
58) 1,3-Dichloropropane	14.71	76	709297	201.96 ppb	95
59) Dibromochloromethane	15.16	129	485465	216.97 ppb	99
60) 1,2-Dibromoethane	15.39	107	449194	218.05 ppb	100
61) Chlorobenzene	16.35	112	1080038	210.28 ppb	97
62) 1,1,1,2-Tetrachloroethane	16.49	131	385501	221.57 ppb	97
63) Ethylbenzene	16.55	91	1798515	207.96 ppb	99
64) (m+p)Xylene	16.78	106	1301439	407.90 ppb	99
65) o-Xylene	17.57	106	673471	209.70 ppb	97
66) Styrene	17.58	104	1133229	206.79 ppb	96
67) Bromoform	17.97	173	324447	245.27 ppb	100
68) Isopropylbenzene	18.29	105	1649974	213.45 ppb	99
70) 1,1,2,2-Tetrachloroethane	18.85	83	670457	248.29 ppb	99
71) 1,2,3-Trichloropropane	18.96	110	168464	251.55 ppb	95
72) Trans-1,4-Dichloro-2-Buten	18.97	53	245944	246.92 ppb	95
73) n-Propylbenzene	19.12	91	2134898	203.10 ppb	97
74) Bromobenzene	18.92	156	421109	221.98 ppb	99
75) 1,3,5-Trimethylbenzene	19.46	105	1295182	212.41 ppb	99
76) 2-Chlorotoluene	19.32	91	1288778	207.30 ppb	99
77) 4-Chlorotoluene	19.53	91	1426144	198.82 ppb	98
78) tert-Butylbenzene	20.14	119	1133811	233.82 ppb	96
79) 1,2,4-Trimethylbenzene	20.23	105	1290592	211.76 ppb	97
80) sec-Butylbenzene	20.58	105	1856666	225.65 ppb	99
81) p-Isopropyltoluene	20.87	119	1356938	222.73 ppb	98
82) 1,3-Dclbenz	20.84	146	725817	204.56 ppb	99
83) 1,4-Dclbenz	21.01	146	728086	200.76 ppb	100
84) n-Butylbenzene	21.71	91	1417330	223.97 ppb	98

0083

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8852.D Vial: 9
Acq On : 13 Jan 100 3:27 pm Operator: HERRING
Sample : 200PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 16:02 19100

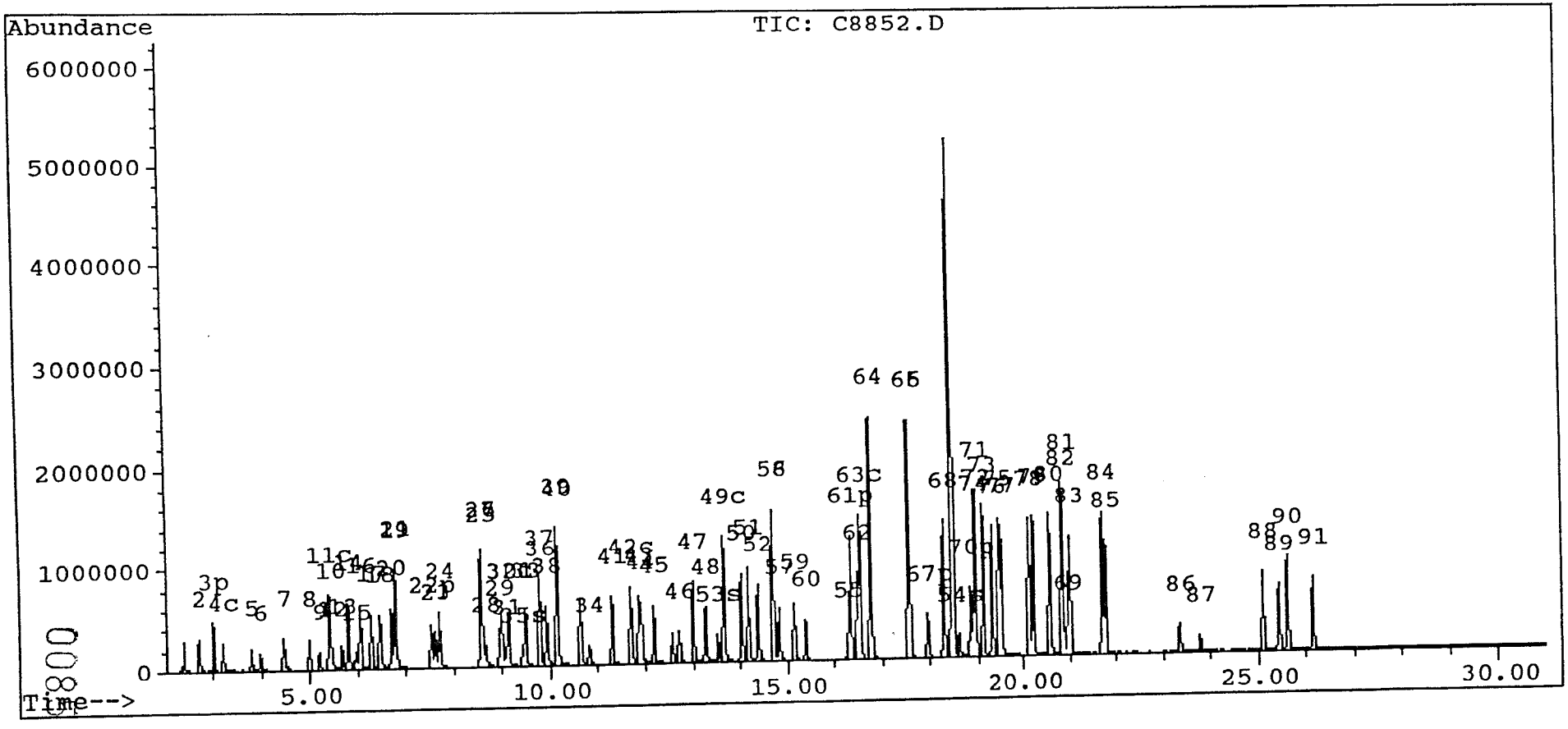
Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

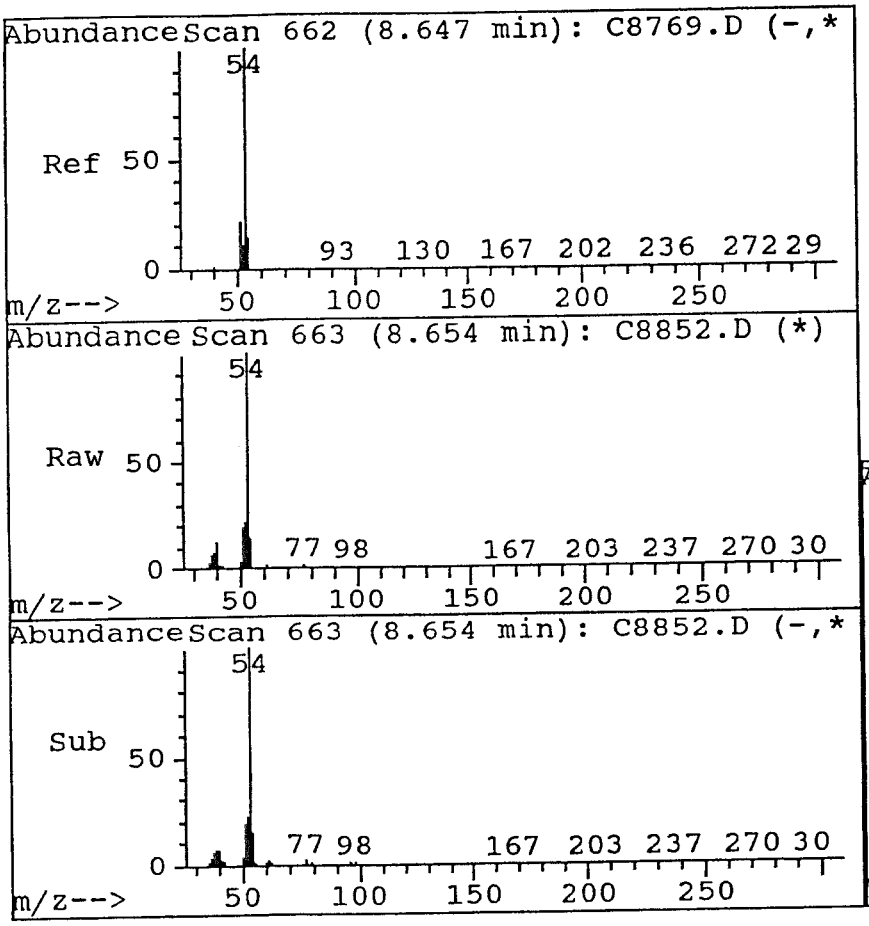
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) 1,2-Dclbenz	21.78	146	722824	215.38	ppb	99
86) 1,2-Dibromo-3-chloropropan	23.37	157	117012	312.40	ppb	90
87) Nitrobenzene	23.79	77	143896	846.33	ppb	92
88) 1,2,4-Tcbenzene	25.10	180	379748	217.03	ppb	98
89) Hexachlorobt	25.44	225	200270	309.93	ppb	98
90) Naphthalen	25.62	128	1215543	276.32	ppb	99
91) 1,2,3-Tclbenzene	26.15	180	389819	235.63	ppb	100

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8852.D Vial: 9
Acq On : 13 Jan 100 3:27 pm Operator: HERRING
Sample : 200PPB Inst : 5971 - In
Misc : 5035 by 8260B Initial Calibration for So Multiplr: 1.00
Quant Time: Jan 13 16:02 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 13 16:12:52 2000
Response via : Multiple Level Calibration

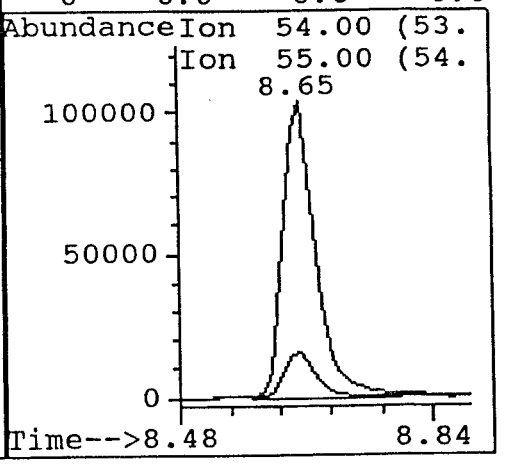




#28
Propionitrile
Concen: 1583.10 ppb m
RT: 8.65 min Scan# 663
Delta R.T. 0.00 min
Lab File: C8852.D
Acq: 13 Jan 100 3:27 pm

Tgt Ion:54 Resp: 325189

Ion	Ratio	Lower	Upper
54	100		
55	15.2	11.5	19.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0



RJH
4/13

Response Factor Report 5970 - In

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Initial Calibration

William R Gilgen

Calibration Files
5 =Y5743.D 20 =Y5744.D 50 =Y5745.D
100 =Y5737.D 150 =Y5738.D 200 =Y5739.D

		Compound	5	20	50	100	150	200	Avg	%RSD
1)		Pentafluorobenzene	ISTD							
2)		Dichlorodifluoromet	0.427	0.426	0.488	0.496	0.499	0.480	0.469	7.19
3)	p	Chloromethane	0.351	0.297	0.340	0.346	0.341	0.340	0.336	5.83
4)	c	Vinyl Chloride	0.377	0.336	0.391	0.389	0.388	0.382	0.377	5.55
5)		Bromomethane	0.159	0.174	0.166	0.243	0.244	0.230	0.203	19.97
6)		Chloroethane	0.230	0.201	0.216	0.218	0.216	0.213	0.216	4.28
7)		Trichlorofluorometh	0.517	0.483	0.552	0.540	0.528	0.515	0.523	4.58
8)		Diethyl Ether	0.329	0.284	0.310	0.322	0.315	0.314	0.312	4.99
9)		Acrolein	0.050	0.044	0.045	0.042	0.043	0.044	0.045	6.68
10)		FREON 113	0.167	0.158	0.178	0.168	0.169	0.164	0.167	3.99
11)	c	1,1-Diclethene	0.305	0.295	0.336	0.335	0.329	0.325	0.321	5.30
12)		Acetone		0.095	0.099	0.098	0.092	0.101	0.097	3.42
13)		Iodomethane	0.220	0.266	0.275	0.220	0.221	0.221	0.237	10.94
14)		Carbon Disulfide	1.313	1.375	1.338	1.201	1.240	1.270	1.289	5.01
15)		Acetonitrile		0.022	0.023	0.030	0.028	0.022	0.025	15.08
16)		Allyl Chloride	0.189	0.181	0.190	0.199	0.206	0.197	0.194	4.51
17)		Methylene Chloride	0.395	0.345	0.392	0.389	0.383	0.387	0.382	4.89
18)		TBA	0.029	0.030	0.030	0.033	0.032	0.033	0.031	5.1
19)		Acrylonitrile	0.131	0.120	0.122	0.133	0.128	0.128	0.127	3.88
20)		Methyl-t-Butyl Ethe	1.103	0.960	1.041	1.063	1.046	1.043	1.043	4.49
21)		trans-1,2-Dichloroe	0.362	0.326	0.373	0.372	0.376	0.371	0.363	5.16
22)	p	1,1-Diclethane	0.652	0.583	0.660	0.645	0.648	0.644	0.639	4.37
23)		Vinyl Acetate	0.802	0.711	0.649	0.640	0.673	0.665	0.690	8.75
24)		2-Chloro-1,3-butadi	0.579	0.554	0.636	0.620	0.637	0.620	0.608	5.52
25)		2,2-Dichloropropane	0.532	0.486	0.547	0.553	0.544	0.528	0.532	4.58
26)		2-Butanone	0.143	0.119	0.116	0.110	0.113	0.124	0.121	9.91
27)		cis-1,2-Dichloroeth	0.438	0.385	0.434	0.428	0.422	0.420	0.421	4.52
28)		Propionitrile	0.043	0.048	0.047	0.053	0.052	0.052	0.049	7.97
29)		Methacrylonitrile	0.172	0.161	0.172	0.181	0.179	0.183	0.175	4.79
30)		Bromochloromethane	0.219	0.189	0.213	0.214	0.210	0.210	0.209	4.93
31)	c	Chloroform	0.723	0.635	0.698	0.712	0.697	0.695	0.693	4.39
32)		Tetrahydrofuran		0.119	0.106	0.101	0.103	0.106	0.107	6.56
33)		1,1,1-Trichloroetha	0.552	0.516	0.602	0.586	0.586	0.577	0.570	5.49
34)	I	1,4 - Difluorobenzene	ISTD							
35)	s	surr4,Dibrflmethane	0.323	0.320	0.320	0.325	0.312	0.323	0.320	1.36
36)		Carbontetrachloride	0.310	0.278	0.319	0.319	0.313	0.299	0.306	5.16
37)		1,1-Dichloropropene	0.323	0.289	0.341	0.336	0.332	0.323	0.324	5.76
38)		Iso-Butyl Alcohol	0.007	0.008	0.007	0.009	0.008	0.008	0.008	8.33
39)		Benzene	1.014	0.869	0.939	0.974	0.949	0.954	0.950	5.02
40)		1,2-Dichloroethane	0.445	0.383	0.408	0.418	0.396	0.392	0.407	5.51
41)		N-Heptane	0.377	0.249	0.246	0.246	0.257	0.240	0.269	19.84
42)		Trichloroethene	0.280	0.259	0.303	0.310	0.294	0.293	0.290	6.

0087

(#) = Out of Range

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Initial Calibration

Calibration Files
5 =Y5743.D 20 =Y5744.D 50 =Y5745.D
100 =Y5737.D 150 =Y5738.D 200 =Y5739.D

		Compound	5	20	50	100	150	200	Avg	%RSD
43)	c	1,2-Diclpropane	0.260	0.234	0.265	0.273	0.263	0.265	0.260	5.09
44)		Methyl Methacrylate	0.197	0.184	0.205	0.220	0.214	0.214	0.206	6.42
45)		1,4-Dioxane	0.003	0.003	0.003	0.003	0.003	0.003	0.003	4.95
46)		Dibromomethane	0.193	0.172	0.183	0.187	0.180	0.176	0.182	4.04
47)		Bromodichloromethan	0.364	0.329	0.364	0.382	0.366	0.371	0.363	4.96
48)		2-Nitropropane	0.135	0.146	0.164	0.195	0.187	0.187	0.169	14.57
49)		2-Chloroethylvinyl	0.157	0.151	0.159	0.145	0.148	0.151	0.152	3.34
50)		cis-1,3-Dichloropro	0.415	0.381	0.415	0.430	0.427	0.427	0.416	4.37
51)	I	d5 - Chlorobenzene	ISTD							
52)		4-Methyl-2-Pentanon	0.302	0.268	0.275	0.253	0.259	0.266	0.270	6.38
53)	c	Toluene	1.247	1.108	1.223	1.232	1.194	1.167	1.195	4.31
54)		trans-1,3-Dichlorop	0.457	0.416	0.458	0.478	0.479	0.474	0.461	5.18
55)		Ethyl Methacrylate	0.438	0.424	0.440	0.473	0.461	0.450	0.448	3.95
56)		1,1,2-Trichloroetha	0.249	0.223	0.249	0.252	0.250	0.242	0.244	4.48
57)	s	surr3,Toluene-d8	1.297	1.279	1.260	1.306	1.265	1.271	1.280	1.42
58)	s	surr2,bfb	0.574	0.572	0.584	0.579	0.585	0.582	0.579	0.91
59)		Tetrachloroethene	0.344	0.296	0.335	0.328	0.326	0.304	0.322	5.69
60)		2-Hexanone	0.152	0.155	0.161	0.151	0.155	0.162	0.156	3.00
61)		1,3-Dichloropropane	0.511	0.453	0.493	0.492	0.487	0.469	0.484	4.21
62)		Dibromochloromethan	0.295	0.289	0.326	0.342	0.340	0.329	0.320	7.04
63)		1,2-Dibromoethane	0.323	0.292	0.318	0.327	0.326	0.314	0.317	4.10
64)	p	Chlorobenzene	0.861	0.739	0.816	0.806	0.806	0.775	0.800	5.10
65)		1,1,1,2-Tetrachloro	0.289	0.266	0.301	0.305	0.302	0.297	0.293	4.95
66)	c	Ethylbenzene	1.405	1.288	1.429	1.399	1.394	1.360	1.379	3.61
67)		(m+p)Xylene	0.532	0.462	0.510	0.498	0.493	0.469	0.494	5.31
68)		o-Xylene	0.510	0.470	0.506	0.505	0.513	0.480	0.497	3.58
69)		Styrene	0.917	0.812	0.908	0.895	0.906	0.857	0.883	4.60
70)	p	Bromoform	0.223	0.218	0.250	0.268	0.267	0.261	0.248	8.87
71)		Isopropylbenzene	1.327	1.211	1.349	1.317	1.338	1.263	1.301	4.09
72)		Cyclohexanone	0.005	0.004	0.004	0.005	0.004	0.004	0.005	6.23
73)	I	d4 - Dichlorobenzene	ISTD							
74)	p	1,1,2,2-Tetrachloro	0.666	0.645	0.669	0.713	0.713	0.710	0.686	4.34
75)		Trans-1,4-Dichloro-	0.203	0.202	0.223	0.246	0.242	0.242	0.226	8.78
76)		1,2,3-Trichloroprop	0.217	0.196	0.206	0.223	0.213	0.212	0.211	4.43
77)		n-Propylbenzene	2.855	2.599	2.876	2.846	2.880	2.799	2.809	3.81
78)		Bromobenzene	0.717	0.641	0.688	0.701	0.698	0.687	0.689	3.75
79)		1,3,5-Trimethylbenz	2.038	1.857	2.015	2.015	2.087	1.994	2.001	3.88
80)		2-Chlorotoluene	1.787	1.633	1.825	1.807	1.793	1.780	1.771	3.93
81)		4-Chlorotoluene	2.267	2.015	2.176	2.188	2.181	2.120	2.158	3.91
82)		tert-Butylbenzene	1.666	1.485	1.642	1.608	1.663	1.579	1.607	4.28
83)		1,2,4-Trimethylbenz	2.081	1.843	2.002	2.032	2.105	2.031	2.016	4.58
84)		sec-Butylbenzene	2.533	2.163	2.389	2.344	2.422	2.324	2.362	5.17

0088

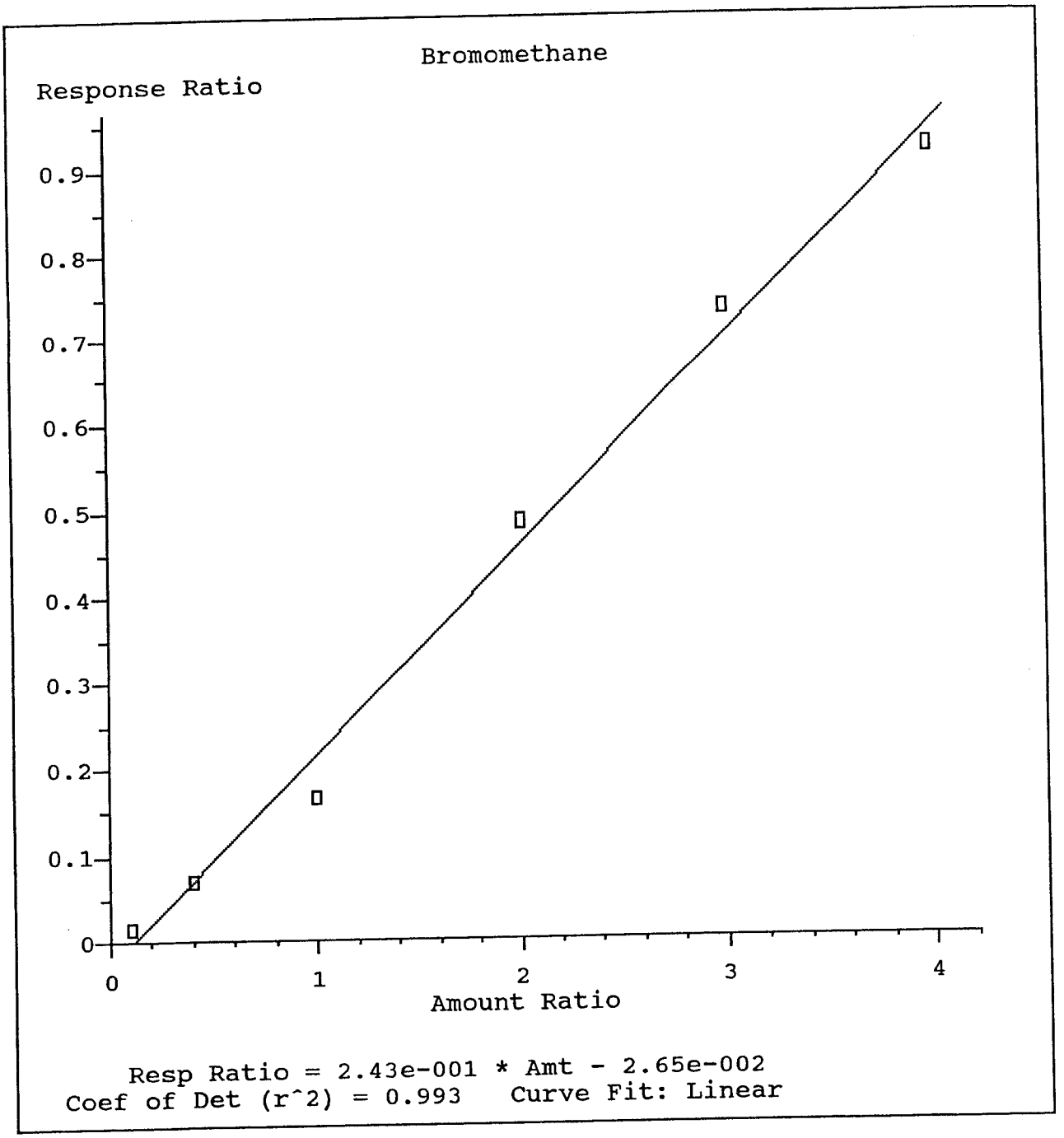
(#) = Out of Range

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Initial Calibration

Calibration Files
5 =Y5743.D 20 =Y5744.D 50 =Y5745.D
100 =Y5737.D 150 =Y5738.D 200 =Y5739.D

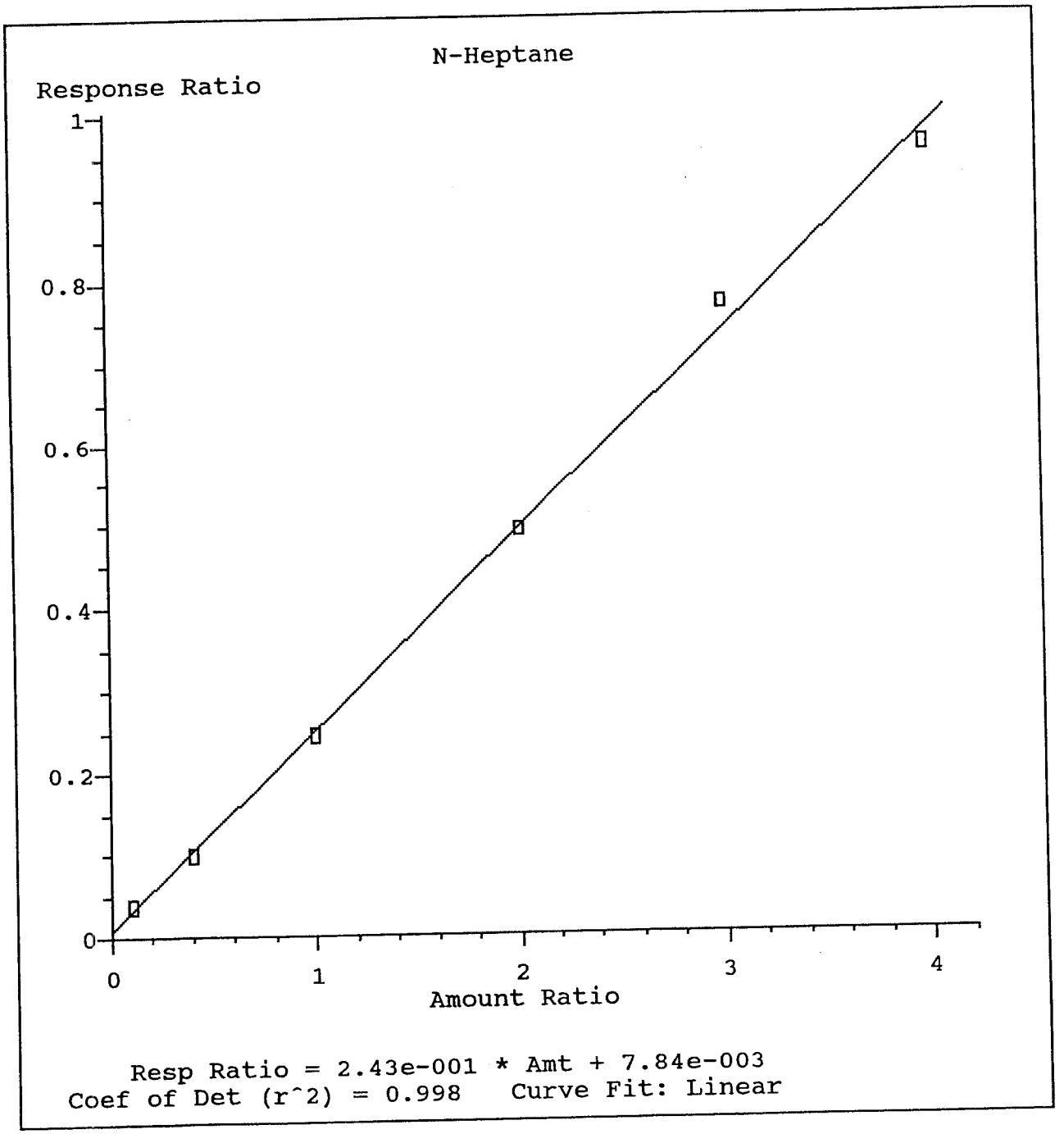
	Compound	5	20	50	100	150	200	Avg	%RSD
85)	p-Isopropyltoluene	2.045	1.764	1.929	1.885	1.944	1.838	1.901	5.06
86)	1,3-Dclbenz	1.272	1.163	1.239	1.254	1.262	1.231	1.237	3.16
87)	1,4-Dclbenz	1.377	1.198	1.267	1.277	1.270	1.233	1.270	4.73
88)	n-Butylbenzene	2.025	1.673	1.765	1.770	1.888	1.801	1.820	6.69
89)	1,2-Dclbenz	1.262	1.131	1.200	1.214	1.212	1.193	1.202	3.54
90)	1,2-Dibromo-3-chlor	0.131	0.123	0.135	0.158	0.158	0.157	0.143	11.08
91)	Nitrobenzene	0.016	0.021	0.024	0.035	0.037	0.040	0.029	34.05
92)	1,2,4-Tcbenzene	0.889	0.756	0.752	0.785	0.819	0.768	0.795	6.57
93)	Hexachlorobt	0.565	0.320	0.300	0.287	0.296	0.272	0.340	32.77
94)	Naphthalen	1.813	1.516	1.400	1.618	1.795	1.655	1.633	9.76
95)	1,2,3-Tclbenzene	0.832	0.665	0.657	0.712	0.736	0.700	0.717	8.84
96)	TOTAL XYLENE							0.000	-1.00

0089



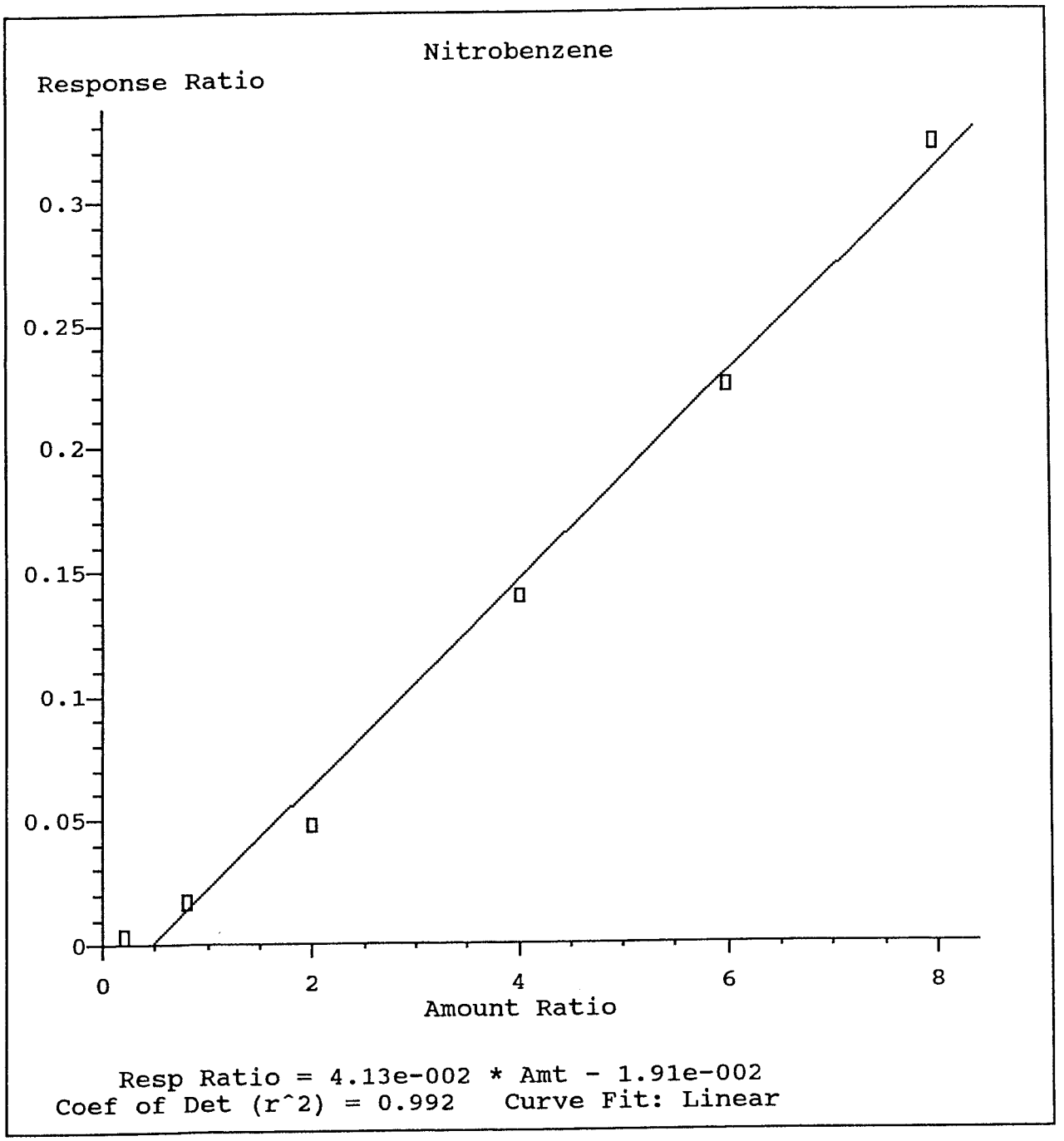
Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Calibration Table Last Updated: Tue Jan 25 09:22:58 2000

BA
1/25



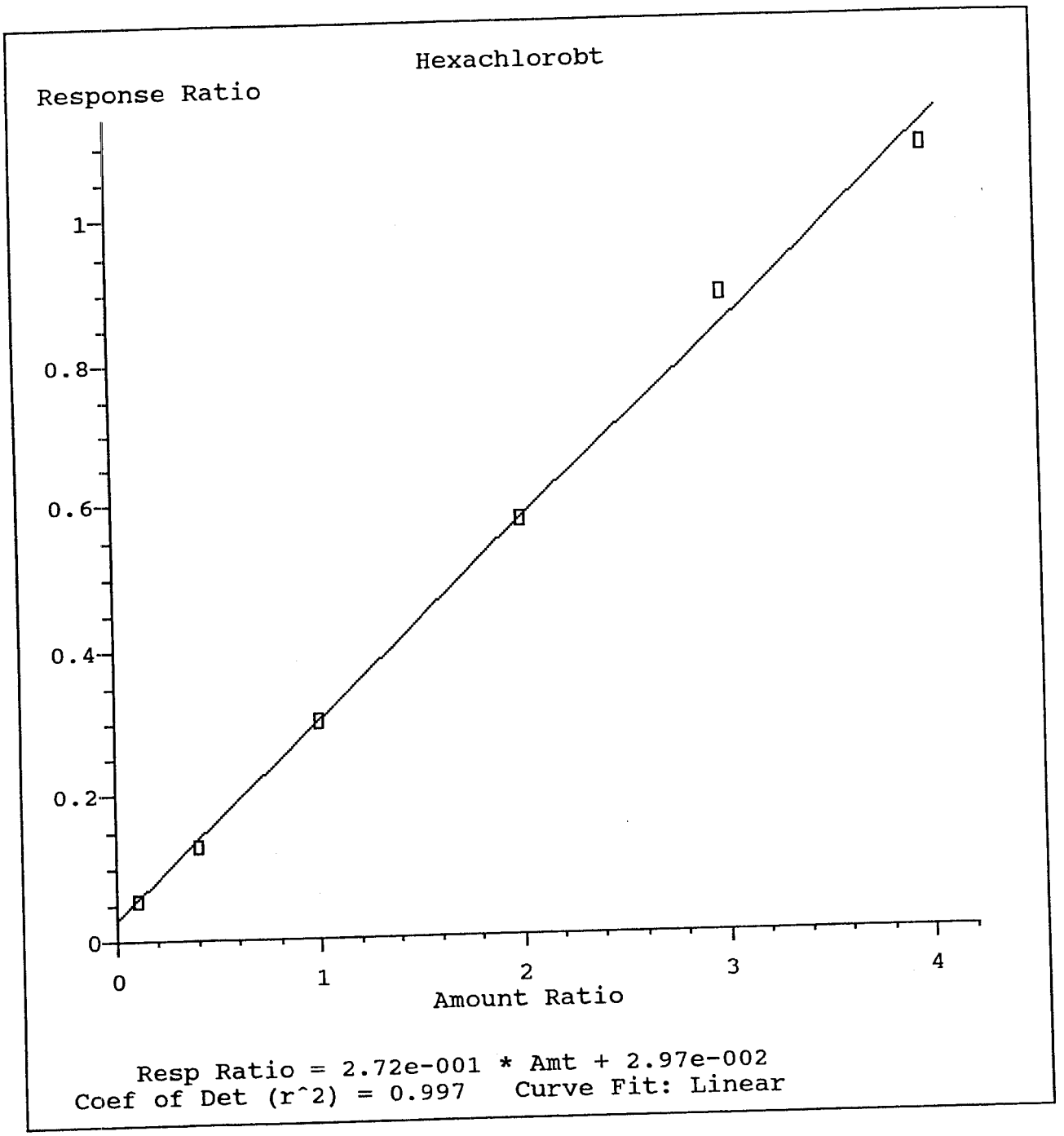
Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Calibration Table Last Updated: Tue Jan 25 09:21:31 2000

BA
1/25



Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Calibration Table Last Updated: Tue Jan 25 09:21:31 2000

BA
1/25



Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Calibration Table Last Updated: Tue Jan 25 09:21:31 2000

BA
1/25

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5743.D
Acq On : 24 Jan 100 6:34 pm
Sample : 5PPB
Misc :
Quant Time: Jan 24 19:02 19100

Vial: 98
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.78	168	252490	50.00	ppb		-0.03
34) 1,4 - Difluorobenzene	7.91	114	378709	50.00	ppb		-0.04
51) d5 - Chlorobenzene	12.89	117	344291	50.00	ppb		-0.04
73) d4 - Dichlorobenzene	17.28	152	194179	50.00	ppb		-0.04
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	6.65	113	122268	50.02	ppb		100.04%
57) surr3,Toluene-d8	10.36	98	446422	50.33	ppb		100.66%
58) surr2,bfb	15.08	95	197622	49.82	ppb		99.65%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.57	85	10776	4.55	ppb		97
3) Chloromethane	1.74	50	8861	5.25	ppb		99
4) Vinyl Chloride	1.85	62	9511	5.02	ppb		91
5) Bromomethane	2.19	94	4007	3.94	ppb		95
6) Chloroethane	2.32	64	5804	5.38	ppb		98
7) Trichlorofluoromethane	2.62	101	13049	5.04	ppb		90
8) Diethyl Ether	2.98	59	8309	5.39	ppb		91
9) Acrolein	3.13	56	6349	28.17	ppb		93
10) FREON 113	3.29	85	4226	5.16	ppb		89
11) 1,1-Diclethene	3.25	96	7703	4.89	ppb		98
12) Acetone	3.35	43	3691	4.27	ppb		98
13) Iodomethane	3.43	127	5553	5.04	ppb		94
14) Carbon Disulfide	3.51	76	33144	5.43	ppb		97
16) Allyl Chloride	3.76	76	4767	5.02	ppb		71
17) Methylene Chloride	3.94	84	9980	5.28	ppb		95
18) TBA	4.19	59	14876	94.44	ppb		98
19) Acrylonitrile	4.30	53	16507	26.12	ppb		97
20) Methyl-t-Butyl Ether	4.38	73	27855	5.57	ppb		97
21) trans-1,2-Dichloroethene	4.36	96	9145	5.10	ppb		96
22) 1,1-Diclethane	4.97	63	16468	5.17	ppb		94
23) Vinyl Acetate	5.11	43	20255	6.50	ppb		97
24) 2-Chloro-1,3-butadiene	5.12	53	14618	4.84	PPB		91
25) 2,2-Dichloropropane	5.87	77	13444	5.29	ppb		91
26) 2-Butanone	5.94	43	3613	4.04	ppb	#	85
27) cis-1,2-Dichloroethene	5.89	96	11054	5.29	ppb		87
28) Propionitrile	6.00	54	5428	21.29	ppb		100
29) Methacrylonitrile	6.23	67	4332	5.07	ppb		97
30) Bromochloromethane	6.23	128	5525	5.29	ppb		92
31) Chloroform	6.40	83	18259	5.29	ppb		99
32) Tetrahydrofuran	6.33	42	5526	9.71	ppb		94
33) 1,1,1-Trichloroethane	6.66	97	13927	4.94	ppb	#	90
36) Carbontetrachloride	6.92	117	11737	5.00	ppb		98
37) 1,1-Dichloropropene	6.93	75	12220	5.05	ppb		96

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

0094

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5743.D
Acq On : 24 Jan 100 6:34 pm
Sample : 5PPB
Misc :
Quant Time: Jan 24 19:02 19100

Vial: 98
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38) Iso-Butyl Alcohol	7.24	43	5554	82.98	ppb		77
39) Benzene	7.24	78	38410	5.32	ppb		98
40) 1,2-Dichloroethane	7.27	62	16852	5.42	ppb		97
41) N-Heptane	7.78	43	14289	7.92	ppb		98
42) Trichloroethene	8.32	95	10617	4.73	ppb		92
43) 1,2-Diclpropane	8.66	63	9853	4.96	ppb		96
44) Methyl Methacrylate	8.95	69	7456	4.78	ppb		92
45) 1,4-Dioxane	8.94	88	1986	91.81	ppb	#	72
46) Dibromomethane	8.85	93	7291	5.33	ppb		95
47) Bromodichloromethane	9.15	83	13788	4.96	ppb		99
48) 2-Nitropropane	9.51	43	5106	3.98	ppb	#	84
49) 2-Chloroethylvinyl Ether	9.70	63	5927	5.21	ppb		98
50) cis-1,3-Dichloropropene	9.91	75	15708	5.11	ppb		97
52) 4-Methyl-2-Pentanone	10.21	43	10404	5.40	ppb		92
53) Toluene	10.47	91	42937	5.21	ppb		99
54) trans-1,3-Dichloropropene	10.89	75	15723	5.07	ppb		98
55) Ethyl Methacrylate	11.11	69	15073	4.88	ppb		96
56) 1,1,2-Trichloroethane	11.18	83	8590	5.01	ppb		97
59) Tetrachloroethene	11.43	166	11827	5.35	ppb		95
60) 2-Hexanone	11.67	43	5225	3.73	ppb		92
61) 1,3-Dichloropropane	11.46	76	17601	5.31	ppb		95
62) Dibromochloromethane	11.86	129	10161	4.50	ppb		96
63) 1,2-Dibromoethane	12.02	107	11136	5.12	ppb		94
64) Chlorobenzene	12.94	112	29632	5.41	ppb		97
65) 1,1,1,2-Tetrachloroethane	13.11	131	9953	4.80	ppb		99
66) Ethylbenzene	13.18	91	48360	5.12	ppb		98
67) (m+p)Xylene	13.40	106	36659	10.94	ppb		98
68) o-Xylene	14.12	106	17557	5.14	ppb		100
69) Styrene	14.15	104	31579	5.24	ppb		99
70) Bromoform	14.44	173	7692	4.38	ppb		96
71) Isopropylbenzene	14.83	105	45680	5.19	ppb		100
72) Cyclohexanone	14.91	55	3493	9.91	ppb		96
74) 1,1,2,2-Tetrachloroethane	15.39	83	12929	4.71	ppb		93
75) Trans-1,4-Dichloro-2-buten	15.49	53	3950	4.33	ppb		85
76) 1,2,3-Trichloropropane	15.44	110	4208	4.96	ppb		94
77) n-Propylbenzene	15.61	91	55445	5.22	ppb		99
78) Bromobenzene	15.33	156	13927	5.21	ppb		97
79) 1,3,5-Trimethylbenzene	15.96	105	39564	5.09	ppb		99
80) 2-Chlorotoluene	15.72	91	34702	5.04	ppb		100
81) 4-Chlorotoluene	15.94	91	44019	5.32	ppb		95
82) tert-Butylbenzene	16.56	119	32351	5.31	ppb		97
83) 1,2,4-Trimethylbenzene	16.65	105	40401	5.11	ppb		92
84) sec-Butylbenzene	16.98	105	49176	5.62	ppb		99
85) p-Isopropyltoluene	17.28	119	39700	5.53	ppb		9[illegible]

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

0095

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5743.D
Acq On : 24 Jan 100 6:34 pm
Sample : 5PPB
Misc :
Quant Time: Jan 24 19:02 19100

Vial: 98
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
86) 1,3-Dclbenz	17.14	146	24708	5.11	ppb		99
87) 1,4-Dclbenz	17.31	146	26740	5.39	ppb		91
88) n-Butylbenzene	18.07	91	39325	5.80	ppb		94
89) 1,2-Dclbenz	18.02	146	24515	5.18	ppb		99
90) 1,2-Dibromo-3-chloropropan	19.53	157	2536	4.36	ppb		91
91) Nitrobenzene	19.93	77	623	5.61	ppb		83
92) 1,2,4-Tcbenzene	21.17	180	17261	5.58	ppb		97
93) Hexachlorobt	21.56	225	10972	10.28	ppb		95
94) Naphthalen	21.62	128	35198	5.11	ppb	#	93
95) 1,2,3-Tclbenzene	22.11	180	16147	5.70	ppb		99

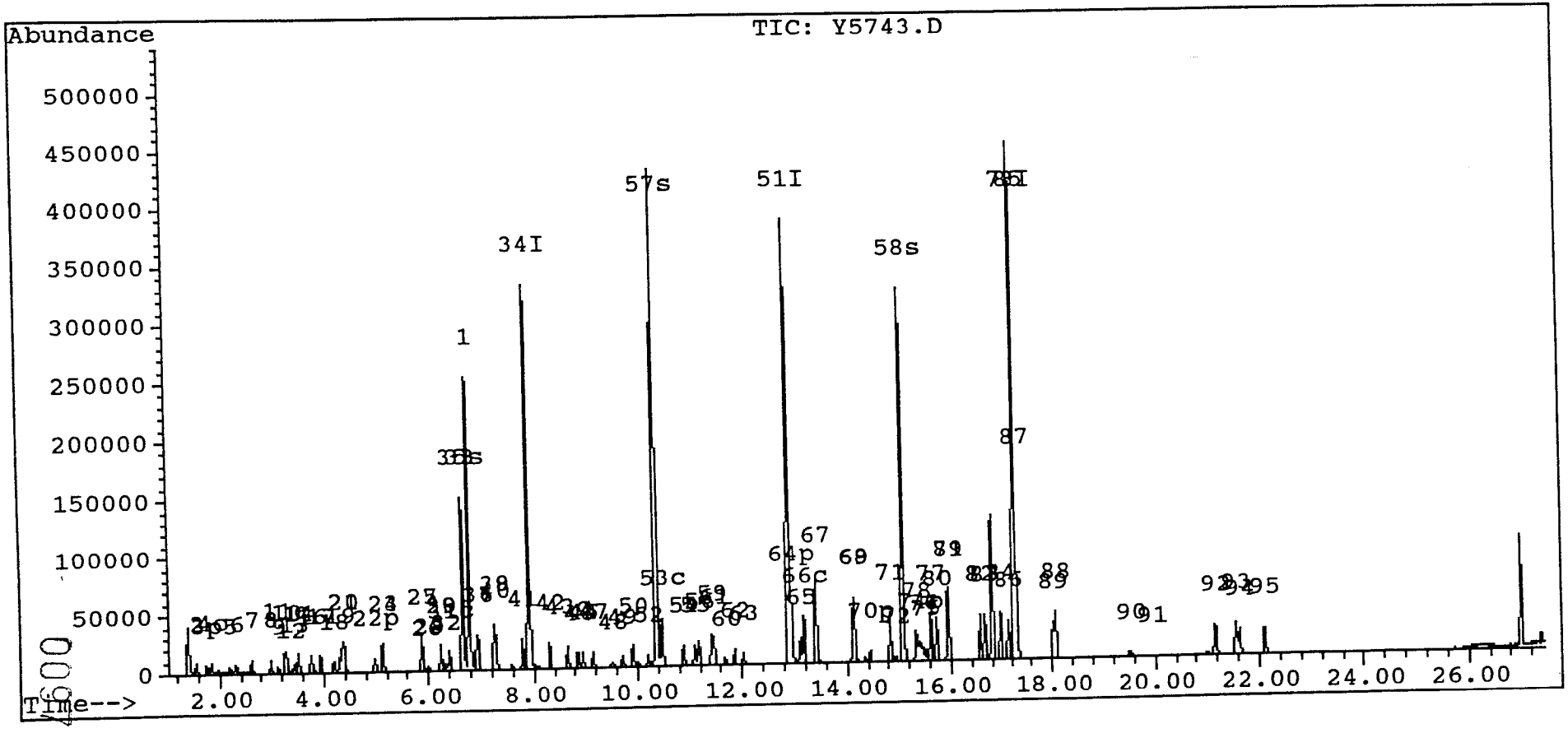
(#) = qualifier out of range (m) = manual integration

0096

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5743.D
Acq On : 24 Jan 100 6:34 pm
Sample : 5PPB
Misc :
Quant Time: Jan 24 19:02 19100

Vial: 98
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration



Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5744.D
Acq On : 24 Jan 100 7:12 pm
Sample : 20PPB
Misc :
Quant Time: Jan 24 19:39 19100

Vial: 99
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.78	168	242732	50.00	ppb	-0.03
34) 1,4 - Difluorobenzene	7.92	114	369045	50.00	ppb	-0.03
51) d5 - Chlorobenzene	12.89	117	342113	50.00	ppb	-0.04
73) d4 - Dichlorobenzene	17.27	152	189697	50.00	ppb	-0.04
System Monitoring Compounds						%Recovery
35) surr4,Dibrflmethane	6.65	113	117985	49.53	ppb	99.06%
57) surr3,Toluene-d8	10.36	98	437512	49.64	ppb	99.28%
58) surr2,bfb	15.08	95	195714	49.66	ppb	99.31%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.57	85	41392	18.19	ppb	95
3) Chloromethane	1.75	50	28826	17.75	ppb	97
4) Vinyl Chloride	1.85	62	32602	17.91	ppb	95
5) Bromomethane	2.20	94	16923	17.32	ppb	96
6) Chloroethane	2.31	64	19541	18.84	ppb	95
7) Trichlorofluoromethane	2.61	101	46911	18.84	ppb	97
8) Diethyl Ether	2.99	59	27557	18.59	ppb	95
9) Acrolein	3.12	56	21398	98.74	ppb	95
10) FREON 113	3.28	85	15328	19.45	ppb	92
11) 1,1-Diclethene	3.26	96	28644	18.93	ppb	97
12) Acetone	3.34	43	9221	11.10	ppb	99
13) Iodomethane	3.43	127	25835	24.39	ppb	97
14) Carbon Disulfide	3.52	76	133498	22.76	ppb	99
16) Allyl Chloride	3.76	76	17565	19.22	ppb	98
17) Methylene Chloride	3.94	84	33480	18.43	ppb	93
18) TBA	4.19	59	58635	387.21	ppb	98
19) Acrylonitrile	4.29	53	58461	96.23	ppb	96
20) Methyl-t-Butyl Ether	4.39	73	93196	19.37	ppb	98
21) trans-1,2-Dichloroethene	4.36	96	31664	18.38	ppb	97
22) 1,1-Diclethane	4.98	63	56600	18.48	ppb	97
23) Vinyl Acetate	5.11	43	69054	23.04	ppb	100
24) 2-Chloro-1,3-butadiene	5.13	53	53832	18.54	PPB	92
25) 2,2-Dichloropropane	5.86	77	47197	19.30	ppb	98
26) 2-Butanone	5.93	43	11565	13.46	ppb	94
27) cis-1,2-Dichloroethene	5.88	96	37363	18.59	ppb	97
28) Propionitrile	5.99	54	23092	94.20	ppb	96
29) Methacrylonitrile	6.23	67	15595	18.97	ppb	94
30) Bromochloromethane	6.24	128	18374	18.31	ppb	94
31) Chloroform	6.40	83	61694	18.59	ppb	97
32) Tetrahydrofuran	6.33	42	11559	21.13	ppb	93
33) 1,1,1-Trichloroethane	6.66	97	50054	18.47	ppb	99
36) Carbontetrachloride	6.93	117	41008	17.94	ppb	99
37) 1,1-Dichloropropene	6.93	75	42615	18.09	ppb	99

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

0098

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5744.D
Acq On : 24 Jan 100 7:12 pm
Sample : 20PPB
Misc :
Quant Time: Jan 24 19:39 19100

Vial: 99
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38) Iso-Butyl Alcohol	7.25	43	23331	357.71	ppb		95
39) Benzene	7.25	78	128295	18.23	ppb		100
40) 1,2-Dichloroethane	7.28	62	56498	18.64	ppb	#	94
41) N-Heptane	7.78	43	36691	20.87	ppb		98
42) Trichloroethene	8.31	95	38247	17.49	ppb		97
43) 1,2-Diclpropane	8.66	63	34603	17.88	ppb		93
44) Methyl Methacrylate	8.95	69	27229	17.90	ppb		96
45) 1,4-Dioxane	8.92	88	8413	399.12	ppb		88
46) Dibromomethane	8.85	93	25405	19.05	ppb		95
47) Bromodichloromethane	9.14	83	48549	17.91	ppb		98
48) 2-Nitropropane	9.51	43	21558	17.23	ppb	#	89
49) 2-Chloroethylvinyl Ether	9.71	63	22270	20.09	ppb		98
50) cis-1,3-Dichloropropene	9.92	75	56264	18.79	ppb		99
52) 4-Methyl-2-Pentanone	10.20	43	36645	19.14	ppb		98
53) Toluene	10.47	91	151622	18.51	ppb		100
54) trans-1,3-Dichloropropene	10.89	75	56966	18.50	ppb		100
55) Ethyl Methacrylate	11.11	69	57958	18.88	ppb		99
56) 1,1,2-Trichloroethane	11.18	83	30512	17.90	ppb		97
59) Tetrachloroethene	11.42	166	40533	18.47	ppb		97
60) 2-Hexanone	11.68	43	21191	15.23	ppb		92
61) 1,3-Dichloropropane	11.46	76	61995	18.81	ppb		93
62) Dibromochloromethane	11.86	129	39610	17.64	ppb		96
63) 1,2-Dibromoethane	12.03	107	40013	18.53	ppb		100
64) Chlorobenzene	12.94	112	101153	18.60	ppb		99
65) 1,1,1,2-Tetrachloroethane	13.11	131	36366	17.63	ppb		99
66) Ethylbenzene	13.17	91	176241	18.79	ppb		98
67) (m+p)Xylene	13.40	106	126401	37.97	ppb		95
68) o-Xylene	14.12	106	64276	18.94	ppb		97
69) Styrene	14.15	104	111076	18.54	ppb		96
70) Bromoform	14.44	173	29878	17.10	ppb		98
71) Isopropylbenzene	14.83	105	165729	18.94	ppb		99
72) Cyclohexanone	14.92	55	11833	33.79	ppb		92
74) 1,1,2,2-Tetrachloroethane	15.39	83	48910	18.24	ppb		99
75) Trans-1,4-Dichloro-2-buten	15.49	53	15353	17.22	ppb		87
76) 1,2,3-Trichloropropane	15.44	110	14865	17.94	ppb		99
77) n-Propylbenzene	15.61	91	197209	18.99	ppb		95
78) Bromobenzene	15.33	156	48627	18.62	ppb		92
79) 1,3,5-Trimethylbenzene	15.95	105	140877	18.56	ppb		99
80) 2-Chlorotoluene	15.73	91	123879	18.42	ppb		97
81) 4-Chlorotoluene	15.93	91	152863	18.91	ppb		100
82) tert-Butylbenzene	16.57	119	112657	18.91	ppb		99
83) 1,2,4-Trimethylbenzene	16.66	105	139865	18.10	ppb		99
84) sec-Butylbenzene	16.99	105	164148	19.21	ppb		100
85) p-Isopropyltoluene	17.28	119	133847	19.10	ppb		99

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

0099

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5744.D
Acq On : 24 Jan 100 7:12 pm
Sample : 20PPB
Misc :
Quant Time: Jan 24 19:39 19100

Vial: 99
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86) 1,3-Dclbenz	17.14	146	88266	18.68	ppb	95
87) 1,4-Dclbenz	17.32	146	90913	18.75	ppb	95
88) n-Butylbenzene	18.07	91	126955	19.18	ppb	98
89) 1,2-Dclbenz	18.02	146	85810	18.56	ppb	99
90) 1,2-Dibromo-3-chloropropan	19.52	157	9296	16.35	ppb	97
91) Nitrobenzene	19.92	77	3235	29.82	ppb	86
92) 1,2,4-Tcbenzene	21.16	180	57349	18.98	ppb	97
93) Hexachlorobt	21.56	225	24301	23.31	ppb	99
94) Naphthalen	21.62	128	115068	17.11	ppb	100
95) 1,2,3-Tclbenzene	22.11	180	50486	18.24	ppb	99

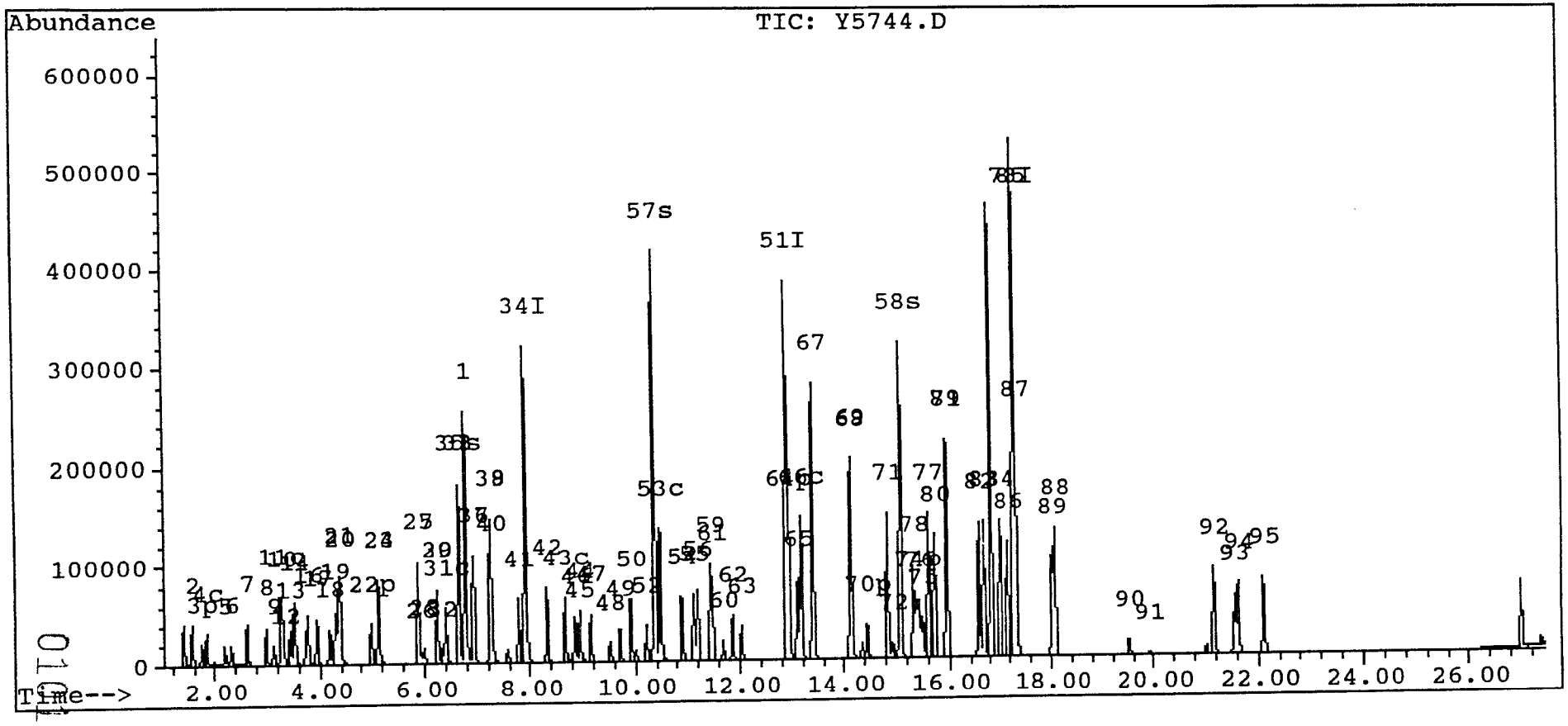
(#) = qualifier out of range (m) = manual integration

0100

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5744.D
Acq On : 24 Jan 100 7:12 pm
Sample : 20PPB
Misc :
Quant Time: Jan 24 19:39 19100

Vial: 99
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration



Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5745.D
Acq On : 24 Jan 100 7:49 pm
Sample : 50PPB
Misc :
Quant Time: Jan 25 9:07 19100

Vial: 100
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.78	168	243276	50.00	ppb		-0.03
34) 1,4 - Difluorobenzene	7.92	114	375682	50.00	ppb		-0.03
51) d5 - Chlorobenzene	12.89	117	340694	50.00	ppb		-0.04
73) d4 - Dichlorobenzene	17.27	152	188470	50.00	ppb		-0.04
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	6.65	113	120060	49.51	ppb		99.02%
57) surr3,Toluene-d8	10.36	98	429234	48.91	ppb		97.81%
58) surr2,bfb	15.08	95	198826	50.66	ppb		101.31%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.57	85	118749	52.07	ppb		99
3) Chloromethane	1.74	50	82714	50.83	ppb		98
4) Vinyl Chloride	1.85	62	95083	52.11	ppb	m	0
5) Bromomethane	2.20	94	40307	41.16	ppb		95
6) Chloroethane	2.31	64	52427	50.42	ppb		93
7) Trichlorofluoromethane	2.61	101	134393	53.86	ppb		98
8) Diethyl Ether	2.99	59	75365	50.71	ppb	m	0
9) Acrolein	3.12	56	54181	249.47	ppb		100
10) FREON 113	3.28	85	43349	54.89	ppb		96
11) 1,1-Diclethene	3.25	96	81759	53.91	ppb		98
12) Acetone	3.34	43	23973	28.79	ppb		99
13) Iodomethane	3.43	127	66901	63.01	ppb		90
14) Carbon Disulfide	3.52	76	325550	55.39	ppb		99
15) Acetonitrile	3.71	41	27539	191.94	ppb		98
16) Allyl Chloride	3.76	76	46334	50.59	ppb		93
17) Methylene Chloride	3.94	84	95421	52.40	ppb		94
18) TBA	4.18	59	144950	955.08	ppb		99
19) Acrylonitrile	4.30	53	148267	243.52	ppb		98
20) Methyl-t-Butyl Ether	4.38	73	253347	52.54	ppb		98
21) trans-1,2-Dichloroethene	4.35	96	90722	52.55	ppb		98
22) 1,1-Diclethane	4.98	63	160450	52.26	ppb		99
23) Vinyl Acetate	5.11	43	157833	52.54	ppb		100
24) 2-Chloro-1,3-butadiene	5.13	53	154722	53.18	PPB		100
25) 2,2-Dichloropropane	5.87	77	133123	54.32	ppb		100
26) 2-Butanone	5.93	43	28143	32.68	ppb		99
27) cis-1,2-Dichloroethene	5.88	96	105588	52.41	ppb		97
28) Propionitrile	5.98	54	57555	234.26	ppb		99
29) Methacrylonitrile	6.23	67	41862	50.82	ppb		96
30) Bromochloromethane	6.24	128	51699	51.40	ppb		94
31) Chloroform	6.41	83	169707	51.01	ppb		98
32) Tetrahydrofuran	6.32	42	25772	47.01	ppb		91
33) 1,1,1-Trichloroethane	6.66	97	146477	53.93	ppb		97
36) Carbontetrachloride	6.93	117	119706	51.44	ppb		98

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

0102

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5745.D
Acq On : 24 Jan 100 7:49 pm
Sample : 50PPB
Misc :
Quant Time: Jan 25 9:07 19100

Vial: 100
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37)	1,1-Dichloropropene	6.93	75	128156	53.44	ppb		95
38)	Iso-Butyl Alcohol	7.25	43	54254	817.12	ppb		97
39)	Benzene	7.25	78	352712	49.24	ppb		99
40)	1,2-Dichloroethane	7.27	62	153250	49.68	ppb		100
41)	N-Heptane	7.78	43	92238	51.53	ppb		94
42)	Trichloroethene	8.32	95	113711	51.08	ppb		99
43)	1,2-Diclpropane	8.66	63	99433	50.47	ppb		98
44)	Methyl Methacrylate	8.94	69	77096	49.78	ppb		96
45)	1,4-Dioxane	8.92	88	21026	979.87	ppb		92
46)	Dibromomethane	8.85	93	68754	50.65	ppb		95
47)	Bromodichloromethane	9.15	83	136613	49.50	ppb		100
48)	2-Nitropropane	9.52	43	61618	48.39	ppb	#	92
49)	2-Chloroethylvinyl Ether	9.70	63	59639	52.85	ppb		98
50)	cis-1,3-Dichloropropene	9.91	75	156008	51.18	ppb		99
52)	4-Methyl-2-Pentanone	10.20	43	93662	49.12	ppb		98
53)	Toluene	10.48	91	416819	51.10	ppb		100
54)	trans-1,3-Dichloropropene	10.88	75	156193	50.94	ppb		99
55)	Ethyl Methacrylate	11.11	69	150061	49.07	ppb		100
56)	1,1,2-Trichloroethane	11.18	83	84817	49.97	ppb		96
59)	Tetrachloroethene	11.43	166	114134	52.21	ppb		100
60)	2-Hexanone	11.66	43	55013	39.69	ppb		98
61)	1,3-Dichloropropane	11.47	76	167953	51.16	ppb		93
62)	Dibromochloromethane	11.85	129	111137	49.71	ppb		97
63)	1,2-Dibromoethane	12.02	107	108346	50.38	ppb		98
64)	Chlorobenzene	12.95	112	277915	51.31	ppb		97
65)	1,1,1,2-Tetrachloroethane	13.11	131	102426	49.88	ppb		97
66)	Ethylbenzene	13.18	91	486709	52.12	ppb		100
67)	(m+p)Xylene	13.41	106	347772	104.90	ppb		97
68)	o-Xylene	14.12	106	172351	50.99	ppb		97
69)	Styrene	14.15	104	309320	51.83	ppb		97
70)	Bromoform	14.44	173	85164	48.95	ppb		100
71)	Isopropylbenzene	14.83	105	459643	52.74	ppb		100
72)	Cyclohexanone	14.91	55	29514	84.62	ppb		99
74)	1,1,2,2-Tetrachloroethane	15.39	83	126102	47.34	ppb		97
75)	Trans-1,4-Dichloro-2-buten	15.50	53	42077	47.49	ppb		94
76)	1,2,3-Trichloropropane	15.43	110	38804	47.14	ppb		99
77)	n-Propylbenzene	15.60	91	542031	52.53	ppb		99
78)	Bromobenzene	15.33	156	129631	49.97	ppb		98
79)	1,3,5-Trimethylbenzene	15.96	105	379795	50.35	ppb		99
80)	2-Chlorotoluene	15.72	91	344019	51.48	ppb		100
81)	4-Chlorotoluene	15.94	91	410023	51.06	ppb		98
82)	tert-Butylbenzene	16.56	119	309454	52.29	ppb		100
83)	1,2,4-Trimethylbenzene	16.66	105	377366	49.14	ppb		98
84)	sec-Butylbenzene	16.99	105	450253	53.02	ppb		99

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

0103

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5745.D
Acq On : 24 Jan 100 7:49 pm
Sample : 50PPB
Misc :
Quant Time: Jan 25 9:07 19100

Vial: 100
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) p-Isopropyltoluene	17.29	119	363496	52.20	ppb	99
86) 1,3-Dclbenz	17.15	146	233447	49.72	ppb	98
87) 1,4-Dclbenz	17.32	146	238803	49.58	ppb	98
88) n-Butylbenzene	18.07	91	332693	50.58	ppb	99
89) 1,2-Dclbenz	18.02	146	226231	49.24	ppb	98
90) 1,2-Dibromo-3-chloropropan	19.52	157	25409	44.99	ppb	94
91) Nitrobenzene	19.92	77	8938	82.92	ppb	97
92) 1,2,4-Tcbenzene	21.17	180	141719	47.21	ppb	99
93) Hexachlorobt	21.55	225	56606	54.65	ppb	94
94) Naphthalen	21.62	128	263948	39.51	ppb	100
95) 1,2,3-Tclbenzene	22.10	180	123767	45.00	ppb	96

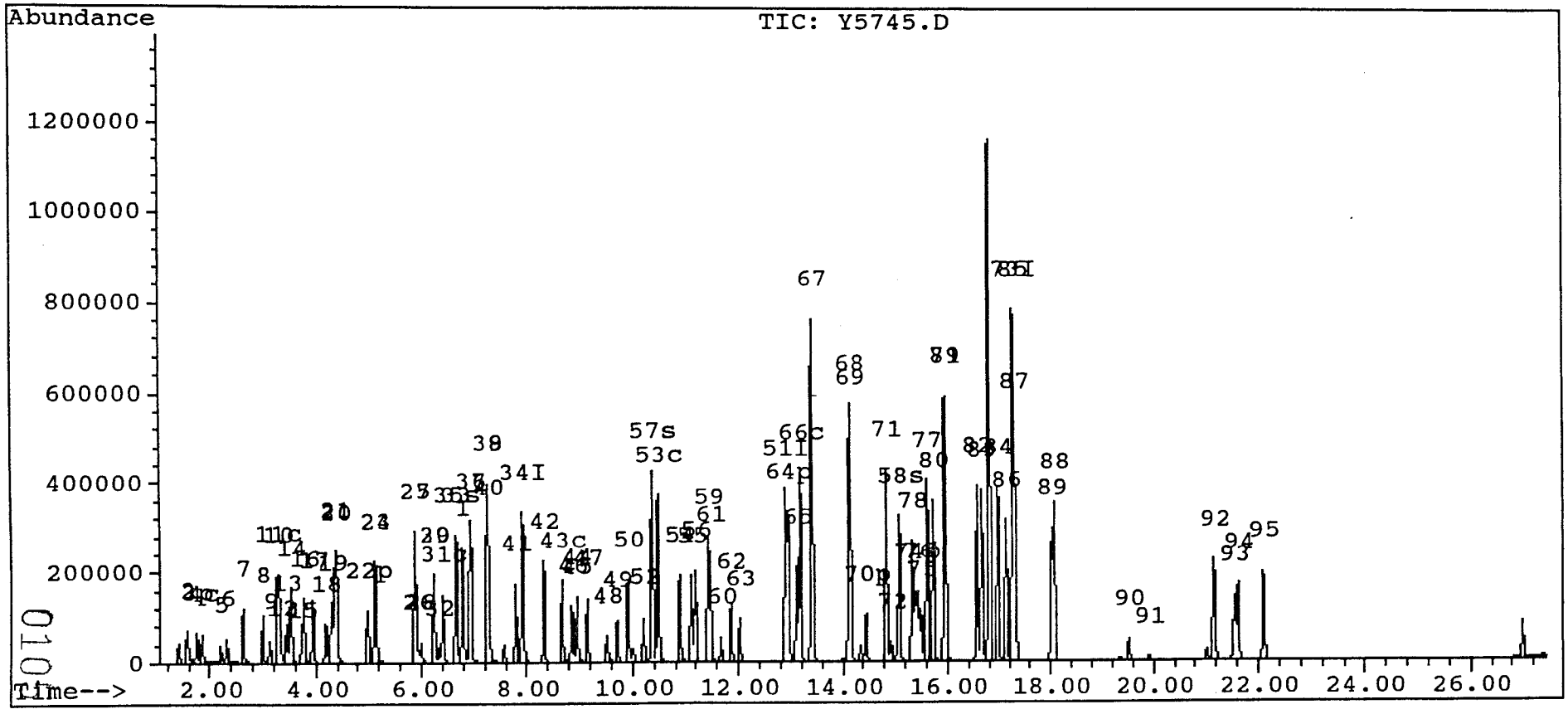
(#) = qualifier out of range (m) = manual integration

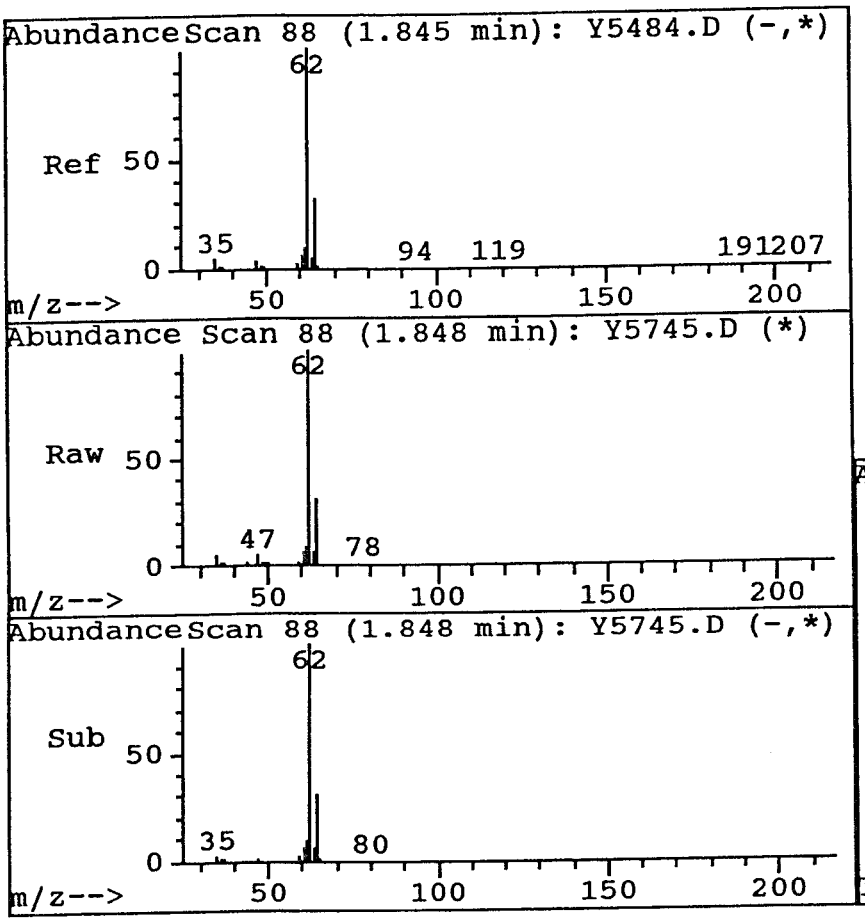
0104

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5745.D
Acq On : 24 Jan 100 7:49 pm
Sample : 50PPB
Misc :
Quant Time: Jan 25 9:07 19100

