DENR USE ONLY: ☐ Paper Report ☐ Electronic Data - Email CD (data loaded: Yes / No ) Doc/Event #:

NC DENR
Division of Waste Management - Solid Waste

# Environmental Monitoring Reporting Form

**Notice:** This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

## Instructions:

- **Prepare one form for each individually monitored unit.**
- **Please type or print legibly.**
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

## Solid Waste Monitoring Data Submittal Information

**Name of entity submitting data (laboratory, consultant, facility owner):**

Draper Aden Associates

**Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:**

Name: Karen Weber Phone: 540-552-0444

E-mail: kweber@daa.com

| Facility name: | Facility Address: | Facility Permit # | NC Landfill Rule: (.0500 or .1600) | Actual sampling dates (e.g., October 20-24, 2006) |
|---|---|---|---|---|
| Watauga County Landfill | 336 Landfill Road<br>Boone, NC 28607 | 95-02 | .0500 | September 13-14, 2010 |

**Environmental Status: (Check all that apply)**

☐ Initial/Background Monitoring ☐ Detection Monitoring ☒ Assessment Monitoring ☐ Corrective Action

**Type of data submitted: (Check all that apply)**

☒ Groundwater monitoring data from monitoring wells
☒ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☒ Surface water monitoring data
☐ Methane gas monitoring data
☐ Corrective action data (specify) _____
☐ Other(specify) _____

**Notification attached?**

☐ No. No groundwater or surface water standards were exceeded.
☒ Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

## Certification

**To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.**

Karen Weber — Project Geologist — (540) 552-0444

Facility Representative Name (Print) — Title — (Area Code) Telephone Number

Signature — Date: 6-6-2011

Affix NC Licensed/ Professional Geologist Seal

NORTH CAROLINA LICENSED SEAL 2155 GEOLOGIST KAREN M. WEBER 6-6-11

2206 South Main Street, Blacksburg, VA 24060

Facility Representative Address

C-0861

NC PE Firm License Number (if applicable effective May 1, 2009)

Revised 6/2009

# GROUNDWATER AND SURFACE WATER ASSESSMENT MONITORING REPORT

**September 13-14, 2010 Event**

**Watauga County Landfill**
**Watauga County, North Carolina**
**NCDENR Permit No. 95-02**

**Prepared For:**
Watauga County Board of Commissioners
And
North Carolina Department of Environment and Natural Resources
Division of Solid Waste Management
Solid Waste Section

**June 6, 2011**

Prepared By:

Draper Aden Associates
*Engineering • Surveying • Environmental Services*

DAA Project Number: 6520-39

Draper Aden Associates prepared this document (which may include drawings, specifications, reports, studies and attachments) in accordance with the agreement between Draper Aden Associates and Watauga County

The standard of care for all professional engineering, environmental and surveying and related services performed or furnished by Draper Aden Associates under this Agreement are the care and skill ordinarily used by members of these professions practicing under similar circumstances at the same time and in the same locality. Draper Aden Associates makes no warranties, express or implied, under this Agreement in connection with Draper Aden Associates' services.

Conclusions presented are based upon a review of available information, the results of our field studies, and/or professional judgment. To the best of our knowledge, information provided by others is true and accurate, unless otherwise noted.

Draper Aden Associates' liability, hereunder, shall be limited to amounts due Draper Aden Associates for services actually rendered, or reimbursable expenses actually incurred.

Any reuse or modification of any of the aforementioned documents (whether hard copies or electronic transmittals) prepared by Draper Aden Associates without written verification or adaptation by Draper Aden Associates will be at the sole risk of the individual or entity utilizing said documents and such use is without the authorization of Draper Aden Associates. Draper Aden Associates shall have no legal liability resulting from any and all claims, damages, losses, and expenses, including attorney's fees arising out of the unauthorized reuse or modification of these documents. Client shall indemnify Draper Aden Associates from any claims arising out of unauthorized use or modification of the documents whether hard copy or electronic.

# TABLE OF CONTENTS


**1.0 INTRODUCTION ..... 2**
- 1.1 Data Transmittal Guidelines ..... 2
- 1.2 Site Description ..... 2
- 1.3 Groundwater Monitoring Well Network ..... 4
- 1.4 Surface Water Sampling Network ..... 4
- 1.5 Sampling and Analysis Schedule ..... 5

**2.0 FIELD SAMPLING PROCEDURES ..... 7**
- 2.1 Well Purging and Sample Collection ..... 7
- 2.2 Field Meter Equipment and Calibration ..... 8
- 2.3 Quality Control Samples ..... 8
- 2.4 Sample Containers and Shipment ..... 8
- 2.5 Chain of Custody Documentation ..... 9

**3.0 PRESENTATION OF VALIDATED RESULTS ..... 10**
- 3.1 Laboratory Analysis ..... 10
- 3.2 Analytical Results - Target Organic Parameters and Regulatory Exceedances ... 11
- 3.3 Analytical Results - Non-target Organic Parameters ..... 12
- 3.4 Private Well Sampling Results ..... 12

**4.0 SUMMARY OF MONITORING PROGRAM ..... 15**
- 4.1 Engineering and Institutional Controls ..... 15
- 4.2 Monitored Natural Attenuation for Groundwater Remedy ..... 15
  - 4.2.1 Chlorinated Hydrocarbon Parent-Daughter Compounds ..... 16
  - 4.2.2 Temporal Trend Evaluation ..... 17

**5.0 CONCLUSIONS ..... 28**
- 5.1 Recommended Actions ..... 28

**6.0 REFERENCES ..... 29**


**FIGURES**


**Figure 1 – Site Location Map**
**Figure 2 – Potentiometric Surface Map**
**Figure 3 – Location of Monitoring Wells with NC2L Exceedances**


**APPENDICES**


**Appendix A – Groundwater Elevation Data**
**Appendix B – Analytical Data Tables**
**Appendix C – Field Notes**
**Appendix D – Historical Data Tables (CD-ROM)**
**Appendix E – Laboratory Data and Data Validation Summaries (CD-ROM)**

# 1.0 INTRODUCTION

This report summarizes the results of the September 2010 Assessment groundwater and surface water sampling event at the Watauga County Landfill, North Carolina Department of Environment and Natural Resources (NCDENR) Permit No. 95-02 (facility). Assessment monitoring was conducted in accordance with the *Watauga County Landfill Assessment Plan* (Draper Aden Associates, 1993) and subsequent monitoring program revisions as approved by NCDENR. This monitoring event represents the second semiannual Assessment monitoring event for 2010.

A remedial cap was installed at the facility in the fall of 1996. The remedial cap constitutes source containment as an intermediate remedial action, as established by the EPA's presumptive remedy directive (EPA 540-F-93-035, 1993). Source containment, institutional controls, monitored natural attenuation, and continued assessment monitoring comprise the broad package of corrective measures currently being conducted at the site.

## 1.1 Data Transmittal Guidelines

Notification tables are included with this submittal (CD-ROM) including: 1) Concentrations that exceed North Carolina 2L Groundwater Standards and 2B Surface Water Standards, and 2) Concentrations that Exceed Reporting Limits as outlined in the NCDENR Guidance, dated October 27, 2006, and updated October 16, 2007 for electronic submittal of monitoring data. The Guidance also encourages the electronic submittal of additional reports (including narrative text, additional tables, and figures), and laboratory data (Appendix E, CD-ROM) conforming to the format required by NCDENR electronic submittal guidelines. Note that the laboratory data files provide un-validated results; the validation process is discussed in data validation summary reports presented with the laboratory data and the results presented within this report narrative are based on the validated results.

## 1.2 Site Description

The facility is located approximately 2.75 miles east of the City of Boone, Watauga County, North Carolina south of U.S. Route 421. Development in the vicinity of the landfill is mixed use including residential, commercial, an active quarry, and undeveloped woodland (Figure 1).

The facility is located within the Blue Ridge Belt geologic province in northwestern North Carolina. Geology underlying the site includes an assemblage of metamorphic and plutonic rocks primarily consisting of amphibolite interlayered with granitic gneiss, porphyroclastic biotite-hornblende-plagioclase schist and gneiss, hornblende-biotite gneiss, and hornblende gneiss (Batholemew and Lewis, 1984; Bryant, 1963).

Two aquifer systems exist beneath the facility: an unconfined soil aquifer and a semi-confined fractured bedrock aquifer. A portion of the groundwater from the fracture controlled aquifer is discharged to the soil at lower elevations where it eventually migrates to the South Fork of the New River and its tributaries. A similar potentiometric surface inferred from elevation data in groundwater monitoring wells and local private wells installed in both aquifer systems indicate the soil and fracture controlled aquifers are somewhat interconnected by hydraulically conducive fractures, joints, and/or shear zones. Groundwater flow direction is likely influenced by fracture orientation. Figure 2 illustrates groundwater flow direction at the facility inferred from groundwater elevation data obtained from monitoring wells during the September 2010 monitoring event. Groundwater elevation data are provided on Tables 1A and 1B (Appendix A).

The facility resides within the South Fork of the New River watershed. Three primary drainages are identified at the site (Figure 2): an unnamed tributary of Rocky Branch located directly below the surficial drainage of the fill area (referred to as the North Drainage); an unnamed drainage located below the Bolick Site (referred to as the West Drainage); and an unnamed tributary of Mutton Creek located within the nearby Rock Mountain Heights subdivision (referred to as the Southern Saddle). The North Drainage is the only drainage directly influenced by surface flow from the fill area. Rocky Knob, a topographic knoll located east of the facility and a smaller knoll located southwest are the primary recharge areas at the site.

Along the base of Rocky Knob, discharge is expressed by the presence of surface springs along a northwest trending geologic contact. A series of previously documented springs subsequently covered by landfilling also follow this trend. A spring capture outfall system was installed prior to waste disposal, monitored as surface water sample location S2 (discussed further in Section 1.4).

## 1.3 Groundwater Monitoring Well Network

Nineteen groundwater monitoring wells (MW-1 through MW-19) were installed at the Watauga County Landfill. Monitoring well locations are shown on the Groundwater and Surface Water Monitoring Program Site Map (Figure 2). As noted on Figure 2, MW-6 and MW-16 were abandoned in April 1996; MW-6 was ultimately abandoned due to its proximity to construction of the landfill cap. Abandonment of MW-16 was necessary due to its proximity to construction of the Route 421 bypass. Additionally, MW-7 was abandoned in October 2002 to permit the extension of the transfer station access routes at the site.

In order to maximize the effectiveness and efficiency of the groundwater monitoring program, the assessment well network is defined as "core" wells or "boundary" wells. Core wells were selected based on each well's ability to monitor and characterize migration of potential impacts. Boundary wells were selected based on each well's ability to monitor and characterize the horizontal and vertical extent of impact. Core wells include MW-1, MW-2, MW-3, MW-8, MW-9, MW-10, MW-11, MW-12, MW-15, MW-17, and MW-19 (Figure 2). Boundary wells include MW-4 MW-5, MW-13, MW-14, and MW-18 (Figure 2).

The soil aquifer is absent upgradient of the fill area. Compliance monitoring wells were primarily completed in the fracture controlled aquifer. Monitoring wells MW-3 (paired with deep well MW-17) and MW-11 (paired with deep well MW-12) were completed in the shallow soil aquifer within the West Drainage. Depth to groundwater ranges from approximately 6 to 65 ft. below the ground surface, consistent with historical depth to water measurements.

## 1.4 Surface Water Sampling Network

The goal of the surface water monitoring system at the Watauga County Landfill is to provide representative surface water samples for assessing the water quality downgradient of the waste disposal area. Six surface water monitoring points serve to meet this objective, as illustrated on Figure 2 and outlined below:

- S-1 Sampled to assess the surface water originating from the landfill before the water discharges into the stream.

- S-2 Sampled to assess the surface water originating from the spring capture system located beneath the fill area.
- S-3 Sampled to assess the surface water of the stream below the waste disposal area. (No sampling location is available upstream of the waste disposal area since the stream originates immediately below and adjacent to the disposal area.)
- S-4 Sampled to assess the surface water beneath the Bolick site. (This sampling location was chosen instead of the sediment pond located on the Bolick site to provide a sample that is more representative of the potential influence of groundwater from the shallow soil aquifer.
- S-5 Sampled to assess a seep located below the waste disposal area observed in June 1994.
- S-6 Sampled to assess the persistence of surface water impacts observed at S-4 further downgradient along this drainage.

During each sampling event, a reconnaissance of the landfill is conducted to identify the presence or absence of leachate production. No leachate production has been observed during the sampling events since the initiation of monitoring in 1994.

### 1.5 Sampling and Analysis Schedule

Background monitoring began in 1993 at the Watauga County Landfill. The results of background sampling were provided in the facility's Assessment Plan (Draper Aden Associates, 1993). Based on the results of background sampling and successive assessment sampling events the following inorganic and organic parameters are currently included on the facility's target parameter lists:

- Inorganic Parameters – Barium, chromium, cobalt, iron, nickel, and vanadium.
- Organic Parameters – Benzene, chloroethane, dichlorodifluoromethane, 1,1-dichloroethane, 1,1-dichloroethylene, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, tetrachloroethelene, trichloroethelene, methylene chloride, vinyl chloride, 1,1,1-trichloroethane, chlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, and 1,2-dichloropropane.

As approved by NCDENR, monitoring of additional parameters outlined in 40CFR Part 258 Appendix II – List of Hazardous Organic and Inorganic Constituents that have not been confirmed in monitoring wells to date is no longer required.

In 1998 NCDENR approved a subset of wells to reduce sampling parameters within the core network. As noted below, boundary wells are not included in the current monitoring program; however, these wells are maintained at the site and used to collect periodic water level measurements. Groundwater monitoring wells and surface water locations are currently sampled as follows:

| Sample Locations | Sample Frequency | Sample Parameters |
|---|---|---|
| Core Well Subset (MW-2, MW-3, MW-8, MW-9, MW-12, MW-17) | Semiannual | Organic Target Parameters |
| | Annual (Spring Event) | Inorganic Target Parameters |
| Remaining Core Well (MW-1, MW-10, MW-11, MW-15, MW-19) | Annual (Fall Event) | Organic Target Parameters |
| Boundary Wells (MW-4 MW-5, MW-13, MW-14, MW-18) | n/a | n/a |
| Surface Sample Locations (S-1, S-2, S-3, S-4, S-5, S-6) | Semiannual | Organic Target Parameters |

The September 2010 event included semiannual sampling and analysis of organic target parameters for the core well subset and the surface water sampling locations only. Annual sampling and analysis of inorganic target parameters in the core well subset and organic target parameters in the remaining core wells was completed in March 2010.

# 2.0 FIELD SAMPLING PROCEDURES

Groundwater and surface water samples were collected in accordance with the facility's Assessment Plan (Draper Aden Associates, 1993). Field procedures conducted during the sampling event are presented in the following sections. Field sample collection procedures also generally conform to current USEPA guidance. Copies of field notes recorded during the September 2010 event are included in Appendix C.

## 2.1 Well Purging and Sample Collection

Prior to conducting field activities, field personnel donned disposable powder-free nitrile gloves and applicable personal protection equipment. New gloves were donned prior to conducting each purging and sampling collection activity. Prior to the start of groundwater sample collection activities, a water level indicator was used to measure the depth to water in each monitoring well. Monitoring wells are generally purged and sampled using a dedicated submersible electric pump. All non-dedicated equipment (i.e., water level indicator) was decontaminated between sampling of each monitoring well.

The volume of water residing in each well was calculated from depth to water measurements and a minimum of three well casing volumes of water was purged from each well or until the well was purged dry prior to sample collection. During well purging, indicator parameters pH, specific conductance (SC), and temperature were measured to evaluate physicochemical groundwater quality prior to sample collection. Each monitoring well was purged until the field parameters approached general steady state conditions. Approximate stabilization of field measurements of pH, SC, and temperature suggested that groundwater being sampled was representative of the near-aquifer. The field measurements were recorded in the field notes included in Appendix C.

Within 24 hours of purging, groundwater samples were collected from each monitoring well in order of decreasing volatility: volatile organic compounds (method 8260B) and total metals (6000 and 7000 series methods). All groundwater samples were containerized and preserved in accordance with USEPA protocols, labeled and immediately placed on ice in a cooler.

Additionally, six residential/commercial use private wells are sampled semiannually for 59 volatile organic compounds by USEPA method 524.2 (see Chain-of-Custody documentation with laboratory data for a list of compounds analyzed by 524.2, CD-ROM). These are sampled from exterior spigots at each location.

## 2.2 Field Meter Equipment and Calibration

Field measurements of pH, SC, oxidation-reduction potential (ORP), dissolved oxygen (DO), and temperature were analyzed at each well by completing multiple measurements throughout the purge. A YSI model 650 pH/SC/ORP/DO/temperature meter was used for the field measurements of these parameters. The meter was calibrated in the field using laboratory-grade buffers for pH and KCl solution for SC. Field calibration and measurements are documented in the field notes taken for this event and are presented in Appendix C.

## 2.3 Quality Control Samples

Quality control (QC) field samples consisted of trip blanks for all required analyses. The trip blanks were prepared and supplied by the analytical laboratories and utilized sample containers identical in physical and chemical integrity to the containers used for actual sample collection. The trip blanks were filled with a water matrix, preserved, and sealed by the analytical laboratories. The trip blanks accompanied the actual field samples throughout the sample collection event and served to evaluate potential extraneous sample contamination associated with sample kit preparation, field activities, and/or transportation. Field blanks were not collected, due to the use of dedicated purging/sampling equipment. Additional quality control samples were prepared and analyzed by the laboratory, such as method blanks, reagent blanks, and matrix spikes.

## 2.4 Sample Containers and Shipment

Groundwater samples were collected in USEPA approved containers prepared and supplied by the analyzing laboratory. The types and volumes of sample containers used, as well as the respective methods of preservation, were recorded on chain-of-custody (COC) documentation (included with the laboratory data on CD-ROM). Groundwater samples were containerized and preserved in accordance with USEPA protocols, labeled, and immediately placed on ice in a cooler. A custody

seal was placed on each sample cooler prior to shipping to verify samples were not disturbed during transport. Each cooler containing groundwater samples was transported via overnight carrier to the analytical laboratory with appropriate COC documentation.

### 2.5 Chain of Custody Documentation

Standardized COC forms were used to document custody of the samples from the time they were collected in the field to the time the samples were relinquished to the analytical laboratory. COC documentation includes site location information, sample collection locations, numbers and types of sample containers, sample preservation methods, filtration procedures, MS/MSD samples, blank samples, dates and times of sample collections, names of sample collectors, and dates and times of each custody change. COC documentation was transported with the samples to the respective analytical laboratories. COC documentation is included with the analytical laboratory reports (on CD-ROM, Appendix E).

# 3.0 PRESENTATION OF VALIDATED RESULTS

As required under NCDENR Memorandum for *Environmental Monitoring Data for North Carolina Solid Waste Management Facilities* dated October 16, 2007, the following additional information is presented on CD-ROM under the folder Electronic Data Deliverables (EDD):

- NCDENR Environmental Monitoring Data Form,
- Original Laboratory Analytical Reports, and
- Analytical Results based on NCDENR EDD templates.

Please note the data on EDD are presented as received from the laboratory (i.e., unvalidated data). The following sections discuss results after Draper Aden Associates completed third party validation of the data. Validated results are presented on Table 2A Organic Results – Core Wells and Table 2B Organic Results – Surface Water Samples, Appendix B. Historic Data Tables are presented in Appendix D.

## 3.1 Laboratory Analysis

Commercial analytical laboratories were contracted to provide identification and quantitation of target parameters. Analysis for VOCs by Methods 8260B (groundwater samples) and EPA CLP-SOMO 1.2 volatile target compounds (surface water samples) were performed by CompuChem Environmental Corporation, a division of Liberty Analytical Corporation of Cary, North Carolina. Analysis for VOCs by EPA Method 524.2 for private well samples was performed by Lancaster Laboratories of Lancaster, Pennsylvania (NC state-certified lab for Method 524.2). Quality assurance and quality control objectives were established to ensure the groundwater monitoring data were of adequate quality for the intended use. The objectives include: precision, accuracy, representativeness, completeness and comparability along with internal quality control methods for field procedures. The use of these quality control measures help to validate the findings of the September 2010 monitoring event.

Analytical methods were performed in accordance with the procedures outlined in the USEPA document *Test Methods for Evaluating Solid Waste – Physical/Chemical Methods, SW-846, 3rd ed., Final Update I, II/IIA and III* (USEPA, 1996) (commonly referred to as SW-846), or for

CLP analytical techniques in accordance with the procedures listed in the CLP-SOW Organics SOMO 1.2. The analytical methods used for this project were the most appropriate methods available within the framework of VSWMR and SW-846. The laboratory analytical reports and associated data validation documentation are presented in Appendix E on CD-ROM.

Draper Aden Associates validated the data set in general accordance with SW-846, the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999),* and *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008),* where applicable. In addition, the analytical laboratory QA/QC data were evaluated for conformance with and adherence to prescribed data quality objectives (DQOs). Predefined standardized data validation qualifiers were used to communicate unique characteristics of the data identified in the review process

### 3.2 Analytical Results - Target Organic Parameters and Regulatory Exceedances

Analytical results of target organic parameters are presented on Table 2A (Appendix B). Figure 3 illustrates the location of wells where target organic parameters were detected at a concentration that exceeded the NC2L standard during this event. The following list identifies the target organic parameters that exceed the NC2L standards on the September 2010 monitoring events, and the monitoring well(s) in which the parameters were observed.

Benzene was reported at a concentration above the current NC2L standard in monitoring well MW-9.

1,1-Dichloroethane was reported at a concentration above the current NC2L standard in wells MW-2, MW-3, MW-9, MW-10, MW-11 and MW-12.

1,1-Dichloroethene was reported at a concentration above the current NC2L standard and the USEPA MCL in MW-2 and MW-10.

Tetrachloroethene was reported at a concentration above the current NC2L standard in wells MW-2, MW-9, MW-10, MW-12, MW-17, and MW-19.

Trichloroethene was reported at a concentration above the current NC2L standard in well MW-12.

1,1,1-Trichloroethane was reported at a concentration above the current NC2L standard and the USEPA MCL in well MW-2.

Vinyl Chloride was reported at a concentration above the current NC2L standard in wells MW-2, MW-11 and MW-12. Vinyl chloride was also reported in MW-9 at a concentration above the USEPA MCL and the current NC2L standard.

Target organic parameters were detected in surface water samples collected from S-1, S-2, S-4, and S-5; however no detections were observed above the USEPA MCL or current NC2L standards.

### 3.3 Analytical Results - Non-target Organic Parameters

Though not part of the routine target parameter list, additional volatile organic compounds are analyzed and reported by Method 8260B. Of these additional compounds, chloroform and carbon disulfide were detected at low, estimated concentrations below the QL in MW-19 (Table 3, Appendix B). Chloroform was historically detected in well MW-2, MW-12 and MW-17 at very low levels below the laboratory quantitation limit. Carbon disulfide was rarely detected in the past. These non-target organic parameters will continue to be monitored and results evaluated for trends.

### 3.4 Private Well Sampling Results

Private well sampling began in 1993. Sampling between 1994 and 2000 was jointly conducted by the Appalachian District Health Department (ADHD) and the NC State Laboratory of Public Health. Private well sampling between 2001 and the present were conducted by Draper Aden Associates at the direction of Watauga County with oversight by State officials. The objective of the private well sampling and analysis program is to investigate and evaluate the potential influence and associated risks from the landfill on neighboring groundwater resources.

As noted previously, six residential/commercial private wells are sampled semiannually for volatile organic compounds by USEPA method 524.2 as follows (see Figure 2 for approximate well locations):

- 2239 Hwy 421 South (Well Reference No. 1) – Not In Use
- 2347 Hwy 421 South (Well Reference No. 2) – Non-potable Use Only
- BREMCO, 2491 Hwy 421 South (Well Reference No. 5) – Not In Use
- Hollar and Greene Produce, 230 Cabbage Row (Well reference No. 6) – In Use
- 2711 Hwy 421 South (Well Reference No. 15) – Non-potable Use Only
- 2737 Hwy 421 South (Well Reference No. 16) – Non-potable Use Only

All locations, except Hollar and Greene Produce were apparently connected to the City of Boone public drinking water supply. Analytical results from the September 2010 sampling of these wells are discussed below. Target analytes that were detected on the September 2010 sampling event are presented on Table 4 (Appendix B); historical private well results are provided in Appendix D. Note, no analytes were detected in wells No. 1 and No. 6; therefore, these are not included on Table 4.