Vial: 100
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

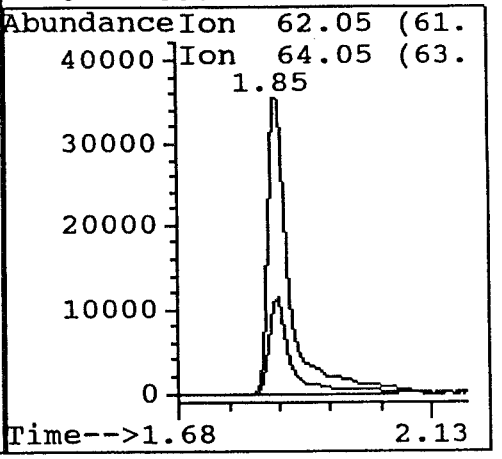




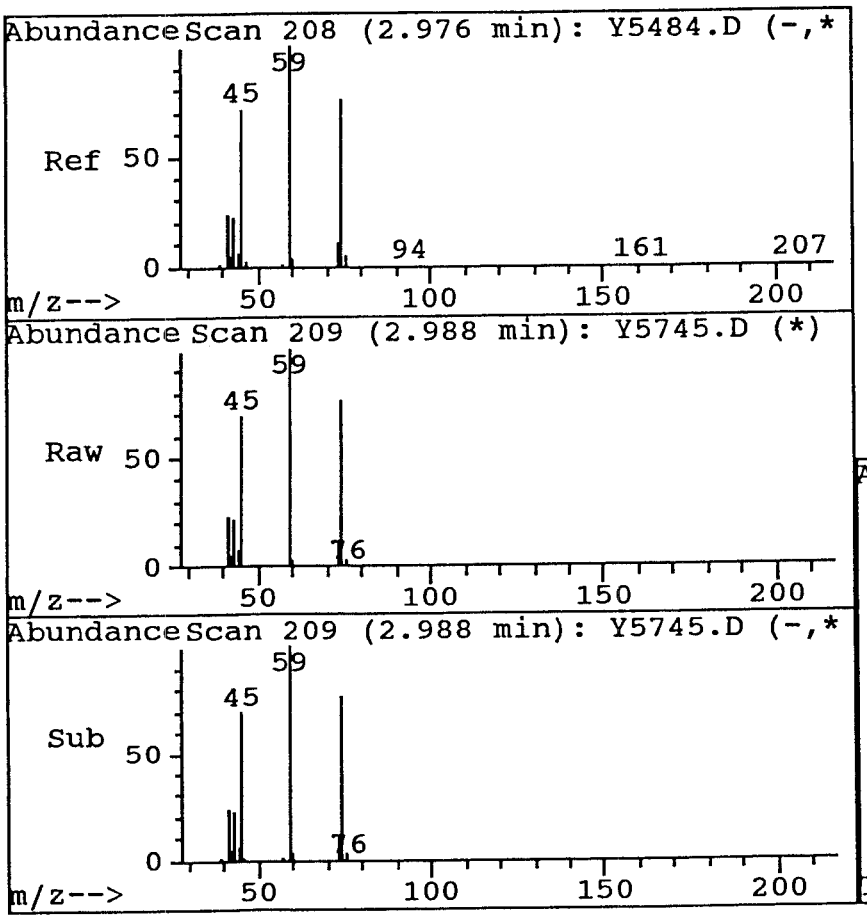
#4
Vinyl Chloride
Concen: 52.11 ppb m
RT: 1.85 min Scan# 88
Delta R.T. -0.02 min
Lab File: Y5745.D
Acq: 24 Jan 100 7:49 pm

Tgt Ion:62.05 Resp: 95083

Ion	Ratio	Lower	Upper
62	100		
64	31.0	26.5	39.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0



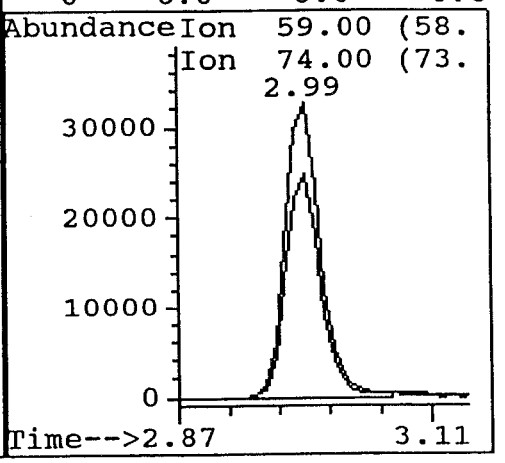
BA
1/25



#8
Diethyl Ether
Concen: 50.71 ppb m
RT: 2.99 min Scan# 209
Delta R.T. -0.01 min
Lab File: Y5745.D
Acq: 24 Jan 100 7:49 pm

Tgt Ion:59 Resp: 75365

Ion	Ratio	Lower	Upper
59	100		
74	76.2	52.2	86.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0



BA

1/25

0107

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5737.D
Acq On : 24 Jan 100 2:51 pm
Sample : 100PPB
Misc :
Quant Time: Jan 24 15:20 19100

Vial: 92
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.78	168	253010	50.00	ppb		-0.03
34) 1,4 - Difluorobenzene	7.92	114	379404	50.00	ppb		-0.03
51) d5 - Chlorobenzene	12.89	117	348779	50.00	ppb		-0.04
73) d4 - Dichlorobenzene	17.27	152	190672	50.00	ppb		-0.04
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	6.65	113	123162	50.29	ppb		100.58%
57) surr3,Toluene-d8	10.36	98	455401	50.68	ppb		101.37%
58) surr2,bfb	15.08	95	201813	50.23	ppb		100.45%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.57	85	250870	105.77	ppb		98
3) Chloromethane	1.75	50	175178	103.51	ppb		98
4) Vinyl Chloride	1.85	62	196909	103.77	ppb		99
5) Bromomethane	2.19	94	122756	120.53	ppb		99
6) Chloroethane	2.31	64	110376	102.08	ppb		93
7) Trichlorofluoromethane	2.61	101	273178	105.27	ppb		96
8) Diethyl Ether	2.98	59	163187	105.59	ppb		99
9) Acrolein	3.12	56	106289	470.56	ppb		99
10) FREON 113	3.28	85	85112	103.62	ppb	m	0
11) 1,1-Diclethene	3.25	96	169724	107.60	ppb		98
12) Acetone	3.34	43	49791	57.50	ppb		98
13) Iodomethane	3.42	127	111245	100.74	ppb		98
14) Carbon Disulfide	3.51	76	607706	99.42	ppb		100
15) Acetonitrile	3.71	41	75938	508.92	ppb		93
16) Allyl Chloride	3.76	76	100729	105.76	ppb		100
17) Methylene Chloride	3.93	84	197091	104.07	ppb		98
18) TBA	4.19	59	337946	2141.07	ppb		97
19) Acrylonitrile	4.29	53	336484	531.39	ppb		100
20) Methyl-t-Butyl Ether	4.38	73	538072	107.29	ppb		97
21) trans-1,2-Dichloroethene	4.35	96	188076	104.76	ppb		98
22) 1,1-Diclethane	4.98	63	326564	102.27	ppb		99
23) Vinyl Acetate	5.10	43	323698	103.61	ppb		99
24) 2-Chloro-1,3-butadiene	5.12	53	313948	103.75	PPB		97
25) 2,2-Dichloropropane	5.86	77	280010	109.86	ppb		98
26) 2-Butanone	5.92	43	55547	62.01	ppb		99
27) cis-1,2-Dichloroethene	5.88	96	216453	103.30	ppb		97
28) Propionitrile	5.98	54	135003	528.34	ppb		99
29) Methacrylonitrile	6.23	67	91713	107.05	ppb		92
30) Bromochloromethane	6.24	128	108517	103.74	ppb		96
31) Chloroform	6.40	83	360322	104.14	ppb		100
32) Tetrahydrofuran	6.32	42	51252	89.88	ppb		95
33) 1,1,1-Trichloroethane	6.65	97	296351	104.90	ppb		98
36) Carbontetrachloride	6.93	117	242368	103.12	ppb		100

BA 1/25

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

0108

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5737.D
Acq On : 24 Jan 100 2:51 pm
Sample : 100PPB
Misc :
Quant Time: Jan 24 15:20 19100

Vial: 92
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 1,1-Dichloropropene	6.93	75	254738	105.17	ppb	97
38) Iso-Butyl Alcohol	7.24	43	134585	2007.11	ppb	99
39) Benzene	7.24	78	738731	102.11	ppb	99
40) 1,2-Dichloroethane	7.27	62	316940	101.74	ppb	99
41) N-Heptane	7.78	43	186751	103.32	ppb	99
42) Trichloroethene	8.31	95	235212	104.62	ppb	99
43) 1,2-Diclpropane	8.66	63	206946	104.02	ppb	100
44) Methyl Methacrylate	8.94	69	167095	106.83	ppb	96
45) 1,4-Dioxane	8.92	88	46198	2131.83	ppb	94
46) Dibromomethane	8.84	93	141580	103.28	ppb	98
47) Bromodichloromethane	9.14	83	290215	104.13	ppb	99
48) 2-Nitropropane	9.51	43	147710	114.86	ppb	99
49) 2-Chloroethylvinyl Ether	9.70	63	110351	96.83	ppb	100
50) cis-1,3-Dichloropropene	9.90	75	325932	105.88	ppb	99
52) 4-Methyl-2-Pentanone	10.21	43	176625	90.48	ppb	98
53) Toluene	10.47	91	859352	102.91	ppb	99
54) trans-1,3-Dichloropropene	10.88	75	333720	106.32	ppb	99
55) Ethyl Methacrylate	11.10	69	330021	105.43	ppb	100
56) 1,1,2-Trichloroethane	11.18	83	175726	101.14	ppb	97
59) Tetrachloroethene	11.43	166	228497	102.11	ppb	99
60) 2-Hexanone	11.67	43	105224	74.16	ppb	93
61) 1,3-Dichloropropane	11.46	76	343101	102.10	ppb	96
62) Dibromochloromethane	11.85	129	238531	104.22	ppb	98
63) 1,2-Dibromoethane	12.02	107	228421	103.74	ppb	99
64) Chlorobenzene	12.94	112	562248	101.40	ppb	99
65) 1,1,1,2-Tetrachloroethane	13.11	131	212641	101.14	ppb	98
66) Ethylbenzene	13.17	91	975602	102.05	ppb	98
67) (m+p)Xylene	13.40	106	695076	204.79	ppb	97
68) o-Xylene	14.12	106	352592	101.90	ppb	96
69) Styrene	14.14	104	624606	102.24	ppb	96
70) Bromoform	14.44	173	186691	104.83	ppb	98
71) Isopropylbenzene	14.82	105	918909	103.00	ppb	100
72) Cyclohexanone	14.92	55	63494	177.82	ppb	99
74) 1,1,2,2-Tetrachloroethane	15.39	83	271865	100.88	ppb	99
75) Trans-1,4-Dichloro-2-buten	15.49	53	93661	104.49	ppb	96
76) 1,2,3-Trichloropropane	15.43	110	85038	102.11	ppb	99
77) n-Propylbenzene	15.60	91	1085166	103.96	ppb	100
78) Bromobenzene	15.33	156	267176	101.79	ppb	94
79) 1,3,5-Trimethylbenzene	15.96	105	768415	100.70	ppb	99
80) 2-Chlorotoluene	15.73	91	689210	101.94	ppb	99
81) 4-Chlorotoluene	15.93	91	834485	102.72	ppb	100
82) tert-Butylbenzene	16.56	119	613244	102.44	ppb	96
83) 1,2,4-Trimethylbenzene	16.66	105	774965	99.76	ppb	99
84) sec-Butylbenzene	16.99	105	893775	104.04	ppb	9[illegible]

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

0109

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5737.D
Acq On : 24 Jan 100 2:51 pm
Sample : 100PPB
Misc :
Quant Time: Jan 24 15:20 19100

Vial: 92
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

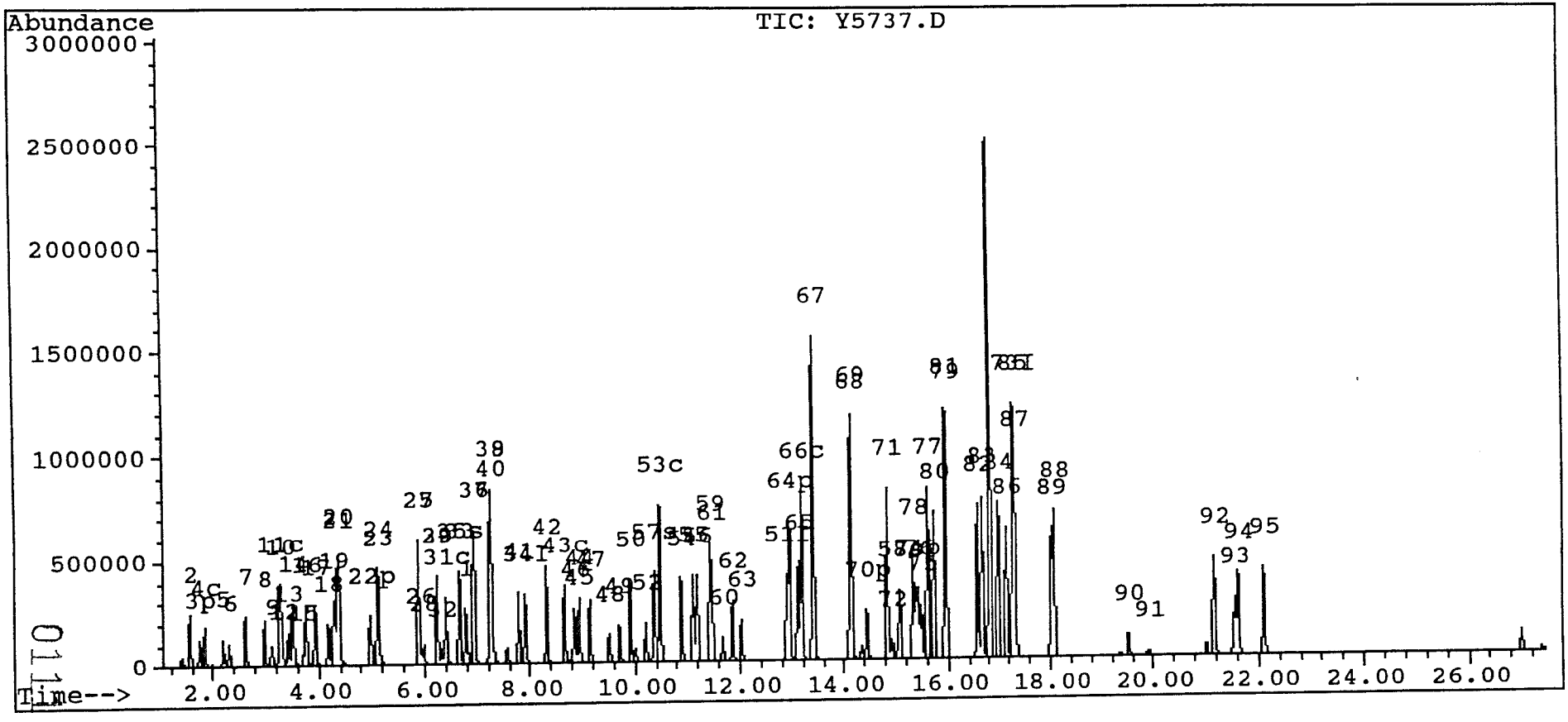
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) p-Isopropyltoluene	17.28	119	718665	102.01	ppb	100
86) 1,3-Dclbenz	17.15	146	478328	100.70	ppb	99
87) 1,4-Dclbenz	17.32	146	486936	99.93	ppb	98
88) n-Butylbenzene	18.07	91	674982	101.43	ppb	99
89) 1,2-Dclbenz	18.02	146	462953	99.60	ppb	99
90) 1,2-Dibromo-3-chloropropan	19.52	157	60201	105.37	ppb	98
91) Nitrobenzene	19.91	77	26710	244.93	ppb	94
92) 1,2,4-Tcbenzene	21.16	180	299537	98.63	ppb	100
93) Hexachlorobt	21.55	225	109257	104.26	ppb	96
94) Naphthalen	21.61	128	616949	91.28	ppb	99
95) 1,2,3-Tclbenzene	22.10	180	271459	97.56	ppb	100

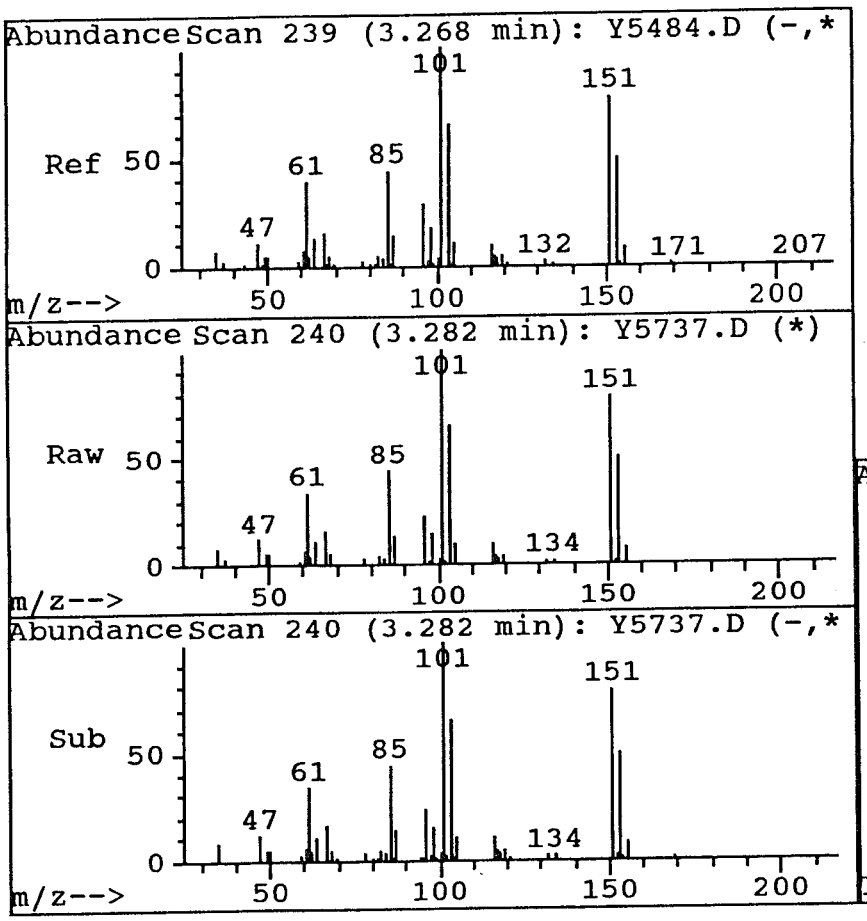
(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5737.D
Acq On : 24 Jan 100 2:51 pm
Sample : 100PPB
Misc :
Quant Time: Jan 24 15:20 19100

Vial: 92
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

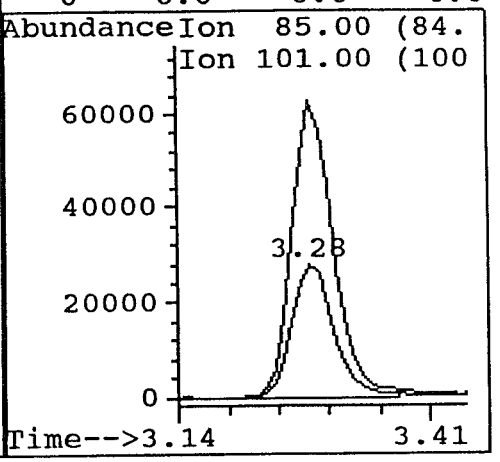




#10
FREON 113
Concen: 103.62 ppb m
RT: 3.28 min Scan# 240
Delta R.T. -0.03 min
Lab File: Y5737.D
Acq: 24 Jan 100 2:51 pm

Tgt Ion:85 Resp: 85112

Ion	Ratio	Lower	Upper
85	100		
101	225.9	168.1	280.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0



BA
1/25

0112

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5738.D
Acq On : 24 Jan 100 3:28 pm
Sample : 150PPB
Misc :
Quant Time: Jan 24 15:56 19100

Vial: 93
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.78	168	259150	50.00	ppb	-0.03
34) 1,4 - Difluorobenzene	7.91	114	386107	50.00	ppb	-0.03
51) d5 - Chlorobenzene	12.89	117	360919	50.00	ppb	-0.04
73) d4 - Dichlorobenzene	17.28	152	200683	50.00	ppb	-0.03
System Monitoring Compounds						%Recovery
35) surr4,Dibrflmethane	6.65	113	124558	49.98	ppb	99.96%
57) surr3,Toluene-d8	10.36	98	457037	49.15	ppb	98.31%
58) surr2,bfb	15.08	95	209779	50.45	ppb	100.91%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.57	85	388434	159.88	ppb	99
3) Chloromethane	1.74	50	264850	152.79	ppb	99
4) Vinyl Chloride	1.85	62	311390	160.21	ppb	100
5) Bromomethane	2.19	94	189396	181.56	ppb	99
6) Chloroethane	2.31	64	168029	151.71	ppb	99
7) Trichlorofluoromethane	2.61	101	411244	154.71	ppb	99
8) Diethyl Ether	2.99	59	244869	154.68	ppb	93
9) Acrolein	3.12	56	166100	717.94	ppb	98
10) FREON 113	3.29	85	133556	158.74	ppb	95
11) 1,1-Diclethene	3.25	96	256167	158.55	ppb	97
12) Acetone	3.33	43	71770	80.92	ppb	98
13) Iodomethane	3.43	127	172051	152.11	ppb	100
14) Carbon Disulfide	3.51	76	963787	153.93	ppb	99
15) Acetonitrile	3.70	41	108915	712.63	ppb	99
16) Allyl Chloride	3.76	76	159889	163.90	ppb	98
17) Methylene Chloride	3.94	84	300147	154.74	ppb	96
18) TBA	4.19	59	504851	3122.71	ppb	100
19) Acrylonitrile	4.29	53	479059	738.63	ppb	100
20) Methyl-t-Butyl Ether	4.38	73	812880	158.25	ppb	99
21) trans-1,2-Dichloroethene	4.35	96	293322	159.51	ppb	99
22) 1,1-Diclethane	4.97	63	503836	154.05	ppb	99
23) Vinyl Acetate	5.10	43	522963	163.42	ppb	99
24) 2-Chloro-1,3-butadiene	5.12	53	492818	159.00	PPB	98
25) 2,2-Dichloropropane	5.87	77	424552	162.63	ppb	99
26) 2-Butanone	5.92	43	89148	97.17	ppb	100
27) cis-1,2-Dichloroethene	5.88	96	326188	151.99	ppb	98
28) Propionitrile	5.98	54	202694	774.45	ppb	99
29) Methacrylonitrile	6.23	67	137560	156.76	ppb	92
30) Bromochloromethane	6.24	128	164050	153.12	ppb	99
31) Chloroform	6.40	83	545372	153.88	ppb	98
32) Tetrahydrofuran	6.32	42	79682	136.43	ppb	99
33) 1,1,1-Trichloroethane	6.66	97	451262	155.96	ppb	99
36) Carbontetrachloride	6.92	117	374125	156.42	ppb	98

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

0113

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5738.D
Acq On : 24 Jan 100 3:28 pm
Sample : 150PPB
Misc :
Quant Time: Jan 24 15:56 19100

Vial: 93
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 1,1-Dichloropropene	6.93	75	395195	160.33	ppb	97
38) Iso-Butyl Alcohol	7.24	43	204265	2993.39	ppb	97
39) Benzene	7.24	78	1130440	153.54	ppb	100
40) 1,2-Dichloroethane	7.27	62	470239	148.33	ppb	99
41) N-Heptane	7.78	43	306000	166.35	ppb	99
42) Trichloroethene	8.32	95	343351	150.07	ppb	99
43) 1,2-Diclpropane	8.66	63	313726	154.95	ppb	97
44) Methyl Methacrylate	8.94	69	254558	159.92	ppb	94
45) 1,4-Dioxane	8.91	88	67511	3061.24	ppb	94
46) Dibromomethane	8.84	93	214504	153.76	ppb	97
47) Bromodichloromethane	9.15	83	436332	153.84	ppb	99
48) 2-Nitropropane	9.51	43	222048	169.67	ppb	99
49) 2-Chloroethylvinyl Ether	9.70	63	175789	151.57	ppb	97
50) cis-1,3-Dichloropropene	9.91	75	507289	161.93	ppb	100
52) 4-Methyl-2-Pentanone	10.20	43	280314	138.77	ppb	98
53) Toluene	10.47	91	1302749	150.76	ppb	99
54) trans-1,3-Dichloropropene	10.88	75	518536	159.65	ppb	100
55) Ethyl Methacrylate	11.11	69	499674	154.25	ppb	99
56) 1,1,2-Trichloroethane	11.18	83	269208	149.73	ppb	99
59) Tetrachloroethene	11.43	166	353845	152.80	ppb	99
60) 2-Hexanone	11.66	43	168097	114.49	ppb	99
61) 1,3-Dichloropropane	11.46	76	530727	152.62	ppb	97
62) Dibromochloromethane	11.86	129	368327	155.52	ppb	97
63) 1,2-Dibromoethane	12.02	107	354534	155.60	ppb	99
64) Chlorobenzene	12.94	112	873420	152.22	ppb	99
65) 1,1,1,2-Tetrachloroethane	13.10	131	328200	150.86	ppb	99
66) Ethylbenzene	13.18	91	1511051	152.74	ppb	100
67) (m+p)Xylene	13.40	106	1068141	304.12	ppb	96
68) o-Xylene	14.12	106	555593	155.17	ppb	96
69) Styrene	14.15	104	983697	155.60	ppb	96
70) Bromoform	14.44	173	289625	157.15	ppb	98
71) Isopropylbenzene	14.83	105	1449604	157.02	ppb	100
72) Cyclohexanone	14.92	55	95912	259.58	ppb	94
74) 1,1,2,2-Tetrachloroethane	15.39	83	427849	150.84	ppb	99
75) Trans-1,4-Dichloro-2-buten	15.50	53	145296	154.01	ppb	99
76) 1,2,3-Trichloropropane	15.44	110	128139	146.19	ppb	96
77) n-Propylbenzene	15.61	91	1729238	157.40	ppb	99
78) Bromobenzene	15.33	156	415488	150.40	ppb	96
79) 1,3,5-Trimethylbenzene	15.96	105	1247289	155.30	ppb	100
80) 2-Chlorotoluene	15.73	91	1061909	149.23	ppb	98
81) 4-Chlorotoluene	15.94	91	1308468	153.03	ppb	100
82) tert-Butylbenzene	16.56	119	997114	158.25	ppb	99
83) 1,2,4-Trimethylbenzene	16.65	105	1271721	155.54	ppb	96
84) sec-Butylbenzene	16.99	105	1454370	160.84	ppb	99

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

0114

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5738.D
Acq On : 24 Jan 100 3:28 pm
Sample : 150PPB
Misc :
Quant Time: Jan 24 15:56 19100

Vial: 93
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

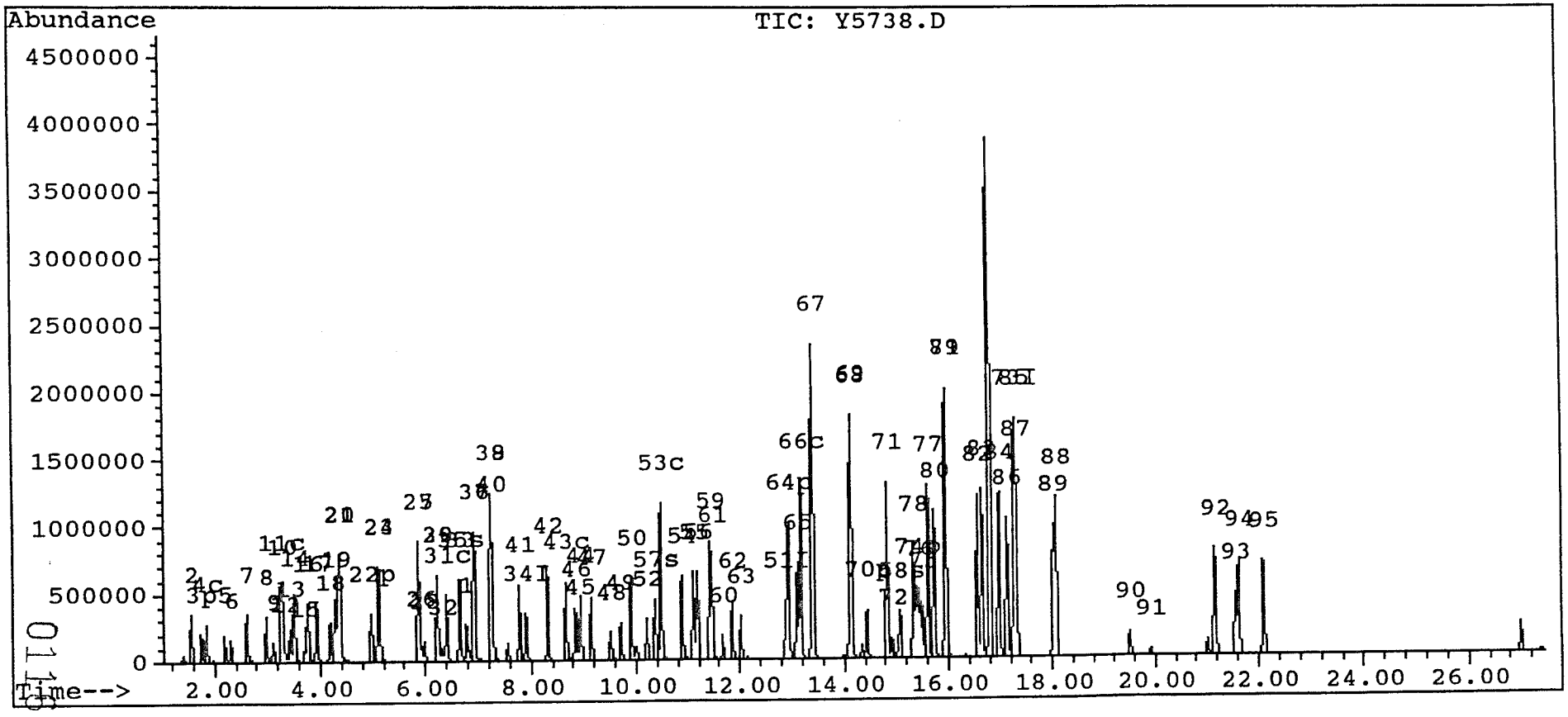
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) p-Isopropyltoluene	17.29	119	1169443	157.72	ppb	98
86) 1,3-Dclbenz	17.14	146	759961	152.01	ppb	99
87) 1,4-Dclbenz	17.32	146	762467	148.67	ppb	99
88) n-Butylbenzene	18.07	91	1134886	162.03	ppb	98
89) 1,2-Dclbenz	18.02	146	730130	149.24	ppb	100
90) 1,2-Dibromo-3-chloropropan	19.52	157	94654	157.41	ppb	95
91) Nitrobenzene	19.91	77	44701	389.45	ppb	98
92) 1,2,4-Tcbenzene	21.17	180	491650	153.82	ppb	98
93) Hexachlorobt	21.55	225	177972	161.35	ppb	98
94) Naphthalen	21.62	128	1078002	151.54	ppb	99
95) 1,2,3-Tclbenzene	22.11	180	441751	150.84	ppb	97

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5738.D
Acq On : 24 Jan 100 3:28 pm
Sample : 150PPB
Misc :
Quant Time: Jan 24 15:56 19100

Vial: 93
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration



Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5739.D
Acq On : 24 Jan 100 4:05 pm
Sample : 200PPB
Misc :
Quant Time: Jan 24 16:33 19100

Vial: 94
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.78	168	256920	50.00	ppb	-0.03
34) 1,4 - Difluorobenzene	7.91	114	387882	50.00	ppb	-0.04
51) d5 - Chlorobenzene	12.89	117	361051	50.00	ppb	-0.04
73) d4 - Dichlorobenzene	17.27	152	193315	50.00	ppb	-0.04
System Monitoring Compounds						%Recovery
35) surr4,Dibrflmethane	6.65	113	126207	50.41	ppb	100.82%
57) surr3,Toluene-d8	10.36	98	459048	49.35	ppb	98.71%
58) surr2,bfb	15.08	95	210228	50.54	ppb	101.08%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.57	85	492967	204.67	ppb	100
3) Chloromethane	1.74	50	349914	203.61	ppb	100
4) Vinyl Chloride	1.85	62	380010	197.21	ppb	100
5) Bromomethane	2.18	94	235547	227.76	ppb	97
6) Chloroethane	2.31	64	218782	199.25	ppb	98
7) Trichlorofluoromethane	2.61	101	529851	201.07	ppb	97
8) Diethyl Ether	2.98	59	323188	205.93	ppb	93
9) Acrolein	3.12	56	224261	977.74	ppb	97
11) 1,1-Diclethene	3.25	96	333490	208.20	ppb	97
12) Acetone	3.33	43	103492	117.70	ppb	96
13) Iodomethane	3.43	127	227502	202.88	ppb	99
14) Carbon Disulfide	3.51	76	1305412	210.31	ppb	100
15) Acetonitrile	3.70	41	139829	922.84	ppb	95
16) Allyl Chloride	3.77	76	202619	209.50	ppb	94
17) Methylene Chloride	3.94	84	394535	205.16	ppb	98
18) TBA	4.19	59	668466	4170.63	ppb	99
19) Acrylonitrile	4.29	53	663575	1032.01	ppb	100
20) Methyl-t-Butyl Ether	4.38	73	1088439	213.73	ppb	99
21) trans-1,2-Dichloroethene	4.35	96	382743	209.94	ppb	99
22) 1,1-Diclethane	4.97	63	662011	204.16	ppb	100
23) Vinyl Acetate	5.10	43	655461	206.60	ppb	99
24) 2-Chloro-1,3-butadiene	5.12	53	644562	209.76	PPB	98
25) 2,2-Dichloropropane	5.87	77	543210	209.88	ppb	100
26) 2-Butanone	5.92	43	127132	139.77	ppb	99
27) cis-1,2-Dichloroethene	5.88	96	434064	204.01	ppb	98
28) Propionitrile	5.98	54	265323	1022.55	ppb	100
29) Methacrylonitrile	6.23	67	188423	216.59	ppb	89
30) Bromochloromethane	6.23	128	216605	203.93	ppb	99
31) Chloroform	6.40	83	717693	204.26	ppb	99
32) Tetrahydrofuran	6.32	42	107396	185.48	ppb	98
33) 1,1,1-Trichloroethane	6.66	97	593642	206.94	ppb	98
36) Carbontetrachloride	6.92	117	467876	194.72	ppb	99
37) 1,1-Dichloropropene	6.93	75	505681	204.22	ppb	97

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

0117

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5739.D
Acq On : 24 Jan 100 4:05 pm
Sample : 200PPB
Misc :
Quant Time: Jan 24 16:33 19100

Vial: 94
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Iso-Butyl Alcohol	7.24	43	263806	3848.24	ppb	99
39) Benzene	7.24	78	1492425	201.78	ppb	100
40) 1,2-Dichloroethane	7.27	62	613120	192.51	ppb	99
41) N-Heptane	7.78	43	374893	202.87	ppb	98
42) Trichloroethene	8.32	95	457185	198.91	ppb	98
43) 1,2-Diclpropane	8.66	63	414786	203.92	ppb	97
44) Methyl Methacrylate	8.95	69	334942	209.46	ppb	93
45) 1,4-Dioxane	8.91	88	87622	3954.98	ppb	93
46) Dibromomethane	8.84	93	275261	196.41	ppb	96
47) Bromodichloromethane	9.15	83	580600	203.76	ppb	100
48) 2-Nitropropane	9.51	43	292078	222.16	ppb	99
49) 2-Chloroethylvinyl Ether	9.70	63	236568	203.04	ppb	100
50) cis-1,3-Dichloropropene	9.91	75	668388	212.37	ppb	99
52) 4-Methyl-2-Pentanone	10.20	43	384659	190.35	ppb	100
53) Toluene	10.47	91	1685722	195.01	ppb	100
54) trans-1,3-Dichloropropene	10.88	75	685024	210.83	ppb	100
55) Ethyl Methacrylate	11.10	69	649433	200.41	ppb	100
56) 1,1,2-Trichloroethane	11.18	83	349944	194.56	ppb	98
59) Tetrachloroethene	11.42	166	438461	189.27	ppb	97
60) 2-Hexanone	11.67	43	233647	159.08	ppb	96
61) 1,3-Dichloropropane	11.46	76	682074	196.06	ppb	98
62) Dibromochloromethane	11.86	129	475233	200.59	ppb	96
63) 1,2-Dibromoethane	12.02	107	453933	199.16	ppb	98
64) Chlorobenzene	12.94	112	1119734	195.08	ppb	100
65) 1,1,1,2-Tetrachloroethane	13.11	131	428496	196.89	ppb	98
66) Ethylbenzene	13.18	91	1964979	198.55	ppb	99
67) (m+p)Xylene	13.40	106	1352303	384.89	ppb	93
68) o-Xylene	14.12	106	694917	194.01	ppb	99
69) Styrene	14.15	104	1238823	195.88	ppb	97
70) Bromoform	14.44	173	377412	204.71	ppb	100
71) Isopropylbenzene	14.84	105	1824985	197.61	ppb	99
72) Cyclohexanone	14.92	55	128584	347.87	ppb	96
74) 1,1,2,2-Tetrachloroethane	15.39	83	552744	202.30	ppb	97
75) Trans-1,4-Dichloro-2-buten	15.49	53	187599	206.43	ppb	96
76) 1,2,3-Trichloropropane	15.44	110	164147	194.41	ppb	98
77) n-Propylbenzene	15.61	91	2164698	204.54	ppb	99
78) Bromobenzene	15.33	156	530647	199.41	ppb	96
79) 1,3,5-Trimethylbenzene	15.96	105	1541161	199.21	ppb	99
80) 2-Chlorotoluene	15.73	91	1376745	200.85	ppb	100
81) 4-Chlorotoluene	15.94	91	1638726	198.97	ppb	100
82) tert-Butylbenzene	16.57	119	1217633	200.61	ppb	99
83) 1,2,4-Trimethylbenzene	16.66	105	1575184	199.99	ppb	99
84) sec-Butylbenzene	16.99	105	1796816	206.29	ppb	99
85) p-Isopropyltoluene	17.28	119	1423921	199.36	ppb	100

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

0118

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5739.D
Acq On : 24 Jan 100 4:05 pm
Sample : 200PPB
Misc :
Quant Time: Jan 24 16:33 19100

Vial: 94
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

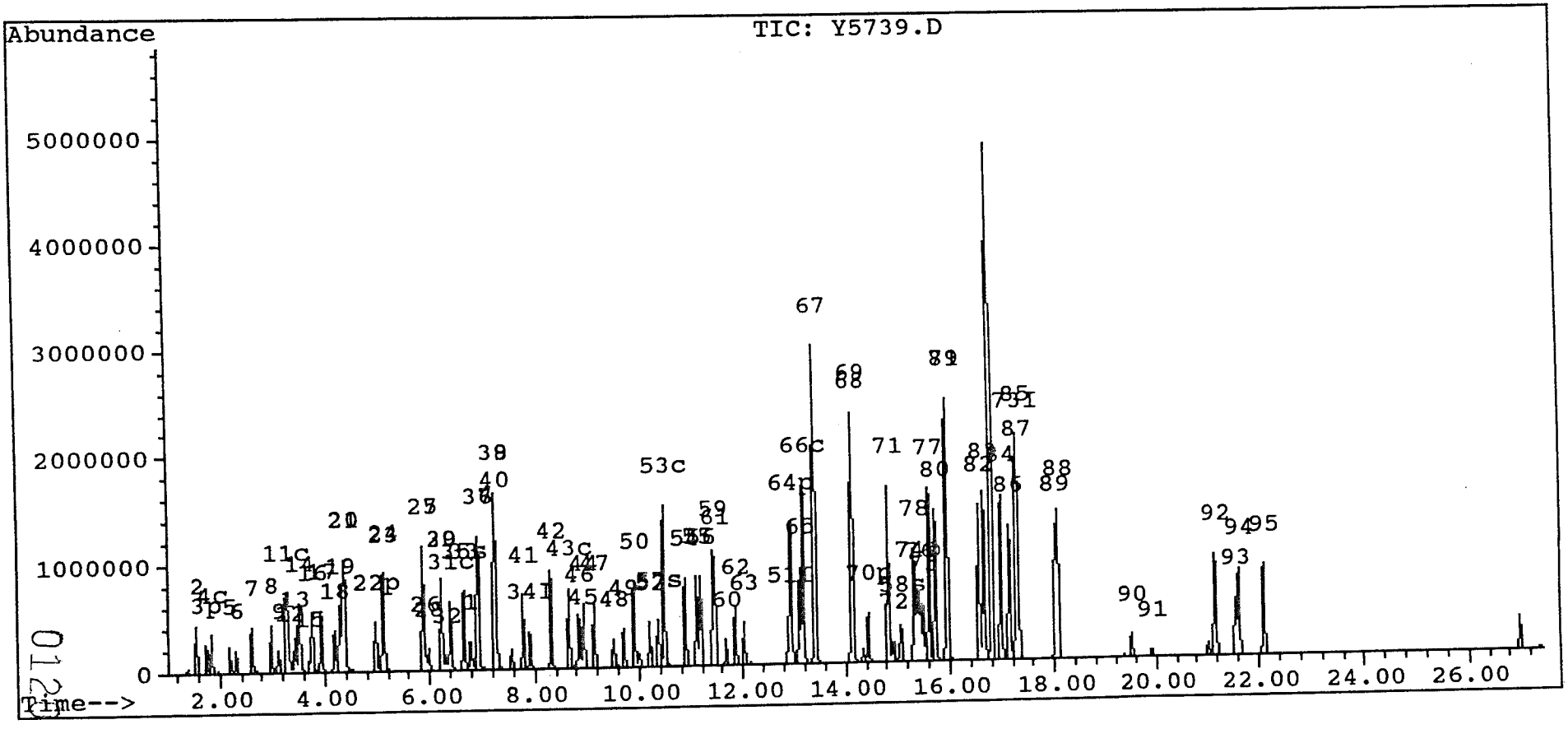
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86) 1,3-Dclbenz	17.15	146	952466	197.78	ppb	99
87) 1,4-Dclbenz	17.32	146	953611	193.03	ppb	98
88) n-Butylbenzene	18.08	91	1393349	206.52	ppb	99
89) 1,2-Dclbenz	18.02	146	924964	196.27	ppb	100
90) 1,2-Dibromo-3-chloropropan	19.53	157	120965	208.84	ppb	97
91) Nitrobenzene	19.91	77	62228	562.82	ppb	96
92) 1,2,4-Tcbenzene	21.17	180	593595	192.79	ppb	99
93) Hexachlorobt	21.55	225	209954	197.61	ppb	99
94) Naphthalen	21.62	128	1279629	186.74	ppb	99
95) 1,2,3-Tclbenzene	22.11	180	541378	191.90	ppb	100

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5739.D
Acq On : 24 Jan 100 4:05 pm
Sample : 200PPB
Misc :
Quant Time: Jan 24 16:33 19100

Vial: 94
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 09:24:10 2000
Response via : Multiple Level Calibration



Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9019.D Vial: 3
Acq On : 27 Jan 100 10:19 am Operator: HERRING
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Wed Jan 26 14:17:39 2000
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		Pentafluorobenzene	1.000	1.000	0.0	68	-0.03
2		Dichlorodifluoromethane	1.059	1.124	-6.1	69	0.00
3	p	Chloromethane	1.071	1.070	0.0	65	-0.02
4	c	Vinyl Chloride	0.829	0.860	-3.7	67	-0.02
5		Bromomethane	0.389	0.375	3.6	63	-0.02
6		Chloroethane	0.503	0.460	8.4	60	-0.02
7		Trichlorofluoromethane	0.905	0.879	2.9	65	-0.02
8		Diethyl Ether	0.515	0.443	13.9	57	-0.03
9		Acrolein	0.080	0.084	-5.1	73	-0.02
10		FREON 113	0.263	0.261	1.0	67	-0.02
11	c	1,1-Diclethene	0.511	0.455	11.0	58	-0.02
12		Acetone	0.570	0.633	-11.2	73	-0.02
13		Iodomethane	0.789	0.710	10.0	60	-0.03
14		Carbon Disulfide	2.667	2.587	3.0	65	-0.03
[illegible]		Acetonitrile	0.018	0.021	-17.1	81	-0.03
16		Allyl Chloride	0.333	0.282	15.3	59	-0.03
17		Methylene Chloride	0.696	0.666	4.4	65	-0.03
18		TBA	0.117	0.120	-2.9	75	-0.03
19		Methyl-t-Butyl Ether	1.582	1.373	13.3	60	-0.03
20		Acrylonitrile	0.280	0.270	3.4	66	-0.03
21		trans-1,2-Dichloroethene	0.552	0.505	8.5	61	-0.03
22	p	1,1-Diclethane	1.388	1.233	11.2	59	-0.03
23		Vinyl Acetate	0.156	0.156	0.6	68	-0.02
24		2-Chloro-1,3-butadiene	1.111	1.056	5.0	62	-0.03
25		2,2-Dichloropropane	0.977	0.902	7.7	64	-0.03
26		2-Butanone	0.609	0.621	-1.9	78	-0.02
27		cis-1,2-Dichloroethene	0.690	0.617	10.6	59	-0.03
28		Propionitrile	0.108	0.107	1.1	70	-0.03
29		Methacrylonitrile	0.307	0.279	9.0	65	-0.03
30		Bromochloromethane	0.411	0.373	9.1	61	-0.03
31		Tetrahydrofuran	0.344	0.326	5.3	66	-0.03
32	c	Chloroform	1.262	1.166	7.6	62	-0.03
33		1,1,1-Trichloroethane	0.916	0.875	4.4	65	-0.03
34		1,4-Difluorobenzene	1.000	1.000	0.0	67	-0.03
35	s	surr4,Dibrflmethane	0.380	0.378	0.7	65	-0.03
36		Carbontetrachloride	0.403	0.407	-0.8	65	-0.03
37		1,1-Dichloropropene	0.447	0.437	2.1	63	-0.03
38		Iso-Butyl Alcohol	0.031	0.036	-13.7	79	-0.03
[illegible]		Benzene	1.495	1.432	4.2	61	-0.03
[illegible]		1,2-Dichloroethane	0.666	0.656	1.6	66	-0.03
41		Trichloroethene	0.386	0.382	1.0	64	-0.03

0121

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9019.D
Acq On : 27 Jan 100 10:19 am
Sample : CCV
Misc :

Vial: 3
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Wed Jan 26 14:17:39 2000
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)
42	c	1,2-Diclpropane	0.496	0.483	2.6	64	-0.04
43		Methyl Methacrylate	0.353	0.359	-1.8	69	-0.03
44		Dibromomethane	0.303	0.292	3.6	65	-0.03
45		Bromodichloromethane	0.592	0.562	5.0	64	-0.03
46		2-Chloroethylvinyl Ether	0.209	0.197	5.9	64	-0.04
47		cis-1,3-Dichloropropene	0.693	0.661	4.6	62	-0.03
48		4-Methyl-2-Pentanone	0.817	0.827	-1.2	74	-0.04
49	c	Toluene	1.652	1.713	-3.7	67	-0.03
50		trans-1,3-Dichloropropene	0.721	0.726	-0.6	66	-0.03
51		Ethyl Methacrylate	0.796	0.809	-1.7	68	-0.03
52		1,1,2-Trichloroethane	0.391	0.386	1.3	66	-0.04
53	s	surr3,Toluene-d8	1.201	1.212	-0.9	66	-0.03
54	s	surr2,bfb	0.565	0.595	-5.4	69	-0.04
		d5-Chlorobenze	1.000	1.000	0.0	70	-0.04
56		Tetrachloroethene	0.316	0.332	-5.1	70	-0.04
57		2-Hexanone	0.611	0.649	-6.1	76	-0.05
58		1,3-Dichloropropane	0.731	0.689	5.6	64	-0.04
59		Dibromochloromethane	0.501	0.476	5.1	66	-0.03
60		1,2-Dibromoethane	0.464	0.456	1.8	67	-0.04
61	p	Chlorobenzene	1.151	1.176	-2.1	70	-0.04
62		1,1,1,2-Tetrachloroethane	0.404	0.398	1.4	68	-0.04
63	c	Ethylbenzene	1.863	1.942	-4.2	68	-0.04
64		(m+p)Xylene	0.675	0.726	-7.5	72	-0.03
65		o-Xylene	0.700	0.733	-4.7	70	-0.03
66		Styrene	1.174	1.243	-5.8	71	-0.03
67	p	Bromoform	0.331	0.332	-0.2	71	-0.04
68		Isopropylbenzene	1.685	1.824	-8.3	71	-0.03
69		d4-1,4-Dichlorobenzene	1.000	1.000	0.0	70	-0.03
70	p	1,1,2,2-Tetrachloroethane	1.553	1.587	-2.2	71	-0.04
71		1,2,3-Trichloropropane	0.383	0.393	-2.6	74	-0.03
72		Trans-1,4-Dichloro-2-Butene	0.560	0.611	-9.0	77	-0.04
73		n-Propylbenzene	4.883	5.410	-10.8	74	-0.04
74		Bromobenzene	0.951	0.941	1.1	67	-0.04
75		1,3,5-Trimethylbenzene	2.904	3.141	-8.1	73	-0.04
76		2-Chlorotoluene	2.927	3.093	-5.7	71	-0.04
77		4-Chlorotoluene	3.281	3.556	-8.4	74	-0.04
78		tert-Butylbenzene	2.523	2.659	-5.4	71	-0.04
		1,2,4-Trimethylbenzene	2.861	3.134	-9.5	74	-0.04
80		sec-Butylbenzene	4.143	4.612	-11.3	74	-0.04
81		p-Isopropyltoluene	3.025	3.416	-12.9	77	-0.04

0122

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9019.D Vial: 3
Acq On : 27 Jan 100 10:19 am Operator: HERRING
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Wed Jan 26 14:17:39 2000
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)
82	1,3-Dclbenz	1.655	1.743	-5.3	73	-0.04
83	1,4-Dclbenz	1.685	1.785	-5.9	74	-0.03
84	n-Butylbenzene	3.217	3.786	-17.7	80	-0.04
85	1,2-Dclbenz	1.629	1.686	-3.5	71	-0.04
86	1,2-Dibromo-3-chloropropane	0.255	0.265	-3.8	75	-0.04
87	Nitrobenzene	0.133	0.124	6.6	72	-0.04
88	1,2,4-Tcbenzene	0.852	0.987	-15.9	84	-0.04
89	Hexachlorobt	0.474	0.542	-14.5	79	-0.04
90	Naphthalen	2.539	2.591	-2.0	75	-0.04
91	1,2,3-Tclbenzene	0.876	0.951	-8.6	77	-0.04
92	TOTAL XYLENE	0.000	0.000	0.0	0#	-0.70#

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9019.D
Acq On : 27 Jan 100 10:19 am
Sample : CCV
Misc :
Quant Time: Jan 27 10:52 19100

Vial: 3
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Wed Jan 26 14:17:39 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	9.48	168	78413	50.00	ppb	-0.03
34) 1,4-Difluorobenzene	10.81	114	142235	50.00	ppb	-0.03
55) d5-Chlorobenze	16.28	117	157067	50.00	ppb	-0.04
69) d4-1,4-Dichlorobenzene	20.96	152	73212	50.00	ppb	-0.03
System Monitoring Compounds						%Recovery
35) surr4,Dibrflmethane	9.41	113	53713	49.66	ppb	99.32%
53) surr3,Toluene-d8	13.52	98	172369	50.45	ppb	100.90%
54) surr2,bfb	18.60	95	84638	52.69	ppb	105.38%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.70	85	88115	53.06	ppb	98
3) Chloromethane	3.00	50	83926	49.98	ppb	100
4) Vinyl Chloride	3.20	62	67435	51.87	ppb	98
5) Bromomethane	3.78	94	29395	48.21	ppb	90
6) Chloroethane	3.98	64	36099	45.79	ppb	94
7) Trichlorofluoromethane	4.46	101	68899	48.53	ppb	98
8) Diethyl Ether	4.97	59	34764	43.06	ppb	96
9) Acrolein	5.19	56	32994	262.87	ppb	99
10) FREON 113	5.41	85	20428	49.48	ppb	97
11) 1,1-Diclethene	5.40	96	35687	44.52	ppb	99
12) Acetone	5.47	43	49650	55.59	ppb	97
13) Iodomethane	5.66	142	55651	44.98	ppb	97
14) Carbon Disulfide	5.80	76	202837	48.50	ppb	99
15) Acetonitrile	5.95	39	8067	292.84	ppb	67
16) Allyl Chloride	6.05	76	22146	42.36	ppb	97
17) Methylene Chloride	6.26	84	52207	47.80	ppb	98
18) TBA	6.45	59	188276	1028.90	ppb	97
19) Methyl-t-Butyl Ether	6.77	73	107626	43.37	ppb	94
20) Acrylonitrile	6.68	53	105990	241.48	ppb	99
21) trans-1,2-Dichloroethene	6.77	96	39610	45.76	ppb	96
22) 1,1-Diclethane	7.52	63	96703	44.42	ppb	96
23) Vinyl Acetate	7.61	42	12196	49.70	ppb	96
24) 2-Chloro-1,3-butadiene	7.70	53	82805	47.52	ppb	96
25) 2,2-Dichloropropane	8.57	77	70710	46.17	ppb	100
26) 2-Butanone	8.57	43	48693	50.94	ppb	95
27) cis-1,2-Dichloroethene	8.57	96	48378	44.72	ppb	98
28) Propionitrile	8.65	54	50215	296.64	ppb	99
29) Methacrylonitrile	8.94	67	21905	45.51	ppb	97
30) Bromochloromethane	8.99	128	29285	45.45	ppb	93
31) Tetrahydrofuran	9.08	42	25542	47.37	ppb	95
32) Chloroform	9.13	83	91428	46.19	ppb	99
33) 1,1,1-Trichloroethane	9.48	97	68624	47.79	ppb	95
36) Carbontetrachloride	9.79	117	57821	50.42	ppb	99

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9019.D
Acq On : 27 Jan 100 10:19 am
Sample : CCV
Misc :
Quant Time: Jan 27 10:52 19100

Vial: 3
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Wed Jan 26 14:17:39 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 1,1-Dichloropropene	9.77	75	62199	48.94	ppb	96
38) Iso-Butyl Alcohol	9.92	43	101247	1137.09	ppb	99
39) Benzene	10.14	78	203692	47.91	ppb	99
40) 1,2-Dichloroethane	10.15	62	93321	49.22	ppb	99
41) Trichloroethene	11.30	95	54363	49.49	ppb	99
42) 1,2-Diclpropane	11.69	63	68770	48.69	ppb	98
43) Methyl Methacrylate	11.87	69	51037	50.88	ppb	94
44) Dibromomethane	11.91	93	41476	48.19	ppb	99
45) Bromodichloromethane	12.19	83	79964	47.51	ppb	98
46) 2-Chloroethylvinyl Ether	12.70	63	27997	47.03	ppb	96
47) cis-1,3-Dichloropropene	13.00	75	94036	47.69	ppb	97
48) 4-Methyl-2-Pentanone	13.25	43	117605	50.61	ppb	98
49) Toluene	13.65	91	243602	51.85	ppb	99
50) trans-1,3-Dichloropropene	14.02	75	103225	50.30	ppb	99
51) Ethyl Methacrylate	14.17	69	115045	50.83	ppb	98
52) 1,1,2-Trichloroethane	14.37	83	54839	49.33	ppb	97
56) Tetrachloroethene	14.71	166	52187	52.56	ppb	96
57) 2-Hexanone	14.82	43	101898	53.07	ppb	99
58) 1,3-Dichloropropane	14.70	76	108273	47.18	ppb	98
59) Dibromochloromethane	15.15	129	74764	47.47	ppb	99
60) 1,2-Dibromoethane	15.39	107	71613	49.10	ppb	97
61) Chlorobenzene	16.34	112	184686	51.07	ppb	99
62) 1,1,1,2-Tetrachloroethane	16.48	131	62508	49.28	ppb	97
63) Ethylbenzene	16.54	91	304976	52.11	ppb	98
64) (m+p)Xylene	16.77	106	227916	107.45	ppb	98
65) o-Xylene	17.56	106	115102	52.37	ppb	95
66) Styrene	17.58	104	195182	52.91	ppb	99
67) Bromoform	17.96	173	52158	50.10	ppb	95
68) Isopropylbenzene	18.29	105	286527	54.13	ppb	99
70) 1,1,2,2-Tetrachloroethane	18.85	83	116192	51.10	ppb	97
71) 1,2,3-Trichloropropane	18.96	110	28741	51.29	ppb	91
72) Trans-1,4-Dichloro-2-Buten	18.96	53	44710	54.52	ppb	87
73) n-Propylbenzene	19.11	91	396104	55.40	ppb	98
74) Bromobenzene	18.93	156	68887	49.47	ppb	95
75) 1,3,5-Trimethylbenzene	19.46	105	229936	54.07	ppb	100
76) 2-Chlorotoluene	19.31	91	226441	52.84	ppb	99
77) 4-Chlorotoluene	19.52	91	260311	54.18	ppb	98
78) tert-Butylbenzene	20.13	119	194684	52.70	ppb	99
79) 1,2,4-Trimethylbenzene	20.23	105	229452	54.76	ppb	100
80) sec-Butylbenzene	20.58	105	337674	55.66	ppb	100
81) p-Isopropyltoluene	20.86	119	250081	56.45	ppb	98
82) 1,3-Dclbenz	20.83	146	127608	52.67	ppb	98
83) 1,4-Dclbenz	21.01	146	130652	52.97	ppb	98
84) n-Butylbenzene	21.70	91	277181	58.84	ppb	98

0125

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9019.D
Acq On : 27 Jan 100 10:19 am
Sample : CCV
Misc :
Quant Time: Jan 27 10:52 19100

Vial: 3
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Wed Jan 26 14:17:39 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) 1,2-Dclbenz	21.78	146	123440	51.75 ppb	99
86) 1,2-Dibromo-3-chloropropan	23.36	157	19421	51.92 ppb	97
87) Nitrobenzene	23.78	77	18148	93.38 ppb	97
88) 1,2,4-Tcbenzene	25.09	180	72269	57.96 ppb	98
89) Hexachlorobt	25.43	225	39702	57.26 ppb	95
90) Naphthalen	25.61	128	189671	51.01 ppb	100
91) 1,2,3-Tclbenzene	26.14	180	69651	54.29 ppb	95

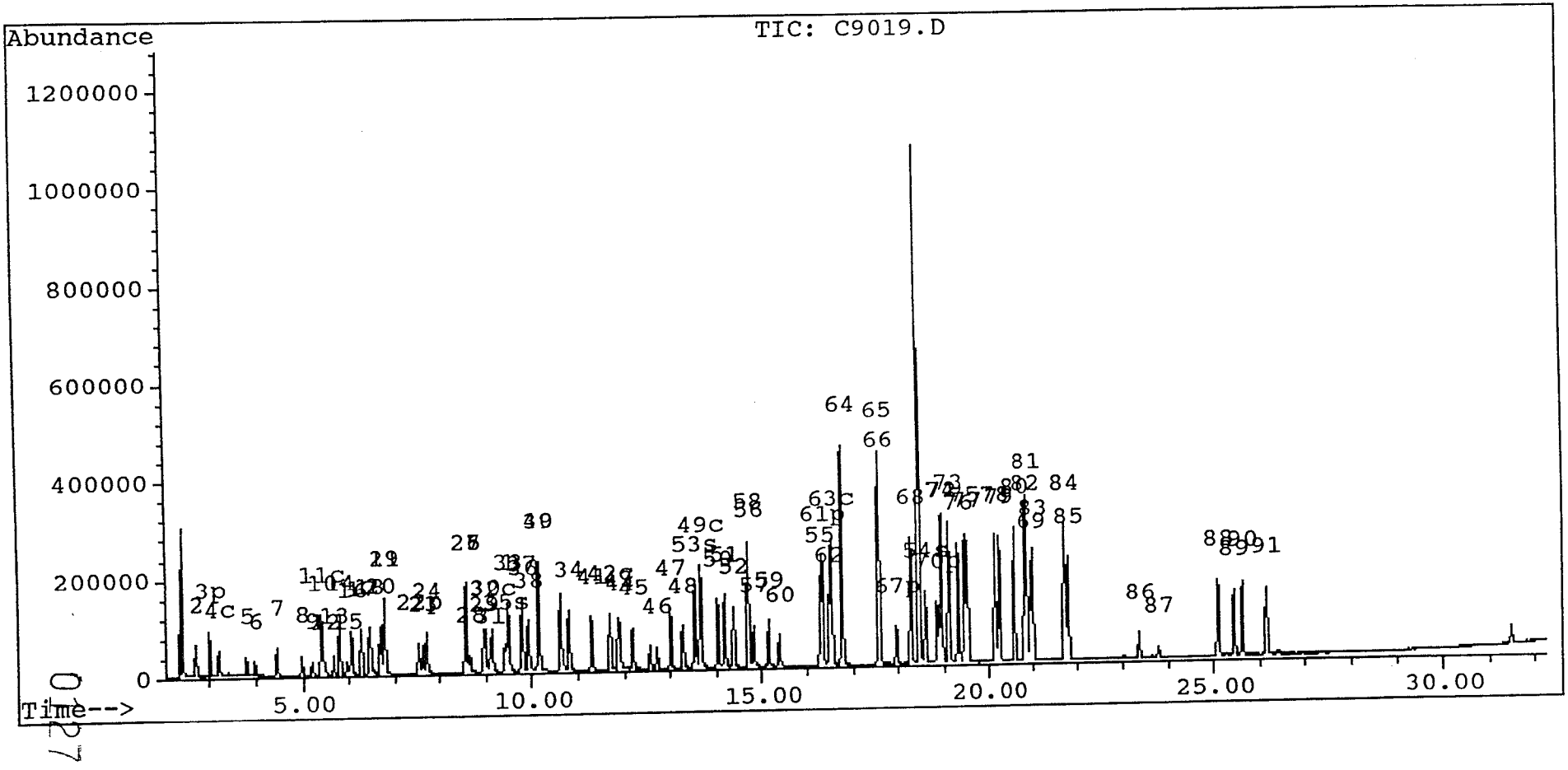
0126

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

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9019.D
Acq On : 27 Jan 100 10:19 am
Sample : CCV
Misc :
Quant Time: Jan 27 10:52 19100

Vial: 3
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Wed Jan 26 14:17:39 2000
Response via : Multiple Level Calibration



Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5789.D
Acq On : 27 Jan 100 10:50 am
Sample : CCV
Misc :

Vial: 44
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
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		Pentafluorobenzene	1.000	1.000	0.0	117	-0.01
2		Dichlorodifluoromethane	0.469	0.409	12.9	98	-0.01
3	p	Chloromethane	0.336	0.299	10.9	103	0.00
4	c	Vinyl Chloride	0.377	0.338	10.5	101	0.00
5		Bromomethane	0.202	0.193	4.8	136	0.00
6		Chloroethane	0.216	0.193	10.3	105	0.00
7		Trichlorofluoromethane	0.523	0.480	8.2	102	0.00
8		Diethyl Ether	0.312	0.278	10.9	105	-0.01
9		Acrolein	0.045	0.044	2.0	115	-0.01
10		FREON 113	0.168	0.153	8.8	101	-0.01
11	c	1,1-Diclethene	0.321	0.303	5.5	106	0.00
12		Acetone	0.097	0.122	-25.8#	145	-0.01
13		Iodomethane	0.237	0.236	0.3	101	-0.01
14		Carbon Disulfide	1.289	1.265	1.9	111	-0.01
15		Acetonitrile	0.026	0.019	27.1#	98	0.00
16		Allyl Chloride	0.194	0.175	9.5	108	-0.01
17		Methylene Chloride	0.382	0.347	9.2	103	-0.01
18		TBA	0.031	0.027	13.3	107	-0.02
19		Acrylonitrile	0.126	0.113	10.3	109	-0.01
20		Methyl-t-Butyl Ether	1.045	0.919	12.1	103	-0.01
21		trans-1,2-Dichloroethene	0.364	0.329	9.5	103	-0.01
22	p	1,1-Diclethane	0.639	0.582	8.8	103	-0.01
23		Vinyl Acetate	0.685	0.797	-16.3	144	-0.01
24		2-Chloro-1,3-butadiene	0.608	0.558	8.3	103	-0.01
25		2,2-Dichloropropane	0.532	0.501	5.8	107	-0.01
26		2-Butanone	0.121	0.167	-38.1#	169	-0.01
27		cis-1,2-Dichloroethene	0.421	0.386	8.3	104	-0.01
28		Propionitrile	0.049	0.047	5.0	116	-0.01
29		Methacrylonitrile	0.174	0.148	14.8	101	-0.02
30		Bromochloromethane	0.209	0.192	8.1	106	-0.01
31	c	Chloroform	0.695	0.635	8.5	107	-0.01
32		Tetrahydrofuran	0.107	0.100	5.8	111	0.00
33		1,1,1-Trichloroethane	0.569	0.533	6.2	104	-0.01
34	I	1,4 - Difluorobenzene	1.000	1.000	0.0	117	-0.01
35	s	surr4,Dibrflmethane	0.322	0.321	0.6	117	-0.01
36		Carbontetrachloride	0.308	0.282	8.5	103	-0.01
37		1,1-Dichloropropene	0.326	0.289	11.4	99	-0.01
38		Iso-Butyl Alcohol	0.008	0.007	10.2	118	-0.01
39		Benzene	0.956	0.865	9.4	108	-0.01
40		1,2-Dichloroethane	0.409	0.371	9.3	106	-0.01
41		N-Heptane	0.271	0.241	11.0	114	-0.01

0128

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5789.D
Acq On : 27 Jan 100 10:50 am
Sample : CCV
Misc :

Vial: 44
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
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)
42		Trichloroethene	0.291	0.258	11.3	99	-0.01
43	c	1,2-Diclpropane	0.262	0.230	12.1	101	-0.01
44		Methyl Methacrylate	0.207	0.186	10.0	106	-0.01
45		1,4-Dioxane	0.003	0.002	12.8	103	-0.01
46		Dibromomethane	0.183	0.164	10.1	105	-0.01
47		Bromodichloromethane	0.365	0.330	9.6	106	-0.01
48		2-Nitropropane	0.170	0.158	7.2	112	-0.01
49		2-Chloroethylvinyl Ether	0.153	0.149	2.1	110	-0.01
50		cis-1,3-Dichloropropene	0.418	0.364	12.9	102	-0.01
51	I	d5 - Chlorobenzene	1.000	1.000	0.0	92	-0.01
52		4-Methyl-2-Pentanone	0.271	0.333	-23.0	111	-0.01
53	c	Toluene	1.197	1.289	-7.7	97	-0.01
54		trans-1,3-Dichloropropene	0.461	0.494	-7.2	99	-0.01
55		Ethyl Methacrylate	0.448	0.472	-5.4	99	-0.01
56		1,1,2-Trichloroethane	0.244	0.255	-4.4	94	-0.01
57	s	surr3,Toluene-d8	1.280	1.590	-24.2	116	-0.01
58	s	surr2,bfb	0.579	0.584	-1.0	92	-0.01
59		Tetrachloroethene	0.322	0.298	7.6	82	-0.01
60		2-Hexanone	0.156	0.177	-13.3	101	-0.01
61		1,3-Dichloropropane	0.485	0.429	11.5	80	-0.01
62		Dibromochloromethane	0.320	0.290	9.6	82	-0.01
63		1,2-Dibromoethane	0.317	0.286	9.7	83	-0.01
64	p	Chlorobenzene	0.801	0.701	12.5	79	-0.01
65		1,1,1,2-Tetrachloroethane	0.293	0.266	9.3	81	-0.02
66	c	Ethylbenzene	1.379	1.244	9.8	80	-0.01
67		(m+p)Xylene	0.494	0.451	8.7	81	-0.01
68		o-Xylene	0.498	0.448	10.0	81	-0.01
69		Styrene	0.883	0.797	9.7	81	-0.01
70	p	Bromoform	0.248	0.226	8.9	83	-0.01
71		Isopropylbenzene	1.301	1.189	8.6	81	-0.01
72		Cyclohexanone	0.005	0.034	-655.8#	726#	-0.01
73	I	d4 - Dichlorobenzene	1.000	1.000	0.0	95	-0.01
74	p	1,1,2,2-Tetrachloroethane	0.686	0.604	12.0	85	-0.01
75		Trans-1,4-Dichloro-2-butene	0.226	0.194	14.3	82	-0.01
76		1,2,3-Trichloropropane	0.211	0.185	12.3	85	-0.01
77		n-Propylbenzene	2.808	2.470	12.0	81	-0.01
78		Bromobenzene	0.687	0.611	11.0	84	-0.01
79		1,3,5-Trimethylbenzene	1.998	1.745	12.7	82	-0.01
80		2-Chlorotoluene	1.766	1.530	13.4	79	-0.01
81		4-Chlorotoluene	2.156	1.878	12.9	82	-0.01

0129

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5789.D
Acq On : 27 Jan 100 10:50 am
Sample : CCV
Misc :

Vial: 44
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
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)
82	tert-Butylbenzene	1.605	1.421	11.5	82	-0.02
83	1,2,4-Trimethylbenzene	2.018	1.748	13.4	83	-0.01
84	sec-Butylbenzene	2.361	2.068	12.4	82	-0.01
85	p-Isopropyltoluene	1.901	1.672	12.1	82	-0.01
86	1,3-Dclbenz	1.237	1.094	11.6	83	-0.02
87	1,4-Dclbenz	1.270	1.100	13.4	82	-0.01
88	n-Butylbenzene	1.820	1.569	13.8	84	-0.01
89	1,2-Dclbenz	1.203	1.044	13.2	82	-0.01
90	1,2-Dibromo-3-chloropropane	0.143	0.122	15.0	85	-0.01
91	Nitrobenzene	0.029	0.020	30.8#	80	-0.01
92	1,2,4-Tcbenzene	0.794	0.683	14.0	86	-0.01
93	Hexachlorobt	0.340	0.271	20.4	85	-0.01
94	Naphthalen	1.632	1.308	19.9	88	-0.01
95	1,2,3-Tclbenzene	0.717	0.604	15.7	87	-0.01
96	TOTAL XYLENE	0.000	0.000	0.0	0#	-0.50

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5789.D
Acq On : 27 Jan 100 10:50 am
Sample : CCV
Misc :
Quant Time: Jan 27 12:18 19100

Vial: 44
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.77	168	284713	50.00	ppb	-0.01
34) 1,4 - Difluorobenzene	7.90	114	438389	50.00	ppb	-0.01
51) d5 - Chlorobenzene	12.88	117	313202	50.00	ppb	-0.01
73) d4 - Dichlorobenzene	17.26	152	178215	50.00	ppb	-0.01
System Monitoring Compounds						%Recovery
35) surr4,Dibrflmethane	6.64	113	140539	49.71	ppb	99.42%
57) surr3,Toluene-d8	10.35	98	498009	62.12	ppb	124.24%
58) surr2,bfb	15.07	95	183036	50.50	ppb	101.00%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.56	85	116409	43.55	ppb	99
3) Chloromethane	1.74	50	85189	44.54	ppb	98
4) Vinyl Chloride	1.85	62	96107	44.75	ppb	98
5) Bromomethane	2.19	94	54874	45.20	ppb	100
6) Chloroethane	2.30	64	55089	44.87	ppb	100
7) Trichlorofluoromethane	2.61	101	136688	45.92	ppb	99
8) Diethyl Ether	2.97	59	79263	44.55	ppb	98
9) Acrolein	3.10	56	62179	245.11	ppb	97
10) FREON 113	3.27	85	43577	45.58	ppb	95
11) 1,1-Diclethene	3.25	96	86341	47.25	ppb	93
12) Acetone	3.32	43	34746	62.92	ppb	98
13) Iodomethane	3.42	127	67324	49.83	ppb	99
14) Carbon Disulfide	3.50	76	360158	49.05	ppb	100
15) Acetonitrile	3.70	41	27039	182.16	ppb	98
16) Allyl Chloride	3.75	76	49910	45.26	ppb	94
17) Methylene Chloride	3.92	84	98719	45.39	ppb	97
18) TBA	4.17	59	154496	866.70	ppb	100
19) Acrylonitrile	4.28	53	161368	224.19	ppb	98
20) Methyl-t-Butyl Ether	4.37	73	261772	43.97	ppb	98
21) trans-1,2-Dichloroethene	4.34	96	93711	45.24	ppb	96
22) 1,1-Diclethane	4.96	63	165818	45.59	ppb	100
23) Vinyl Acetate	5.09	43	226904	58.14	ppb	100
24) 2-Chloro-1,3-butadiene	5.11	53	158879	45.85	PPB	98
25) 2,2-Dichloropropane	5.86	77	142731	47.09	ppb	100
26) 2-Butanone	5.91	43	47591	69.07	ppb	99
27) cis-1,2-Dichloroethene	5.86	96	109873	45.83	ppb	99
28) Propionitrile	5.97	54	66479	237.44	ppb	98
29) Methacrylonitrile	6.21	67	42266	42.59	ppb	83
30) Bromochloromethane	6.22	128	54782	45.93	ppb	94
31) Chloroform	6.39	83	180927	45.74	ppb	99
32) Tetrahydrofuran	6.32	42	28591	47.08	ppb	89
33) 1,1,1-Trichloroethane	6.65	97	151892	46.89	ppb	95
36) Carbontetrachloride	6.91	117	123695	45.75	ppb	95

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

0131

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5789.D
Acq On : 27 Jan 100 10:50 am
Sample : CCV
Misc :
Quant Time: Jan 27 12:18 19100