Draper Aden Associates reviewed the data prior to submitting results to the individual property owners; however, a formal validation of the data was not conducted. The following NC2L or MCL exceedances were identified in samples collected during the September 2010 sampling event:

- 1,1-Dichloroethane concentrations reported for the BREMCO well and Well No. 2 exceed the NC2L standard. Both locations are connected to the public water system, no immediate action is planned at this time.

- Vinyl chloride, reported in the BREMCO well, also exceeds the NC2L standard, however, the analytical result is considered estimated. The result does not exceed the MCL for vinyl chloride.

- The organic parameter sec-butylbenzene was detected in the BREMCO well on the September 2010 event, but has not been reported during previous sampling events. This parameter will continue to be tracked during subsequent monitoring events.

The September 2010 target parameter results observed in the six private well samples are consistent with historical results from these wells. The Hollar & Greene Produce well (Well Reference No. 6) is the only private well sampled that is apparently still in use as a potable water source. No target organic parameters were detected in Hollar & Greene Produce well, which is consistent with historical monitoring.

Given that the remaining private wells are either not in use (BREMCO, Well Reference No. 1), or are non-potable water sources (Well References No. 2, 15 and 16), no further immediate action is proposed. Semiannual monitoring of the six residential/commercial private wells will continue.

Historically, 61 wells that are adjacent to the landfill were sampled at least once for potential impact from the landfill. Residences primarily in the southern saddle and western drainage were connected to public water as noted on Figure 2. Eighteen of the remaining wells are periodically sampled as part of the private well sampling program. These were last sampled in March 2008 with no indication of landfill-derived impact.

# 4.0 SUMMARY OF MONITORING PROGRAM

Source containment, implemented through a remedial cap, institutional controls, monitored natural attenuation, and continuing monitoring comprise the broad package of corrective action implemented at the site as discussed in the following sections. A risk assessment to support the corrective action was completed for the landfill and documented in 1993 and 1996 (Draper Aden Associates 1993, 1996) and updated in 2000 (Draper Aden Associates, 2000). The following discussion highlights the primary corrective measures in-place.

## 4.1 Engineering and Institutional Controls

Engineering controls at this facility include facility closure, followed by installation of a landfill remedial cap in 1996. Closure and capping of the landfill mitigates water infiltration through the waste thereby reducing leachate formation and preventing direct exposure of human and ecological receptors to solid waste.

Institutional controls include the extension of public water along the Route 421 alignment north of the facility and to select residences located south of the facility. Additionally, facility personnel manage the site and control access during operating hours (transfer station, animal shelter) and access is restricted to authorized personnel during non-operating hours. Additionally, development at the site will be restricted in perpetuity as a result of the landfill.

## 4.2 Monitored Natural Attenuation for Groundwater Remedy

Site specific sampling provides historical data for evidence that natural attenuation processes occur in groundwater to reduce solid waste constituent mass and concentration. The core monitoring wells are located at upgradient, cross-gradient, and downgradient locations relative to the groundwater plume and waste unit. Historical data tables are provided in Appendix D, showing decreasing concentrations over time, and changing relative ratios of parent-daughter chlorinated organic compounds. The results tabulated in Appendix D are the result of intrinsic bioremediation, which is the primary means by which natural attenuation processes reduce constituent mass. Although NC2L groundwater protection standards continue to be exceeded at the site, natural attenuation processes are successfully reducing the concentration, extent, and total mass of impact.

Field measurements of oxidation-reduction potential (ORP) and dissolved oxygen (DO) are monitored during well purging and immediately before sample collection and documented in the field notes (Appendix C). Observations of ORP at the core wells monitored during September 2010 fall within the range that supports reductive dechlorination, ranging from 178.5 mV in MW-17 to -87.4 mV in MW-19 (field notes, Appendix C). However, DO readings are greater than 0.5 mg/L, which limits the functionality of anaerobic bacteria.

While field-measured parameters are useful indicators, intrinsic biodegradation susceptibility and progress toward target organic parameter degradation via MNA processes are reflected by the ratios of parent (source) to daughter (product) analyte concentrations. For example, mass degradation of trichloroethene (parent) is interpreted from the presence of daughter product 1,1-dichloroethane in groundwater. The following discussion summarizes the observed parent-daughter relationships that suggest MNA processes are progressing toward diminishing the mass and concentration of target organic parameters in groundwater.

Following the parent-daughter discussion below, an assessment of the overall temporal trend in parent target organic parameters is presented, further reflecting the progress of MNA in reducing groundwater concentrations.

### 4.2.1 Chlorinated Hydrocarbon Parent-Daughter Compounds

Both parent and daughter compounds are observed in each of the three flow paths: western drainage, northern drainage, and southern saddle. The biotic degradation (microbially mediated oxidation-reduction reactions that degrade contaminants) of tetrachloroethene(PCE)→trichloroethene(TCE)→cis-1,2-dichloroethene(cis-1,2-DCE)→vinyl chloride (VC) is observed in all three drainage areas and the degradation of 1,1,1-trichloroethane (1,1,1-TCA)→1,1-dichloroethane(1,1-DCA)→Chloroethane is observed in the northern drainage area and to a lesser degree in the southern saddle. Additional abiotic degradation (chemical transformation that degrades without microbial facilitation) of 1,1,1-trichloroethane→1,1-dichloroethene (1,1-DCE) and ultimately to vinyl chloride is also evident in the northern drainage. These are discussed further in the following section.

The private well associated with the BREMCO facility has historically detected a suite of target organic parameters. Increasing 1,1-dichloroethane and chloroethane are observed at this location where historically only trace or undetected amounts of 1,1,1-trichloroethane are observed (source). The analytical data from this well and parent-daughter compounds present help define the extent of plume migration in the northern drainage.

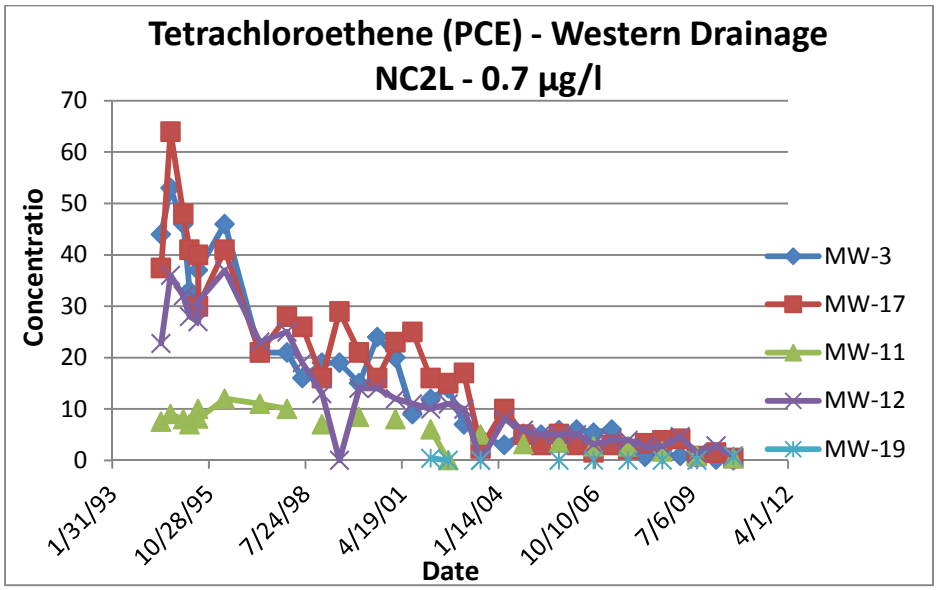
### 4.2.2 Temporal Trend Evaluation

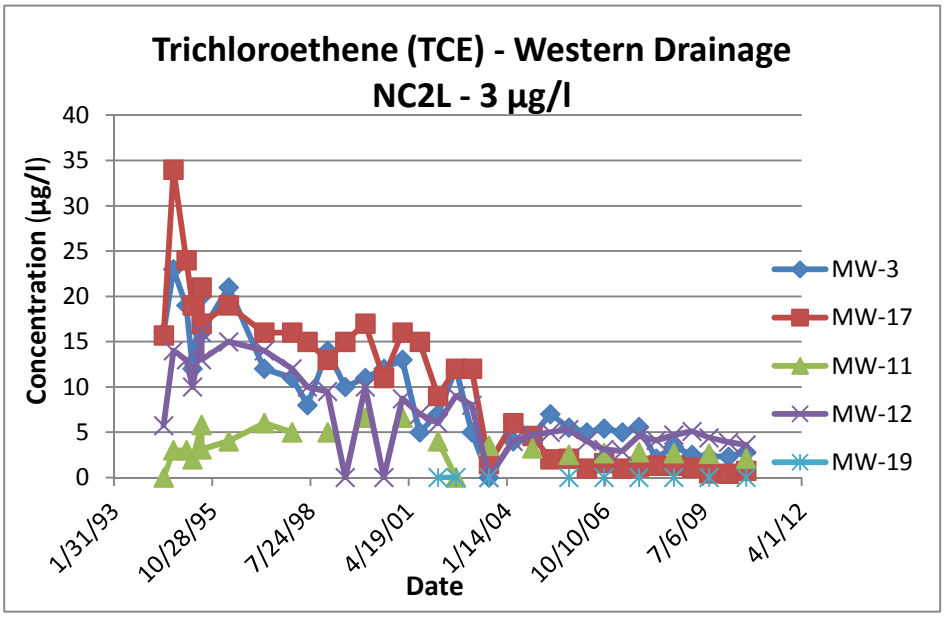
Monitoring results indicate reductions in the extent and concentration of impact to groundwater have occurred across the site. Although target constituents continue to be observed in off-site locations, reductions of concentrations and extent are observed. Analytical data collected from the core monitoring wells are used to evaluate groundwater quality in the western drainage, northern drainage, and southern saddle and provide continuous data for evaluation of plume degradation as presented below in the following graphs, which illustrate historic detections of target organic parameters in each of the drainage areas. The following presentation is primarily based on those constituents in which a NC2L standard was exceeded during the September 2010 groundwater monitoring event or if the constituent applies to the parent-daughter compound discussion above.

#### 4.2.2.1 Western Drainage

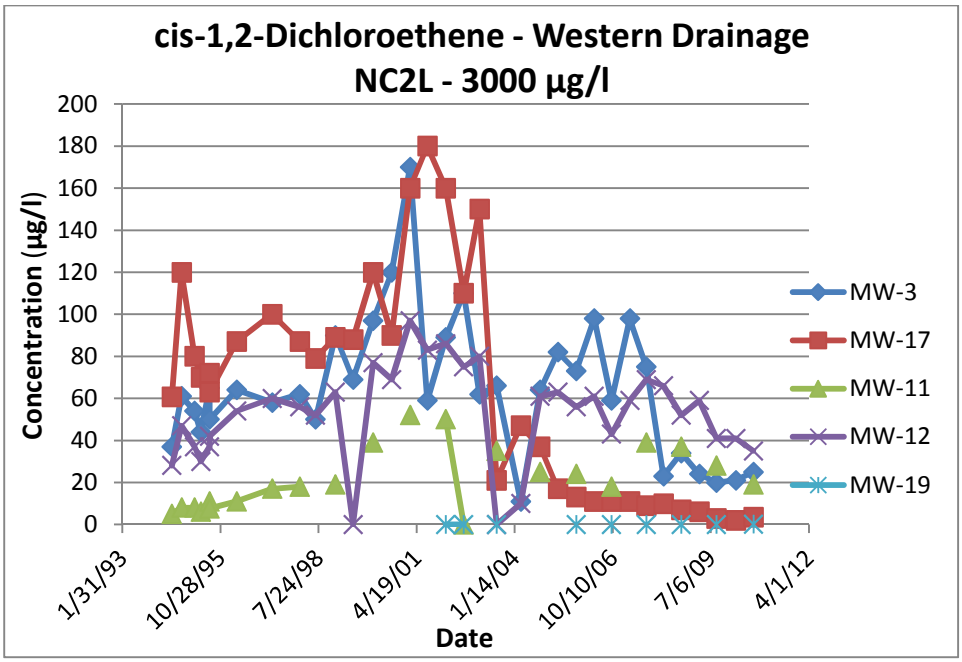
**Western Drainage – Degradation of PCE→TCE→cis-1,2-DCE→VC**

The downward trend in concentrations of tetrachloroethene and trichloroethene in wells along the western drainage is apparent in the graphs below indicating that natural attenuation processes are effectively reducing solid waste constituent mass and concentration in the groundwater plume.

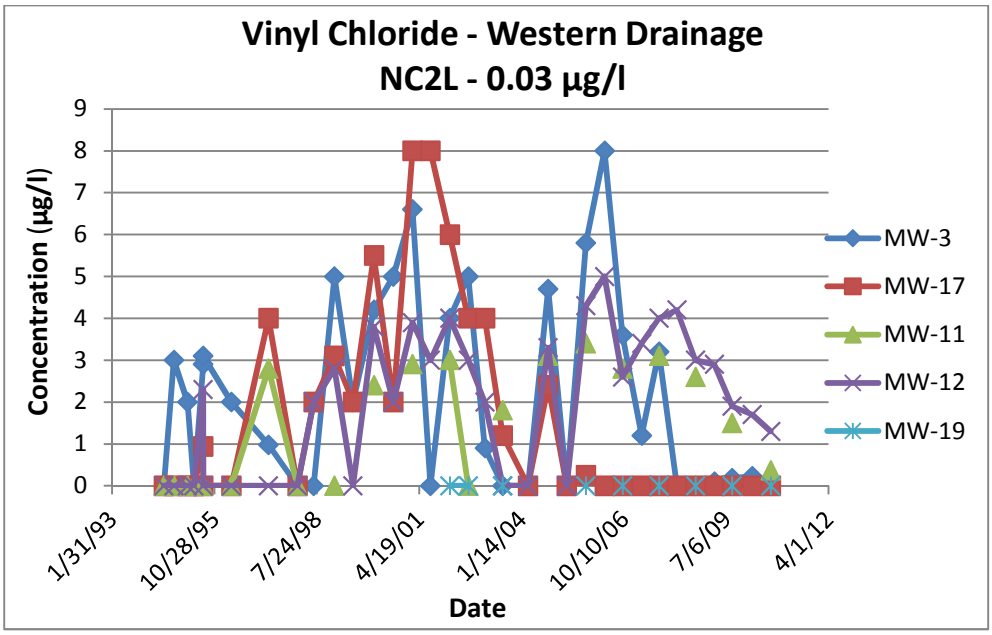



As tetrachloroethene and trichloroethene concentrations degrade, cis-1,2-dichloroethene concentrations generally increase starting in the late 1990s, degradation of cis-1,2-dichloroethene can be inferred by a reduction in concentration first in MW-17 (deep pair with MW-3), followed by MW-3 (shallow), MW-11(shallow pair with MW-12), and MW-12 (deep). Where daughter concentrations also show an indication of degradation it is likely due to reduced parent compounds in groundwater due to intrinsic biodegradation (see below).



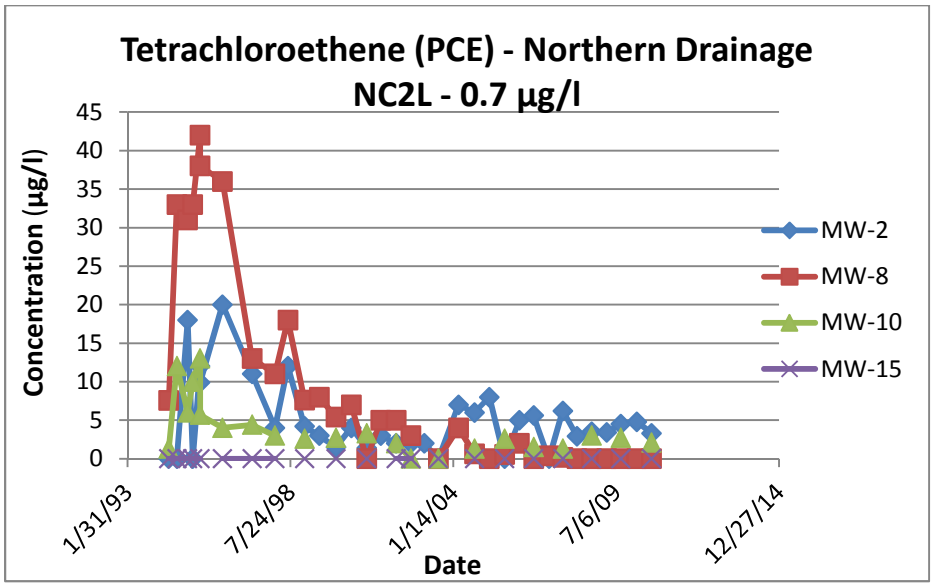

There is evidence of a downward trend in concentration of vinyl chloride in wells MW-3 (shallow) and MW-17 (deep) closest to the waste unit and a slight upward trend in concentration of vinyl chloride in wells MW-11 (shallow) and MW-12 (deep) farther from the waste unit as degradation of parent products continues throughout the plume. Production of cis-1,2-dichloroethane and vinyl chloride is evidence of dechlorination reactions driven by intrinsic bioremediation in the western drainage and a reduction of parent compounds in groundwater.

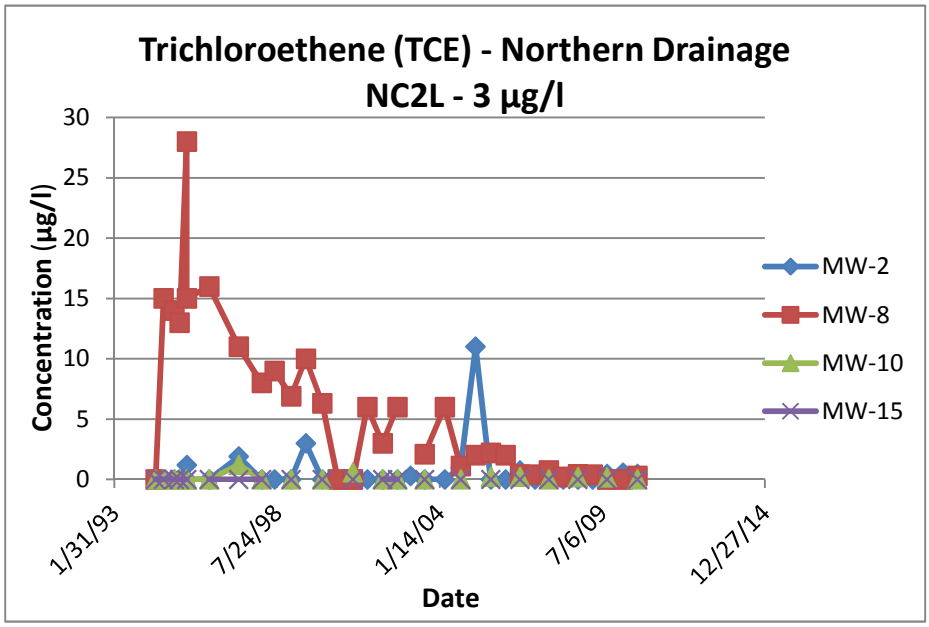



4.2.2.2 Northern Drainage

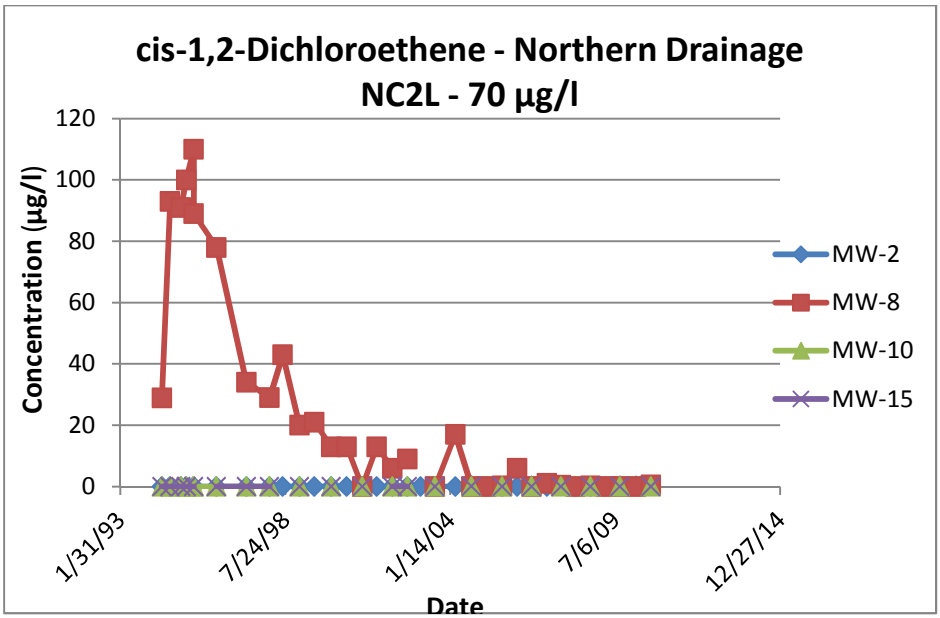
**Northern Drainage - Degradation of PCE→TCE→cis-1,2-DCE→VC**

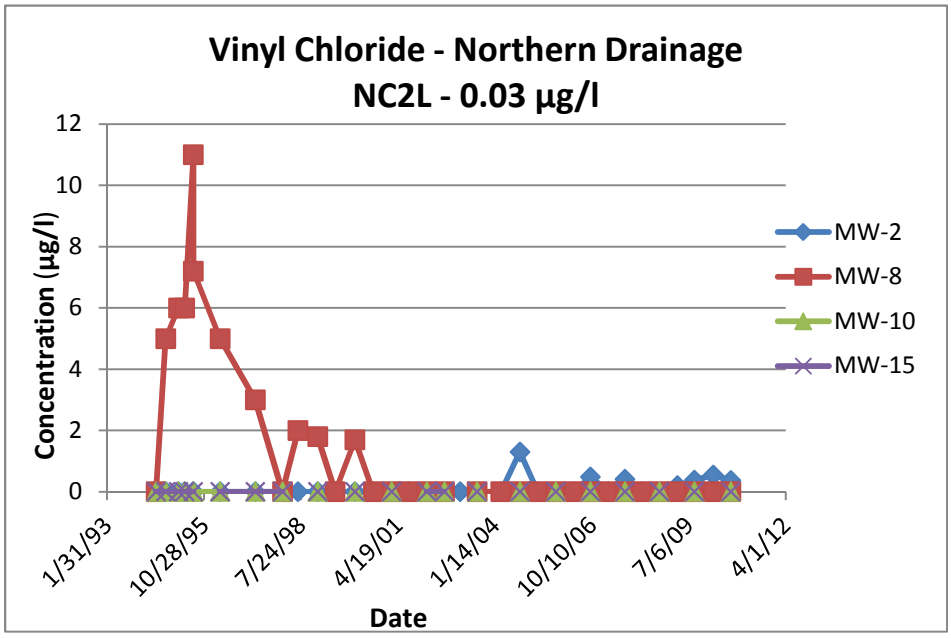
Similar to the western drainage area, the downward trend in concentrations of tetrachloroethene and trichloroethene in wells along the northern drainage indicates that natural attenuation processes are effectively reducing solid waste constituent mass and concentration in the groundwater plume.