Vial: 44
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37) 1,1-Dichloropropene	6.92	75	126571	44.30	ppb		97
38) Iso-Butyl Alcohol	7.23	43	63864	898.46	ppb		93
39) Benzene	7.23	78	379355	45.28	ppb		100
40) 1,2-Dichloroethane	7.26	62	162608	45.34	ppb		98
41) N-Heptane	7.77	43	105501	47.27	ppb		97
42) Trichloroethene	8.30	95	112936	44.34	ppb		98
43) 1,2-Diclpropane	8.64	63	100840	43.95	ppb		93
44) Methyl Methacrylate	8.94	69	81683	44.99	ppb		99
45) 1,4-Dioxane	8.90	88	21732	872.14	ppb		94
46) Dibromomethane	8.83	93	72055	44.96	ppb		96
47) Bromodichloromethane	9.13	83	144640	45.20	ppb		99
48) 2-Nitropropane	9.50	43	69160	46.42	ppb		95
49) 2-Chloroethylvinyl Ether	9.69	63	65524	48.96	ppb		98
50) cis-1,3-Dichloropropene	9.90	75	159652	43.54	ppb		100
52) 4-Methyl-2-Pentanone	10.19	43	104252	61.51	ppb		93
53) Toluene	10.46	91	403765	53.86	ppb		100
54) trans-1,3-Dichloropropene	10.87	75	154605	53.60	ppb		97
55) Ethyl Methacrylate	11.09	69	147833	52.72	ppb		99
56) 1,1,2-Trichloroethane	11.17	83	79829	52.22	ppb		99
59) Tetrachloroethene	11.41	166	93257	46.22	ppb		96
60) 2-Hexanone	11.66	43	55355	56.65	ppb		96
61) 1,3-Dichloropropane	11.45	76	134517	44.25	ppb		100
62) Dibromochloromethane	11.85	129	90702	45.20	ppb		98
63) 1,2-Dibromoethane	12.01	107	89668	45.13	ppb		96
64) Chlorobenzene	12.93	112	219432	43.76	ppb		98
65) 1,1,1,2-Tetrachloroethane	13.09	131	83375	45.37	ppb		97
66) Ethylbenzene	13.17	91	389701	45.10	ppb		100
67) (m+p)Xylene	13.39	106	282621	91.32	ppb	m	0
68) o-Xylene	14.11	106	140269	45.01	ppb		98
69) Styrene	14.14	104	249687	45.14	ppb		98
70) Bromoform	14.43	173	70797	45.57	ppb		97
71) Isopropylbenzene	14.82	105	372533	45.71	ppb		99
72) Cyclohexanone	14.91	55	214304	7557.93	ppb		99
74) 1,1,2,2-Tetrachloroethane	15.38	83	107680	44.02	ppb		99
75) Trans-1,4-Dichloro-2-buten	15.48	53	34584	42.85	ppb		92
76) 1,2,3-Trichloropropane	15.43	110	33008	43.87	ppb		96
77) n-Propylbenzene	15.60	91	440202	43.98	ppb		100
78) Bromobenzene	15.32	156	108972	44.49	ppb		95
79) 1,3,5-Trimethylbenzene	15.94	105	310933	43.66	ppb		99
80) 2-Chlorotoluene	15.72	91	272697	43.32	ppb		98
81) 4-Chlorotoluene	15.93	91	334648	43.54	ppb		99
82) tert-Butylbenzene	16.55	119	253290	44.27	ppb		100
83) 1,2,4-Trimethylbenzene	16.65	105	311572	43.32	ppb		99
84) sec-Butylbenzene	16.98	105	368557	43.79	ppb		99

BA 1/27

0132

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5789.D
Acq On : 27 Jan 100 10:50 am
Sample : CCV
Misc :
Quant Time: Jan 27 12:18 19100

Vial: 44
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
Response via : Multiple Level Calibration

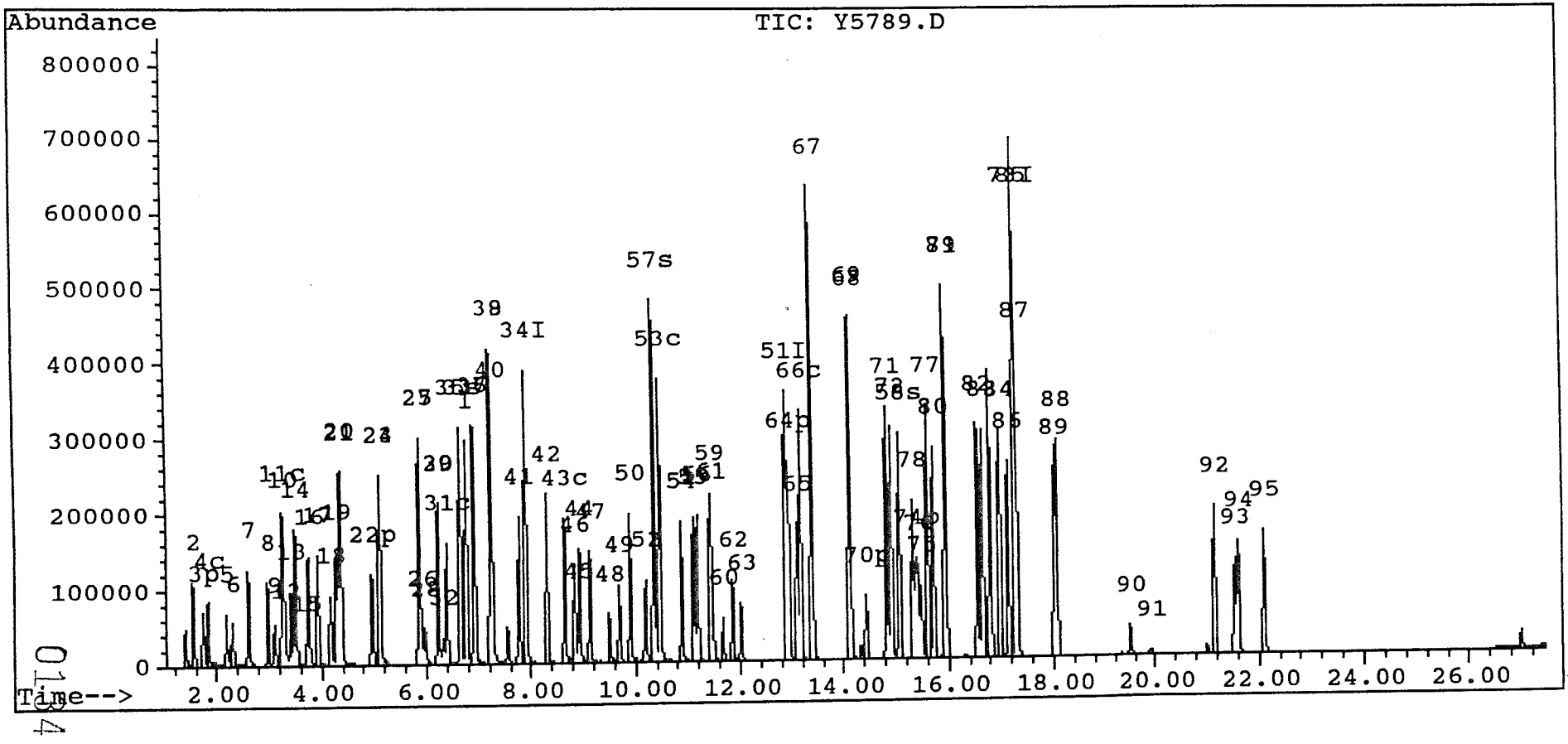
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) p-Isopropyltoluene	17.27	119	297897	43.97 ppb	99
86) 1,3-Dclbenz	17.13	146	194902	44.20 ppb	99
87) 1,4-Dclbenz	17.31	146	196017	43.31 ppb	99
88) n-Butylbenzene	18.06	91	279647	43.11 ppb	98
89) 1,2-Dclbenz	18.01	146	186130	43.42 ppb	99
90) 1,2-Dibromo-3-chloropropan	19.51	157	21688	42.48 ppb	94
91) Nitrobenzene	19.90	77	7130	71.57 ppb	96
92) 1,2,4-Tcbenzene	21.15	180	121700	42.98 ppb	100
93) Hexachlorobt	21.54	225	48218	44.32 ppb	97
94) Naphthalen	21.61	128	233047	40.06 ppb	99
95) 1,2,3-Tclbenzene	22.10	180	107690	42.17 ppb	99

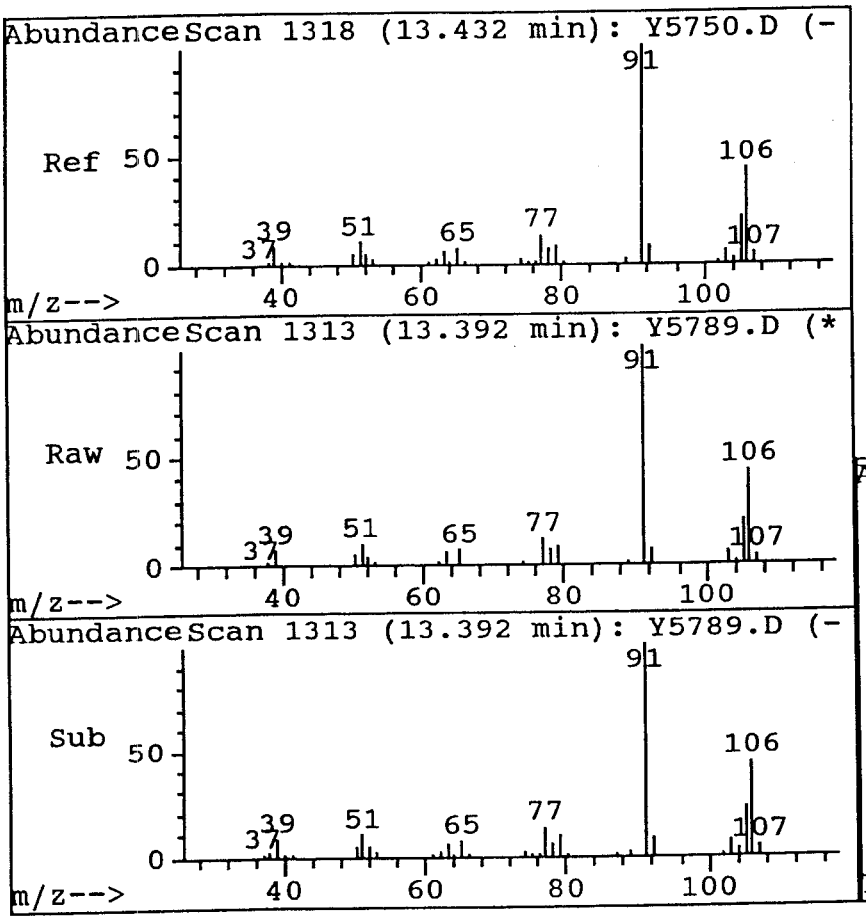
(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5789.D
Acq On : 27 Jan 100 10:50 am
Sample : CCV
Misc :
Quant Time: Jan 27 12:18 19100

Vial: 44
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
Response via : Multiple Level Calibration

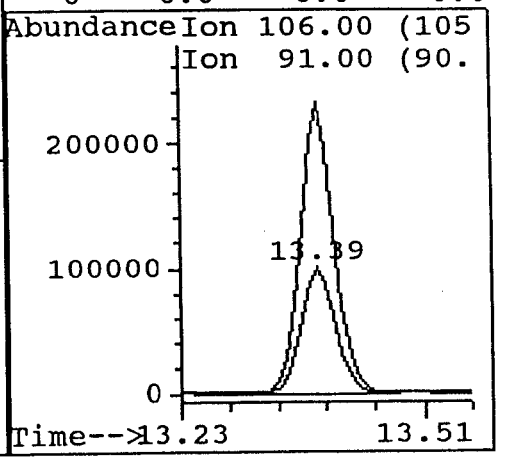




#67
(m+p)Xylene
Concen: 91.32 ppb m
RT: 13.39 min Scan# 1313
Delta R.T. -0.01 min
Lab File: Y5789.D
Acq: 27 Jan 100 10:50 am

Tgt Ion:106 Resp: 282621

Ion	Ratio	Lower	Upper
106	100		
91	230.9	186.6	279.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0



BA 1/27

0135

VOLATILE ORGANICS

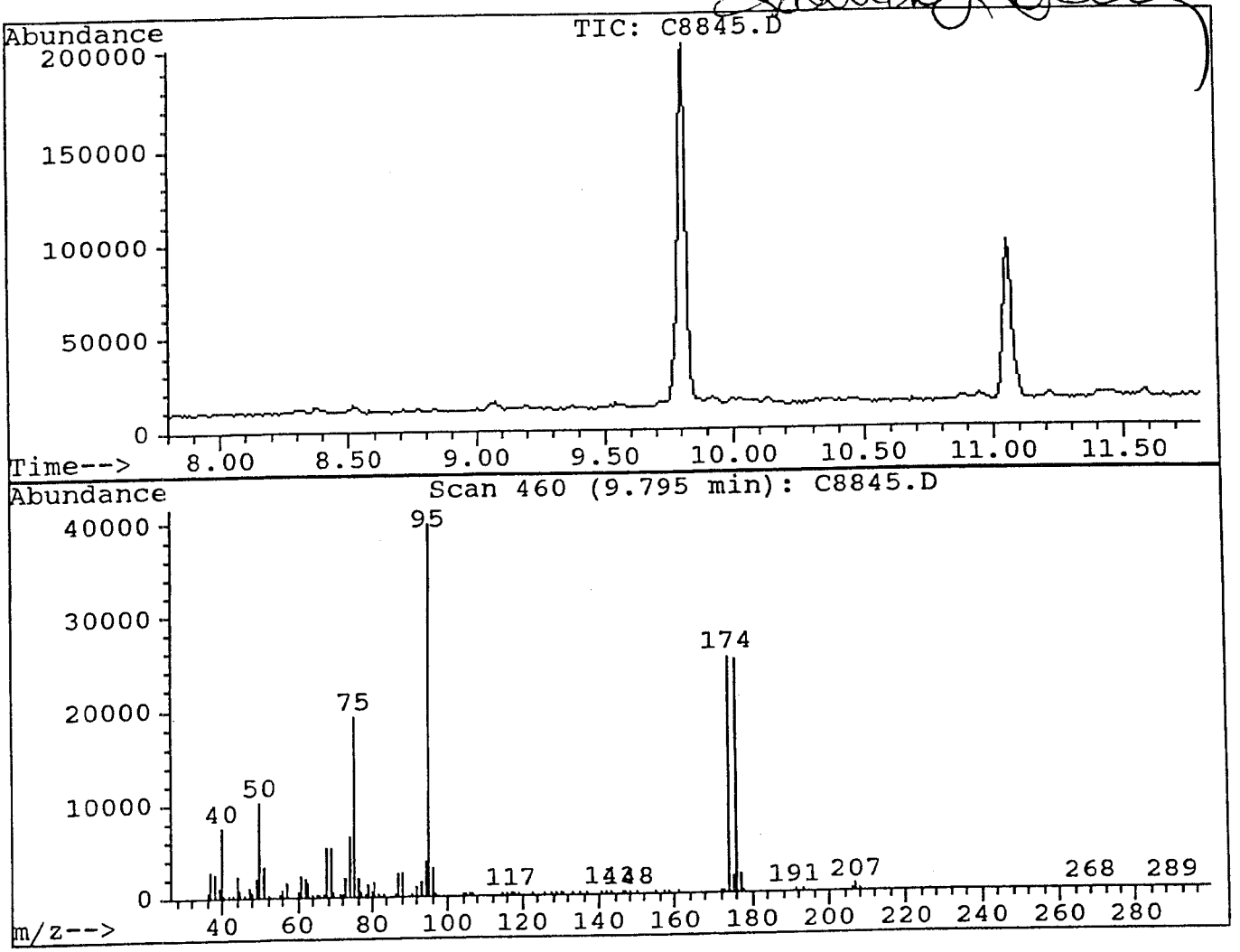
RAW QC DATA

BFB

Data File : J:\ACQUDATA\MSVOA5\DATA\011300\C8845.D
Acq On : 13 Jan 100 11:15 am
Sample : TUNE CHECK
Misc :

Vial: 2
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\EXP0106.M
Title : 8260voa



Peak Apex is scan: 460

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.2	10052	PASS
75	95	30	60	47.9	19144	PASS
95	95	100	100	100.0	39952	PASS
96	95	5	9	7.3	2917	PASS
173	174	0	2	1.1	265	PASS
174	95	50	100	63.1	25216	PASS
175	174	5	9	6.6	1675	PASS
176	174	95	101	98.9	24944	PASS
177	176	5	9	7.2	1804	PASS

0137

C8845.D EXP0106.M Thu Jan 13 11:28:43 2000

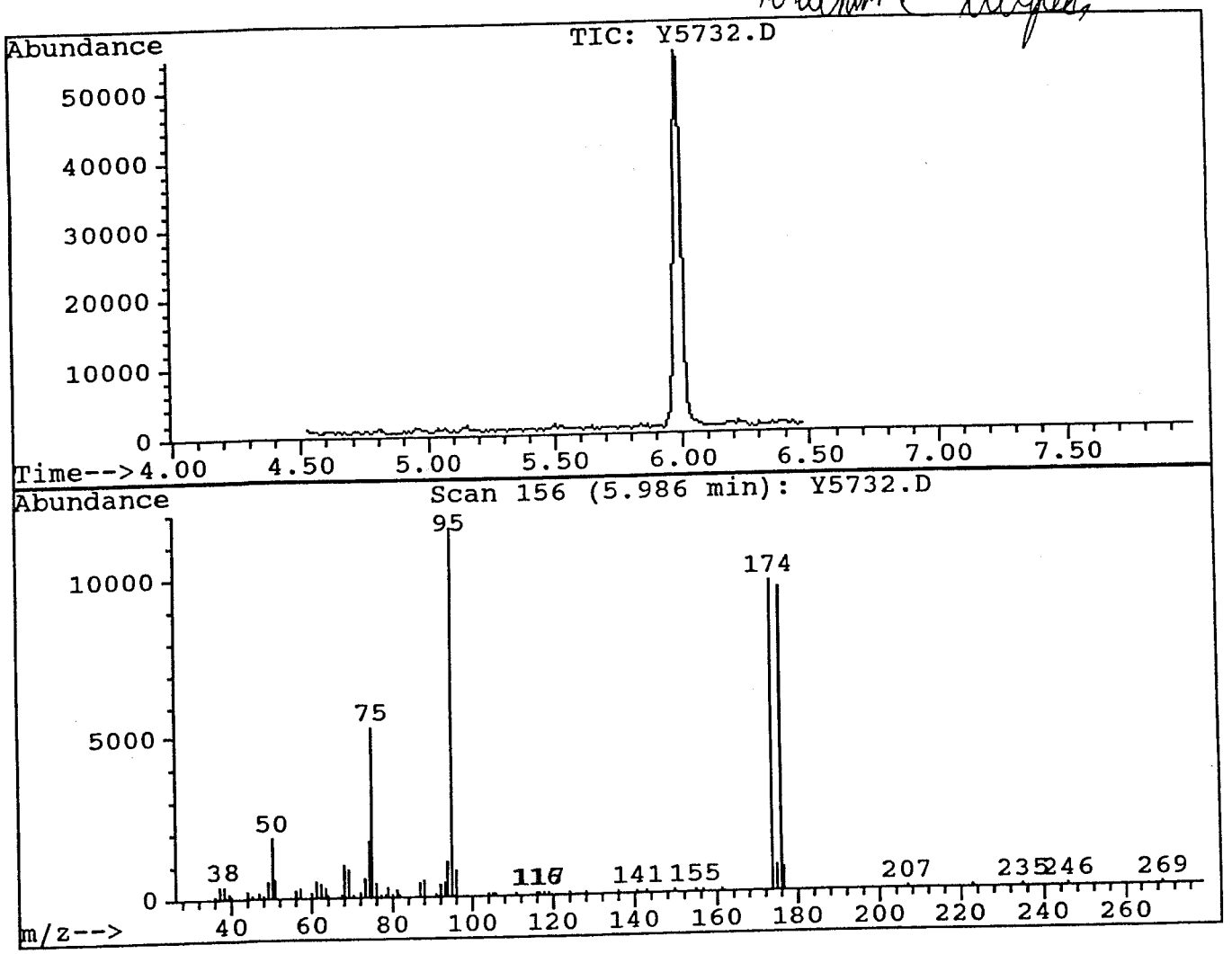
BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\012300\Y5732.D
Acq On : 24 Jan 100 10:22 am
Sample : TUNE CHECK
Misc :

Vial: 87
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0120.M
Title : 8260voa

William C Allgeier



Peak Apex is scan: 156

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.9	1839	PASS
75	95	30	60	45.6	5271	PASS
95	95	100	100	100.0	11551	PASS
96	95	5	9	6.7	772	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	84.1	9719	PASS
175	174	5	9	7.6	735	PASS
176	174	95	101	97.8	9503	PASS
177	176	5	9	7.3	689	PASS

0138

Y5732.D EXP0120.M Mon Jan 24 10:31:01 2000

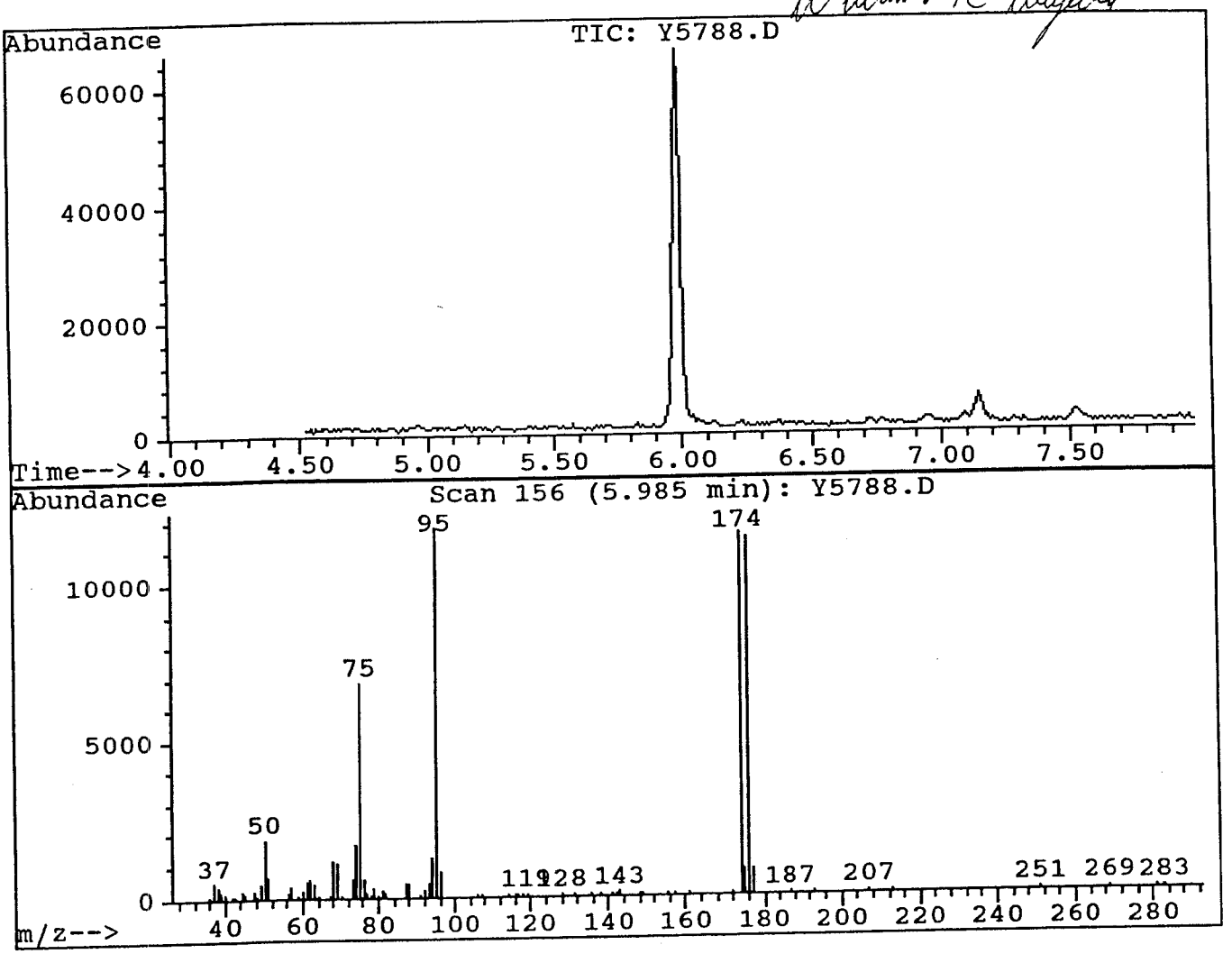
BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5788.D
Acq On : 27 Jan 100 10:15 am
Sample : TUNE CHECK
Misc :

Vial: 43
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa

William C Allgeier



Peak Apex is scan: 156

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.7	1851	PASS
75	95	30	60	58.1	6854	PASS
95	95	100	100	100.0	11794	PASS
96	95	5	9	6.4	750	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	97.8	11539	PASS
175	174	5	9	6.9	793	PASS
176	174	95	101	98.5	11371	PASS
177	176	5	9	6.8	770	PASS

0139

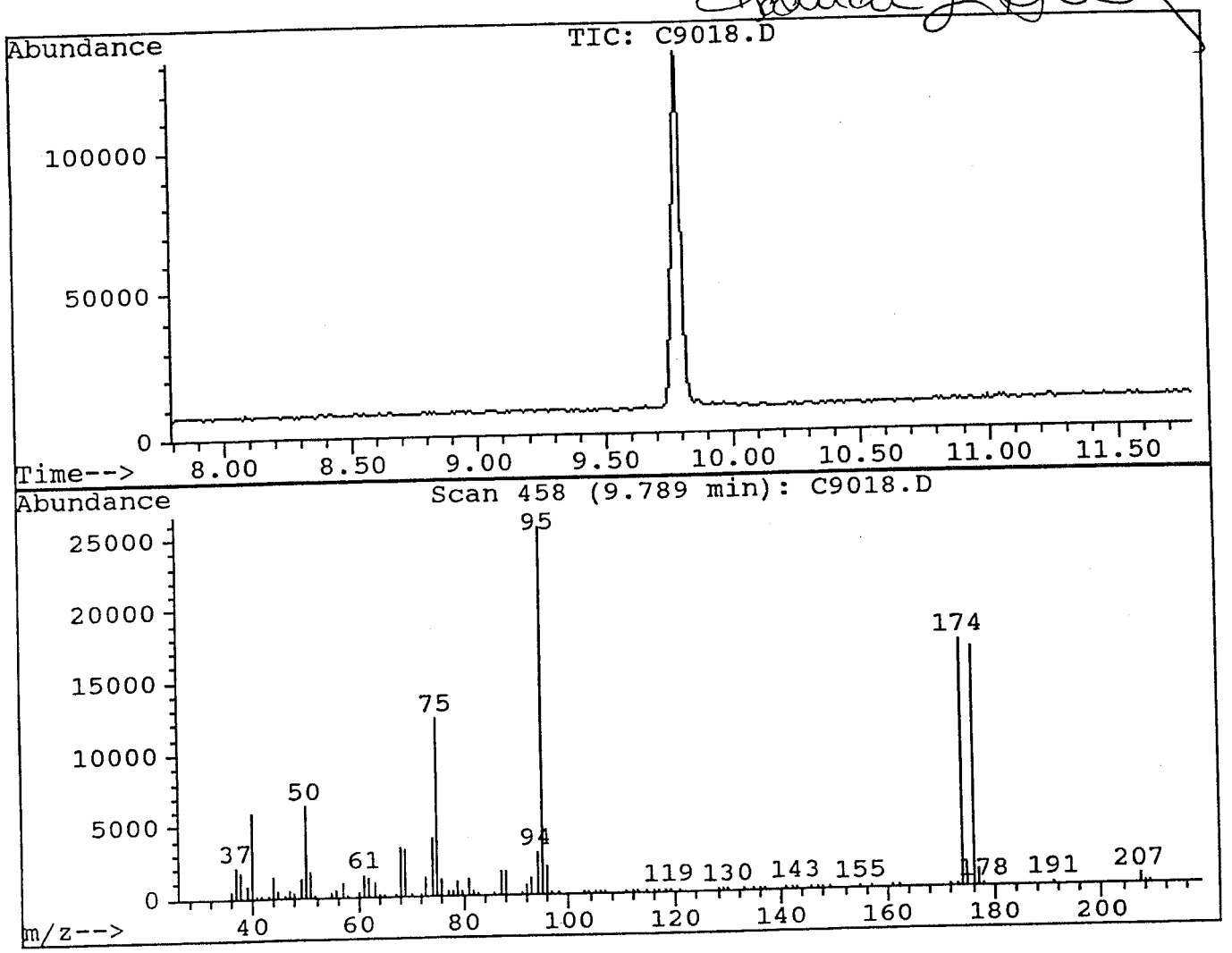
Y5788.D EXP0124.M Thu Jan 27 10:24:49 2000

BFB

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9018.D
Acq On : 27 Jan 100 9:58 am
Sample : TUNE CHECK
Misc :

Vial: 2
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa



Peak Apex is scan: 458

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.6	6280	PASS
75	95	30	60	47.7	12185	PASS
95	95	100	100	100.0	25560	PASS
96	95	5	9	7.0	1794	PASS
173	174	0	2	0.8	141	PASS
174	95	50	100	66.8	17064	PASS
175	174	5	9	6.6	1120	PASS
176	174	95	101	96.5	16472	PASS
177	176	5	9	6.8	1127	PASS

0140

C9018.D SOIL0113.M Thu Jan 27 10:11:29 2000

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 361282 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

DATE ANALYZED : 01/27/00
ANALYTICAL DILUTION: 125.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	2500 U	UG/KG
BENZENE	5.0	630 U	UG/KG
BROMODICHLOROMETHANE	5.0	630 U	UG/KG
BROMOFORM	5.0	630 U	UG/KG
BROMOMETHANE	5.0	630 U	UG/KG
2-BUTANONE (MEK)	10	1300 U	UG/KG
CARBON DISULFIDE	10	1300 U	UG/KG
CARBON TETRACHLORIDE	5.0	630 U	UG/KG
CHLOROBENZENE	5.0	630 U	UG/KG
CHLOROETHANE	5.0	630 U	UG/KG
CHLOROFORM	5.0	630 U	UG/KG
CHLOROMETHANE	5.0	630 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	630 U	UG/KG
1,3-DICHLOROBENZENE	5.0	630 U	UG/KG
1,2-DICHLOROBENZENE	5.0	630 U	UG/KG
1,4-DICHLOROBENZENE	5.0	630 U	UG/KG
1,1-DICHLOROETHANE	5.0	630 U	UG/KG
1,2-DICHLOROETHANE	5.0	630 U	UG/KG
1,1-DICHLOROETHENE	5.0	630 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	630 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	630 U	UG/KG
1,2-DICHLOROPROPANE	5.0	630 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	630 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	630 U	UG/KG
ETHYLBENZENE	5.0	630 U	UG/KG
2-HEXANONE	10	1300 U	UG/KG
METHYLENE CHLORIDE	5.0	630 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	1300 U	UG/KG
STYRENE	5.0	630 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	630 U	UG/KG
TETRACHLOROETHENE	5.0	630 U	UG/KG
TOLUENE	5.0	630 U	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	630 U	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	630 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	630 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	630 U	UG/KG
TRICHLOROETHENE	5.0	630 U	UG/KG
VINYL CHLORIDE	5.0	630 U	UG/KG
O-XYLENE	5.0	630 U	UG/KG
M+P-XYLENE	5.0	630 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	100	%
TOLUENE-D8	(81 - 117 %)	98	%

0141

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled :
Date Received:
Order #: 361282
Submission #:
Sample Matrix: SOIL/SEDIMENT
Percent Solid: 100

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 01/27/00			
ANALYTICAL DILUTION:	125.00			Dry Weight
DIBROMOFLUOROMETHANE		(80 - 120 %)	101	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\OLDDATA\012700\Y5791.D Vial: 46
Acq On : 27 Jan 100 12:08 pm Operator: ALLGEIER
Sample : 361282 125 Inst : 5970 - In
Misc : MET BLK Multiplr: 1.00
Quant Time: Feb 25 13:54 2000

VBLK01

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
Response via : Multiple Level Calibration

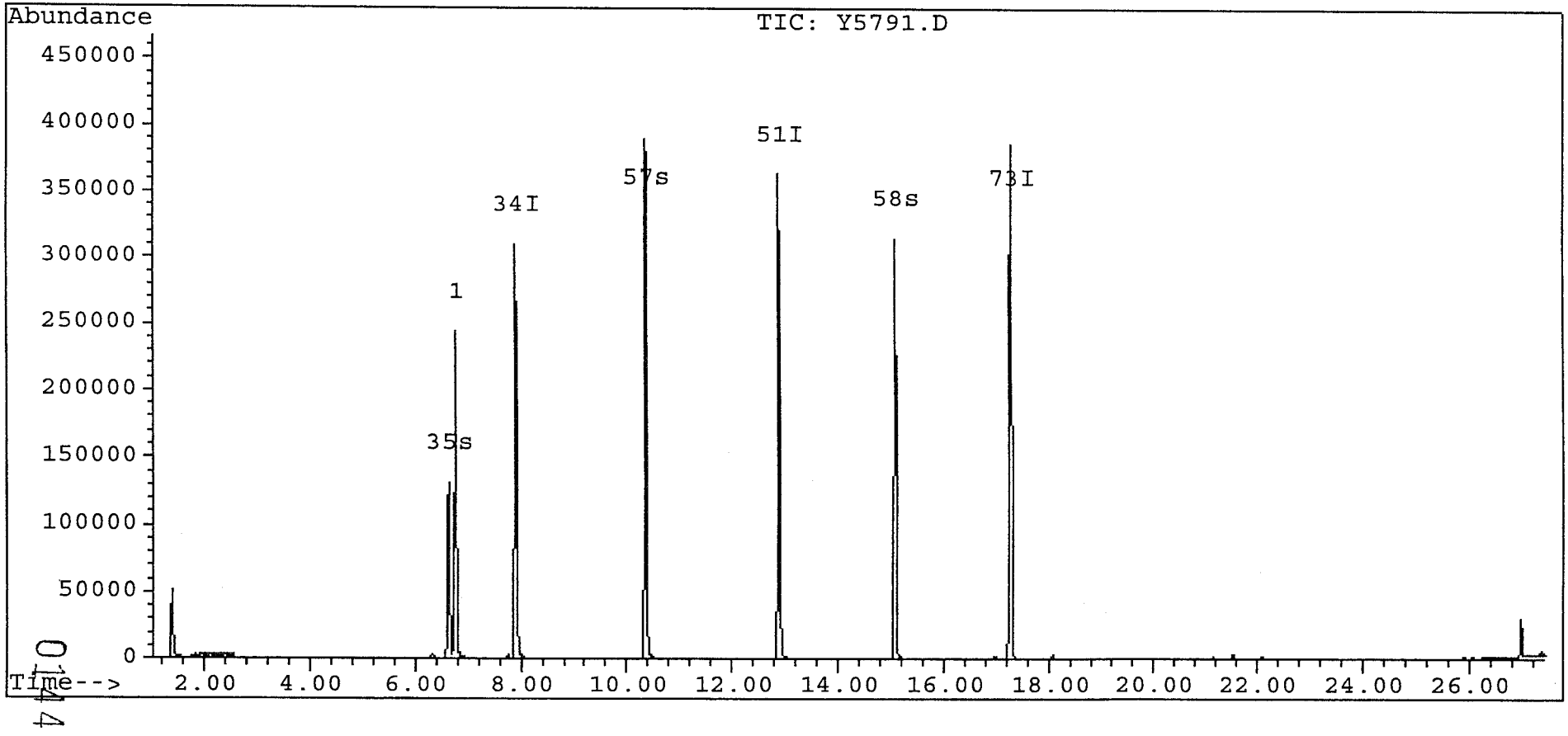
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.77	168	235608	50.00	ppb	0.00
34) 1,4 - Difluorobenzene	7.91	114	354796	50.00	ppb	0.00
51) d5 - Chlorobenzene	12.89	117	322686	50.00	ppb	0.00
73) d4 - Dichlorobenzene	17.27	152	181154	50.00	ppb	0.00
System Monitoring Compounds						**%Recovery**
35) surr4,Dibrflmethane	6.64	113	115294	50.39	ppb	100.78%
57) surr3,Toluene-d8	10.35	98	405400	49.08	ppb	98.17%
58) surr2,bfb	15.07	95	187049	50.09	ppb	100.18%
Target Compounds						**Qvalue**

0143

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

Data File : J:\ACQUDATA\MSVOA3\OLDDATA\012700\Y5791.D Vial: 46
Acq On : 27 Jan 100 12:08 pm Operator: ALLGEIER
Sample : 361282 125 Inst : 5970 - In
Misc : MET BLK Multiplr: 1.00
Quant Time: Feb 25 13:54 2000

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 361280 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

DATE ANALYZED : 01/27/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	20 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,3-DICHLOROBENZENE	5.0	5.0 U	UG/KG
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/KG
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0	5.0 U	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/KG
TRICHLOROETHENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 U	UG/KG
O-XYLENE	5.0	5.0 U	UG/KG
M+P-XYLENE	5.0	5.0 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	97	%
TOLUENE-D8	(81 - 117 %)	99	%

0145

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled :
Date Received:
Order #: 361280
Submission #:
Sample Matrix: SOIL/SEDIMENT
Percent Solid: 100

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 01/27/00			
ANALYTICAL DILUTION:	1.00			Dry Weight
DIBROMOFLUOROMETHANE		(80 - 120 %)	98	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\OLDDATA\012700\C9021.D Vial: 5
Acq On : 27 Jan 100 11:39 am Operator: HERRING
Sample : 361280 1 Inst : 5971 - In
Misc : MET BLK Multiplr: 1.00
Quant Time: Feb 2 12:31 2000

VBJC02

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

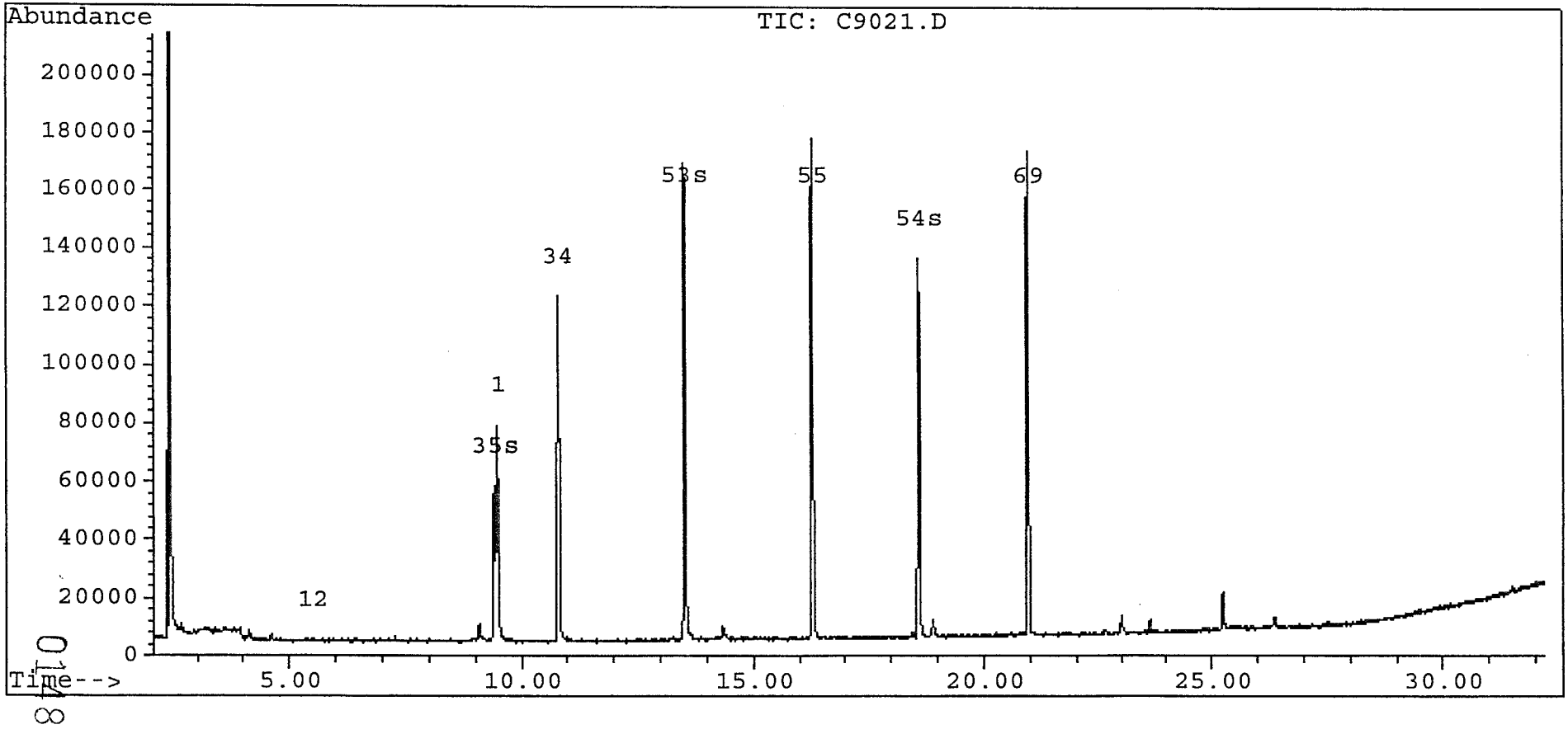
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	9.48	168	77925	50.00	ppb	0.00
34) 1,4-Difluorobenzene	10.81	114	136302	50.00	ppb	0.00
55) d5-Chlorobenze	16.28	117	147706	50.00	ppb	0.00
69) d4-1,4-Dichlorobenzene	20.95	152	58602	50.00	ppb	0.00
System Monitoring Compounds						**%Recovery**
35) surr4,Dibrflmethane	9.41	113	50997	49.20	ppb	98.40%
53) surr3,Toluene-d8	13.52	98	161799	49.42	ppb	98.83%
54) surr2,bfb	18.60	95	74319	48.28	ppb	96.56%
Target Compounds						**Qvalue**
12) Acetone	5.50	43	1483	1.67	ppb	95

0147

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

Data File : J:\ACQUDATA\MSVOA5\OLDDATA\012700\C9021.D Vial: 5
Acq On : 27 Jan 100 11:39 am Operator: HERRING
Sample : 361280 1 Inst : 5971 - In
Misc : MET BLK Multiplr: 1.00
Quant Time: Feb 2 12:31 2000

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Project Reference:
Client Sample ID : QC Ref

Date Sampled : 02/25/00 **Order #:** 361284 **Sample Matrix:** SOIL/SEDIMENT
Date Received: / / **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/27/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	29	UG/KG
BENZENE	5.0	22	UG/KG
BROMODICHLOROMETHANE	5.0	21	UG/KG
BROMOFORM	5.0	19	UG/KG
BROMOMETHANE	5.0	14	UG/KG
2-BUTANONE (MEK)	10	26	UG/KG
CARBON DISULFIDE	10	20	UG/KG
CARBON TETRACHLORIDE	5.0	22	UG/KG
CHLOROBENZENE	5.0	22	UG/KG
CHLOROETHANE	5.0	27	UG/KG
CHLOROFORM	5.0	22	UG/KG
CHLOROMETHANE	5.0	26	UG/KG
DIBROMOCHLOROMETHANE	5.0	21	UG/KG
1,3-DICHLOROBENZENE	5.0	21	UG/KG
1,2-DICHLOROBENZENE	5.0	21	UG/KG
1,4-DICHLOROBENZENE	5.0	21	UG/KG
1,1-DICHLOROETHANE	5.0	22	UG/KG
1,2-DICHLOROETHANE	5.0	22	UG/KG
1,1-DICHLOROETHENE	5.0	25	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	21	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	22	UG/KG
1,2-DICHLOROPROPANE	5.0	21	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	22	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	20	UG/KG
ETHYLBENZENE	5.0	22	UG/KG
2-HEXANONE	10	23	UG/KG
METHYLENE CHLORIDE	5.0	22	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	21	UG/KG
STYRENE	5.0	22	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	20	UG/KG
TETRACHLOROETHENE	5.0	23	UG/KG
TOLUENE	5.0	22	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	21	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	20	UG/KG
1,1,1-TRICHLOROETHANE	5.0	22	UG/KG
1,1,2-TRICHLOROETHANE	5.0	21	UG/KG
TRICHLOROETHENE	5.0	22	UG/KG
VINYL CHLORIDE	5.0	26	UG/KG
O-XYLENE	5.0	22	UG/KG
M+P-XYLENE	5.0	46	UG/KG

SURROGATE RECOVERIES	QC LIMITS	0149	
4-BROMOFLUOROBENZENE	(74 - 121 %)	101	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Project Reference:
Client Sample ID : QC Ref

Date Sampled : 02/25/00 **Order #:** 361284 **Sample Matrix:** SOIL/SEDIMENT
Date Received: / / **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/27/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
TOLUENE-D8	(81 - 117 %)	102	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	98	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\OLDDATA\012700\Y5792.D Vial: 47
Acq On : 27 Jan 100 12:46 pm Operator: ALLGEIER
Sample : 361284 1 Inst : 5970 - In
Misc : QC\REF Multiplr: 1.00
Quant Time: Jan 27 13:13 2000

VLEF01

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.77	168	239357	50.00	ppb		0.00
34) 1,4 - Difluorobenzene	7.90	114	360614	50.00	ppb		0.00
51) d5 - Chlorobenzene	12.89	117	326145	50.00	ppb		0.00
73) d4 - Dichlorobenzene	17.27	152	186612	50.00	ppb		0.00
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	6.64	113	113895	48.97	ppb		97.95%
57) surr3,Toluene-d8	10.35	98	425207	50.94	ppb		101.87%
58) surr2,bfb	15.07	95	190533	50.48	ppb		100.96%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.56	85	49173	21.88	ppb		95
3) Chloromethane	1.74	50	41698	25.93	ppb		95
4) Vinyl Chloride	1.86	62	46931	26.00	ppb		95
5) Bromomethane	2.18	94	10117	14.10	ppb		90
6) Chloroethane	2.30	64	27610	26.75	ppb		95
7) Trichlorofluoromethane	2.60	101	72378	28.92	ppb		100
9) Acrolein	3.12	56	23787	111.54	ppb		92
10) FREON 113	3.27	85	17134	21.32	ppb		93
11) 1,1-Diclethene	3.24	96	38462	25.03	ppb		99
12) Acetone	3.34	43	13294	28.63	ppb	#	88
13) Iodomethane	3.42	127	25209	22.20	ppb		94
14) Carbon Disulfide	3.50	76	120797	19.57	ppb		99
17) Methylene Chloride	3.93	84	39469	21.59	ppb		97
18) TBA	4.18	59	141697	945.52	ppb		98
19) Acrylonitrile	4.29	53	114170	188.67	ppb		99
20) Methyl-t-Butyl Ether	4.37	73	112362	22.45	ppb		99
21) trans-1,2-Dichloroethene	4.34	96	37601	21.59	ppb		91
22) 1,1-Diclethane	4.96	63	66368	21.71	ppb		97
23) Vinyl Acetate	5.11	43	39248	11.96	ppb		100
25) 2,2-Dichloropropane	5.86	77	54751	21.49	ppb		98
26) 2-Butanone	5.93	43	14986	25.87	ppb		95
27) cis-1,2-Dichloroethene	5.87	96	42701	21.18	ppb		100
30) Bromochloromethane	6.23	128	22096	22.04	ppb		90
31) Chloroform	6.40	83	72831	21.90	ppb		99
32) Tetrahydrofuran	6.33	42	3706	7.26	ppb		89
33) 1,1,1-Trichloroethane	6.65	97	59513	21.86	ppb		97
36) Carbontetrachloride	6.91	117	49360	22.19	ppb		96
37) 1,1-Dichloropropene	6.92	75	58479	24.88	ppb		98
39) Benzene	7.23	78	151505	21.98	ppb		97
40) 1,2-Dichloroethane	7.26	62	65799	22.30	ppb		96
42) Trichloroethene	8.31	95	46214	22.06	ppb		92
43) 1,2-Diclpropane	8.65	63	39039	20.68	ppb		96
46) Dibromomethane	8.84	93	28461	21.59	ppb		93

0151

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\OLDDATA\012700\Y5792.D Vial: 47
Acq On : 27 Jan 100 12:46 pm Operator: ALLGEIER
Sample : 361284 1 Inst : 5970 - In
Misc : QC\REF Multiplr: 1.00
Quant Time: Jan 27 13:13 2000

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
47)	Bromodichloromethane	9.14	83	55520	21.09	ppb		97
49)	2-Chloroethylvinyl Ether	9.69	63	28925	26.28	ppb		95
50)	cis-1,3-Dichloropropene	9.90	75	64851	21.50	ppb		99
52)	4-Methyl-2-Pentanone	10.19	43	36722	20.81	ppb		100
53)	Toluene	10.47	91	175860	22.53	ppb		100
54)	trans-1,3-Dichloropropene	10.87	75	61258	20.39	ppb		99
56)	1,1,2-Trichloroethane	11.17	83	33680	21.16	ppb		92
59)	Tetrachloroethene	11.42	166	48258	22.97	ppb		99
60)	2-Hexanone	11.66	43	23581	23.17	ppb		100
61)	1,3-Dichloropropane	11.45	76	68634	21.68	ppb		99
62)	Dibromochloromethane	11.85	129	44357	21.23	ppb		98
63)	1,2-Dibromoethane	12.01	107	43207	20.88	ppb		97
64)	Chlorobenzene	12.93	112	113382	21.71	ppb		97
65)	1,1,1,2-Tetrachloroethane	13.09	131	41117	21.49	ppb		96
66)	Ethylbenzene	13.17	91	198347	22.05	ppb		97
67)	(m+p)Xylene	13.40	106	148055	45.94	ppb		96
68)	o-Xylene	14.11	106	71531	22.04	ppb		98
69)	Styrene	14.14	104	125213	21.74	ppb		99
70)	Bromoform	14.43	173	30724	18.99	ppb		100
71)	Isopropylbenzene	14.82	105	187028	22.04	ppb		97
72)	Cyclohexanone	15.06	55	368	12.46	ppb	#	29
74)	1,1,2,2-Tetrachloroethane	15.38	83	52688	20.57	ppb		99
76)	1,2,3-Trichloropropane	15.43	110	15935	20.23	ppb		90
77)	n-Propylbenzene	15.60	91	227648	21.72	ppb		100
78)	Bromobenzene	15.33	156	52511	20.48	ppb		96
79)	1,3,5-Trimethylbenzene	15.95	105	161092	21.60	ppb		99
80)	2-Chlorotoluene	15.71	91	140202	21.27	ppb		99
81)	4-Chlorotoluene	15.93	91	171237	21.28	ppb		98
82)	tert-Butylbenzene	16.55	119	130325	21.75	ppb		97
83)	1,2,4-Trimethylbenzene	16.65	105	163472	21.71	ppb		100
84)	sec-Butylbenzene	16.98	105	181389	20.58	ppb		99
85)	p-Isopropyltoluene	17.28	119	145440	20.50	ppb		100
86)	1,3-Dclbenz	17.14	146	98819	21.40	ppb		96
87)	1,4-Dclbenz	17.31	146	101678	21.45	ppb		97
88)	n-Butylbenzene	18.07	91	137491	20.24	ppb		96
89)	1,2-Dclbenz	18.01	146	96312	21.45	ppb		99
90)	1,2-Dibromo-3-chloropropan	19.51	157	9635	18.02	ppb		94
92)	1,2,4-Tcbenzene	21.15	180	61181	20.64	ppb		98
93)	Hexachlorobt	21.54	225	23111	17.32	ppb		97
94)	Naphthalen	21.61	128	125114	20.54	ppb		97
95)	1,2,3-Tclbenzene	22.10	180	54711	20.46	ppb		99

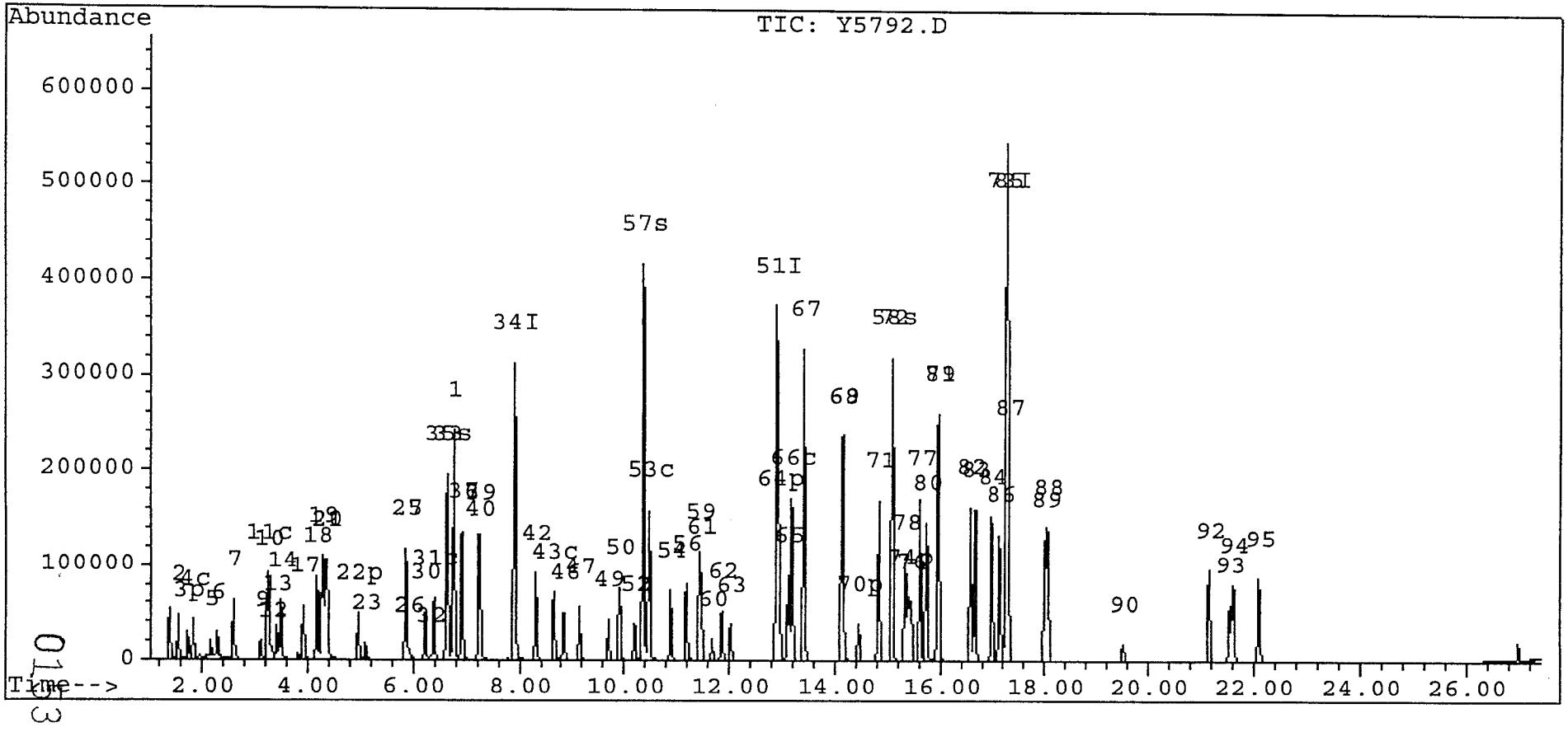
0152

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\OLDDATA\012700\Y5792.D Vial: 47
Acq On : 27 Jan 100 12:46 pm Operator: ALLGEIER
Sample : 361284 1 Inst : 5970 - In
Misc : QC\REF Multiplr: 1.00
Quant Time: Jan 27 13:13 2000

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Project Reference:
Client Sample ID : QC Ref

Date Sampled : 02/25/00 **Order #:** 361281 **Sample Matrix:** SOIL/SEDIMENT
Date Received: / / **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/27/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	20 U	UG/KG
BENZENE	5.0	18	UG/KG
BROMODICHLOROMETHANE	5.0	18	UG/KG
BROMOFORM	5.0	18	UG/KG
BROMOMETHANE	5.0	34	UG/KG
2-BUTANONE (MEK)	10	21	UG/KG
CARBON DISULFIDE	10	14	UG/KG
CARBON TETRACHLORIDE	5.0	19	UG/KG
CHLOROBENZENE	5.0	20	UG/KG
CHLOROETHANE	5.0	20	UG/KG
CHLOROFORM	5.0	16	UG/KG
CHLOROMETHANE	5.0	21	UG/KG
DIBROMOCHLOROMETHANE	5.0	17	UG/KG
1,3-DICHLOROBENZENE	5.0	21	UG/KG
1,2-DICHLOROBENZENE	5.0	20	UG/KG
1,4-DICHLOROBENZENE	5.0	21	UG/KG
1,1-DICHLOROETHANE	5.0	17	UG/KG
1,2-DICHLOROETHANE	5.0	19	UG/KG
1,1-DICHLOROETHENE	5.0	17	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	16	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	18	UG/KG
1,2-DICHLOROPROPANE	5.0	18	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	19	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	19	UG/KG
ETHYLBENZENE	5.0	21	UG/KG
2-HEXANONE	10	17	UG/KG
METHYLENE CHLORIDE	5.0	19	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	20	UG/KG
STYRENE	5.0	21	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	20	UG/KG
TETRACHLOROETHENE	5.0	20	UG/KG
TOLUENE	5.0	22	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	21	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	19	UG/KG
1,1,1-TRICHLOROETHANE	5.0	17	UG/KG
1,1,2-TRICHLOROETHANE	5.0	19	UG/KG
TRICHLOROETHENE	5.0	19	UG/KG
VINYL CHLORIDE	5.0	21	UG/KG
O-XYLENE	5.0	20	UG/KG
M+P-XYLENE	5.0	43	UG/KG

SURROGATE RECOVERIES	QC LIMITS	0154	
4-BROMOFLUOROBENZENE	(74 - 121 %)	112	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Project Reference:
Client Sample ID : QC Ref

Date Sampled : 02/25/00 **Order #:** 361281 **Sample Matrix:** SOIL/SEDIMENT
Date Received: / / **Submission #:** **Percent Solid:** 100

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 01/27/00			
ANALYTICAL DILUTION:	1.00			Dry Weight
TOLUENE-D8	(81 - 117 %)		106	%
DIBROMOFLUOROMETHANE	(80 - 120 %)		97	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\OLDDATA\012700\C9022.D Vial: 6
Acq On : 27 Jan 100 12:18 pm Operator: HERRING
Sample : 361281 1 Inst : 5971 - In
Misc : QC/REF Multiplr: 1.00
Quant Time: Jan 27 12:51 2000

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.48	168	72311	50.00	ppb		0.00
34) 1,4-Difluorobenzene	10.81	114	126519	50.00	ppb		0.00
55) d5-Chlorobenze	16.28	117	145740	50.00	ppb		0.00
69) d4-1,4-Dichlorobenzene	20.96	152	66287	50.00	ppb		0.00
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.41	113	46733	48.57	ppb		97.15%
53) surr3,Toluene-d8	13.52	98	160481	52.80	ppb		105.61%
54) surr2,bfb	18.60	95	80011	56.00	ppb		112.00%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.69	85	28304	18.48	ppb		99
3) Chloromethane	3.00	50	32786	21.17	ppb		100
4) Vinyl Chloride	3.20	62	25471	21.25	ppb		98
5) Bromomethane	3.78	94	19056	33.89	ppb		92
6) Chloroethane	3.96	64	14418	19.83	ppb		98
7) Trichlorofluoromethane	4.45	101	23508	17.96	ppb		95
9) Acrolein	5.19	56	9573	82.71	ppb		95
10) FREON 113	5.42	85	5665	14.88	ppb		93
11) 1,1-Diclethene	5.40	96	12357	16.72	ppb		97
12) Acetone	5.47	43	12321	14.96	ppb		99
13) Iodomethane	5.66	142	18070	15.84	ppb		97
14) Carbon Disulfide	5.80	76	54509	14.13	ppb		96
16) Allyl Chloride	5.80	76	55352	114.82	ppb	#	1
17) Methylene Chloride	6.27	84	19603	19.46	ppb		99
18) TBA	6.46	59	224818	1332.27	ppb		98
19) Methyl-t-Butyl Ether	6.78	73	40798	17.83	ppb		98
20) Acrylonitrile	6.68	53	78827	194.75	ppb		97
21) trans-1,2-Dichloroethene	6.78	96	14304	17.92	ppb		97
22) 1,1-Diclethane	7.53	63	34588	17.23	ppb		97
23) Vinyl Acetate	7.62	42	2579	11.40	ppb		96
25) 2,2-Dichloropropane	8.56	77	23896	16.92	ppb		99
26) 2-Butanone	8.56	43	18236	20.69	ppb		96
27) cis-1,2-Dichloroethene	8.56	96	16192	16.23	ppb		97
30) Bromochloromethane	8.99	128	10143	17.07	ppb		90
31) Tetrahydrofuran	9.09	42	6426	12.92	ppb		91
32) Chloroform	9.12	83	30223	16.56	ppb		100
33) 1,1,1-Trichloroethane	9.47	97	23136	17.47	ppb	#	27
36) Carbontetrachloride	9.78	117	19336	18.96	ppb		91
37) 1,1-Dichloropropene	9.77	75	24067	21.29	ppb		95
38) Iso-Butyl Alcohol	9.78	43	116	1.46	ppb		86
39) Benzene	10.14	78	68027	17.99	ppb		99
40) 1,2-Dichloroethane	10.15	62	31400	18.62	ppb		97
41) Trichloroethene	11.30	95	18497	18.93	ppb		97

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\OLDDATA\012700\C9022.D Vial: 6
Acq On : 27 Jan 100 12:18 pm Operator: HERRING
Sample : 361281 1 Inst : 5971 - In
Misc : QC/REF Multiplr: 1.00
Quant Time: Jan 27 12:51 2000

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42)	1,2-Diclpropane	11.69	63	23284	18.53	ppb		98
44)	Dibromomethane	11.91	93	14002	18.29	ppb		97
45)	Bromodichloromethane	12.18	83	27824	18.59	ppb		100
46)	2-Chloroethylvinyl Ether	12.71	63	13085	24.71	ppb		95
47)	cis-1,3-Dichloropropene	13.00	75	33346	19.01	ppb		98
48)	4-Methyl-2-Pentanone	13.26	43	41405	20.03	ppb		97
49)	Toluene	13.65	91	90582	21.67	ppb		100
50)	trans-1,3-Dichloropropene	14.03	75	35549	19.48	ppb		99
52)	1,1,2-Trichloroethane	14.38	83	18974	19.19	ppb		98
56)	Tetrachloroethene	14.71	166	18496	20.08	ppb		99
57)	2-Hexanone	14.83	43	30583	17.17	ppb		95
58)	1,3-Dichloropropane	14.70	76	35724	16.78	ppb		89
59)	Dibromochloromethane	15.15	129	25265	17.29	ppb		99
60)	1,2-Dibromoethane	15.39	107	24937	18.42	ppb		93
61)	Chlorobenzene	16.33	112	67239	20.04	ppb		98
62)	1,1,1,2-Tetrachloroethane	16.48	131	21233	18.04	ppb		93
63)	Ethylbenzene	16.53	91	112417	20.70	ppb		99
64)	(m+p)Xylene	16.76	106	84313	42.84	ppb		96
65)	o-Xylene	17.55	106	40909	20.06	ppb		99
66)	Styrene	17.57	104	71452	20.87	ppb		99
67)	Bromoform	17.96	173	17934	18.57	ppb		95
68)	Isopropylbenzene	18.28	105	101543	20.67	ppb		96
70)	1,1,2,2-Tetrachloroethane	18.85	83	41591	20.20	ppb		99
71)	1,2,3-Trichloropropane	18.95	110	9943	19.60	ppb		97
72)	Trans-1,4-Dichloro-2-Buten	19.12	53	1146	1.54	ppb	#	1
73)	n-Propylbenzene	19.11	91	142819	22.06	ppb		98
74)	Bromobenzene	18.93	156	23504	18.64	ppb		98
75)	1,3,5-Trimethylbenzene	19.46	105	82421	21.41	ppb		100
76)	2-Chlorotoluene	19.31	91	81838	21.09	ppb		98
77)	4-Chlorotoluene	19.52	91	96041	22.08	ppb		97
78)	tert-Butylbenzene	20.13	119	67872	20.29	ppb		98
79)	1,2,4-Trimethylbenzene	20.23	105	80160	21.13	ppb		96
80)	sec-Butylbenzene	20.58	105	115663	21.06	ppb		99
81)	p-Isopropyltoluene	20.87	119	82210	20.50	ppb		98
82)	1,3-Dclbenz	20.84	146	45287	20.64	ppb		96
83)	1,4-Dclbenz	21.01	146	46664	20.89	ppb		97
84)	n-Butylbenzene	21.71	91	93609	21.95	ppb		97
85)	1,2-Dclbenz	21.78	146	43505	20.14	ppb		95
86)	1,2-Dibromo-3-chloropropan	23.36	157	6494	19.17	ppb		94
88)	1,2,4-Tcbenzene	25.10	180	24116	21.36	ppb		100
89)	Hexachlorobt	25.44	225	13563	21.61	ppb		96
90)	Naphthalen	25.61	128	59347	17.63	ppb		98
91)	1,2,3-Tclbenzene	26.14	180	22536	19.40	ppb		99

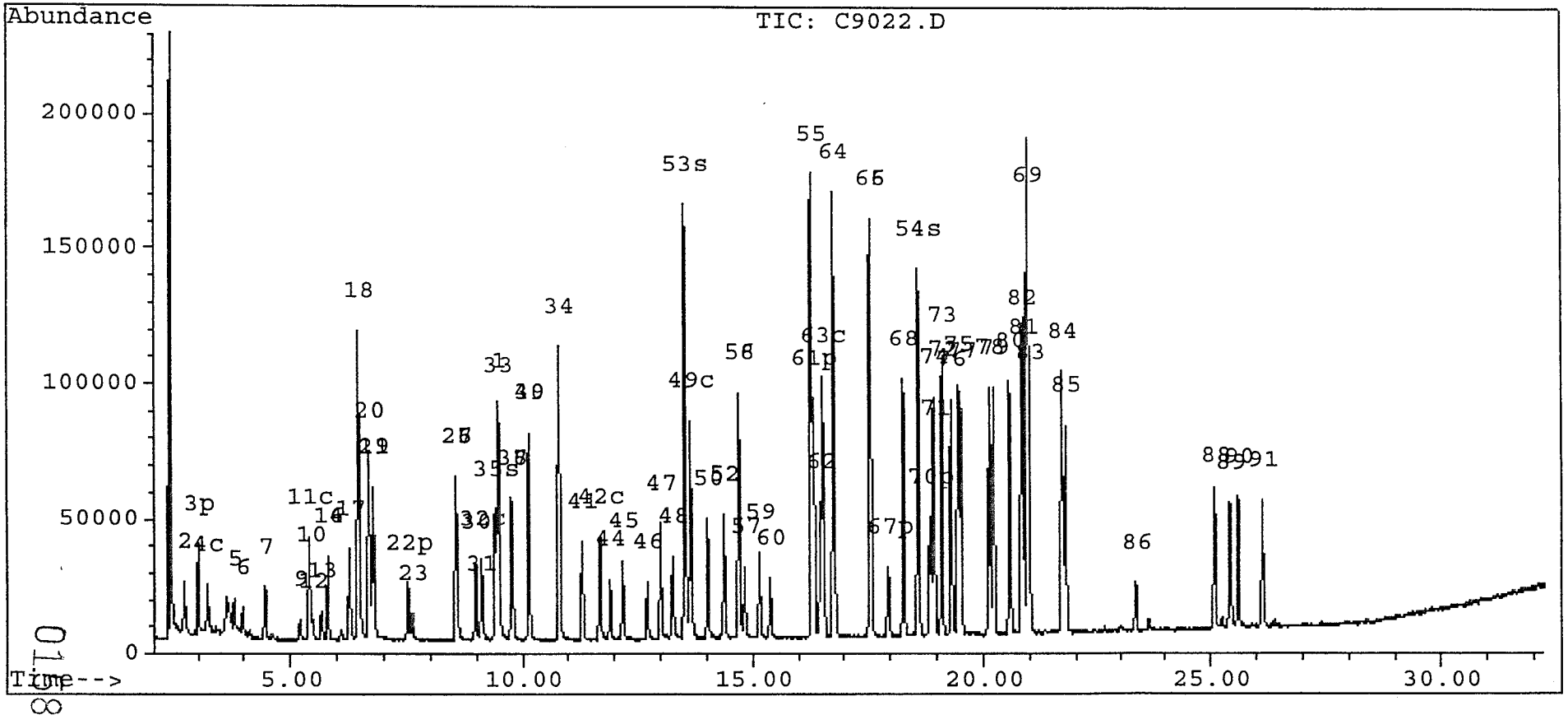
0157

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\OLDDATA\012700\C9022.D Vial: 6
Acq On : 27 Jan 100 12:18 pm Operator: HERRING
Sample : 361281 1 Inst : 5971 - In
Misc : QC/REF Multiplr: 1.00
Quant Time: Jan 27 12:51 2000

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Tue Feb 08 12:17:57 2000
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Project Reference:
Client Sample ID : MATRIX SPIKE

Date Sampled : 02/25/00 **Order #:** 361278 **Sample Matrix:** SOIL/SEDIMENT
Date Received: / / **Submission #:** **Percent Solid:** 63.8

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/27/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	74	UG/KG
BENZENE	5.0	69	UG/KG
BROMODICHLOROMETHANE	5.0	67	UG/KG
BROMOFORM	5.0	60	UG/KG
BROMOMETHANE	5.0	69	UG/KG
2-BUTANONE (MEK)	10	61	UG/KG
CARBON DISULFIDE	10	60	UG/KG
CARBON TETRACHLORIDE	5.0	69	UG/KG
CHLOROBENZENE	5.0	75	UG/KG
CHLOROETHANE	5.0	72	UG/KG
CHLOROFORM	5.0	64	UG/KG
CHLOROMETHANE	5.0	80	UG/KG
DIBROMOCHLOROMETHANE	5.0	64	UG/KG
1,3-DICHLOROBENZENE	5.0	83	UG/KG
1,2-DICHLOROBENZENE	5.0	75	UG/KG
1,4-DICHLOROBENZENE	5.0	82	UG/KG
1,1-DICHLOROETHANE	5.0	64	UG/KG
1,2-DICHLOROETHANE	5.0	69	UG/KG
1,1-DICHLOROETHENE	5.0	66	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	63	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	66	UG/KG
1,2-DICHLOROPROPANE	5.0	69	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	64	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	64	UG/KG
ETHYLBENZENE	5.0	80	UG/KG
2-HEXANONE	10	63	UG/KG
METHYLENE CHLORIDE	5.0	71	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	60	UG/KG
STYRENE	5.0	74	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	89	UG/KG
TETRACHLOROETHENE	5.0	77	UG/KG
TOLUENE	5.0	75	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	49	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	39	UG/KG
1,1,1-TRICHLOROETHANE	5.0	69	UG/KG
1,1,2-TRICHLOROETHANE	5.0	64	UG/KG
TRICHLOROETHENE	5.0	72	UG/KG
VINYL CHLORIDE	5.0	80	UG/KG
O-XYLENE	5.0	78	UG/KG
M+P-XYLENE	5.0	160	UG/KG

SURROGATE RECOVERIES	QC LIMITS	0159	
4-BROMOFLUOROBENZENE	(74 - 121 %)	85	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Project Reference:
Client Sample ID : MATRIX SPIKE

Date Sampled : 02/25/00 **Order #:** 361278 **Sample Matrix:** SOIL/SEDIMENT
Date Received: / / **Submission #:** **Percent Solid:** 63.8

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 01/27/00			
ANALYTICAL DILUTION:	1.00			Dry Weight
TOLUENE-D8	(81 - 117 %)		102	%
DIBROMOFLUOROMETHANE	(80 - 120 %)		97	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9026.D
Acq On : 27 Jan 100 3:12 pm
Sample : 355896 1.0MS
Misc : DAMES R20-664 8260B.TCLH
Quant Time: Jan 27 15:44 19100

Vial: 10
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

CB-1MS

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration

2-14-00

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.49	168	69441	50.00	ppb		0.00
34) 1,4-Difluorobenzene	10.80	114	123427	50.00	ppb		0.00
55) d5-Chlorobenze	16.28	117	124172	50.00	ppb		0.00
69) d4-1,4-Dichlorobenzene	20.95	152	42022	50.00	ppb		0.00
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.41	113	45545	48.52	ppb		97.05%
53) surr3,Toluene-d8	13.52	98	150808	50.86	ppb		101.73%
54) surr2,bfb	18.60	95	59410	42.62	ppb		85.24%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.70	85	79951	54.36	ppb		99
3) Chloromethane	3.00	50	75381	50.69	ppb		97
4) Vinyl Chloride	3.20	62	58675	50.96	ppb		99
5) Bromomethane	3.78	94	24037	44.52	ppb		99
6) Chloroethane	3.97	64	32519	46.57	ppb		96
7) Trichlorofluoromethane	4.45	101	57346	45.61	ppb		98
8) Diethyl Ether	4.97	59	27524	38.50	ppb		99
9) Acrolein	5.19	56	5183	46.63	ppb		92
10) FREON 113	5.41	85	16585	45.36	ppb		90
11) 1,1-Diclethene	5.40	96	29667	41.79	ppb		94
12) Acetone	5.46	43	37400	47.29	ppb		99
13) Iodomethane	5.66	142	45834	41.83	ppb		96
14) Carbon Disulfide	5.80	76	142598	38.50	ppb		100
15) Acetonitrile	5.96	39	4095	167.86	ppb		96
16) Allyl Chloride	6.05	76	16280	35.17	ppb		96
17) Methylene Chloride	6.26	84	43191	44.65	ppb		97
18) TBA	6.45	59	117282	723.74	ppb		96
19) Methyl-t-Butyl Ether	6.77	73	84137	38.29	ppb		96
20) Acrylonitrile	6.68	53	67452	173.53	ppb		99
21) trans-1,2-Dichloroethene	6.78	96	32188	41.99	ppb		98
22) 1,1-Diclethane	7.52	63	79428	41.20	ppb		99
23) Vinyl Acetate	7.61	42	715	3.29	ppb	#	55
24) 2-Chloro-1,3-butadiene	7.70	53	65861	42.68	ppb		100
25) 2,2-Dichloropropane	8.57	77	58733	43.30	ppb		98
26) 2-Butanone	8.57	43	32935	38.91	ppb		99
27) cis-1,2-Dichloroethene	8.57	96	38659	40.36	ppb		92
28) Propionitrile	8.66	54	31315	208.89	ppb		98
29) Methacrylonitrile	8.95	67	12792	30.01	ppb		87
30) Bromochloromethane	8.99	128	22940	40.20	ppb		93
31) Tetrahydrofuran	9.09	42	16626	34.82	ppb		96
32) Chloroform	9.13	83	72673	41.46	ppb		99
33) 1,1,1-Trichloroethane	9.48	97	55842	43.92	ppb		90
36) Carbontetrachloride	9.79	117	43888	44.11	ppb		95

0161

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9026.D
Acq On : 27 Jan 100 3:12 pm
Sample : 355896 1.0MS
Misc : DAMES R20-664 8260B.TCLH
Quant Time: Jan 27 15:44 19100