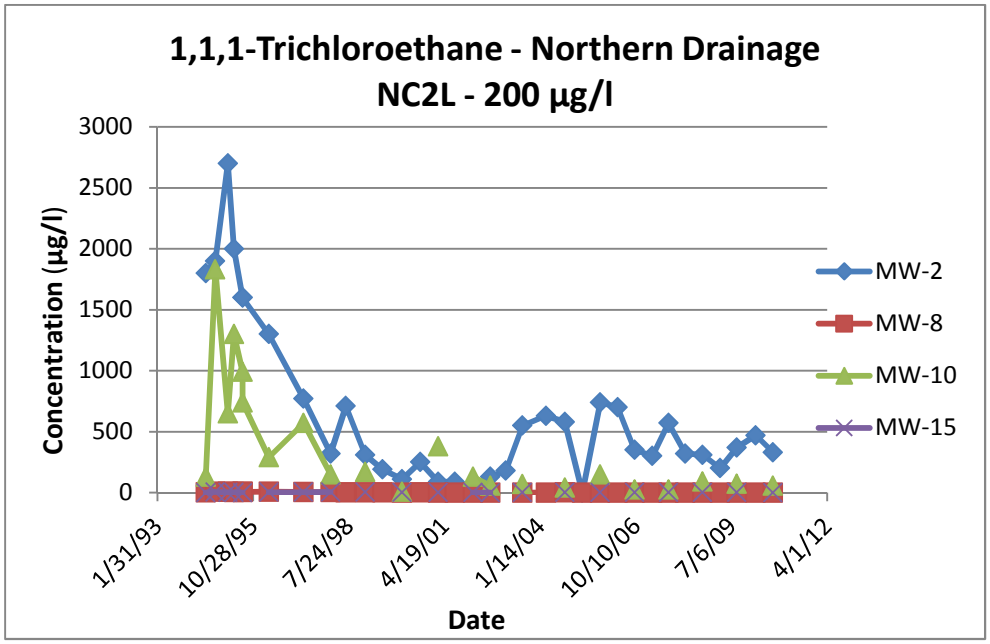

Based on the decline in concentrations of tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, and vinyl chloride in MW-8, microbial mitigated degradation of tetrachloroethene and trichloroethene is evident at this location, which lies west of the waste as opposed to MW-10 and MW-2, which lie east and north respectively.


cis-1,2-Dichloroethene - Northern Drainage
NC2L - 70 µg/l
Concentration (µg/l)
120
100
80
60
40
20
0
1/31/93
7/24/98
1/14/04
7/6/09
12/27/14
Date
MW-2
MW-8
MW-10
MW-15


Vinyl Chloride - Northern Drainage
NC2L - 0.03 µg/l
Concentration (µg/l)
12
10
8
6
4
2
0
1/31/93
10/28/95
7/24/98
4/19/01
1/14/04
10/10/06
7/6/09
4/1/12
Date
MW-2
MW-8
MW-10
MW-15

**Northern Drainage - Degradation of 1,1,1-TCA→1,1-DCA→Chloroethane**

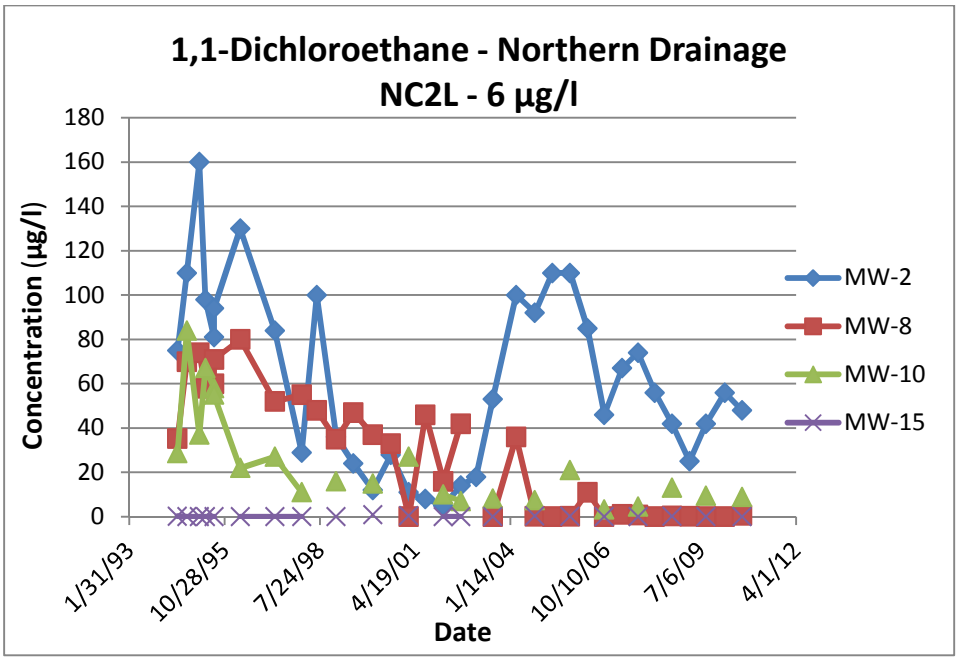
Note the concentrations of 1,1,1-trichloroethane in the mid-1990s were often observed at levels exceeding 1,000 µg/l in wells MW-10, which lies approximately 100 feet and slightly cross-gradient to the waste with respect to groundwater flow and MW-2, which lies approximately 440 feet downgradient from the waste with respect to groundwater flow.

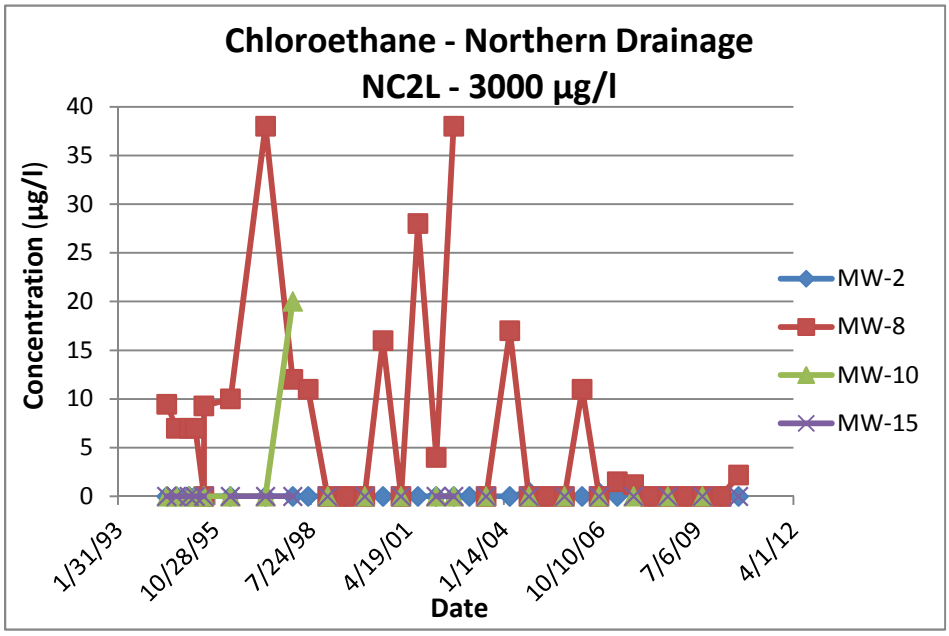



Biotic degradation of 1,1,1-trichloroethane to 1,1-dichloroethane and ultimately to chloroethane appears incomplete in wells MW-2 and MW-10 based on variable observations of 1,1-dichloroethane and the lack of observation of chloroethane at these locations.

1,1-dichloroethane is reported as a fairly recalcitrant compound, with a relatively low degradation rate under anaerobic conditions and an even lower degradation rate in aerobic conditions. The relatively slow reaction kinetics leads to persistence of 1,1-dichloroethane in groundwater.

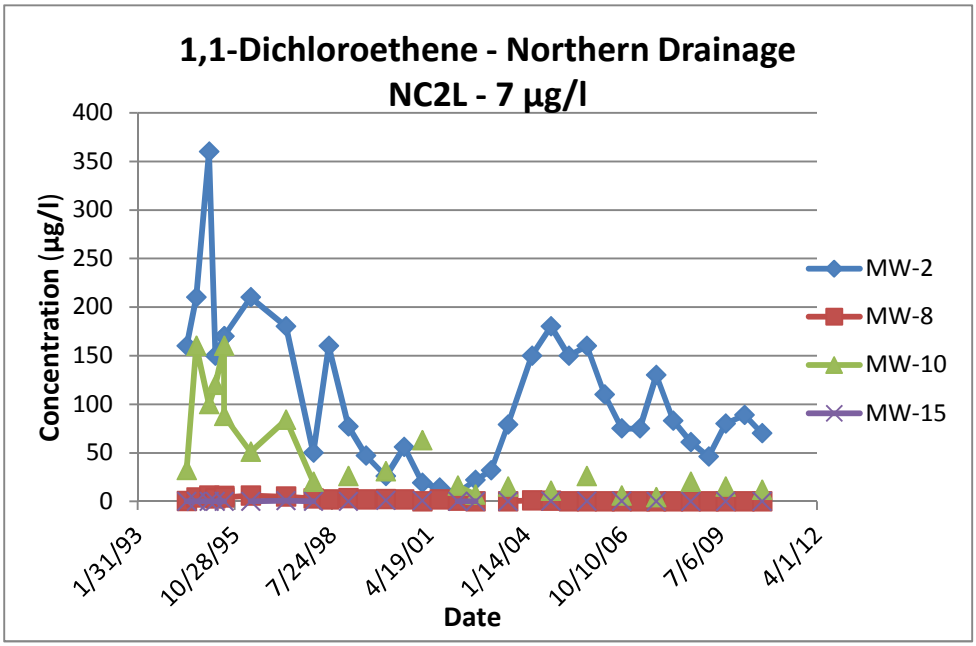
The presence of 1,1-dichloroethane and chloroethane in MW-8 indicate that intrinsic biodegradation of 1,1,1-trichloroethane was likely completed prior to initiating groundwater monitoring at these locations. Degradation of tetrachloroethene and trichloroethene were also observed in MW-8, as discussed previously.


1,1-Dichloroethane - Northern Drainage
NC2L - 6 µg/l
Concentration (µg/l)
180
160
140
120
100
80
60
40
20
0
1/31/93
10/28/95
7/24/98
4/19/01
1/14/04
10/10/06
7/6/09
4/1/12
Date
MW-2
MW-8
MW-10
MW-15


Chloroethane - Northern Drainage
NC2L - 3000 µg/l
Concentration (µg/l)
40
35
30
25
20
15
10
5
0
1/31/93
10/28/95
7/24/98
4/19/01
1/14/04
10/10/06
7/6/09
4/1/12
Date
MW-2
MW-8
MW-10
MW-15

**Northern Drainage - Degradation of 1,1,1-TCA→1,1-DCE→VC**

Referring back to the graph of 1,1,1-trichloroethane in the northern drainage, the presence of 1,1-dichloroethene (1,1,1-trichloroethane→1,1-dichloroethene→vinyl chloride) indicates that both abiotic and biotic degradation play a role in the breakdown of 1,1,1-trichloroethane. However, degradation of 1,1-dichloroethene to vinyl chloride is not complete as vinyl chloride has not been observed at significant concentrations in wells MW-2 and MW-10 or further from the waste in MW-15.

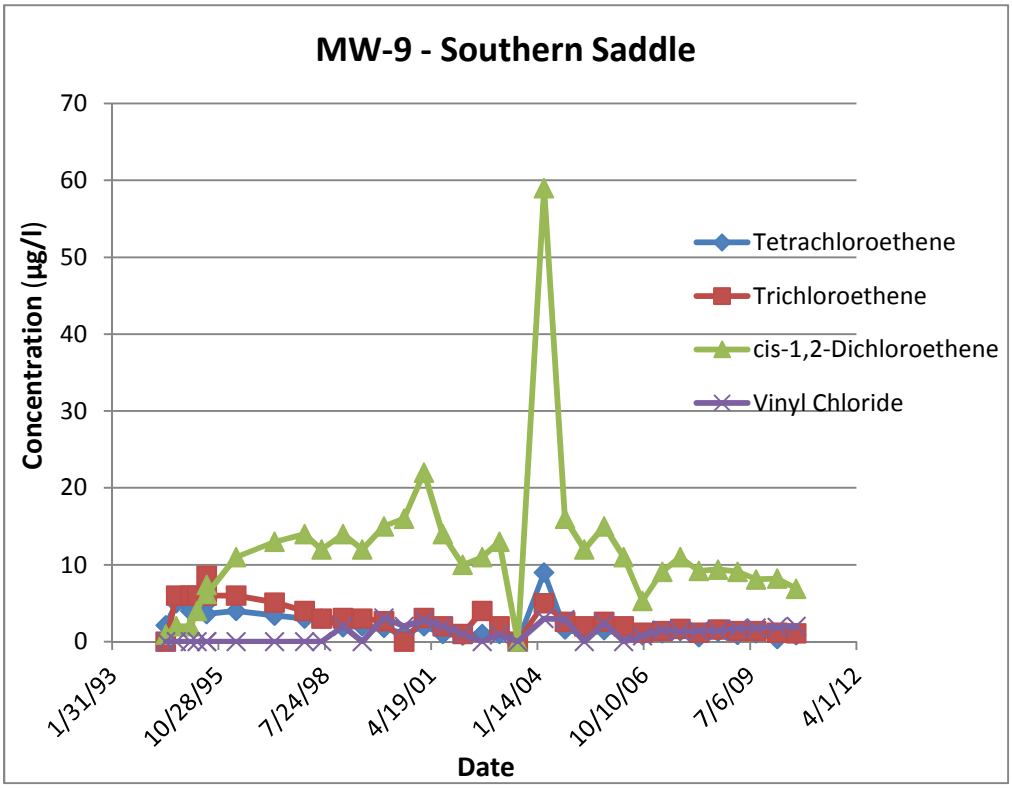



4.2.2.3 Southern Saddle

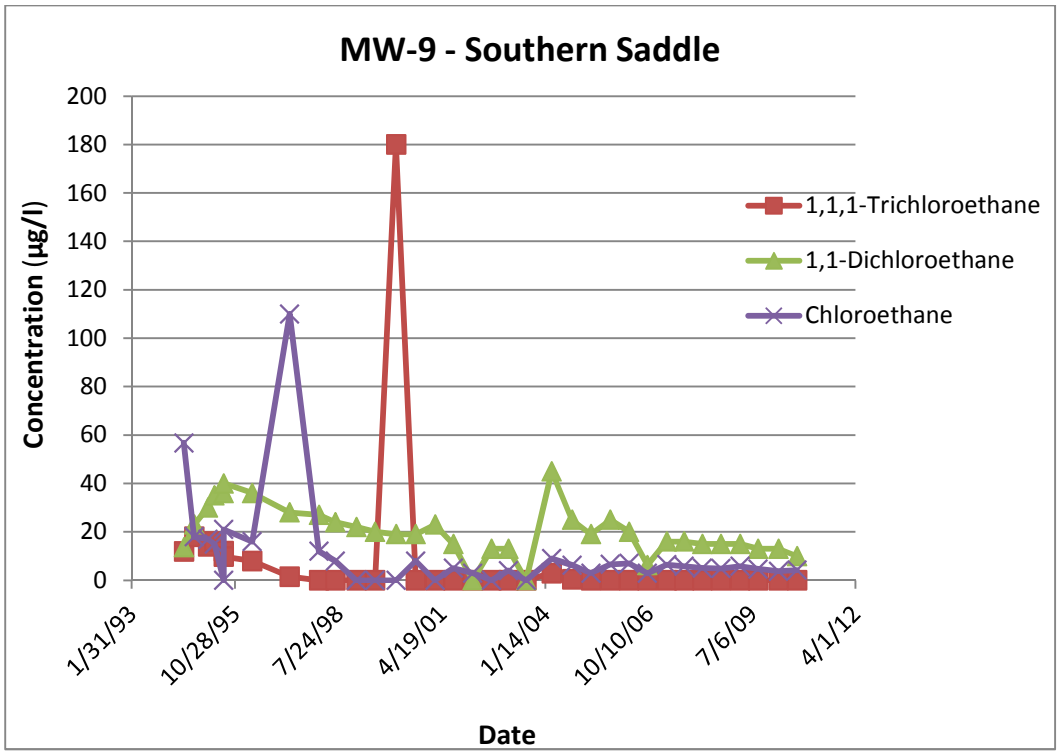
Two core wells MW-1 and MW-9 monitor groundwater quality in the southern saddle:. Historically, analytical data from groundwater collected at MW-1 indicate there is no impact from the landfill (Appendix D). Data from MW-9 indicate a variety of organic target analytes are detected in the local groundwater.

Similar to the northern and western drainages, the degradation sequence of tetrachloroethene→trichloroethene→cis-1,2-dichloroethene→vinyl chloride appears evident in MW-9. Both tetrachloroethene and trichloroethene show slight downward concentration trends. Despite the elevated detection of cis-1,2-dichloroethene in 2004, which was not greater than the

NC2L standard, this compound appears to demonstrate a downward trend beginning in late 2005. Vinyl chloride demonstrates a slightly increasing trend with consistent detections since late 2006 to the present and variable, yet slight, NC2L exceedances since monitoring began. The linear trends observed over time supports the fact that biotic degradation of these compounds is occurring at this location.




The degradation sequence of 1,1,1-trichloroethane→1,1-dichloroethane→chloroethane is also observed in MW-9, with all compounds currently demonstrating decreasing trends and only 1,1-dichloroethane exceeding the current NC2L standard.




Benzene has also been detected in MW-9 at concentrations that exceed the NC2L standard. However, benzene has not historically been detected above the EPA MCL (5 µg/l) and is not illustrated herein.

No residential wells in the southern saddle were sampled in 2010. Eighteen residential wells located south of the southern saddle were sampled in September 2008 and ten residential wells located outside the area currently served by public water were sampled in March 2005. No constituents were verified as detected in any well located south of the southern saddle in 2005 and 2008. Historically, organic constituents were detected at trace levels in wells located south of the southern saddle in 1992 and 1993 that have diminished to non-detect levels. One well, Well Reference No. 24 indicated trace levels of chloroform, bromodichloromethane, and dibromochloromethane; these compounds have not been detected in groundwater samples at the landfill and are a known byproduct of well chlorination. Nonetheless, this well was connected to public water.

# 5.0 CONCLUSIONS

Assessment data collected to date provides evidence of plume attenuation. Ongoing monitoring will provide temporal data necessary to continue assessing constituent transport, migration, and fate. As plume attenuation continues, source controls (cap) will reduce leachate production. Natural attenuation processes will continue to reduce plume mass and concentrations and provide for a continuously diminished plume boundary.

Ongoing natural attenuation indicator monitoring is expected to enable the identification of conditions affecting reductive dechlorination and aerobic degradation processes existing at impacted locations across the site. The identification of favorable and/or unfavorable site conditions that can either promote or limit active natural attenuation processes may enable the relaxation of factors impeding intrinsic reduction and oxidation reactions at the site.

Private well sampling will continue at the site to evaluate potential risk to these water sources. Environmental receptors, such as surface streams, have been identified and impact is not anticipated based on surface and groundwater data collected to date.

## 5.1 Recommended Actions

The next assessment monitoring event was conducted in March 2011. The monitoring event was conducted in accordance with the following monitoring program schedule:

- Semiannual monitoring of the core monitoring well subset;
- Annual analysis for target metals;
- Semiannual surface water monitoring; and
- Semiannual private well sampling.

Subsequent monitoring is scheduled for September 2011.

## 6.0 REFERENCES


Bartholemew, M.J., and Lewis, D.E., 1984, *Evolution of Grenville Massifs in the Blue Ridge Geologic Province, Southern and Central Appalachians,* Geologic Society of America Special Paper No. 194, p 229-254.

Bryant, B. and Reed, J.C., Jr., 1970, *Geology of the Grandfather Mountain Window and Vicinity, North Carolina and Tennessee,* US Geological Survey Professional Paper No. 615, 190 p.

Draper Aden Associates, 1993, *The Watauga County Landfill, Permit No. 95-02 Assessment Plan,* DAA Job No. 6520-13, Blacksburg, Virginia, September 3, 1993.

Draper Aden Associates, 1996, *The Watauga County Landfill, Permit No. 95-02 Remedial Investigation and Alternative Report,* DAA Job No. 6520-18, Blacksburg, Virginia, January 12, 1996.

Draper Aden Associates, 2000, *Closed Watauga County Landfill Conceptual Site Model Update: Horizontal and Vertical Plume Delineation Maps,* DAA Job No. 6520-24, Blacksburg, Virginia, January 4, 2000.

North Carolina Department of Environment and Natural Resources, 15A NC Administrative Code 13B.1600, Effective January 4, 1993

North Carolina Department of Environment and Natural Resources, 15A NC Administrative Code 2B, *NC and EPA Criteria Table*, February 5, 2010.

North Carolina Department of Environment and Natural Resources, 15A NC Administrative Code 2L.0202 Groundwater Standards, Effective January 1, 2010.

North Carolina Department of Environment and Natural Resources, *Memorandum: Environmental Monitoring Data for North Carolina Solid Waste Management Facilities,* October 16, 2007.

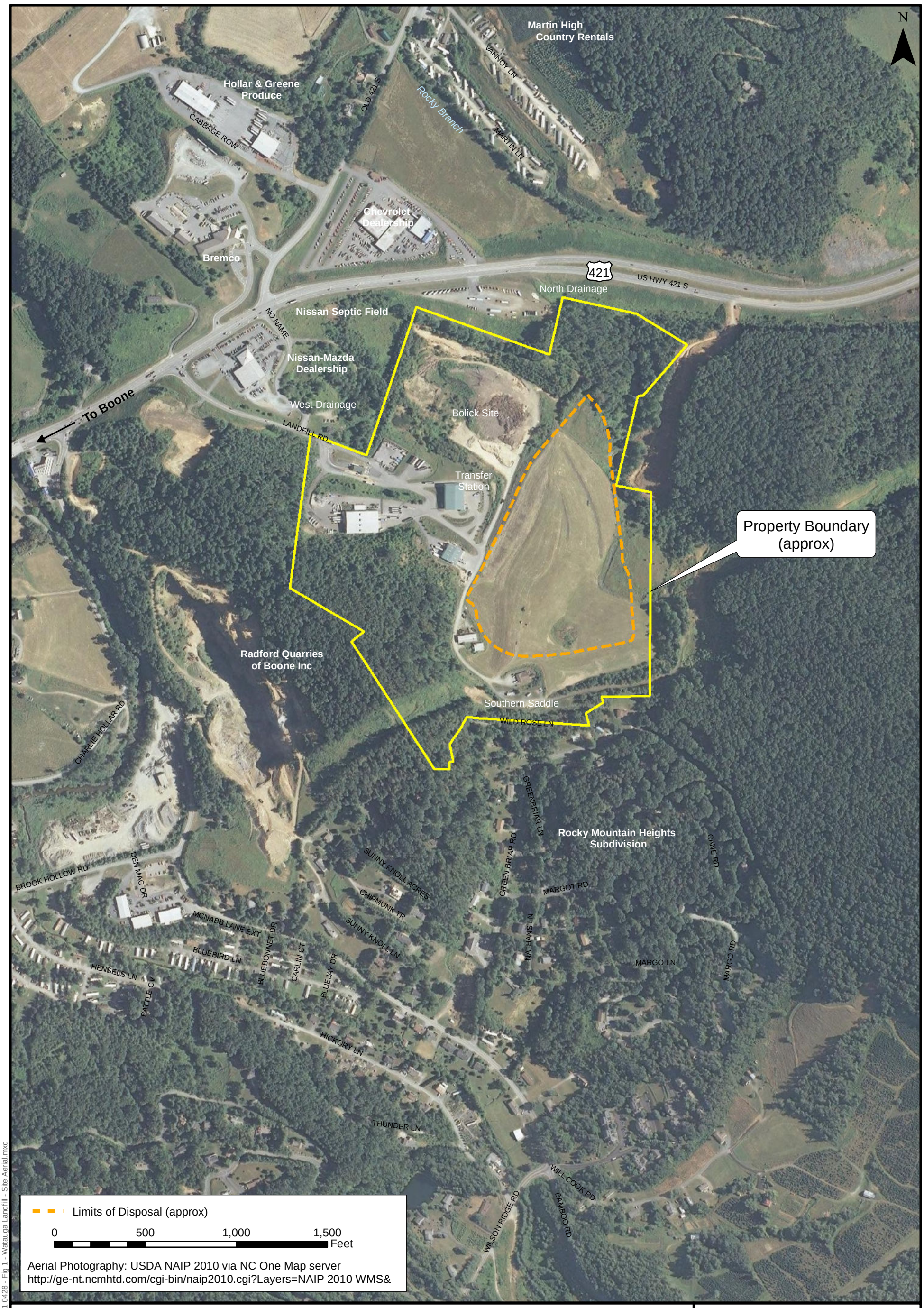
USEPA. 1993. Presumptive Remedies: Policy and Procedures. EPA/4540/F-93-047. September 1993.

USEPA. 1996. Test Methods for Evaluating Solid Waste - Physical and Chemical Methods, SW-846, 3rd ed. (Final Update I, II/IIA, and III). GPO. Washington, DC.

USEPA. 1999. USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review. USEPA Office of Emergency and Remedial Response. GPO. Washington, DC. EPA-540-R-94-012.

USEPA. 2008. USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review. EPA-540-R-08-01

Wiedemier, Todd H., et al., 1999, *Natural Attenuation of Fuels and Chlorinated Solvents in the Subsurface*, John Wiley & Sons, Inc., 1999.