Vial: 10
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37) 1,1-Dichloropropene	9.77	75	51078	46.32 ppb	99
38) Iso-Butyl Alcohol	9.92	43	56264	728.18 ppb	99
39) Benzene	10.14	78	163615	44.35 ppb	99
40) 1,2-Dichloroethane	10.15	62	72314	43.96 ppb	98
41) Trichloroethene	11.29	95	43709	45.85 ppb	92
42) 1,2-Diclpropane	11.69	63	54193	44.22 ppb	97
43) Methyl Methacrylate	11.87	69	28941	33.25 ppb	95
44) Dibromomethane	11.91	93	32949	44.11 ppb	99
45) Bromodichloromethane	12.18	83	62270	42.64 ppb	99
46) 2-Chloroethylvinyl Ether	12.71	63	18763	36.32 ppb	97
47) cis-1,3-Dichloropropene	13.00	75	70105	40.97 ppb	99
48) 4-Methyl-2-Pentanone	13.26	43	76515	37.94 ppb	99
49) Toluene	13.65	91	193905	47.56 ppb	100
50) trans-1,3-Dichloropropene	14.03	75	72422	40.67 ppb	99
51) Ethyl Methacrylate	14.18	69	26457	13.47 ppb	95
52) 1,1,2-Trichloroethane	14.38	83	39596	41.05 ppb	98
56) Tetrachloroethene	14.71	166	38753	49.37 ppb	94
57) 2-Hexanone	14.83	43	61116	40.27 ppb	99
58) 1,3-Dichloropropane	14.71	76	79463	43.80 ppb	99
59) Dibromochloromethane	15.15	129	50753	40.76 ppb	98
60) 1,2-Dibromoethane	15.39	107	49734	43.13 ppb	95
61) Chlorobenzene	16.34	112	136386	47.70 ppb	99
62) 1,1,1,2-Tetrachloroethane	16.48	131	44945	44.82 ppb	96
63) Ethylbenzene	16.53	91	236962	51.21 ppb	98
64) (m+p)Xylene	16.76	106	173745	103.61 ppb	98
65) o-Xylene	17.55	106	86640	49.86 ppb	99
66) Styrene	17.57	104	137472	47.14 ppb	94
67) Bromoform	17.96	173	31403	38.16 ppb	91
68) Isopropylbenzene	18.28	105	198389	47.40 ppb	97
70) 1,1,2,2-Tetrachloroethane	18.85	83	74229	56.87 ppb	96
71) 1,2,3-Trichloropropane	18.95	110	18427	57.29 ppb	95
72) Trans-1,4-Dichloro-2-Buten	18.96	53	21261	45.17 ppb	88
73) n-Propylbenzene	19.11	91	256555	62.51 ppb	99
74) Bromobenzene	18.92	156	46188	57.79 ppb	96
75) 1,3,5-Trimethylbenzene	19.46	105	148142	60.70 ppb	100
76) 2-Chlorotoluene	19.31	91	154742	62.91 ppb	99
77) 4-Chlorotoluene	19.52	91	173942	63.08 ppb	100
78) tert-Butylbenzene	20.13	119	114370	53.93 ppb	94
79) 1,2,4-Trimethylbenzene	20.23	105	146541	60.94 ppb	98
80) sec-Butylbenzene	20.58	105	180807	51.92 ppb	96
81) p-Isopropyltoluene	20.86	119	132273	52.02 ppb	97
82) 1,3-Dclbenz	20.82	146	73310	52.71 ppb	96
83) 1,4-Dclbenz	21.00	146	73482	51.90 ppb	97
84) n-Butylbenzene	21.70	91	125616	46.46 ppb	97

0162

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9026.D Vial: 10
Acq On : 27 Jan 100 3:12 pm Operator: HERRING
Sample : 355896 1.0MS Inst : 5971 - In
Misc : DAMES R20-664 8260B.TCLH Multiplr: 1.00
Quant Time: Jan 27 15:44 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration

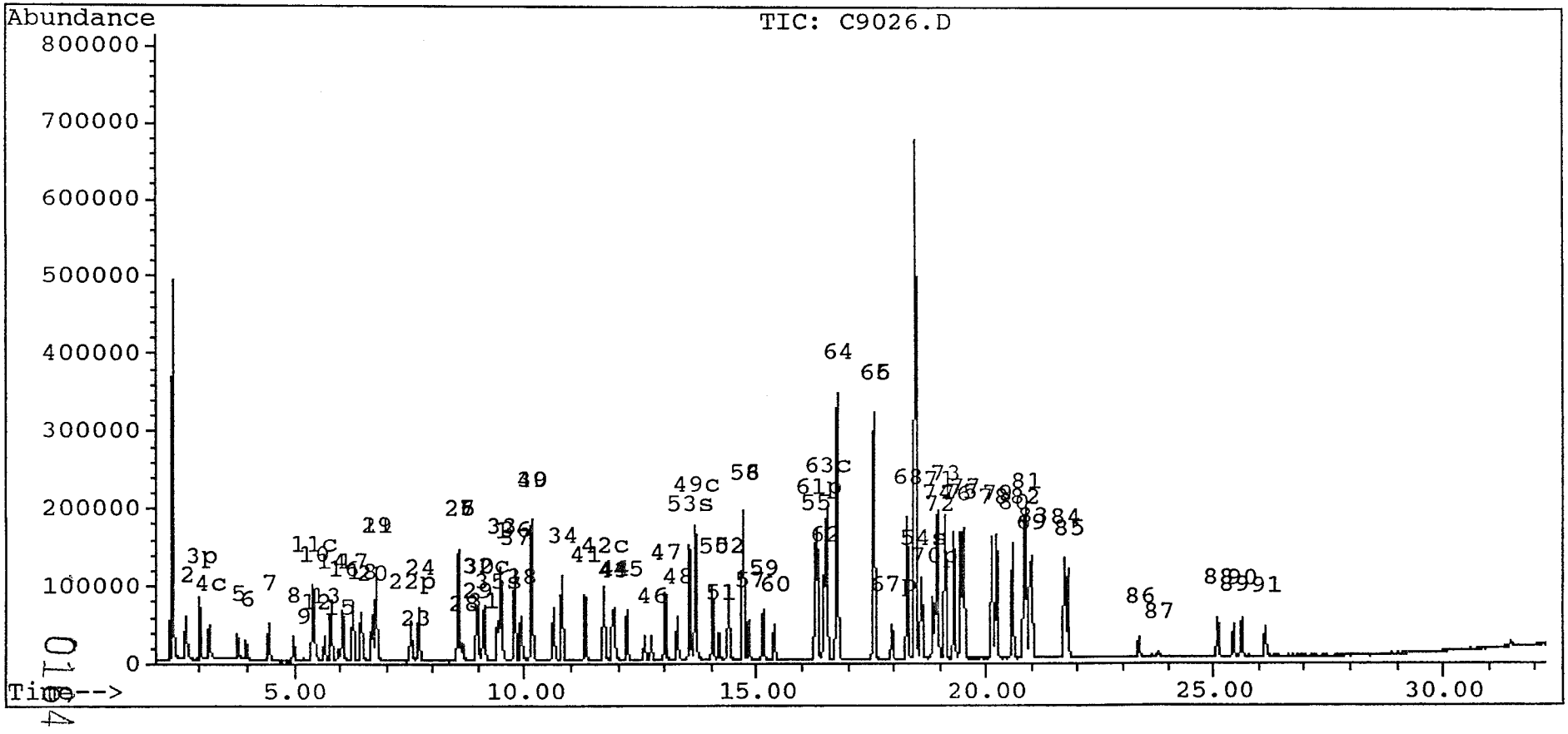
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85)	1,2-Dclbenz	21.77	146	65644	47.95 ppb	95
86)	1,2-Dibromo-3-chloropropan	23.36	157	9878	46.01 ppb	96
87)	Nitrobenzene	23.78	77	5460	48.94 ppb	99
88)	1,2,4-Tcbenzene	25.09	180	21952	30.67 ppb	97
89)	Hexachlorobt	25.43	225	11441	28.75 ppb	100
90)	Naphthalen	25.61	128	58978	27.64 ppb	98
91)	1,2,3-Tclbenzene	26.14	180	18610	25.27 ppb	100

0163

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

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9026.D Vial: 10
Acq On : 27 Jan 100 3:12 pm Operator: HERRING
Sample : 355896 1.0MS Inst : 5971 - In
Misc : DAMES R20-664 8260B.TCLH Multiplr: 1.00
Quant Time: Jan 27 15:44 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Project Reference:
Client Sample ID : MATRIX SPIKE DUPLICATE

Date Sampled : 02/25/00 **Order #:** 361279 **Sample Matrix:** SOIL/SEDIMENT
Date Received: / / **Submission #:** **Percent Solid:** 63.8

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/27/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	83	UG/KG
BENZENE	5.0	74	UG/KG
BROMODICHLOROMETHANE	5.0	66	UG/KG
BROMOFORM	5.0	56	UG/KG
BROMOMETHANE	5.0	75	UG/KG
2-BUTANONE (MEK)	10	64	UG/KG
CARBON DISULFIDE	10	60	UG/KG
CARBON TETRACHLORIDE	5.0	64	UG/KG
CHLOROBENZENE	5.0	77	UG/KG
CHLOROETHANE	5.0	82	UG/KG
CHLOROFORM	5.0	71	UG/KG
CHLOROMETHANE	5.0	88	UG/KG
DIBROMOCHLOROMETHANE	5.0	63	UG/KG
1,3-DICHLOROBENZENE	5.0	82	UG/KG
1,2-DICHLOROBENZENE	5.0	77	UG/KG
1,4-DICHLOROBENZENE	5.0	82	UG/KG
1,1-DICHLOROETHANE	5.0	72	UG/KG
1,2-DICHLOROETHANE	5.0	74	UG/KG
1,1-DICHLOROETHENE	5.0	71	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	67	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	69	UG/KG
1,2-DICHLOROPROPANE	5.0	74	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	60	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	63	UG/KG
ETHYLBENZENE	5.0	82	UG/KG
2-HEXANONE	10	66	UG/KG
METHYLENE CHLORIDE	5.0	77	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	64	UG/KG
STYRENE	5.0	74	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	96	UG/KG
TETRACHLOROETHENE	5.0	80	UG/KG
TOLUENE	5.0	77	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	45	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	36	UG/KG
1,1,1-TRICHLOROETHANE	5.0	72	UG/KG
1,1,2-TRICHLOROETHANE	5.0	69	UG/KG
TRICHLOROETHENE	5.0	72	UG/KG
VINYL CHLORIDE	5.0	88	UG/KG
O-XYLENE	5.0	82	UG/KG
M+P-XYLENE	5.0	160	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	87	%

0165

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Project Reference:
Client Sample ID : MATRIX SPIKE DUPLICATE

Date Sampled : 02/25/00 **Order #:** 361279 **Sample Matrix:** SOIL/SEDIMENT
Date Received: / / **Submission #:** **Percent Solid:** 63.8

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 01/27/00			
ANALYTICAL DILUTION:	1.00			Dry Weight
TOLUENE-D8	(81 - 117 %)		100	%
DIBROMOFLUOROMETHANE	(80 - 120 %)		99	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9027.D
Acq On : 27 Jan 100 3:52 pm
Sample : 355896 1.0MSD
Misc : DAMES R20-664 8260B.TCLH
Quant Time: Jan 27 16:24 19100

Vial: 11
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

CB-1 MSD

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration

2.14.00

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.48	168	68460	50.00	ppb		0.00
34) 1,4-Difluorobenzene	10.80	114	123945	50.00	ppb		0.00
55) d5-Chlorobenze	16.28	117	123615	50.00	ppb		0.00
69) d4-1,4-Dichlorobenzene	20.95	152	40100	50.00	ppb		0.00
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.41	113	46743	49.59	ppb		99.18%
53) surr3,Toluene-d8	13.52	98	149594	50.24	ppb		100.49%
54) surr2,bfb	18.60	95	60627	43.31	ppb		86.63%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.70	85	83526	57.61	ppb		97
3) Chloromethane	3.00	50	81878	55.85	ppb		99
4) Vinyl Chloride	3.20	62	63803	56.21	ppb		99
5) Bromomethane	3.78	94	25285	47.50	ppb		95
6) Chloroethane	3.98	64	35623	51.75	ppb		98
7) Trichlorofluoromethane	4.45	101	58696	47.36	ppb		98
8) Diethyl Ether	4.98	59	29788	42.26	ppb		95
9) Acrolein	5.19	56	5006	45.68	ppb		98
10) FREON 113	5.40	85	17250	47.86	ppb		92
11) 1,1-Diclethene	5.39	96	31615	45.17	ppb		88
12) Acetone	5.46	43	41329	53.00	ppb		97
13) Iodomethane	5.66	142	46728	43.26	ppb		98
14) Carbon Disulfide	5.79	76	137267	37.60	ppb		99
15) Acetonitrile	5.95	39	5041	209.60	ppb		95
16) Allyl Chloride	6.04	76	15968	34.99	ppb		96
17) Methylene Chloride	6.26	84	47042	49.33	ppb		95
18) TBA	6.45	59	135871	850.46	ppb		97
19) Methyl-t-Butyl Ether	6.77	73	92223	42.57	ppb		99
20) Acrylonitrile	6.68	53	69142	180.43	ppb		97
21) trans-1,2-Dichloroethene	6.77	96	33277	44.03	ppb		98
22) 1,1-Diclethane	7.52	63	86649	45.59	ppb		98
23) Vinyl Acetate	7.58	42	302	1.41	ppb	#	31
24) 2-Chloro-1,3-butadiene	7.69	53	65277	42.91	ppb		97
25) 2,2-Dichloropropane	8.56	77	60632	45.34	ppb		98
26) 2-Butanone	8.56	43	34462	41.30	ppb		93
27) cis-1,2-Dichloroethene	8.56	96	40879	43.28	ppb		96
28) Propionitrile	8.65	54	32725	221.42	ppb		99
29) Methacrylonitrile	8.93	67	11696	27.83	ppb		92
30) Bromochloromethane	8.98	128	25326	45.02	ppb		97
31) Tetrahydrofuran	9.08	42	19845	42.15	ppb		96
32) Chloroform	9.13	83	78557	45.46	ppb		98
33) 1,1,1-Trichloroethane	9.47	97	57605	45.95	ppb		99
36) Carbontetrachloride	9.79	117	40803	40.83	ppb		95

0167

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9027.D
Acq On : 27 Jan 100 3:52 pm
Sample : 355896 1.0MSD
Misc : DAMES R20-664 8260B.TCLH
Quant Time: Jan 27 16:24 19100

Vial: 11
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 1,1-Dichloropropene	9.77	75	50985	46.04	ppb	97
38) Iso-Butyl Alcohol	9.92	43	51860	668.38	ppb	97
39) Benzene	10.14	78	174332	47.06	ppb	100
40) 1,2-Dichloroethane	10.15	62	77121	46.68	ppb	98
41) Trichloroethene	11.29	95	43856	45.82	ppb	98
42) 1,2-Diclpropane	11.69	63	57520	46.74	ppb	97
43) Methyl Methacrylate	11.86	69	22662	25.92	ppb	90
44) Dibromomethane	11.90	93	35274	47.03	ppb	97
45) Bromodichloromethane	12.18	83	61183	41.72	ppb	97
46) 2-Chloroethylvinyl Ether	12.71	63	19768	38.11	ppb	100
47) cis-1,3-Dichloropropene	13.00	75	65063	37.87	ppb	100
48) 4-Methyl-2-Pentanone	13.26	43	83581	41.27	ppb	99
49) Toluene	13.65	91	200191	48.90	ppb	100
50) trans-1,3-Dichloropropene	14.02	75	70827	39.61	ppb	98
51) Ethyl Methacrylate	14.18	69	14237	7.22	ppb	100
52) 1,1,2-Trichloroethane	14.38	83	42762	44.14	ppb	100
56) Tetrachloroethene	14.69	166	39753	50.87	ppb	97
57) 2-Hexanone	14.82	43	64322	42.57	ppb	99
58) 1,3-Dichloropropane	14.70	76	84694	46.89	ppb	99
59) Dibromochloromethane	15.14	129	49587	40.00	ppb	98
60) 1,2-Dibromoethane	15.38	107	51495	44.86	ppb	97
61) Chlorobenzene	16.34	112	138626	48.70	ppb	100
62) 1,1,1,2-Tetrachloroethane	16.48	131	46632	46.71	ppb	98
63) Ethylbenzene	16.53	91	238776	51.84	ppb	99
64) (m+p)Xylene	16.76	106	173460	103.91	ppb	99
65) o-Xylene	17.56	106	89146	51.54	ppb	99
66) Styrene	17.58	104	137488	47.36	ppb	99
67) Bromoform	17.96	173	29898	36.49	ppb	93
68) Isopropylbenzene	18.28	105	200302	48.08	ppb	96
70) 1,1,2,2-Tetrachloroethane	18.85	83	76342	61.30	ppb	93
71) 1,2,3-Trichloropropane	18.95	110	19532	63.64	ppb	95
72) Trans-1,4-Dichloro-2-Buten	18.96	53	19004	42.31	ppb	65
73) n-Propylbenzene	19.11	91	257379	65.72	ppb	100
74) Bromobenzene	18.93	156	46000	60.32	ppb	99
75) 1,3,5-Trimethylbenzene	19.46	105	148097	63.59	ppb	98
76) 2-Chlorotoluene	19.31	91	153685	65.48	ppb	99
77) 4-Chlorotoluene	19.52	91	168008	63.85	ppb	99
78) tert-Butylbenzene	20.12	119	119093	58.85	ppb	99
79) 1,2,4-Trimethylbenzene	20.22	105	142562	62.12	ppb	98
80) sec-Butylbenzene	20.57	105	176646	53.16	ppb	99
81) p-Isopropyltoluene	20.85	119	128179	52.83	ppb	97
82) 1,3-Dclbenz	20.82	146	69724	52.54	ppb	96
83) 1,4-Dclbenz	21.00	146	70806	52.41	ppb	96
84) n-Butylbenzene	21.70	91	117298	45.46	ppb	98

0168

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

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9027.D Vial: 11
Acq On : 27 Jan 100 3:52 pm Operator: HERRING
Sample : 355896 1.0MSD Inst : 5971 - In
Misc : DAMES R20-664 8260B.TCLH Multiplr: 1.00
Quant Time: Jan 27 16:24 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration

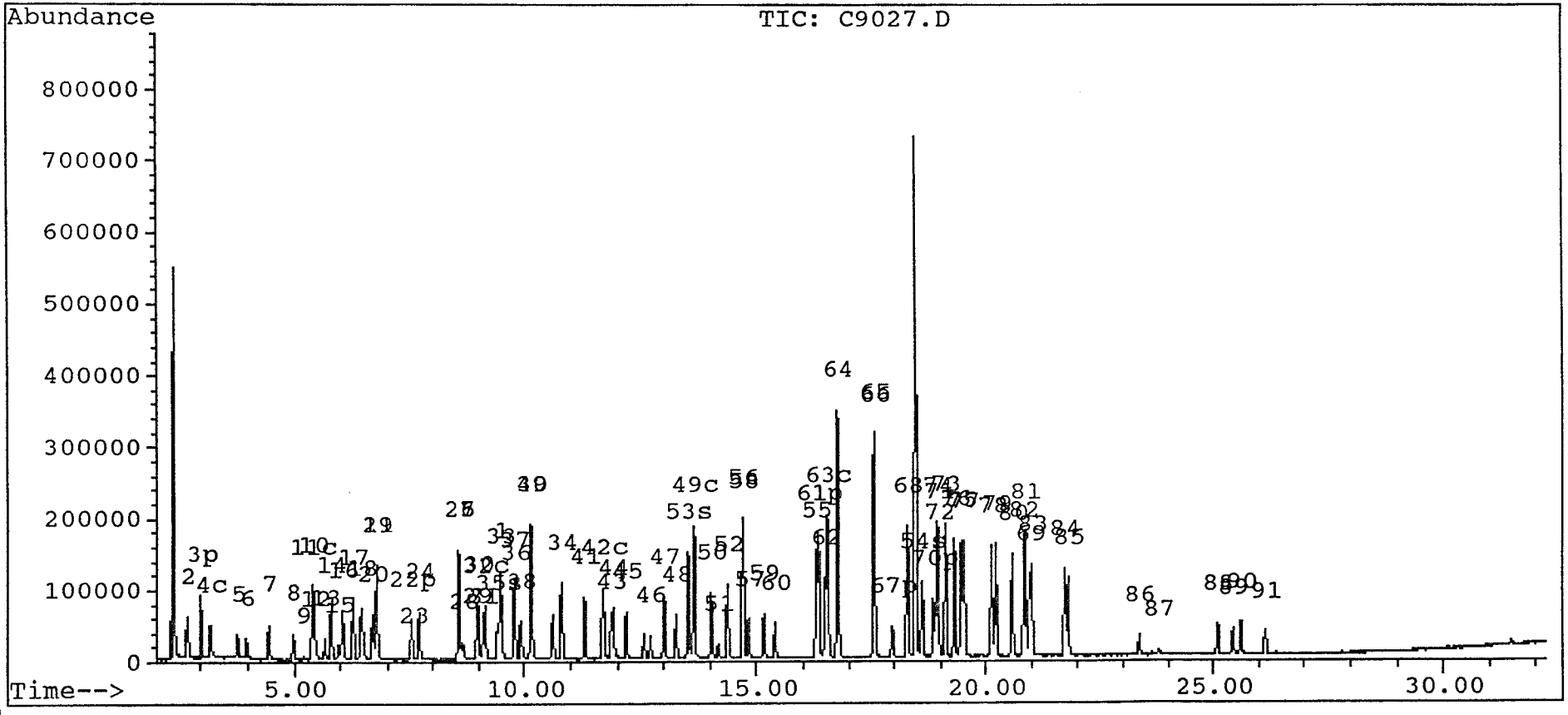
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85)	1,2-Dclbenz	21.77	146	64156	49.11	ppb		95
86)	1,2-Dibromo-3-chloropropan	23.36	157	10023	48.92	ppb		95
87)	Nitrobenzene	23.78	77	5761	54.12	ppb	#	85
88)	1,2,4-Tcbenzene	25.10	180	19615	28.72	ppb		98
89)	Hexachlorobt	25.43	225	10599	27.91	ppb		100
90)	Naphthalen	25.62	128	57478	28.22	ppb		99
91)	1,2,3-Tclbenzene	26.15	180	16341	23.26	ppb		95

0169

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

Data File : J:\ACQUDATA\MSVOA5\DATA\012700\C9027.D Vial: 11
Acq On : 27 Jan 100 3:52 pm Operator: HERRING
Sample : 355896 1.0MSD Inst : 5971 - In
Misc : DAMES R20-664 8260B.TCLH Multiplr: 1.00
Quant Time: Jan 27 16:24 19100

Method : J:\ACQUDATA\MSVOA5\METHODS\SOIL0113.M
Title : 8260voa
Last Update : Thu Jan 27 11:03:44 2000
Response via : Multiple Level Calibration



0678

1	BLK	Y5787	–	
1	TUNE CHECK (10:15 AM)	Y5788	YT	
1	CCV	Y5789	YC	
1	BLK	Y5790	–	
2	MET BLK	Y5791	YM	
3	QC /REF	Y5792	YQ	
1	355356 1.0 [XRXPOSK RZO-00-628 8260B.TCLH]	Y5793	Y	
1	354435 1.0 [ESI RZO-00-540 8260B.TCMT]	Y5794	Y	
1	PREP BLANK 1.0 ΣHLA-DENVER RZO-00-663 8260B.TCLP	Y5795	N	TOLUENE D-8
2	355850 10.0	Y5796	Y	
3	851 10.0	Y5797	Y	
4	852 10.0	Y5798	Y	
5	PREP BLK 1.0	Y5799	Y	
6	355585 10.0 [DLIN RZO-00-645 8260B.TPTO]	Y5800	Y	
7	580 10.0(ms) ΣHLA RZO-00-645 8260B.TCLP]	Y5801	YQ	
8	BLK	Y580X2	–	
9	355898 500.0 [DAMES RZO-00-664 8260B.]	Y580Z3	Y	
10	355413 125.0 [FRD RZO-00-630 8260B.]	Y5803	Y	
11	355334 50.0 [INDSPEC COR. RZO-00-623 8260B.TCMT]	Y5804		
12	335 50.0	Y5805		
13	336 50.0	Y5806		
14	337 50.0	Y5807		
15	338 50.0	Y5808		
16	339 50.0	Y5809		
17	340 50.0	Y5810		
18	341 50.0	Y5811		
19	342 50.0	Y5812		
20	343 50.0	Y5813		

BA 1/27 — 4 SCREENS

William C Allgeier

		TUNE	CCV	REF	SPK
SURR	MSV 3040A	17uL	-	-	-
TARGETS	MSV 3037A	-	5uL	-	4.25
HSL	MSV 3037B	-	5uL	-	4.25
HSL REF	MSV 3045B	-	-	50uL	-
QC REF	MSV 3040A	-	-	50uL	-

0170

—	1	BLK			C9017	—	
YT	•	TUNE CHECK			C9018	YT	
YC	1	CCV 78443, 142235, 157067, 73242			C9019	YC	
—	1	BLK			C9020	—	
YM	2	MET BLK			C9021	YM	
YQ	1	QC/REF			C9022	YQ	
Y	1	354967	1.0	[DAY R-6040 8260B.260]	C9023	Y	
Y	1	968	1.0		C9024	Y	
Y	2	355896	1.0	[DAMES R-604 8260B.TUNE]	C9025	Y	IS+ out ok in MS/MSD
Y	3	896	1.0 MS		C9026	YQ	
Y	4	896	1.0 MSD		C9027	YQ	
Y	5	BLK			C9028	—	
Y	6	355899	1.0 (IB)		C9029	Y	
Y	7	897	1.0		C9030	Y	
Y							
Y							
Y							

(1) 10:02
R AS REPL ONLY
NOTE HOLDING TIME

Rodenica J Hunt

Surr. MSV3043A, 2µL tune
Targets + Gases MSV3037A, 5µL / 50mL CCV
HSL/Acrolein MSV3037B, 5µL / CCV
8260 Ref. MSV3040A, 50µL
HSL Ref. MSV3045B, 50µL / 50mL Ref.

0171

PCB's

QC SUMMARY

COLUMBIA ANALYTICAL SERVICES

QUALITY CONTROL SUMMARY MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
SOIL/SEDIMENT

Spiked Order No. : 355896 Dames & Moore

Client ID: CB-1

Test: 8082 PCB'S

Analytical Units: UG/KG

Run Number : 47170

Percent Solid : 63.8

			MATRIX SPIKE		MATRIX SPIKE DUP.			QC LIMITS	
ANALYTE	SPIKE ADDED	SAMPLE CONCENT.	FOUND	% REC.	FOUND	% REC.	RPD	RPD	REC.
PCB 1260	261	102	320	84	306	78	4	50	8 - 127

0173

COLUMBIA ANALYTICAL SERVICES

QUALITY CONTROL SUMMARY BLANK SPIKE RECOVERY

SOIL/SEDIMENT

Spiked Order No. : 355896

Client ID:

Test: 8082 PCB'S

Analytical Units: UG/KG

Run Number : 47170

			BLANK SPIKE		QC LIMITS
ANALYTE	SPIKE ADDED	SAMPLE CONCENT.	FOUND	% REC.	REC.
PCB 1260	167	0	150	90	8 - 127

METHOD BLANK SUMMARY

Lab Name:	Columbia Analytical Services		Contract:	DAMES	
Lab Code:	10145	Case No.: R2000664	SAS No.:		SDG No.: CB-1
Lab Sample ID.:	356290		Lab File ID:	CS606, ZS606	
Matrix: (soil/water):	SOIL		Level: (low/med)		
Date Extracted:	1/27/00		Extraction: (Sepf/Cont/Sonc)	SONC	
Date Analyzed: (1)	1/31/00		Date Analyzed: (2)	1/31/00	
Time Analyzed: (1)	12:51:00 PM		Time Analyzed: (2)	12:51:00 PM	
Instument ID: (1)	5890C		Instument ID: (2)	5890C	
GC Column ID: (1)	DB-1701		GC Column ID: (2)	DB-17	

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
1	PBLK1MS	356291 BS	1/31/00	1/31/00
2	CB-1	355896	1/31/00	1/31/00
3	CB-1 MS	356292 MS	1/31/00	1/31/00
4	CB-1 MSD	356293 MSD	1/31/00	1/31/00
5	STMH-2	355897	1/31/00	1/31/00
6	STMH-3	355898	2/2/00	2/2/00
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

COMMENTS:

0175

PCB's

SAMPLE DATA

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-1

Date Sampled : 01/25/00 **Order #:** 355896 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 63.8

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/27/00			
DATE ANALYZED : 01/31/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
PCB 1016	33	52 U	UG/KG
PCB 1221	33	52 U	UG/KG
PCB 1232	33	52 U	UG/KG
PCB 1242	33	52 U	UG/KG
PCB 1248	33	52 U	UG/KG
PCB 1254	33	52 U	UG/KG
PCB 1260	33	100	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	85	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	86	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100\CS608.D Vial: 5
Acq On : 31 Jan 2000 2:13 pm Operator: DROOT
Sample : 355896 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 8:06 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	347054	85.509 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	85.51%
37) S SURR2,DECACHLOROBIPHENYL	21.48	435050	84.940 ug/l
Spiked Amount 100.000		Recovery =	84.94%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.00	37906	148.413 ug/l
33) L7c PCB 1260{2}	16.37	57724	187.337 ug/l
34) L7c PCB 1260{3}	17.38	6659	162.952 ug/l
35) L7C PCB 1260{4}	20.11	39486	299.825 ug/l
36) L7C PCB 1260{5}	20.95	9000	176.186 ug/l
Sum PCB 1260		150776	974.713 ug/l
Average PCB 1260			194.943 ug/l

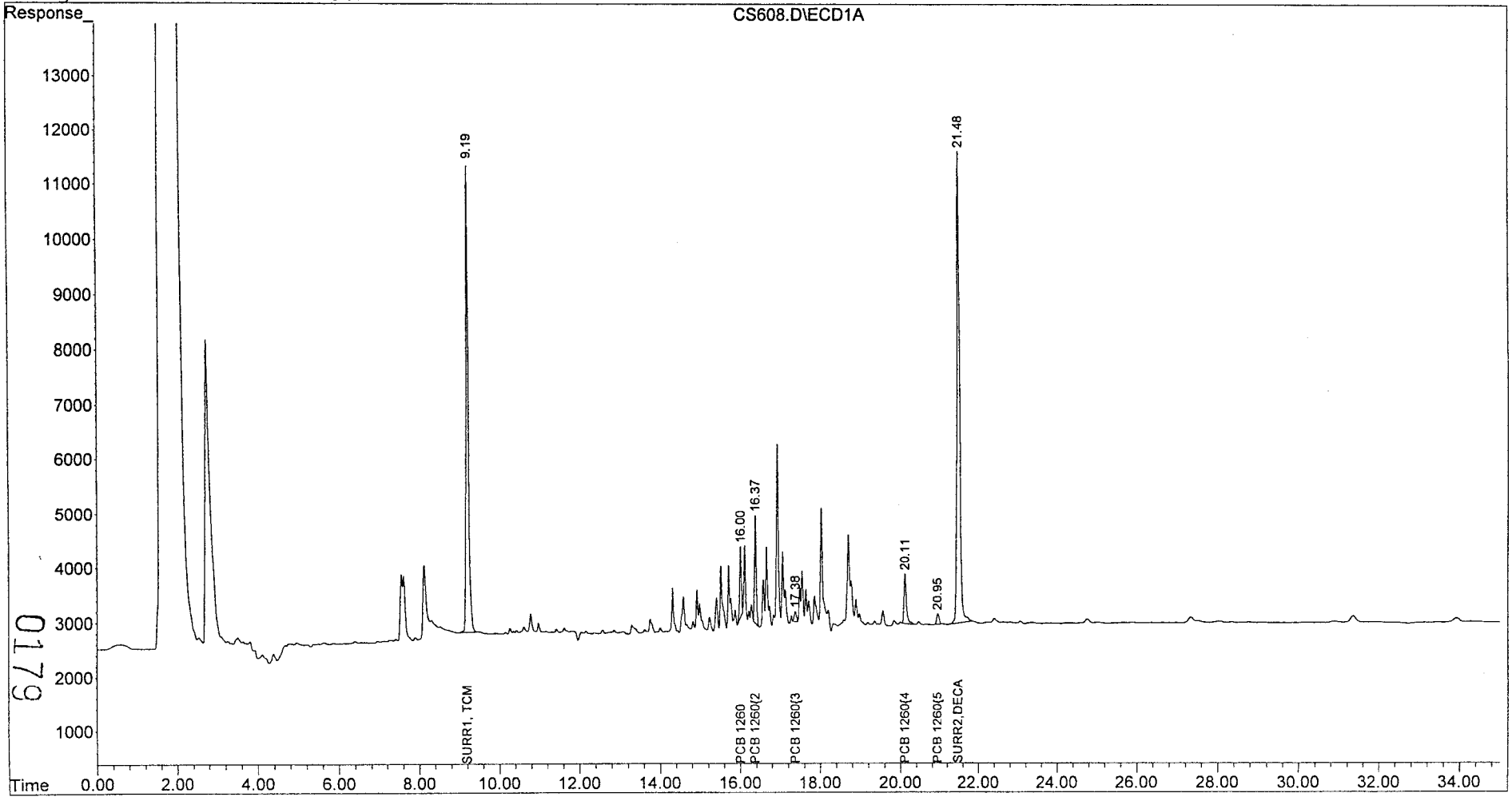
0178

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\013100\CS608.D Vial: 5
Acq On : 31 Jan 2000 2:13 pm Operator: DROOT
Sample : 355896 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 8:06 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0179

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS608.D Vial: 55
Acq On : 31 Jan 2000 2:13 pm Operator: DROOT
Sample : 355896 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 355896 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 7:29 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.59	1224293	105.539 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery = 105.54%	
37) S SURR2,DECACHLOROBIPHENYL	23.55	1343136	96.953 ug/l
Spiked Amount 100.000		Recovery = 96.95%	
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	117755	275.946 ug/l
33) L7c PCB 1260{2}	16.65	133230	178.157 ug/l
34) L7c PCB 1260{3}	16.81	153395	211.245 ug/l
35) L7C PCB 1260{4}	18.01	13500	127.168 ug/l
36) L7C PCB 1260{5}	18.60	233167	200.042 ug/l
Sum PCB 1260		651048	992.557 ug/l
Average PCB 1260			198.511 ug/l

0180

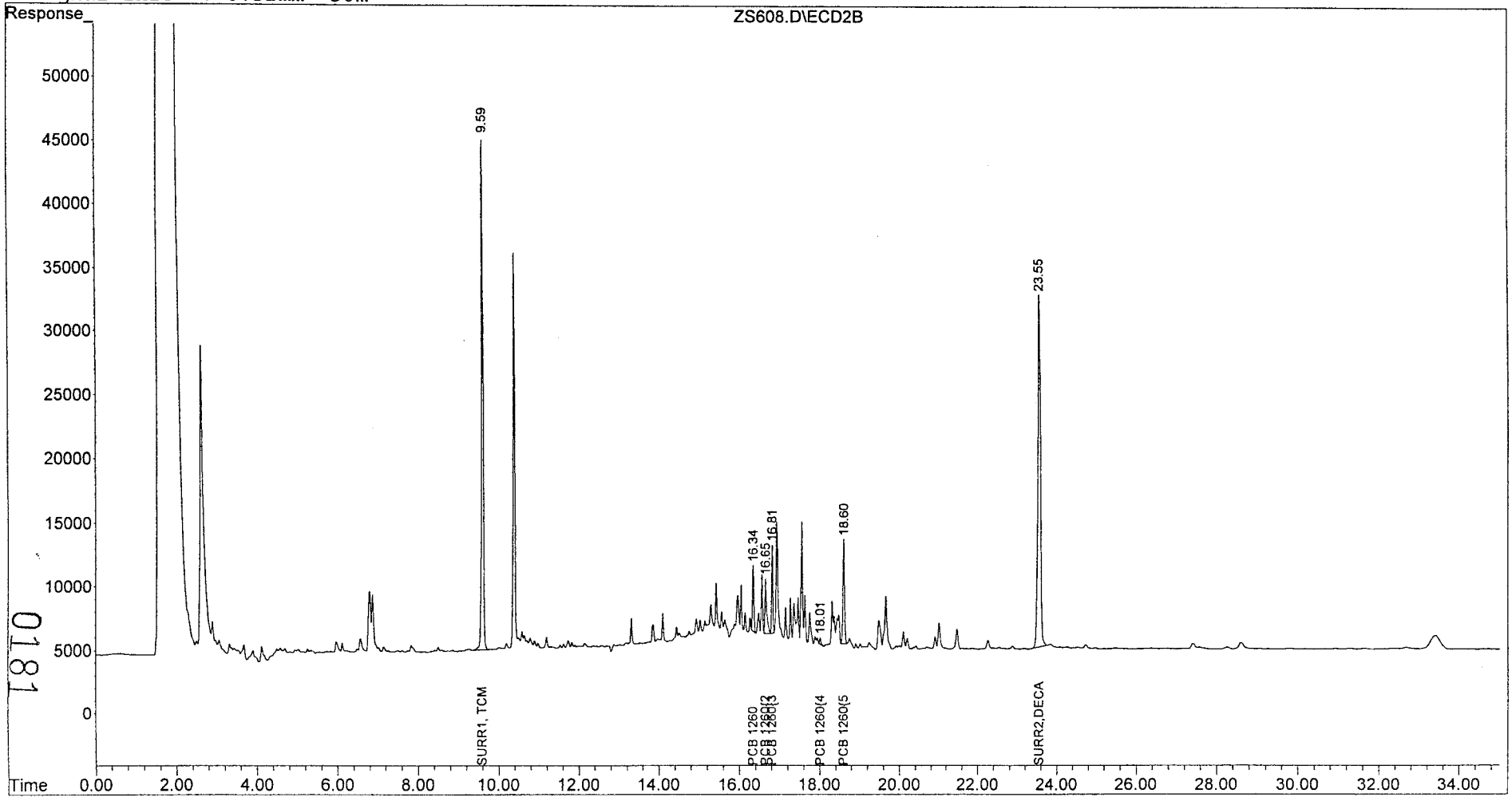
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS608.D Vial: 55
Acq On : 31 Jan 2000 2:13 pm Operator: DROOT
Sample : 355896 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 355896 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 7:29 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0181

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : STMH-2

Date Sampled : 01/25/00 **Order #:** 355897 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 83.1

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/27/00			
DATE ANALYZED : 01/31/00			
ANALYTICAL DILUTION: 50.00			Dry Weight
PCB 1016	33	2000 U	UG/KG
PCB 1221	33	2000 U	UG/KG
PCB 1232	33	2000 U	UG/KG
PCB 1242	33	2000 U	UG/KG
PCB 1248	33	2000 U	UG/KG
PCB 1254	33	14000	UG/KG
PCB 1260	33	6700	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	D	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	D	%

Data File : C:\HPCHEM\2\DATA\013100\CS611.D Vial: 8
Acq On : 31 Jan 2000 4:15 pm Operator: DROOT
Sample : 355897 50.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 8:10 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
Target Compounds					
Sum PCB 1016		0	N.D.	ug/l	
Average PCB 1016			0.000	ug/l	
Sum PCB 1221		0	N.D.	ug/L	
Average PCB 1221			0.000	ug/L	
Sum PCB 1232		0	N.D.	ug/l	
Average PCB 1232			0.000	ug/l	
Sum PCB 1242		0	N.D.	ug/l	
Average PCB 1242			0.000	ug/l	
Sum PCB 1248		0	N.D.	ug/l	
Average PCB 1248			0.000	ug/l	
27) L6c PCB 1254	13.79	26938	319.914	ug/l	m
28) L6c PCB 1254{2}	14.00	16956	518.674	ug/l	
29) L6c PCB 1254{3}	15.39	137985	1210.279	ug/l	
Sum PCB 1254		181878	2048.867	ug/l	
Average PCB 1254			682.956	ug/l	
33) L7c PCB 1260{2}	16.37	192760	625.578	ug/l	
34) L7c PCB 1260{3}	17.38	24795	606.729	ug/l	m
35) L7C PCB 1260{4}	20.10	7016	53.271	ug/l	
36) L7C PCB 1260{5}	20.93	2570	50.309	ug/l	m
Sum PCB 1260		227140	N.D.	ug/l	
Average PCB 1260			333.972	ug/l	

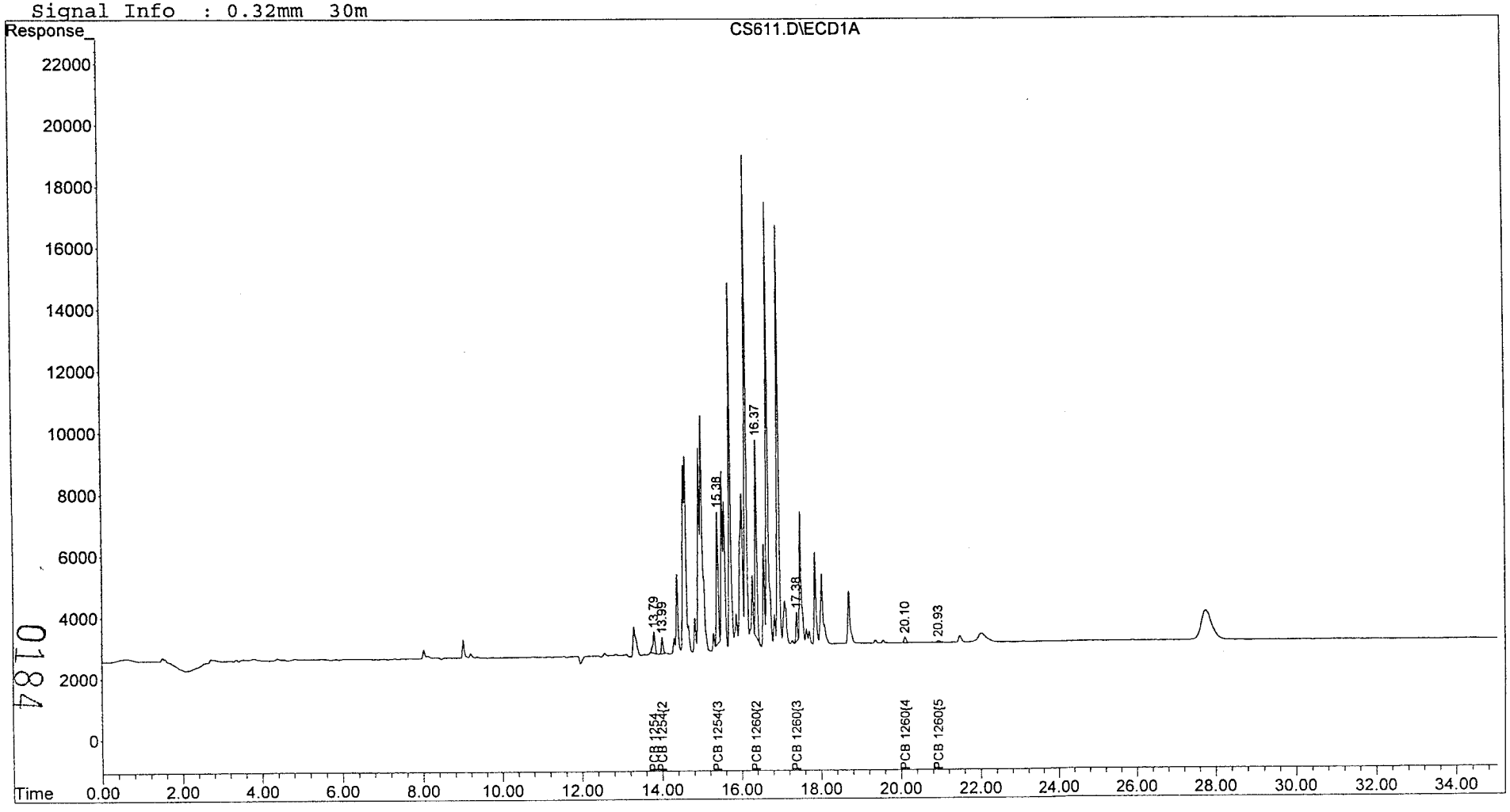
0183

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\013100\CS611.D Vial: 8
Acq On : 31 Jan 2000 4:15 pm Operator: DROOT
Sample : 355897 50.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 8:10 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS611.D Vial: 58
Acq On : 31 Jan 2000 4:15 pm Operator: DROOT
Sample : 355897 50.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 7:31 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
27) L6c PCB 1254	13.87	109042	369.533 ug/l
29) L6c PCB 1254{3}	15.29	251713	441.252 ug/l
30) L6c PCB 1254{4}	15.42	582884	880.248 ug/l
31) L6c PCB 1254{5}	15.88	223492	778.040 ug/l
Sum PCB 1254		1167131	2469.074 ug/l
Average PCB 1254			617.268 ug/l
33) L7c PCB 1260{2}	16.65	218153	291.718 ug/l
34) L7c PCB 1260{3}	16.81	417991	575.627 ug/l
36) L7C PCB 1260{5}	18.60	283287	243.041 ug/l
Sum PCB 1260		919432	N.D. ug/l
Average PCB 1260			370.129 ug/l

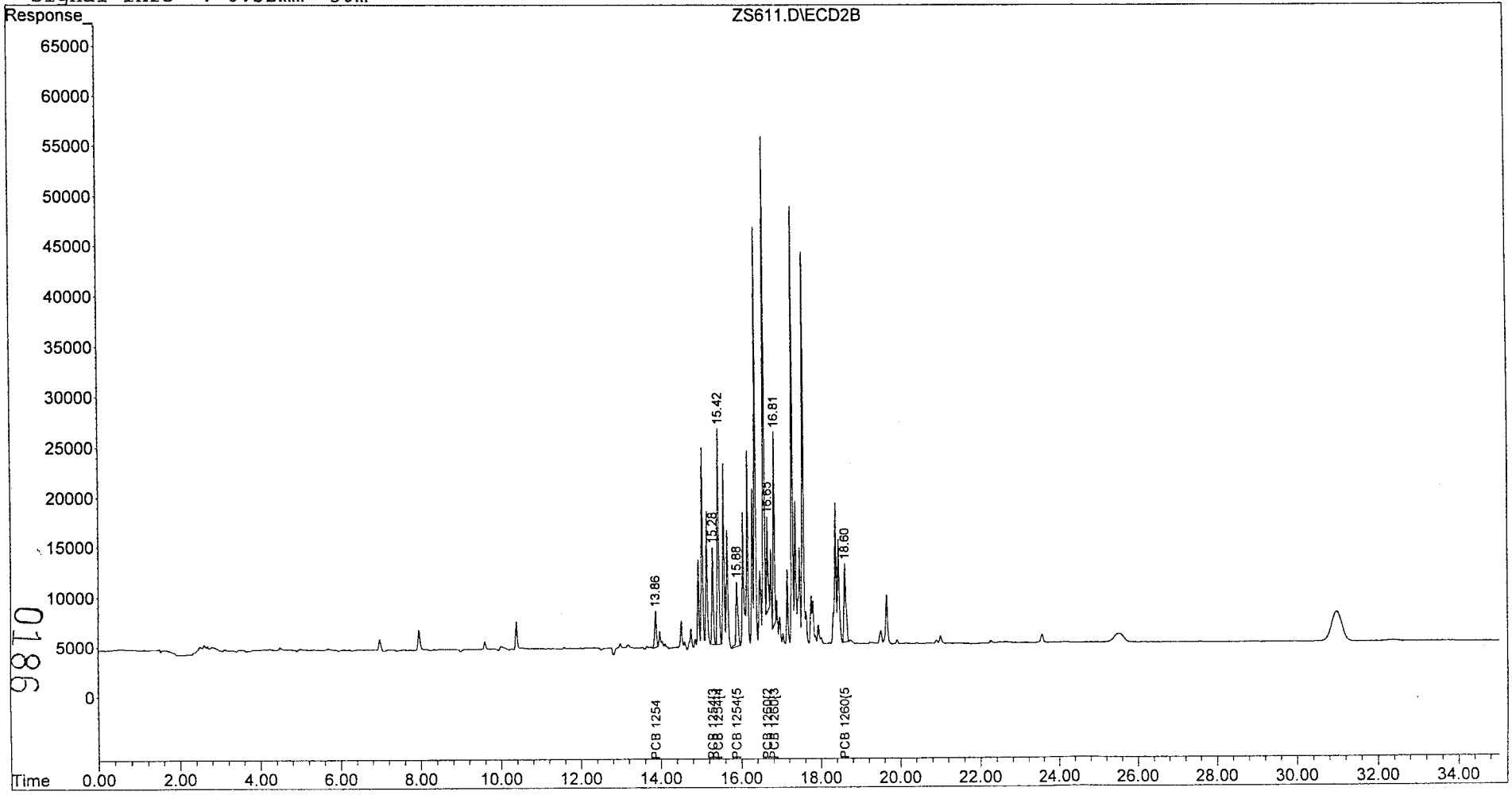
0185

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS611.D Vial: 58
Acq On : 31 Jan 2000 4:15 pm Operator: DROOT
Sample : 355897 50.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 7:31 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : STMH-3

Date Sampled : 01/25/00 **Order #:** 355898 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 62.3

ANALYTE	PQL	RESULT		UNITS
DATE EXTRACTED : 01/27/00				
DATE ANALYZED : 02/02/00				
ANALYTICAL DILUTION: 100000.00				Dry Weight
PCB 1016	33	5300000	U	UG/KG
PCB 1221	33	5300000	U	UG/KG
PCB 1232	33	5300000	U	UG/KG
PCB 1242	33	5300000	U	UG/KG
PCB 1248	33	5300000	U	UG/KG
PCB 1254	33	36000000		UG/KG
PCB 1260	33	5300000	U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	D	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	D	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020200\CS642.D
Acq On : 2 Feb 2000 9:28 am
Sample : 355898 100000
Misc : 01/27/00 3.0 DAMES 8082
IntFile : events.e
Quant Time: Feb 2 10:29 2000 Quant Results File: F0127C.RES

Vial: 3
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
Target Compounds					
Sum PCB 1016		0	N.D.	ug/l	
Average PCB 1016			0.000	ug/l	
Sum PCB 1221		0	N.D.	ug/L	
Average PCB 1221			0.000	ug/L	
Sum PCB 1232		0	N.D.	ug/l	
Average PCB 1232			0.000	ug/l	
Sum PCB 1242		0	N.D.	ug/l	
Average PCB 1242			0.000	ug/l	
Sum PCB 1248		0	N.D.	ug/l	
Average PCB 1248			0.000	ug/l	
27) L6c PCB 1254	13.79	31848	378.231	ug/l	
28) L6c PCB 1254{2}	13.99	17137	524.221	ug/l	m
29) L6c PCB 1254{3}	15.38	104231	914.224	ug/l	
31) L6c PCB 1254{5}	16.92	285886	899.313	ug/l	
Sum PCB 1254		439103	2715.988	ug/l	
Average PCB 1254			678.997	ug/l	
Sum PCB 1260		0	N.D.	ug/l	
Average PCB 1260			0.000	ug/l	

0188

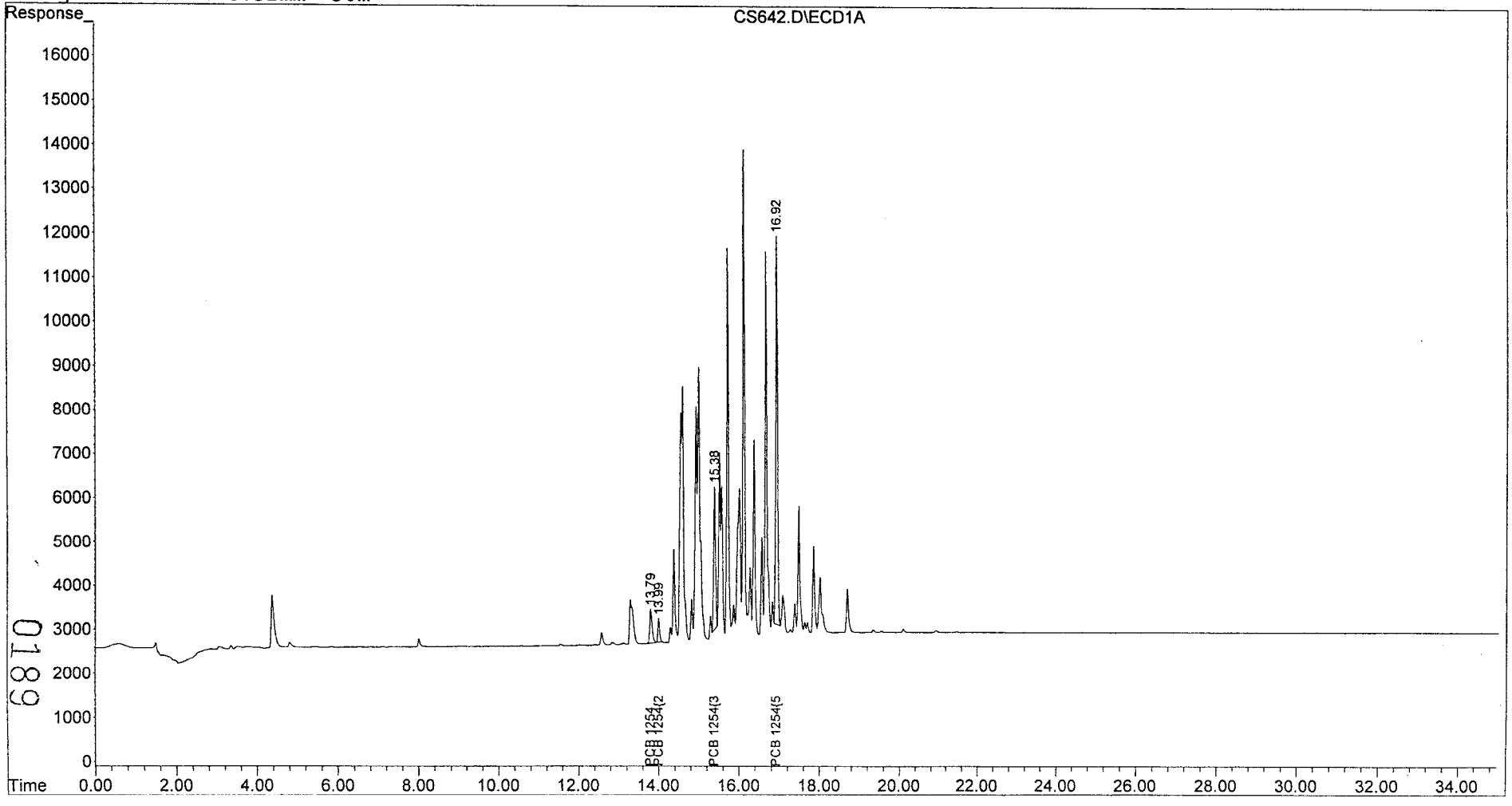
(f)=RT Delta > 1/2 Window
(m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\020200\CS642.D Vial: 3
Acq On : 2 Feb 2000 9:28 am Operator: DROOT
Sample : 355898 100000 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 10:29 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020200.SEC\ZS642.D
Acq On : 2 Feb 2000 9:28 am
Sample : 355898 100000
Misc : 01/27/00 3.0 DAMES 8082
IntFile : events.e
Quant Time: Feb 2 10:28 2000 Quant Results File: R0127C.RES

Vial: 53
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
Sum PCB 1016		0	N.D.	ug/l
Average PCB 1016			0.000	ug/l
Sum PCB 1221		0	N.D.	ug/L
Average PCB 1221			0.000	ug/L
Sum PCB 1232		0	N.D.	ug/l
Average PCB 1232			0.000	ug/l
Sum PCB 1242		0	N.D.	ug/l
Average PCB 1242			0.000	ug/l
Sum PCB 1248		0	N.D.	ug/l
Average PCB 1248			0.000	ug/l
27) L6c PCB 1254	13.87	68287	231.417	ug/l
28) L6c PCB 1254{2}	15.02	316686	1397.811	ug/l
29) L6c PCB 1254{3}	15.28	167779	294.116	ug/l
30) L6c PCB 1254{4}	15.42	366893	554.067	ug/l
31) L6c PCB 1254{5}	15.88	149611	520.838	ug/l
Sum PCB 1254		1069255	2998.249	ug/l
Average PCB 1254			599.650	ug/l
Sum PCB 1260		0	N.D.	ug/l
Average PCB 1260			0.000	ug/l

0190

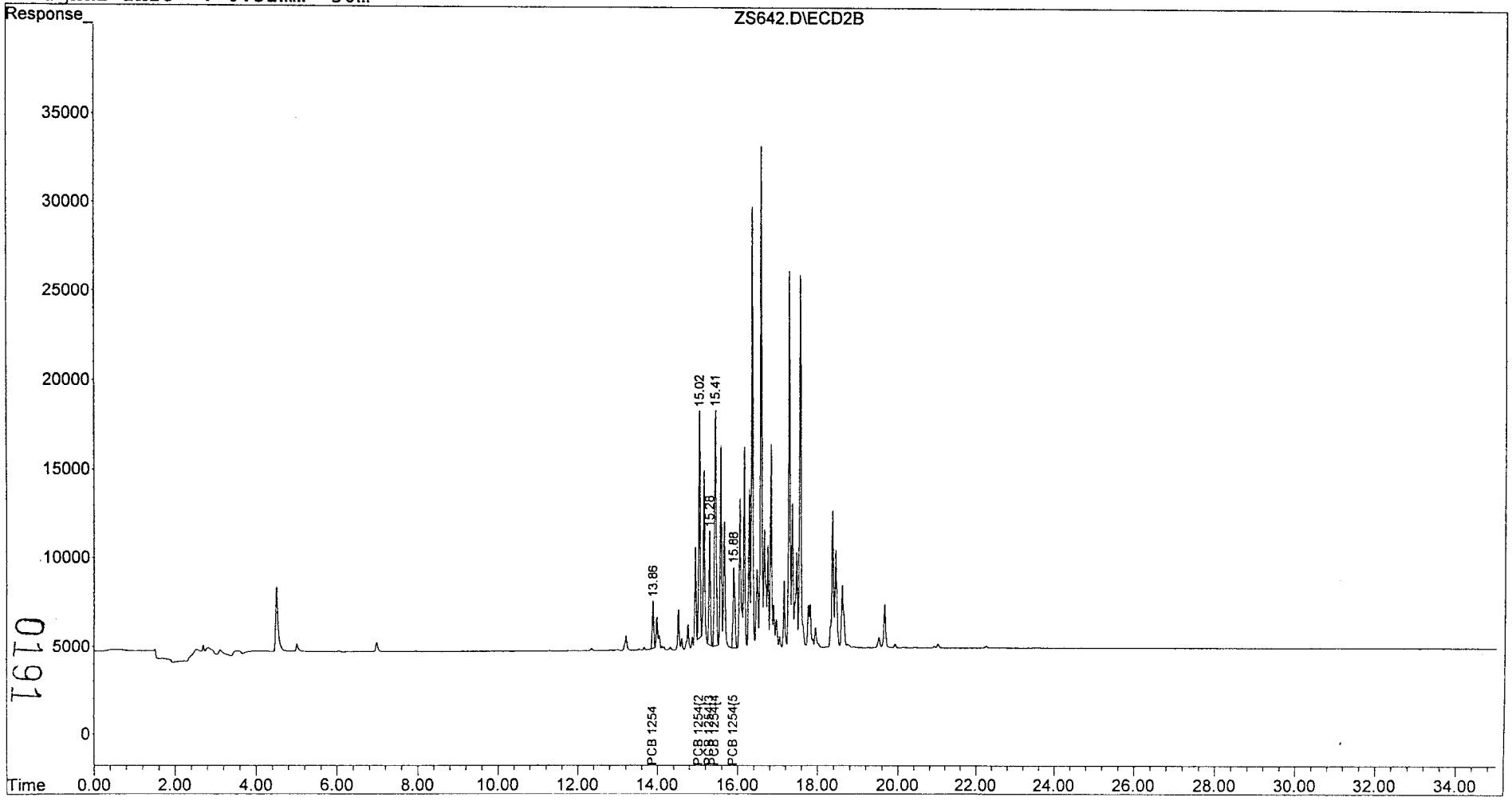
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\020200.SEC\ZS642.D Vial: 53
Acq On : 2 Feb 2000 9:28 am Operator: DROOT
Sample : 355898 100000 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 10:28 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0191

PCB's

STANDARDS DATA

Response Factor Report 5890C

Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:41:31 2000

Calibration Files
1 =CS520.D 2 =CS519.D 3 =CS518.D
4 =CS517.D 5 =CS516.D

	Compound	1	2	3	4	5	Avg		%RSD
1)	S SURR1, TCMX	4.178	4.498	4.059	4.374	4.351	4.292	E3	4.04
2)	L1c PCB 1016	1.104	1.232	1.188	1.333	1.406	1.253	E2	9.51
3)	L1c PCB 1016{2}	2.138	2.402	2.346	2.700	2.956	2.508	E2	12.80
4)	L1c PCB 1016{3}	3.906	4.358	4.189	4.742	5.170	4.473	E2	11.03
5)	L1c PCB 1016{4}	1.842	2.068	1.994	2.270	2.479	2.130	E2	11.67
6)	L1c PCB 1016{5}	1.459	1.626	1.548	1.718	1.807	1.632	E2	8.40
7)	L2c PCB 1221			7.423			7.423	E1	0.00
8)	L2c PCB 1221{2}			5.358			5.358	E1	0.00
9)	L2c PCB 1221{3}			1.876			1.876	E2	0.00
10)	PCB 1221{4}						0.000	0	-1.00
11)	PCB 1221{5}						0.000	0	-1.00
12)	L3c PCB 1232			1.397			1.397	E2	0.00
13)	L3c PCB 1232{2}			1.144			1.144	E2	0.00
14)	L3c PCB 1232{3}			1.910			1.910	E2	0.00
15)	L3c PCB 1232{4}			8.801			8.801	E1	0.00
16)	L3c PCB 1232{5}			8.519			8.519	E1	0.00
17)	L4c PCB 1242			1.037			1.037	E2	0.00
18)	L4c PCB 1242{2}			1.795			1.795	E2	0.00
19)	L4c PCB 1242{3}			3.220			3.220	E2	0.00
20)	L4c PCB 1242{4}			1.502			1.502	E2	0.00
21)	L4c PCB 1242{5}			1.620			1.620	E2	0.00
22)	L5c PCB 1248			9.929			9.929	E1	0.00
23)	L5c PCB 1248{2}			2.274			2.274	E2	0.00
24)	L5c PCB 1248{3}			9.961			9.961	E1	0.00
25)	L5c PCB 1248{4}			2.570			2.570	E2	0.00
26)	L5c PCB 1248{5}			2.118			2.118	E2	0.00
27)	L6c PCB 1254			8.420			8.420	E1	0.00
28)	L6c PCB 1254{2}			3.269			3.269	E1	0.00
29)	L6c PCB 1254{3}			1.140			1.140	E2	0.00
30)	L6c PCB 1254{4}			2.268			2.268	E2	0.00
31)	L6c PCB 1254{5}			3.179			3.179	E2	0.00
32)	L7c PCB 1260	2.302	2.591	2.554	2.939	3.336	2.744	E2	14.61
33)	L7c PCB 1260{2}	2.782	3.126	3.081	3.529	4.018	3.307	E2	14.45
34)	L7c PCB 1260{3}	3.927	4.333	4.087	4.410	4.645	4.281	E1	6.55
35)	L7C PCB 1260{4}	1.214	1.370	1.317	1.456	1.591	1.390	E2	10.27
36)	L7C PCB 1260{5}	4.777	5.367	5.108	5.770	6.032	5.411	E1	9.28
37)	S SURR2,DECACHLOROBIPHE	4.927	5.440	5.122	5.628	6.173	5.458	E3	8.86

0193

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700\CS516.D
Acq On : 27 Jan 2000 11:34 am
Sample : AR1660L01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 27 14:25 2000 Quant Results File: F0127C.RES

Vial: 1
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Jan 26 07:40:35 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012500\CS477.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.17	87020	17.219 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	17.22%#
37) S SURR2,DECACHLOROBIPHENYL	21.47	123451	21.185 ug/l
Spiked Amount 100.000		Recovery =	21.18%
Target Compounds			
2) L1c PCB 1016	10.55	14061	98.699 ug/l
3) L1c PCB 1016{2}	11.54	29560	105.427 ug/l
4) L1c PCB 1016{3}	12.56	51703	103.034 ug/l
5) L1c PCB 1016{4}	13.79	24794	105.718 ug/l
6) L1c PCB 1016{5}	14.00	18067	98.842 ug/l
Sum PCB 1016		138185	511.720 ug/l
Average PCB 1016			102.344 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.00	33358	113.846 ug/l
33) L7c PCB 1260{2}	16.37	40178	114.499 ug/l
34) L7c PCB 1260{3}	17.36	4645	97.532 ug/l
35) L7C PCB 1260{4}	20.10	15910	106.925 ug/l
36) L7C PCB 1260{5}	20.93	6032	100.466 ug/l
Sum PCB 1260		100122	533.268 ug/l
Average PCB 1260			106.654 ug/l

0194

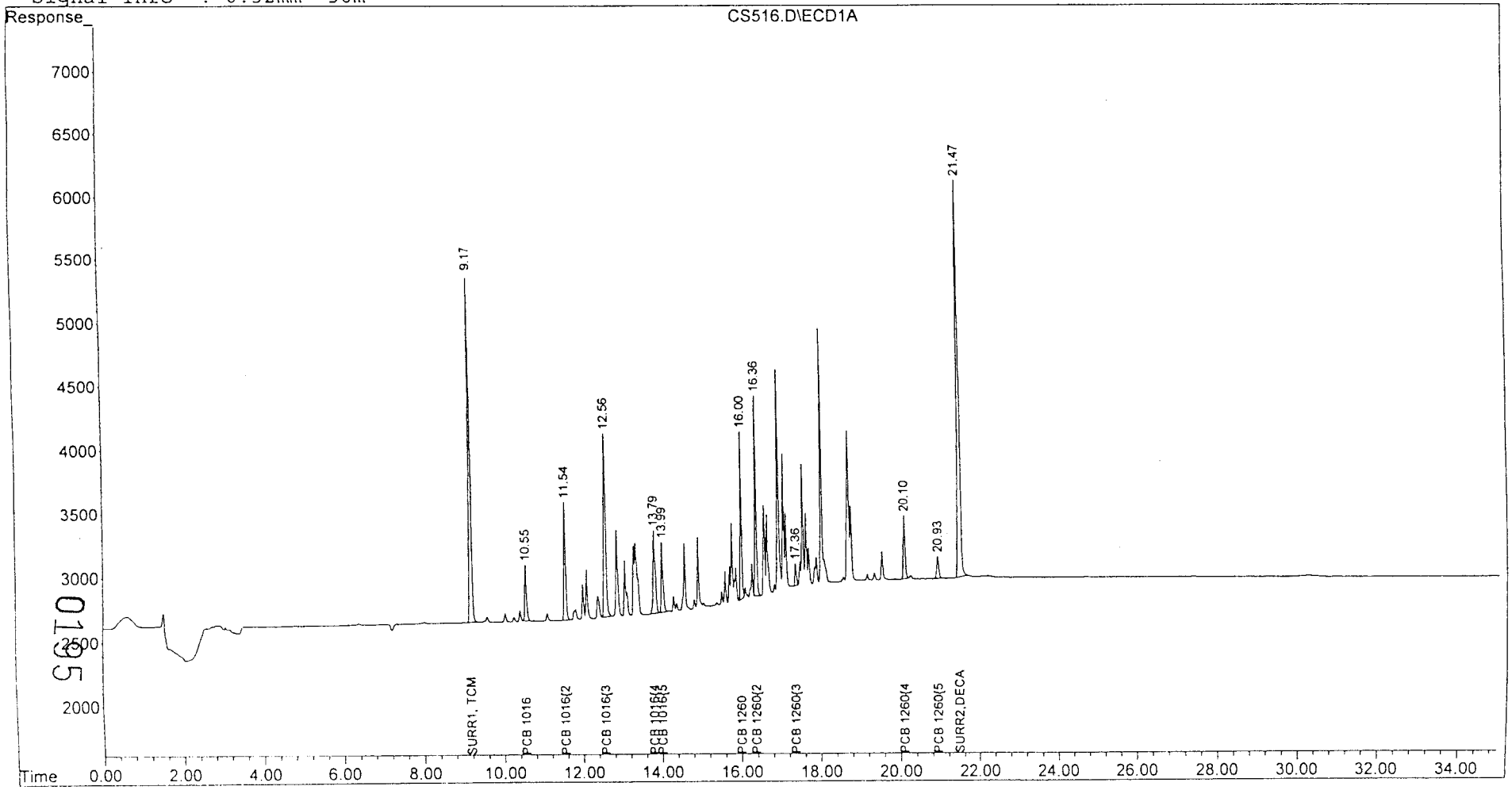
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700\CS516.D Vial: 1
Acq On : 27 Jan 2000 11:34 am Operator: DROOT
Sample : AR1660L01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 27 14:25 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Jan 26 07:40:35 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700\CS517.D
Acq On : 27 Jan 2000 12:15 pm
Sample : AR1660ML1
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 27 14:25 2000 Quant Results File: F0127C.RES

Vial: 2
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:25:23 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012500\CS477.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.17	174966	34.621 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	34.62%#
37) S SURR2,DECACHLOROBIPHENYL	21.47	225112	38.630 ug/l
Spiked Amount 100.000		Recovery =	38.63%
Target Compounds			
2) L1c PCB 1016	10.54	33323	233.899 ug/l
3) L1c PCB 1016{2}	11.54	67511	240.785 ug/l
4) L1c PCB 1016{3}	12.56	118539	236.224 ug/l
5) L1c PCB 1016{4}	13.79	56745	241.955 ug/l
6) L1c PCB 1016{5}	13.99	42960	235.031 ug/l
Sum PCB 1016		319078	1187.894 ug/l
Average PCB 1016			237.579 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	15.99	73478	250.770 ug/l
33) L7c PCB 1260{2}	16.36	88220	251.410 ug/l
34) L7c PCB 1260{3}	17.36	11026	231.512 ug/l
35) L7C PCB 1260{4}	20.10	36400	244.632 ug/l
36) L7C PCB 1260{5}	20.93	14424	240.253 ug/l
Sum PCB 1260		223548	1218.577 ug/l
Average PCB 1260			243.715 ug/l

0196

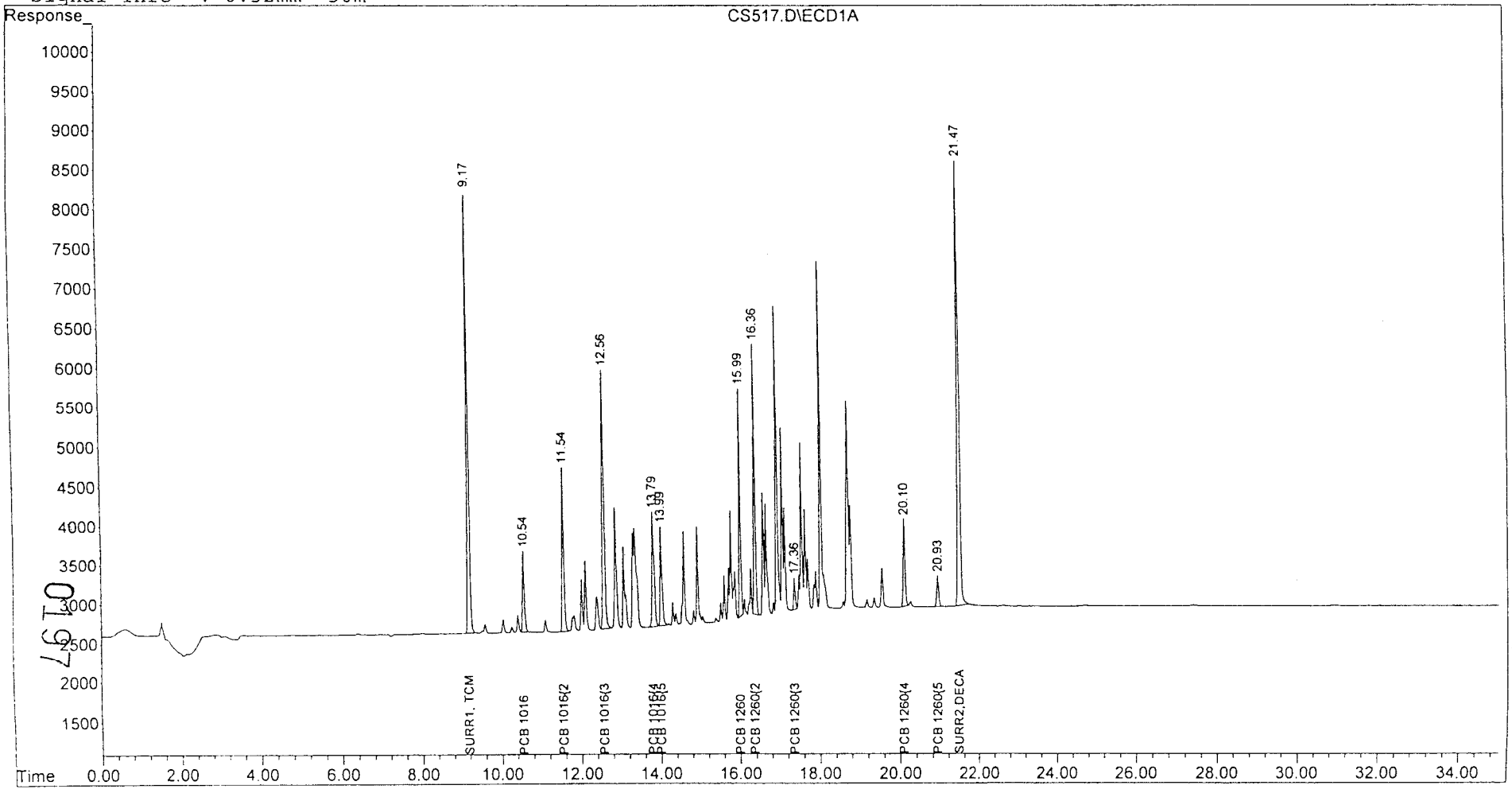
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700\CS517.D Vial: 2
Acq On : 27 Jan 2000 12:15 pm Operator: DROOT
Sample : AR1660ML1 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 27 14:25 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:25:23 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



CS517.D F0127C.M Fri Jan 28 08:52:03 2000 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700\CS518.D
Acq On : 27 Jan 2000 12:55 pm
Sample : AR1660M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 27 14:26 2000 Quant Results File: F0127C.RES

Vial: 3
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:25:58 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012500\CS477.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.17	243521	48.186 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	48.19%#
37) S SURR2,DECACHLOROBIPHENYL	21.46	307312	52.736 ug/l
Spiked Amount 100.000		Recovery =	52.74%
Target Compounds			
2) L1c PCB 1016	10.54	59403	416.961 ug/l
3) L1c PCB 1016{2}	11.54	117298	418.354 ug/l
4) L1c PCB 1016{3}	12.56	209454	417.401 ug/l
5) L1c PCB 1016{4}	13.79	99678	425.016 ug/l
6) L1c PCB 1016{5}	13.99	77417	423.538 ug/l
Sum PCB 1016		563250	2101.270 ug/l
Average PCB 1016			420.254 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	15.99	127704	435.836 ug/l
33) L7c PCB 1260{2}	16.36	154065	439.058 ug/l
34) L7c PCB 1260{3}	17.35	20433	429.036 ug/l
35) L7C PCB 1260{4}	20.09	65849	442.548 ug/l
36) L7C PCB 1260{5}	20.92	25542	425.439 ug/l
Sum PCB 1260		393593	2171.917 ug/l
Average PCB 1260			434.383 ug/l

0198

(f)=RT Delta > 1/2 Window (m)=manual int.

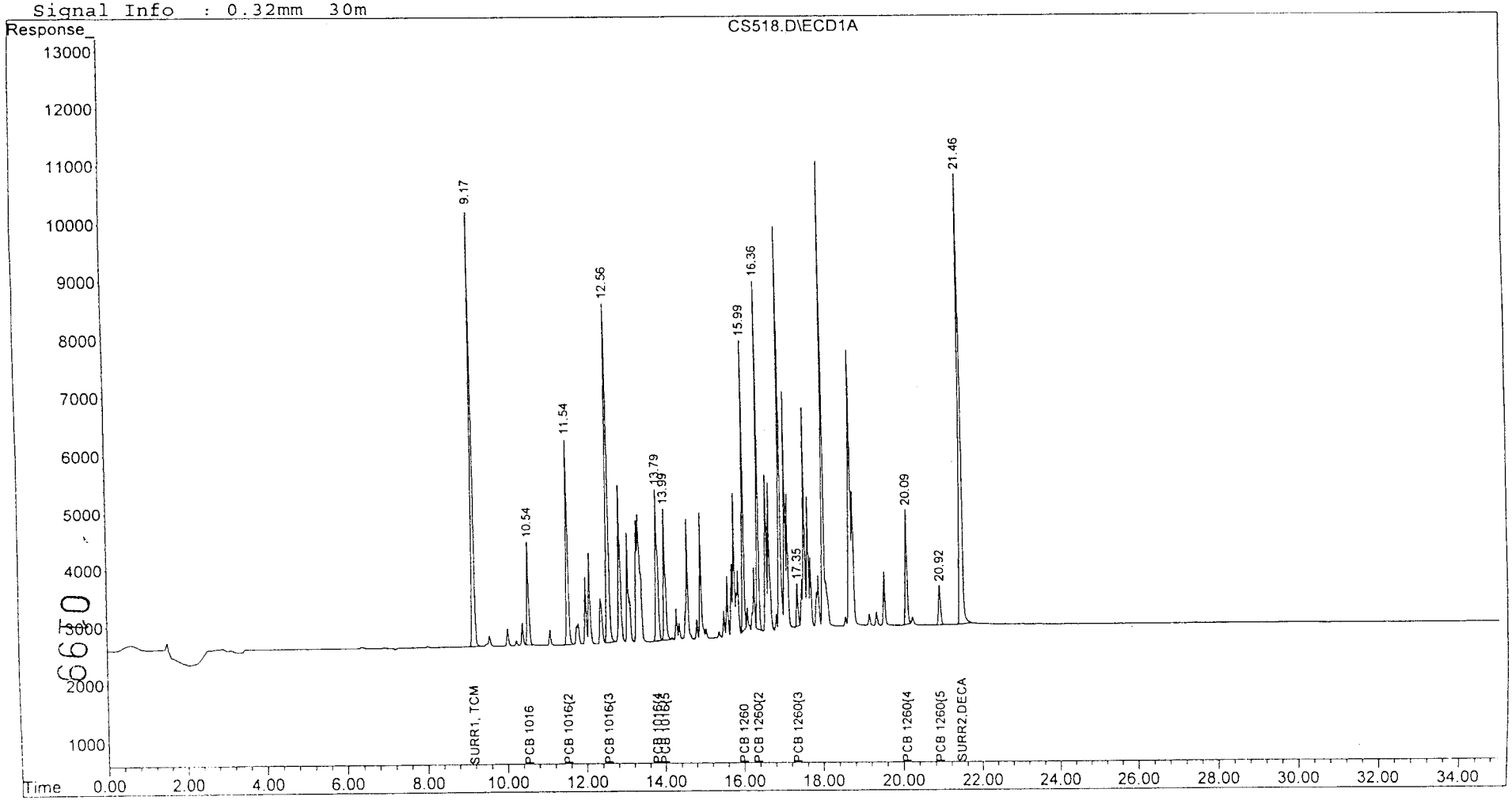
Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700\CS518.D
Acq On : 27 Jan 2000 12:55 pm
Sample : AR1660M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 27 14:26 2000 Quant Results File: F0127C.RES

Vial: 3
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:25:58 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



660

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700\CS519.D
Acq On : 27 Jan 2000 1:36 pm
Sample : AR1660MH1
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 27 14:26 2000 Quant Results File: F0127C.RES

Vial: 4
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:26:34 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.17	359820	88.654 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	88.65%
37) S SURR2,DECACHLOROBIPHENYL	21.46	435170	84.963 ug/l
Spiked Amount 100.000		Recovery =	84.96%
Target Compounds			
2) L1c PCB 1016	10.54	92390	777.651 ug/l
3) L1c PCB 1016{2}	11.54	180130	767.831 ug/l
4) L1c PCB 1016{3}	12.56	326836	780.210 ug/l
5) L1c PCB 1016{4}	13.79	155085	777.932 ug/l
6) L1c PCB 1016{5}	13.99	121927	787.466 ug/l
Sum PCB 1016		876367	3891.091 ug/l
Average PCB 1016			778.218 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	15.99	194313	760.797 ug/l
33) L7c PCB 1260{2}	16.36	234485	760.992 ug/l
34) L7c PCB 1260{3}	17.35	32501	795.294 ug/l
35) L7C PCB 1260{4}	20.09	102735	780.082 ug/l
36) L7C PCB 1260{5}	20.92	40254	787.988 ug/l
Sum PCB 1260		604288	3885.153 ug/l
Average PCB 1260			777.031 ug/l

0200

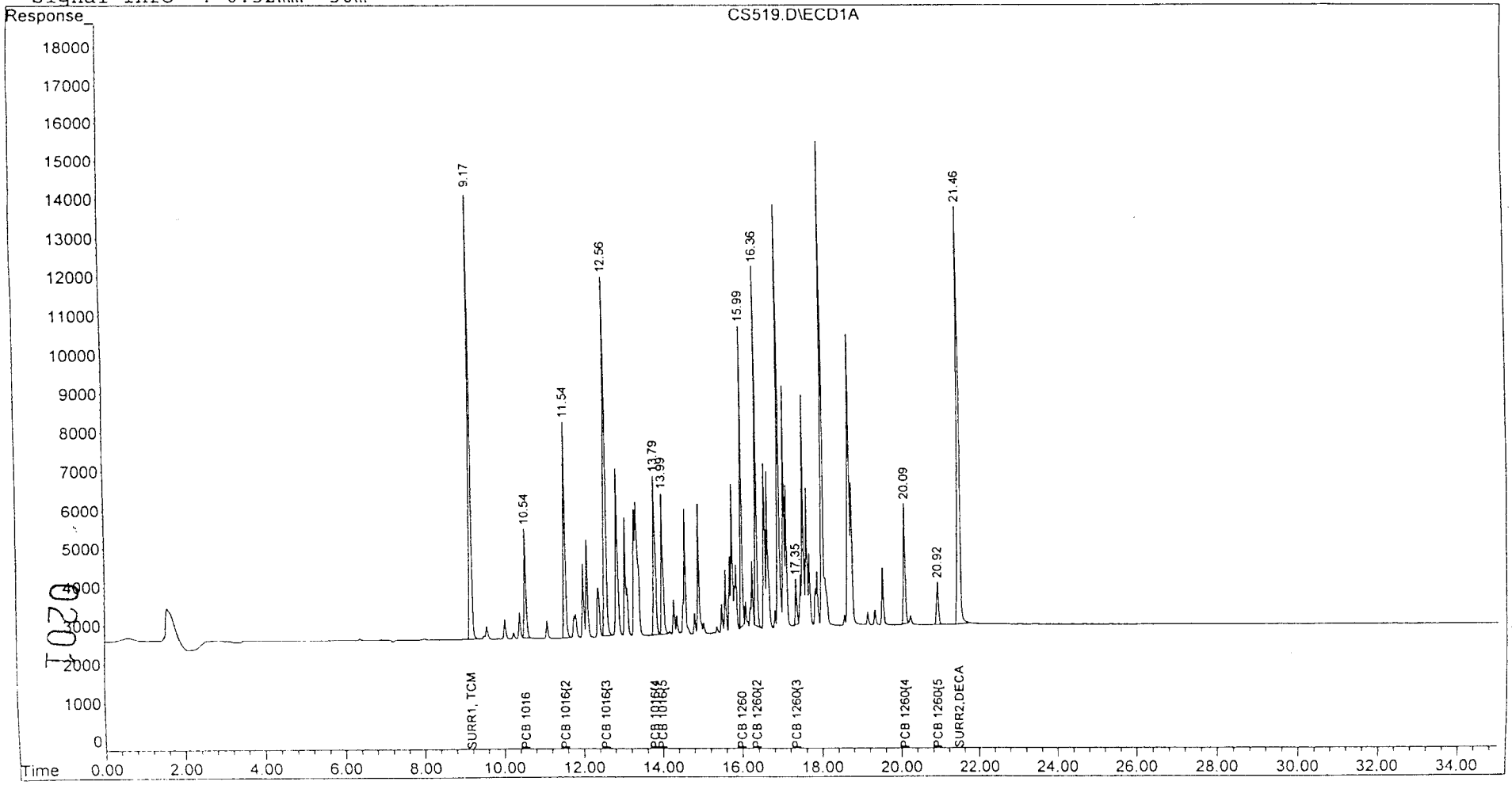
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700\CS519.D Vial: 4
Acq On : 27 Jan 2000 1:36 pm Operator: DROOT
Sample : AR1660MH1 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 27 14:26 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:26:34 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



T070

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700\CS520.D
Acq On : 27 Jan 2000 2:16 pm
Sample : AR1660H01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 28 7:19 2000 Quant Results File: F0127C.RES

Vial: 5
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:27:04 2000
Response via : Continuing Cal.File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.17	417783	102.936 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery = 102.94%	
37) S SURR2,DECACHLOROBIPHENYL	21.46	492719	96.199 ug/l
Spiked Amount 100.000		Recovery = 96.20%	
Target Compounds			
2) L1c PCB 1016	10.54	110400	929.239 ug/l
3) L1c PCB 1016{2}	11.54	213759	911.181 ug/l
4) L1c PCB 1016{3}	12.56	390637	932.513 ug/l
5) L1c PCB 1016{4}	13.79	184163	923.793 ug/l
6) L1c PCB 1016{5}	13.99	145870	942.107 ug/l
Sum PCB 1016		1044829	4638.834 ug/l
Average PCB 1016			927.767 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	15.99	230244	901.478 ug/l
33) L7c PCB 1260{2}	16.36	278166	902.753 ug/l
34) L7c PCB 1260{3}	17.35	39275	961.049 ug/l
35) L7C PCB 1260{4}	20.09	121415	921.918 ug/l
36) L7C PCB 1260{5}	20.92	47768	935.081 ug/l
Sum PCB 1260		716868	4622.280 ug/l
Average PCB 1260			924.456 ug/l

0202

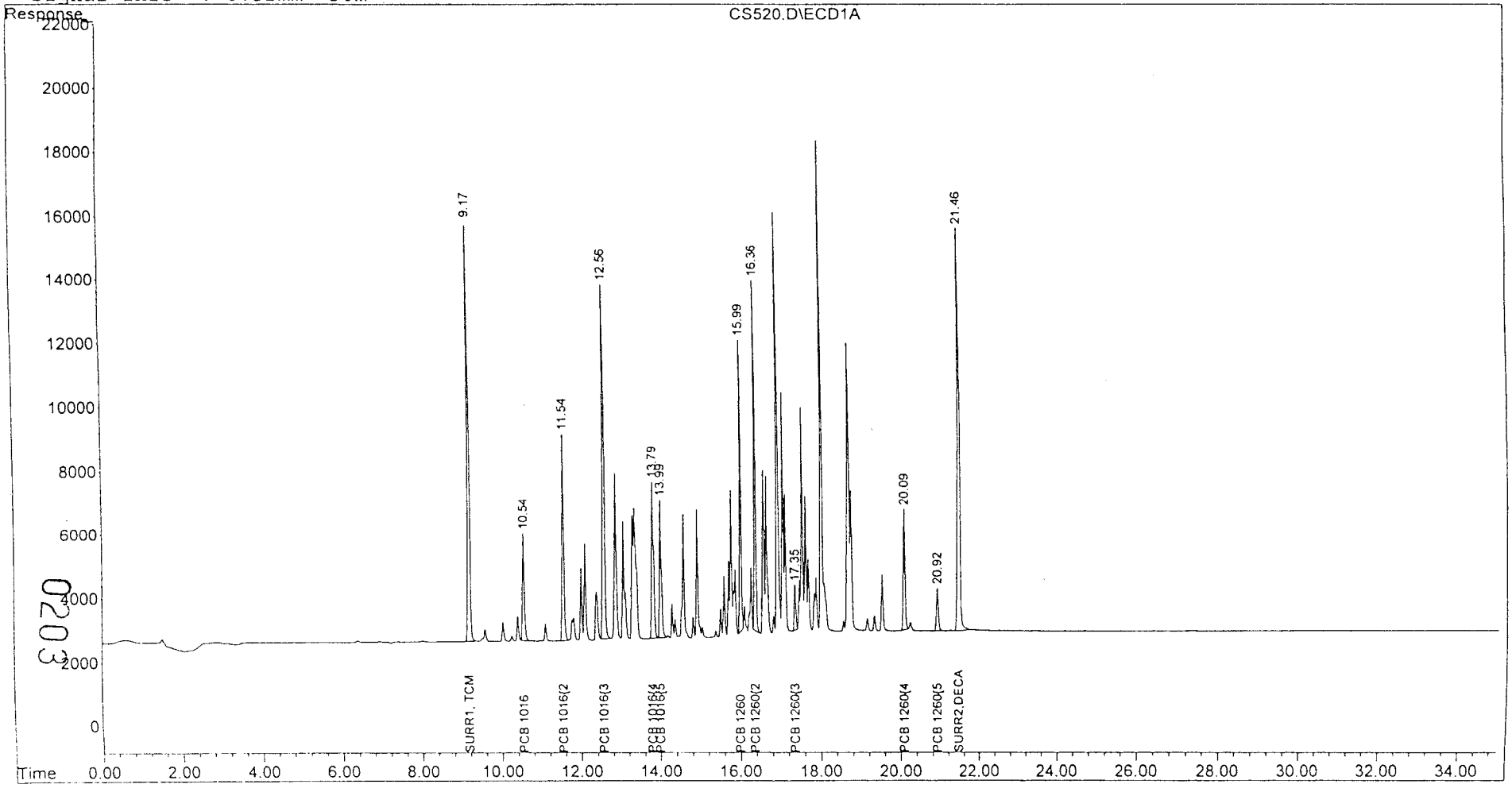
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700\CS520.D Vial: 5
Acq On : 27 Jan 2000 2:16 pm Operator: DROOT
Sample : AR1660H01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:19 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:27:04 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



0203

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700\CS521.D
Acq On : 27 Jan 2000 2:57 pm
Sample : AR1221M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 28 7:19 2000 Quant Results File: F0127C.RES

Vial: 6
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:19:19 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.17	258341	63.652 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	63.65%
37) S SURR2,DECACHLOROBIPHENYL	21.46	332713	64.959 ug/l
Spiked Amount 100.000		Recovery =	64.96%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
7) L2c PCB 1221	10.02	37114	414.262 ug/l
8) L2c PCB 1221{2}	10.40	26790	409.110 ug/l
9) L2c PCB 1221{3}	10.54	93793	414.609 ug/l
Sum PCB 1221		157696	1237.981 ug/L
Average PCB 1221			412.660 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0204

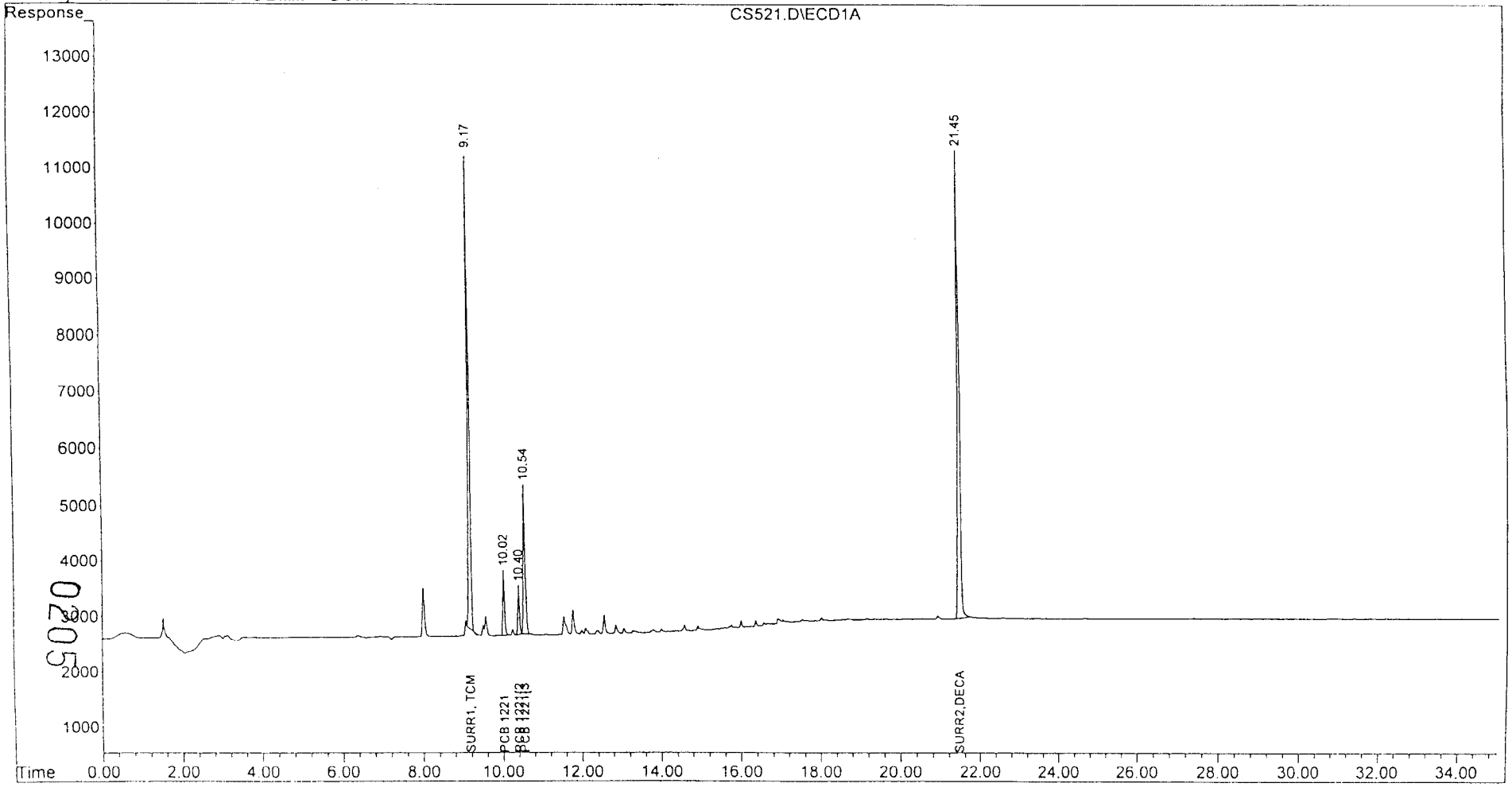
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700\CS521.D Vial: 6
Acq On : 27 Jan 2000 2:57 pm Operator: DROOT
Sample : AR1221M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:19 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:19:19 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700\CS522.D
Acq On : 27 Jan 2000 3:37 pm
Sample : AR1232M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 28 7:20 2000 Quant Results File: F0127C.RES

Vial: 7
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:20:16 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS521.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.17	229282	53.251 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	53.25%#
37) S SURR2,DECACHLOROBIPHENYL	21.45	306635	55.297 ug/l
Spiked Amount 100.000		Recovery =	55.30%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
12) L3c PCB 1232	10.54	69844	354.986 ug/l
13) L3c PCB 1232{2}	11.54	57205	353.098 ug/l
14) L3c PCB 1232{3}	12.56	95511	353.710 ug/l
15) L3c PCB 1232{4}	12.85	44003	349.482 ug/l
16) L3c PCB 1232{5}	13.79	42594	348.021 ug/l
Sum PCB 1232		309158	1759.297 ug/l
Average PCB 1232			351.859 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

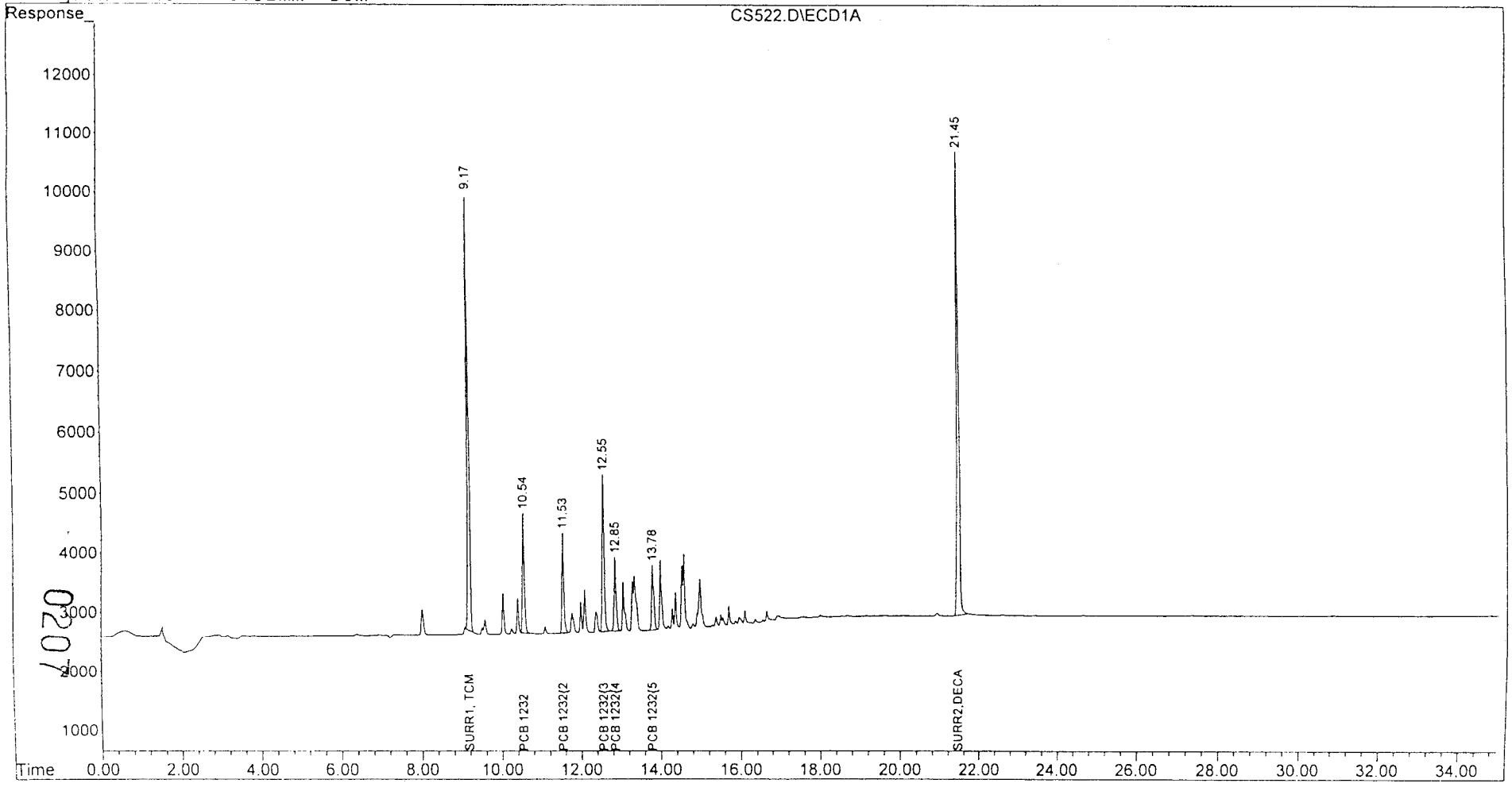
(m)-manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700\CS522.D Vial: 7
Acq On : 27 Jan 2000 3:37 pm Operator: DROOT
Sample : AR1232M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:20 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:20:16 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



1070

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700\CS523.D
Acq On : 27 Jan 2000 4:18 pm
Sample : AR1242M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 28 7:21 2000 Quant Results File: F0127C.RES

Vial: 8
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:21:01 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS522.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.17	239697	62.726 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	62.73%
37) S SURR2,DECACHLOROBIPHENYL	21.44	312401	61.128 ug/l
Spiked Amount 100.000		Recovery =	61.13%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
17) L4c PCB 1242	10.54	51862	378.134 ug/l
18) L4c PCB 1242{2}	11.53	89759	381.876 ug/l
19) L4c PCB 1242{3}	12.55	160992	374.655 ug/l
20) L4c PCB 1242{4}	12.85	75124	374.955 ug/l
21) L4c PCB 1242{5}	13.79	81024	378.883 ug/l
Sum PCB 1242		458762	1888.503 ug/l
Average PCB 1242			377.701 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0208

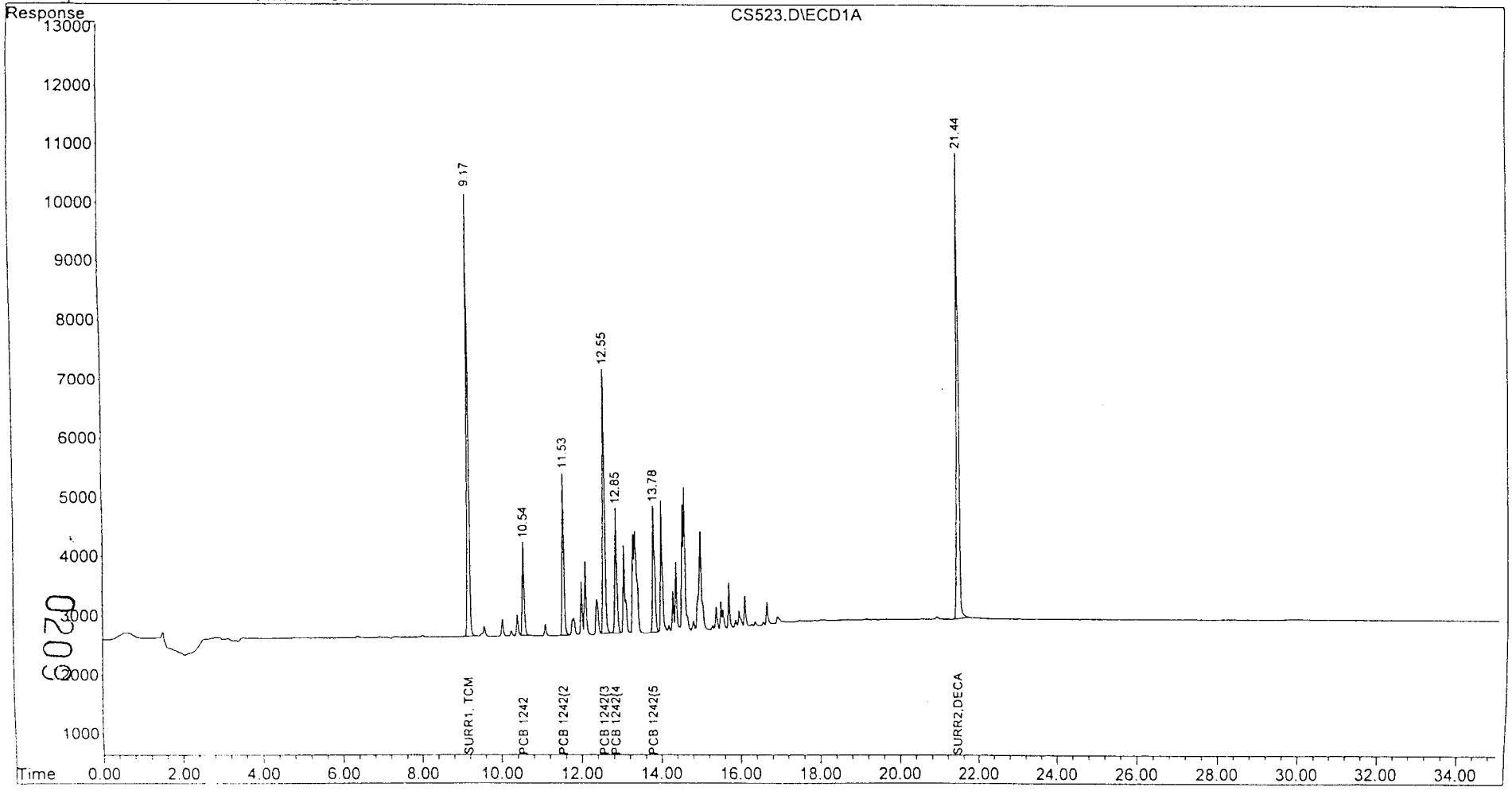
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700\CS523.D Vial: 8
Acq On : 27 Jan 2000 4:18 pm Operator: DROOT
Sample : AR1242M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:21 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:21:01 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



0020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700\CS524.D
Acq On : 27 Jan 2000 4:58 pm
Sample : AR1248M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 28 7:22 2000 Quant Results File: F0127C.RES

Vial: 9
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:22:01 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS523.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.17	248579	62.223 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	62.22%
37) S SURR2,DECACHLOROBIPHENYL	21.44	318421	61.156 ug/l
Spiked Amount 100.000		Recovery =	61.16%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
22) L5c PCB 1248	11.53	49647	382.460 ug/l
23) L5c PCB 1248{2}	12.55	113676	377.338 ug/l
24) L5c PCB 1248{3}	12.84	49806	377.634 ug/l
25) L5c PCB 1248{4}	13.78	128509	382.603 ug/l
26) L5c PCB 1248{5}	13.98	105908	379.914 ug/l
Sum PCB 1248		447545	1899.948 ug/l
Average PCB 1248			379.990 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0210

(f)=RT Delta > 1/2 Window (m)=manual int.

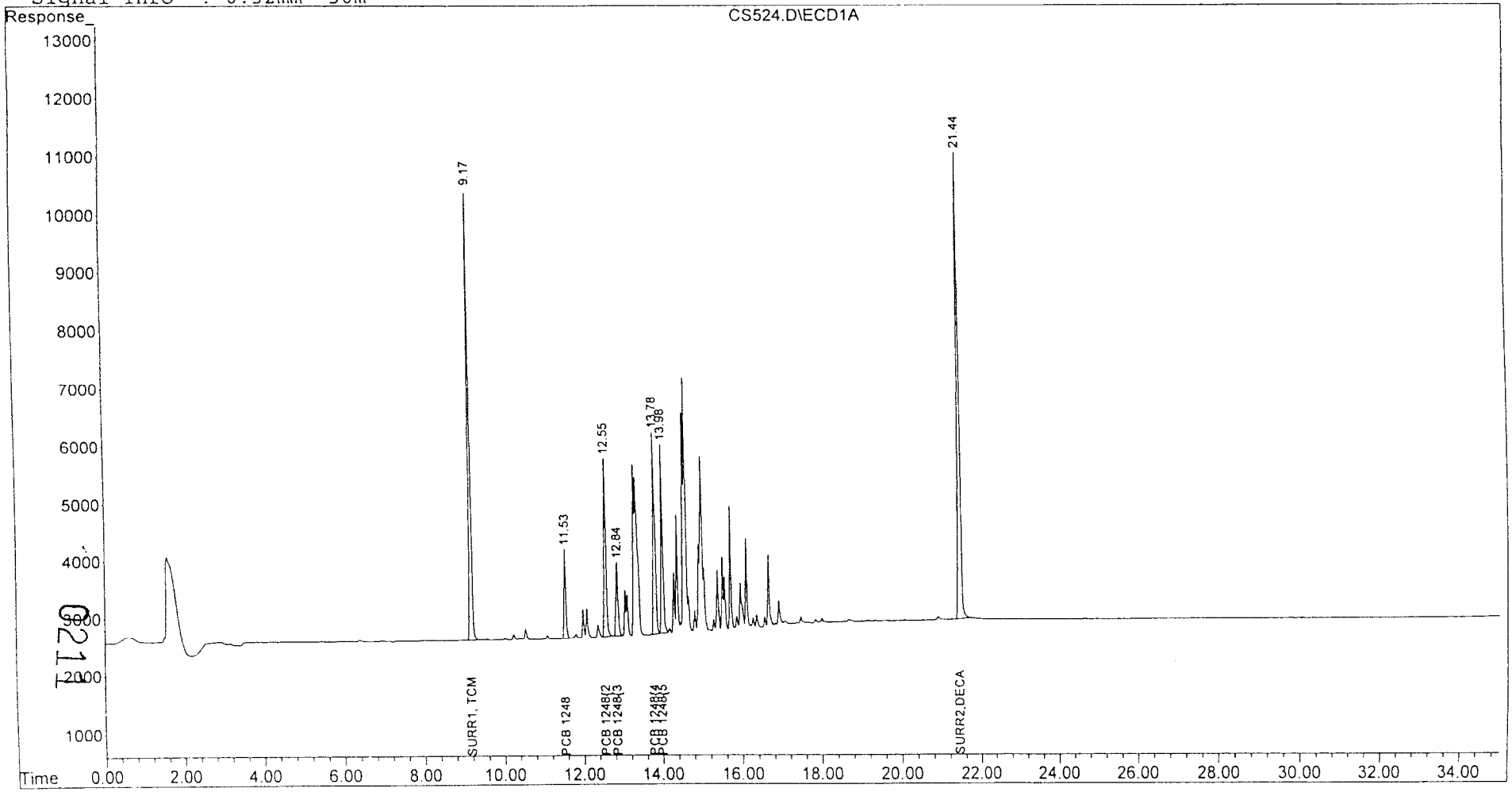
Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700\CS524.D
Acq On : 27 Jan 2000 4:58 pm
Sample : AR1248M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 28 7:22 2000 Quant Results File: F0127C.RES

Vial: 9
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:22:01 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700\CS525.D
Acq On : 27 Jan 2000 5:39 pm
Sample : AR1254M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 28 7:23 2000 Quant Results File: F0127C.RES

Vial: 10
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:22:46 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS524.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.17	257028	62.039 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	62.04%
37) S SURR2,DECACHLOROBIPHENYL	21.44	332100	62.577 ug/l
Spiked Amount 100.000		Recovery =	62.58%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
27) L6c PCB 1254	13.78	42102	412.014 ug/l
28) L6c PCB 1254{2}	13.98	16345	407.116 ug/l
29) L6c PCB 1254{3}	15.37	57005	414.554 ug/l
30) L6c PCB 1254{4}	16.09	113381	412.467 ug/l
31) L6c PCB 1254{5}	16.91	158947	422.552 ug/l
Sum PCB 1254		387780	2068.704 ug/l
Average PCB 1254			413.741 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0212

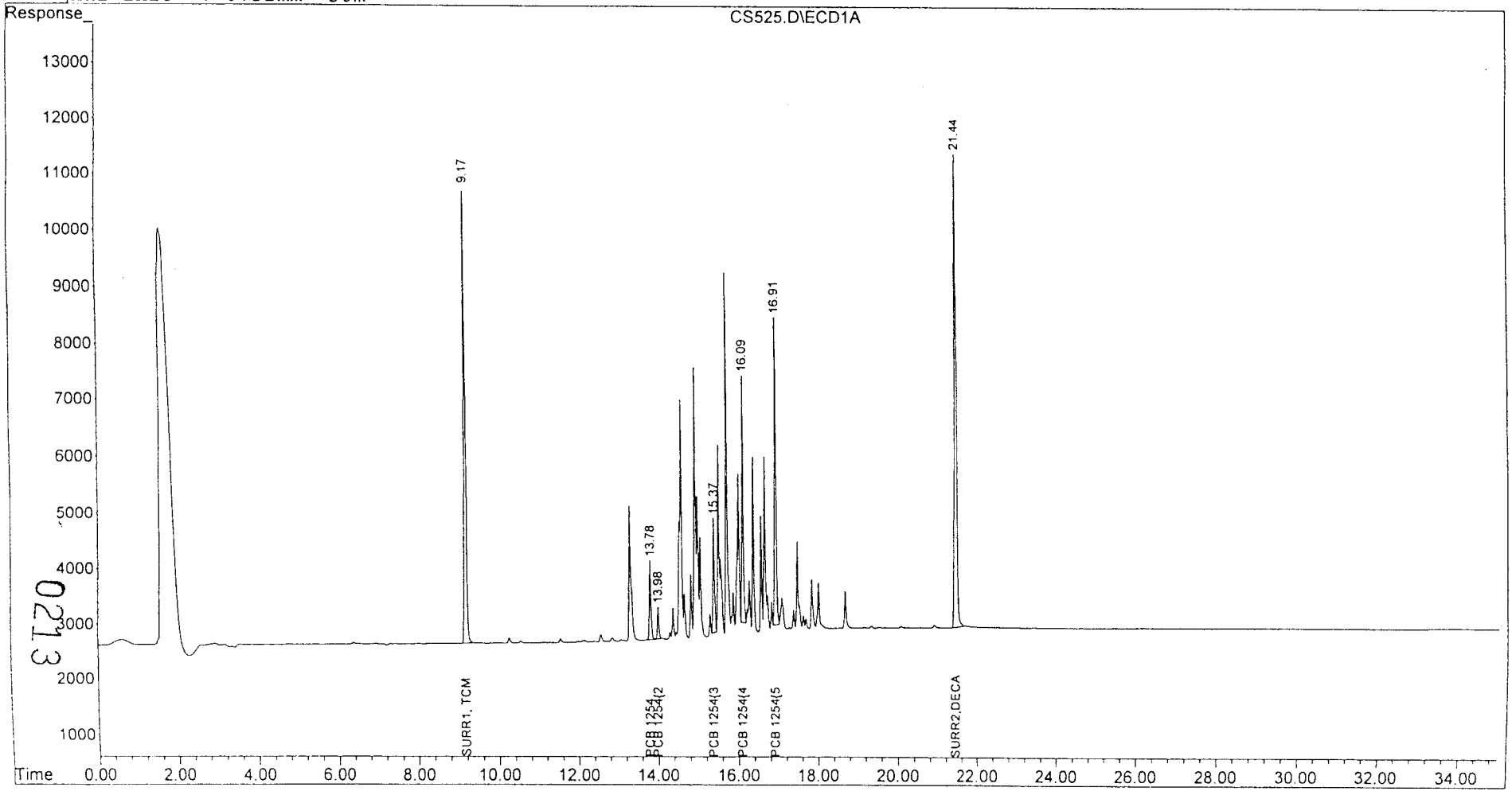
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700\CS525.D Vial: 10
Acq On : 27 Jan 2000 5:39 pm Operator: DROOT
Sample : AR1254M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:23 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:22:46 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



0213

Response Factor Report 5890C

Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:51:32 2000

Calibration Files
1 =ZS520.D 2 =ZS519.D 3 =ZS518.D
4 =ZS517.D 5 =ZS516.D

	Compound	1	2	3	4	5	Avg		%RSD
1) S	SURR1, TCMX	1.196	1.182	1.160	1.199	1.212	1.190	E4	1.66
2) L1c	PCB 1016	2.530	2.625	2.764	3.085	3.412	2.883	E2	12.58
3) L1c	PCB 1016{2}	5.546	5.771	6.107	6.965	8.027	6.483	E2	15.70
4) L1c	PCB 1016{3}	0.957	0.974	1.020	1.141	1.284	1.075	E3	12.75
5) L1c	PCB 1016{4}	2.560	2.623	2.771	3.150	3.514	2.924	E2	13.74
6) L1c	PCB 1016{5}	2.672	2.743	2.914	3.324	3.722	3.075	E2	14.35
7) L2c	PCB 1221			1.491			1.491	E2	0.00
8) L2c	PCB 1221{2}			1.162			1.162	E2	0.00
9) L2c	PCB 1221{3}			3.022			3.022	E2	0.00
10)	PCB 1221{4}						0.000	0	-1.00
11)	PCB 1221{5}						0.000	0	-1.00
12) L3c	PCB 1232			2.990			2.990	E2	0.00
13) L3c	PCB 1232{2}			3.210			3.210	E2	0.00
14) L3c	PCB 1232{3}			4.829			4.829	E2	0.00
15) L3c	PCB 1232{4}			1.059			1.059	E2	0.00
16) L3c	PCB 1232{5}			1.461			1.461	E2	0.00
17) L4c	PCB 1242			2.403			2.403	E2	0.00
18) L4c	PCB 1242{2}			4.848			4.848	E2	0.00
19) L4c	PCB 1242{3}			7.991			7.991	E2	0.00
20) L4c	PCB 1242{4}			2.043			2.043	E2	0.00
21) L4c	PCB 1242{5}			2.713			2.713	E2	0.00
22) L5c	PCB 1248			2.653			2.653	E2	0.00
23) L5c	PCB 1248{2}			6.416			6.416	E1	0.00
24) L5c	PCB 1248{3}			2.479			2.479	E2	0.00
25) L5c	PCB 1248{4}			1.543			1.543	E2	0.00
26) L5c	PCB 1248{5}			7.349			7.349	E1	0.00
27) L6c	PCB 1254			2.951			2.951	E2	0.00
28) L6c	PCB 1254{2}			2.266			2.266	E2	0.00
29) L6c	PCB 1254{3}			5.705			5.705	E2	0.00
30) L6c	PCB 1254{4}			6.622			6.622	E2	0.00
31) L6c	PCB 1254{5}			2.872			2.872	E2	0.00
32) L7c	PCB 1260	4.008	4.068	4.267	4.801	5.361	4.501	E2	12.74
33) L7c	PCB 1260{2}	6.938	7.064	7.478	8.568	9.814	7.972	E2	15.21
34) L7c	PCB 1260{3}	6.752	6.852	7.261	8.341	9.541	7.749	E2	15.26
35) L7C	PCB 1260{4}	1.026	1.024	1.062	1.167	1.291	1.114	E2	10.31
36) L7C	PCB 1260{5}	1.137	1.125	1.166	1.295	1.451	1.235	E3	11.22
37) S	SURR2,DECACHLOROBIPHE	1.401	1.374	1.385	1.487	1.576	1.445	E4	5.96

(#) = Out of Range

R0127C.M Fri Jan 28 09:58:38 2000

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS516.D Vial: 51
Acq On : 27 Jan 2000 11:34 am Operator: DROOT
Sample : AR1660L01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 27 14:22 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Jan 26 08:10:21 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012500.SEC\ZS477.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.58	242375	18.084 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	18.08%#
37) S SURR2,DECACHLOROBIPHENYL	23.55	315258	19.486 ug/l
Spiked Amount 100.000		Recovery =	19.49%
Target Compounds			
2) L1c PCB 1016	11.28	34121	113.609 ug/l
3) L1c PCB 1016{2}	12.33	80268	115.662 ug/l
4) L1c PCB 1016{3}	13.19	128403	116.870 ug/l
5) L1c PCB 1016{4}	15.28	35135	111.342 ug/l
6) L1c PCB 1016{5}	15.42	37215	114.891 ug/l
Sum PCB 1016		315142	572.373 ug/l
Average PCB 1016			114.475 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	53610	111.837 ug/l
33) L7c PCB 1260{2}	16.65	98135	114.113 ug/l
34) L7c PCB 1260{3}	16.81	95407	117.282 ug/l
35) L7C PCB 1260{4}	18.01	12908	110.911 ug/l
36) L7C PCB 1260{5}	18.60	145074	112.172 ug/l
Sum PCB 1260		405135	566.316 ug/l
Average PCB 1260			113.263 ug/l

0215

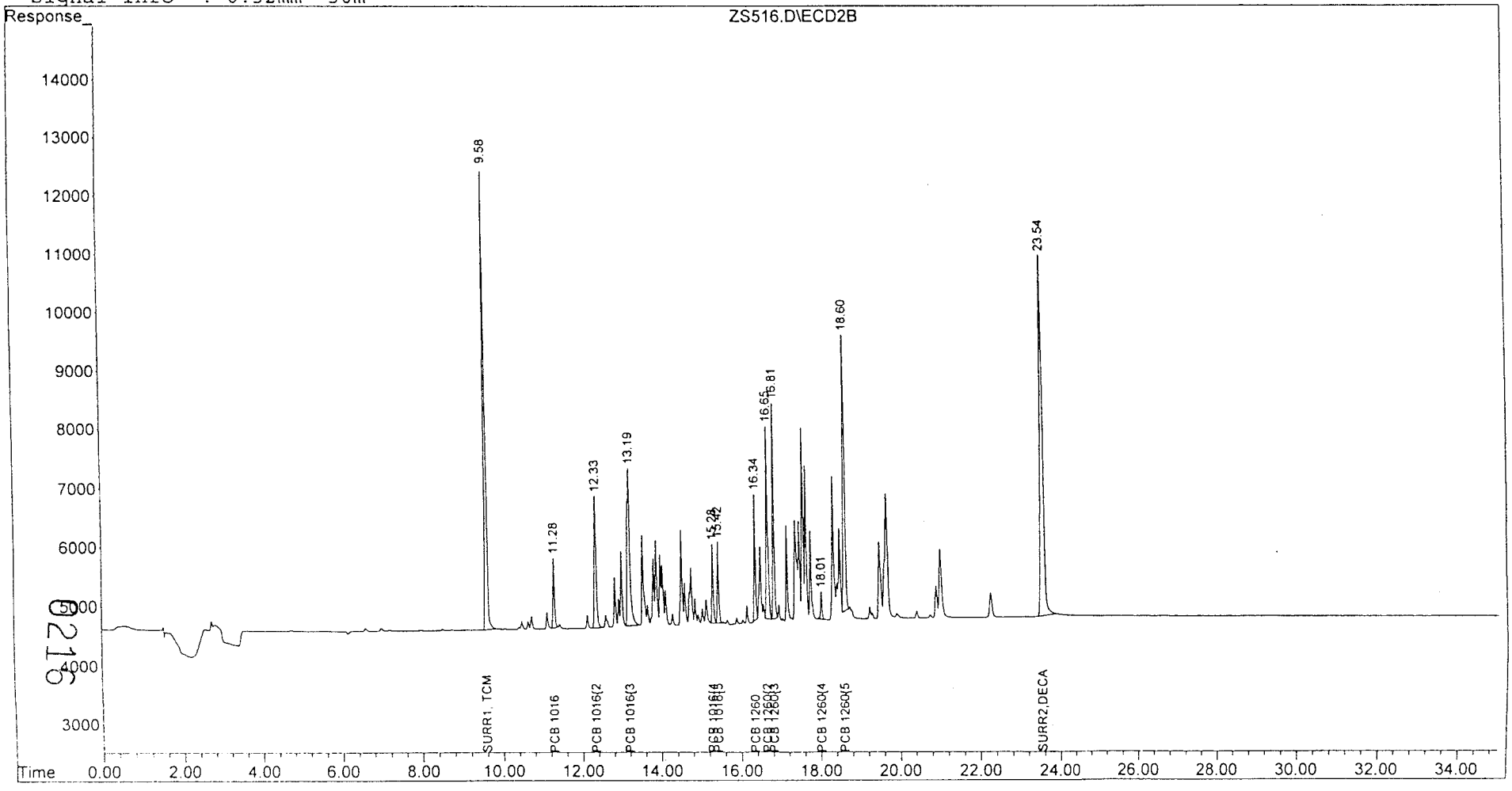
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS516.D Vial: 51
Acq On : 27 Jan 2000 11:34 am Operator: DROOT
Sample : AR1660L01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 27 14:22 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Wed Jan 26 08:10:21 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS517.D Vial: 52
Acq On : 27 Jan 2000 12:15 pm Operator: DROOT
Sample : AR1660ML1 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 27 14:23 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:22:42 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012500.SEC\ZS477.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.58	479616	35.786 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	35.79%#
37) S SURR2,DECACHLOROBIPHENYL	23.54	594950	36.773 ug/l
Spiked Amount 100.000		Recovery =	36.77%
Target Compounds			
2) L1c PCB 1016	11.28	77131	256.815 ug/l
3) L1c PCB 1016{2}	12.33	174118	250.895 ug/l
4) L1c PCB 1016{3}	13.19	285141	259.530 ug/l
5) L1c PCB 1016{4}	15.28	78756	249.575 ug/l
6) L1c PCB 1016{5}	15.42	83088	256.506 ug/l
Sum PCB 1016		698233	1273.320 ug/l
Average PCB 1016			254.664 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	120016	250.367 ug/l
33) L7c PCB 1260{2}	16.65	214207	249.084 ug/l
34) L7c PCB 1260{3}	16.81	208527	256.339 ug/l
35) L7C PCB 1260{4}	18.01	29163	250.579 ug/l
36) L7C PCB 1260{5}	18.59	323748	250.324 ug/l
Sum PCB 1260		895662	1256.693 ug/l
Average PCB 1260			251.339 ug/l

0217

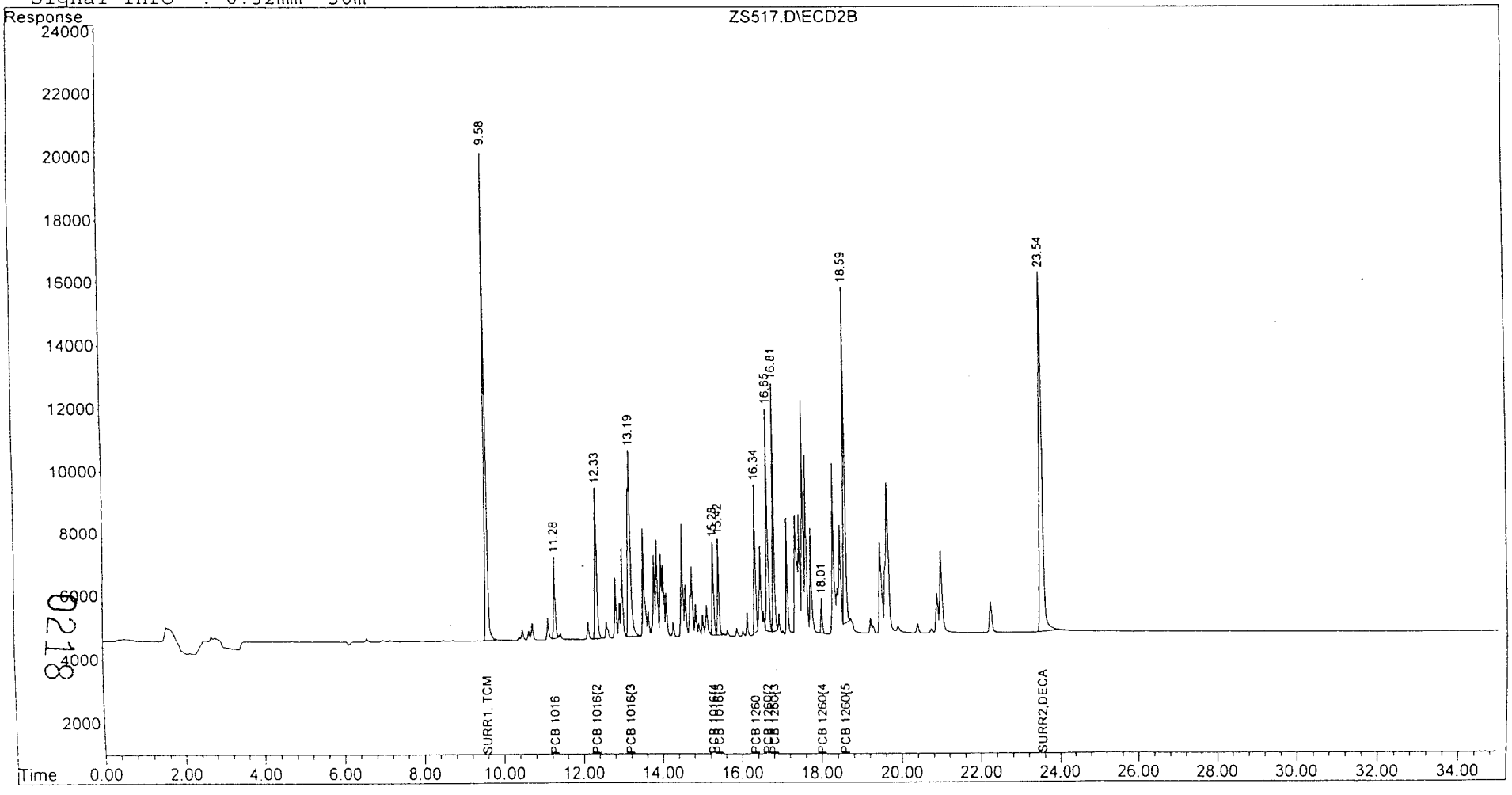
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS517.D Vial: 52
Acq On : 27 Jan 2000 12:15 pm Operator: DROOT
Sample : AR1660ML1 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 27 14:23 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:22:42 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



0218

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS518.D Vial: 53
Acq On : 27 Jan 2000 12:55 pm Operator: DROOT
Sample : AR1660M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 27 14:23 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:23:10 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012500.SEC\ZS477.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.58	696025	51.933 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	51.93%#
37) S SURR2,DECACHLOROBIPHENYL	23.54	831210	51.376 ug/l
Spiked Amount 100.000		Recovery =	51.38%
Target Compounds			
2) L1c PCB 1016	11.28	138221	460.220 ug/l
3) L1c PCB 1016{2}	12.33	305350	439.994 ug/l
4) L1c PCB 1016{3}	13.19	509963	464.158 ug/l
5) L1c PCB 1016{4}	15.28	138530	438.996 ug/l
6) L1c PCB 1016{5}	15.42	145676	449.727 ug/l
Sum PCB 1016		1237739	2253.095 ug/l
Average PCB 1016			450.619 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	213365	445.103 ug/l
33) L7c PCB 1260{2}	16.65	373912	434.791 ug/l
34) L7c PCB 1260{3}	16.81	363075	446.322 ug/l
35) L7C PCB 1260{4}	18.01	53081	456.087 ug/l
36) L7C PCB 1260{5}	18.59	582796	450.621 ug/l
Sum PCB 1260		1586229	2232.925 ug/l
Average PCB 1260			446.585 ug/l

0219

(f)=RT Delta > 1/2 Window (m)=manual int.

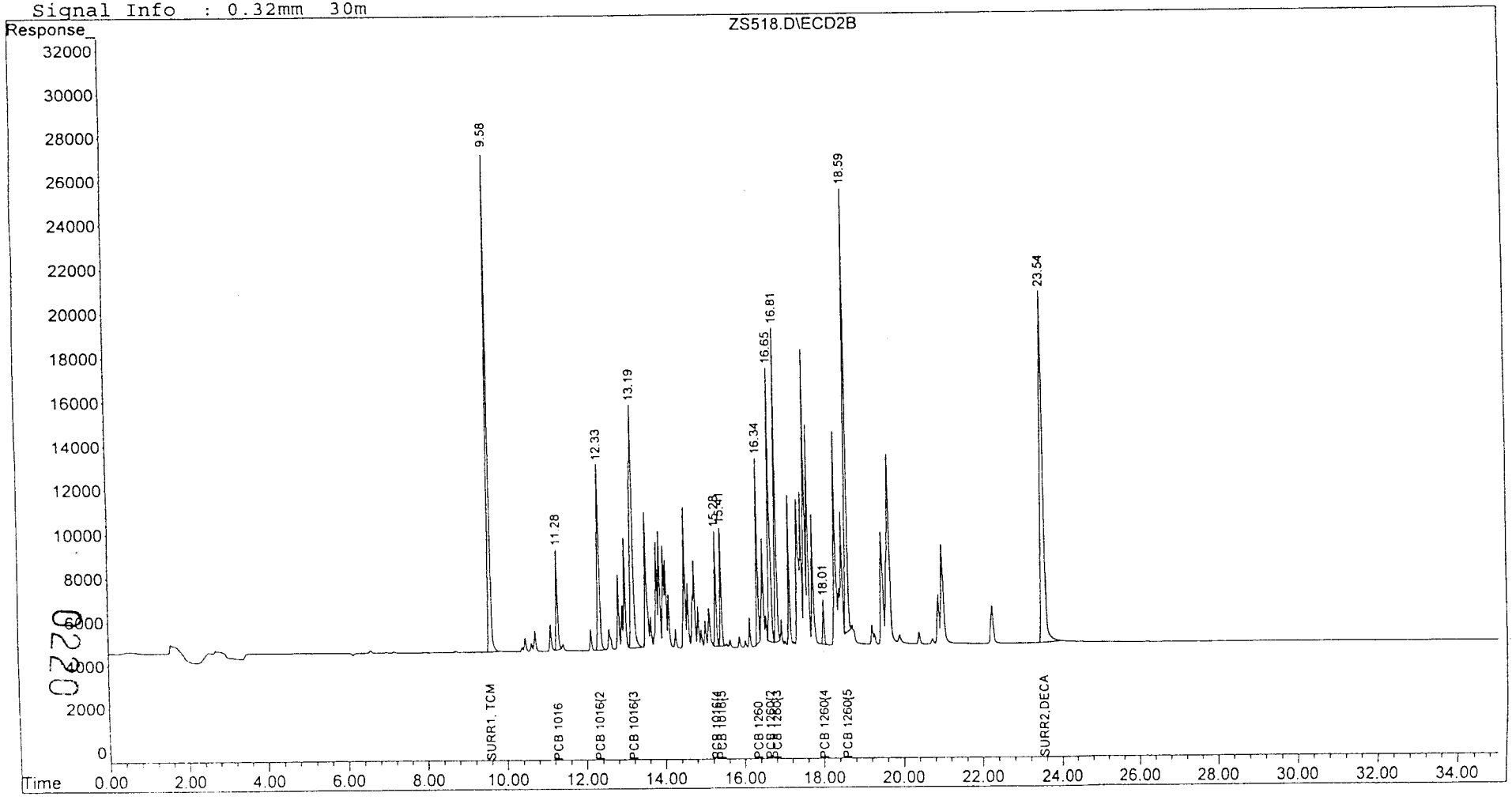
Quantitatic Report

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
Acq On : 27 Jan 2000 12:55 pm
Sample : AR1660M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 27 14:23 2000 Quant Results File: R0127C.RES

Vial: 53
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:23:10 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS519.D Vial: 54
Acq On : 27 Jan 2000 1:36 pm Operator: DROOT
Sample : AR1660MH1 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 27 14:24 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:23:48 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.58	945344	81.492 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	81.49%
37) S SURR2,DECACHLOROBIPHENYL	23.54	1098913	79.324 ug/l
Spiked Amount 100.000		Recovery =	79.32%
Target Compounds			
2) L1c PCB 1016	11.28	196875	712.177 ug/l
3) L1c PCB 1016{2}	12.33	432821	708.729 ug/l
4) L1c PCB 1016{3}	13.19	730542	716.270 ug/l
5) L1c PCB 1016{4}	15.28	196724	710.041 ug/l
6) L1c PCB 1016{5}	15.41	205689	705.982 ug/l
Sum PCB 1016		1762651	3553.199 ug/l
Average PCB 1016			710.640 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	305080	714.925 ug/l
33) L7c PCB 1260{2}	16.65	529764	708.407 ug/l
34) L7c PCB 1260{3}	16.81	513863	707.655 ug/l
35) L7C PCB 1260{4}	18.01	76765	723.090 ug/l
36) L7C PCB 1260{5}	18.59	843382	723.565 ug/l
Sum PCB 1260		2268854	3577.642 ug/l
Average PCB 1260			715.528 ug/l

0221

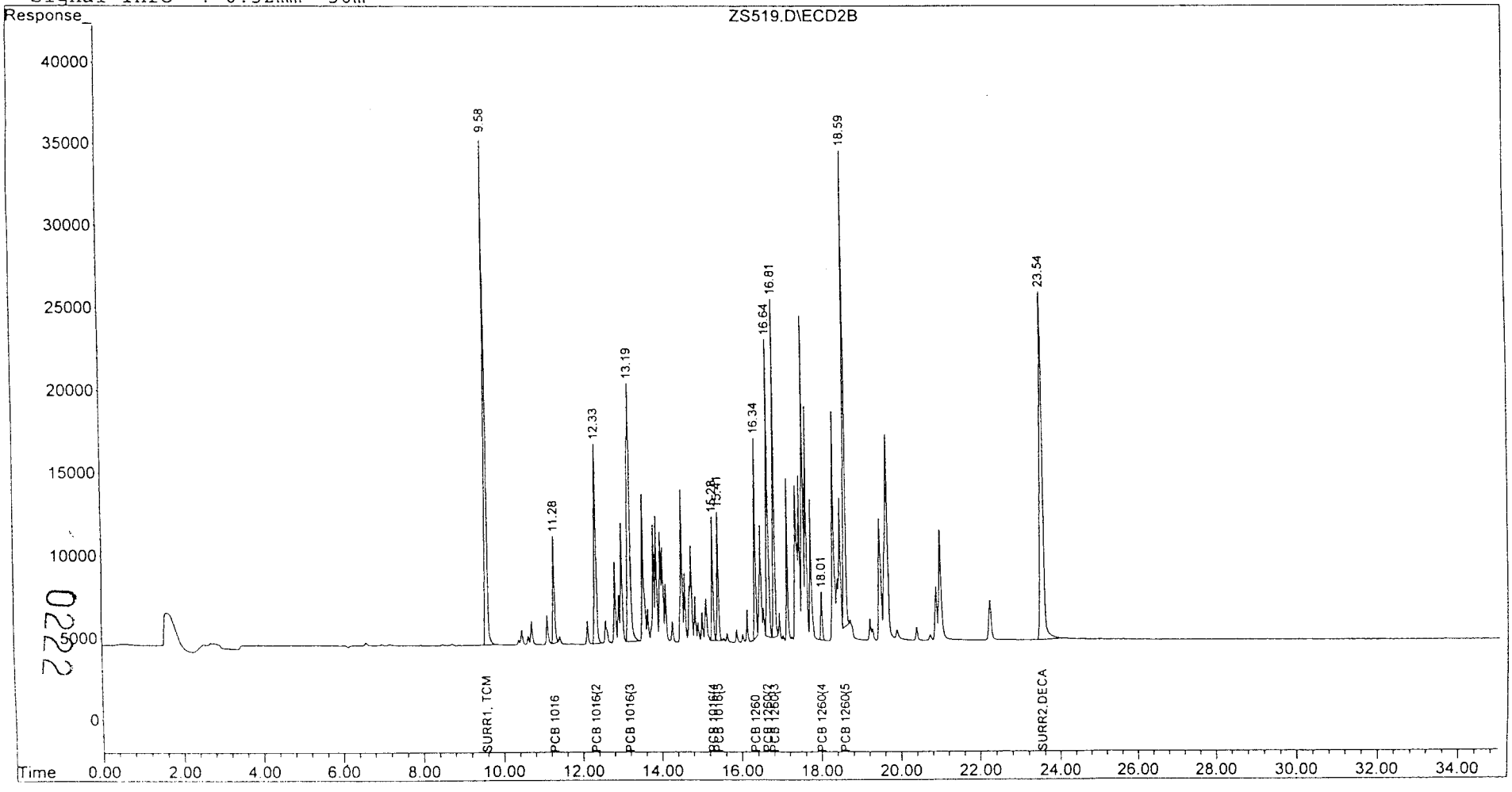
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS519.D Vial: 54
Acq On : 27 Jan 2000 1:36 pm Operator: DROOT
Sample : AR1660MH1 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 27 14:24 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:23:48 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



2220

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS520.D Vial: 55
Acq On : 27 Jan 2000 2:16 pm Operator: DROOT
Sample : AR1660H01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:44 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:24:19 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.58	1196411	103.135 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery = 103.14%	
37) S SURR2,DECACHLOROBIPHENYL	23.54	1400993	101.129 ug/l
Spiked Amount 100.000		Recovery = 101.13%	
Target Compounds			
2) L1c PCB 1016	11.28	252969	915.089 ug/l
3) L1c PCB 1016{2}	12.33	554555	908.064 ug/l
4) L1c PCB 1016{3}	13.19	957118	938.420 ug/l
5) L1c PCB 1016{4}	15.28	256021	924.062 ug/l
6) L1c PCB 1016{5}	15.41	267197	917.094 ug/l
Sum PCB 1016		2287859	4602.728 ug/l
Average PCB 1016			920.546 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	400825	939.293 ug/l
33) L7c PCB 1260{2}	16.65	693818	927.782 ug/l
34) L7c PCB 1260{3}	16.81	675249	929.904 ug/l
35) L7C PCB 1260{4}	18.01	102558	966.049 ug/l
36) L7C PCB 1260{5}	18.59	1136831	975.324 ug/l
Sum PCB 1260		3009280	4738.353 ug/l
Average PCB 1260			947.671 ug/l

0223

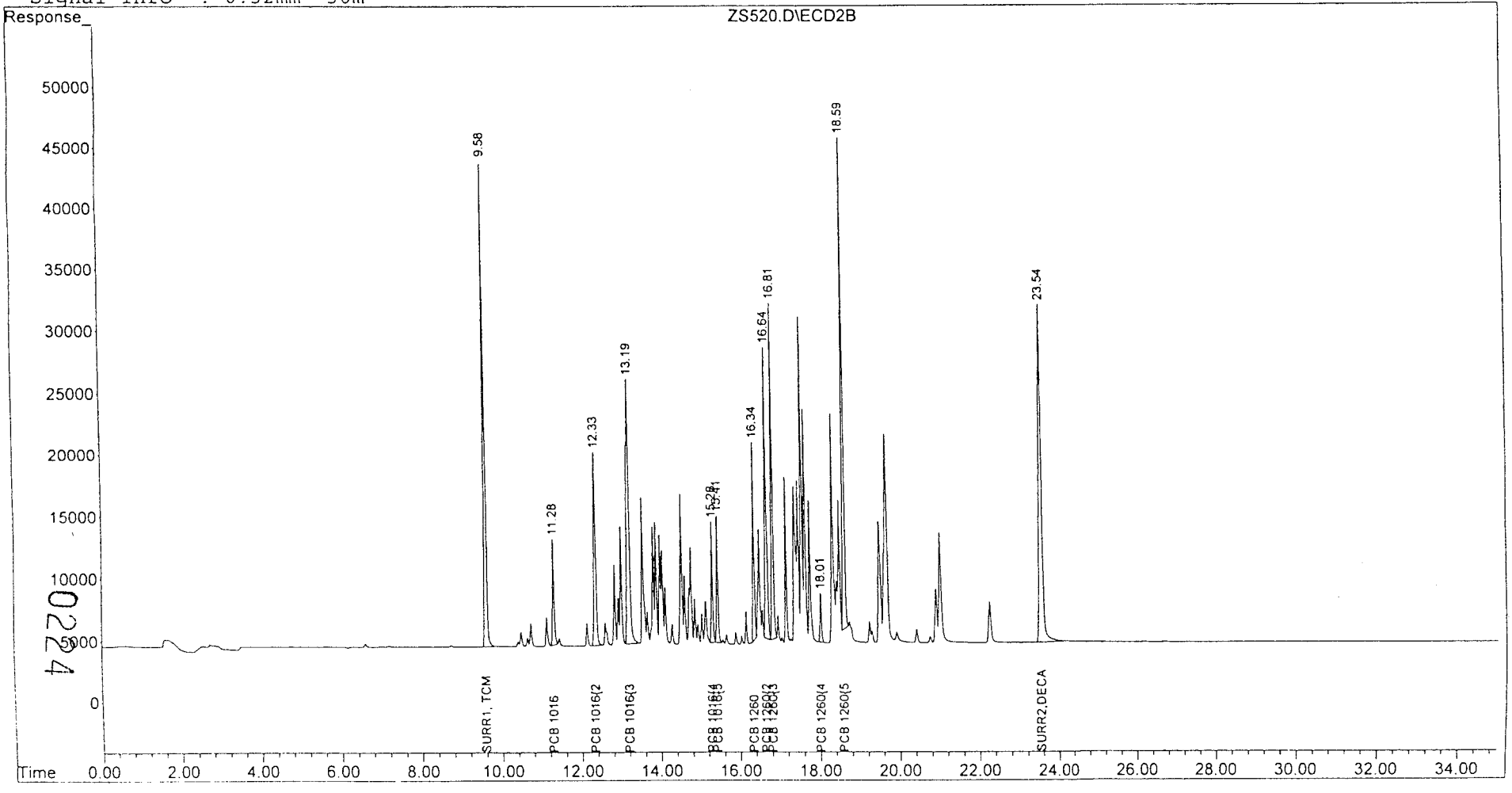
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS520.D Vial: 55
Acq On : 27 Jan 2000 2:16 pm Operator: DROOT
Sample : AR1660H01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:44 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Thu Jan 27 14:24:19 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



0024

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS521.D Vial: 56
Acq On : 27 Jan 2000 2:57 pm Operator: DROOT
Sample : AR1221M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:45 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:44:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.58	605697	52.213 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	52.21%#
37) S SURR2,DECACHLOROBIPHENYL	23.54	745296	53.798 ug/l
Spiked Amount 100.000		Recovery =	53.80%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
7) L2c PCB 1221	10.72	74547	423.542 ug/l
8) L2c PCB 1221{2}	11.11	58087	411.410 ug/l
9) L2c PCB 1221{3}	11.28	151092	419.476 ug/l
Sum PCB 1221		283726	No CC ug/L
Average PCB 1221			418.143 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0225

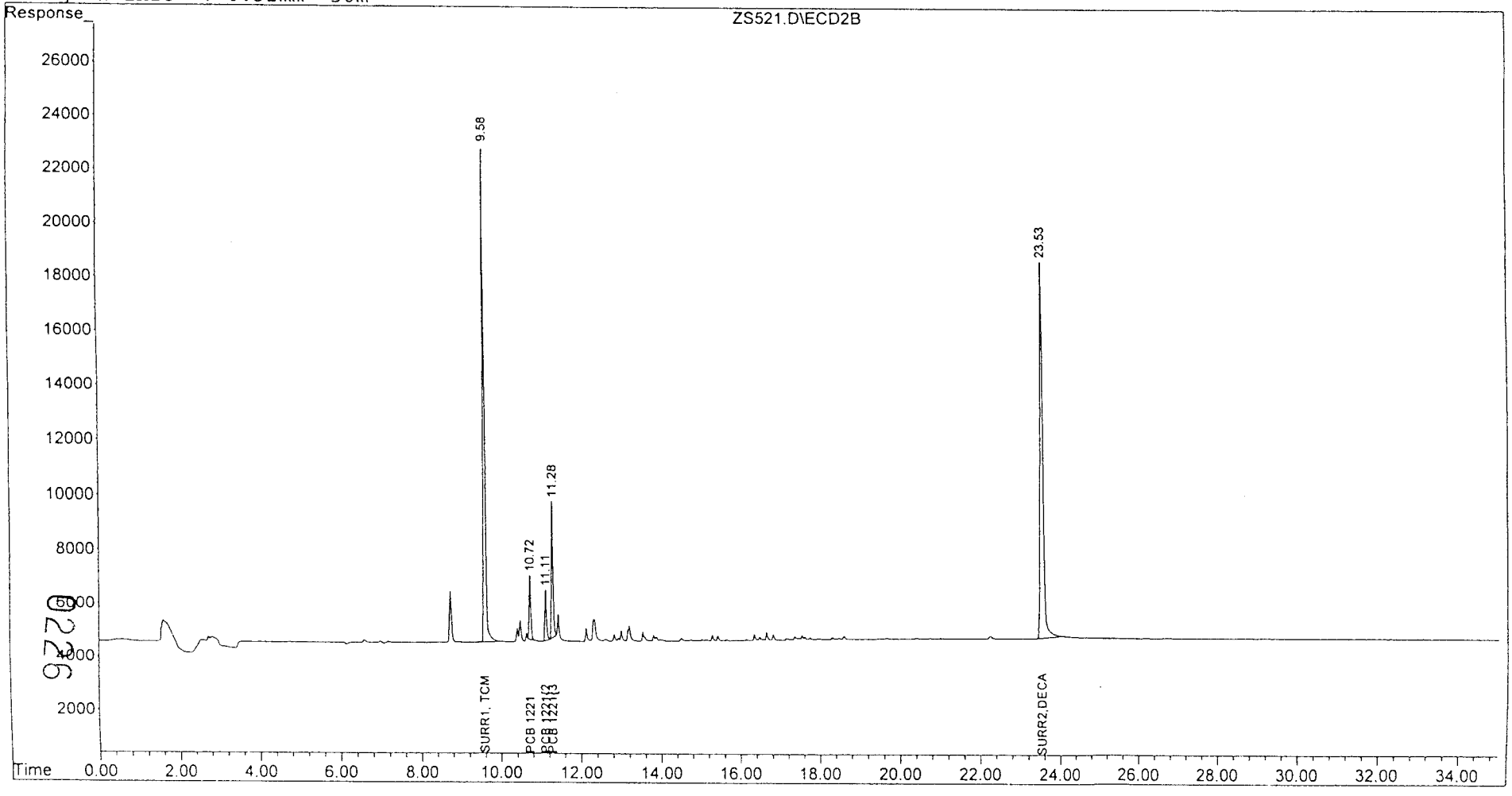
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS521.D Vial: 56
Acq On : 27 Jan 2000 2:57 pm Operator: DROOT
Sample : AR1221M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:45 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:44:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS522.D Vial: 57
Acq On : 27 Jan 2000 3:37 pm Operator: DROOT
Sample : AR1232M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:47 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:46:29 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS521.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.58	679461	67.307 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	67.31%
37) S SURR2,DECACHLOROBIPHENYL	23.53	818231	65.872 ug/l
Spiked Amount 100.000		Recovery =	65.87%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
12) L3c PCB 1232	11.28	149501	451.160 ug/l
13) L3c PCB 1232{2}	12.33	160488	445.906 ug/l
14) L3c PCB 1232{3}	13.19	241471	460.823 ug/l
15) L3c PCB 1232{4}	15.02	52972	472.300 ug/l
16) L3c PCB 1232{5}	15.13	73028	475.807 ug/l
Sum PCB 1232		677459	2305.996 ug/l
Average PCB 1232			461.199 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0227

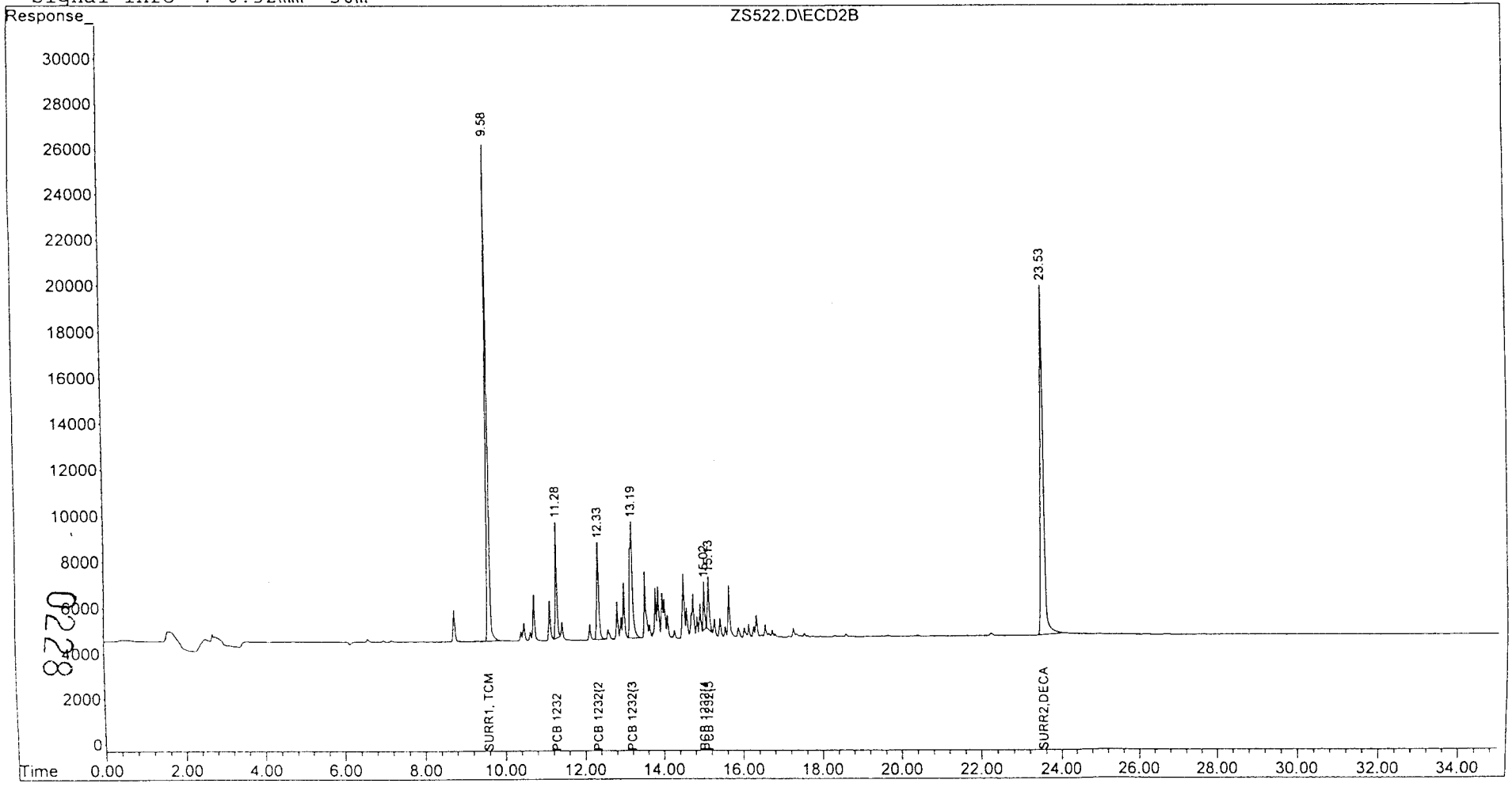
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS522.D Vial: 57
Acq On : 27 Jan 2000 3:37 pm Operator: DROOT
Sample : AR1232M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:47 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:46:29 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS523.D Vial: 58
Acq On : 27 Jan 2000 4:18 pm Operator: DROOT
Sample : AR1242M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:48 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:47:26 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS522.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.58	692592	61.160 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	61.16%
37) S SURR2,DECACHLOROBIPHENYL	23.53	829765	60.846 ug/l
Spiked Amount 100.000		Recovery =	60.85%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
17) L4c PCB 1242	11.28	120158	488.596 ug/l
18) L4c PCB 1242{2}	12.33	242388	476.632 ug/l
19) L4c PCB 1242{3}	13.19	399525	492.841 ug/l
20) L4c PCB 1242{4}	15.02	102169	491.981 ug/l
21) L4c PCB 1242{5}	15.13	135650	496.904 ug/l
Sum PCB 1242		999889	2446.953 ug/l
Average PCB 1242			489.391 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0229

(f)=RT Delta > 1/2 Window (m)=manual int.