# Aerial Photograph 2010

Watauga County Landfill
Watauga County, North Carolina

SCALE 1" = 500'

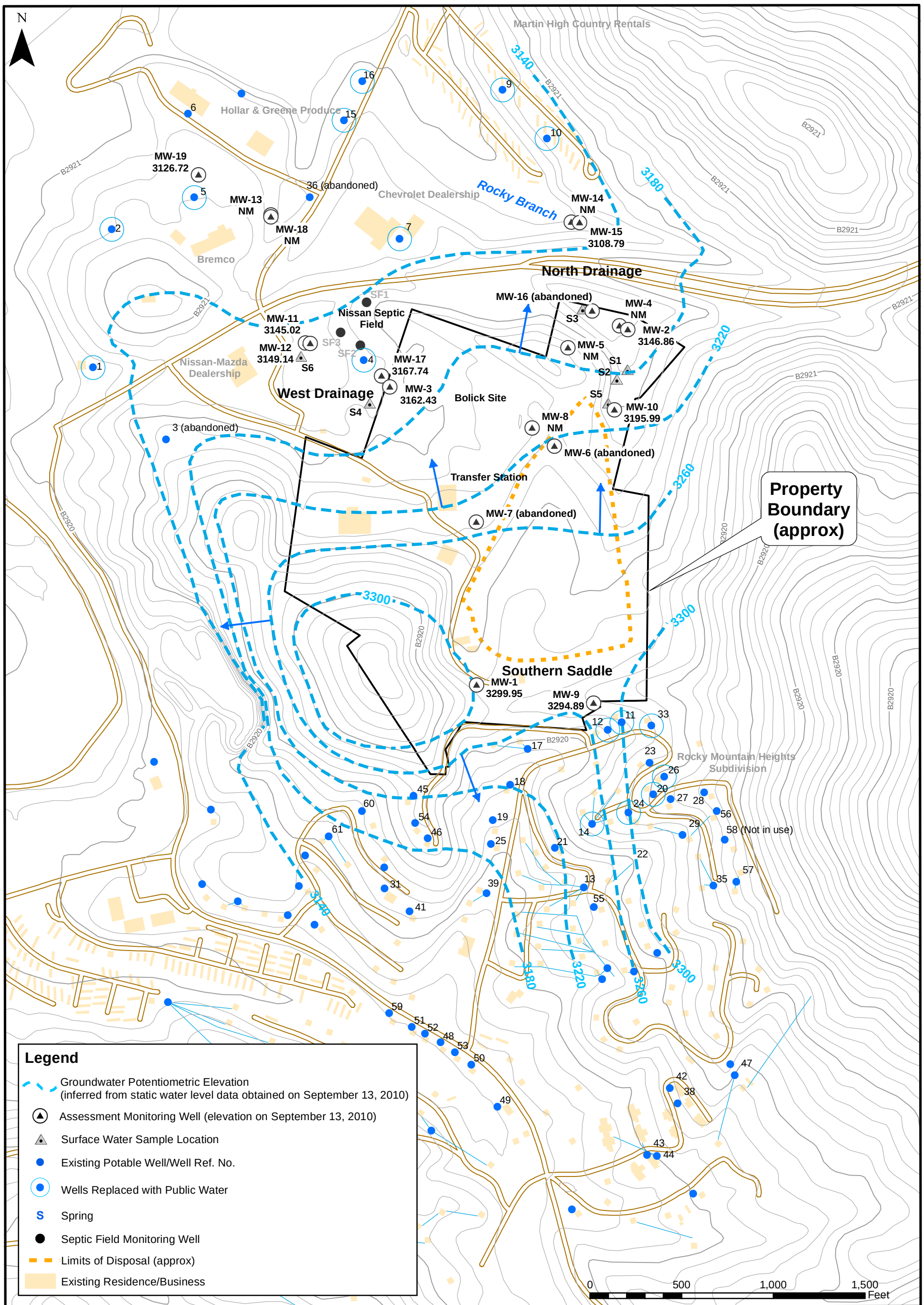
PLAN NO. 6520-39

Draper Aden Associates
Engineering ◆ Surveying ◆ Environmental Services
2206 South Main Street
Blacksburg, VA 24060
540-552-0444 Fax: 540-552-0291
Richmond, VA
Charlottesville, VA
Hampton Roads, VA

DESIGNED KMW
DRAWN SMF
CHECKED WDN
DATE 04-28-11

FIGURE
1

Path: P:\06\500\06520\06520-39\GIS\MAP - 11 0428 - Fig 1 - Watauga Landfill - Site Aerial.mxd




# Potentiometric Surface Map

Watauga County Landfill
Watauga County, North Carolina

SCALE 1" = 500'

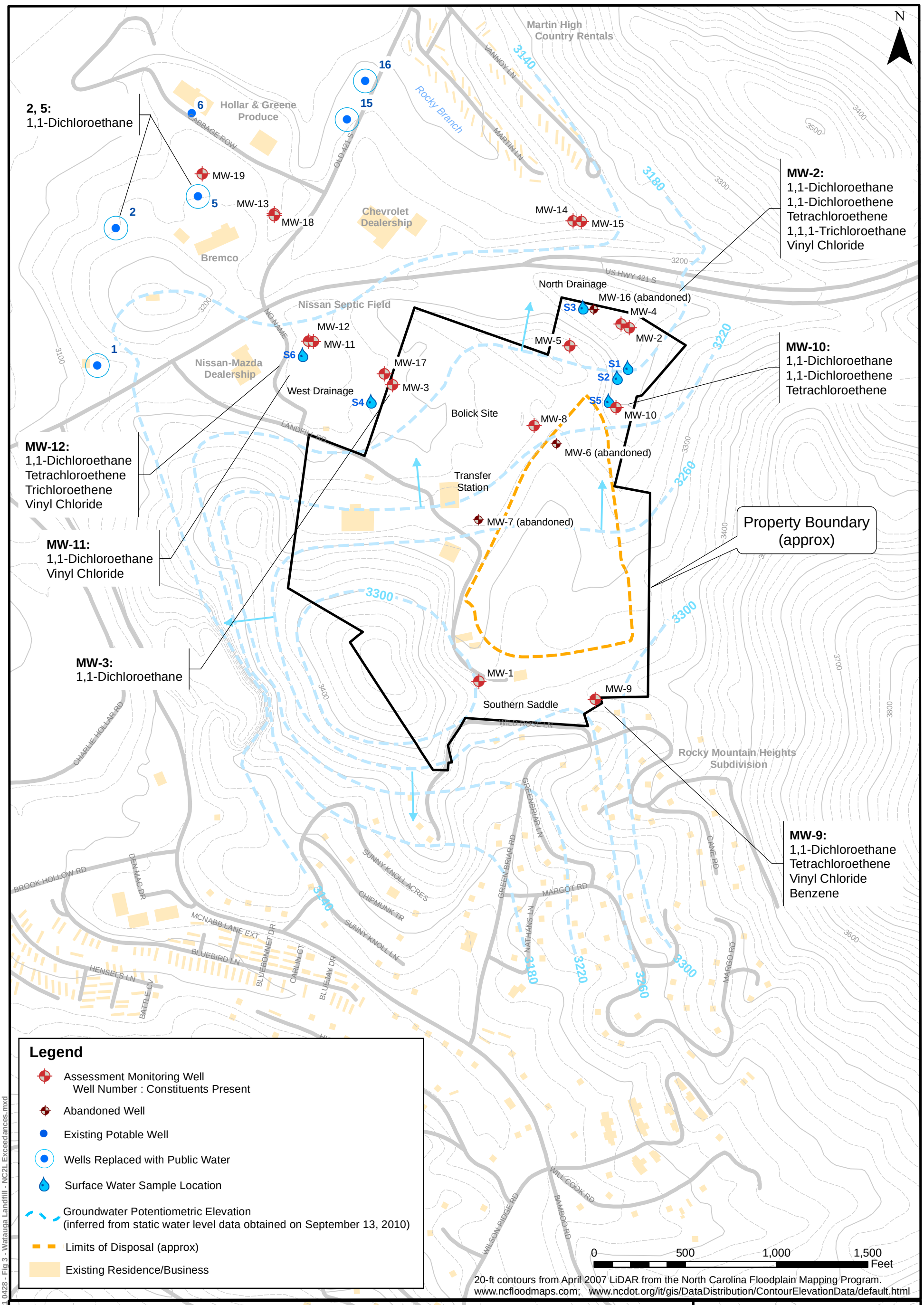
PLAN NO. 6520-39

Draper Aden Associates
Engineering • Surveying • Environmental Services
2206 South Main Street
Blacksburg, VA 24060
540-552-0444 Fax: 540-552-0291
Richmond, VA
Charlottesville, VA
Hampton Roads, VA

DESIGNED KMW
DRAWN SMF
CHECKED WDN
DATE 12-23-10

FIGURE 2

File: P:\06\500\06520\06520-39\GIS\MAP - 10 0913 - Fig 2 - Watauga Landfill - Potentiometric.mxd




# NC2L Exceedances

Watauga County Landfill
Watauga County, North Carolina

SCALE 1" = 500'

PLAN NO. 6520-39

Draper Aden Associates
Engineering • Surveying • Environmental Services
2206 South Main Street
Blacksburg, VA 24060
540-552-0444 Fax: 540-552-0291
Richmond, VA
Charlottesville, VA
Hampton Roads, VA

DESIGNED KMW
DRAWN SMF
CHECKED WDN
DATE 04-28-11

FIGURE
3

Path: P:\06\500\06520\06520-39\GIS\MAP - 11 0428 - Fig 3 - Watauga Landfill - NC2L Exceedances.mxd

## Table 1A. Groundwater Elevation Data

### Watauga County Landfill, Facility ID No. 95-02

| Well ID | MW-1 | MW-2 | MW-3 | MW-4 | MW-5 | MW-6 | MW-7 | MW-8* | MW-9 | MW-10 |
|---|---|---|---|---|---|---|---|---|---|---|
| GS Elevation | 3339.03 | 3151.24 | 3182.25 | 3150.06 | 3263.81 | 3262.55 | 3270.56 | 3235.39 | 3356.65 | 3202.18 |
| MP Elevation | 3341.80 | 3152.94 | 3183.12 | 3152.52 | 3267.69 | 3266.04 | 3273.53 | 3239.77 | 3359.23 | 3203.87 |
| **DATE** | **GROUNDWATER ELEVATION** | | | | | | | | | |
| 6/20/94 | 3303.80 | 3145.06 | 3164.69 | 3139.04 | NM | 3221.92 | 3250.50 | 3222.09 | 3299.88 | 3195.69 |
| 9/27/94 | 3302.11 | 3145.43 | 3165.70 | 3142.07 | NM | 3222.05 | 3242.80 | 3222.39 | 3301.44 | 3195.78 |
| 2/6/95 | 3304.23 | 3147.36 | 3166.92 | 3144.34 | 3217.30 | 3223.19 | 3227.65 | 3224.36 | 3299.69 | 3196.14 |
| 4/11/95 | 3303.86 | 3146.48 | 3166.27 | 3143.30 | 3218.74 | 3223.23 | 3224.42 | 3223.72 | 3299.93 | 3195.97 |
| 7/10/95 | 3300.60 | 3146.34 | 3165.69 | 3143.58 | NM | 3222.31 | 3224.55 | 3222.35 | 3279.06 | 3195.96 |
| 4/9/96 | 3303.09 | 3147.09 | 3176.11 | 3144.12 | 3217.82 | 3223.17 | 3229.21 | 3222.97 | 3297.95 | 3196.2 |
| 4/8/97 | 3303.50 | 3147.35 | 3166.77 | NM | NM | AB | 3233.03 | 3222.34 | 3296.76 | 3196.2 |
| 1/13/98 | 3298.09 | 3145.94 | 3165.61 | 3143.98 | 3212.23 | AB | 3229.35 | 3219.45 | 3295.67 | 3195.62 |
| 6/23/98 | 3304.96 | 3147.00 | 3169.11 | NM | NM | AB | 3230.46 | 3222.85 | 3297.08 | 3196.55 |
| 1/11/99 | 3297.24 | 3145.28 | 3164.25 | 3143.67 | 3212.58 | AB | 3235.64 | 3216.94 | 3294.84 | 3195.19 |
| 7/12/99 | 3298.93 | 3146.16 | 3167.96 | NM | NM | AB | 3227.74 | 3219.85 | 3295.18 | 3195.62 |
| 2/1/00 | 3297.70 | 3145.32 | 3166.07 | 3143.40 | 3211.61 | AB | 3232.28 | 3218.37 | 3294.82 | 3195.46 |
| 8/8/00 | 3299.43 | 3145.52 | 3165.84 | NM | NM | AB | 3227.88 | 3218.52 | 3295.53 | 3195.33 |
| 2/12/01 | 3295.00 | 3144.89 | 3164.20 | 3143.42 | 3209.02 | AB | 3230.81 | 3215.50 | 3294.63 | 3194.74 |
| 8/7/01 | NM | 3145.78 | 3168.47 | NM | NM | AB | NM | 3220.24 | 3295.29 | NM |
| 2/11/02 | 3297.01 | 3146.02 | 3166.87 | 3144.52 | 3209.28 | AB | 3229.42 | 3217.02 | 3295.24 | 3195.22 |
| 8/12/02 | 3297.14 | 3143.80 | 3164.49 | NM | NM | AB | 3226.19 | NM | 3294.99 | 3194.51 |
| 1/21/03 | NM | 3146.22 | 3168.52 | NM | NM | AB | AB | NM | 3294.99 | NM |
| 7/14/03 | 3302.39 | 3147.69 | 3169.23 | NM | NM | AB | AB | NM | 3296.84 | 3196.4 |
| 3/16/04 | 3301.23 | 3148.28 | 3168.11 | NM | 3216.32 | AB | AB | NM | 3296.19 | 3196.21 |
| 9/30/04 | NM | 3149.83 | 3169.62 | NM | NM | AB | AB | NM | 3296.79 | 3196.38 |
| 3/30/05 | 3302.06 | 3149.09 | 3168.89 | NM | NM | AB | AB | NM | 3296.24 | 3196.57 |
| 10/03/05 | NM | 3146.81 | 3165.31 | NM | NM | AB | AB | NM | 3294.74 | 3196.02 |
| 4/3/06 | NM | 3147.74 | 3166.32 | NM | NM | AB | AB | NM | 3295.10 | 3196.18 |
| 9/27/06 | 3300.67 | 3147.49 | 3167.52 | NM | NM | AB | AB | NM | 3294.85 | 3195.85 |
| 4/3/07 | NM | 3148.25 | 3167.58 | NM | NM | AB | AB | NM | 3295.41 | NM |
| 9/18/07 | NM | 3145.90 | 3162.22 | NM | NM | AB | AB | NM | 3293.98 | 3195.06 |
| 3/10/08 | NM | 3147.54 | 3167.15 | NM | NM | AB | AB | 3230.95 | 3294.67 | NM |
| 9/8/08 | NM | 3146.05 | 3163.29 | NM | NM | AB | AB | 3210.28 | 3294.62 | 3195.16 |
| 3/11/09 | NM | 3147.11 | 3164.29 | NM | NM | AB | AB | 3214.63 | 3294.81 | NM |
| 9/1/09 | NM | 3147.34 | 3165.14 | NM | NM | AB | AB | 3215.32 | 3295.72 | 3196.09 |
| 3/17/10 | NM | 3149.62 | 3168.37 | NM | NM | AB | AB | 3225.45 | 3297.28 | NM |
| 9/13/10 | NM | 3146.86 | 3162.43 | NM | NM | AB | AB | NM | 3294.89 | 3195.97 |

* MW-8 was damaged and the steel casing bent afecting the ability to accurately measure depth to groundwater.

1) All measurements in feet above mean sea level.

2) GS = Ground Surface.

3) MP = Measuring Point (Top of PVC).

4)NM = Not measured.

5) AB = Well Abandoned.

## Table 1B. Groundwater Elevation Data

### Watauga County Landfill, Facility ID No. 95-02

| Well ID | MW-11 | MW-12 | MW-13 | MW-14 | MW-15 | MW-16 | MW-17 | MW-18 | MW-19 |
|---|---|---|---|---|---|---|---|---|---|
| GS Elevation | 3156.44 | 3156.82 | 3117.39 | 3117.00 | 3117.15 | 3141.42 | 3181.14 | 3117.12 | 3125.00 |
| MP Elevation | 3159.60 | 3159.15 | 3119.72 | 3120.00 | 3120.65 | 3142.72 | 3183.62 | 3119.63 | 3140.00 |
| DATE | GROUNDWATER ELEVATION | | | | | | | | |
| 6/20/94 | 3146.25 | 3148.11 | 3100.06 | 3112.06 | 3108.73 | 3137.40 | 3165.69 | 3101.70 | - |
| 9/27/94 | 3146.38 | 3148.37 | 3100.15 | 3112.11 | 3108.83 | 3137.04 | 3165.79 | 3101.77 | - |
| 2/6/95 | 3146.38 | 3148.54 | 3100.33 | 3112.48 | 3109.10 | 3138.11 | 3166.57 | 3102.05 | - |
| 4/11/95 | 3146.60 | 3148.57 | 3100.19 | 3112.25 | 3108.78 | 3137.61 | 3166.14 | 3101.98 | - |
| 7/10/95 | 3147.07 | 3148.67 | 3100.10 | 3112.26 | 3108.69 | 3138.18 | 3165.51 | 3101.69 | - |
| 4/9/96 | 3146.87 | 3148.77 | 3100.16 | 3112.41 | 3108.80 | 3138.05 | 3165.84 | 3101.82 | - |
| 4/8/97 | 3147.32 | 3149.67 | NM | NM | 3108.74 | AB | 3166.45 | NM | 3135.15 |
| 1/13/98 | 3147.12 | 3149.50 | 3099.97 | 3112.56 | 3108.91 | AB | 3165.02 | 3101.31 | 3129.79 |
| 6/23/98 | 3147.78 | 3150.04 | NM | NM | 3108.86 | AB | 3168.79 | NM | NM |
| 1/11/99 | 3147.19 | 3149.69 | 3099.67 | 3112.81 | 3108.86 | AB | 3163.78 | 3101.07 | NM |
| 7/12/99 | 3148.23 | 3150.40 | NM | NM | NM | AB | 3166.54 | NM | NM |
| 2/1/00 | 3147.22 | 3149.97 | 3099.41 | 3112.28 | 3108.47 | AB | 3165.85 | 3100.86 | NM |
| 8/8/00 | 3147.81 | 3150.21 | NM | NM | NM | AB | 3165.76 | NM | NM |
| 2/12/01 | 3147.20 | 3149.92 | 3099.69 | 3112.32 | 3108.56 | AB | 3164.41 | 3101.40 | NM |
| 8/7/01 | NM | 3150.38 | NM | NM | NM | AB | 3168.15 | NM | NM |
| 2/11/02 | 3147.57 | 3150.29 | 3099.91 | 3112.58 | 3108.80 | AB | 3166.52 | 3101.58 | 3115.35 |
| 8/12/02 | 3147.44 | 3149.98 | NM | NM | NM | AB | 3163.58 | NM | NM |
| 1/21/03 | NM | 3150.50 | NM | NM | NM | AB | 3168.18 | NM | NM |
| 7/14/03 | 3148.51 | 3150.88 | NM | NM | NM | AB | 3168.76 | NM | NM |
| 3/16/04 | 3146.78 | 3149.91 | NM | NM | NM | AB | 3167.83 | NM | NM |
| 9/30/04 | 3147.54 | 3150.50 | NM | NM | NM | AB | 3168.35 | NM | NM |
| 3/30/05 | 3146.38 | 3149.13 | NM | NM | NM | AB | 3168.50 | NM | NM |
| 10/03/05 | 3145.09 | 3148.21 | NM | NM | NM | AB | 3165.09 | NM | NM |
| 4/3/06 | 3145.59 | 3148.50 | NM | NM | NM | AB | 3166.07 | NM | 3125.58 |
| 9/27/06 | 3145.77 | 3148.61 | NM | NM | NM | AB | 3167.21 | NM | NM |
| 4/3/07 | NM | 3148.65 | NM | NM | NM | AB | 3167.39 | NM | NM |
| 9/18/07 | 3144.83 | 3147.65 | NM | NM | NM | AB | 3163.46 | NM | NM |
| 3/10/08 | NM | 3148.52 | NM | NM | NM | AB | 3167.07 | NM | NM |
| 9/8/08 | 3145.45 | 3147.94 | NM | NM | NM | AB | 3163.49 | NM | NM |
| 3/11/09 | NM | 3148.25 | NM | NM | NM | AB | 3164.37 | NM | NM |
| 9/1/09 | 3146.12 | 3148.47 | NM | NM | NM | AB | 3165.28 | NM | NM |
| 3/17/10 | NM | 3149.14 | NM | NM | NM | AB | 3167.74 | NM | NM |
| 9/13/10 | 3145.02 | 3147.54 | NM | NM | NM | AB | 3163.74 | NM | NM |

1) All measurements in feet above mean sea level.
2) GS = Ground Surface.
3) MP = Measuring Point (Top of PVC).
4)NM = Not measured.
5) AB = Well Abandoned.

## Table 2A. Assessment Target Parameter Analytical Results - September 2010

**Watauga County Landfill, Facility ID 95-02**

Core Groundwater Monitoring Wells

| Well ID | MW-1 | | MW-2 | | MW-3 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | NC2L | MCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Results** (µg/L) | | | | | | | | | | | | | | | | | | | | | | (µg/L) | (µg/L) |
| Benzene | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 2.8 | | 0.5 | U | 0.5 | U | 0.2 | J | 0.5 | u | 0.5 | U | 0.5 | U | 1 | 5 |
| Chlorobenzene | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.4 | J | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 50 | 100 |
| 1,4-Dichlorobenzene | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 1.6 | | 0.5 | U | 0.5 | U | 1.4 | | 0.5 | U | 0.5 | U | 0.5 | U | 6 | 100 |
| Chloroethane | 0.5 | U | 0.5 | U | 5.1 | | 2.2 | | 4.2 | | 0.5 | U | 2.1 | J | 7 | J | 0.5 | U | 0.5 | U | 0.5 | U | 3000 | - |
| Dichlorodifluoromethane | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.6 | | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 1000 | - |
| 1,1-Dichloroethane | 0.5 | U | 48 | | 10 | | 0.7 | | 10 | | 8.9 | | 11 | | 17 | | 0.1 | J | 1.0 | | 1.4 | | 6 | - |
| 1,1-Dichloroethene | 0.5 | U | 70 | | 0.5 | U | 0.5 | U | 0.5 | U | 12 | | 0.08 | J | 0.2 | J | 0.5 | U | 0.5 | U | 0.5 | U | 7 | 7 |
| 1,2-Dichloroethane | 0.5 | U | 0.5 | U | 0.2 | J | 0.5 | U | 0.5 | U | 0.5 | U | 0.12 | J | 0.3 | J | 0.5 | U | 0.5 | U | 0.5 | U | 0.4 | - |
| 1,2-Dichloropropane | 0.5 | U | 0.5 | U | 0.4 | J | 0.5 | U | 0.2 | J | 0.5 | U | 0.41 | J | 0.6 | J | 0.5 | U | 0.5 | U | 0.5 | U | 0.6 | 5 |
| cis-1,2-Dichloroethene | 0.5 | U | 0.2 | J | 25 | | 0.5 | | 6.9 | | 0.5 | U | 19 | | 35 | | 0.5 | U | 0.2 | J | 0.17 | J | 70 | 70 |
| trans-1,2-Dichloroethene | 0.5 | U | 0.5 | U | 0.4 | J | 0.5 | U | 0.3 | J | 0.5 | U | 0.24 | J | 0.5 | J | 0.5 | U | 0.5 | U | 0.5 | U | 100 | 100 |
| Methylene Chloride | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 5 | 5 |
| Tetrachloroethene | 0.5 | U | 3.3 | | 0.5 | U | 0.5 | U | 0.8 | J | 2.1 | | 0.39 | J | 0.8 | J | 0.5 | U | 0.8 | | 0.84 | | 0.7 | 5 |
| Trichloroethene | 0.5 | U | 0.4 | | 2.8 | | 0.5 | U | 1.1 | | 0.5 | U | 2.1 | | 3.6 | | 0.5 | U | 0.4 | J | 0.5 | U | 3 | 5 |
| 1,1,1-Trichloroethane | 0.5 | U | 330 | | 0.5 | U | 0.1 | J | 0.5 | U | 58 | | 0.5 | U | 0.5 | U | 0.35 | J | 0.5 | U | 0.5 | U | 200 | 200 |
| Vinyl Chloride | 0.5 | U | 0.4 | J | 0.5 | U | 0.5 | U | 2.0 | J | 0.5 | U | 0.37 | J | 1.3 | J | 0.5 | U | 0.5 | U | 0.5 | U | 0.03 | 2 |

Notes:
NC2L Denotes North Carolina Groundwater Quality Standard (T15A: 02L .0200)
MCL Denotes EPA Maximum Contaminant Level (EPA 822-R-94-001)
U Denotes not detected (the associated numerical value is the laboratory Limit of Quantitation).
J Denotes an estimated value.
- Denotes Not Established.
Organic parameters were analyzed in accordance with USEPA SW-846 Method 8260B (25 ml purge).