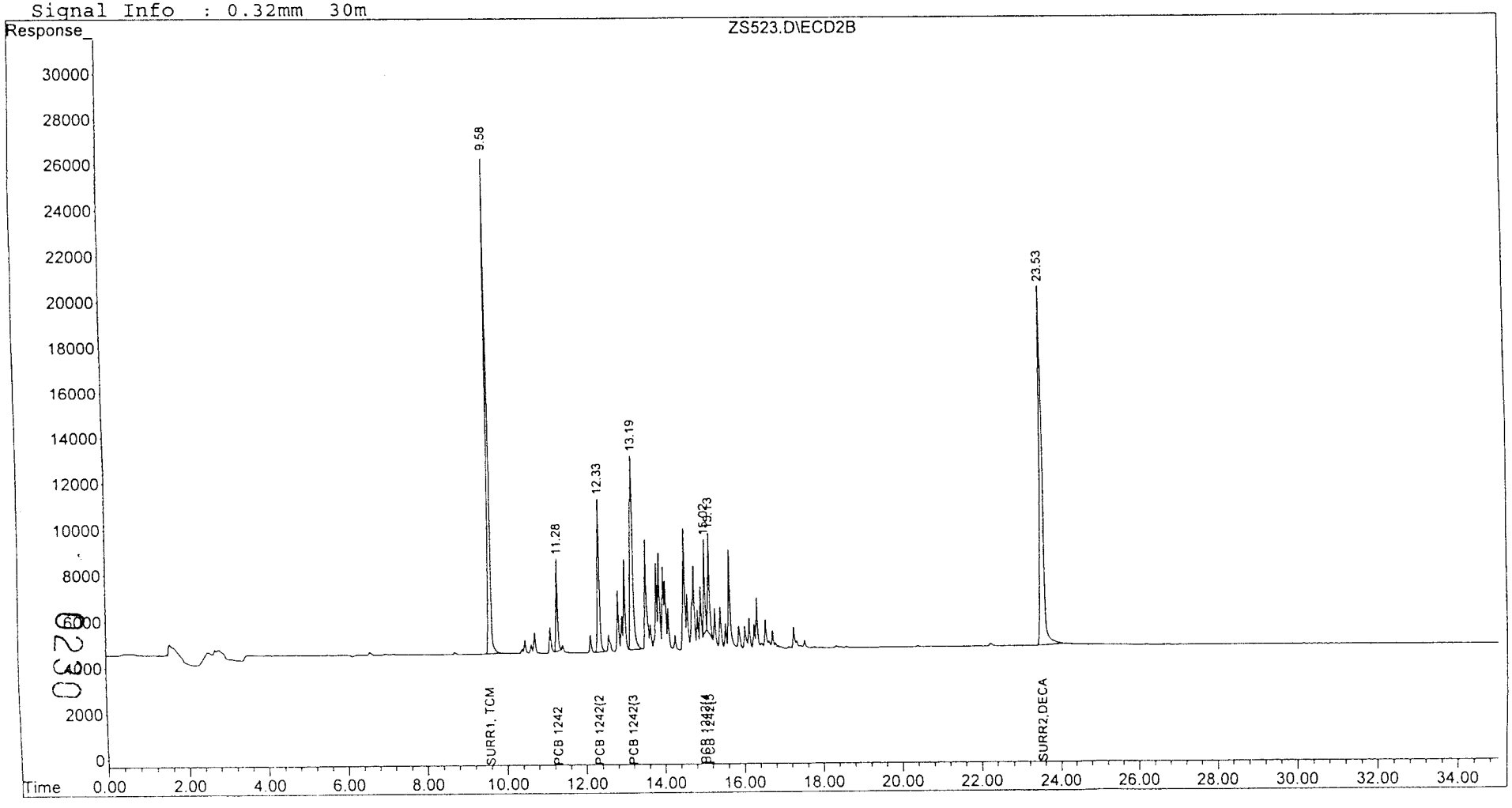
Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS523.D
Acq On : 27 Jan 2000 4:18 pm
Sample : AR1242M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 28 7:48 2000 Quant Results File: R0127C.RES

Vial: 58
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:47:26 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS524.D Vial: 59
Acq On : 27 Jan 2000 4:58 pm Operator: DROOT
Sample : AR1248M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:49 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:48:39 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS523.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S SURR1, TCMX	9.58	707099	61.257	ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	61.26%	
37) S SURR2,DECACHLOROBIPHENYL	23.53	857982	62.040	ug/l
Spiked Amount 100.000		Recovery =	62.04%	
Target Compounds				
Sum PCB 1016		0	N.D.	ug/l
Average PCB 1016			0.000	ug/l
Sum PCB 1221		0	N.D.	ug/L
Average PCB 1221			0.000	ug/L
Sum PCB 1232		0	N.D.	ug/l
Average PCB 1232			0.000	ug/l
Sum PCB 1242		0	N.D.	ug/l
Average PCB 1242			0.000	ug/l
22) L5c PCB 1248	12.33	132656	463.625	ug/l
23) L5c PCB 1248{2}	13.65	32078	465.130	ug/l
24) L5c PCB 1248{3}	15.42	123949	470.409	ug/l
25) L5c PCB 1248{4}	15.88	77138	468.388	ug/l
26) L5c PCB 1248{5}	16.73	36747	494.735	ug/l
Sum PCB 1248		402569	2362.288	ug/l
Average PCB 1248			472.458	ug/l
Sum PCB 1254		0	N.D.	ug/l
Average PCB 1254			0.000	ug/l
Sum PCB 1260		0	N.D.	ug/l
Average PCB 1260			0.000	ug/l

0231

(f)=RT Delta > 1/2 Window (m)=manual int.

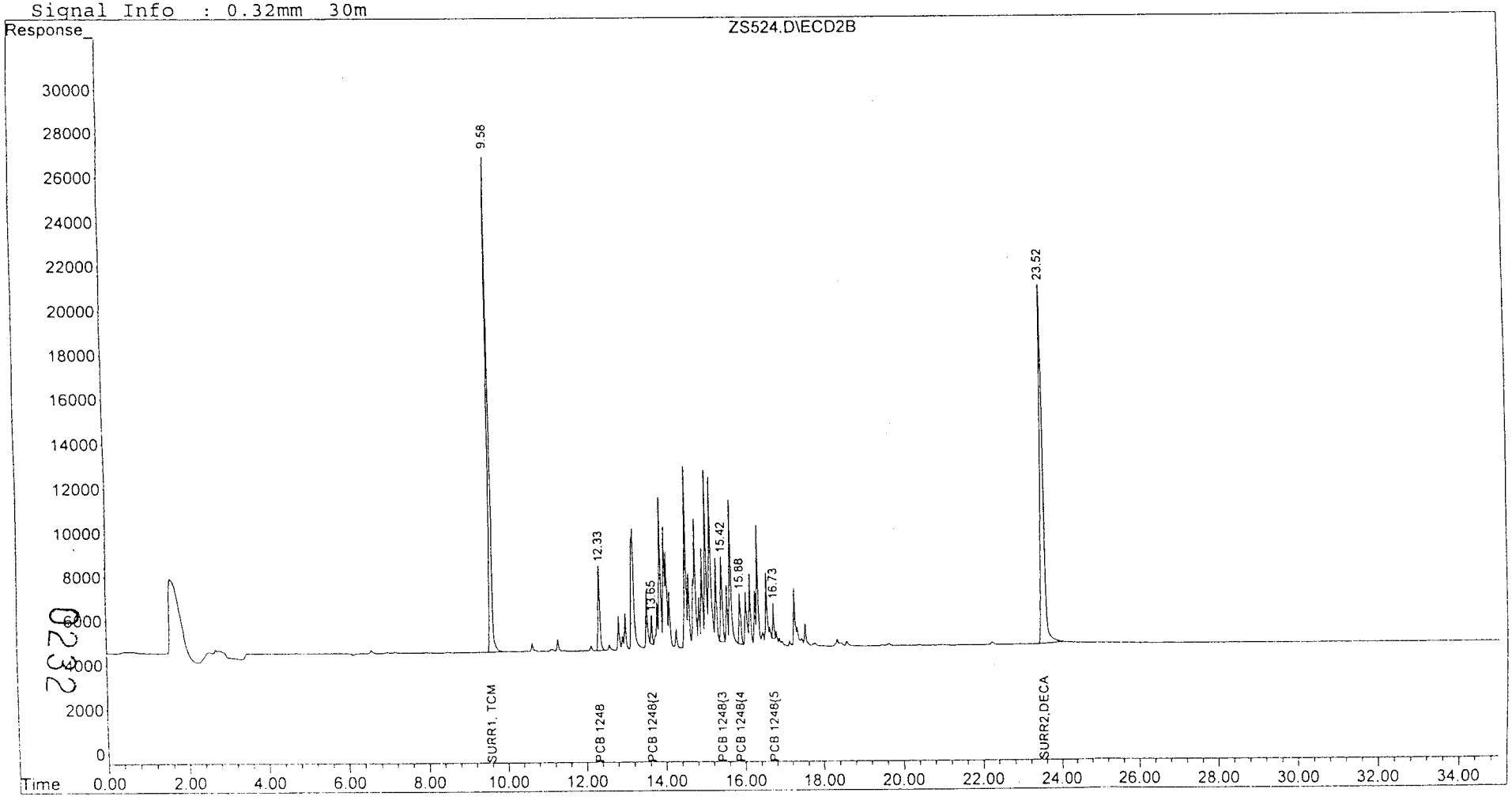
Quantitation Report

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS524.D
Acq On : 27 Jan 2000 4:58 pm
Sample : AR1248M01
Misc : CALIBRATION
IntFile : events.e
Quant Time: Jan 28 7:49 2000 Quant Results File: R0127C.RES

Vial: 59
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:48:39 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS525.D Vial: 60
Acq On : 27 Jan 2000 5:39 pm Operator: DROOT
Sample : AR1254M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:50 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:49:42 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS524.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.58	731541	62.074 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	62.07%
37) S SURR2,DECACHLOROBIPHENYL	23.52	907450	63.459 ug/l
Spiked Amount 100.000		Recovery =	63.46%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
27) L6c PCB 1254	13.86	147540	507.181 ug/l
28) L6c PCB 1254{2}	15.02	113279	521.312 ug/l
29) L6c PCB 1254{3}	15.28	285226	490.822 ug/l
30) L6c PCB 1254{4}	15.41	331091	500.294 ug/l
31) L6c PCB 1254{5}	15.88	143625	502.493 ug/l
Sum PCB 1254		1020761	2522.101 ug/l
Average PCB 1254			504.420 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0233

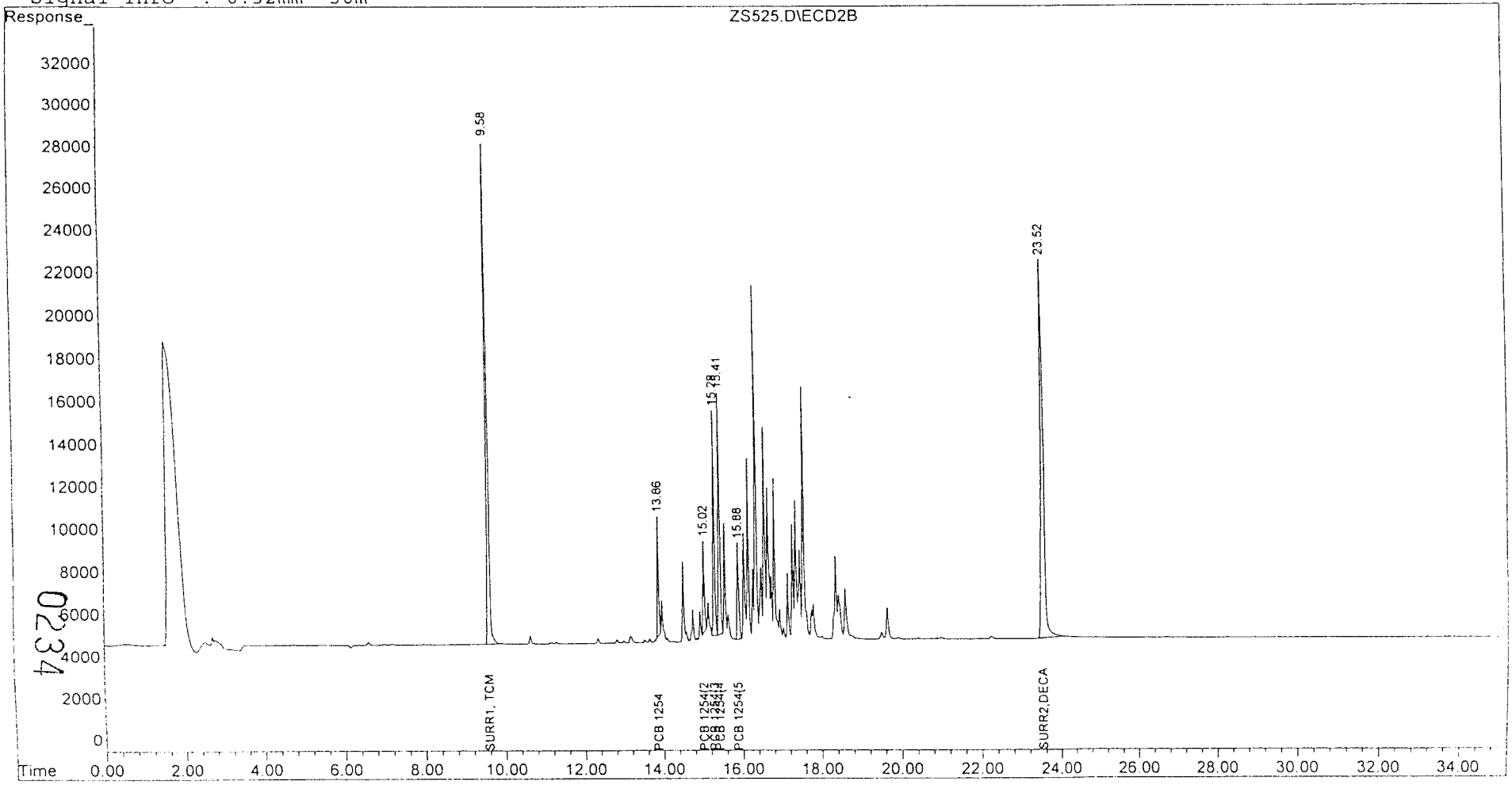
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitati Report

Data File : C:\HPCHEM\2\DATA\012700.SEC\ZS525.D Vial: 60
Acq On : 27 Jan 2000 5:39 pm Operator: DROOT
Sample : AR1254M01 Inst : 5890C
Misc : CALIBRATION Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 28 7:50 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Fri Jan 28 07:49:42 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : HP-50+
Signal Info : 0.32mm 30m



0234

8D- PESTICIDE SEQUENCE SUMMARY
Evaluation of Retention Time Shift for DCB and TCMX

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract: DAMES

Lab Code: 10145 Case No.: R2000664 SAS No.: _____ SDG No.: CB-1

Instrument ID: HP5890-C GC Column ID.: DB-1701

Mean Surrogate RT from Init. Calibration

Init Calib Date(s): 1/27/00 TCX: 9.19 DCB: 21.48

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	PIBLK10	PIBLK10	1/31/00	11:30	9.19	21.48
02	AR1660M11	AR1660M11	1/31/00	12:11	9.19	21.48
03	PBLK1	356290 BLK	1/31/00	12:51	9.19	21.48
04	PBLK1MS	356291 BS	1/31/00	13:32	9.19	21.48
05	CB-1	355896	1/31/00	14:13	9.19	21.48
06	CB-1 MS	356292 MS	1/31/00	14:53	9.19	21.48
07	CB-1 MSD	356293 MSD	1/31/00	15:34	9.19	21.48
08	STMH 2 (1/50)	355897 (1/50)	1/31/00	16:15	D	D
09	ZZZZZ	355898 (1/10,000)	1/31/00	16:55	D	D
10	ZZZZZ	HEXANE	1/31/00	17:39	---	---
11	PIBLK11	PIBLK11	1/31/00	18:16	9.19	21.48
12	AR1660M12	AR1660M12	1/31/00	18:57	9.19	21.48
13						
14						
15						
16						
17						
18						
19						
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27						
28						
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30						

TCX = SURR1,TCMX (+/- 0.05 MINUTES)
DCB = SURR2,Decachlorobiphenyl (+/- 0.10 MINUTES)
# Column used to flag retention time values with an asterik
* Values outside of QC limits

FORM VIII PEST 3/90

0235

8D- PESTICIDE SEQUENCE SUMMARY
Evaluation of Retention Time Shift for DCB and TCMX

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract: DAMES

Lab Code: 10145 Case No.: R2000664 SAS No.: _____ SDG No.: CB-1

Instrument ID: HP5890-C GC Column ID.: DB-17

Mean Surrogate RT from Init. Calibration

Init Calib Date(s): 1/27/00 TCX: 9.59 DCB: 23.55

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	PIBLK10	PIBLK10	1/31/00	11:30	9.59	23.55
02	AR1660M11	AR1660M11	1/31/00	12:11	9.59	23.55
03	PBLK1	356290 BLK	1/31/00	12:51	9.59	23.55
04	PBLK1MS	356291 BS	1/31/00	13:32	9.59	23.55
05	CB-1	355896	1/31/00	14:13	9.59	23.55
06	CB-1 MS	356292 MS	1/31/00	14:53	9.59	23.55
07	CB-1 MSD	356293 MSD	1/31/00	15:34	9.59	23.55
08	STMH 2 (1/50)	355897 (1/50)	1/31/00	16:15	D	D
09	ZZZZZ	355898 (1/10,000)	1/31/00	16:55	D	D
10	ZZZZZ	HEXANE	1/31/00	17:39	---	---
11	PIBLK11	PIBLK11	1/31/00	18:16	9.59	23.55
12	AR1660M12	AR1660M12	1/31/00	18:57	9.59	23.55
13						
14						
15						
16						
17						
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19						
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22						
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25						
26						
27						
28						
29						
30						

TCX = SURR1,TCMX (+/- 0.05 MINUTES)
DCB = SURR2,Decachlorobiphenyl (+/- 0.10 MINUTES)
# Column used to flag retention time values with an asterik
* Values outside of QC limits

8D- PESTICIDE SEQUENCE SUMMARY
Evaluation of Retention Time Shift for DCB and TCMX

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract: DAMES

Lab Code: 10145 Case No.: R2000664 SAS No.: _____ SDG No.: CB-1

Instrument ID: HP5890-C GC Column ID.: DB-1701

Mean Surrogate RT from Init. Calibration

Init Calib Date(s): 1/27/00 TCX: 9.19 DCB: 21.48

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	PIBLK16	PIBLK16	2/2/00	8:07	9.19	21.47
02	AR1660M17	AR1660M17	2/2/00	8:47	9.18	21.46
03	STMH-3 (100,000)	355898 (100,000)	2/2/00	9:28	D	D
04	PIBLK17	PIBLK17	2/2/00	10:08	9.18	21.46
05	AR1660M18	AR1660M18	2/2/00	10:49	9.18	21.47
06						
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TCX = SURR1,TCMX (+/- 0.05 MINUTES)
DCB = SURR2,Decachlorobiphenyl (+/- 0.10 MINUTES)
# Column used to flag retention time values with an asterik
* Values outside of QC limits

FORM VIII PEST 3/90

0237

8D- PESTICIDE SEQUENCE SUMMARY
Evaluation of Retention Time Shift for DCB and TCMX

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract: DAMES

Lab Code: 10145 Case No.: R2000664 SAS No.: _____ SDG No.: CB-1

Instrument ID: HP5890-C GC Column ID.: DB-17

Mean Surrogate RT from Init. Calibration

Init Calib Date(s): 1/27/00 TCX: 9.59 DCB: 23.55

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	PIBLK16	PIBLK16	2/2/00	8:07	9.59	23.54
02	AR1660M17	AR1660M17	2/2/00	8:47	9.58	23.53
03	STMH-3 (100,000)	355898 (100,000)	2/2/00	9:28	D	D
04	PIBLK17	PIBLK17	2/2/00	10:08	9.59	23.53
05	AR1660M18	AR1660M18	2/2/00	10:49	9.59	23.53
06						
07						
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28						
29						
30						

TCX = SURR1,TCMX (+/- 0.05 MINUTES)
DCB = SURR2,Decachlorobiphenyl (+/- 0.10 MINUTES)
# Column used to flag retention time values with an asterik
* Values outside of QC limits

FORM VIII PEST 3/90

0238

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\013100\CS605.D
Acq On : 31 Jan 2000 12:11 pm
Sample : AR1660M11
Misc : CALIBRATION CHECK
IntFile : events.e

Vial: 2
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	S	SURR1, TCMX	4.292	4.229	E3	1.5	104	0.01
2	L1c	PCB 1016	125.260	121.114		3.3	102	0.00
3	L1c	PCB 1016{2}	250.833	242.730		3.2	103	0.00
4	L1c	PCB 1016{3}	447.301	430.892		3.7	103	0.00
5	L1c	PCB 1016{4}	213.043	202.997		4.7	102	0.00
6	L1c	PCB 1016{5}	163.157	157.900		3.2	102	0.00
32	L7c	PCB 1260	274.445	260.352		5.1	102	0.00
33	L7c	PCB 1260{2}	330.719	318.696		3.6	103	0.00
34	L7c	PCB 1260{3}	42.806	37.397		12.6	92	0.01
35	L7C	PCB 1260{4}	138.959	127.981		7.9	97	0.00
36	L7C	PCB 1260{5}	54.107	50.382		6.9	99	0.00
37	S	SURR2,DECACHLOROBIPHENYL	5.458	5.111	E3	6.4	100	0.00

0239

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100\CS605.D Vial: 2
Acq On : 31 Jan 2000 12:11 pm Operator: DROOT
Sample : AR1660M11 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 12:46 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	253743	62.519 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	62.52%
37) S SURR2,DECACHLOROBIPHENYL	21.48	306688	59.878 ug/l
Spiked Amount 100.000		Recovery =	59.88%
Target Compounds			
2) L1c PCB 1016	10.55	60557	509.710 ug/l
3) L1c PCB 1016{2}	11.55	121365	517.339 ug/l
4) L1c PCB 1016{3}	12.57	215446	514.304 ug/l
5) L1c PCB 1016{4}	13.80	101498	509.133 ug/l
6) L1c PCB 1016{5}	14.00	78950	509.901 ug/l
Sum PCB 1016		577817	2560.387 ug/l
Average PCB 1016			512.077 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.00	130176	509.680 ug/l
33) L7c PCB 1260{2}	16.37	159348	517.144 ug/l
34) L7c PCB 1260{3}	17.37	18698	457.543 ug/l
35) L7C PCB 1260{4}	20.11	63990	485.887 ug/l
36) L7C PCB 1260{5}	20.94	25191	493.130 ug/l
Sum PCB 1260		397404	2463.385 ug/l
Average PCB 1260			492.677 ug/l

0240

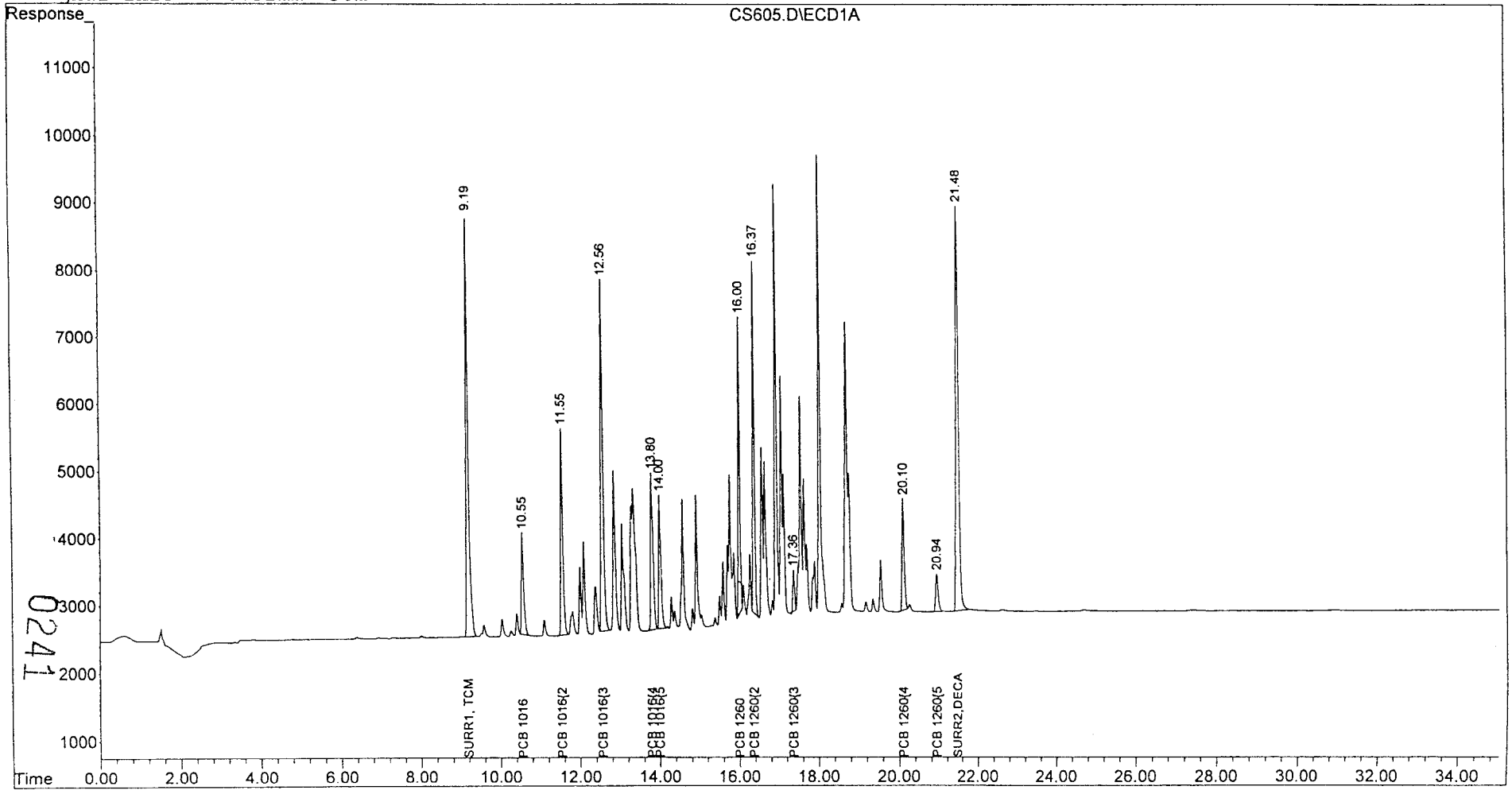
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\013100\CS605.D Vial: 2
Acq On : 31 Jan 2000 12:11 pm Operator: DROOT
Sample : AR1660M11 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 12:46 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0241

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\013100\CS615.D
Acq On : 31 Jan 2000 6:57 pm
Sample : AR1660M12
Misc : CALIBRATION CHECK
IntFile : events.e

Vial: 12
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	S	SURR1, TCMX	4.292	3.693	E3	14.0	91	0.02
2	L1c	PCB 1016	125.260	106.562		14.9	90	0.00
3	L1c	PCB 1016{2}	250.833	215.403		14.1	92	0.00
4	L1c	PCB 1016{3}	447.301	383.631		14.2	92	0.00
5	L1c	PCB 1016{4}	213.043	183.984		13.6	92	0.00
6	L1c	PCB 1016{5}	163.157	140.130		14.1	91	0.00
32	L7c	PCB 1260	274.445	235.308		14.3	92	0.00
33	L7c	PCB 1260{2}	330.719	286.274		13.4	93	0.00
34	L7c	PCB 1260{3}	42.806	40.908		4.4	100	0.00
35	L7C	PCB 1260{4}	138.959	118.649		14.6	90	0.00
36	L7C	PCB 1260{5}	54.107	46.536		14.0	91	0.00
37	S	SURR2,DECACHLOROBIPHENYL	5.458	4.784	E3	12.3	93	0.00

0242

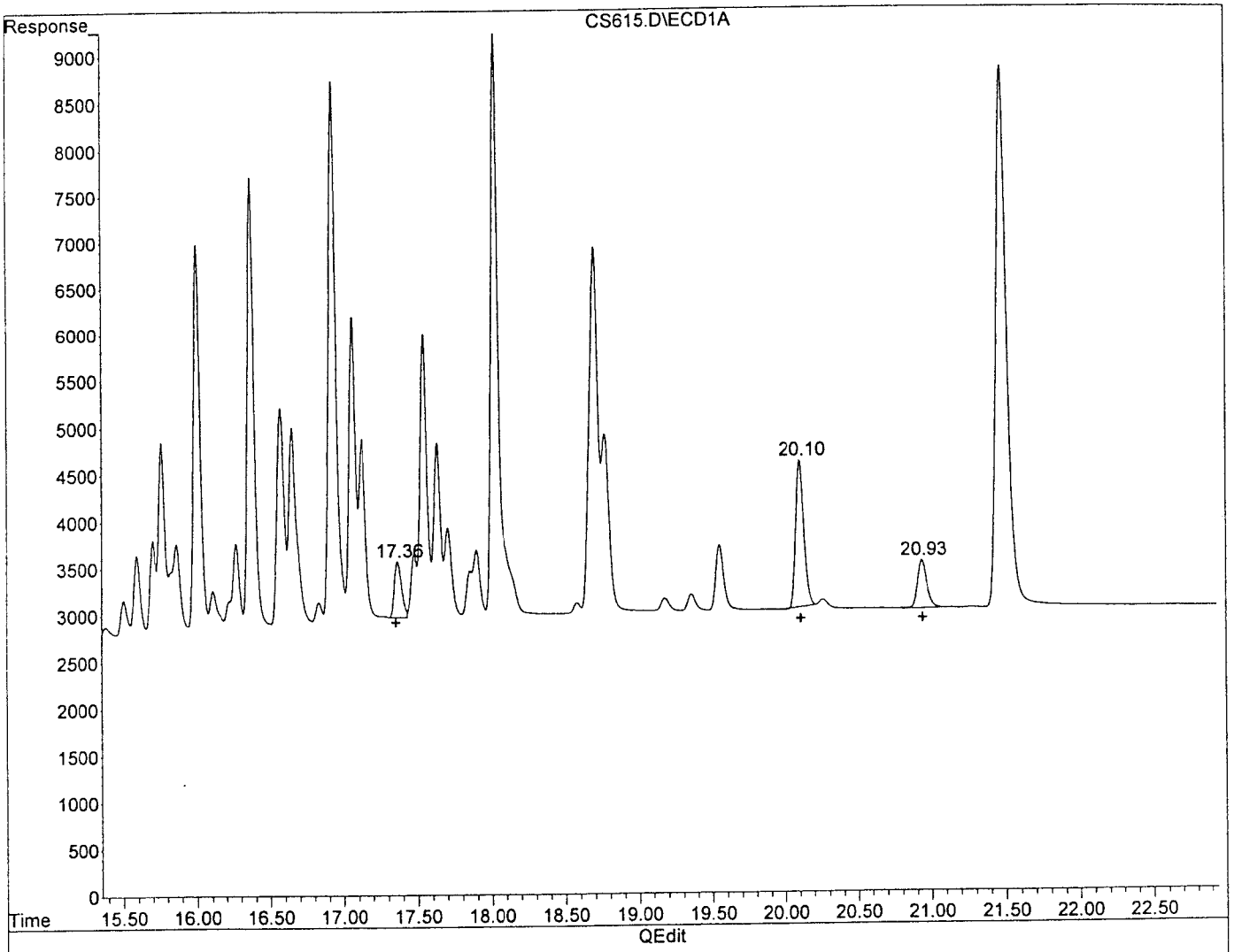
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Qedit)

Data File : C:\HPCHEM\2\DATA\013100\CS615.D
Acq On : 31 Jan 2000 6:57 pm
Sample : AR1660M12
Misc : CALIBRATION CHECK
IntFile : events.e
Quant Time: Feb 2 8:12 2000 Quant Results File: F0127C.RES

Vial: 12
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration



(34) PCB 1260{3} (L7c)

R.T.	Response	Conc
17.36	20454	500.51
20.10	59325	450.46
20.93	23268	455.48

0243

(+) = Expected Retention Time

CS615.D F0127C.M Wed Feb 02 08:13:39 2000

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100\CS615.D Vial: 12
Acq On : 31 Jan 2000 6:57 pm Operator: DROOT
Sample : AR1660M12 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 8:12 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	221585	54.595 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	54.59%#
37) S SURR2,DECACHLOROBIPHENYL	21.48	287042	56.042 ug/l
Spiked Amount 100.000		Recovery =	56.04%
Target Compounds			
2) L1c PCB 1016	10.55	53281	448.467 ug/l
3) L1c PCB 1016{2}	11.55	107701	459.095 ug/l
4) L1c PCB 1016{3}	12.57	191816	457.895 ug/l
5) L1c PCB 1016{4}	13.80	91992	461.447 ug/l m
6) L1c PCB 1016{5}	14.00	70065	452.516 ug/l
Sum PCB 1016		514855	2279.419 ug/l
Average PCB 1016			455.884 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.00	117654	460.653 ug/l
33) L7c PCB 1260{2}	16.37	143137	464.533 ug/l
34) L7c PCB 1260{3}	17.36	20454	500.505 ug/l m
35) L7C PCB 1260{4}	20.10	59325	450.460 ug/l
36) L7C PCB 1260{5}	20.93	23268	455.483 ug/l m
Sum PCB 1260		363838	2331.634 ug/l
Average PCB 1260			466.327 ug/l

0244

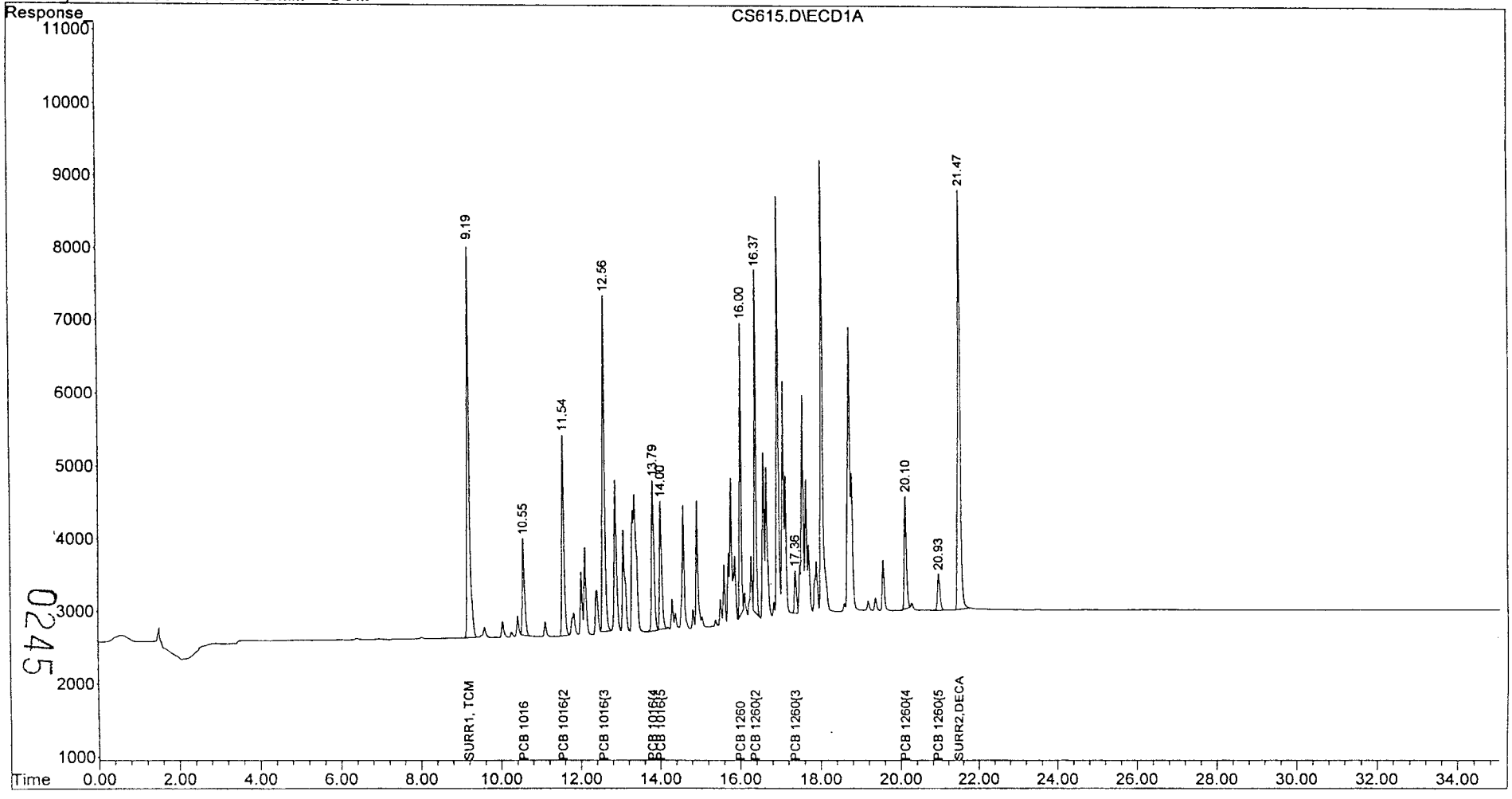
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\013100\CS615.D Vial: 12
Acq On : 31 Jan 2000 6:57 pm Operator: DROOT
Sample : AR1660M12 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 8:12 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0245

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS605.D
Acq On : 31 Jan 2000 12:11 pm
Sample : AR1660M11
Misc : CALIBRATION CHECK
IntFile : events.e

Vial: 52
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	S	SURR1, TCMX	11.898	12.376	E3	-4.0	107	0.00
2	L1c	PCB 1016	288.329	308.231		-6.9	111	0.00
3	L1c	PCB 1016{2}	648.299	644.807		0.5	106	0.00
4	L1c	PCB 1016{3}	1075.139	1110.872		-3.3	109	0.00
5	L1c	PCB 1016{4}	292.351	287.023		1.8	104	0.00
6	L1c	PCB 1016{5}	307.461	306.641		0.3	105	0.00
32	L7c	PCB 1260	450.099	451.872		-0.4	106	0.00
33	L7c	PCB 1260{2}	797.236	775.785		2.7	104	0.00
34	L7c	PCB 1260{3}	774.945	766.268		1.1	106	0.00
35	L7C	PCB 1260{4}	111.361	105.567		5.2	99	0.00
36	L7C	PCB 1260{5}	1.235	1.230	E3	0.4	105	0.00
37	S	SURR2,DECACHLOROBIPHENYL	14.447	14.197	E3	1.7	102	0.00

0246

(#) = Out of Range SPCC's out = 0 CCC's out = 0
ZS605.D R0127C.M Mon Jan 31 12:47:42 2000

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS605.D Vial: 52
Acq On : 31 Jan 2000 12:11 pm Operator: DROOT
Sample : AR1660M11 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 12:47 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.59	742578	64.013 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	64.01%
37) S SURR2,DECACHLOROBIPHENYL	23.55	851826	61.488 ug/l
Spiked Amount 100.000		Recovery =	61.49%
Target Compounds			
2) L1c PCB 1016	11.28	154115	557.497 ug/l
3) L1c PCB 1016{2}	12.34	322403	527.924 ug/l
4) L1c PCB 1016{3}	13.19	555436	544.585 ug/l
5) L1c PCB 1016{4}	15.28	143511	517.979 ug/l
6) L1c PCB 1016{5}	15.42	153320	526.238 ug/l
Sum PCB 1016		1328787	2674.223 ug/l
Average PCB 1016			534.845 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	225936	529.458 ug/l
33) L7c PCB 1260{2}	16.65	387892	518.695 ug/l
34) L7c PCB 1260{3}	16.81	383134	527.625 ug/l
35) L7C PCB 1260{4}	18.01	52783	497.197 ug/l
36) L7C PCB 1260{5}	18.60	614833	527.486 ug/l
Sum PCB 1260		1664579	2600.461 ug/l
Average PCB 1260			520.092 ug/l

0247

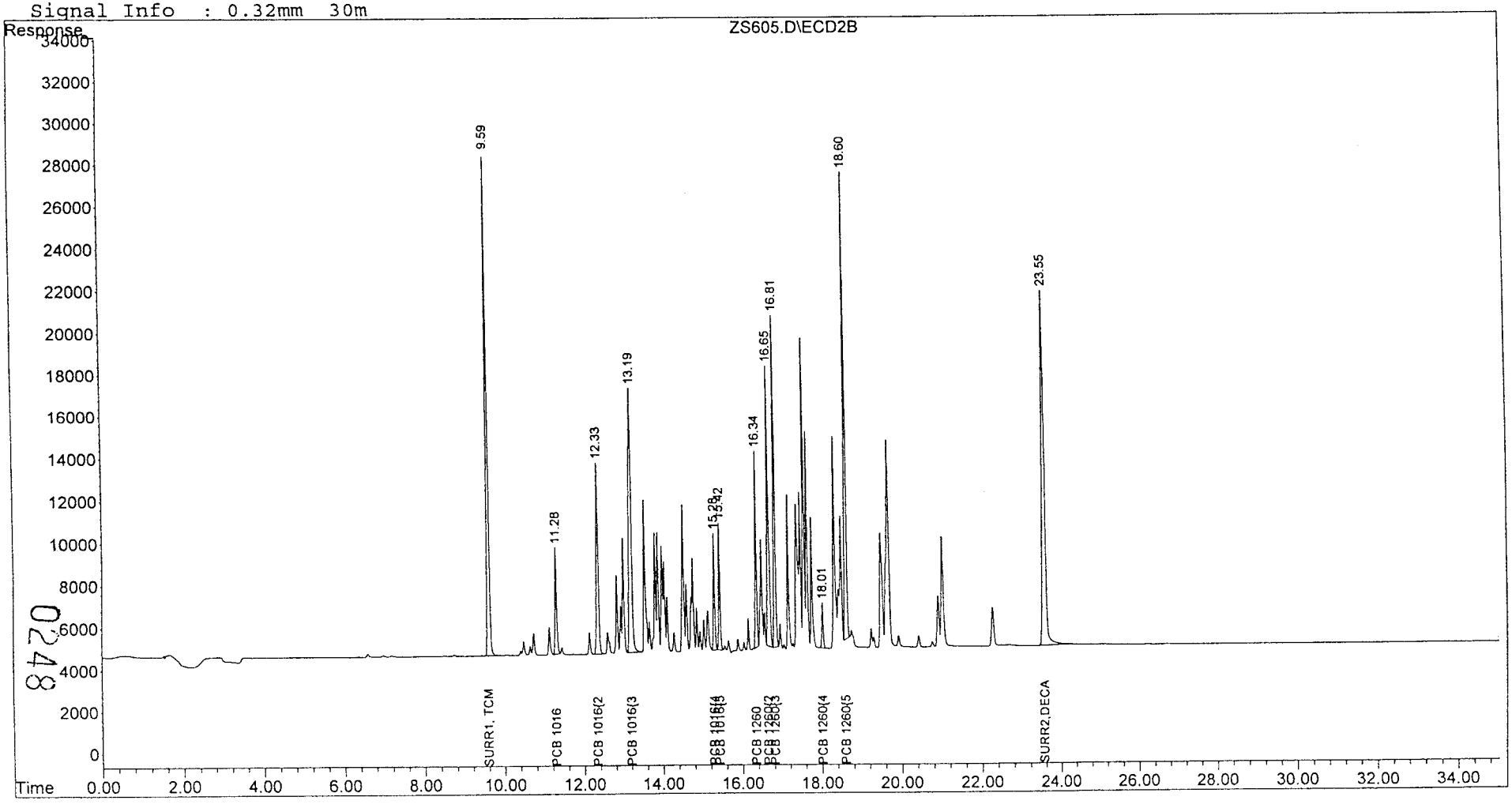
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS605.D Vial: 52
Acq On : 31 Jan 2000 12:11 pm Operator: DROOT
Sample : AR1660M11 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 12:47 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0248

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS615.D
Acq On : 31 Jan 2000 6:57 pm
Sample : AR1660M12
Misc : CALIBRATION CHECK
IntFile : events.e

Vial: 62
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	S	SURR1, TCMX	11.898	11.821	E3	0.6	102	0.00
2	L1c	PCB 1016	288.329	297.553		-3.2	108	0.00
3	L1c	PCB 1016{2}	648.299	623.851		3.8	102	0.00
4	L1c	PCB 1016{3}	1075.139	1081.758		-0.6	106	0.00
5	L1c	PCB 1016{4}	292.351	279.394		4.4	101	0.00
6	L1c	PCB 1016{5}	307.461	298.288		3.0	102	0.00
32	L7c	PCB 1260	450.099	439.138		2.4	103	0.00
33	L7c	PCB 1260{2}	797.236	759.906		4.7	102	0.00
34	L7c	PCB 1260{3}	774.945	760.058		1.9	105	0.00
35	L7C	PCB 1260{4}	111.361	105.978		4.8	100	0.00
36	L7C	PCB 1260{5}	1.235	1.232	E3	0.2	106	0.00
37	S	SURR2,DECACHLOROBIPHENYL	14.447	14.555	E3	-0.7	105	0.00

0249

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS615.D Vial: 62
Acq On : 31 Jan 2000 6:57 pm Operator: DROOT
Sample : AR1660M12 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 7:32 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.59	709272	61.142 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	61.14%
37) S SURR2,DECACHLOROBIPHENYL	23.55	873323	63.040 ug/l
Spiked Amount 100.000		Recovery =	63.04%
Target Compounds			
2) L1c PCB 1016	11.28	148777	538.185 ug/l
3) L1c PCB 1016{2}	12.34	311925	510.767 ug/l
4) L1c PCB 1016{3}	13.19	540879	530.312 ug/l
5) L1c PCB 1016{4}	15.28	139697	504.211 ug/l
6) L1c PCB 1016{5}	15.42	149144	511.903 ug/l
Sum PCB 1016		1290422	2595.379 ug/l
Average PCB 1016			519.076 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	219569	514.538 ug/l
33) L7c PCB 1260{2}	16.65	379953	508.078 ug/l
34) L7c PCB 1260{3}	16.81	380029	523.349 ug/l
35) L7C PCB 1260{4}	18.01	52989	499.134 ug/l
36) L7C PCB 1260{5}	18.60	616192	528.652 ug/l
Sum PCB 1260		1648732	2573.750 ug/l
Average PCB 1260			514.750 ug/l

0250

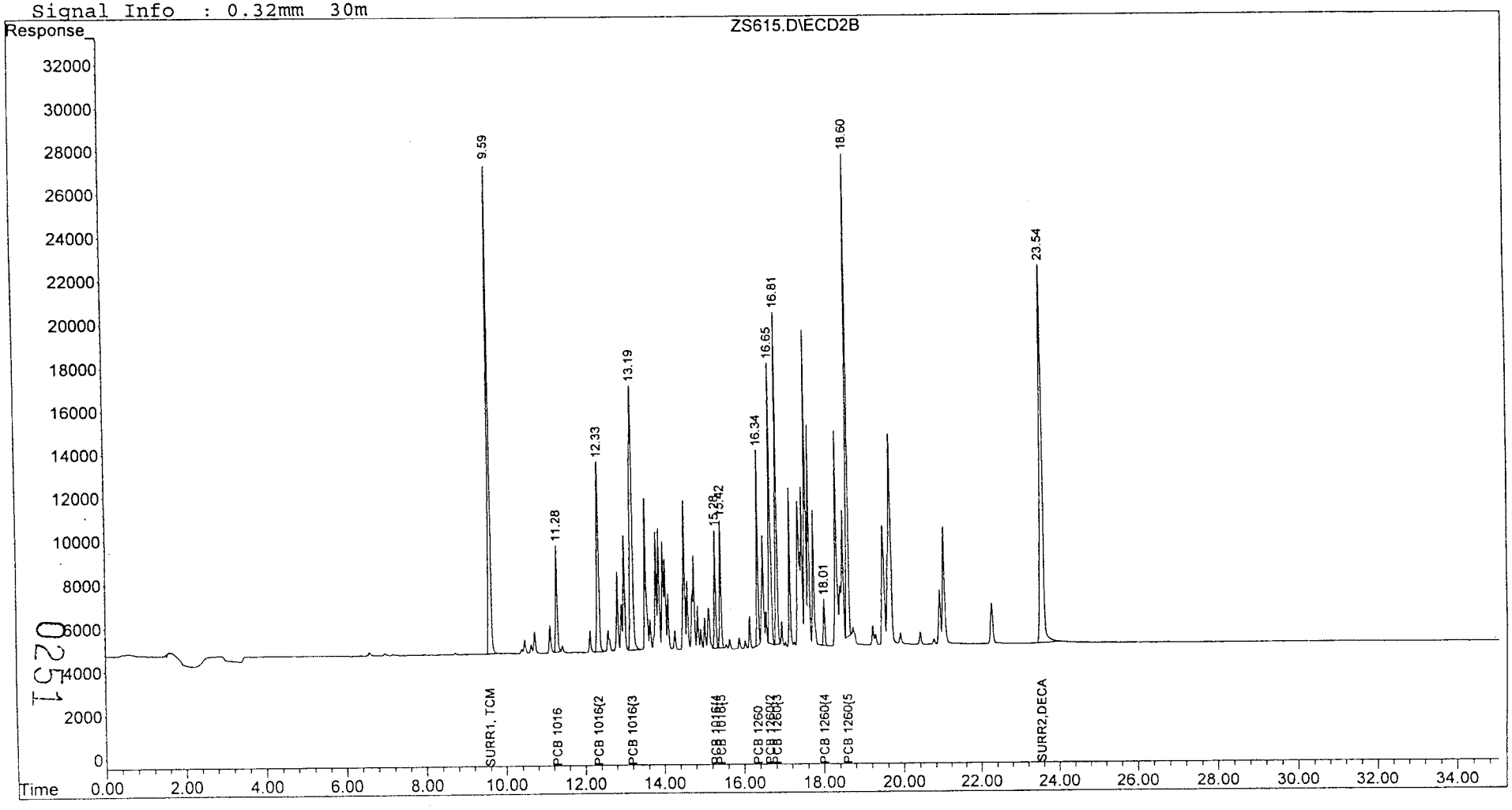
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS615.D Vial: 62
Acq On : 31 Jan 2000 6:57 pm Operator: DROOT
Sample : AR1660M12 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 7:32 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\020200\CS641.D
Acq On : 2 Feb 2000 8:47 am
Sample : AR1660M17
Misc : CALIBRATION CHECK
IntFile : events.e

Vial: 2
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	S	SURR1, TCMX	4.292	4.146	E3	3.4	102	0.00
2	L1c	PCB 1016	125.260	117.621		6.1	99	0.00
3	L1c	PCB 1016{2}	250.833	238.436		4.9	102	0.00
4	L1c	PCB 1016{3}	447.301	422.152		5.6	101	0.00
5	L1c	PCB 1016{4}	213.043	199.738		6.2	100	0.00
6	L1c	PCB 1016{5}	163.157	154.003		5.6	99	0.00
32	L7c	PCB 1260	274.445	257.727		6.1	101	0.00
33	L7c	PCB 1260{2}	330.719	314.262		5.0	102	0.00
34	L7c	PCB 1260{3}	42.806	37.103		13.3	91	0.00
35	L7C	PCB 1260{4}	138.959	129.839		6.6	99	-0.02
36	L7C	PCB 1260{5}	54.107	49.574		8.4	97	-0.02
37	S	SURR2,DECACHLOROBIPHENYL	5.458	5.273	E3	3.4	103	-0.02

0252

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CS641.D F0127C.M Wed Feb 02 09:23:35 2000

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020200\CS641.D Vial: 2
Acq On : 2 Feb 2000 8:47 am Operator: DROOT
Sample : AR1660M17 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 9:23 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S SURR1, TCMX	9.18	248744	61.287	ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	61.29%	
37) S SURR2,DECACHLOROBIPHENYL	21.46	316409	61.776	ug/l
Spiked Amount 100.000		Recovery =	61.78%	
Target Compounds				
2) L1c PCB 1016	10.54	58811	495.011	ug/l
3) L1c PCB 1016{2}	11.54	119218	508.187	ug/l
4) L1c PCB 1016{3}	12.56	211076	503.873	ug/l
5) L1c PCB 1016{4}	13.79	99869	500.958	ug/l
6) L1c PCB 1016{5}	13.99	77001	497.316	ug/l
Sum PCB 1016		565975	2505.344	ug/l
Average PCB 1016			501.069	ug/l
Sum PCB 1221		0	N.D.	ug/L
Average PCB 1221			0.000	ug/L
Sum PCB 1232		0	N.D.	ug/l
Average PCB 1232			0.000	ug/l
Sum PCB 1242		0	N.D.	ug/l
Average PCB 1242			0.000	ug/l
Sum PCB 1248		0	N.D.	ug/l
Average PCB 1248			0.000	ug/l
Sum PCB 1254		0	N.D.	ug/l
Average PCB 1254			0.000	ug/l
32) L7c PCB 1260	15.99	128864	504.542	ug/l
33) L7c PCB 1260{2}	16.36	157131	509.950	ug/l
34) L7c PCB 1260{3}	17.36	18552	453.953	ug/l
35) L7C PCB 1260{4}	20.09	64920	492.943	ug/l
36) L7C PCB 1260{5}	20.92	24787	485.221	ug/l
Sum PCB 1260		394253	2446.609	ug/l
Average PCB 1260			489.322	ug/l

0253

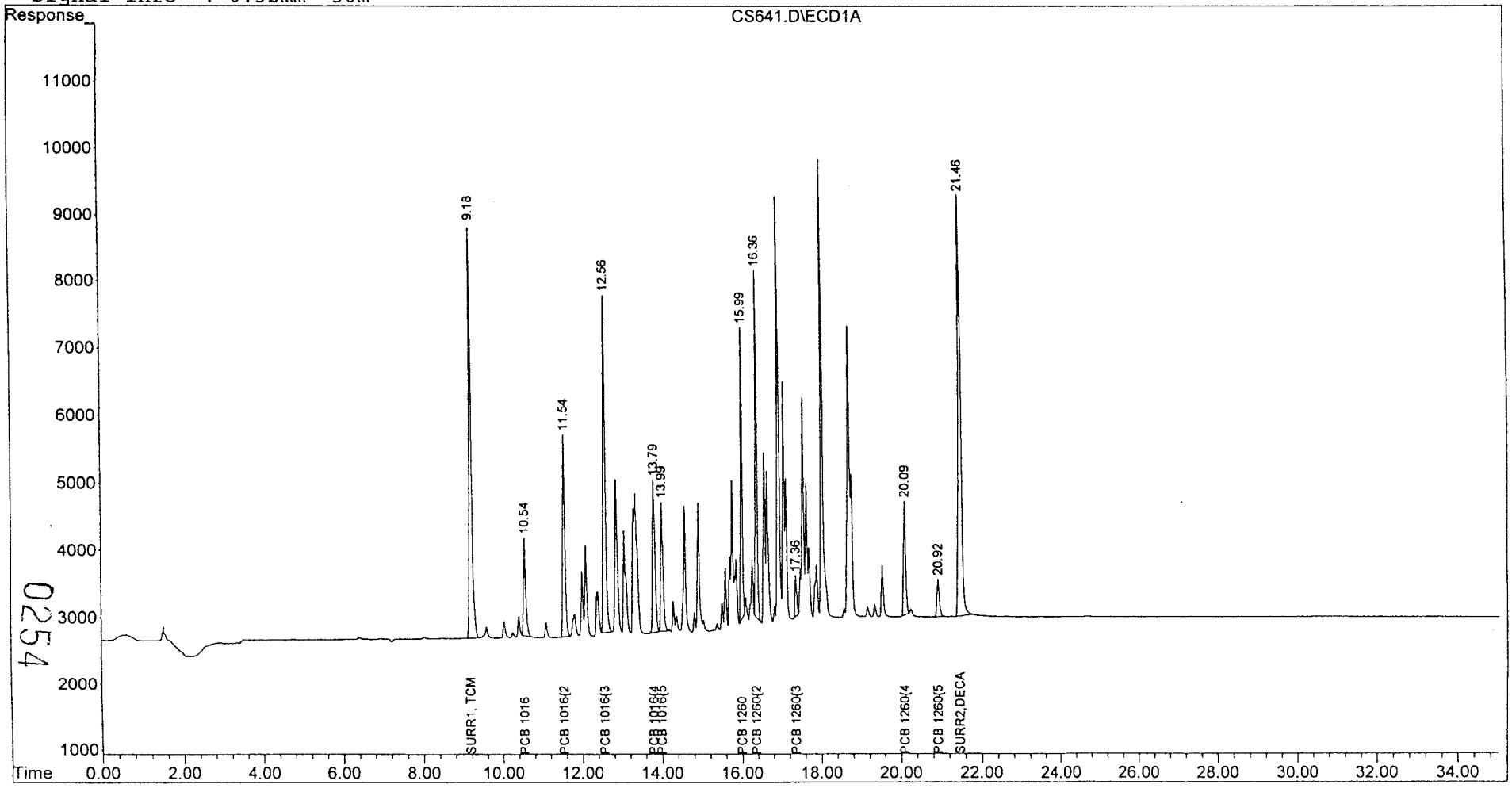
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitat_ _ Report

Data File : C:\HPCHEM\2\DATA\020200\CS641.D Vial: 2
Acq On : 2 Feb 2000 8:47 am Operator: DROOT
Sample : AR1660M17 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 9:23 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\020200\CS644.D
Acq On : 2 Feb 2000 10:49 am
Sample : AR1660M18
Misc : CALIBRATION CHECK
IntFile : events.e

Vial: 5
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	S	SURR1, TCMX	4.292	4.445	E3	-3.6	110	0.01
2	L1c	PCB 1016	125.260	125.783		-0.4	106	0.00
3	L1c	PCB 1016{2}	250.833	254.871		-1.6	109	0.00
4	L1c	PCB 1016{3}	447.301	453.088		-1.3	108	0.00
5	L1c	PCB 1016{4}	213.043	212.389		0.3	107	0.00
6	L1c	PCB 1016{5}	163.157	164.722		-1.0	106	0.00
32	L7c	PCB 1260	274.445	273.347		0.4	107	0.00
33	L7c	PCB 1260{2}	330.719	332.309		-0.5	108	0.00
34	L7c	PCB 1260{3}	42.806	40.008		6.5	98	0.00
35	L7C	PCB 1260{4}	138.959	137.234		1.2	104	-0.02
36	L7C	PCB 1260{5}	54.107	52.825		2.4	103	-0.02
37	S	SURR2,DECACHLOROBIPHENYL	5.458	5.573	E3	-2.1	109	-0.02

0255

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020200\CS644.D
Acq On : 2 Feb 2000 10:49 am
Sample : AR1660M18
Misc : CALIBRATION CHECK
IntFile : events.e
Quant Time: Feb 2 11:25 2000 Quant Results File: F0127C.RES

Vial: 5
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.18	266703	65.712 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	65.71%
37) S SURR2,DECACHLOROBIPHENYL	21.47	334406	65.290 ug/l
Spiked Amount 100.000		Recovery =	65.29%
Target Compounds			
2) L1c PCB 1016	10.55	62891	529.358 ug/l
3) L1c PCB 1016{2}	11.54	127435	543.214 ug/l
4) L1c PCB 1016{3}	12.56	226544	540.797 ug/l
5) L1c PCB 1016{4}	13.79	106195	532.690 ug/l
6) L1c PCB 1016{5}	13.99	82361	531.932 ug/l
Sum PCB 1016		605427	2677.991 ug/l
Average PCB 1016			535.598 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	15.99	136674	535.121 ug/l
33) L7c PCB 1260{2}	16.36	166155	539.234 ug/l
34) L7c PCB 1260{3}	17.36	20004	489.489 ug/l
35) L7C PCB 1260{4}	20.09	68617	521.019 ug/l
36) L7C PCB 1260{5}	20.92	26413	517.040 ug/l
Sum PCB 1260		417862	2601.904 ug/l
Average PCB 1260			520.381 ug/l

0256

(f)=RT Delta > 1/2 Window (m)=manual int.