P:\06\500\06520\06520-39\Reports\2010 tables\September 2010 Tables\[XLS - 10 1222 - Target Parameters - Organic - TABLE2A - KMW.xls]Core Wells

## Table 2B. Suface Water Monitoring - September 2010

**Watauga County Landfill, Facility ID 95-02**

| Sample ID | S-1 | | S-2 | | S-3 | | S-4 | | S-5 | | S-6 | | WQS | MCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | Results (µg/L) | | | | | | | | | | | | (µg/L) | (µg/L) |
| Benzene | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 51 | 5 |
| Chlorobenzene | 5 | U | 5.0 | U | 5 | U | 5 | U | 5 | U | 5 | U | 140* | 100 |
| 1,4-Dichlorobenzene | 5 | U | 2.5 | J | 5 | U | 5 | U | 5 | U | 5 | U | 190 | 100 |
| Chloroethane | 5 | U | 25 | | 5 | U | 2.4 | J | 5 | U | 5 | U | 550 | - |
| Dichlorodifluoromethane | 5 | U | 5 | U | 5 | U | 5 | U | 3.3 | J | 5 | U | 77000 | - |
| 1,1-Dichloroethane | 0.59 | J | 2.5 | J | 5 | U | 3.9 | J | 5 | U | 5 | U | 170000 | - |
| 1,1-Dichloroethene | 5 | U | 5 | U | 5 | U | 10 | U | 5 | U | 5 | U | 7100 | 7 |
| 1,2-Dichloroethane | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 37 | - |
| 1,2-Dichloropropane | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 15 | 5 |
| cis-1,2-Dichloroethene | 5 | U | 1 | J | 5 | U | 8.3 | | 5 | U | 5 | U | 4900 | 70 |
| trans-1,2-Dichloroethene | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 10000 | 100 |
| Methylene Chloride | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 590 | 5 |
| Tetrachloroethene | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 3.3 | 5 |
| Trichloroethene | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 30 | 5 |
| 1,1,1-Trichloroethane | 5 | U | 5 | U | 5 | U | 5 | U | 0.9 | J | 5 | U | 2500* | 200 |
| Vinyl Chloride | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 2.4 | 2 |

Notes:

WQS Denotes North Carolina 15A NCAC 2B Surface Water Quality Standard (Human Health) or National Criteria per EPA, current 2/5/2010
* freshwater aquatic life standard (no human health standard available).

MCL Denotes EPA Maximum Contaminant Level for drinking water.

U Denotes not detected (the associated numerical value is the Contract Required Quantitation Limit).

J Denotes an estimated value.

\- Denotes Not Established.

Organic parameters were analyzed in accordance with EPA CLP Statement of Work SOMO1.2.

P:\06\500\06520\06520-39\Reports\2010 tables\September 2010 Tables\[XLS - 10 1222 - Surface Water Results - Oraganic - TABLE2B - KMW.xls]Surface Water

**Table 3. Detected Non-Target Organic Parameters - September 2010**
**Watauga County Landfill, Facility ID 95-02**

| **Sample ID** | **MW-19** | |
|---|---|---|
| **Parameter** | **Results** (µg/L) | |
| Chloroform | 0.20 | J |
| Carbon Disulfide | 0.03 | J |

Notes:

J Denotes an estimated value.

U Denotes not detected (the associated numerical value is the laboratory Limit of Quantitation).

Organic parameters were analyzed in accordance with EPA SW-846 Method 8260(25 ml purge).

**Table 4. Summary of Private Well Sampling Results - September 2010**
**Watauga County Landfill, Facility ID No. 95-02**

| Analyte | Result (µg/l) | QL/CRQL (µg/l) | MCL(µg/l) | NC 2L(µg/l) |
|---|---|---|---|---|
| ***Well Reference No. 2 - Residential 2347 Hwy. 421 S. (Bolick Rental)*** | | | | |
| Benzene | 0.1 J | 0.5 | 5 | 1 |
| Chloroethane | 1 | 0.5 | n/a | 3,000 |
| 1,4-Dichlorobenzene | 0.1 J | 0.5 | n/a | 6 |
| Dichlorodifluoromethane | 0.5 | 0.5 | n/a | 1,000 |
| 1,1-Dichloroethane | 7.1 | 0.5 | n/a | 6 |
| 1,1-Dichloroethene | 0.3 J | 0.5 | 7 | 7 |
| cis-1,2-Dichloroethene | 1 | 0.5 | 70 | 70 |
| Tetrachloroethene | 0.1 J | 0.5 | 5 | 0.7 |
| Trichloroethene | 0.2 J | 0.5 | 5 | 3 |
| ***Well Reference No. 5 (BREMCO) - Commercial 2491 Hwy 421 S.*** | | | | |
| Benzene | 0.5 | 0.5 | 5 | 1 |
| sec-Butylbenzene | 0.1 J | 0.5 | n/a | 70 |
| Chlorobenzene | 0.3 J | 0.5 | 100 | 50 |
| Chloroethane | 11 | 0.5 | n/a | 3,000 |
| 1,4-Dichlorobenzene | 1.9 | 0.5 | n/a | 6 |
| Dichlorodifluoromethane | 1.1 | 0.5 | n/a | 1,000 |
| 1,1-Dichloroethane | 30 | 5* | n/a | 6 |
| 1,2-Dichloroethane | 0.2 J | 0.5 | 5 | 0.4 |
| 1,1-Dichloroethene | 1.3 | 0.5 | 7 | 7 |
| cis-1,2-Dichloroethene | 6.1 | 0.5 | 70 | 70 |
| trans-1,2-Dichloroethene | 0.2 J | 0.5 | 100 | 100 |
| 1,2-Dichloropropane | 0.2 J | 0.5 | 5 | 0.6 |
| Methylene Chloride | 1.3 | 0.5 | 5 | 5 |
| Tetrachloroethene | 0.3 J | 0.5 | 5 | 0.7 |
| Trichloroethene | 0.9 | 0.5 | 5 | 3 |
| Vinyl Chloride | 0.4 J | 0.5 | 2 | 0.3 |
| ***Well Reference No. 15 - Residential 2711 Hwy. 421 S. (Greer Residence)*** | | | | |
| cis-1,2-Dichloroethene | 0.2 J | 0.5 | 70 | 70 |
| Tetrachloroethene | 0.3 J | 0.5 | 5 | 0.7 |
| ***Well Reference No. 16 - Residential 2737 Hwy 421 S. (Williamson Residence)*** | | | | |
| cis-1,2-Dichloroethene | 0.4 J | 0.5 | 70 | 70 |
| Tetrachloroethene | 0.2 J | 0.5 | 5 | 0.7 |

Definitions:

QL - Laboratory quantitation limit.

CRQL - Laboratory contract required quantitation limit.

J - Analyte is estimated; analyte detected between the laboratory detection limit and QL/CRQL.

Notes:

1. All samples were analyzed by EPA Method 524.2 at Lancaster Laboratories of Lancaster, PA.
2. Lancaster Laboratories NC Certification Number 42705.
3. Target analytes not listed above were not detected at or above the laboratory detection limit; see laboratory analytical data package for full analyte reporting list.
4. For method reference CLP SOW - use CRQL.

* Sample dillution - 10X.

9/13/10 Watauga Co LF FB#2
6520-39
CJB/DAS

General Notes
Weather - Sunny, 70's
PPE - Eye Protection, Nitrile gloves
Calibrations - YSI 650 MDS
- ph: 4.00 = 4.00, 7.00 = 7.00, 10.00 = 10.00
- Conductivity reads 1413 us in 1413 us std
- DO % = 100

Static Water Level Table

| WELL | DTW | Notes |
|---|---|---|
| mw-1 | 41.85 | |
| mw-2 | 6.08 | |
| mw-3 | 20.69 | |
| mw-8 | unable to get level due to bend in casing | |
| mw-9 | 64.34 | |
| mw-10 | 7.90 | |
| mw-11 | 14.58 | |
| mw-12 | 11.61 | |
| mw-15 | 11.86 | |
| mw-17 | 19.88 | |
| mw-19 | 13.28 | |

mw-1
TD - 76.65 Begin Purge (1145)
DTW - 41.85 Initial Purge - Clear
34.80 x 0.65 = 22.62 x3 = 67.86 gallons

| Time | Temp(C) | Cond(us) | DO mg/L | pH | ORP(mv) | Purge R(gpm) | Vol(gal) | Desc |
|---|---|---|---|---|---|---|---|---|
| (1150) | 10.75 | 202 | 2.95 | 6.60 | 99.8 | 2.0 | 10.0 | Clear |
| (1200) | 10.75 | 114 | 5.63 | 6.03 | 113.3 | " | 30.0 | Clear |
| (1210) | 11.20 | 106 | 5.72 | 6.03 | 139.9 | " | 50.0 | Clear |
| (1219) | 11.44 | 104 | 5.55 | 6.08 | 160.8 | " | 68.0 | Clear |

(1219) Well purged @ 68.0 gallons



9/13/10 Watauga Co LF FB#2
6520-39
DAS/CJB

mw-1 (Cont.)
Sample Time (1220)
Samples Collected: (3) 8260

mw-9
TD - 86.40 Begin Purge (1248)
DTW - 64.34 Initial Purge - Clear
22.06 x 0.163 = 3.59 x3 = 10.78 gallons

| Time | Temp(C) | Cond(us) | DO mg/L | pH | ORP(mv) | Purge R(gpm) | Vol(gal) | Desc |
|---|---|---|---|---|---|---|---|---|
| (1250) | 12.21 | 294 | 1.86 | 5.83 | 176.7 | 0.50 | 1.0 | Clear |
| (1257) | 12.73 | 337 | 2.01 | 5.86 | 162.8 | " | 4.50 | Clear |
| (1304) | 12.84 | 331 | 2.11 | 5.94 | 155.6 | " | 8.00 | Clear |
| (1310) | 12.95 | 296 | 2.19 | 5.79 | 152.7 | " | 11.0 | Clear |

(1310) Well purged @ 11.0 gallons
Sample Time (1315)
Samples Collected: (3) 8260

mw-2
TD - 177.50 Begin Purge (1344)
DTW - 6.08 Initial Purge - Clear
171.42 x 0.65 = 111.42 x3 = 334.26 gallons

| Time | Temp(C) | Cond(us) | DO mg/L | pH | ORP(mv) | Purge R(gpm) | Vol(gal) | Desc |
|---|---|---|---|---|---|---|---|---|
| (1350) | 11.00 | 283 | 2.94 | 7.61 | 109.3 | 3.0 | 18.0 | Clear |
| (1426) | 10.99 | 277 | 1.96 | 7.63 | 100.8 | " | 126 | Clear |
| (1501) | 11.08 | 280 | 1.94 | 7.65 | 88.2 | " | 231 | Clear |
| (1536) | 11.37 | 278 | 2.42 | 7.71 | 80.7 | " | 336 | Clear |

(1536) Well purged @ 336.0 gallons

Sample Time (1540)
Samples Collected: (3) 8260, (2) 8260

9/13/10 Watauga Co LF FB#2
65209-39
CJB/DAS

Spring Sample Collection Table

| Spring | Temp(C) | Cond(us) | DO mg/L | pH | ORP(mV) | Date | Time | Samples Collected |
|---|---|---|---|---|---|---|---|---|
| S-1 | 13.86 | 310 | 4.81 | 7.04 | 21.4 | 9/13/10 | (1615) | (3) CLP Volatiles |
| S-2 | 13.82 | 794 | 1.83 | 6.34 | -16.2 | 9/13/10 | (1625) | (3) CLP Volatiles |
| S-3 | 14.76 | 523 | 6.90 | 7.96 | 220.3 | 9/13/10 | (1600) | (3) CLP Volatiles |
| S-4 | 13.70 | 290 | 7.00 | 6.43 | 208.4 | 9/14/10 | (1440) | (3) CLP Volatiles |
| S-5 | 13.28 | 258 | 2.09 | 6.59 | -8.9 | 9/13/10 | (1640) | (3) CLP Volatiles |
| S-6 | 12.78 | 292 | 3.70 | 6.62 | 7.1 | 9/14/10 | (1500) | (3) CLP Volatiles |

MW-10

TD - 70.03 Begin Purge (1659)

DTW - 7.90 Initial Purge - Clear

62.13 x 0.163 = 10.12 x3 = 30.38 gallons

| Time | Temp(C) | Cond(us) | DO mg/L | pH | ORP(mV) | Purge(gpm) | Vol(gal) | Desc |
|---|---|---|---|---|---|---|---|---|
| (1700) | 10.85 | 195 | 3.14 | 9.48 | 78.8 | 0.50 | 0.50 | Clear |
| (1710) | 12.47 | 195 | 2.88 | 9.24 | 96.1 | " | 5.50 | Clear |
| (1720) | 13.44 | 197 | 3.04 | 8.88 | 122.7 | " | 10.50 | Clear |
| (1730) | 13.60 | 185 | 3.08 | 8.80 | 126.3 | " | 15.50 | Clear |
| (1740) | 13.75 | 191 | 3.11 | 8.81 | 127.4 | " | 20.50 | Clear |

(1740) Well purged dry @ ≈ 20.50 gallons
Allowing well to recharge.
Sample Time (1800)
Samples Collected: (5) 8260



9/14/10 Watauga Co LF ~~FB#~~
65209-39
CJB/DAS

General Notes

Weather - Sunny, 80's
PPE - Eye Protection, Nitrile gloves
Calibrations - YSI 650 MDS
- pH: 4.00 = 4.00, 7.00 = 7.00, 10.00 = 10.00
- Conductivity reads 1413 us in 1413 us std
- DO% = 100

Residence Sample Collection Table

| Residence | Date | Time | Samples Collected | Notes |
|---|---|---|---|---|
| RES-1 | 9/14/10 | (0815) | (3) Volatiles 524.2 | |
| RES-2 | 9/14/10 | (0835) | (3) Volatiles 524.2 | |
| RES-15 | 9/14/10 | (0900) | (3) Volatiles 524.2 | |
| RES-16 | 9/14/10 | (0915) | (3) Volatiles 524.2 | |
| H&G Produce | 9/14/10 | (0935) | (3) Volatiles 524.2 | |
| Bremco | 9/14/10 | (1000) | (3) Volatiles 524.2 | |

MW-19

TD - 69.60 Begin Purge (1012)

DTW - 13.28 Initial Purge - Clear

56.32 x 0.163 = 9.18 x3 = 27.54 gallons

| Time | Temp(C) | Cond(us) | DO mg/L | pH | ORP(mV) | Purge(gpm) | Vol(gal) | Desc |
|---|---|---|---|---|---|---|---|---|
| (1014) | 12.19 | 36 | 2.64 | 8.27 | -137.8 | 0.50 | 1.0 | Sl. Clo |
| (1030) | 12.07 | 36 | 2.48 | 7.76 | -203.1 | " | 9.0 | Sl. Clo |
| (1046) | 12.39 | 52 | 3.29 | 7.30 | -146.6 | " | 17.0 | Cloud |
| (1054) | 13.19 | 88 | 3.88 | 6.97 | -84.3 | " | 21.0 | Cloud |

(1054) Well purged dry @ ≈ 21.0 gallons

Sample Time (1110)
Samples Collected: (3) 8260

9/14/10 Watauga Co LF FB#2

6520-39
CTB/DAS

MW-15

TD-178.00 Begin Purge (1134)

DTW-11.86 Initial Purge - Clear

164.14 x0.163= 27.08 x3= 81.24 gallons

| Time | Temp(C) | Cond(us) | DO mg/L | pH | ORP(mv) | Purge(lpm) | Vol(gal) | Desc |
|---|---|---|---|---|---|---|---|---|
| (1136) | 10.77 | 137 | 3.27 | 7.64 | 131.1 | 2.0 | 4.0 | Clear |
| (1144) | 11.13 | 137 | 2.06 | 7.59 | 129.4 | " | 20.0 | Clear |
| (1152) | 11.75 | 137 | 1.81 | 8.00 | 71.4 | " | 36.0 | Clear |
| (1154) | 12.01 | 136 | 1.82 | 8.11 | 58.1 | " | 40.0 | Clear |

(1154) Well purged dry @ ≈ 40.0 gallons

Sample Time (1215)

Samples Collected: (3) 8260

MW-8

TD-67.00 Begin Purge (1242)

DTW- NA Initial Purge - Cloudy

x0.163= x3= gallons

| Time | Temp(C) | Cond(us) | DO mg/L | pH | ORP(mv) | Purge(lpm) | Vol(gal) | Desc |
|---|---|---|---|---|---|---|---|---|
| (1244) | 12.78 | 140 | 3.87 | 6.38 | 53.5 | 0.50 | 1.0 | Cloudy |
| (1250) | 13.40 | 87 | 2.32 | 6.15 | 65.5 | " | 4.0 | Cloudy |
| (1300) | 13.49 | 127 | 2.14 | 6.23 | 80.7 | " | 9.0 | Cloudy |
| (1303) | 13.67 | 150 | 2.34 | 6.36 | 70.3 | " | 10.5 | Sl. Cloudy tannic lt. Brown |

(1303) Well purged dry @ ≈ 10.50 gallons

* Casing bent and possibly broke at ground level. Unable to get water level. Attempt to pull pump but would not pass bend in casing. Tubing and wiring had dirt present when pulling from well.

Sample Time (1310)

Samples Collected: (3) 8260



9/14/10 Watauga Co LF FB#2

6520-39
DAS/CJB

MW-17

TD-94.54 Begin Purge (1327)

DTW-19.88 Initial Purge - Clear

74.66 x0.163= 12.16 x3= 36.50 gallons

| Time | Temp(C) | Cond(us) | DO mg/L | pH | ORP(mv) | Purge(lpm) | Vol(gal) | Desc |
|---|---|---|---|---|---|---|---|---|
| (1330) | 11.29 | 249 | 5.66 | 5.97 | 158.2 | 1.0 | 3.0 | Clea |
| (1340) | 12.18 | 248 | 3.50 | 5.95 | 174.0 | " | 13.0 | Clea |
| (1346) | 12.45 | 262 | 2.57 | 5.94 | 178.5 | " | 19.0 | Clea |

(1346) well purged dry @ ≈ 19.0 gallons

Sample Time (1425)

Samples Collected: (3) 8260

MW-3

TD-39.60 Begin Purge (1353)

DTW-20.69 Initial Purge - Clear

18.91 x0.163= 3.08 x3= 9.24 gallons

| Time | Temp(C) | Cond(us) | DO mg/L | pH | ORP(mv) | Purge(lpm) | Vol(gal) | Desc |
|---|---|---|---|---|---|---|---|---|
| (1355) | 11.71 | 349 | 2.23 | 5.89 | 197.0 | 0.50 | 1.0 | Sl. Cloud |
| (1400) | 11.81 | 349 | 2.33 | 5.90 | 199.8 | " | 3.50 | Sl. Cloud |
| (1405) | 11.77 | 349 | 2.37 | 5.90 | 202.2 | " | 6.0 | Sl. Cloud |
| (1412) | 11.76 | 349 | 2.38 | 5.91 | 205.2 | " | 9.50 | Sl. Cloud |

(1412) well purged @ 9.50 gallons

Sample Time (1415)

Samples Collected: (9) 8260

9/14/10 Watauga Co LF FB#2
65200039
DAS/CJB

MW-11

TD - 25.80 Begin Purge (1523)
DTW - 14.58 Initial Purge - Clear
11.22 x 0.163 = 1.82 x3 = 5.48 gallons

| Time | Temp(C) | Cond(us) | DO mg/L | pH | ORP(mv) | Purge K(gpm) | Vol(gal) | Desc |
|---|---|---|---|---|---|---|---|---|
| (1525) | 12.04 | 273 | 6.19 | 5.80 | 74.8 | 0.25 | 0.50 | Clear |
| (1531) | 12.04 | 284 | 4.02 | 5.77 | 85.7 | " | 2.0 | Clear |
| (1539) | 12.08 | 288 | 3.53 | 5.76 | 94.8 | " | 4.0 | Clear |
| (1545) | 12.10 | 289 | 3.39 | 5.76 | 100.9 | " | 5.50 | Clear |

(1545) well purged @ 5.50 gallons
Sample Time (1550)
Samples Collected: (3) 8260

MW-12

TD - 72.75 Begin Purge (1559)
DTW - 11.61 Initial Purge - Clear
61.14 x 0.163 = 9.96 x3 = 29.89 gallons

| Time | Temp(C) | Cond(us) | DO mg/L | pH | ORP(mv) | Purge K(gpm) | Vol(gal) | Desc |
|---|---|---|---|---|---|---|---|---|
| (1600) | 11.26 | 431 | 3.50 | 6.05 | 116.7 | 1.0 | 1.0 | Clear |
| (1609) | 11.45 | 437 | 3.02 | 5.99 | 128.0 | " | 10.0 | Clear |
| (1619) | 11.47 | 436 | 3.02 | 5.96 | 133.5 | " | 20.0 | Clear |
| (1629) | 11.50 | 436 | 2.97 | 5.93 | 139.3 | " | 30.0 | Clear |

(1629) well purged @ 30.0 gallons
Sample Time (1630)
Samples Collected: (3) 8260

COMPLETED
9/21/10 CJB

Table 5B

Watauga County, North Carolina — Assessment Organic Target Parameter Analytical Results (1994-2006)

Upgradient Well: MW-1 — Boundary Groundwater Monitoring Wells

| Parameter Results ug/l(ppb) | Event | MW-4 | | MW-5 | | MW-13 | | MW-14 | | MW-15 | | MW-16 | | MW-18 | | Analysis Type | NCS (ug/L) | MCL (ug/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 6/20/94 | 10 | U | - | | 5.3 | U | 5.3 | U | 5.3 | U | 5.3 | U | 5.3 | U | 8021 | 1 | 5 |
| | 9/27/94 | 2 | J | - | | 10 | U | 10 | U | 10 | U | 2 | J | 1 | J | CLP | 1 | 5 |
| | 2/06/95 | 10 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 8021 | 1 | 5 |
| | 4/11/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 1 | 5 |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 8021 | 1 | 5 |
| | 4/10/96 | - | | - | | - | | - | | 10 | U | - | | - | | CLP | 1 | 5 |
| | 4/8/97 | - | | - | | - | | - | | 1 | U | - | | - | | 8021 | 1 | 5 |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | 10 | U | CLP | 1 | 5 |
| | 2/12-14/01 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | - | | 1 | U | 8021 | 1 | 5 |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 1 | 5 |
| | 8/12-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 1 | 5 |
| | 9/27-28/06 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | - | | - | | 0.5 | U | 8260B | 1 | 5 |
| Chloroethane | 6/20/94 | 10 | U | - | | 9.29 | U | 9.29 | U | 9.29 | U | 9.29 | U | 9.29 | U | 8021 | 3000 | - |
| | 9/27/94 | 18 | | - | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 3000 | - |
| | 2/06/95 | 10 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 8021 | 3000 | - |
| | 4/11/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 3000 | - |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 8021 | 3000 | - |
| | 4/10/96 | - | | - | | - | | - | | 10 | U | - | | - | | CLP | 3000 | - |
| | 4/8/97 | - | | - | | - | | - | | 1 | U | - | | - | | 8021 | 3000 | - |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | 10 | U | CLP | 3000 | - |
| | 2/12-14/01 | 2 | U | 2 | U | 2 | U | 2 | U | 2 | U | - | | 2 | U | 8021 | 3000 | - |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 3000 | - |
| | 8/12-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 3000 | - |
| | 9/27-28/06 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | - | | - | | 0.5 | U | 8260B | 3000 | - |
| Dichlorodifluoromethane | 6/20/94 | 10 | U | - | | 46.64 | U | 46.64 | U | 46.64 | U | 46.64 | U | 46.64 | U | 8021 | 1000 | - |
| | 9/27/94 | 10 | U | - | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 1000 | - |
| | 2/06/95 | 10 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 8021 | 1000 | - |
| | 4/11/95 | 10 | U | 10 | U | 10 | U | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | CLP | 1000 | - |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 8021 | 1000 | - |
| | 4/10/96 | - | | - | | - | | - | | 10 | U | - | | - | | CLP | 1000 | - |
| | 4/8/97 | - | | - | | - | | - | | 1 | U | - | | - | | 8021 | 1000 | - |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | 10 | U | CLP | 1000 | - |
| | 2/12-14/01 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | - | | 1 | U | 8021 | 1000 | - |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 1000 | - |
| | 8/12-14/02 | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ | 8260B | 1000 | - |
| | 9/27-28/06 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | - | | - | | 0.5 | U | 8260B | 1000 | - |
| 1,1-Dichloroethane | 6/20/94 | 10 | U | - | | 0.99 | J | 43.1 | U | 0.26 | J | 43.1 | U | 43.1 | U | 8021 | 6 | - |
| | 9/27/94 | 10 | U | - | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 6 | - |
| | 2/06/95 | 10 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 8021 | 6 | - |
| | 4/11/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 6 | - |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 8021 | 6 | - |
| | 4/10/96 | - | | - | | - | | - | | 10 | U | - | | - | | CLP | 6 | - |
| | 4/8/97 | - | | - | | - | | - | | 1 | U | - | | - | | 8021 | 6 | - |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | 10 | U | CLP | 6 | - |
| | 2/12-14/01 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | - | | 1 | U | 8021 | 6 | - |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 6 | - |
| | 8/12-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 6 | - |
| | 9/27-28/06 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | - | | - | | 0.5 | U | 8260B | 6 | - |

Table 5B

Watauga County, North Carolina — Assessment Organic Target Parameter Analytical Results (1994-2006)

Upgradient Well: MW-1 — Boundary Groundwater Monitoring Wells

| Parameter Results ug/l(ppb) | Event | MW-4 | | MW-5 | | MW-13 | | MW-14 | | MW-15 | | MW-16 | | MW-18 | | Analysis Type | NCS (ug/L) | MCL (ug/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 6/20/94 | 10 | U | - | | 9.75 | U | 9.75 | U | 9.75 | U | 9.75 | U | 9.75 | U | 8021 | 7 | 7 |
| | 9/27/94 | 10 | U | - | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 7 | 7 |
| | 2/06/95 | 10 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 8021 | 7 | 7 |
| | 4/11/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 7 | 7 |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 8021 | 7 | 7 |
| | 4/10/96 | - | | - | | - | | - | | 10 | U | - | | - | | CLP | 7 | 7 |
| | 4/8/97 | - | | - | | - | | - | | 0.77 | J | - | | - | | 8021 | 7 | 7 |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | 10 | U | CLP | 7 | 7 |
| | 2/12-14/01 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | - | | 1 | U | 8021 | 7 | 7 |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 7 | 7 |
| | 8/12-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 7 | 7 |
| | 9/27-28/06 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | - | | - | | 0.5 | U | 8260B | 7 | 7 |
| cis-1,2-Dichloroethene(3) | 6/20/94 | 10 | U | - | | 9.49 | U | 9.49 | U | 9.49 | U | 9.49 | U | 9.49 | U | 8021 | 70 | 70 |
| | 9/27/94 | 10 | U | - | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 70 | 70 |
| | 2/06/95 | 10 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 8021 | 70 | 70 |
| | 4/11/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 70 | 70 |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 8021 | 70 | 70 |
| | 4/10/96 | - | | - | | - | | - | | 10 | U | - | | - | | CLP | 70 | 70 |
| | 4/8/97 | - | | - | | - | | - | | 1 | U | - | | - | | 8021 | 70 | 70 |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | 10 | U | CLP | 70 | 70 |
| | 2/12-14/01 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | - | | 1 | U | 8021 | 70 | 70 |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 70 | 70 |
| | 8/12-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 70 | 70 |
| | 9/27-28/06 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | - | | - | | 0.5 | U | 8260B | 70 | 70 |
| trans-1,3-Dichloropropene | 6/20/94 | 10 | U | - | | 24.49 | U | 24.49 | U | 24.49 | U | 24.49 | U | 24.49 | U | 8021 | 100 | - |
| | 9/27/94 | 10 | U | - | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 100 | - |
| | 2/06/95 | 10 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 8021 | 100 | - |
| | 4/11/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 100 | - |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 8021 | 100 | - |
| Methylene Chloride | 6/20/94 | 10 | U | - | | 36.2 | UJ | 36.2 | UJ | 36.2 | UJ | 36.2 | UJ | 36.2 | U | 8021 | 5 | 5 |
| | 9/27/94 | 13 | U | - | | 10 | U | 10 | U | 10 | U | 33 | | 27 | | CLP | 5 | 5 |
| | 2/06/95 | 10 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 8021 | 5 | 5 |
| | 4/11/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 5 | 5 |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 8021 | 5 | 5 |
| | 4/10/96 | - | | - | | - | | - | | 10 | U | - | | - | | CLP | 5 | 5 |
| | 4/8/97 | - | | - | | - | | - | | 0.656 | J | - | | - | | 8021 | 5 | 5 |
| | 1/15/98 | - | | - | | - | | - | | 1 | J | - | | - | | CLP | 5 | 5 |
| | 2/12-14/01 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | - | | 1 | U | 8021 | 5 | 5 |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 5 | 5 |
| | 8/12-14/02 | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ | 0.5 | UJ | 8260B | 5 | 5 |
| | 9/27-28/06 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | - | | - | | 0.5 | U | 8260B | 5 | 5 |
| Tetrachloroethene | 6/20/94 | 10 | U | - | | 7.84 | U | 0.24 | J | 7.84 | U | 7.84 | U | 7.84 | U | 8021 | 0.7 | 5 |
| | 9/27/94 | 10 | U | - | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 0.7 | 5 |
| | 2/06/95 | 10 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 8021 | 0.7 | 5 |
| | 4/11/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 0.7 | 5 |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 8021 | 0.7 | 5 |
| | 4/10/96 | - | | - | | - | | - | | 10 | U | - | | - | | CLP | 0.7 | 5 |
| | 4/8/97 | - | | - | | - | | - | | 1 | U | - | | - | | 8021 | 0.7 | 5 |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | 10 | U | CLP | 0.7 | 5 |
| | 2/12-14/01 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | - | | 1 | U | 8021 | 0.7 | 5 |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 0.7 | 5 |
| | 8/12-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 0.7 | 5 |
| | 9/27-28/06 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | - | | - | | 0.5 | U | 8260B | 0.7 | 5 |

Table 5B

Watauga County, North Carolina — Assessment Organic Target Parameter Analytical Results (1994-2006)

Upgradient Well: MW-1 — Boundary Groundwater Monitoring Wells

| Parameter Results ug/l(ppb) | Event | MW-4 | | MW-5 | | MW-13 | | MW-14 | | MW-15 | | MW-16 | | MW-18 | | Analysis Type | NCS (ug/L) | MCL (ug/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | 6/20/94 | 10 | U | - | | 21.2 | U | 21.2 | U | 21.2 | U | 21.2 | U | 21.2 | U | 8021 | 3 | 5 |
| | 9/27/94 | 10 | U | - | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 3 | 5 |
| | 2/06/95 | 10 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 2.5 | U | 8021 | 3 | 5 |
| | 4/11/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 3 | 5 |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 8021 | 3 | 5 |
| | 4/10/96 | - | | - | | - | | - | | 10 | U | - | | - | | CLP | 3 | 5 |
| | 4/8/97 | - | | - | | - | | - | | 1 | U | - | | - | | 8021 | 3 | 5 |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | 10 | U | CLP | 3 | 5 |
| | 2/12-14/01 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | - | | 1 | U | 8021 | 3 | 5 |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 3 | 5 |
| | 8/12-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 1 | J | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 3 | 5 |
| | 9/27-28/06 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | - | | - | | 0.5 | U | 8260B | 3 | 5 |
| 1,1,1-Trichloroethane | 6/20/94 | 10 | U | - | | 30.11 | U | 30.11 | U | 0.08 | J | 30.11 | U | 30.11 | U | 8021 | 200 | 200 |
| | 9/27/94 | 10 | U | - | | 10 | U | 10 | U | 5 | J | 10 | U | 10 | U | CLP | 200 | 200 |
| | 2/06/95 | 10 | U | 1 | U | 1 | U | 1 | U | 2.5 | | 1 | U | 1 | U | 8021 | 200 | 200 |
| | 4/11/95 | 10 | U | 10 | U | 10 | U | 1 | J | 3 | J | 10 | U | 10 | U | CLP | 200 | 200 |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 8021 | 200 | 200 |
| | 4/10/96 | - | | - | | - | | - | | 4 | J | - | | - | | CLP | 200 | 200 |
| | 4/8/97 | - | | - | | - | | - | | 4.1 | | - | | - | | 8021 | 200 | 200 |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 5 | J | - | | 10 | U | CLP | 200 | 200 |
| | 2/12-14/01 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | - | | 1 | U | 8021 | 200 | 200 |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 200 | 200 |
| | 8/12-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 1 | | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 200 | 200 |
| | 9/27-28/06 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | - | | - | | 0.5 | U | 8260B | 200 | 200 |
| Vinyl Chloride | 6/20/94 | 10 | U | - | | 6.6 | UJ | 6.6 | | 6.6 | UJ | 6.6 | UJ | 6.6 | U | 8021 | 0.03 | 2 |
| | 9/27/94 | 10 | U | - | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | CLP | 0.03 | 2 |
| | 2/06/95 | 10 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 8021 | 0.03 | 2 |
| | 4/11/95 | 10 | UJ | 10 | U | 10 | U | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | CLP | 0.03 | 2 |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 8021 | 0.03 | 2 |
| | 4/10/96 | - | | - | | - | | - | | 10 | U | - | | - | | CLP | 0.03 | 2 |
| | 4/8/97 | - | | - | | - | | - | | 1 | U | - | | - | | 8021 | 0.03 | 2 |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | 10 | U | CLP | 0.03 | 2 |
| | 2/12-14/01 | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | - | | 1 | U | 8021 | 0.03 | 2 |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 0.03 | 2 |
| | 8/12-14/02 | 0.5 | U | 0.5 | U | 0.5 | U | 1 | U | 0.5 | U | 0.5 | U | 0.5 | U | 8260B | 0.03 | 2 |
| | 9/27-28/06 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | - | | - | | 0.5 | U | 8260B | 0.03 | 2 |

TABLE 5B NOTES:

U Denotes not detected above Instrument Detection Level (IDL) for Inorganics and not detected above CRQL/LOQ for Organics.

J Denotes an estimated value

CRQL Contract Required Quantification Limit (CLP Methods)

LOQ Limit of Quantitation (SW-846 Methods)

\- Denotes Not Avaliable or Not Sampled

NCS Denotes North Carolina Groundwater Quality Standard (T15A: 02L .0200)

MCL Denotes EPA Maximum Contaminant Level (EPA 822-R-94-001)

Shading - denotes parameter results that exceed U.S. EPA Maximum Contaminant Levels.

ANALYSIS TYPE NOTES:

1) Organic parameters were analyzed utilizing CLP Statement of Work OLMO3.2, SW-846 Method #8260B and/or #8021, as noted.

2) For CLP, 1,2-Dichloroethene was reported as total concentration; for 8021/8260B concentration was reported for cis-isomer.

P:\06\500\06520\06520-39\Reports\2010 tables\September 2010 Tables\[XLS - 10 1223 - NCDENR - TABLE5BC - JES.xls]SURFACE WATER

Watauga County Landfill
Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

# Table 5A
## Assessment Organic Target Parameter Analytical Results
## 1994-2010
## Core Groundwater Monitoring Wells

| Parameter | Event | Results ug/l(ppb) | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-1 | | MW-2 | | MW-3 | | MW-6 | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | Analysis Type |
| Organics | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | 6/20/94 | 10 | U | 120 | U | 10 | U | 9 | J | 0.42 | J | 0.72 | J | 0.4 | J | 5.3 | U | 5.3 | U | 5.3 | U | 5.3 | U | 5.3 | U | | | CLP/8021 |
| | 9/27/94 | 10 | U | 9 | J | 2 | J | 12 | J | 3 | J | 5 | J | 4 | J | 10 | U | 10 | U | 10 | U | 10 | U | 2 | J | | | CLP |
| MCL= 5 ug/l | 2/06/95 | 10 | U | 150 | U | 2 | J | 12 | J | 3.6 | | 5 | J | 2 | J | 50 | U | 10 | U | 10 | U | 1 | U | 10 | U | | | CLP |
| NCS = 1 ug/l | 4/11/95 | 10 | U | 200 | U | 1 | J | 10 | J | 3 | J | 6 | J | 3 | J | 71 | U | 10 | U | 10 | U | 10 | U | 10 | U | | | CLP |
| | 7/10/95 | 2 | U | 2 | U | 2.3 | | 14 | | 2.2 | | 6.2 | | 4 | | 2 | U | 2 | U | 2 | U | 10 | U | 2 | U | | | 8021 |
| | 7/10/95 | 5 | U | 5 | U | 2.6 | J | 13 | | 2.7 | J | 5.5 | | 3.8 | J | 5 | U | 5 | U | 5 | U | - | | 5 | U | | | 8260 |
| | 4/10/96 | 1 | J | 91 | U | 2 | J | 11 | J | 5 | J | 5 | | 4 | J | 23 | U | 10 | U | 1 | J | 10 | U | 10 | U | | | CLP |
| | 4/8/97 | 1 | U | 100 | U | 2 | | - | | 4.8 | | 2.3 | | 3.9 | | 100 | U | 1 | U | 1.4 | | 1 | U | 1 | | | | 8021 |
| | 1/15/98 | 10 | U | 20 | U | 3 | J | - | | 2 | J | 2 | J | 3 | J | 14 | U | 10 | U | 2 | J | 10 | U | 2 | J | | | CLP |
| | 6/23/98 | - | | 25 | UJ | 1 | J | - | | - | | 3 | J | 3 | J | - | | - | | 2 | J | - | | 2 | J | | | CLP |
| | 1/12/99 | 1 | U | 1 | U | 3.6 | | - | | 2.4 | | 2 | | 3.2 | | 1 | U | 1 | U | 2.5 | | 1 | U | 1.4 | | | | 8021B |
| | 7/12/99 | - | | 10 | U | 2 | J | - | | - | | 1 | J | 2 | J | - | | - | | 10 | U | - | | 2 | J | | | CLP |
| | 2/1/00 | 1 | U | 1 | U | 2.5 | | - | | 2.3 | | 1.6 | | 3.2 | | 1 | U | 1.4 | | 2.2 | | 1 | U | 2.4 | | | | 8021B |
| | 8/8/00 | - | | 10 | U | 4 | J | - | | - | | 2 | J | 4 | J | - | | - | | 2 | J | - | | 1 | J | | | CLP |
| | 2/12-14/01 | 1 | U | 1 | U | 3.9 | | - | | 2.3 | | 1.3 | | 4.3 | | 1 | U | 1.8 | | 2.8 | | 1 | U | 5 | | | | 8021B |
| | 8/7-8/01 | - | | 10 | U | 1 | J | - | | - | | 1 | J | 2 | J | - | | - | | 2 | J | - | | 4 | J | | | CLP |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 3 | U | - | | 1 | | 0.5 | U | 2 | | 0.5 | U | 1 | | 2 | | 0.5 | U | 3 | | 0.5 | U | 8260B |
| | 8/12-14/02 | 0.5 | U | 10 | U | 3 | J | - | | 1 | U | 10 | U | 10 | U | 1 | U | 0.5 | U | 10 | U | 0.5 | U | 2 | J | 0.5 | U | CLP/8260B |
| | 1/21-22/03 | - | | 10 | U | 0.8 | J | - | | - | | - | | 3 | J | - | | - | | 2 | J | - | | 3 | J | | | CLP |
| | 7/14-15/03 | 1 | U | 17 | U | 4 | U | - | | - | | 1 | U | 1 | U | 4.2 | U | 1 | UJ | 1 | U | 1 | UJ | 1 | U | 1 | J | 8260B |
| | 3/16-17/04 | - | | 10 | U | 10 | U | - | | - | | 10 | U | 10 | U | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 9/29-30/04 | 0.5 | U | 0.5 | U | 0.46 | J | - | | - | | 0.5 | U | 3.8 | J | 0.84 | U | 0.33 | J | 0.68 | | 0.5 | U | 0.22 | J | | | 8260B |
| | 3/30-31/05 | - | | 67 | U | 10 | U | - | | - | | 10 | U | 10 | U | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 10/3-4/05 | - | | 25 | U | 0.62 | | - | | - | | 0.5 | U | 4.1 | | 0.5 | U | 0.29 | J | 0.61 | | 0.5 | U | 0.5 | U | 0.5 | U | 8260B |
| | 4/4-5/06 | - | | 10 | U | 10 | U | - | | - | | 10 | U | 3 | J | - | | - | | 10 | U | - | | 10 | U | - | | CLP |
| | 9/27-28/06 | 0.50 | U | 0.50 | U | 2.5 | U | - | | - | | 0.50 | U | 1.6 | | 0.50 | U | 0.27 | J | 0.36 | J | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 4/2-3/07 | - | | 13 | U | 10 | U | - | | - | | 0.50 | U | 2.8 | | - | | - | | 2,5 | U | - | | 0.50 | U | - | | 8260B |
| | 9/18-19/07 | 0.50 | U | 0.50 | U | 0.34 | J | - | | - | | 0.50 | U | 3.1 | | 0.50 | U | 0.31 | J | 0.38 | J | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/11/08 | - | | 10 | UJ | 0.50 | UJ | - | | - | | 0.50 | UJ | 2.5 | J | - | | - | | 0.50 | UJ | - | | 0.50 | UJ | - | | 8260B |
| | 9/8-9/08 | 0.50 | U | 8.3 | U | 0.50 | U | - | | - | | 0.50 | U | 3.1 | | 0.50 | U | 0.29 | J | 0.36 | J | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/11-12/09 | - | | 0.50 | U | 0.50 | U | - | | - | | 0.50 | U | 2.9 | | - | | - | | 0.4 | J | - | | 0.50 | U | - | | 8260B |
| | 9/1-2/09 | 0.50 | U | 0.50 | U | 0.50 | U | - | | - | | 0.50 | U | 3.1 | | 0.50 | U | .18 | J | 0.26 | J | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/17-18/10 | - | | 0.50 | U | 0.50 | U | - | | - | | 0.50 | U | 3 | | - | - | - | | 0.23 | J | - | | 0.50 | U | - | | 8260B |
| | 9/13-14/10 | 0.50 | U | 0.50 | U | 0.50 | U | - | | - | | 0.50 | U | 2.8 | | 0.50 | U | 0.50 | U | 0.16 | J | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |

NOTES ON PAGE 3

Watauga County Landfill
Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

# Table 5A
## Assessment Organic Target Parameter Analytical Results
## 1994-2010
## Core Groundwater Monitoring Wells

| Parameter | Event | Results ug/l(ppb) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-1 | | MW-2 | | MW-3 | | MW-6 | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | Analysis Type |
| Chloroethane | 6/20/94 | 10 | U | 120 | U | 6 | J | 8 | J | 7.33 | J | 9.44 | | 56.78 | J | 9.29 | U | 1.16 | J | 20.23 | | 9.29 | U | 28.21 | | | | CLP/8021 |
| | 9/27/94 | 10 | U | 170 | U | 8 | J | 10 | J | 16 | | 7 | J | 18 | | 10 | U | 10 | U | 5 | J | 10 | U | 7 | J | | | CLP |
| no MCL established | 2/06/95 | 10 | U | 150 | U | 7 | J | 11 | J | 28 | | 7 | J | 17 | | 50 | U | 10 | U | 4 | J | 1 | U | 5 | J | | | CLP |
| NCS = 3000 ug/l | 4/11/95 | 10 | U | 200 | U | 6 | J | 8 | J | 16 | | 7 | J | 15 | | 71 | U | 10 | U | 2 | J | 10 | U | 4 | J | | | CLP |
| | 7/10/95 | 2 | U | 2 | U | 10 | U | 15 | U | 9.2 | | 10 | U | 20 | U | 2 | U | 2 | U | 5 | U | 10 | U | 5 | U | | | 8021 |
| | 7/10/95 | 5 | U | 5 | U | 8.7 | | 16 | | 22 | | 9.3 | | 21 | | 5 | U | 5 | U | 6.4 | | - | | 4.9 | J | | | 8260 |
| | 4/10/96 | 10 | U | 91 | U | 8 | J | 14 | J | 41 | | 10 | J | 16 | | 23 | U | 10 | U | 5 | J | 10 | U | 5 | J | | | CLP |
| | 4/8/97 | 1 | U | 1 | U | 46 | | - | | 58 | | 38 | | 110 | | 1 | U | 12 | | 40 | | 1 | U | 30 | | | | 8021 |
| | 1/15/98 | 10 | U | 20 | U | 10 | | - | | 19 | | 12 | | 12 | | 20 | | 10 | U | 5 | J | 10 | U | 9 | J | | | CLP |
| | 6/23/98 | - | | 25 | UJ | 5 | J | - | | - | | 11 | J | 8 | J | - | | - | | 5 | J | - | | 6 | J | | | CLP |
| | 1/12/99 | 2 | U | 2 | U | 100 | U | - | | 43 | | 40 | U | 60 | U | 2 | U | 25 | | 50 | U | 2 | U | 40 | U | | | 8021B |
| | 7/12/99 | - | | 10 | U | 8 | J | - | | - | | 10 | U | 10 | U | - | | - | | 10 | U | - | | 7 | J | | | CLP |
| | 2/1/00 | 2 | U | 2 | U | 40 | U | - | | 34 | J | 40 | U | 40 | U | 2 | U | 28 | J | 50 | U | 2 | U | 40 | U | | | 8021B |
| | 8/8/00 | - | | 10 | U | 13 | | - | | - | | 16 | | 8 | J | - | | - | | 7 | J | - | | 7 | J | | | CLP |
| | 2/12-14/01 | 2 | U | 2 | U | 60 | U | - | | 44 | J | 40 | U | 40 | U | 2 | U | 34 | J | 40 | U | 2 | U | 60 | U | | | 8021B |
| | 8/7-8/01 | - | | 10 | UJ | 6 | J | - | | - | | 28 | J | 5 | J | - | | - | | 8 | J | - | | 14 | J | | | CLP |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 8 | | - | | 23 | | 4 | | 3 | | 0.5 | U | 7 | | 8 | | 0.5 | U | 10 | | 0.5 | U | 8260B |
| | 8/12-14/02 | 0.5 | U | 10 | U | 21 | | - | | 18 | | 38 | | 10 | U | 1 | U | 0.5 | U | 17 | | 0.5 | U | 17 | | 0.5 | U | CLP/8260B |
| | 1/21-22/03 | - | | 10 | U | 4 | J | - | | - | | - | | 4 | J | - | | - | | 4 | J | - | | 7 | J | | | CLP |
| | 7/14-15/03 | 1 | U | 17 | U | 4 | | - | | - | | 1 | U | 1 | U | 4.2 | U | 5.6 | J | 1 | U | 1 | UJ | 2.9 | J | 1 | J | 8260B |
| | 3/16-17/04 | - | | 10 | U | 20 | | - | | - | | 17 | | 9 | J | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 9/29-30/04 | 0.5 | U | 0.44 | J | 7.8 | J | - | | - | | 0.5 | U | 6.3 | J | 0.84 | U | 6.6 | J | 6.2 | | 0.5 | U | 5.3 | J | | | 8260B |
| | 3/30-31/05 | - | | 67 | U | 10 | U | - | | - | | 10 | U | 3 | J | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 10/3-4/05 | - | | 25 | U | 10 | | - | | - | | 0.5 | U | 6.6 | | 0.5 | U | 7 | | 9.7 | | 0.5 | U | 0.89 | J | 0.5 | U | 8260B |
| | 4/4-5/06 | - | | 10 | U | 11 | | - | | - | | 11 | | 7 | J | - | | - | | 12 | | - | | 10 | U | - | | CLP |
| | 9/27-28/06 | 0.50 | U | 0.39 | J | 8.7 | | - | | - | | 0.50 | U | 2.9 | | 0.50 | U | 7.5 | J | 4.9 | | 0.50 | U | 0.71 | | 0.50 | U | 8260B |
| | 4/2-3/07 | - | | 13 | U | 11 | | - | | - | | 1.5 | | 6.5 | | - | | - | | 12 | | - | | 0.50 | U | - | | 8260B |
| | 9/18-19/07 | 0.50 | U | 0.39 | J | 7.8 | | - | | - | | 1.2 | | 5.8 | | 0.50 | U | 8.7 | | 9.4 | | 0.50 | U | 0.7 | | 0.50 | U | 8260B |
| | 3/11/08 | - | | 10 | U | 1.5 | | - | | - | | 0.50 | U | 5.1 | | - | | - | | 11 | | - | | 0.9 | | - | | 8260B |
| | 9/8-9/08 | 0.50 | U | 8.3 | U | 1.2 | J | - | | - | | 0.50 | U | 4.9 | | 0.50 | U | 7.3 | | 9.4 | | 0.50 | U | 0.9 | | 0.50 | J | 8260B |
| | 3/11-12/09 | - | | 0.5 | U | 2.4 | | - | | - | | 0.50 | U | 5.8 | | - | | - | | 9.9 | | - | | 0.50 | U | - | | 8260B |
| | 9/1-2/09 | 0.50 | U | 0.5 | U | 2.3 | | - | | - | | 0.50 | U | 4.7 | | 0.50 | U | 5.5 | | 7 | | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/17-18/10 | - | - | 0.5 | U | 2.6 | | - | | - | | 0.50 | U | 3.8 | | - | - | - | | 6.5 | | - | | 0.50 | U | - | | |
| | 9/13-14/10 | 0.50 | U | 0.50 | U | 5.1 | J | - | | - | | 2.2 | J | 4.2 | J | 0.50 | U | 2.1 | J | 7 | J | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |

Watauga County Landfill
Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

# Table 5A
## Assessment Organic Target Parameter Analytical Results
## 1994-2010
## Core Groundwater Monitoring Wells

| Parameter | Event | Results ug/l(ppb) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-1 | | MW-2 | | MW-3 | | MW-6 | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | Analysis Type |
| Dichlorodifluoromethane | 6/20/94 | 10 | U | 120 | U | 7 | J | 25 | U | 46.64 | U | 2.26 | J | 13.92 | J | 46.64 | U | 1.88 | J | 9.83 | J | 46.64 | U | 1.44 | J | | | CLP/8021 |
| | 9/27/94 | 10 | U | 10 | J | 4 | J | 25 | U | 10 | U | 2 | J | 9 | J | 10 | U | 10 | U | 4 | J | 10 | U | 4 | J | | | CLP |
| no MCL established | 2/06/95 | 10 | U | 150 | U | 10 | U | 25 | U | 1 | U | 14 | | 27 | | 50 | U | 2 | J | 10 | U | 1 | U | 12 | | | | CLP |
| NCS = 1000 ug/l | 4/11/95 | 10 | U | 200 | U | 10 | U | 25 | U | 10 | U | 7 | J | 9 | J | 71 | U | 10 | U | 4 | J | 10 | UJ | 3 | J | | | CLP |
| | 7/10/95 | 2 | UJ | 2 | UJ | 6.9 | J | 2 | UJ | 2 | UJ | 16 | J | 2 | UJ | 2 | UJ | 2 | UJ | 5.7 | J | 10 | U | 5.3 | J | | | 8021 |
| | 7/10/95 | 5 | U | 5 | U | 7.2 | | 2.2 | J | 5 | U | 6.7 | | 2.8 | J | 5 | U | 1.7 | J | 4 | J | - | | 4.2 | J | | | 8260 |
| | 4/10/96 | 10 | U | 91 | U | 10 | U | 25 | U | 10 | U | 10 | U | 10 | U | 23 | U | 10 | U | 10 | U | 10 | U | 10 | U | | | CLP |
| | 4/8/97 | 1 | U | 1 | U | 6.4 | | - | | 1 | U | 17 | | 11 | | 1 | U | 3 | | 10 | | 1 | U | 1 | U | | | 8021 |
| | 1/15/98 | 10 | U | 20 | U | 11 | | - | | 10 | U | 12 | | 10 | U | 14 | U | 10 | U | 10 | U | 10 | U | 10 | U | | | CLP |
| | 6/23/98 | - | | 25 | UJ | 3 | J | - | | - | | 10 | UJ | 10 | UJ | - | | - | | 3 | J | - | | 10 | UJ | | | CLP |
| | 1/12/99 | 1 | U | 1 | U | 1 | U | - | | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | | | 8021B |
| | 7/12/99 | - | | 10 | U | 10 | U | - | | - | | 10 | U | 10 | U | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 2/1/00 | 1 | U | 1 | U | 3 | | - | | 1.3 | | 8.1 | | 3.7 | | 1 | U | 3 | | 4.8 | | 1 | U | 3.9 | | | | 8021B |
| | 8/8/00 | - | | 10 | U | 3 | J | - | | - | | 2 | J | 1 | J | - | | - | | 3 | J | - | | 1 | J | | | CLP |
| | 2/12-14/01 | 1 | U | 1 | U | 3.9 | | - | | 1 | U | 1 | U | 6.6 | | 1 | U | 3 | | 2.8 | | 1 | U | 2.5 | | | | 8021B |
| | 8/7-8/01 | - | | 10 | UJ | 3 | J | - | | - | | 8 | J | 4 | J | - | | - | | 7 | J | - | | 9 | J | | | CLP |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 4 | | - | | 2 | | 0.5 | U | 1 | | 0.5 | U | 3 | | 4 | | 0.5 | U | 6 | | 0.5 | U | 8260B |
| | 8/12-14/02 | 0.5 | UJ | 10 | U | 10 | U | - | | 1 | U | 10 | U | 10 | U | 1 | U | 0.5 | UJ | 10 | U | 0.5 | UJ | 10 | U | 0.50 | J | CLP/8260B |
| | 1/21-22/03 | - | | 10 | U | 10 | U | - | | - | | - | | 0.5 | J | - | | - | | 0.9 | J | - | | 0.9 | J | | | CLP |
| | 7/14-15/03 | 1 | U | 17 | U | 4 | U | - | | - | | 1 | U | 1 | U | 4.2 | U | 1 | UJ | 1 | U | 1 | UJ | 1 | U | 1 | J | 8260B |
| | 3/16-17/04 | - | | 10 | U | 10 | U | - | | - | | 10 | U | 3 | J | - | | - | | 10 | U | - | | 3 | J | | | CLP |
| | 9/29-30/04 | 0.5 | U | 0.15 | J | 0.5 | U | - | | - | | 0.5 | U | 3.3 | J | 0.84 | U | 0.76 | J | 1.1 | | 0.5 | U | 0.6 | J | | | 8260B |
| | 3/30-31/05 | - | | 67 | UJ | 10 | UJ | - | | - | | 10 | UJ | 0.8 | J | - | | - | | 10 | UJ | - | | 10 | U | | | CLP |
| | 10/3-4/05 | - | | 25 | U | 3.2 | | - | | - | | 0.5 | UJ | 1.2 | J | 0.5 | UJ | 1 | UJ | 0.31 | J | 0.5 | UJ | 0.18 | J | 0.50 | J | 8260B |
| | 4/4-5/06 | - | | 10 | U | 10 | U | - | | - | | 10 | U | 2 | J | - | | - | | 10 | U | - | | 10 | U | - | | CLP |
| | 9/27-28/06 | 0.50 | U | 0.50 | U | 2.5 | U | - | | - | | 0.50 | U | 0.44 | J | 0.50 | U | 0.50 | U | 1.6 | U | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 4/2-3/07 | - | | 13 | U | 10 | U | - | | - | | 0.50 | U | 0.7 | J | - | | - | | 2,5 | U | - | | 0.50 | U | - | | 8260B |
| | 9/18-19/07 | 0.50 | U | 0.50 | U | 2.5 | U | - | | - | | 0.50 | U | 0.73 | | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/11/08 | - | | 10 | U | 0.50 | U | - | | - | | 0.50 | U | 0.5 | J | - | | - | | 2.5 | U | - | | 0.50 | U | - | | 8260B |
| | 9/8-9/08 | 0.50 | U | 8.3 | U | 0.50 | U | - | | - | | 0.50 | U | 0.58 | | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/11-12/09 | - | | 0.50 | U | 0.50 | U | - | | - | | 0.50 | U | 0.4 | J | - | | - | | 0.50 | U | - | | 0.50 | U | - | | 8260B |
| | 9/1-2/09 | 0.50 | U | 8.3 | U | 0.50 | U | - | | - | | 0.50 | U | 0.66 | | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/17-18/10 | - | | 0.5 | UJ | 0.50 | UJ | - | | - | | 0.50 | UJ | 0.43 | J | - | - | - | | 0.14 | J | - | | 0.038 | J | - | | |
| | 9/13-14/10 | 0.50 | U | 0.50 | U | 0.50 | U | - | | - | | 0.50 | U | 0.55 | | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |

Watauga County Landfill
Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

# Table 5A
## Assessment Organic Target Parameter Analytical Results
## 1994-2010
## Core Groundwater Monitoring Wells

| Parameter | Event | Results ug/l(ppb) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-1 | | MW-2 | | MW-3 | | MW-6 | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | Analysis Type |
| 1,1-Dichloroethane | 6/20/94 | 10 | U | 75 | J | 160 | | 97 | | 10.42 | J | 35.33 | J | 13.63 | J | 28.62 | J | 25.23 | J | 82.77 | J | 0.26 | J | 105.03 | J | | | CLP/8021 |
| | 9/27/94 | 10 | U | 110 | J | 200 | | 110 | | 1 | J | 70 | | 23 | | 84 | | 27 | | 130 | | 10 | U | 230 | | | | CLP |
| no MCL established | 2/06/95 | 10 | U | 160 | | 180 | | 140 | | 2.9 | | 74 | | 30 | | 37 | J | 28 | | 120 | | 1 | U | 170 | | | | CLP |
| NCS = 6 ug/l | 4/11/95 | 10 | U | 98 | J | 130 | | 94 | | 4 | J | 58 | | 35 | | 67 | J | 18 | | 77 | | 10 | U | 130 | | | | CLP |
| | 7/10/95 | 2 | U | 81 | | 130 | | 100 | J | 4.8 | | 60 | J | 36 | | 58 | J | 22 | | 100 | | 10 | U | 102 | J | | | 8021 |
| | 7/10/95 | 5 | U | 94 | | 160 | | 130 | | 6.8 | | 71 | | 40 | | 55 | | 26 | | 120 | | - | | 130 | | | | 8260 |
| | 4/10/96 | 10 | U | 130 | | 150 | | 120 | | 5 | J | 80 | | 36 | | 22 | J | 26 | | 120 | | 10 | U | 130 | | | | CLP |
| | 4/8/97 | 1 | U | 84 | | 90 | | - | | 9.4 | | 52 | | 28 | | 27 | | 26 | | 82 | | 1 | U | 76 | | | | 8021 |
| | 1/15/98 | 10 | U | 29 | | 97 | | - | | 13 | | 55 | | 27 | | 11 | J | 30 | | 82 | | 10 | U | 88 | | | | CLP |
| | 6/23/98 | - | | 100 | J | 67 | J | - | | - | | 48 | J | 24 | J | - | | - | | 66 | J | - | | 10 | UJ | | | CLP |
| | 1/12/99 | 1 | U | 36 | | 92 | | - | | 13 | | 35 | | 22 | | 16 | | 27 | | 70 | | 1 | U | 65 | | | | 8021B |
| | 7/12/99 | - | | 24 | | 72 | | - | | - | | 47 | | 20 | | - | | - | | 10 | U | - | | 71 | | | | CLP |
| | 2/1/00 | 1 | U | 12 | | 78 | | - | | 14 | | 37 | | 19 | | 15 | | 37 | | 74 | | 0.86 | J | 90 | | | | 8021B |
| | 8/8/00 | - | | 28 | | 73 | | - | | - | | 33 | | 19 | | - | | - | | 58 | | - | | 59 | | | | CLP |
| | 2/12-14/01 | 1 | U | 11 | | 100 | | - | | 12 | | 1 | U | 23 | | 27 | | 34 | | 70 | | 0.56 | J | 95 | | | | 8021B |
| | 8/7-8/01 | - | | 8 | J | 32 | | - | | - | | 46 | | 15 | | - | | - | | 47 | | - | | 81 | | | | CLP |
| | 2/11-14/02 | 0.5 | U | 5 | | 51 | | - | | 12 | | 16 | | 0.5 | U | 10 | | 38 | | 61 | | 0.5 | U | 85 | | 0.5 | U | 8260B |
| | 8/12-14/02 | 0.5 | U | 14 | | 58 | | - | | 16 | | 42 | | 13 | | 7 | | 0.5 | U | 47 | | 0.5 | U | 53 | | 0.5 | U | CLP/8260B |
| | 1/21-22/03 | - | | 18 | | 29 | | - | | - | | - | | 13 | | - | | - | | 42 | | - | | 59 | | | | CLP |
| | 7/14-15/03 | 1 | U | 53 | | 28 | | - | | - | | 1 | U | 1 | U | 8.2 | | 30 | J | 1 | U | 1 | UJ | 11 | | 1 | J | 8260B |
| | 3/16-17/04 | - | | 100 | | 33 | | - | | - | | 36 | | 45 | | - | | - | | 18 | | - | | 21 | | | | CLP |
| | 9/29-30/04 | 0.5 | U | 92 | J | 29 | J | - | | - | | 0.17 | J | 25 | J | 7.4 | J | 24 | J | 34 | J | 0.32 | J | 15 | J | | | 8260B |
| | 3/30-31/05 | - | | 110 | | 28 | | - | | - | | 10 | U | 19 | | - | | - | | 32 | | - | | 7 | J | | | CLP |
| | 10/3-4/05 | - | | 110 | | 30 | | - | | - | | 0.21 | J | 25 | | 21 | | 21 | | 33 | | 0.19 | J | 6.4 | J | 0.5 | U | 8260B |
| | 4/4-5/06 | - | | 85 | | 38 | | - | | - | | 11 | | 20 | | - | | - | | 34 | | - | | 5 | J | - | | CLP |
| | 9/27-28/06 | 0.50 | U | 46 | | 17 | | - | | - | | 0.50 | U | 6.3 | | 3.3 | | 21 | | 20 | | 0.50 | U | 3.2 | | 0.50 | U | 8260B |
| | 4/2-3/07 | - | | 67 | J | 38 | | - | | - | | 1.1 | J | 16 | J | - | | - | | 33 | J | - | | 5 | J | - | | 8260B |
| | 9/18-19/07 | 0.50 | U | 74 | | 24 | | - | | - | | 0.76 | | 16 | | 4.5 | | 28 | | 32 | | 0.11 | J | 3.8 | | 0.12 | J | 8260B |
| | 3/11/08 | - | | 56 | | 8.5 | | - | | - | | 0.50 | U | 15 | | - | | - | | 30 | | - | | 3.7 | | - | | 8260B |
| | 9/8-9/08 | 0.50 | U | 42 | | 12 | | - | | - | | 0.39 | J | 15 | | 13 | | 21 | | 24 | | 0.26 | J | 2.9 | | 0.50 | U | 8260B |
| | 3/11-12/09 | - | | 25 | | 8.1 | | - | | - | | 0.20 | J | 15 | | - | | - | | 25 | | - | | 3.7 | | - | | 8260B |
| | 9/1-2/09 | 0.50 | U | 42 | | 7.9 | | - | | - | | 0.50 | U | 13 | | 9.5 | | 18 | | 20 | | 0.10 | J | 1.5 | | 0.15 | J | 8260B |
| | 3/17-18/10 | - | | 56 | | 7.8 | | - | | - | | 0.057 | J | 13 | | - | | - | | 19 | | - | | 1 | | - | | |
| | 9/13-14/10 | 0.50 | U | 48 | | 10 | | - | | - | | 0.71 | | 10 | | 8.9 | | 11 | | 17 | | 0.1 | J | 2.2 | | 1.4 | | 8260B |

NOTES ON PAGE 3

Watauga County Landfill
Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

# Table 5A
## Assessment Organic Target Parameter Analytical Results
## 1994-2010
## Core Groundwater Monitoring Wells

| Parameter | Event | Results ug/l(ppb) | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-1 | | MW-2 | | MW-3 | | MW-6 | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | Analysis Type |
| 1,1-Dichloroethene | 6/20/94 | 10 | U | 160 | | 5 | J | 25 | U | 9.75 | U | 0.3 | J | 9.75 | U | 32.29 | | 9.75 | U | 1.15 | J | 9.75 | U | 1.09 | J | | | CLP/8021 |
| | 9/27/94 | 10 | U | 210 | | 6 | J | 25 | U | 10 | U | 4 | J | 10 | U | 160 | | 10 | U | 5 | J | 10 | U | 3 | J | | | CLP |
| MCL= 7 ug/l | 2/06/95 | 10 | U | 360 | | 6 | J | 25 | U | 1 | U | 6 | J | 10 | U | 100 | | 10 | U | 4 | J | 1 | U | 3 | J | | | CLP |
| NCS = 7 ug/l | 4/11/95 | 10 | U | 150 | J | 3 | J | 25 | U | 10 | U | 3 | J | 10 | U | 120 | | 10 | U | 2 | J | 10 | U | 1 | J | | | CLP |
| | 7/10/95 | 2 | U | 170 | | 4 | | 2 | U | 2 | U | 5.7 | | 2 | U | 160 | J | 0.86 | J | 3.9 | | 10 | U | 1.8 | J | | | 8021 |
| | 7/10/95 | 5 | U | 170 | J | 3.7 | J | 1.3 | J | 5 | U | 4.1 | J | 5 | U | 88 | | 5 | U | 3.6 | J | - | | 1.6 | J | | | 8260 |
| | 4/10/96 | 10 | U | 210 | | 3 | J | 25 | U | 10 | U | 6 | J | 10 | U | 51 | | 10 | U | 3 | J | 10 | U | 2 | J | | | CLP |
| | 4/8/97 | 1 | U | 180 | | 1.9 | | - | | 1 | U | 4.9 | | 0.54 | J | 84 | | 1.1 | | 2.7 | | 0.77 | J | 1.2 | | | | 8021 |
| | 1/15/98 | 10 | U | 50 | | 2 | J | - | | 10 | U | 3 | J | 10 | U | 20 | | 10 | U | 2 | J | 10 | U | 1 | J | | | CLP |
| | 6/23/98 | - | | 160 | J | 10 | UJ | - | | - | | 2 | J | 10 | UJ | - | | - | | 2 | J | - | | 1 | J | | | CLP |
| | 1/12/99 | 1 | U | 77 | | 1.9 | | - | | 1 | U | 3.2 | | 1 | U | 26 | | 1.2 | | 1.9 | | 1 | U | 1 | U | | | 8021B |
| | 7/12/99 | - | | 47 | | 1 | J | - | | - | | 2 | J | 10 | U | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 2/1/00 | 1 | U | 26 | | 1.2 | | - | | 1 | U | 2.4 | | 1 | U | 31 | | 1.4 | | 1.6 | | 0.96 | J | 1.2 | | | | 8021B |
| | 8/8/00 | - | | 56 | | 1 | J | - | | - | | 2 | J | 10 | U | - | | - | | 1 | J | - | | 10 | U | | | CLP |
| | 2/12-14/01 | 1 | U | 19 | | 1.3 | | - | | 1 | U | 1 | U | 1 | U | 63 | | 1.2 | | 1.3 | | 0.61 | J | 1.4 | | | | 8021B |
| | 8/7-8/01 | - | | 14 | | 10 | U | - | | - | | 2 | J | 10 | U | - | | - | | 10 | U | - | | 0.8 | J | | | CLP |
| | 2/11-14/02 | 0.5 | U | 9 | | 3 | U | - | | 0.8 | | 0.8 | | 12 | | 16 | | 0.8 | | 0.9 | | 0.5 | U | 0.8 | | 0.5 | U | 8260B |
| | 8/12-14/02 | 0.5 | U | 22 | | 10 | U | - | | 1 | U | 10 | U | 10 | U | 7 | | 0.5 | U | 10 | U | 0.5 | U | 10 | U | 0.5 | U | CLP/8260B |
| | 1/21-22/03 | - | | 32 | | 0.3 | J | - | | - | | - | | 10 | U | - | | - | | 0.8 | J | - | | 0.8 | J | | | CLP |
| | 7/14-15/03 | 1 | U | 79 | | 4 | U | - | | - | | 1 | U | 1 | U | 15 | | 1 | UJ | 1 | U | 1 | UJ | 1 | UJ | 1 | U | 8260B |
| | 3/16-17/04 | - | | 150 | | 10 | U | - | | - | | 1 | J | 10 | U | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 9/29-30/04 | 0.5 | U | 180 | J | 0.5 | U | - | | - | | 0.48 | J | 0.28 | J | 11 | | 0.86 | J | 1.4 | | 0.43 | J | 0.32 | J | | | 8260B |
| | 3/30-31/05 | - | | 150 | | 10 | U | - | | - | | 10 | U | 10 | U | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 10/3-4/05 | - | | 160 | | 0.52 | | - | | - | | 0.5 | U | 0.5 | U | 26 | | 0.6 | J | 0.7 | | 0.2 | J | 0.5 | U | 0.5 | U | 8260B |
| | 4/4-5/06 | - | | 110 | | 10 | U | - | | - | | 10 | U | 10 | U | - | | - | | 10 | U | - | | 10 | U | - | | CLP |
| | 9/27-28/06 | 0.50 | U | 75 | | 2.5 | U | - | | - | | 0.50 | U | 0.50 | U | 5.9 | | 0.45 | J | 0.36 | J | 0.27 | J | 0.50 | U | 0.50 | U | 8260B |
| | 4/2-3/07 | - | | 75 | | 10 | U | - | | - | | 0.50 | U | 0.50 | U | - | | - | | 2,5 | U | - | | 0.50 | U | - | | 8260B |
| | 9/18-19/07 | 0.50 | U | 130 | | 0.26 | J | - | | - | | 0.50 | U | 0.50 | U | 4.2 | | 0.46 | J | 0.52 | | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/11/08 | - | | 83 | | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | - | | - | | J | J | - | | 0.50 | U | - | | 8260B |
| | 9/8-9/08 | 0.50 | U | 61 | | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | 20 | | 0.30 | J | 0.35 | J | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/11-12/09 | - | | 46 | | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | - | | - | | 0.30 | J | - | | 0.50 | U | - | | 8260B |
| | 9/1-2/09 | 0.50 | U | 80 | | 0.10 | J | - | | - | | 0.50 | U | 0.50 | U | 15 | | 0.19 | J | 0.26 | J | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/17-18/10 | - | | 89 | | 0.072 | J | - | | - | | 0.50 | U | 0.50 | U | - | | - | | 0.27 | J | - | | 0.50 | U | - | | |
| | 9/13-14/10 | 0.50 | U | 70 | | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | 12 | | 0.83 | J | 0.23 | J | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |