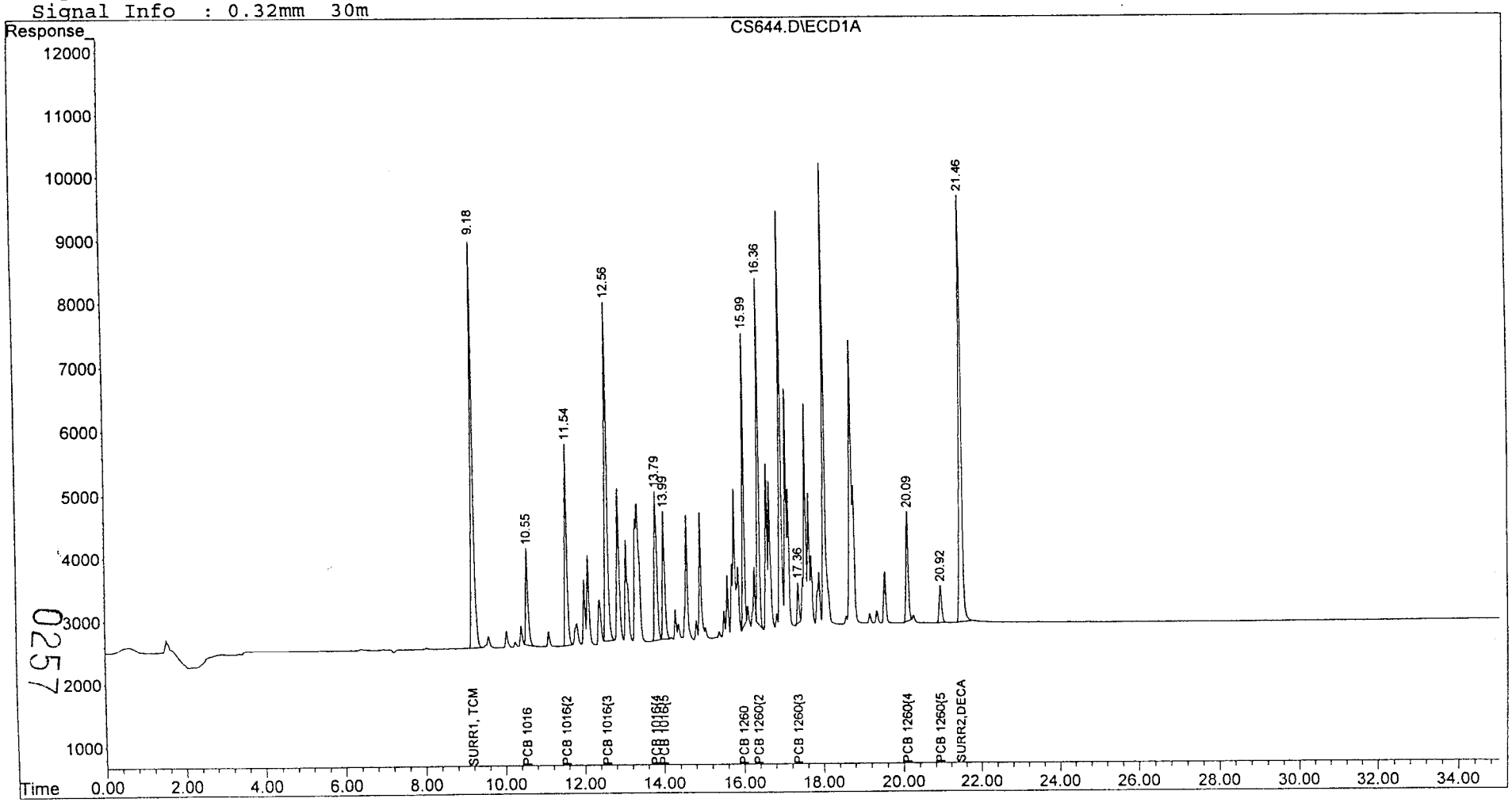
Quantitation Report

Data File : C:\HPCHEM\2\DATA\020200\CS644.D
Acq On : 2 Feb 2000 10:49 am
Sample : AR1660M18
Misc : CALIBRATION CHECK
IntFile : events.e
Quant Time: Feb 2 11:25 2000 Quant Results File: F0127C.RES

Vial: 5
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\020200.SEC\ZS641.D
Acq On : 2 Feb 2000 8:47 am
Sample : AR1660M17
Misc : CALIBRATION CHECK
IntFile : events.e

Vial: 52
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	S	SURR1, TCMX	11.898	11.018	E3	7.4	95	0.00
2	L1c	PCB 1016	288.329	278.060		3.6	101	0.00
3	L1c	PCB 1016{2}	648.299	588.170		9.3	96	0.00
4	L1c	PCB 1016{3}	1075.139	1013.433		5.7	99	0.00
5	L1c	PCB 1016{4}	292.351	259.332		11.3	94	0.00
6	L1c	PCB 1016{5}	307.461	277.620		9.7	95	0.00
32	L7c	PCB 1260	450.099	403.100		10.4	94	0.00
33	L7c	PCB 1260{2}	797.236	697.717		12.5	93	0.00
34	L7c	PCB 1260{3}	774.945	697.048		10.1	96	0.00
35	L7C	PCB 1260{4}	111.361	95.239		14.5	90	0.00
36	L7C	PCB 1260{5}	1.235	1.126	E3	8.8	97	0.00
37	S	SURR2,DECACHLOROBIPHENYL	14.447	13.411	E3	7.2	97	-0.02

0258

(#) = Out of Range SPCC's out = 0 CCC's out = 0
ZS641.D R0127C.M Wed Feb 02 09:24:15 2000

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020200.SEC\ZS641.D
Acq On : 2 Feb 2000 8:47 am
Sample : AR1660M17
Misc : CALIBRATION CHECK
IntFile : events.e
Quant Time: Feb 2 9:23 2000 Quant Results File: R0127C.RES

Vial: 52
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.58	661073	56.987 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	56.99%#
37) S SURR2,DECACHLOROBIPHENYL	23.53	804688	58.086 ug/l
Spiked Amount 100.000		Recovery =	58.09%
Target Compounds			
2) L1c PCB 1016	11.28	139030	502.928 ug/l
3) L1c PCB 1016{2}	12.33	294085	481.554 ug/l
4) L1c PCB 1016{3}	13.19	506717	496.817 ug/l
5) L1c PCB 1016{4}	15.28	129666	468.007 ug/l
6) L1c PCB 1016{5}	15.41	138810	476.435 ug/l
Sum PCB 1016		1208308	2425.741 ug/l
Average PCB 1016			485.148 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	201550	472.312 ug/l
33) L7c PCB 1260{2}	16.64	348858	466.498 ug/l
34) L7c PCB 1260{3}	16.81	348524	479.962 ug/l
35) L7C PCB 1260{4}	18.01	47620	448.556 ug/l
36) L7C PCB 1260{5}	18.59	563027	483.039 ug/l
Sum PCB 1260		1509579	2350.367 ug/l
Average PCB 1260			470.073 ug/l

0259

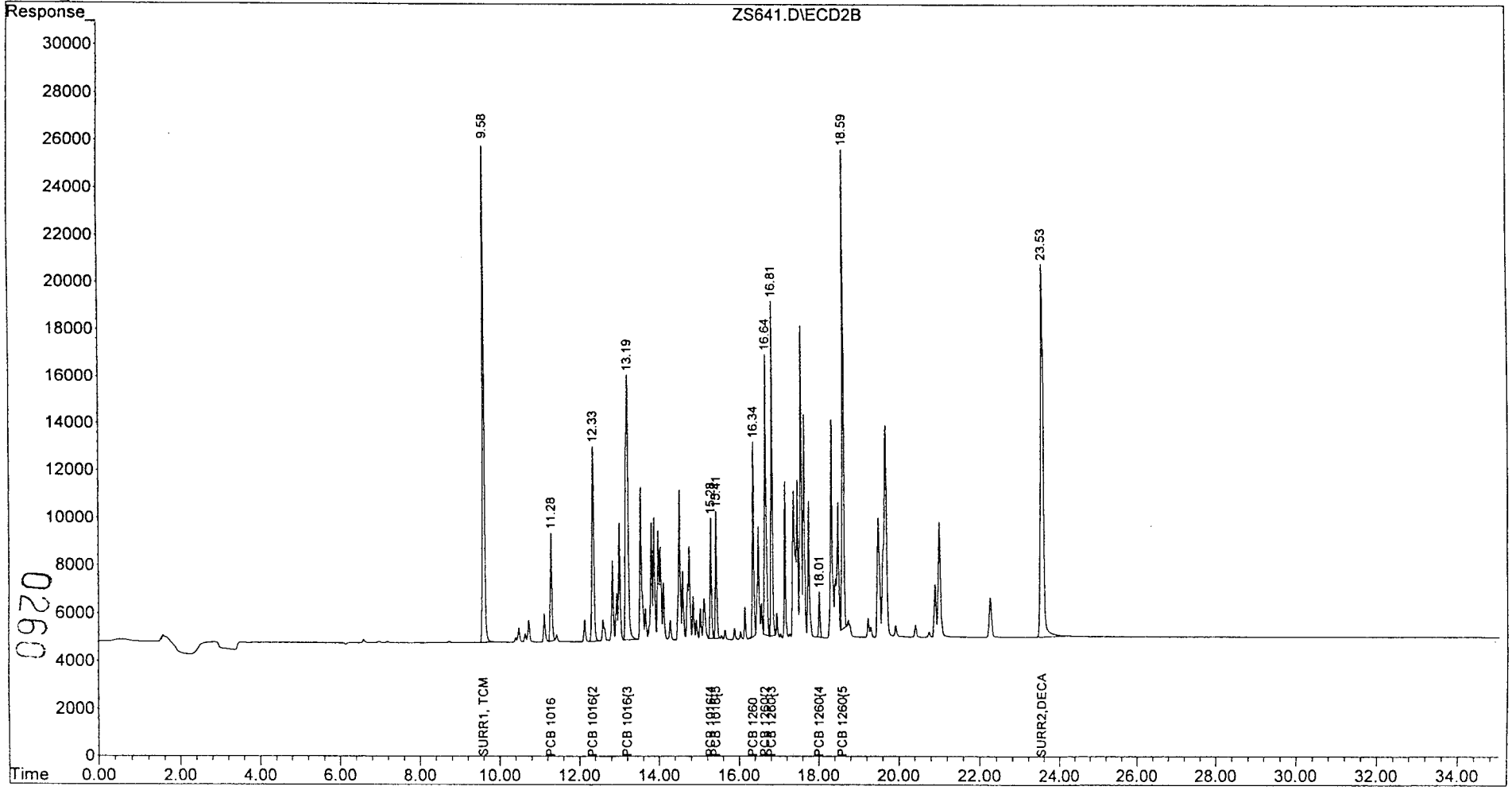
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitat Report

Data File : C:\HPCHEM\2\DATA\020200.SEC\ZS641.D Vial: 52
Acq On : 2 Feb 2000 8:47 am Operator: DROOT
Sample : AR1660M17 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 9:23 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0920

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020200.SEC\ZS644.D
Acq On : 2 Feb 2000 10:49 am
Sample : AR1660M18
Misc : CALIBRATION CHECK
IntFile : events.e
Quant Time: Feb 2 11:26 2000 Quant Results File: R0127C.RES

Vial: 55
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.59	664772	57.306 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	57.31%#
37) S SURR2,DECACHLOROBIPHENYL	23.53	836760	60.401 ug/l
Spiked Amount 100.000		Recovery =	60.40%
Target Compounds			
2) L1c PCB 1016	11.28	139659	505.203 ug/l
3) L1c PCB 1016{2}	12.33	297126	486.534 ug/l
4) L1c PCB 1016{3}	13.19	511985	501.983 ug/l
5) L1c PCB 1016{4}	15.28	132729	479.061 ug/l
6) L1c PCB 1016{5}	15.41	141614	486.057 ug/l
Sum PCB 1016		1223113	2458.838 ug/l
Average PCB 1016			491.768 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	206564	484.062 ug/l
33) L7c PCB 1260{2}	16.65	358885	479.906 ug/l
34) L7c PCB 1260{3}	16.81	359219	494.691 ug/l
35) L7C PCB 1260{4}	18.01	49286	464.249 ug/l
36) L7C PCB 1260{5}	18.59	581011	498.469 ug/l
Sum PCB 1260		1554965	2421.376 ug/l
Average PCB 1260			484.275 ug/l

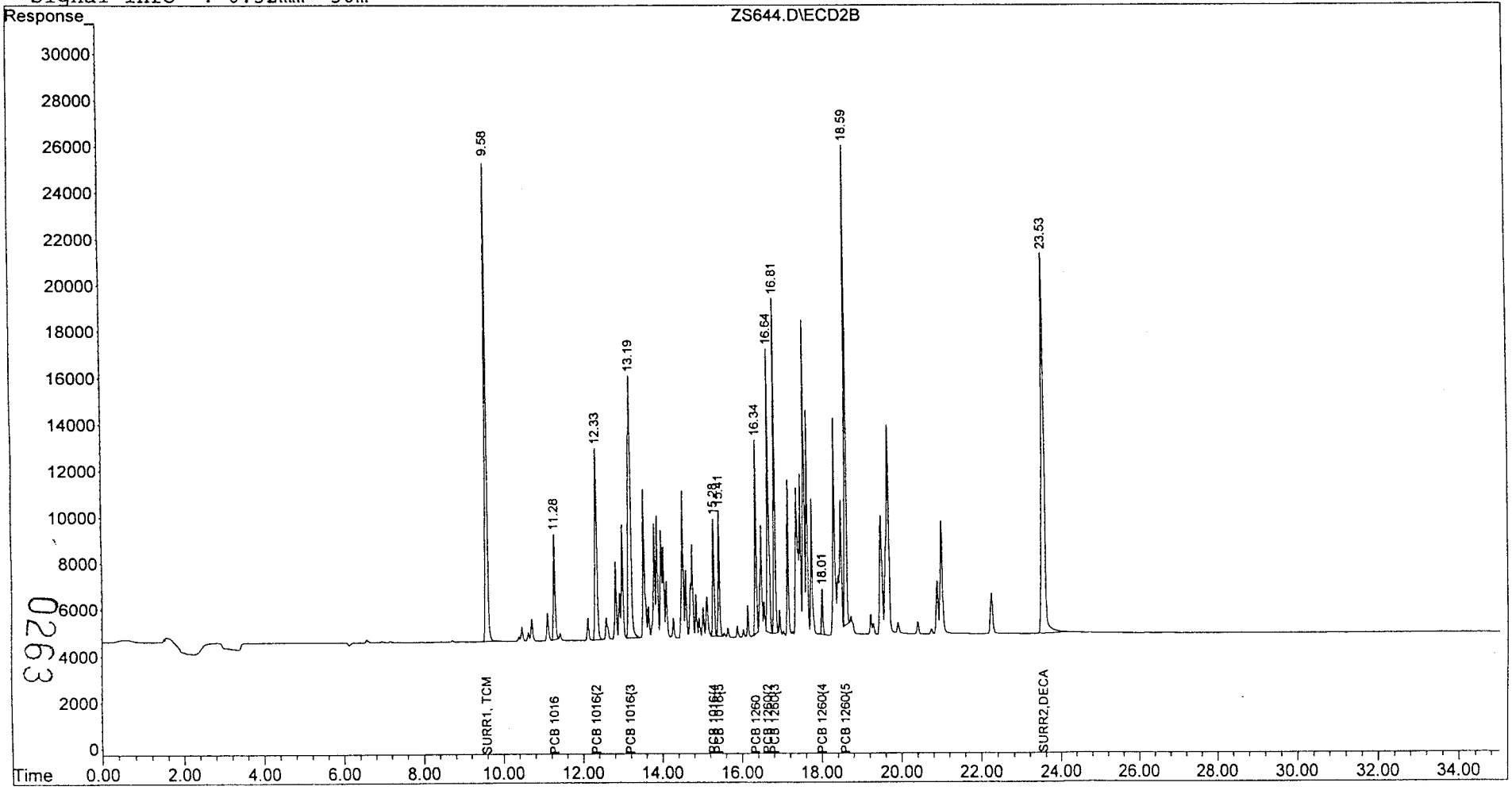
0262

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\020200.SEC\ZS644.D Vial: 55
Acq On : 2 Feb 2000 10:49 am Operator: DROOT
Sample : AR1660M18 Inst : 5890C
Misc : CALIBRATION CHECK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 11:26 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

NYSDEC SAMPLE NO
PBLK1MS

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract DAMES

Lab Code: 10145 Case No.: R2000664 SAS No.: SDG NO.: CB-1
Lab Sample ID: 356290 BS Date(s) Analyzed: 1/31/00
Instrument ID (1): HP5890-C Instrument ID (2): HP5890-C
GC Column (1): DB-1701 (ID): 0.32 (mm) GC Column (2): DB-17 (ID): 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	16.00	15.92	16.06	155.2		
AR1260	2	16.37	16.30	16.42	157.1		
	3	17.37	17.28	17.42	138.8		
COLUMN 1	4	20.10	20.02	20.16	149.6		
	5	20.94	20.85	20.99	149.3	150.0	
	1	16.34	16.27	16.41	161.9		
	2	16.65	16.58	16.72	153.0		
	3	16.81	16.74	16.88	158.0		
	4	18.01	17.94	18.08	145.6		
COLUMN 2	5	18.59	18.52	18.66	160.1	155.7	3.8
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						

At least 3 peaks are required for identification of multicomponent analytes

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

NYSDEC SAMPLE NO: CB-1

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract: DAMES

Lab Code: 10145 Case No.: R2000664 SAS No.: SDG NO.: CB-1
Lab Sample ID: 355896 Date(s) Analyzed: 1/31/00
Instrument ID (1): HP5890-C Instrument ID (2): HP5890-C
GC Column (1): DB-1701 (ID): 0.32 (mm) GC Column (2): DB-17 (ID): 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	16.00	15.92	16.06	77.5		
AR1260	2	16.37	16.30	16.42	97.9		
	3	17.38	17.28	17.42	85.1		
COLUMN 1	4	20.11	20.02	20.16	156.6		
	5	20.95	20.85	20.99	92.1	101.9	
	1	16.34	16.27	16.41	144.2		
	2	16.65	16.58	16.72	93.1		
	3	16.81	16.74	16.88	110.4		
	4	18.01	17.94	18.08	66.4		
COLUMN 2	5	18.59	18.52	18.66	104.5	103.7	1.8
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						

At least 3 peaks are required for identification of multicomponent analytes

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

NYSDEC SAMPLE NO
CB-1MS

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract DAMES

Lab Code: 10145 Case No.: R2000664 SAS No.: SDG NO.: CB-1
Lab Sample ID: 356292 MS Date(s) Analyzed: 1/31/00
Instrument ID (1): HP5890-C Instrument ID (2): HP5890-C
GC Column (1): DB-1701 (ID): 0.32 (mm) GC Column (2): DB-17 (ID): 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
AR1260 COLUMN 1	1	16.00	15.92	16.06	294.4	320.0	
	2	16.37	16.30	16.42	324.5		
	3	17.37	17.28	17.42	315.2		
	4	20.11	20.02	20.16	352.2		
	5	20.94	20.85	20.99	314.0		
AR1260 COLUMN 2	1	16.34	16.27	16.41	343.2	291.6	9.8
	2	16.65	16.58	16.72	282.9		
	3	16.81	16.74	16.88	292.9		
	4	18.01	17.94	18.08	228.1		
	5	18.60	18.52	18.66	310.8		
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						

At least 3 peaks are required for identification of multicomponent analytes

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

NYSDEC SAMPLE NO
CB-1MSD

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract DAMES

Lab Code: 10145 Case No.: R2000664 SAS No.: SDG NO.: CB-1
Lab Sample ID: 356293 MSD Date(s) Analyzed: 1/31/00
Instrument ID (1): HP5890-C Instrument ID (2): HP5890-C
GC Column (1): DB-1701 (ID): 0.32 (mm) GC Column (2): DB-17 (ID): 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	16.00	15.92	16.06	278.2		
AR1260	2	16.37	16.30	16.42	306.7		
	3	17.37	17.28	17.42	299.2		
COLUMN 1	4	20.11	20.02	20.16	341.7		
	5	20.94	20.85	20.99	306.0	306.4	
	1	16.34	16.27	16.41	369.4		
	2	16.65	16.58	16.72	303.8		
	3	16.81	16.74	16.88	315.0		
	4	18.01	17.94	18.08	247.4		
COLUMN 2	5	18.60	18.52	18.66	335.0	314.1	2.5
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						

At least 3 peaks are required for identification of multicomponent analytes

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

NYSDEC SAMPLE NO.: STMH-2 (1/50)

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract: DAMES

Lab Code: 10145 Case No.: R2000664 SAS No.: SDG NO.: CB-1
Lab Sample ID: 355897 (1/50) Date(s) Analyzed: 1/31/00
Instrument ID (1): HP5890-C Instrument ID (2): HP5890-C
GC Column (1): DB-1701 (ID): 0.32 (mm) GC Column (2): DB-17 (ID): 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1		15.92	16.06			
AR1260	2	16.37	16.30	16.42	12545.0		
	3	17.38	17.28	17.42	12170.0		
COLUMN 1	4	21.10	20.02	20.16	1070.0		
	5	20.93	20.85	20.99	1010.0	6698.8	
	1		16.27	16.41			
	2	16.65	16.58	16.72	5850.0		
	3	16.81	16.74	16.88	11545.0		
	4		17.94	18.08			
COLUMN 2	5	18.60	18.52	18.66	4875.0	7423.3	10.8
	1	13.79	13.71	13.85	6415.0		
AR1254	2	14.00	13.91	14.05	10405.0		
	3	15.39	15.30	15.44	24275.0		
COLUMN 1	4		16.02	16.16			
	5		16.84	16.98		13698.3	
	1	13.87	13.79	13.93	7410.0		
	2		14.95	15.09			
	3	15.29	15.21	15.35	8850.0		
	4	15.42	15.34	15.48	17655.0		
COLUMN 2	5	15.88	15.81	15.95	15605.0	12380.0	10.6
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						

At least 3 peaks are required for identification of multicomponent analytes

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

NYSDEC SAMPLE NO
STMH-3
(1/100,000)

Lab Name: COLUMBIA ANALYTICAL SERVICES Contract DAMES

Lab Code: 10145 Case No.: R2000664 SAS No.: SDG NO.: CB-1
Lab Sample ID: 355898 (1/100,000) Date(s) Analyzed: 1/31/00
Instrument ID (1): HP5890-C Instrument ID (2): HP5890-C
GC Column (1): DB-1701 (ID): 0.32 (mm) GC Column (2): DB-17 (ID): 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.79	13.71	13.85	20237078.7		
AR1254	2	13.99	13.91	14.05	28048207.6		
	3	15.38	15.30	15.44	48915141.8		
COLUMN 1	4		16.02	16.16			
	5	16.92	16.84	16.98	48117335.5	36329440.89	
	1	13.87	13.79	13.93	12381862		
	2	15.02	14.95	15.09	74789245.6		
	3	15.28	15.21	15.35	6107808.9		
	4	15.42	15.34	15.48	29645104.3		
COLUMN 2	5	15.88	15.81	15.95	27867201.7	30158244.5	20.5
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
	4						
COLUMN 2	5						

At least 3 peaks are required for identification of multicomponent analytes

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100\CS604.D Vial: 1
Acq On : 31 Jan 2000 11:30 am Operator: DROOT
Sample : PIBLK10 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 12:45 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	90408	22.275 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	22.27%#
37) S SURR2,DECACHLOROBIPHENYL	21.48	118686	23.172 ug/l
Spiked Amount 100.000		Recovery =	23.17%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0270

(f)=RT Delta > 1/2 Window (m)=manual int.

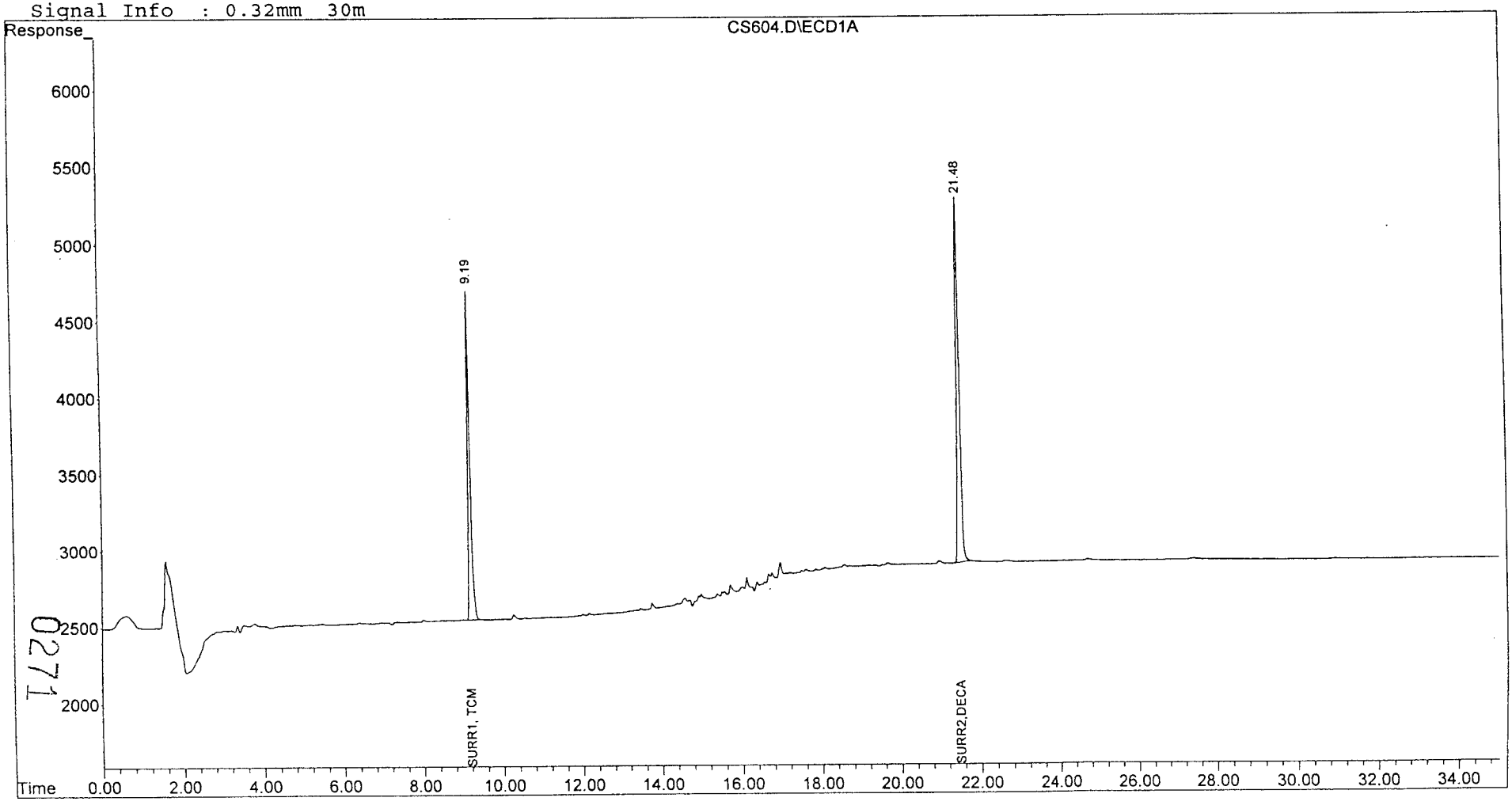
Quantitati . Report

Data File : C:\HPCHEM\2\DATA\013100\CS604.D
Acq On : 31 Jan 2000 11:30 am
Sample : PIBLK10
Misc : INSTRUMENT BLK
IntFile : events.e
Quant Time: Jan 31 12:45 2000 Quant Results File: F0127C.RES

Vial: 1
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0271

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100\CS614.D Vial: 11
Acq On : 31 Jan 2000 6:16 pm Operator: DROOT
Sample : PIBLK11 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 9:36 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	84347	20.782 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	20.78%#
37) S SURR2,DECACHLOROBIPHENYL	21.48	112700	22.004 ug/l
Spiked Amount 100.000		Recovery =	22.00%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

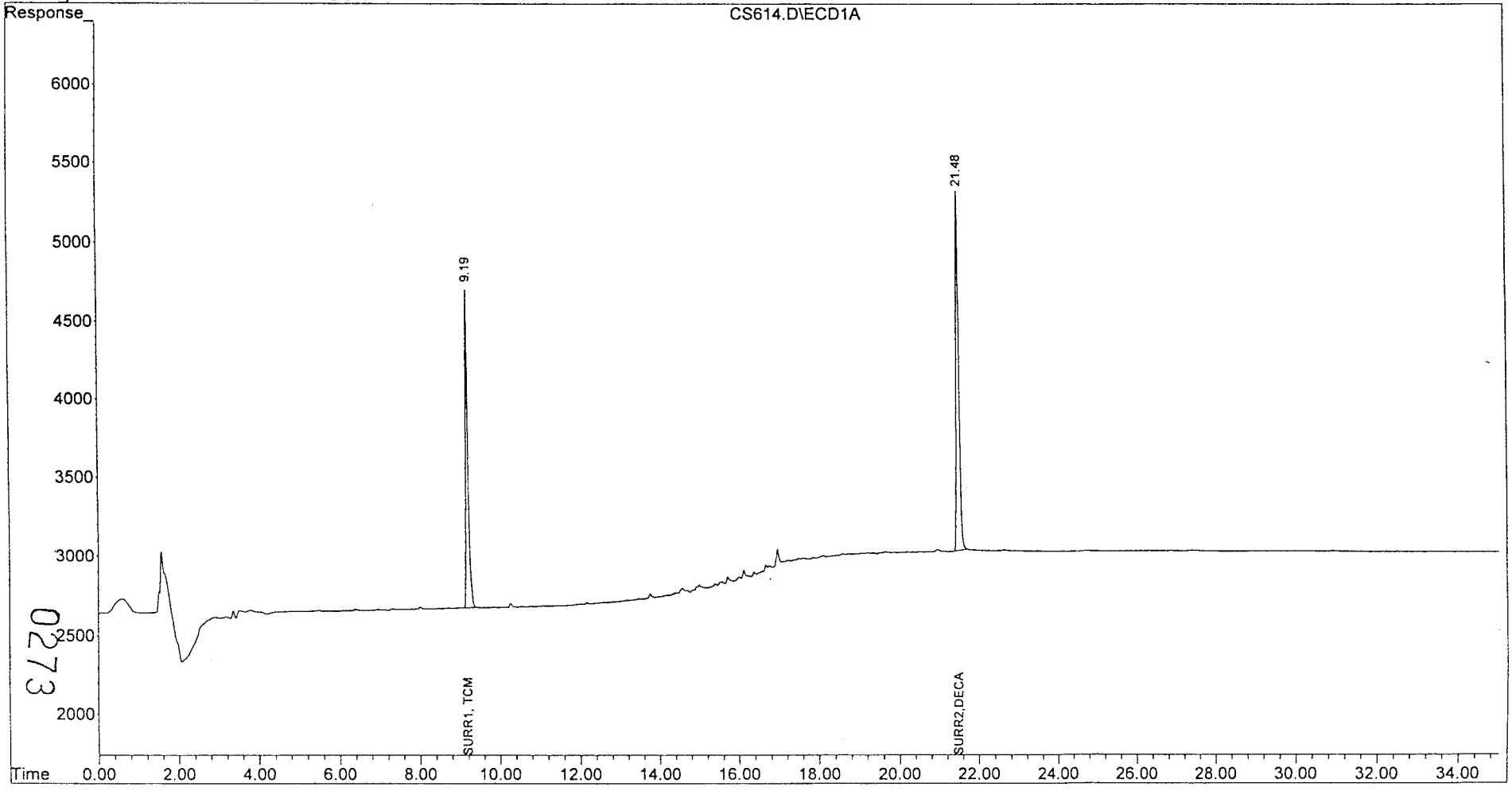
0272

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\013100\CS614.D Vial: 11
Acq On : 31 Jan 2000 6:16 pm Operator: DROOT
Sample : PIBLK11 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 9:36 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



02733

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS604.D Vial: 51
Acq On : 31 Jan 2000 11:30 am Operator: DROOT
Sample : PIBLK10 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 12:45 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.59	249605	21.517 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	21.52%#
37) S SURR2,DECACHLOROBIPHENYL	23.55	313971	22.664 ug/l
Spiked Amount 100.000		Recovery =	22.66%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

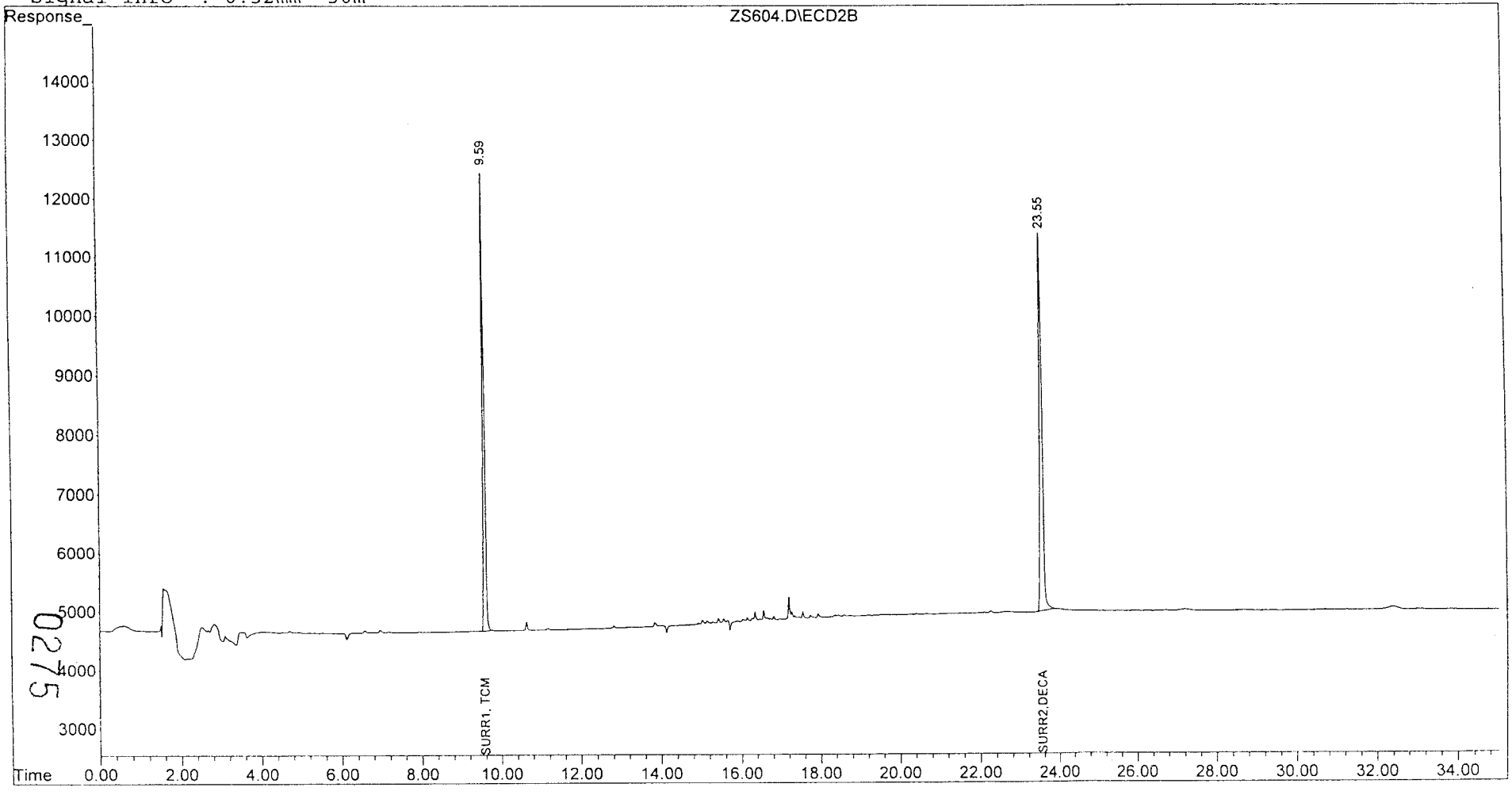
0274

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS604.D Vial: 51
Acq On : 31 Jan 2000 11:30 am Operator: DROOT
Sample : PIBLK10 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 12:45 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS614.D Vial: 61
Acq On : 31 Jan 2000 6:16 pm Operator: DROOT
Sample : PIBLK11 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 7:32 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.59	262463	22.625 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	22.63%#
37) S SURR2,DECACHLOROBIPHENYL	23.55	344319	24.854 ug/l
Spiked Amount 100.000		Recovery =	24.85%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0276

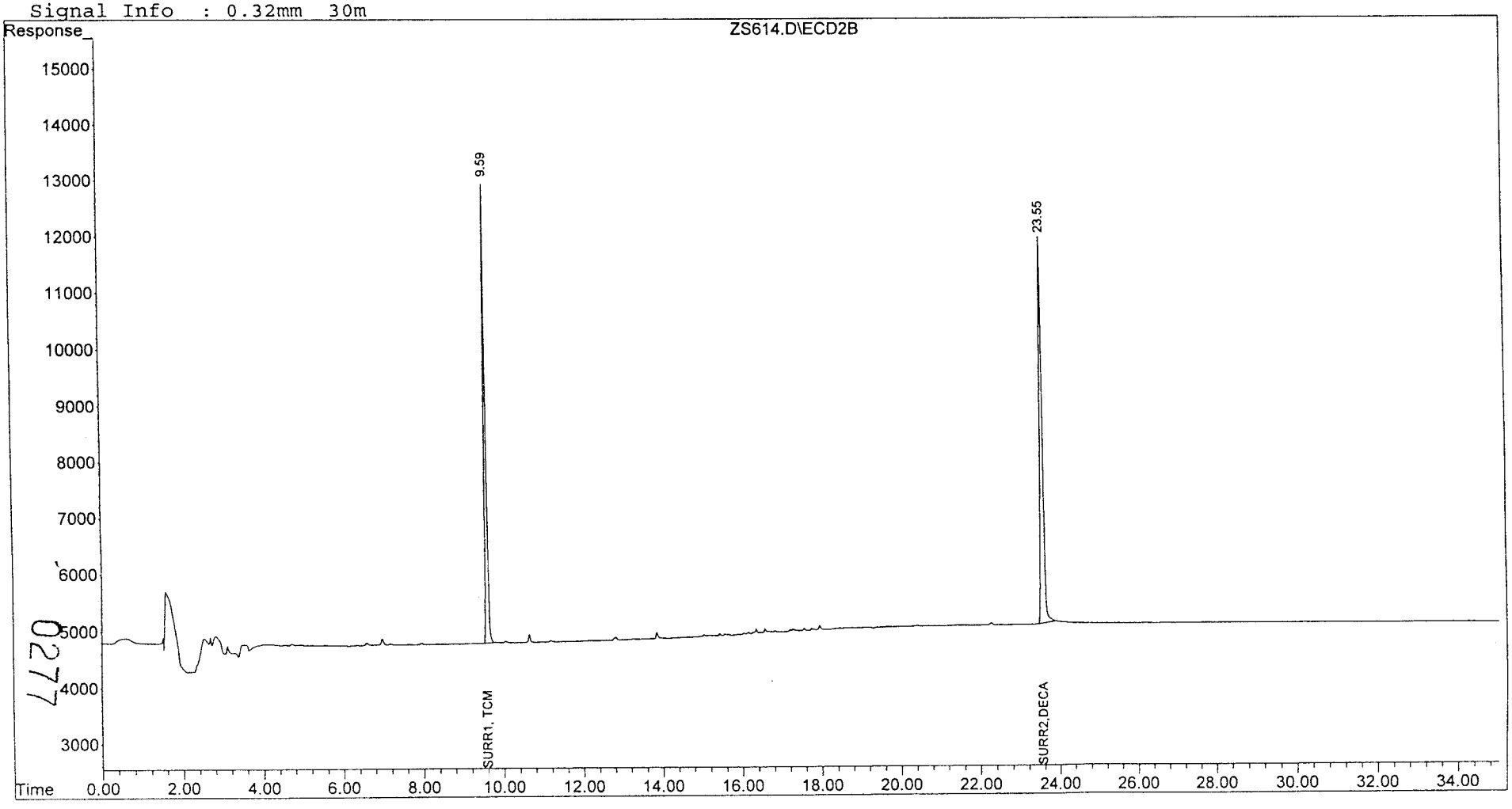
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitati Report

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS614.D Vial: 61
Acq On : 31 Jan 2000 6:16 pm Operator: DROOT
Sample : PIBLK11 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 7:32 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0277

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020200\CS640.D Vial: 1
Acq On : 2 Feb 2000 8:07 am Operator: DROOT
Sample : PIBLK16 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 8:43 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	84219	20.750 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	20.75%#
37) S SURR2,DECACHLOROBIPHENYL	21.47	119227	23.278 ug/l
Spiked Amount 100.000		Recovery =	23.28%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0278

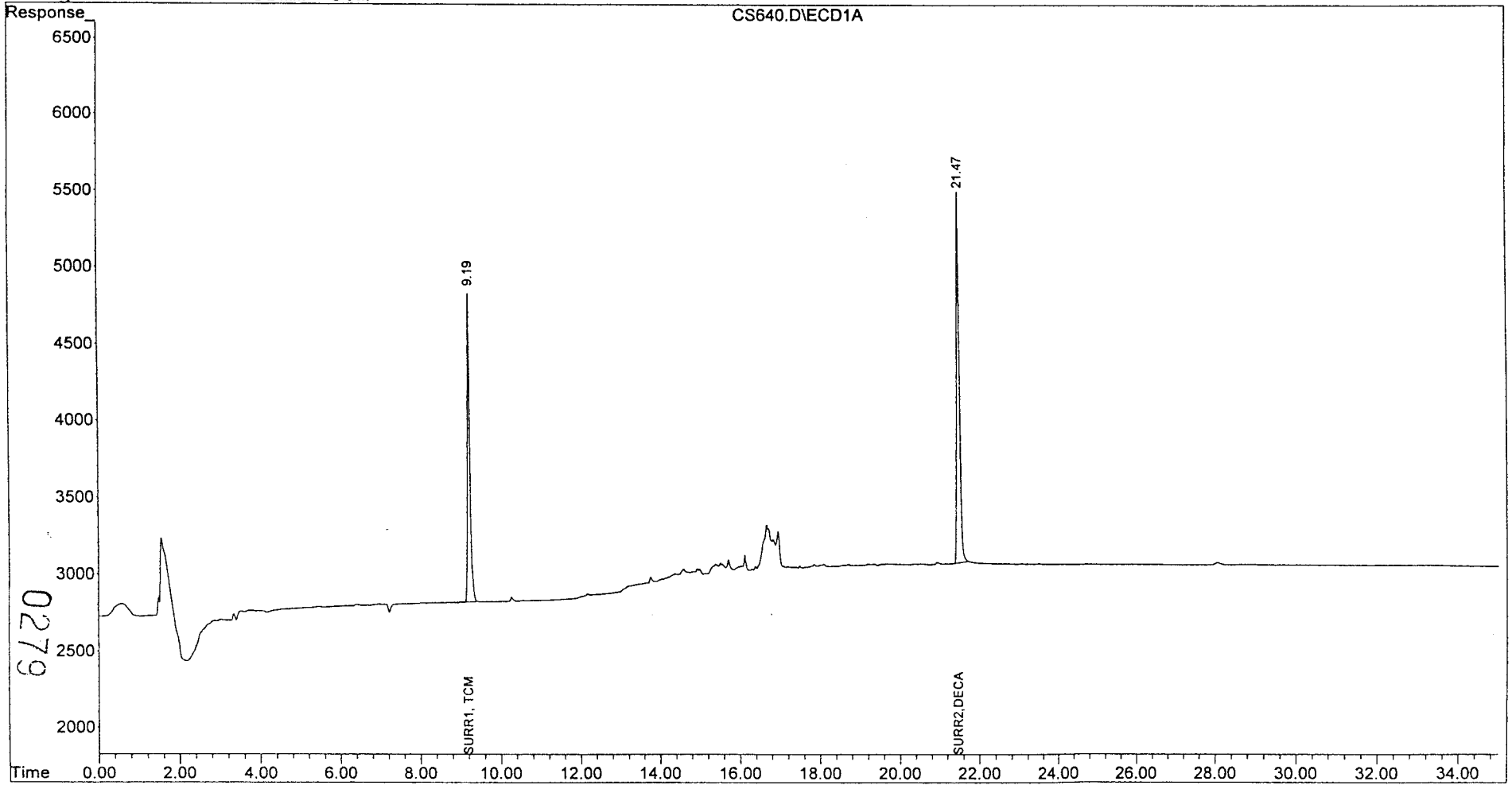
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\020200\CS640.D Vial: 1
Acq On : 2 Feb 2000 8:07 am Operator: DROOT
Sample : PIBLK16 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 8:43 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020200\CS643.D Vial: 4
Acq On : 2 Feb 2000 10:08 am Operator: DROOT
Sample : PIBLK17 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 11:25 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.18	91020	22.426 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	22.43%#
37) S SURR2,DECACHLOROBIPHENYL	21.46	125887	24.578 ug/l
Spiked Amount 100.000		Recovery =	24.58%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0280

(f)=RT Delta > 1/2 Window (m)=manual int.

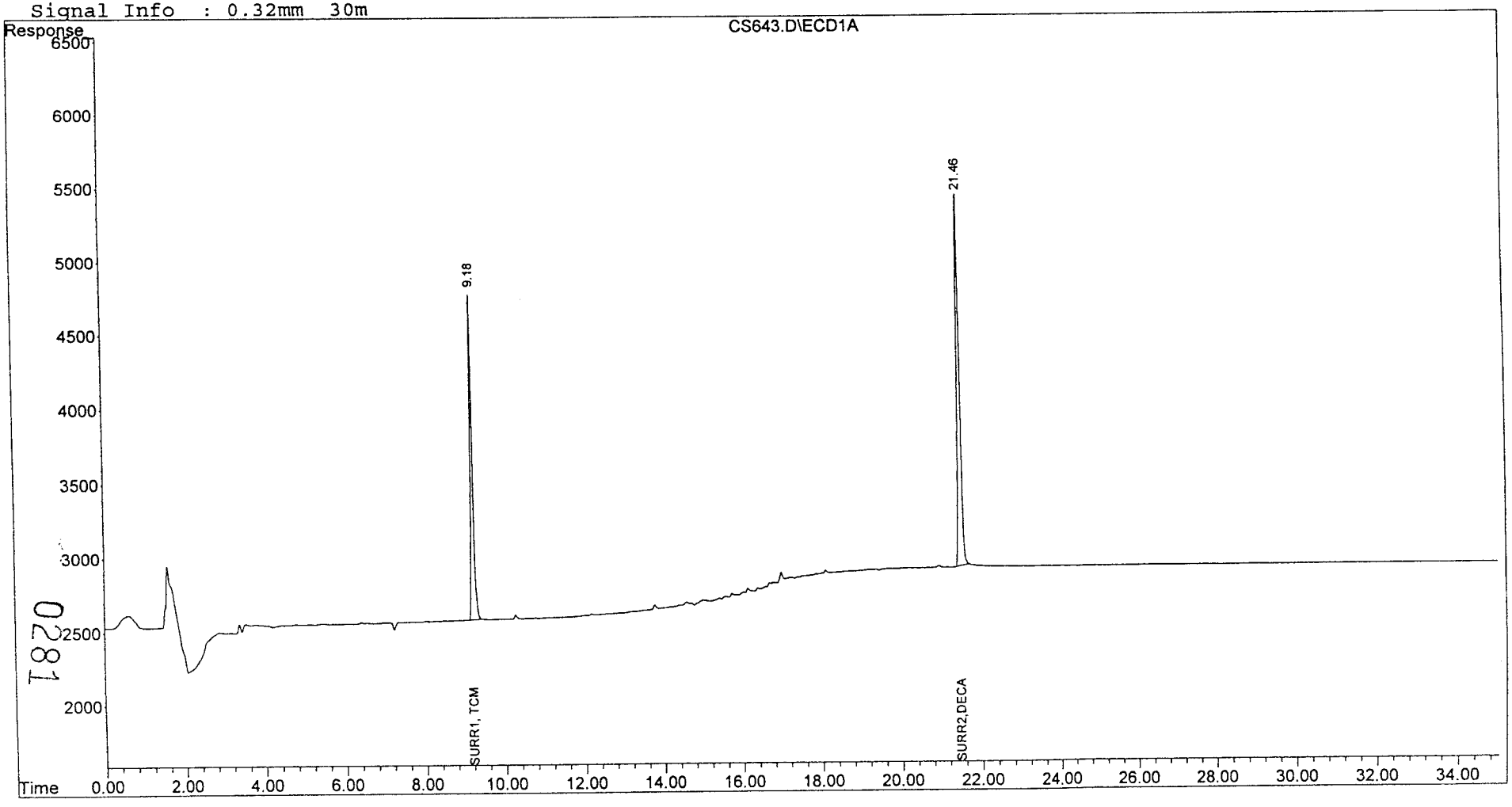
Quantitati Report

Data File : C:\HPCHEM\2\DATA\020200\CS643.D
Acq On : 2 Feb 2000 10:08 am
Sample : PIBLK17
Misc : INSTRUMENT BLK
IntFile : events.e
Quant Time: Feb 2 11:25 2000 Quant Results File: F0127C.RES

Vial: 4
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020200.SEC\ZS640.D Vial: 51
Acq On : 2 Feb 2000 8:07 am Operator: DROOT
Sample : PIBLK16 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 8:43 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.59	275502	23.749 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	23.75%#
37) S SURR2,DECACHLOROBIPHENYL	23.54	346930	25.043 ug/l
Spiked Amount 100.000		Recovery =	25.04%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0282

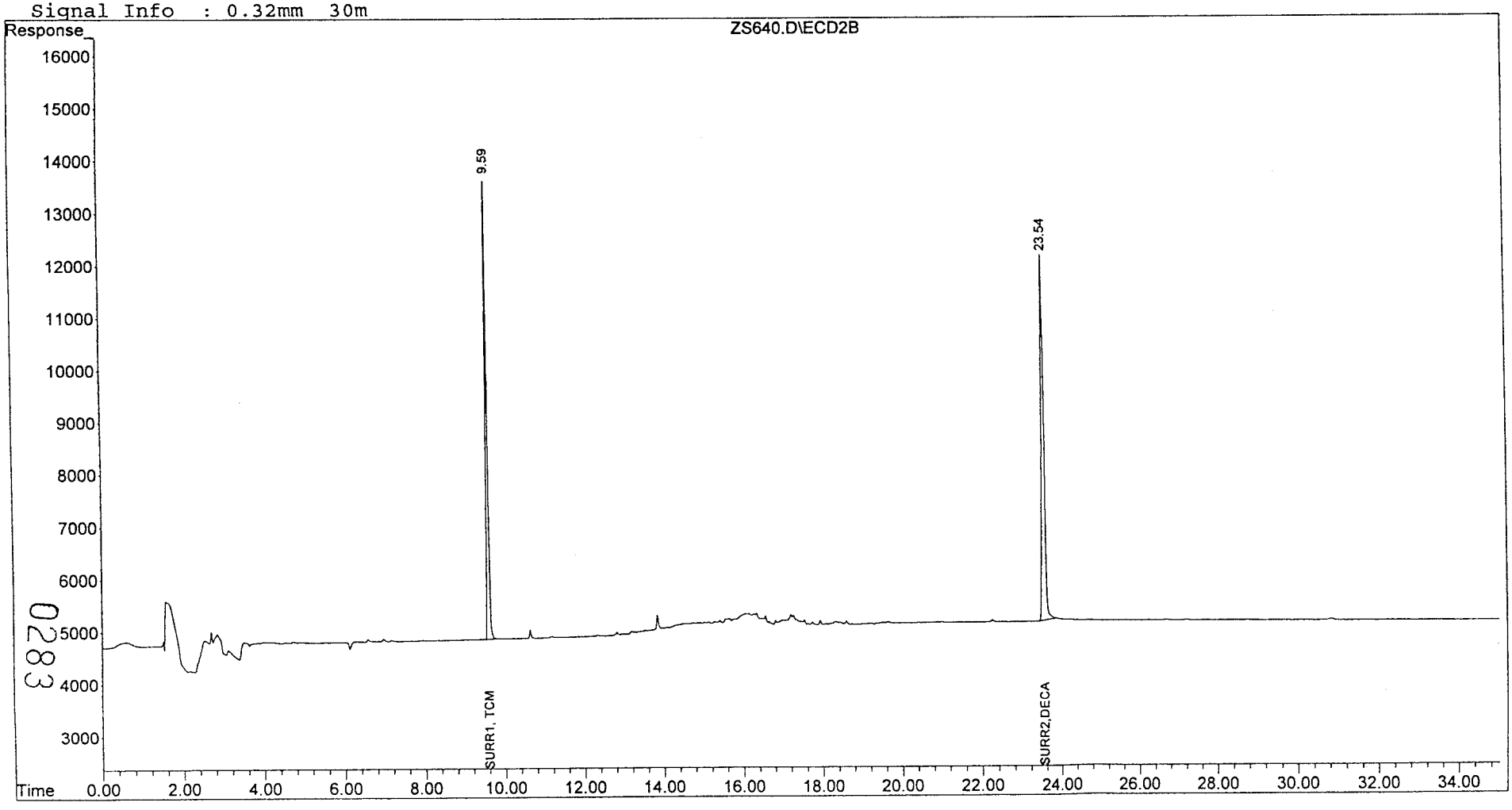
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\020200.SEC\ZS640.D Vial: 51
Acq On : 2 Feb 2000 8:07 am Operator: DROOT
Sample : PIBLK16 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 8:43 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



8082

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\020200.SEC\ZS643.D Vial: 54
Acq On : 2 Feb 2000 10:08 am Operator: DROOT
Sample : PIBLK17 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 11:26 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.59	229264	19.763 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	19.76%#
37) S SURR2,DECACHLOROBIPHENYL	23.53	311181	22.462 ug/l
Spiked Amount 100.000		Recovery =	22.46%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0284

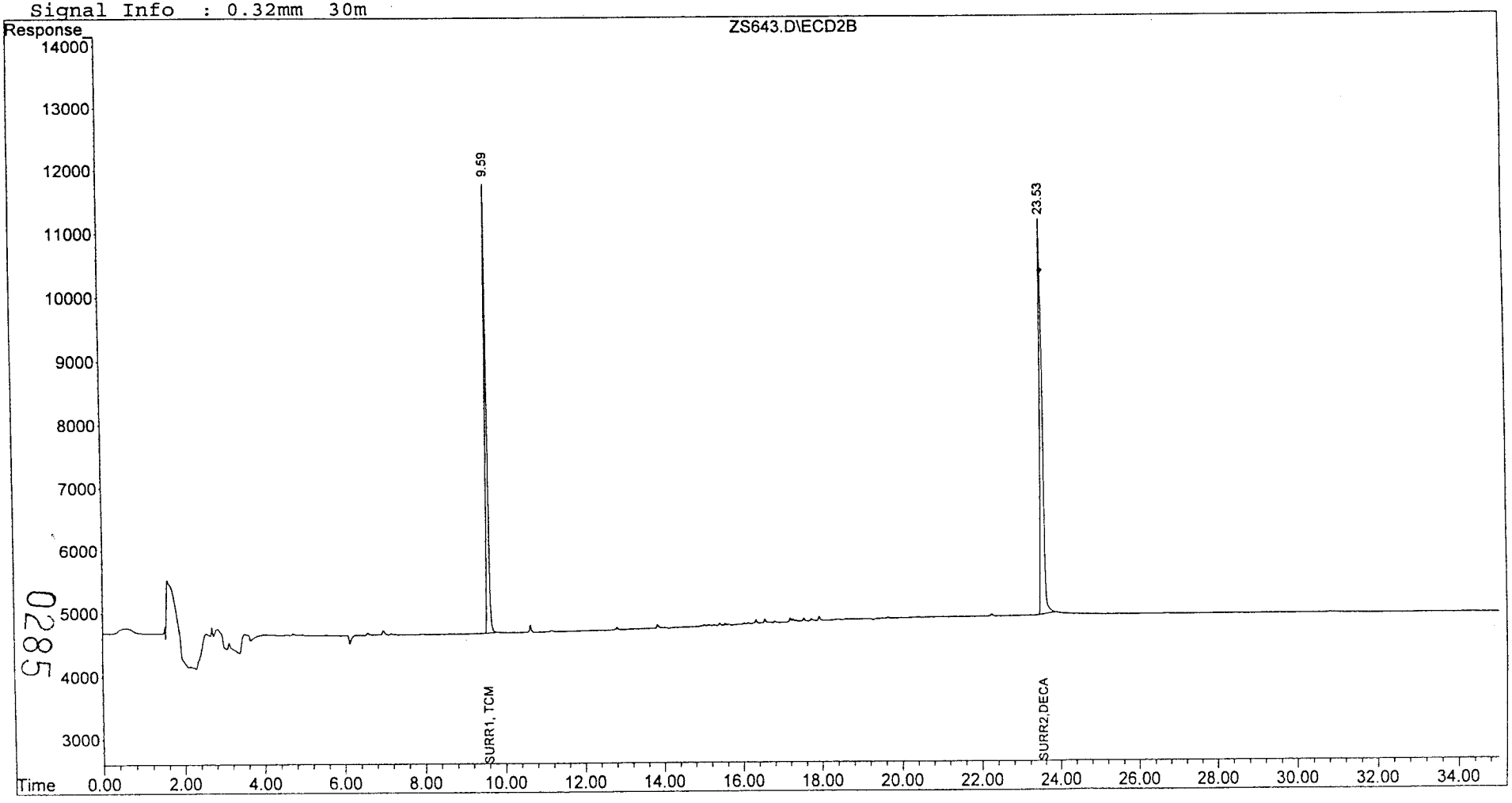
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\020200.SEC\ZS643.D Vial: 54
Acq On : 2 Feb 2000 10:08 am Operator: DROOT
Sample : PIBLK17 Inst : 5890C
Misc : INSTRUMENT BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 2 11:26 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0285

PCB's

RAW QC DATA

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 02/28/00

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 356290 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/27/00			
DATE ANALYZED : 01/31/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
PCB 1016	33	33 U	UG/KG
PCB 1221	33	33 U	UG/KG
PCB 1232	33	33 U	UG/KG
PCB 1242	33	33 U	UG/KG
PCB 1248	33	33 U	UG/KG
PCB 1254	33	33 U	UG/KG
PCB 1260	33	33 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	90	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	90	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100\CS606.D
Acq On : 31 Jan 2000 12:51 pm
Sample : 356290 1.0
Misc : 01/27/00 3.0 DAMES 8082 BLK
IntFile : events.e
Quant Time: Jan 31 13:45 2000 Quant Results File: F0127C.RES

Vial: 3
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	365639	90.088 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	90.09%
37) S SURR2,DECACHLOROBIPHENYL	21.48	459926	89.797 ug/l
Spiked Amount 100.000		Recovery =	89.80%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
Sum PCB 1260		0	N.D. ug/l
Average PCB 1260			0.000 ug/l

0288

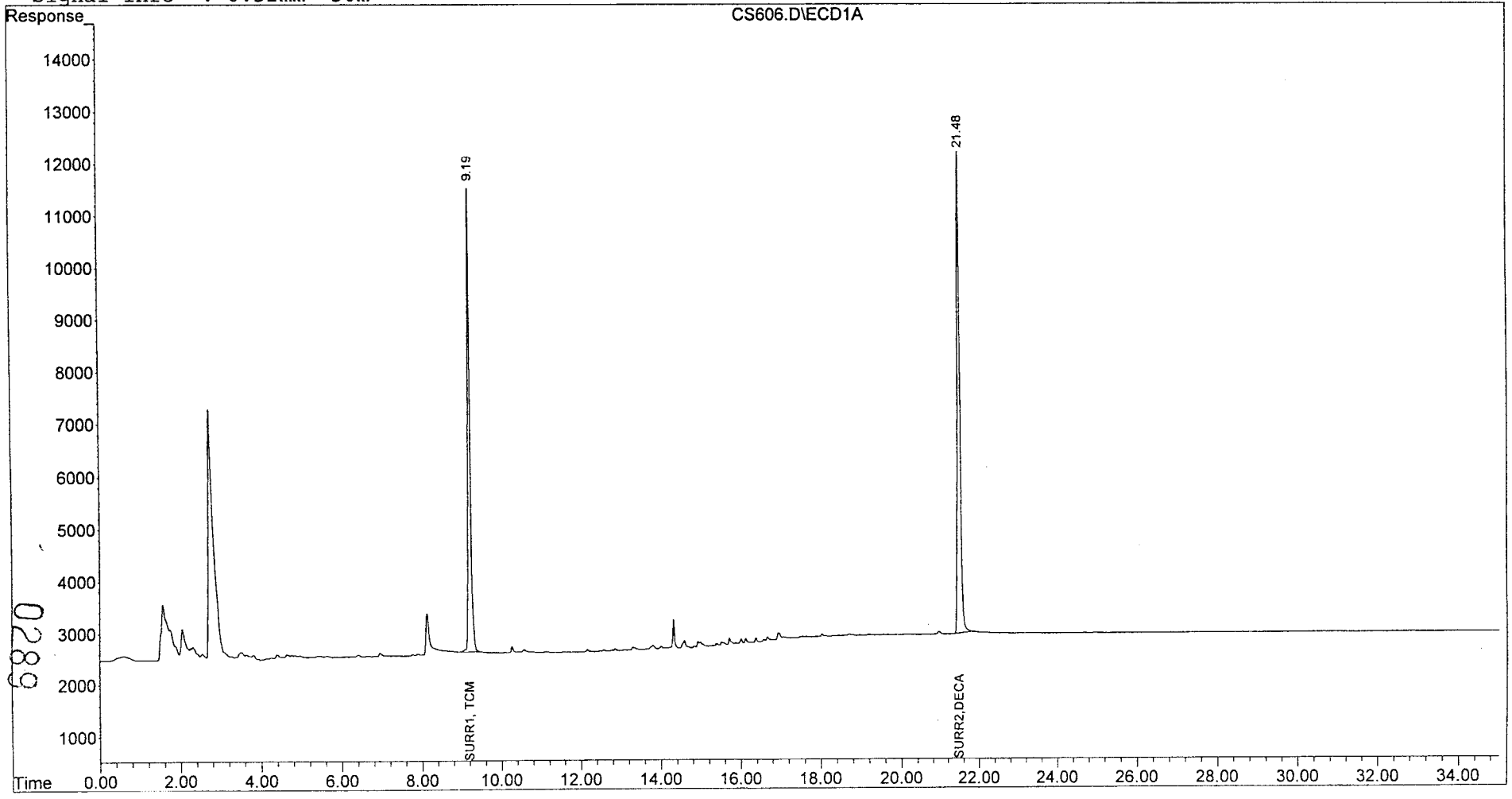
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\013100\CS606.D Vial: 3
Acq On : 31 Jan 2000 12:51 pm Operator: DROOT
Sample : 356290 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 13:45 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0820
6890

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS606.D
Acq On : 31 Jan 2000 12:51 pm
Sample : 356290 1.0
Misc : 01/27/00 3.0 DAMES 8082 BLK
IntFile : events.e
Quant Time: Jan 31 13:44 2000 Quant Results File: R0127C.RES

Vial: 53
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
1) S SURR1, TCMX	9.59	1205851	103.949	ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery = 103.95%		
37) S SURR2,DECACHLOROBIPHENYL	23.55	1425792	102.919	ug/l
Spiked Amount 100.000		Recovery = 102.92%		
Target Compounds				
Sum PCB 1016		0	N.D.	ug/l
Average PCB 1016			0.000	ug/l
Sum PCB 1221		0	N.D.	ug/L
Average PCB 1221			0.000	ug/L
Sum PCB 1232		0	N.D.	ug/l
Average PCB 1232			0.000	ug/l
Sum PCB 1242		0	N.D.	ug/l
Average PCB 1242			0.000	ug/l
Sum PCB 1248		0	N.D.	ug/l
Average PCB 1248			0.000	ug/l
Sum PCB 1254		0	N.D.	ug/l
Average PCB 1254			0.000	ug/l
Sum PCB 1260		0	N.D.	ug/l
Average PCB 1260			0.000	ug/l

0290

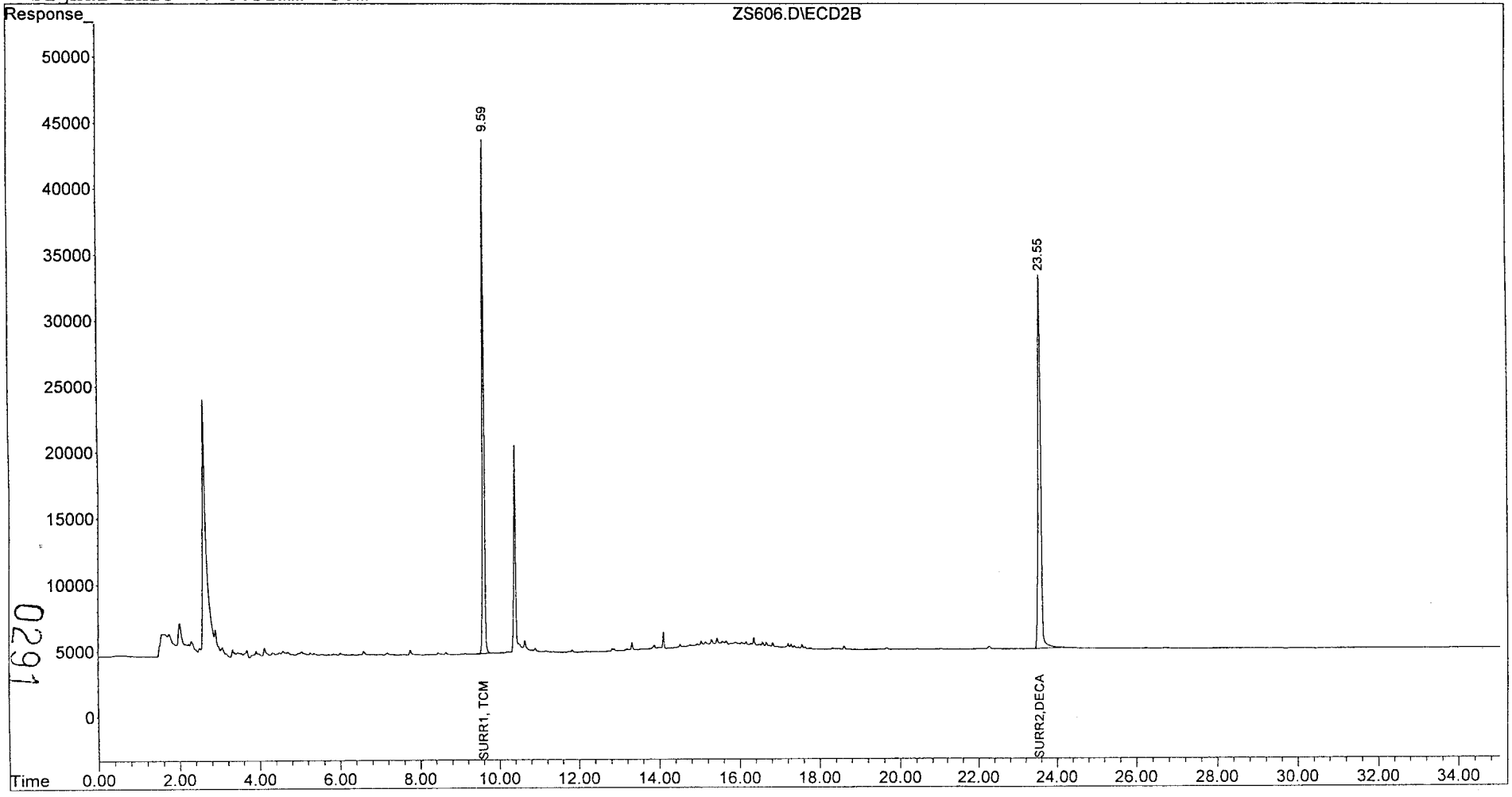
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS606.D Vial: 53
Acq On : 31 Jan 2000 12:51 pm Operator: DROOT
Sample : 356290 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 BLK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 13:44 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0291

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 02/28/00

Project Reference:
Client Sample ID : BLANK SPIKE

Date Sampled : 01/28/00 **Order #:** 356291 **Sample Matrix:** SOIL/SEDIMENT
Date Received: / / **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/27/00			
DATE ANALYZED : 01/31/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
PCB 1016	33	33 U	UG/KG
PCB 1221	33	33 U	UG/KG
PCB 1232	33	33 U	UG/KG
PCB 1242	33	33 U	UG/KG
PCB 1248	33	33 U	UG/KG
PCB 1254	33	33 U	UG/KG
PCB 1260	33	150	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	90	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	92	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100\CS607.D Vial: 4
Acq On : 31 Jan 2000 1:32 pm Operator: DROOT
Sample : 356291 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 BLKSPK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 14:17 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	371415	91.511 ug/l
Spiked Amount 100.000 Range 60 - 150		Recovery =	91.51%
37) S SURR2,DECACHLOROBIPHENYL	21.48	459086	89.633 ug/l
Spiked Amount 100.000		Recovery =	89.63%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.00	118941	465.691 ug/l
33) L7c PCB 1260{2}	16.37	145197	471.218 ug/l
34) L7c PCB 1260{3}	17.37	17022	416.515 ug/l
35) L7C PCB 1260{4}	20.10	59094	448.707 ug/l
36) L7C PCB 1260{5}	20.94	22877	447.831 ug/l
Sum PCB 1260		363130	2249.962 ug/l
Average PCB 1260			449.992 ug/l

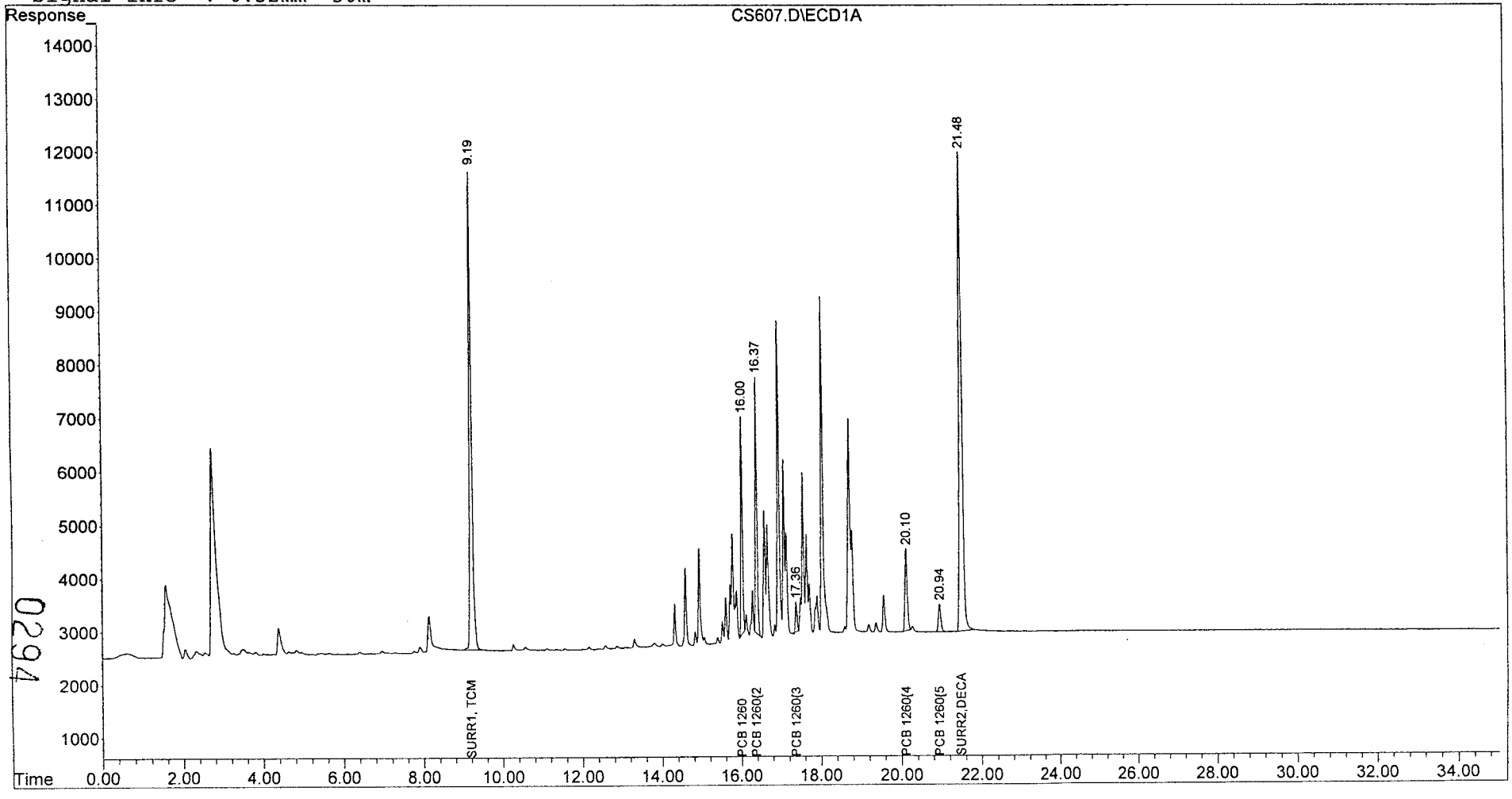
0293

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\013100\CS607.D Vial: 4
Acq On : 31 Jan 2000 1:32 pm Operator: DROOT
Sample : 356291 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 BLKSPK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 14:17 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



0294

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS607.D Vial: 54
Acq On : 31 Jan 2000 1:32 pm Operator: DROOT
Sample : 356291 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 BLKSPK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 14:17 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.59	1079443	93.052 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	93.05%
37) S SURR2,DECACHLOROBIPHENYL	23.55	1236307	89.242 ug/l
Spiked Amount 100.000		Recovery =	89.24%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	207286	485.754 ug/l
33) L7c PCB 1260{2}	16.65	343310	459.078 ug/l
34) L7c PCB 1260{3}	16.81	344274	474.109 ug/l
35) L7C PCB 1260{4}	18.01	46357	436.664 ug/l
36) L7C PCB 1260{5}	18.59	559800	480.271 ug/l
Sum PCB 1260		1501026	2335.876 ug/l
Average PCB 1260			467.175 ug/l

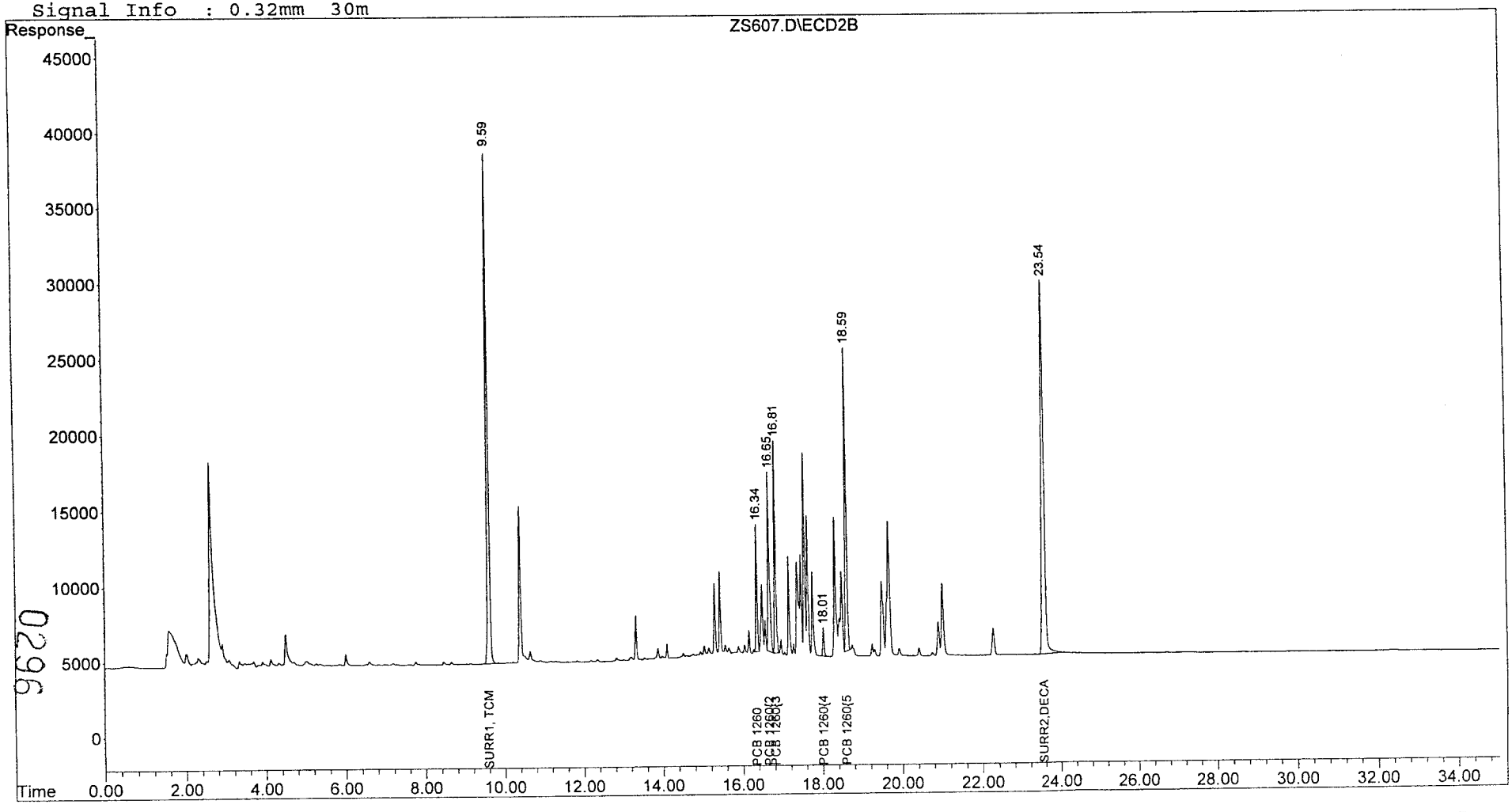
0295

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS607.D Vial: 54
Acq On : 31 Jan 2000 1:32 pm Operator: DROOT
Sample : 356291 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 BLKSPK Multiplr: 1.00
IntFile : events.e
Quant Time: Jan 31 14:17 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 02/28/00

Project Reference:
Client Sample ID : MATRIX SPIKE

Date Sampled : 01/28/00 **Order #:** 356292 **Sample Matrix:** SOIL/SEDIMENT
Date Received: / / **Submission #:** **Percent Solid:** 63.8

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/27/00			
DATE ANALYZED : 01/31/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
PCB 1016	33	52 U	UG/KG
PCB 1221	33	52 U	UG/KG
PCB 1232	33	52 U	UG/KG
PCB 1242	33	52 U	UG/KG
PCB 1248	33	52 U	UG/KG
PCB 1254	33	52 U	UG/KG
PCB 1260	33	320	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	90	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	94	%

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100\CS609.D
Acq On : 31 Jan 2000 2:53 pm
Sample : 356292 1.0
Misc : 01/27/00 3.0 DAMES 8082 355896MS
IntFile : events.e
Quant Time: Feb 1 8:07 2000 Quant Results File: F0127C.RES

Vial: 6
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	380249	93.688 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	93.69%
37) S SURR2,DECACHLOROBIPHENYL	21.48	460816	89.970 ug/l
Spiked Amount 100.000		Recovery =	89.97%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.00	143907	563.442 ug/l
33) L7c PCB 1260{2}	16.37	191370	621.067 ug/l
34) L7c PCB 1260{3}	17.37	24653	603.254 ug/l
35) L7C PCB 1260{4}	20.11	88767	674.018 ug/l
36) L7C PCB 1260{5}	20.94	30699	600.951 ug/l
Sum PCB 1260		479396	3062.732 ug/l
Average PCB 1260			612.546 ug/l

0298

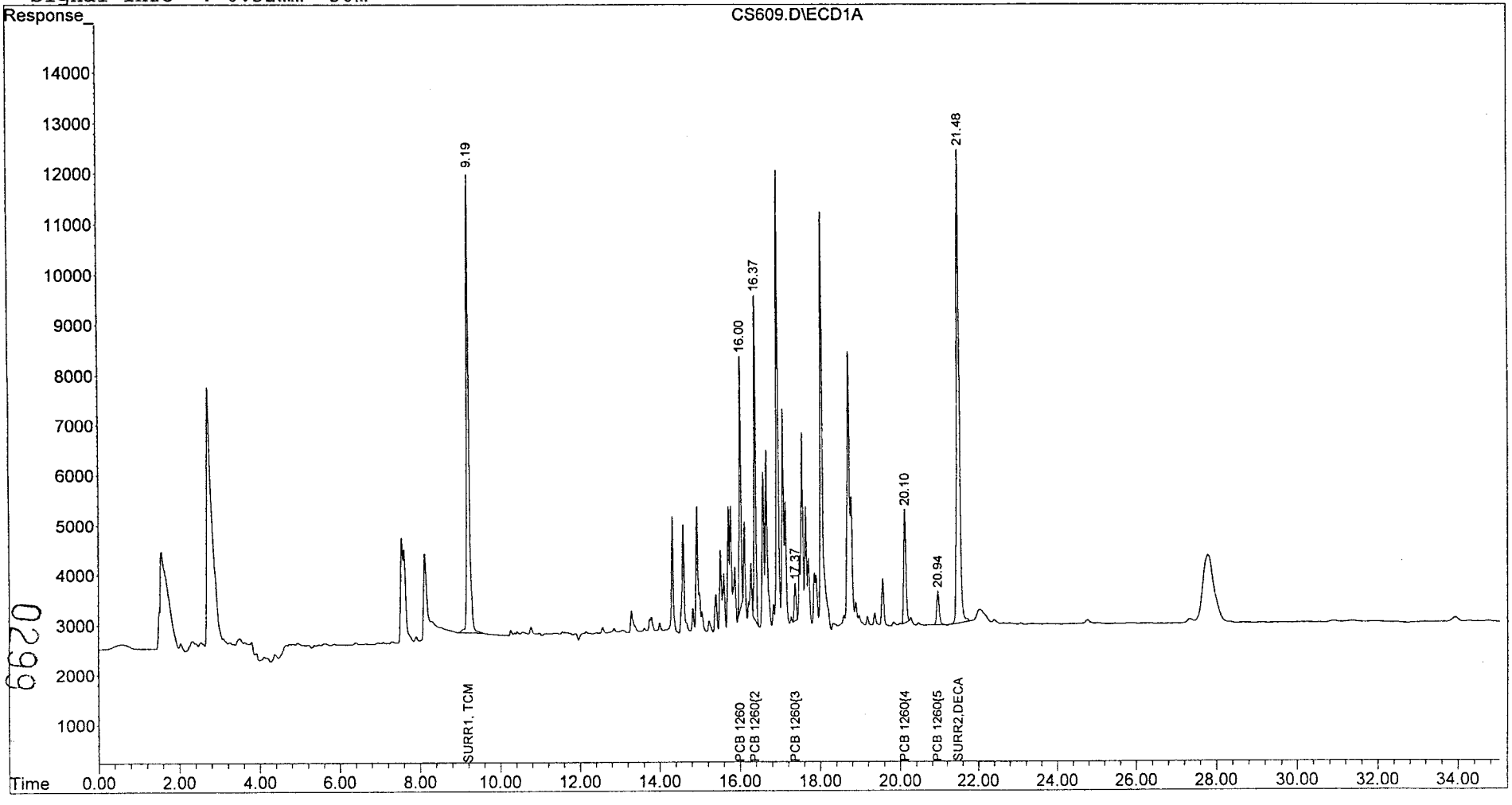
(f)=RT Delta > 1/2 Window
(m)=manual int.

Quantitation Report

Data File : C:\HPCHEM\2\DATA\013100\CS609.D Vial: 6
Acq On : 31 Jan 2000 2:53 pm Operator: DROOT
Sample : 356292 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 355896MS Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 8:07 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS609.D
Acq On : 31 Jan 2000 2:53 pm
Sample : 356292 1.0
Misc : 01/27/00 3.0 DAMES 8082 355896MS
IntFile : events.e
Quant Time: Feb 1 7:29 2000 Quant Results File: R0127C.RES

Vial: 56
Operator: DROOT
Inst : 5890C
Multiplr: 1.00

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.59	1020429	87.965 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	87.97%
37) S SURR2,DECACHLOROBIPHENYL	23.55	1208456	87.231 ug/l
Spiked Amount 100.000		Recovery =	87.23%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	280301	656.858 ug/l
33) L7c PCB 1260{2}	16.65	404934	541.483 ug/l
34) L7c PCB 1260{3}	16.81	407145	560.691 ug/l
35) L7C PCB 1260{4}	18.01	46340	436.506 ug/l
36) L7C PCB 1260{5}	18.60	693383	594.876 ug/l
Sum PCB 1260		1832104	2790.414 ug/l
Average PCB 1260			558.083 ug/l

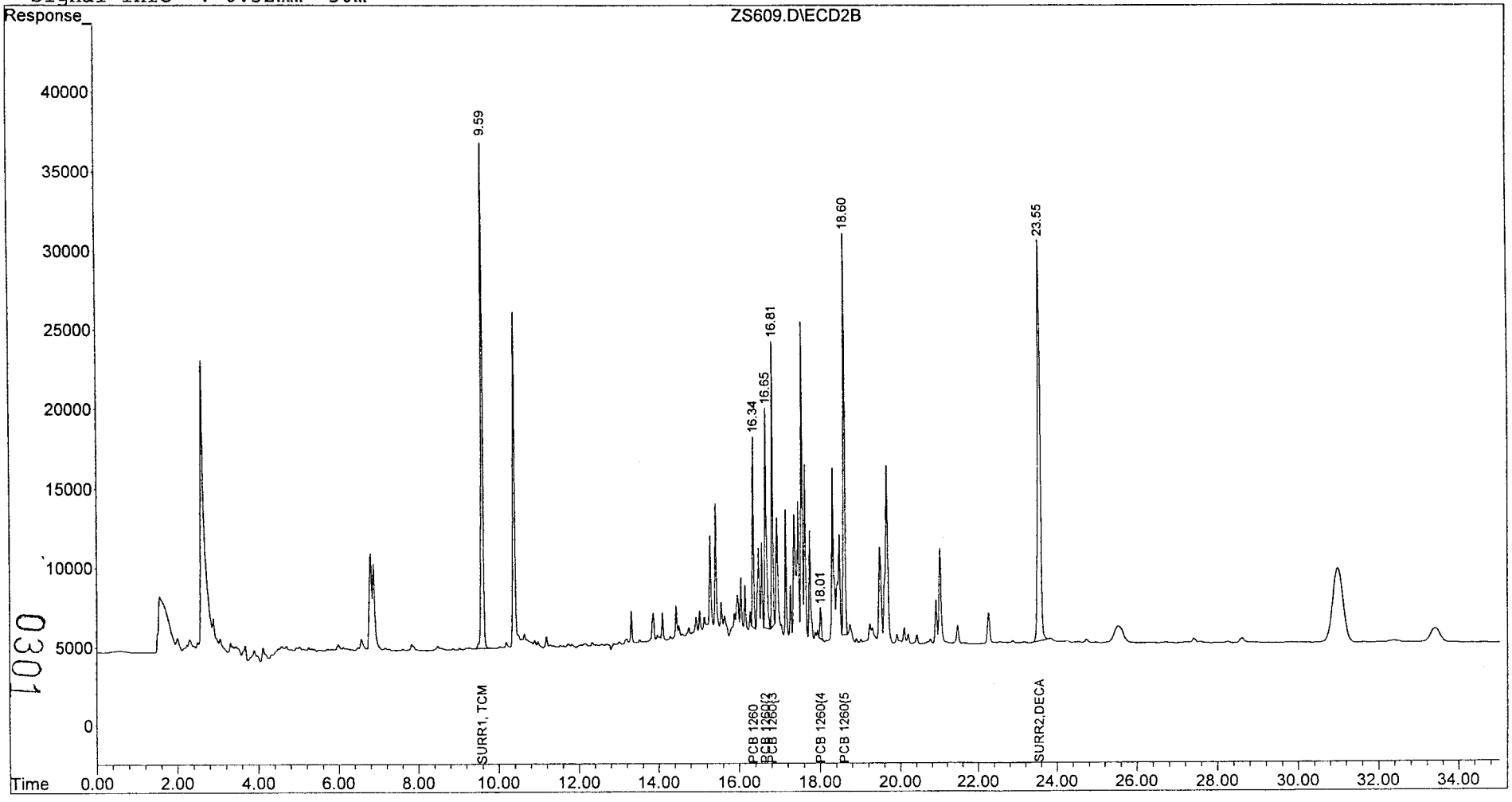
0300

(f)=RT Delta > 1/2 Window
(m)=manual int.

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS609.D Vial: 56
Acq On : 31 Jan 2000 2:53 pm Operator: DROOT
Sample : 356292 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 355896MS Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 7:29 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 02/28/00

Project Reference:
Client Sample ID : MATRIX SPIKE DUPLICATE

Date Sampled : 01/28/00 **Order #:** 356293 **Sample Matrix:** SOIL/SEDIMENT
Date Received: / / **Submission #:** **Percent Solid:** 63.8

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/27/00			
DATE ANALYZED : 01/31/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
PCB 1016	33	52 U	UG/KG
PCB 1221	33	52 U	UG/KG
PCB 1232	33	52 U	UG/KG
PCB 1242	33	52 U	UG/KG
PCB 1248	33	52 U	UG/KG
PCB 1254	33	52 U	UG/KG
PCB 1260	33	310	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	88	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	92	%

Data File : C:\HPCHEM\2\DATA\013100\CS610.D Vial: 7
Acq On : 31 Jan 2000 3:34 pm Operator: DROOT
Sample : 356293 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 355896MSD Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 8:07 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700\CS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.19	375055	92.408 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	92.41%
37) S SURR2,DECACHLOROBIPHENYL	21.48	450068	87.872 ug/l
Spiked Amount 100.000		Recovery =	87.87%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.00	135974	532.381 ug/l
33) L7c PCB 1260{2}	16.37	180884	587.037 ug/l
34) L7c PCB 1260{3}	17.37	23406	572.731 ug/l
35) L7C PCB 1260{4}	20.11	86141	654.079 ug/l
36) L7C PCB 1260{5}	20.94	29922	585.734 ug/l
Sum PCB 1260		456326	2931.960 ug/l
Average PCB 1260			586.392 ug/l

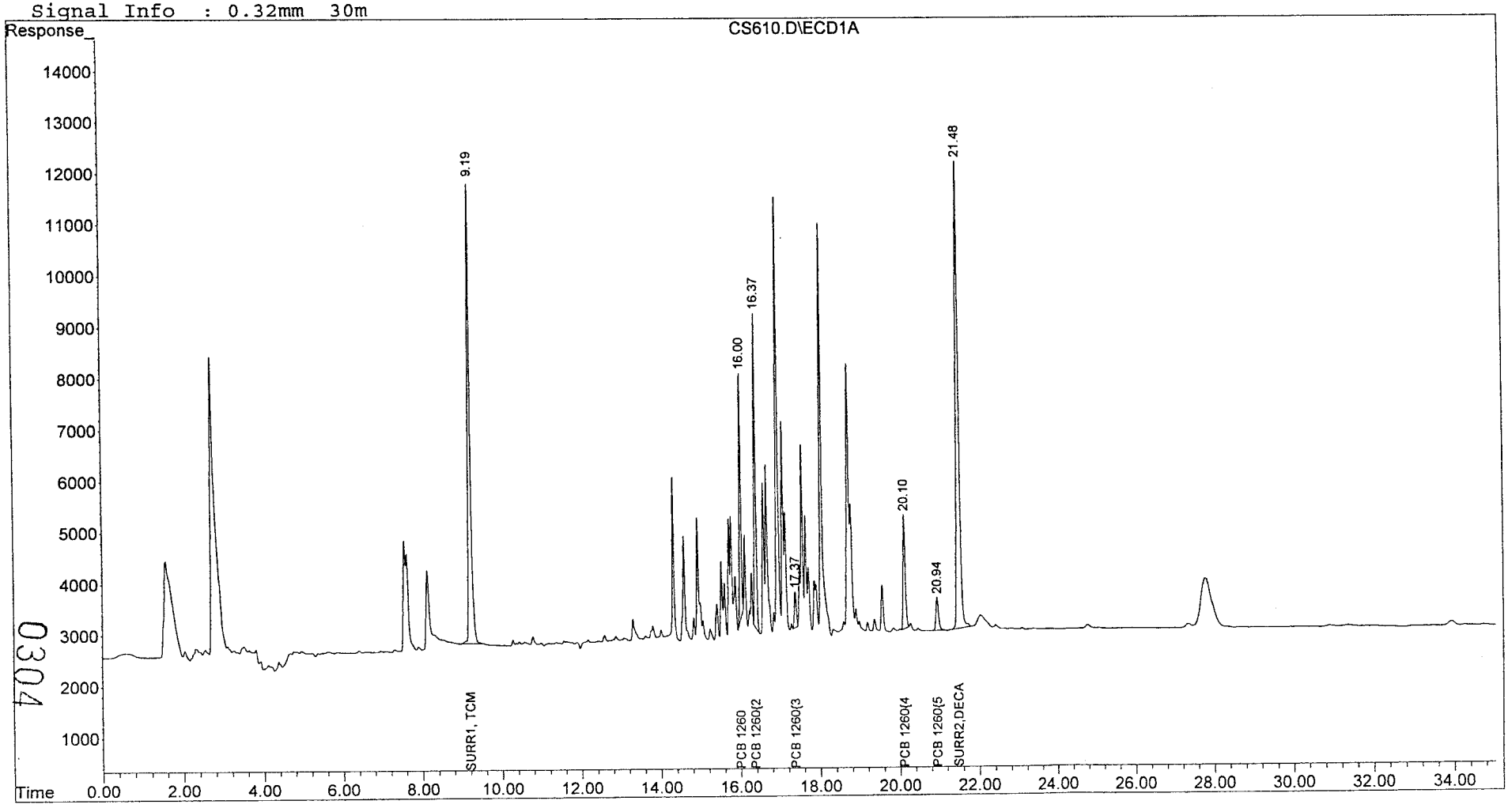
0303

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\013100\CS610.D Vial: 7
Acq On : 31 Jan 2000 3:34 pm Operator: DROOT
Sample : 356293 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 355896MSD Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 8:07 2000 Quant Results File: F0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\F0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 11:00:27 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-1701
Signal Info : 0.32mm 30m



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS610.D Vial: 57
Acq On : 31 Jan 2000 3:34 pm Operator: DROOT
Sample : 356293 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 355896MSD Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 7:30 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Continuing Cal File: C:\HPCHEM\2\DATA\012700.SEC\ZS518.D
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S SURR1, TCMX	9.59	1076663	92.812 ug/l
Spiked Amount 100.000	Range 60 - 150	Recovery =	92.81%
37) S SURR2,DECACHLOROBIPHENYL	23.55	1294973	93.476 ug/l
Spiked Amount 100.000		Recovery =	93.48%
Target Compounds			
Sum PCB 1016		0	N.D. ug/l
Average PCB 1016			0.000 ug/l
Sum PCB 1221		0	N.D. ug/L
Average PCB 1221			0.000 ug/L
Sum PCB 1232		0	N.D. ug/l
Average PCB 1232			0.000 ug/l
Sum PCB 1242		0	N.D. ug/l
Average PCB 1242			0.000 ug/l
Sum PCB 1248		0	N.D. ug/l
Average PCB 1248			0.000 ug/l
Sum PCB 1254		0	N.D. ug/l
Average PCB 1254			0.000 ug/l
32) L7c PCB 1260	16.34	301750	707.121 ug/l
33) L7c PCB 1260{2}	16.65	434873	581.518 ug/l
34) L7c PCB 1260{3}	16.81	437769	602.865 ug/l
35) L7C PCB 1260{4}	18.01	50260	473.431 ug/l
36) L7C PCB 1260{5}	18.60	747408	641.226 ug/l
Sum PCB 1260		1972060	3006.160 ug/l
Average PCB 1260			601.232 ug/l

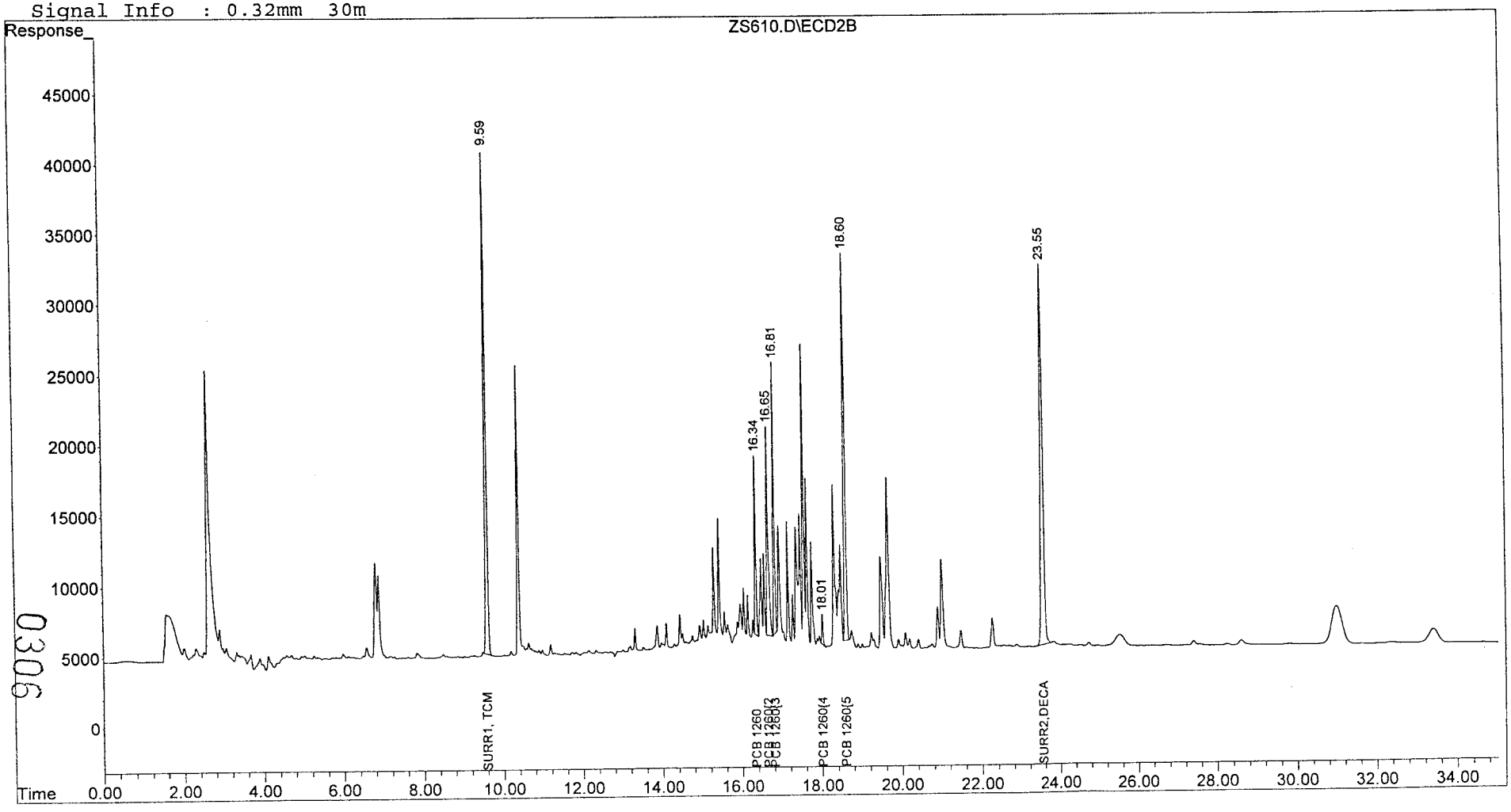
0305

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\2\DATA\013100.SEC\ZS610.D Vial: 57
Acq On : 31 Jan 2000 3:34 pm Operator: DROOT
Sample : 356293 1.0 Inst : 5890C
Misc : 01/27/00 3.0 DAMES 8082 355896MSD Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 1 7:30 2000 Quant Results File: R0127C.RES

Quant Method : C:\HPCHEM\2\METHODS\R0127C.M (Chemstation Integrator)
Title : 8082 PCB
Last Update : Mon Jan 31 10:25:13 2000
Response via : Single Level Calibration
DataAcq Meth : F0127C.M

Volume Inj. : 1 uL
Signal Phase : DB-17
Signal Info : 0.32mm 30m



0306

CLIENT: Dames Lathan JOB #: R2000664 47170 3273 METHOD #: 8082 EXTRACTION #: 3540

Sample number	Initial Wt. or Volume	Appearance	Conc. Date	Final Volume	Primary Clean-up	Date	Dilution	Date	Comments	Date Done
MB	30.0g	Na2SO4	1/27/00	10ml	H+S	1/27/00			356290	1/27/00
MB Spk	30.0g	"							356291	
355 896	30.0g	brown soil								
355 896 MS	30.0g	"							356292	
355 896 MSD	30.0g	"							356293	
355 897	30.0g	brown soil + rocks								
355 898	30.0g	black soil								

Date Extracted: 1/27/00
Extraction Technician: FM
Client: DAMES Lathan
Spike Witness: DR
Job #: R2000664
Concentration Technician:
Method: 8082
Clean-up Technician:
Compound List: PCB
Ext. # 3520 – Time Started:
Time Stopped:

SURROGATE: 1ml 50ug/ml 8082 surrogate spike mix TCMX 0-055-109-6 exp 11/6/99 exp 6/6/00

SPIKE: 1ml AR1260 spike from AR1260 in hexane 4/6/99 MRL 0-055-22-6 exp 2/6/00

SOLVENT LOT #: Hex: 39854 Acetone: BC727

METHOD SUMMARY:
30.0g soil 460g Na2SO4 sonicated w/ 100mls 1:1 Hex/Acetone 1:1 3X 3min

00075

ATTACHMENT 2

DATA VALIDATION REPORT

DATA VALIDATION REPORT - Level III Review

Sub No.: R2001022 **Fraction:** VOCs & PCBs

Lab: Columbia Analytical **Project Name:** GE Tonawanda

Reviewer: JFK **Date:** April 7, 2000

This report presents the findings of a review of the referenced data. The report consists of this summary, a listing of the samples included in the review, copies of data reports with data qualifying flags applied (if any), supporting documentation, and an explanation of the data qualifying flags employed. The review performed is based on the USEPA National Functional Guidelines for Data Review, modified to reflect the level of review requested and the specifics of the analytical method employed.

Major Anomalies: None.

Minor Anomalies: Acetone displays an LCS recovery slightly less than the lower QC limit. Positive acetone results were flagged "J"; non-detects were flagged "UJ". Bromomethane and vinyl chloride displayed LCS recoveries greater than the upper QC limit. Associated non-detects results were neither affected nor flagged. A variety of internal standards displayed area counts less than the lower QC limit. Associated results were flagged "J/UJ"unless flagged for other reasons. The laboratory reported only two of three surrogates introduced into the samples. Samples CB-2 and CB-3 displayed recoveries greater than the upper QC limit for one surrogate and low surrogate recoveries for the unreported surrogate. The reviewer has added the unacceptable surrogate recoveries to the form 1's and flagged associated results "J/UJ". Acetone displayed a continuing calibration %D greater than the QC limit. Positive detections were flagged "J".

Correctable Anomalies: A low-level positive detection for toluene was not reported by the laboratory. The reviewer added a result of 3.2 J to sample CB-2.

Comments: Dates on the chain of custody have been improperly modified and do not reflect a reasonable sequence of events. For example the chain indicates the samples relinquished on 2/25/00 but collected on 2/28/99 and the laboratory report indicates samples collected on the 29th. 123-Trichlorobenzene was observed in the method blank at 1.2 J ppb. No positive detections were observed in the field samples and no data qualification was required. Only a single surrogate result was reported for the method blank. Various sample results are reported at dilutions due to high levels of target analyte. Detection limits were elevated as a result.

Signed: _____

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-3

Date Sampled : 02/29/00 **Order #:** 361736 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 79.2

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/09/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	6.6 J J,I	UG/KG
BENZENE	5.0	6.3 U UJ,S	UG/KG
BROMODICHLOROMETHANE	5.0	6.3 U	UG/KG
BROMOFORM	5.0	6.3 U	UG/KG
BROMOMETHANE	5.0	6.3 U	UG/KG
2-BUTANONE (MEK)	10	13 U	UG/KG
CARBON DISULFIDE	10	13 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.3 U	UG/KG
CHLOROBENZENE	5.0	6.3 U	UG/KG
CHLOROETHANE	5.0	6.3 U	UG/KG
CHLOROFORM	5.0	6.3 U	UG/KG
CHLOROMETHANE	5.0	6.3 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.3 U	UG/KG
1,3-DICHLOROBENZENE	5.0	6.3 U	UG/KG
1,2-DICHLOROBENZENE	5.0	6.3 U	UG/KG
1,4-DICHLOROBENZENE	5.0	6.3 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.3 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.3 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.3 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.3 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.3 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.3 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.3 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.3 U	UG/KG
ETHYLBENZENE	5.0	6.3 U	UG/KG
2-HEXANONE	10	13 U	UG/KG
METHYLENE CHLORIDE	5.0	6.3 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	13 U	UG/KG
STYRENE	5.0	6.3 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.3 U	UG/KG
TETRACHLOROETHENE	5.0	6.3 U	UG/KG
TOLUENE	5.0	2.4 J J,S	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	6.3 U UJ,S	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	6.3 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.3 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.3 U	UG/KG
TRICHLOROETHENE	5.0	6.3 U	UG/KG
VINYL CHLORIDE	5.0	6.3 U	UG/KG
O-XYLENE	5.0	6.3 U	UG/KG
M+P-XYLENE	5.0	1.4 J J,S	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	72 *	%0014B

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-3

Date Sampled : 02/29/00 **Order #:** 361736 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 79.2

DATE ANALYZED : 03/09/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	12 J J,S	UG/KG
BENZENE	5.0	6.3 U UJ,S	UG/KG
BROMODICHLOROMETHANE	5.0	6.3 U	UG/KG
BROMOFORM	5.0	6.3 U	UG/KG
BROMOMETHANE	5.0	6.3 U	UG/KG
2-BUTANONE (MEK)	10	13 U	UG/KG
CARBON DISULFIDE	10	13 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.3 U	UG/KG
CHLOROBENZENE	5.0	6.3 U	UG/KG
CHLOROETHANE	5.0	6.3 U	UG/KG
CHLOROFORM	5.0	6.3 U	UG/KG
CHLOROMETHANE	5.0	6.3 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.3 U	UG/KG
1,3-DICHLOROBENZENE	5.0	6.3 U	UG/KG
1,2-DICHLOROBENZENE	5.0	6.3 U	UG/KG
1,4-DICHLOROBENZENE	5.0	6.3 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.3 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.3 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.3 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.3 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.3 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.3 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.3 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.3 U	UG/KG
ETHYLBENZENE	5.0	6.3 U	UG/KG
2-HEXANONE	10	13 U	UG/KG
METHYLENE CHLORIDE	5.0	6.3 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	13 U	UG/KG
STYRENE	5.0	6.3 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.3 U	UG/KG
TETRACHLOROETHENE	5.0	6.3 U	UG/KG
TOLUENE	5.0	5.7 J J,S	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	6.3 U UJ,S	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	6.3 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.3 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.3 U	UG/KG
TRICHLOROETHENE	5.0	6.3 U	UG/KG
VINYL CHLORIDE	5.0	6.3 U	UG/KG
O-XYLENE	5.0	2.7 J J,S	UG/KG
M+P-XYLENE	5.0	2.7 J J,S	UG/KG

0019

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	66 *	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-2

Date Sampled : 02/29/00 **Order #:** 361737 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 80.4

DATE ANALYZED : 03/09/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	6.1 J J,1	UG/KG
BENZENE	5.0	6.2 U UJ,S	UG/KG
BROMODICHLOROMETHANE	5.0	6.2 U	UG/KG
BROMOFORM	5.0	6.2 U	UG/KG
BROMOMETHANE	5.0	6.2 U	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.2 U	UG/KG
CHLOROBENZENE	5.0	6.2 U	UG/KG
CHLOROETHANE	5.0	6.2 U	UG/KG
CHLOROFORM	5.0	6.2 U	UG/KG
CHLOROMETHANE	5.0	6.2 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.2 U	UG/KG
1,3-DICHLOROBENZENE	5.0	6.2 U	UG/KG
1,2-DICHLOROBENZENE	5.0	6.2 U	UG/KG
1,4-DICHLOROBENZENE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.2 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.2 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
ETHYLBENZENE	5.0	6.2 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
METHYLENE CHLORIDE	5.0	6.2 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	6.2 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.2 U	UG/KG
TETRACHLOROETHENE	5.0	~~6.2 U~~ 3.2 J,S	UG/KG ~~UJ,S~~
TOLUENE	5.0	6.2 U UJ,S	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	6.2 U	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	6.2 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.2 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.2 U	UG/KG
TRICHLOROETHENE	5.0	6.2 U	UG/KG
VINYL CHLORIDE	5.0	6.2 U	UG/KG
O-XYLENE	5.0	6.2 U	UG/KG
M+P-XYLENE	5.0	6.2 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	66 *	%

0027

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-2

Date Sampled : 02/29/00 **Order #:** 361737 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 80.4

DATE ANALYZED : 03/09/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	12 J UJ,i	UG/KG
BENZENE	5.0	6.2 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.2 U	UG/KG
BROMOFORM	5.0	6.2 U UJ,i	UG/KG
BROMOMETHANE	5.0	6.2 U UJ,i	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.2 U	UG/KG
CHLOROBENZENE	5.0	6.2 U UJ,i	UG/KG
CHLOROETHANE	5.0	6.2 U	UG/KG
CHLOROFORM	5.0	6.2 U	UG/KG
CHLOROMETHANE	5.0	6.2 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.2 U UJ,i	UG/KG
1,3-DICHLOROBENZENE	5.0	6.2 U UJ,i	UG/KG
1,2-DICHLOROBENZENE	5.0	6.2 U UJ,i	UG/KG
1,4-DICHLOROBENZENE	5.0	6.2 U UJ,i	UG/KG
1,1-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.2 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.2 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
ETHYLBENZENE	5.0	6.2 U UJ,i	UG/KG
2-HEXANONE	10	12 U UJ,i	UG/KG
METHYLENE CHLORIDE	5.0	6.2 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	6.2 U UJ,i	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.2 U UJ,i	UG/KG
TETRACHLOROETHENE	5.0	6.2 U UJ,i	UG/KG
TOLUENE	5.0	3.2 J	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	6.2 U UJ,i	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	6.2 U UJ,i	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.2 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.2 U	UG/KG
TRICHLOROETHENE	5.0	6.2 U	UG/KG
VINYL CHLORIDE	5.0	6.2 U UJ,i	UG/KG
O-XYLENE	5.0	6.2 U UJ,i	UG/KG
M+P-XYLENE	5.0	1.5 J J,i	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	61	%

0033

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : TRIP BLANK

Date Sampled : 02/29/00 **Order #:** 361738 **Sample Matrix:** WATER
Date Received: 02/29/00 **Submission #:** R2001022 **Analytical Run** 48407

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/09/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

0040

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	101	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-3

Date Sampled : 02/29/00 **Order #:** 361736 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 79.2

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 03/01/00			
DATE ANALYZED : 03/02/00			
ANALYTICAL DILUTION: 10.00			Dry Weight
PCB 1016	33	420 U	UG/KG
PCB 1221	33	420 U	UG/KG
PCB 1232	33	420 U	UG/KG
PCB 1242	33	420 U	UG/KG
PCB 1248	33	420 U	UG/KG
PCB 1254	33	420 U	UG/KG
PCB 1260	33	1600	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	92	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	88	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-2

Date Sampled : 02/29/00 **Order #:** 361737 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 80.4

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 03/01/00			
DATE ANALYZED : 03/02/00			
ANALYTICAL DILUTION: 10.00			Dry Weight
PCB 1016	33	410 U	UG/KG
PCB 1221	33	410 U	UG/KG
PCB 1232	33	410 U	UG/KG
PCB 1242	33	410 U	UG/KG
PCB 1248	33	410 U	UG/KG
PCB 1254	33	410 U	UG/KG
PCB 1260	33	1300	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	97	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	119	%

CASE NARRATIVE

COMPANY: Dames & Moore
GE-Tonawanda
SUBMISSION #: R20001022

Dames & Moore soil samples were collected on 02/29/00 and received at CAS on 02/29/00 in good condition.

VOLATILE ORGANICS

Soil samples were analyzed for the Target Compound List (TCL) Volatile Organics plus dichloro and trichlorobenzenes by EPA Method 8260B from SW-846.

All initial and continuing calibrations were compliant.

All blank spike recoveries were within QC limits.

All surrogate standard recoveries were within QC limits except for BFB in samples CB-2 and CB-3. These samples were reanalyzed as CB-2RE and CB-3RE to confirm QC outliers.

Internal standard areas were outside limits for samples CB-2, CB-3, CB-2RE and CB-3RE.

All samples were analyzed within the required holding times.

No analytical or QC problems were encountered with these analyses.

PCB's

Soil samples were analyzed for the Target Compound List (TCL) of PCB's by EPA Method 8082 from SW-846.

All initial and continuing calibrations were compliant.

All blank spike recoveries were within QC limits.

All surrogate standard recoveries were within QC limits except for sample B-3. This sample was reinjected to confirm this QC outlier.

All samples were analyzed within the required holding times.

No analytical or QC problems were encountered with these analyses.

1 Mustard Street, Suite 250 ▪ Rochester, NY 14609-6925 ▪ Telephone (716) 288-5380 ▪ Fax (716) 288-8475

Columbia Analytical Services, Inc.
An Employee-Owned Company

1 Mustard St., Suite 250, Rochester, NY 14609-6925
(716) 288-5380 • FAX (716) 288-8475

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

DATE 2/28/00 (P) PAGE 1 OF 1

PROJECT NAME GE-TONAWANDA

PROJECT MANAGER/CONTACT Don Porterfield

COMPANY/ADDRESS Dames+Moore
6446 Plank Road Suite 202 Clifton Park, NY 12065

TEL (518) 688 0015 FAX (518) 688-0022

SAMPLER'S SIGNATURE Jennifer Christy

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	FOR OFFICE USE ONLY LAB I.D.	SAMPLE MATRIX	# OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ 95-1	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ 95-2	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/PCB's ☐ 8081 ☐ 608 ☐ 95-3	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (LIST BELOW)	METALS, DISSOLVED (LIST BELOW)	PCB 8082	% Solids	Chlorobenzenes					PRESERVATION pH < 2.0	PRESERVATION pH > 12	PRESERVATION Other
CB-3	2/28/00	11:00		GRAB	2	1										1	X	X							
CB-2	2/28/00	11:30		GRAB	2	1										1	X	X						ICE	
TRIP BLANK					1	1																			

RELINQUISHED BY:
Signature: Jennifer Christy
Printed Name: Jennifer Christy
Firm: CAS
Date/Time: 2/25/00

RECEIVED BY:
Signature: J. Britt
Printed Name: J. Britt
Firm: CAS
Date/Time: 2/29/00 1001

RELINQUISHED BY:
Signature: J. Britt
Printed Name: J. Britt
Firm: CAS
Date/Time: 2/29/00 515P

RECEIVED BY:
Signature: Rochelle Bogart
Printed Name: Rochelle Bogart
Firm: CAS
Date/Time: 2-29-00 1715

RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS
__ 24 hr. __ 48 hr. __ 5 day
X Standard (10-15 working days)
__ Provide Verbal Preliminary Results
X Provide FAX Preliminary Results
Requested Report Date _____

REPORT REQUIREMENTS
__ 1. Routine Report
__ 2. Routine Rep. w/CASE Narrative
__ 3. EPA Level III Validatable Package
__ 4. N.J. Reduced Deliverables Level IV
X 5. NY ASP/CLP Deliverables *
__ 6. Site specific QC.

INVOICE INFORMATION:
P.O. #:
Bill To:

SAMPLE RECEIPT:
Shipping Via: CAS
Shipping #:
Temperature: 1°
Submission No: R2000122

SPECIAL INSTRUCTIONS/COMMENTS:
METALS * Date on sample jars should be 2/28/00 NOT 2/27/00. (P)
ORGANICS: ☐ TCL ☐ PPL ☐ AE Only ☐ BN Only ☐ Special List
SAMPLES FOR CHLOROBENZENES w/ VOC 8260

* Category I deliverables - per initial work scope.

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B

LABORATORY REFERENCE SPIKE SUMMARY

REFERENCE ORDER #: 364327 ANALYTICAL RUN # : 48407

DATE ANALYZED : 03/09/00
ANALYTICAL DILUTION: 1.0

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
ACETONE	20	65	21 - 165
BENZENE	20	95	37 - 151
BROMODICHLOROMETHANE	20	96	35 - 155
BROMOFORM	20	99	45 - 169
BROMOMETHANE	20	138	10 - 242
2-BUTANONE (MEK)	20	91	25 - 162
CARBON DISULFIDE	20	92	45 - 148
CARBON TETRACHLORIDE	20	107	70 - 140
CHLOROBENZENE	20	105	37 - 160
CHLOROETHANE	20	116	53 - 149
CHLOROFORM	20	101	51 - 138
CHLOROMETHANE	20	123	10 - 273
DIBROMOCHLOROMETHANE	20	96	53 - 149
1,3-DICHLOROBENZENE	20	108	71 - 157
1,2-DICHLOROBENZENE	20	107	71 - 157
1,4-DICHLOROBENZENE	20	107	71 - 157
1,1-DICHLOROETHANE	20	92	59 - 155
1,2-DICHLOROETHANE	20	100	49 - 155
1,1-DICHLOROETHENE	20	88	10 - 234
CIS-1,2-DICHLOROETHENE	20	93	54 - 156
TRANS-1,2-DICHLOROETHENE	20	98	54 - 156
1,2-DICHLOROPROPANE	20	92	10 - 210
CIS-1,3-DICHLOROPROPENE	20	93	10 - 227
TRANS-1,3-DICHLOROPROPENE	20	99	17 - 183
ETHYLBENZENE	20	103	37 - 162
2-HEXANONE	20	83	22 - 155
METHYLENE CHLORIDE	20	107	10 - 221
4-METHYL-2-PENTANONE (MIBK)	20	97	46 - 157
STYRENE	20	109	66 - 144
1,1,2,2-TETRACHLOROETHANE	20	96	46 - 157
TETRACHLOROETHENE	20	104	64 - 148
TOLUENE	20	106	47 - 150
1,2,4-TRICHLOROBENZENE	20	105	71 - 157
1,2,3-TRICHLOROBENZENE	20	102	71 - 157
1,1,1-TRICHLOROETHANE	20	98	52 - 162
1,1,2-TRICHLOROETHANE	20	100	52 - 150
TRICHLOROETHENE	20	99	71 - 157
VINYL CHLORIDE	20	131	10 - 251
O-XYLENE	20	107	71 - 135
M+P-XYLENE	40	104	71 - 135

0009

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: DAMES

Lab Code: 10145 Case No.: R-1022 SAS No.: _____ SDG No.: CB-2

Lab File ID (Standard): C9593.D Date Analyzed: 03/09/00

Instrument ID: MS#5 Time Analyzed: 10:47

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): Y

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	27500	9.52	32836	10.85	41185	16.33
	UPPER LIMIT	55000	9.02	65672	10.35	82370	15.83
	LOWER LIMIT	13750	10.02	16418	11.35	20593	16.83
	EPA SAMPLE NO.						
01	VBLK01	23590	9.52	28136	10.85	35245	16.33
02	QC/REF	21970	9.52	24995	10.85	34411	16.33
03	TRIP BLK	23179	9.54	26287	10.86	36278	16.35
04	CB-3	14928	9.53	18489	10.87	20187 *	16.34
05	CB-2	24322	9.53	29649	10.86	29290	16.34
06	CB-3RE	13969	9.53	15870 *	10.84	17629 *	16.33
07	CB-2RE	15788	9.52	17942	10.84	19011 *	16.33

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = d5-Chlorobenze
IS4 = d4-1,4-Dichlorobenzene

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 to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: DAMES

Lab Code: 10145 Case No.: R-1022 SAS No.: _____ SDG No.: CB-2

Lab File ID (Standard): C9593.D Date Analyzed: 03/09/00

Instrument ID: MS#5 Time Analyzed: 10:47

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): Y

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	28584	21.01				
	UPPER LIMIT	57168	20.51				
	LOWER LIMIT	14292	21.51				
	EPA SAMPLE NO.						
01	VBLK01	23160	21.00				
02	QC/REF	24609	21.01				
03	TRIP BLK	22986	21.03				
04	CB-3	9207 *	21.01				
05	CB-2	15117	21.02				
06	CB-3RE	7684 *	21.00				
07	CB-2RE	7379 *	21.01				

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = d5-Chlorobenze
IS4 = d4-1,4-Dichlorobenzene

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 to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-3

Date Sampled : 02/29/00 **Order #:** 361736 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 79.2

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/09/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
TOLUENE-D8	(81 - 117 %)	89	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	117	%
BFB		66% *	

0020

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-2

Date Sampled : 02/29/00 **Order #:** 361737 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 80.4

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 03/09/00			
ANALYTICAL DILUTION:	1.00			Dry Weight
TOLUENE-D8		(81 - 117 %)	85	%
DIBROMOFLUOROMETHANE		(80 - 120 %)	124 *	%

BFB

46 %

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-2

Date Sampled : 02/29/00 **Order #:** 361737 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 02/29/00 **Submission #:** R2001022 **Percent Solid:** 80.4

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/09/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
TOLUENE-D8	(81 - 117 %)	90	%
DIBROMOFLUOROMETHANE	(80 - 120 %)	119	%
BFB		61%	

Quantitation Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9609.D
Acq On : 9 Mar 100 9:20 pm
Sample : 361737 1.0
Misc : DAMES R-1022 8260B.TCCL
Quant Time: Mar 9 21:50 19100

Vial: 20
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	9.52	168	15788	50.00	ppb		0.02
34) 1,4-Difluorobenzene	10.84	114	17942	50.00	ppb		0.02
55) d5-Chlorobenze	16.33	117	19011	50.00	ppb		0.01
69) d4-1,4-Dichlorobenzene	21.01	152	7379	50.00	ppb		0.03
System Monitoring Compounds							%Recovery
35) surr4,Dibrflmethane	9.45	113	10479	59.50	ppb		119.01%
53) surr3,Toluene-d8	13.56	98	22223	44.78	ppb		89.56%
54) surr2,bfb	18.65	95	9093	30.60	ppb		61.19% *
Target Compounds							Qvalue
~~9) Acrolein~~	~~5.24~~	~~56~~	~~15~~	~~1.14~~	~~ppb~~		~~96~~
12) Acetone	5.51	43	1216	9.36	ppb		94 J
~~15) Acetonitrile~~	~~5.94~~	~~39~~	~~35~~	~~9.65~~	~~ppb~~	#	~~1~~
~~18) TBA~~	~~6.50~~	~~59~~	~~48~~	~~1.59~~	~~ppb~~	#	~~57~~
~~26) 2-Butanone~~	~~8.64~~	~~43~~	~~544~~	~~5.64~~	~~ppb~~		~~98~~
~~31) Tetrahydrofuran~~	~~9.14~~	~~42~~	~~479~~	~~10.49~~	~~ppb~~	#	~~67~~
~~98) Iso-Butyl Alcohol~~	~~10.04~~	~~43~~	~~27~~	~~2.91~~	~~ppb~~		~~74~~
49) Toluene	13.69	91	1737	2.60	ppb	#	82 J
64) (m+p)Xylene	16.80	106	331	1.19	ppb	#	66 J
79) 1,2,4-Trimethylbenzene	20.27	105	401	1.04	ppb		100
~~87) Nitrobenzene~~	~~23.79~~	~~77~~	~~117~~	~~7.02~~	~~ppb~~	#	~~32~~
90) Naphthalen	25.66	128	37944	95.40	ppb		98

Replicate

RJH 3/14

~~0035~~

(#) = qualifier out of range (m) = manual integration
C9609.D SOIL0209.M Thu Mar 09 21:50:48 2000

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA5\DATA\030900\C9593.D
Acq On : 9 Mar 100 10:47 am
Sample : CCV
Misc :

Vial: 4
Operator: HERRING
Inst : 5971 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SOIL0209.M
Title : 8260voa
Last Update : Wed Mar 01 10:35:42 2000
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		Pentafluorobenzene	1.000	1.000	0.0	75	0.01	
2		Dichlorodifluoromethane	0.858	0.970	-13.0	84	0.02	
3	p	Chloromethane	0.723	0.767	-6.1	78	0.01	
4	c	Vinyl Chloride	0.812	0.968	-19.2	88	0.01	
5		Bromomethane	0.479	0.608	-26.8#	99	0.01	MD ok
6		Chloroethane	0.287	0.287	-0.0	78	0.01	
7		Trichlorofluoromethane	1.123	1.352	-20.5	95	0.02	MD ok
8		Diethyl Ether	0.273	0.262	3.9	74	0.02	
9		Acrolein	0.042	0.047 M	-12.6	89	0.02	
10		FREON 113	0.236	0.276	-17.1	95	0.02	
11	c	1,1-Diclethene	0.350	0.370	-5.8	91	0.01	
12		Acetone	0.411	0.512	-24.6	87	0.01	MD ok J+
13		Iodomethane	0.631	0.765	-21.2 M	96	0.01	
14		Carbon Disulfide	1.482	1.534	-3.5	86	0.02	
15		Acetonitrile	0.011	0.008 M	32.0# M	43#	0.02	
16		Allyl Chloride	0.175	0.191	-9.4	83	0.00	
17		Methylene Chloride	0.454	0.456	-0.5	76	0.02	
18		TBA	0.095	0.100	-4.6	75	0.03	
19		Methyl-t-Butyl Ether	1.082	1.087	-0.4	75	0.02	
20		Acrylonitrile	0.130	0.132	-1.2	73	0.02	
21		trans-1,2-Dichloroethene	0.348	0.345	1.1	78	0.02	
22	p	1,1-Diclethane	0.837	0.857	-2.3	79	0.03	
23		Vinyl Acetate	0.111	0.125	-11.8	82	0.02	
24		2-Chloro-1,3-butadiene	0.788	0.823	-4.6	81	0.01	
25		2,2-Dichloropropane	0.893	0.936	-4.8	84	0.03	
26		2-Butanone	0.305	0.347	-13.6	83	0.03	
27		cis-1,2-Dichloroethene	0.411	0.397	3.6	75	0.02	
28		Propionitrile	0.054	0.055	-0.7	71	0.03	
29		Methacrylonitrile	0.148	0.146	1.5	73	0.01	
30		Bromochloromethane	0.289	0.305	-5.5	80	0.01	
31		Tetrahydrofuran	0.145	0.153	-5.5	72	0.03	
32	c	Chloroform	1.025	1.077	-5.1	80	0.02	
33		1,1,1-Trichloroethane	0.976	1.010	-3.5	82	0.02	
34		1,4-Difluorobenzene	1.000	1.000	0.0	75	0.02	
35	s	surr4,Dibrflmethane	0.491	0.529	-7.8	82	0.01	
36		Carbontetrachloride	0.739	0.796	-7.7	85	0.02	
37		1,1-Dichloropropene	0.495	0.498	-0.6	82	0.01	
38		Iso-Butyl Alcohol	0.026	0.027 M	-3.3	76	0.01	
39		Benzene	1.192	1.129	5.2	74	0.01	
40		1,2-Dichloroethane	1.003	1.048	-4.5	80	0.01	
41		Trichloroethene	0.457	0.465	-1.7	77	0.01	

0074

(#) = Out of Range

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 364326 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 48407

DATE ANALYZED : 03/09/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROBENZENE	5.0	1.2 J	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	95	%
TOLUENE-D8	(88 - 110 %)	98	%

0084

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 03/22/00

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 364326 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 48407

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 03/09/00				
ANALYTICAL DILUTION: 1.00				
DIBROMOFLUOROMETHANE	(86 - 118 %)		109	%

0085

Data Qualifying Codes

Two types of data qualifying codes or flags are applied in the course of the data review. The data validation flags indicate data that are not usable for decision making, more than normally biased and/or variable, or not representative of field conditions. These codes and their definitions are presented below in the hierarchy stipulated in the USEPA National Functional Guidelines for Data Review.

Data Validation Flags

Flag	Interpretation
R	The datum is unusable due to serious quality control failures.
U	The datum should be considered a non-detect at the value reported due to blank contamination.
J	The datum should be considered an estimated value, more highly biased or variable than normal.
UJ	The datum should be considered a non-detect, however, the detection limit may be inaccurate.
X	The datum is effected by a special circumstance explained at the bottom of the data report.

The other type of code used by Dames & Moore is a "Reason Code". The reason code indicates the type of quality control failure that lead to the application of the data validation flag.

Reason Codes

GC/MS Organics		GC and HPLC Organics		Inorganics and Conventionals	
Code	Interpretation	Code	Interpretation	Code	Interpretation
a	Incorrect or incomplete analytical sequence	a	Incorrect or incomplete analytical sequence	a	Incorrect or incomplete analytical sequence
c	Calibration failure; poor or unstable response	b	Instrument performance failure	c	Calibration failure
d	MS/MSD imprecision	c	Calibration failure; poor or unstable response	d	MS/MSD imprecision
e	LCSD imprecision	d	MS/MSD imprecision	e	LCSD imprecision
f	Field duplicate imprecision	e	LCSD imprecision	f	Field duplicate imprecision
g	Poor chromatography	f	Field duplicate imprecision	h	Holding time violation
h	Holding time violation	g	Poor chromatography	l	LCS recovery failure
i	Internal standard failure	h	Holding time violation	m	MS/MSD recovery failure
j	Poor mass spectrometer performance	i	Internal standard failure	n	ICS failure
l	LCS recovery failure	l	LCS recovery failure	o	Calibration blank contamination
m	MS/MSD recovery failure	m	MS/MSD recovery failure	p	Preparation blank contamination
r	linearity failure in initial calibration	q	No valid quantitation column	r	Linearity failure in calibration or MSA
s	Surrogate failure	r	linearity failure in initial calibration	s	Serial dilution failure
t	Tuning failure	s	Surrogate failure	v	Post-digestion spike failure
w	Identification criteria failure	u	No confirmation column	x	Field blank contamination
x	Field blank contamination	w	Retention time failure	z	Laboratory storage blank contamination
y	Trip blank contamination	x	Field blank contamination	Q	Other - see bottom of data report for explanation
z	Method blank contamination	z	Method blank contamination		

DATA VALIDATION REPORT - Level III Review

Sub No.: R2000664 **Fraction:** VOCs & PCBs

Lab: Columbia Analytical **Project Name:** GE Tonawanda

Reviewer: JFK **Date:** April 7, 2000

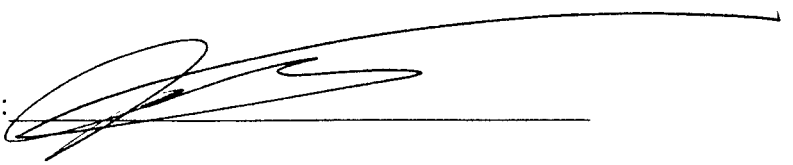
This report presents the findings of a review of the referenced data. The report consists of this summary, a listing of the samples included in the review, copies of data reports with data qualifying flags applied (if any), supporting documentation, and an explanation of the data qualifying flags employed. The review performed is based on the USEPA National Functional Guidelines for Data Review, modified to reflect the level of review requested and the specifics of the analytical method employed.

Major Anomalies: None.

Minor Anomalies: All trip blank vials were received with headspace. Trip blank results have been flagged "UJ" and may present a slight low bias. Acetone, 2-butanone, chloroethane, chloromethane, and vinyl chloride displayed recoveries in the LCS greater than the upper control limit. Positive results were flagged "J". Bromomethane displayed an LCS recovery slightly less than the lower QC limit. Associated results were flagged "UJ". Internal standard 4 displayed an area count less than the lower QC limit in sample CB-1. Associated results were flagged "UJ".

Correctable Anomalies: None.

Comments: Surrogates were diluted out during the analysis of samples STMH-2 and STMH-3. Although no data qualifying action has been taken, the data user should use these data cautiously as the accuracy of the result can no be confirmed. A small number of compounds in the VOC analysis displayed continuing calibration %Ds greater than 25%. However, in each case, the response displayed an increased sensitivity over the initial calibration and thus, are acceptable for the associated non-detect results.

Signed: 

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG #: CB-1 CASE No.:	BATCH COMPLETE: __yes_____	DATE REVISED:
SUBMISSIO R2000664	DISKETTE REQUESTED: Y___ N__x__	DATE DUE: 02/27/00
CLIENT: Dames & Moore	DATE: 01/27/00	PROTOCOL: 846
CLIENT REP: Mark Wilson	CUSTODY SEAL: PRESENT/ABSENT:	SHIPPING No.:
PROJECT: GE-TONAWANDA	CHAIN OF CUSTODY: PRESENT/ABSENT:	

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLE	DATE RECEIVE	pH (SOLIDS)	% SOLIDS	REMARKS AMPLE CONDITIO
355896	CB-1	SOIL	8260/8082	1/25/00	1/26/00			
355897	STMH-2	SOIL	8260/8082	1/25/00	1/26/00			
355898	STMH-3	SOIL	8260/8082	1/25/00	1/26/00			
355899	TRIP BLANK	WATER	8260	1/25/00	1/26/00			

7000

355E KLS 00

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-1

Date Sampled : 01/25/00 **Order #:** 355896 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 63.8

DATE ANALYZED : 01/27/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	20 J J, I	UG/KG
BENZENE	5.0	7.8 U	UG/KG
BROMODICHLOROMETHANE	5.0	7.8 U	UG/KG
BROMOFORM	5.0	7.8 U	UG/KG
BROMOMETHANE	5.0	7.8 U UJ, I	UG/KG
2-BUTANONE (MEK)	10	16 U	UG/KG
CARBON DISULFIDE	10	16 U	UG/KG
CARBON TETRACHLORIDE	5.0	7.8 U	UG/KG
CHLOROBENZENE	5.0	7.8 U	UG/KG
CHLOROETHANE	5.0	7.8 U	UG/KG
CHLOROFORM	5.0	7.8 U	UG/KG
CHLOROMETHANE	5.0	7.8 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	7.8 U	UG/KG
3-DICHLOROBENZENE	5.0	7.8 U UJ, I	UG/KG
1,2-DICHLOROBENZENE	5.0	7.8 U	UG/KG
1,4-DICHLOROBENZENE	5.0	7.8 U	UG/KG
1,1-DICHLOROETHANE	5.0	7.8 U	UG/KG
1,2-DICHLOROETHANE	5.0	7.8 U	UG/KG
1,1-DICHLOROETHENE	5.0	7.8 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	7.8 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	7.8 U	UG/KG
1,2-DICHLOROPROPANE	5.0	7.8 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	7.8 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	7.8 U	UG/KG
ETHYLBENZENE	5.0	7.8 U	UG/KG
2-HEXANONE	10	16 U	UG/KG
METHYLENE CHLORIDE	5.0	7.8 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	16 U	UG/KG
STYRENE	5.0	7.8 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	7.8 U UJ, I	UG/KG
TETRACHLOROETHENE	5.0	7.8 U	UG/KG
TOLUENE	5.0	7.8 U	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	7.8 U UJ, I	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	7.8 U UJ, I	UG/KG
1,1,1-TRICHLOROETHANE	5.0	7.8 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	7.8 U	UG/KG
TRICHLOROETHENE	5.0	7.8 U	UG/KG
VINYL CHLORIDE	5.0	7.8 U	UG/KG
-XYLENE	5.0	7.8 U	UG/KG
+P-XYLENE	5.0	7.8 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS	0027	
4-BROMOFLUOROBENZENE	(74 - 121 %)	76	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : STMH-2

Date Sampled : 01/25/00 **Order #:** 355897 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 83.1

DATE ANALYZED : 01/27/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	24 U	UG/KG
BENZENE	5.0	6.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.0 U	UG/KG
BROMOFORM	5.0	6.0 U	UG/KG
BROMOMETHANE	5.0	6.0 U UJ,1	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.0 U	UG/KG
CHLOROBENZENE	5.0	6.0 U	UG/KG
CHLOROETHANE	5.0	6.0 U	UG/KG
CHLOROFORM	5.0	4.3 J	UG/KG
CHLOROMETHANE	5.0	6.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.0 U	UG/KG
1,3-DICHLOROBENZENE	5.0	6.0 U	UG/KG
1,2-DICHLOROBENZENE	5.0	6.0 U	UG/KG
1,4-DICHLOROBENZENE	5.0	6.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.0 U	UG/KG
ETHYLBENZENE	5.0	6.0 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
METHYLENE CHLORIDE	5.0	6.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
STYRENE	5.0	6.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.0 U	UG/KG
TETRACHLOROETHENE	5.0	6.0 U	UG/KG
TOLUENE	5.0	6.0 U	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	6.0 U	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	6.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.0 U	UG/KG
TRICHLOROETHENE	5.0	6.0 U	UG/KG
VINYL CHLORIDE	5.0	6.0 U	UG/KG
O-XYLENE	5.0	6.0 U	UG/KG
M+P-XYLENE	5.0	6.0 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(74 - 121 %)	92	%

0032

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : STMH-3

Date Sampled : 01/25/00 **Order #:** 355898 **Sample Matrix:** SOIL/SEDIMEN
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 62.3

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/27/00			
ANALYTICAL DILUTION: 500.00			Dry Weight
ACETONE	20	OK ~~16000 U~~ SET	UG/KG
BENZENE	5.0	4000 U	UG/KG
BROMODICHLOROMETHANE	5.0	4000 U	UG/KG
BROMOFORM	5.0	4000 U	UG/KG
BROMOMETHANE	5.0	4000 U UJ, I	UG/KG
2-BUTANONE (MEK)	10	8000 U	UG/KG
CARBON DISULFIDE	10	8000 U	UG/KG
CARBON TETRACHLORIDE	5.0	4000 U	UG/KG
CHLOROBENZENE	5.0	4000 U	UG/KG
CHLOROETHANE	5.0	4000 U	UG/KG
CHLOROFORM	5.0	4000 U	UG/KG
CHLOROMETHANE	5.0	4000 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	4000 U	UG/KG
1,3-DICHLOROBENZENE	5.0	450000 E	UG/KG
1,2-DICHLOROBENZENE	5.0	14000	UG/KG
1,4-DICHLOROBENZENE	5.0	190000 E	UG/KG
1,1-DICHLOROETHANE	5.0	4000 U	UG/KG
1,2-DICHLOROETHANE	5.0	4000 U	UG/KG
1,1-DICHLOROETHENE	5.0	4000 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	4000 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	4000 U	UG/KG
1,2-DICHLOROPROPANE	5.0	4000 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	4000 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	4000 U	UG/KG
ETHYLBENZENE	5.0	4000 U	UG/KG
2-HEXANONE	10	8000 U	UG/KG
METHYLENE CHLORIDE	5.0	4000 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	8000 U	UG/KG
STYRENE	5.0	4000 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	4000 U	UG/KG
TETRACHLOROETHENE	5.0	4000 U	UG/KG
TOLUENE	5.0	4000 U	UG/KG
1,2,4-TRICHLOROBENZENE	5.0	1300000 E	UG/KG
1,2,3-TRICHLOROBENZENE	5.0	10000	UG/KG
1,1,1-TRICHLOROETHANE	5.0	4000 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	4000 U	UG/KG
TRICHLOROETHENE	5.0	4000 U	UG/KG
VINYL CHLORIDE	5.0	4000 U	UG/KG
O-XYLENE	5.0	2200 J	UG/KG
M+P-XYLENE	5.0	4000 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS	0038	
4-BROMOFLUOROBENZENE	(74 - 121 %)	99	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : TRIP BLANK

Date Sampled : 01/25/00 **Order #:** 355899 **Sample Matrix:** WATER
Date Received: 01/26/00 **Submission #:** R2000664 **Analytical Run** 47939

DATE ANALYZED : 01/27/00
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	20	20 U UJ, q	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U UJ, l	UG/L
2-BUTANONE (MEK)	10	10 U UJ, q	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROBENZENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	94	%

0050

q - headspace

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : CB-1

Date Sampled : 01/25/00 **Order #:** 355896 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 63.8

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/27/00			
DATE ANALYZED : 01/31/00			
ANALYTICAL DILUTION: 1.00			Dry Weight
PCB 1016	33	52 U	UG/KG
PCB 1221	33	52 U	UG/KG
PCB 1232	33	52 U	UG/KG
PCB 1242	33	52 U	UG/KG
PCB 1248	33	52 U	UG/KG
PCB 1254	33	52 U	UG/KG
PCB 1260	33	100	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	85	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	86	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : STMH-2

Date Sampled : 01/25/00 **Order #:** 355897 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 83.1

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/27/00			
DATE ANALYZED : 01/31/00			
ANALYTICAL DILUTION: 50.00			Dry Weight
PCB 1016	33	2000 U	UG/KG
PCB 1221	33	2000 U	UG/KG
PCB 1232	33	2000 U	UG/KG
PCB 1242	33	2000 U	UG/KG
PCB 1248	33	2000 U	UG/KG
PCB 1254	33	14000	UG/KG
PCB 1260	33	6700	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	D	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	D	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8082 PCB'S
Reported: 02/28/00

Dames & Moore
Project Reference: GE-TONAWANDA
Client Sample ID : STMH-3

Date Sampled : 01/25/00 **Order #:** 355898 **Sample Matrix:** SOIL/SEDIMEN
Date Received: 01/26/00 **Submission #:** R2000664 **Percent Solid:** 62.3

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 01/27/00			
DATE ANALYZED : 02/02/00			
ANALYTICAL DILUTION: 100000.00			Dry Weight
PCB 1016	33	5300000 U	UG/KG
PCB 1221	33	5300000 U	UG/KG
PCB 1232	33	5300000 U	UG/KG
PCB 1242	33	5300000 U	UG/KG
PCB 1248	33	5300000 U	UG/KG
PCB 1254	33	36000000	UG/KG
PCB 1260	33	5300000 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
DECACHLOROBIPHENYL	(30 - 150 %)	D	%
TETRACHLORO-META-XYLENE	(30 - 150 %)	D	%

CASE NARRATIVE

COMPANY: Dames & Moore
GE-Tonawanda
SUBMISSION #: R2000664

Dames & Moore soil samples were collected on 01/25/00 and received at CAS on 01/26/00 in good condition. See the CLP Batching Form for sample ID cross references.

VOLATILE ORGANICS

Soil samples were analyzed for the Target Compound List (TCL) of Volatile Organics plus chlorinated benzenes by EPA Method 8260B from SW-846.

Sample CB-1 was analyzed for site specific QC. All matrix spike recoveries and RPD were within QC limits.

Sample STMH-3 contained several chlorinated benzenes above the calibration range of the method and they have been flagged "E" as estimated. These were not reanalyzed as these compounds were not initially requested and could not be repeated within the required holding time.

All initial and continuing calibrations were compliant.

All blank spike recoveries were within QC limits.

All surrogate standard recoveries were within QC limits.

All Internal standard areas were within QC limits.

All samples were analyzed within the required holding times.

No other analytical or QC problems were encountered with these analyses.

PCB's

Soil samples were analyzed for the Target Compound List (TCL) of PCB's by EPA Method 8082 from SW-846.

Sample CB-1 was analyzed for site specific QC. Both matrix spike recoveries were within QC limits. RPD was within QC limits

All initial and continuing calibrations were compliant.

All blank spike recoveries were within QC limits.

All surrogate standard recoveries were within QC limits except for samples STMH-2 and STMH-3 where surrogates were diluted out.

All samples were analyzed within the required holding times.

0001

1 Mustard Street, Suite 250 ▪ Rochester, NY 14609-6925 ▪ Telephone (716) 288-5380 ▪ Fax (716) 288-8475

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Check Form

Project/Client Dames Submission Number R2-664

Cooler received on 1-26-00 by: JE COURIER: (CAS) UPS FEDEX CD&L CLIENT

1. Were custody seals on outside of cooler? YES (NO): Date___ : Signature
2. Were custody papers properly filled out (ink, signed, etc.)? (YES) NO
3. Did all bottles arrive in good condition (unbroken)? (YES) NO
4. Were VOA vials checked for absence of air bubbles, and noted if so? (YES) NO — All Trip Blank Vials have head space
5. Were (Ice) or Ice packs present? (YES) NO
6. Where did the bottles originate? (CAS/ROC,) CLIENT
7. Temperature of cooler(s) upon receipt: 6.0 ____ ____ ____ ____

Is the temperature within 0° - 6° C?:	Yes ☒	Yes ☐	Yes ☐	Yes ☐	Yes ☐
If No, Explain Below	No ☐	No ☐	No ☐	No ☐	No ☐

Date/Time Temperatures Taken: 1-26-00 15:45

Thermometer ID: 161 (Temp Blank) Sample Bottle Cooler Temp. IR Gun

If out of Temperature, Client Approval to Run Samples ____

Cooler Breakdown: Date: 1-27-00 by: JE

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct bottles used for the tests indicated? (YES) NO

Explain any discrepancies: ____

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO_3					
2	H_2SO_4					
5-9*	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH ____

*If pH adjustment is required, use NaOH and/or H_2SO_4

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				

Other Comments:

0005

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B

LABORATORY REFERENCE SPIKE SUMMARY

REFERENCE ORDER #: 361284 ANALYTICAL RUN # : 47939

DATE ANALYZED : 01/27/00
ANALYTICAL DILUTION: 1.0

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
ACETONE	20	143	21 - 165
BENZENE	20	110	37 - 151
BROMODICHLOROMETHANE	20	105	35 - 155
BROMOFORM	20	95	45 - 169
BROMOMETHANE	20	71	10 - 242
2-BUTANONE (MEK)	20	129	25 - 162
CARBON DISULFIDE	20	98	45 - 148
CARBON TETRACHLORIDE	20	111	70 - 140
CHLOROBENZENE	20	109	37 - 160
CHLOROETHANE	20	134	53 - 149
CHLOROFORM	20	110	51 - 138
CHLOROMETHANE	20	130	10 - 273
DIBROMOCHLOROMETHANE	20	106	53 - 149
1,3-DICHLOROBENZENE	20	107	71 - 157
1,2-DICHLOROBENZENE	20	107	71 - 157
1,4-DICHLOROBENZENE	20	107	71 - 157
1,1-DICHLOROETHANE	20	109	59 - 155
1,2-DICHLOROETHANE	20	112	49 - 155
1,1-DICHLOROETHENE	20	125	10 - 234
CIS-1,2-DICHLOROETHENE	20	106	54 - 156
TRANS-1,2-DICHLOROETHENE	20	108	54 - 156
1,2-DICHLOROPROPANE	20	103	10 - 210
CIS-1,3-DICHLOROPROPENE	20	108	10 - 227
TRANS-1,3-DICHLOROPROPENE	20	102	17 - 183
ETHYLBENZENE	20	110	37 - 162
2-HEXANONE	20	116	22 - 155
METHYLENE CHLORIDE	20	108	10 - 221
4-METHYL-2-PENTANONE (MIBK)	20	104	46 - 157
STYRENE	20	109	66 - 144
1,1,2,2-TETRACHLOROETHANE	20	103	46 - 157
TETRACHLOROETHENE	20	115	64 - 148
TOLUENE	20	113	47 - 150
1,2,4-TRICHLOROBENZENE	20	103	71 - 157
1,2,3-TRICHLOROBENZENE	20	102	71 - 157
1,1,1-TRICHLOROETHANE	20	109	52 - 162
1,1,2-TRICHLOROETHANE	20	106	52 - 150
TRICHLOROETHENE	20	110	71 - 157
VINYL CHLORIDE	20	130	10 - 251
O-XYLENE	20	110	71 - 135
M+P-XYLENE	40	115	71 - 135

0010

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: DAMES&MOORE

Lab Code: 10145 Case No.: R20-664 SAS No.: _____ SDG No.: CB-1

Lab File ID (Standard): C9019.D Date Analyzed: 01/27/00

Instrument ID: MS#5 Time Analyzed: 10:19

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): Y

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	73212	20.96				
	UPPER LIMIT	146424	20.46				
	LOWER LIMIT	36606	21.46				
	EPA SAMPLE NO.						
01	VBLK02	58602	20.95				
02	VREF02	66287	20.96				
03	CB-1	34130*	20.95				
04	CB-1MS	42022	20.95				
05	CB-1MSD	40100	20.95				
06	TRIP BLANK	56686	20.95				
07	STMH-2	49382	20.95				

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = d5-Chlorobenze
IS4 = d4-1,4-Dichlorobenzene

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 to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5789.D
Acq On : 27 Jan 100 10:50 am
Sample : CCV
Misc :

Vial: 44
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
Response via : Multiple Level Calibration

William C Allgeier

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		Pentafluorobenzene	1.000	1.000	0.0	117	-0.01	
2		Dichlorodifluoromethane	0.469	0.409	12.9	98	-0.01	
3	p	Chloromethane	0.336	0.299	10.9	103	0.00	
4	c	Vinyl Chloride	0.377	0.338	10.5	101	0.00	
5		Bromomethane	0.202	0.193	4.8	136	0.00	
6		Chloroethane	0.216	0.193	10.3	105	0.00	
7		Trichlorofluoromethane	0.523	0.480	8.2	102	0.00	
8		Diethyl Ether	0.312	0.278	10.9	105	-0.01	
9		Acrolein	0.045	0.044 M	2.0	115	-0.01	
10		FREON 113	0.168	0.153	8.8	101	-0.01	
11	c	1,1-Diclethene	0.321	0.303	5.5	106	0.00	
12		Acetone	CAL 0.097	0.122	-25.8#	145	-0.01	OK 1/4 HDS
13		Iodomethane	0.237	0.236	0.3	101	-0.01	
14		Carbon Disulfide	1.289	1.265	1.9	111	-0.01	
15		Acetonitrile	0.026	0.019 M	27.1# M	98	0.00	
16		Allyl Chloride	0.194	0.175	9.5	108	-0.01	
17		Methylene Chloride	0.382	0.347	9.2	103	-0.01	
18		TBA	0.031	0.027 M	13.3	107	-0.02	
19		Acrylonitrile	0.126	0.113	10.3	109	-0.01	
20		Methyl-t-Butyl Ether	1.045	0.919	12.1	103	-0.01	
21		trans-1,2-Dichloroethene	0.364	0.329	9.5	103	-0.01	
22	p	1,1-Diclethane	0.639	0.582	8.8	103	-0.01	
23		Vinyl Acetate	0.685	0.797	-16.3	144	-0.01	
24		2-Chloro-1,3-butadiene	0.608	0.558	8.3	103	-0.01	
25		2,2-Dichloropropane	0.532	0.501	5.8	107	-0.01	
26		2-Butanone	0.121	0.167	-38.1#	169	-0.01	OK 1/4 HDS
27		cis-1,2-Dichloroethene	0.421	0.386	8.3	104	-0.01	
28		Propionitrile	0.049	0.047 M	5.0	116	-0.01	
29		Methacrylonitrile	0.174	0.148	14.8	101	-0.02	
30		Bromochloromethane	0.209	0.192	8.1	106	-0.01	
31	c	Chloroform	0.695	0.635	8.5	107	-0.01	
32		Tetrahydrofuran	0.107	0.100	5.8	111	0.00	
33		1,1,1-Trichloroethane	0.569	0.533	6.2	104	-0.01	
34	I	1,4 - Difluorobenzene	1.000	1.000	0.0	117	-0.01	
35	s	surr4,Dibrflmethane	0.322	0.321	0.6	117	-0.01	
36		Carbontetrachloride	0.308	0.282	8.5	103	-0.01	
37		1,1-Dichloropropene	0.326	0.289	11.4	99	-0.01	
38		Iso-Butyl Alcohol	0.008	0.007 M	10.2	118	-0.01	
39		Benzene	0.956	0.865	9.4	108	-0.01	
40		1,2-Dichloroethane	0.409	0.371	9.3	106	-0.01	
41		N-Heptane	0.271	0.241	11.0	114	-0.01	

0128

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012700\Y5789.D
Acq On : 27 Jan 100 10:50 am
Sample : CCV
Misc :

Vial: 44
Operator: ALLGEIER
Inst : 5970 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP0124.M
Title : 8260voa
Last Update : Tue Jan 25 12:36:25 2000
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)	
42		Trichloroethene	0.291	0.258	11.3	99	-0.01	
43	c	1,2-Diclpropane	0.262	0.230	12.1	101	-0.01	
44		Methyl Methacrylate	0.207	0.186	10.0	106	-0.01	
45		1,4-Dioxane	0.003	0.002 M	12.8	103	-0.01	
46		Dibromomethane	0.183	0.164	10.1	105	-0.01	
47		Bromodichloromethane	0.365	0.330	9.6	106	-0.01	
48		2-Nitropropane	0.170	0.158	7.2	112	-0.01	
49		2-Chloroethylvinyl Ether	0.153	0.149	2.1	110	-0.01	
50		cis-1,3-Dichloropropene	0.418	0.364	12.9	102	-0.01	
51	I	d5 - Chlorobenzene	1.000	1.000	0.0	92	-0.01	
52		4-Methyl-2-Pentanone	0.271	0.333	-23.0	111	-0.01	OK for WDS
53	c	Toluene	1.197	1.289	-7.7	97	-0.01	
54		trans-1,3-Dichloropropene	0.461	0.494	-7.2	99	-0.01	
55		Ethyl Methacrylate	0.448	0.472	-5.4	99	-0.01	
56		1,1,2-Trichloroethane	0.244	0.255	-4.4	94	-0.01	
57	s	surr3,Toluene-d8	1.280	1.590	-24.2	116	-0.01	SW
58	s	surr2,bfb	0.579	0.584	-1.0	92	-0.01	
59		Tetrachloroethene	0.322	0.298	7.6	82	-0.01	
60		2-Hexanone	0.156	0.177	-13.3	101	-0.01	
61		1,3-Dichloropropane	0.485	0.429	11.5	80	-0.01	
62		Dibromochloromethane	0.320	0.290	9.6	82	-0.01	
63		1,2-Dibromoethane	0.317	0.286	9.7	83	-0.01	
64	p	Chlorobenzene	0.801	0.701	12.5	79	-0.01	
65		1,1,1,2-Tetrachloroethane	0.293	0.266	9.3	81	-0.02	
66	c	Ethylbenzene	1.379	1.244	9.8	80	-0.01	
67		(m+p)Xylene	0.494	0.451	8.7	81	-0.01	
68		o-Xylene	0.498	0.448	10.0	81	-0.01	
69		Styrene	0.883	0.797	9.7	81	-0.01	
70	p	Bromoform	0.248	0.226	8.9	83	-0.01	
71		Isopropylbenzene	1.301	1.189	8.6	81	-0.01	
72		Cyclohexanone	0.005	0.034 M	-655.8#	726#	-0.01	
73	I	d4 - Dichlorobenzene	1.000	1.000	0.0	95	-0.01	
74	p	1,1,2,2-Tetrachloroethane	0.686	0.604	12.0	85	-0.01	
75		Trans-1,4-Dichloro-2-butene	0.226	0.194	14.3	82	-0.01	
76		1,2,3-Trichloropropane	0.211	0.185	12.3	85	-0.01	
77		n-Propylbenzene	2.808	2.470	12.0	81	-0.01	
78		Bromobenzene	0.687	0.611	11.0	84	-0.01	
79		1,3,5-Trimethylbenzene	1.998	1.745	12.7	82	-0.01	
80		2-Chlorotoluene	1.766	1.530	13.4	79	-0.01	
81		4-Chlorotoluene	2.156	1.878	12.9	82	-0.01	

0129

(#) = Out of Range

Data Qualifying Codes

Two types of data qualifying codes or flags are applied in the course of the data review. The data validation flags indicate data that are not usable for decision making, more than normally biased and/or variable, or not representative of field conditions. These codes and their definitions are presented below in the hierarchy stipulated in the USEPA National Functional Guidelines for Data Review.

Data Validation Flags

Flag	Interpretation
R	The datum is unusable due to serious quality control failures.
U	The datum should be considered a non-detect at the value reported due to blank contamination.
J	The datum should be considered an estimated value, more highly biased or variable than normal.
UJ	The datum should be considered a non-detect, however, the detection limit may be inaccurate.
X	The datum is effected by a special circumstance explained at the bottom of the data report.

The other type of code used by Dames & Moore is a "Reason Code". The reason code indicates the type of quality control failure that lead to the application of the data validation flag.

Reason Codes

GC/MS Organics		GC and HPLC Organics		Inorganics and Conventionals	
Code	Interpretation	Code	Interpretation	Code	Interpretation
a	Incorrect or incomplete analytical sequence	a	Incorrect or incomplete analytical sequence	a	Incorrect or incomplete analytical sequence
c	Calibration failure; poor or unstable response	b	Instrument performance failure	c	Calibration failure
d	MS/MSD imprecision	c	Calibration failure; poor or unstable response	d	MS/MSD imprecision
e	LCSD imprecision	d	MS/MSD imprecision	e	LCSD imprecision
f	Field duplicate imprecision	e	LCSD imprecision	f	Field duplicate imprecision
g	Poor chromatography	f	Field duplicate imprecision	h	Holding time violation
h	Holding time violation	g	Poor chromatography	l	LCS recovery failure
i	Internal standard failure	h	Holding time violation	m	MS/MSD recovery failure
j	Poor mass spectrometer performance	i	Internal standard failure	n	ICS failure
l	LCS recovery failure	l	LCS recovery failure	o	Calibration blank contamination
m	MS/MSD recovery failure	m	MS/MSD recovery failure	p	Preparation blank contamination
r	linearity failure in initial calibration	q	No valid quantitation column	r	Linearity failure in calibration or MSA
s	Surrogate failure	r	linearity failure in initial calibration	s	Serial dilution failure
t	Tuning failure	s	Surrogate failure	v	Post-digestion spike failure
w	Identification criteria failure	u	No confirmation column	x	Field blank contamination
x	Field blank contamination	w	Retention time failure	z	Laboratory storage blank contamination
y	Trip blank contamination	x	Field blank contamination	Q	Other - see bottom of data report for explanation
z	Method blank contamination	z	Method blank contamination		

Columbia Analytical Services inc.

A FULL SERVICE ENVIRONMENTAL LABORATORY

March 22, 2000

Mr. Don Porterfield
Dames & Moore
646 Plank Rd.
Suite 202
Clifton Park, NY 12065

PROJECT:GE-TONAWANDA
Submission #:R2001022

Dear Mr. Porterfield:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 03/15/00 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at (716) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Mark S. Wilson

Mark Wilson
Client Service Manager

Enc.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director prior to report submittal.

1 Mustard St. • Suite 250 • Rochester, NY 14609 • Tele:(716)288-5380 • Fax:(716)288-8475