NOTES ON PAGE 3

Watauga County Landfill
Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

# Table 5A
## Assessment Organic Target Parameter Analytical Results
## 1994-2010
## Core Groundwater Monitoring Wells

| Parameter | Event | Results ug/l(ppb) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-1 | | MW-2 | | MW-3 | | MW-6 | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | Analysis Type |
| cis 1,2-Dichloroethene(2) | 6/20/94 | 10 | U | 120 | U | 37 | | 330 | | 0.97 | J | 28.9 | | 0.95 | J | 9.49 | U | 5.05 | J | 28.13 | | 9.49 | U | 60.79 | J | | | CLP/8021 |
| | 9/27/94 | 10 | U | 170 | U | 61 | | 380 | | 3 | J | 93 | | 2 | J | 10 | U | 8 | J | 47 | | 10 | U | 120 | | | | CLP |
| MCL= 70 ug/l | 2/06/95 | 10 | U | 150 | U | 54 | | 370 | | 7.2 | | 91 | | 2 | J | 50 | U | 8 | J | 37 | | 1 | U | 80 | | | | CLP |
| NCS = 70 ug/l | 4/11/95 | 10 | U | 200 | U | 44 | | 330 | | 9 | J | 100 | | 4 | J | 71 | U | 6 | J | 30 | | 10 | U | 70 | | | | CLP |
| | 7/10/95 | 2 | U | 2 | U | 65 | | 440 | J | 4.4 | | 110 | J | 7.4 | | 2 | U | 11 | | 37 | | 10 | U | 72 | J | | | 8021 |
| | 7/10/95 | 5 | U | 5 | U | 50 | | 430 | | 7.9 | | 89 | | 6.2 | | 5 | U | 7.6 | | 42 | | - | | 63 | | | | 8260 |
| | 4/10/96 | 10 | U | 91 | U | 64 | | 420 | | 6 | J | 78 | | 11 | | 23 | U | 11 | | 54 | | 10 | U | 87 | | | | CLP |
| | 4/8/97 | 1 | U | 1 | U | 58 | | - | | 4.4 | | 34 | | 13 | | 1 | U | 17 | | 60 | | 1 | U | 100 | | | | 8021 |
| | 1/15/98 | 10 | U | 20 | U | 62 | | - | | 11 | | 29 | | 14 | | 14 | U | 18 | | 56 | | 10 | U | 87 | | | | CLP |
| | 6/23/98 | - | | 25 | UJ | 50 | J | - | | - | | 43 | J | 12 | J | - | | - | | 52 | J | - | | 79 | J | | | CLP |
| | 1/12/99 | 1 | U | 1 | U | 90 | | - | | 7.1 | | 20 | | 14 | | 1 | U | 19 | | 63 | | 1 | U | 89 | | | | 8021B |
| | 7/12/99 | - | | 10 | U | 69 | | - | | - | | 21 | | 12 | | - | | - | | 10 | U | - | | 88 | | | | CLP |
| | 2/1/00 | 1 | U | 1 | U | 97 | | - | | 5.6 | | 13 | | 15 | | 1 | U | 39 | | 77 | | 1 | U | 120 | | | | 8021B |
| | 8/8/00 | - | | 10 | U | 120 | | - | | - | | 13 | | 16 | | - | | - | | 69 | | - | | 90 | | | | CLP |
| | 2/12-14/01 | 1 | U | 1 | U | 170 | | - | | 3.8 | | 1 | U | 22 | | 1 | U | 52 | | 97 | | 1 | U | 160 | | | | 8021B |
| | 8/7-8/01 | - | | 10 | U | 59 | | - | | - | | 13 | | 14 | | - | | - | | 83 | | - | | 180 | | | | CLP |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 89 | | - | | 6 | | 6 | | 10 | | 0.5 | U | 50 | | 86 | | 0.5 | U | 160 | | 0.5 | U | 8260B |
| | 8/12-14/02 | 0.5 | U | 10 | U | 110 | | - | | 5 | | 9 | J | 11 | | 1 | U | 0.5 | U | 75 | | 0.5 | U | 110 | | 0.5 | U | CLP/8260B |
| | 1/21-22/03 | - | | 10 | U | 62 | | - | | - | | - | | 13 | | - | | - | | 80 | | - | | 150 | | | | CLP |
| | 7/14-15/03 | 1 | U | 17 | U | 66 | | - | | - | | 1 | U | 1 | U | 4.2 | U | 35 | J | 1 | U | 0.5 | UJ | 21 | | 0.5 | J | 8260B |
| | 3/16-17/04 | - | | 10 | U | 11 | | - | | - | | 17 | | 59 | | - | | - | | 10 | | - | | 48 | | | | CLP |
| | 9/29-30/04 | 0.16 | J | 0.37 | J | 64 | J | - | | - | | 0.5 | U | 16 | J | 0.84 | U | 25 | J | 61 | J | 0.16 | J | 37 | | | | 8260B |
| | 3/30-31/05 | - | | 67 | U | 82 | | - | | - | | 10 | U | 12 | | - | | - | | 63 | | - | | 17 | | | | CLP |
| | 10/3-4/05 | - | | 25 | U | 73 | | - | | - | | 0.27 | J | 15 | | 0.5 | U | 24 | | 56 | | 0.5 | U | 13 | J | 0.5 | U | 8260B |
| | 4/4-5/06 | - | | 10 | U | 98 | | - | | - | | 6 | J | 11 | | - | | - | | 61 | | - | | 11 | | - | | CLP |
| | 9/27-28/06 | 0.50 | U | 0.25 | J | 59 | | - | | - | | 0.50 | U | 5.3 | | 0.50 | U | 18 | | 43 | | 0.50 | U | 11 | | 0.50 | U | 8260B |
| | 4/2-3/07 | - | | 13 | U | 98 | | - | | - | | 1.1 | | 9.1 | | - | | - | | 59 | | - | | 11 | | - | | 8260B |
| | 9/18-19/07 | 0.50 | U | 0.25 | J | 75 | | - | | - | | 0.47 | J | 11 | | 0.50 | U | 39 | | 69 | | 0.50 | U | 9 | | 0.50 | U | 8260B |
| | 3/11/08 | - | | 10 | U | 23 | | - | | - | | 0.50 | U | 9.2 | | - | | - | | 66 | | - | | 9.9 | | - | | 8260B |
| | 9/8-9/08 | 0.50 | U | 8.3 | U | 34 | | - | | - | | 0.22 | J | 9.4 | | 0.50 | U | 37 | | 52 | | 0.50 | U | 7 | | 0.50 | U | 8260B |
| | 3/11-12/09 | - | | 0.50 | U | 24 | | - | | - | | 0.50 | U | 9.1 | | - | | - | | 59 | | - | | 6.1 | | - | | 8260B |
| | 9/1-2/09 | 0.50 | U | 0.20 | J | 20 | | - | | - | | 0.50 | U | 8.1 | | 0.50 | U | 28 | | 41 | | 0.50 | U | 2.9 | | 0.50 | U | 8260B |
| | 3/17-18/10 | - | | 0.26 | J | 21 | | - | | - | | 0.50 | U | 8.2 | | - | | - | | 41 | | - | | 1.9 | | - | | |
| | 9/13-14/10 | 0.50 | U | 0.2 | J | 25 | | - | | - | | 0.51 | | 6.9 | | 0.50 | U | 19 | | 35 | | 0.50 | U | 3.5 | | 0.17 | J | |

Watauga County Landfill
Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

# Table 5A
## Assessment Organic Target Parameter Analytical Results
## 1994-2010
## Core Groundwater Monitoring Wells

| Parameter | Event | Results ug/l(ppb) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-1 | | MW-2 | | MW-3 | | MW-6 | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | Analysis Type |
| Methylene Chloride | 6/20/94 | 8 | J | 120 | U | 6 | J | 11 | J | 36.2 | UJ | 36.2 | UJ | 140.1 | J | 36.2 | UJ | 36.2 | UJ | 8.58 | J | 36.2 | UJ | 36.2 | UJ | | | CLP/8021 |
| | 9/27/94 | 10 | U | 490 | | 14 | U | 25 | U | 10 | U | 4 | J | 73 | | 180 | | 10 | U | 28 | U | 10 | U | 58 | U | | | CLP |
| MCL= 5 ug/l | 2/06/95 | 10 | U | 150 | U | 10 | U | 25 | U | 1.5 | | 10 | U | 93 | | 50 | U | 10 | U | 10 | U | 1 | U | 10 | U | | | CLP |
| NCS = 5 ug/l | 4/11/95 | 10 | U | 200 | U | 10 | U | 25 | U | 10 | U | 10 | U | 120 | | 71 | U | 10 | U | 10 | U | 10 | U | 10 | U | | | CLP |
| | 7/10/95 | 2 | U | 2 | U | 2.4 | | 1.2 | J | 2 | U | 4.7 | | 89 | | 2 | U | 2.9 | | 3.3 | | 10 | U | 2.2 | | | | 8021 |
| | 7/10/95 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 160 | | 5 | U | 5 | U | 5.9 | U | - | | 5 | U | | | 8260 |
| | 4/10/96 | 10 | U | 91 | U | 10 | U | 25 | U | 10 | U | 10 | U | 120 | | 23 | U | 10 | U | 10 | U | 10 | U | 10 | U | | | CLP |
| | 4/8/97 | 1 | U | 1 | U | 0.71 | J | - | | 1.4 | | 1.6 | | 100 | | 1 | U | 0.7 | J | 1.1 | | 0.656 | J | 0.63 | J | | | 8021 |
| | 1/15/98 | 1 | J | 20 | U | 2 | J | - | | 2 | J | 3 | J | 90 | | 4 | J | 1 | J | 2 | J | 1 | J | 2 | J | | | CLP |
| | 6/23/98 | - | | 25 | UJ | 10 | UJ | - | | - | | 10 | UJ | 10 | UJ | - | | - | | 10 | UJ | - | | 10 | UJ | | | CLP |
| | 1/12/99 | 1 | U | 1 | U | 1 | U | - | | 1 | U | 1.8 | | 2.3 | | 1 | U | 1 | U | 1 | U | 1 | U | 1 | U | | | 8021B |
| | 7/12/99 | - | | 10 | UJ | 10 | UJ | - | | - | | 10 | UJ | 10 | UJ | - | | - | | 10 | UJ | - | | 10 | UJ | | | CLP |
| | 2/1/00 | 1 | J | 1 | U | 0.76 | J | - | | 0.7 | J | 1.5 | | 1 | U | 1 | U | 1 | | 0.82 | J | 1 | U | 0.98 | J | | | 8021B |
| | 8/8/00 | - | | 10 | UJ | 10 | UJ | - | | - | | 10 | UJ | 10 | UJ | - | | - | | 10 | UJ | - | | 10 | UJ | | | CLP |
| | 2/12-14/01 | 1 | J | 1 | U | 0.71 | J | - | | 0.7 | J | 1 | U | 1 | U | 1 | U | 0.93 | J | 0.54 | J | 1 | U | 1.4 | | | | 8021B |
| | 8/7-8/01 | - | | 2 | J | 2 | J | - | | - | | 3 | J | 10 | U | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 3 | U | - | | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.7 | J | 0.5 | J | 0.5 | U | 0.8 | J | 0.50 | U | 8260B |
| | 8/12-14/02 | 0.5 | UJ | 10 | U | 10 | U | - | | 1 | UJ | 10 | U | 10 | U | 1 | UJ | 0.5 | UJ | 10 | U | 0.5 | UJ | 10 | U | 0.50 | J | CLP/8260B |
| | 1/21-22/03 | - | | 10 | U | 10 | U | - | | - | | - | | 10 | U | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 7/14-15/03 | 1 | U | 17 | U | 4 | U | - | | - | | 1 | U | 1 | U | 4.2 | U | 1 | UJ | 1 | U | 1 | UJ | 1 | U | 0.50 | J | 8260B |
| | 3/16-17/04 | - | | 10 | U | 10 | U | - | | - | | - | | 10 | U | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 9/29-30/04 | 0.5 | U | 0.65 | U | 0.88 | U | - | | - | | 0.5 | U | 0.5 | U | 0.5 | U | 0.55 | U | 0.5 | U | 0.5 | U | 0.5 | U | | | 8260B |
| | 3/30-31/05 | - | | 67 | U | 10 | U | - | | - | | 10 | U | 10 | U | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 10/3-4/05 | - | | 25 | U | 0.66 | | - | | - | | 0.5 | U | 0.31 | J | 0.5 | U | 0.38 | J | 0.76 | | 0.5 | U | 0.5 | U | 0.50 | U | 8260B |
| | 4/4-5/06 | - | | 10 | U | 10 | U | - | | - | | 10 | U | 10 | U | - | | - | | 10 | U | - | | 10 | U | - | | CLP |
| | 9/27-28/06 | 0.50 | U | 0.43 | J | 0.68 | J | - | | - | | 0.50 | U | 0.31 | J | 0.50 | U | 0.39 | J | 0.53 | J | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 4/2-3/07 | - | | 3.3 | J | 10 | U | - | | - | | 0.50 | U | 0.3 | J | - | | - | | 1.3 | J | - | | 0.50 | U | - | | 8260B |
| | 9/18-19/07 | 0.50 | U | 0.49 | J | 0.48 | J | - | | - | | 0.50 | U | 0.50 | U | 0.1 | J | 0.49 | J | 0.64 | | 0.50 | U | 0.1 | J | 0.50 | U | 8260B |
| | 3/11/08 | - | | 10 | UJ | 0.50 | UJ | - | | - | | 0.50 | UJ | 0.5 | J | - | | - | | 0.50 | UJ | - | | 0.50 | UJ | - | | 8260B |
| | 9/8-9/08 | 0.50 | U | 8.3 | U | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | J | 8260B |
| | 3/11-12/09 | - | | 0.50 | U | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | - | | - | | 0.50 | U | - | | 0.50 | U | - | | 8260B |
| | 9/1-2/09 | 0.50 | U | 0.50 | U | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/17-18/10 | - | | 0.50 | U | 0.21 | J | - | | - | | 0.50 | U | 0.50 | U | - | | - | | 0.34 | J | - | | 0.50 | U | - | | |
| | 9/13-14/10 | 0.50 | U | 0.50 | U | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | 0.50 | U | |

Watauga County Landfill
Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

# Table 5A
## Assessment Organic Target Parameter Analytical Results
## 1994-2010
## Core Groundwater Monitoring Wells

| Parameter | Event | Results ug/l(ppb) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-1 | | MW-2 | | MW-3 | | MW-6 | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | Analysis Type |
| Tetrachloroethene | 6/20/94 | 10 | U | 120 | U | 44 | | 6 | J | 0.88 | J | 7.55 | J | 2.15 | J | 1.3 | J | 7.47 | J | 22.78 | | 7.84 | U | 37.43 | | | | CLP/8021 |
| | 9/27/94 | 10 | U | 170 | U | 53 | | 26 | | 10 | U | 33 | | 5 | J | 12 | J | 9 | J | 36 | | 10 | U | 64 | | | | CLP |
| MCL= 5 ug/l | 2/06/95 | 10 | U | 18 | J | 46 | | 33 | | 1 | U | 31 | | 4 | J | 6 | J | 8 | J | 32 | | 1 | U | 48 | | | | CLP |
| NCS = 0.7 ug/l | 4/11/95 | 10 | U | 200 | U | 33 | | 13 | J | 10 | U | 33 | | 5 | J | 10 | J | 7 | J | 28 | | 10 | U | 41 | | | | CLP |
| | 7/10/95 | 2 | U | 12 | | 31 | | 13 | | 2 | U | 42 | J | 5 | | 13 | | 10 | | 27 | | 10 | U | 40 | | | | 8021 |
| | 7/10/95 | 5 | U | 9.9 | | 37 | | 14 | | 5 | U | 38 | | 3.6 | J | 5.7 | | 8.1 | | 31 | | - | | 30 | | | | 8260 |
| | 4/10/96 | 10 | U | 20 | J | 46 | | 10 | J | 10 | U | 36 | | 4 | J | 4 | J | 12 | | 37 | | 10 | U | 41 | | | | CLP |
| | 4/8/97 | 1 | U | 11 | | 21 | | - | | 1 | U | 13 | | 3.4 | | 4.4 | | 11 | | 23 | | 1 | U | 21 | | | | 8021 |
| | 1/15/98 | 10 | U | 4 | J | 21 | | - | | 10 | U | 11 | | 3 | J | 3 | J | 10 | | 25 | | 10 | U | 28 | | | | CLP |
| | 6/23/98 | - | | 12 | J | 16 | J | - | | - | | 18 | J | 3 | J | - | | - | | 19 | J | - | | 26 | J | | | CLP |
| | 1/12/99 | 1 | U | 4.2 | | 19 | | - | | 1 | U | 7.6 | | 1.9 | | 2.6 | | 7 | | 13 | | 1 | U | 16 | | | | 8021B |
| | 7/12/99 | - | | 3 | J | 19 | | - | | - | | 8 | J | 2 | J | - | | - | | 10 | U | - | | 29 | J | | | CLP |
| | 2/1/00 | 1 | U | 1.5 | | 15 | | - | | 1 | U | 5.4 | | 1.8 | | 2.7 | | 8.4 | | 14 | | 1 | U | 21 | | | | 8021B |
| | 8/8/00 | - | | 4 | J | 24 | | - | | - | | 7 | J | 1 | J | - | | - | | 14 | | - | | 16 | | | | CLP |
| | 2/12-14/01 | 1 | U | 1.4 | | 20 | | - | | 1 | U | 1 | U | 2 | | 3.3 | | 8 | | 12 | | 1 | U | 23 | | | | 8021B |
| | 8/7-8/01 | - | | 3 | J | 9 | J | - | | - | | 5 | J | 1 | J | - | | - | | 11 | | - | | 25 | | | | CLP |
| | 2/11-14/02 | 0.5 | U | 2 | | 12 | | - | | 0.5 | U | 5 | | 0.8 | | 2 | | 6 | | 10 | | 0.5 | U | 16 | | 0.4 | J | 8260B |
| | 8/12-14/02 | 0.5 | U | 2 | J | 14 | | - | | 1 | U | 3 | J | 1 | J | 1 | U | 0.5 | U | 11 | | 0.5 | U | 15 | | 0.50 | U | CLP/8260B |
| | 1/21-22/03 | - | | 2 | J | 7 | J | - | | - | | - | | 1 | J | - | | - | | 10 | | - | | 17 | | | | CLP |
| | 7/14-15/03 | 1 | U | 17 | U | 4.4 | | - | | - | | 1 | U | 1 | U | 4.2 | U | 5 | J | 1 | U | 1 | UJ | 2.3 | | U | U | 8260B |
| | 3/16-17/04 | - | | 7 | J | 3 | J | - | | - | | 4 | J | 9 | J | - | | - | | 8 | J | - | | 10 | | | | CLP |
| | 9/29-30/04 | 0.5 | U | 6 | J | 5.2 | J | - | | - | | 0.65 | J | 1.6 | J | 1.3 | | 3.1 | J | 5.9 | | 0.5 | U | 5 | J | | | 8260B |
| | 3/30-31/05 | - | | 8 | J | 5 | J | - | | - | | 10 | U | 1 | J | - | | - | | 5 | J | - | | 3 | J | | | CLP |
| | 10/3-4/05 | - | | 25 | U | 5.9 | | - | | - | | 0.53 | | 1.5 | | 2.6 | | 3.4 | | 5 | | 0.5 | U | 5.1 | J | 0.50 | U | 8260B |
| | 4/4-5/06 | - | | 5 | J | 6 | J | - | | - | | 2 | J | 1 | J | - | | - | | 5 | J | - | | 3 | J | - | | CLP |
| | 9/27-28/06 | 0.50 | U | 5.6 | J | 5.4 | | - | | - | | 0.50 | U | 0.85 | | 1.5 | | 2.7 | | 3.1 | | 0.50 | U | 1.6 | | 0.50 | J | 8260B |
| | 4/2-3/07 | - | | 13 | U | 6 | J | - | | - | | 0.4 | J | 1.1 | J | - | | - | | 4.0 | J | - | | 3 | J | - | | 8260B |
| | 9/18-19/07 | 0.50 | U | 6.2 | | 2.7 | | - | | - | | 0.19 | J | 1.4 | | 1.3 | | 2.7 | | 3.9 | | 0.50 | U | 2.2 | | 0.50 | U | 8260B |
| | 3/11/08 | - | | 2.9 | J | 0.7 | J | - | | - | | 0.5 | UJ | 0.6 | J | - | | - | | 2.7 | J | - | | 3.3 | J | - | | 8260B |
| | 9/8-9/08 | 0.50 | U | 3.5 | J | 1.2 | J | - | | - | | 0.50 | U | 1.3 | | 3 | | 1.7 | | 2.7 | | 0.50 | U | 3.9 | | 0.50 | U | 8260B |
| | 3/11-12/09 | - | | 3.4 | J | 0.9 | J | - | | - | | 0.5 | UJ | 0.9 | J | - | | - | | 4.6 | J | - | | 4.2 | J | - | | 8260B |
| | 9/1-2/09 | 0.50 | U | 4.5 | | 0.43 | J | - | | - | | 0.50 | U | 1.1 | | 2.7 | | 0.89 | | 1.4 | | 0.50 | U | 0.80 | | 0.50 | U | 8260B |
| | 3/17-18/10 | - | | 4.8 | | 0.13 | J | - | | - | | 0.50 | U | 0.36 | J | - | | - | | 2.8 | | - | | 1.5 | | - | | |
| | 9/13-14/10 | 0.50 | U | 3.3 | | 0.50 | U | - | | - | | 0.50 | U | 0.83 | | 2.1 | | 0.39 | J | 0.82 | J | 0.50 | U | 0.43 | J | 0.84 | | |

NOTES ON PAGE 3

Watauga County Landfill
Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

# Table 5A
## Assessment Organic Target Parameter Analytical Results
## 1994-2010
## Core Groundwater Monitoring Wells

| Parameter | Event | Results ug/l(ppb) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-1 | | MW-2 | | MW-3 | | MW-6 | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | Analysis Type |
| Trichloroethene | 6/20/94 | 10 | U | 120 | U | 16 | | 21 | J | 21.2 | U | 21.2 | U | 21.2 | U | 21.2 | U | 21.2 | U | 5.74 | J | 21.2 | U | 15.7 | J | | | CLP/8021 |
| | 9/27/94 | 10 | U | 170 | U | 23 | | 71 | | 10 | U | 15 | | 6 | J | 10 | U | 3 | J | 14 | | 10 | U | 34 | | | | CLP |
| MCL= 5 ug/l | 2/06/95 | 10 | U | 150 | U | 19 | | 88 | | 2.5 | U | 14 | | 6 | J | 50 | U | 3 | J | 13 | | 2.5 | U | 24 | | | | CLP |
| NCS = 3 ug/l | 4/11/95 | 10 | U | 200 | U | 12 | | 53 | | 1 | J | 13 | | 6 | J | 71 | U | 2 | J | 10 | | 10 | U | 19 | | | | CLP |
| | 7/10/95 | 2 | U | 1.2 | J | 20 | | 67 | J | 1.6 | J | 28 | | 8.6 | | 2 | U | 5.8 | | 16 | | 10 | U | 21 | J | | | 8021 |
| | 7/10/95 | 5 | U | 5 | U | 16 | | 47 | | 1.2 | J | 15 | | 6 | | 5 | U | 3.1 | J | 13 | | - | | 17 | | | | 8260 |
| | 4/10/96 | 10 | U | 91 | U | 21 | | 28 | | 10 | U | 16 | | 6 | J | 23 | U | 4 | J | 15 | | 10 | U | 19 | | | | CLP |
| | 4/8/97 | 1 | U | 1.9 | | 12 | | - | | 53 | U | 11 | | 5.1 | | 1.2 | | 6 | | 14 | | 1 | U | 16 | | | | 8021 |
| | 1/15/98 | 10 | U | 20 | U | 11 | | - | | 1 | J | 8 | J | 4 | J | 14 | U | 5 | J | 12 | | 10 | U | 16 | | | | CLP |
| | 6/23/98 | - | | 25 | UJ | 8 | J | - | | - | | 9 | J | 3 | J | - | | - | | 10 | J | - | | 15 | J | | | CLP |
| | 1/12/99 | 1 | U | 1 | U | 14 | | - | | 1 | U | 6.9 | | 3.1 | | 1 | U | 5 | | 9.5 | | 1 | U | 13 | | | | 8021B |
| | 7/12/99 | - | | 3 | J | 10 | | - | | - | | 10 | | 3 | J | - | | - | | 10 | U | - | | 15 | | | | CLP |
| | 2/1/00 | 1 | U | 1 | U | 11 | | - | | 1 | J | 6.3 | | 2.7 | | 1 | U | 6.6 | | 10 | | 1 | U | 17 | | | | 8021B |
| | 8/8/00 | - | | 10 | U | 12 | J | - | | - | | 10 | U | 10 | U | - | | - | | 10 | U | - | | 11 | J | | | CLP |
| | 2/12-14/01 | 1 | U | 1 | U | 13 | | - | | 0.8 | J | 1 | U | 3.1 | | 0.59 | J | 6.6 | | 8.7 | | 1 | U | 16 | | | | 8021B |
| | 8/7-8/01 | - | | 10 | U | 5 | J | - | | - | | 6 | J | 2 | J | - | | - | | 7 | J | - | | 15 | | | | CLP |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 7 | | - | | 0.6 | | 3 | | 1 | | 0.5 | U | 4 | | 6 | | 0.5 | U | 9 | | 0.50 | U | 8260B |
| | 8/12-14/02 | 0.5 | U | 10 | U | 12 | | - | | 1 | U | 6 | J | 4 | J | 1 | U | 0.5 | U | 9 | J | 0.5 | U | 12 | | 0.50 | U | CLP/8260B |
| | 1/21-22/03 | - | | 0.3 | J | 5 | J | - | | - | | - | | 2 | J | - | | - | | 8 | J | - | | 12 | | | | CLP |
| | 7/14-15/03 | 1 | U | 17 | U | 4 | U | - | | - | | 2.1 | J | 1 | U | 4.2 | U | 3.5 | J | 1 | U | 1 | UJ | 1.5 | | 0.50 | J | 8260B |
| | 3/16-17/04 | - | | 10 | U | 4 | J | - | | - | | 6 | J | 5 | J | - | | - | | 4 | J | - | | 6 | J | | | CLP |
| | 9/29-30/04 | 0.5 | U | 0.97 | J | 4.6 | J | - | | - | | 1.1 | J | 2.6 | J | 0.84 | U | 3.2 | J | 4.7 | | 0.5 | U | 4.6 | J | | | 8260B |
| | 3/30-31/05 | - | | 11 | J | 7 | J | - | | - | | 2 | J | 2 | J | - | | - | | 5 | J | - | | 2 | J | | | CLP |
| | 10/3-4/05 | - | | 25 | U | 5.5 | | - | | - | | 2.2 | | 2.6 | | 0.21 | J | 2.5 | | 5.3 | | 0.5 | U | 2.1 | J | 0.50 | U | 8260B |
| | 4/4-5/06 | - | | 10 | U | 5 | J | - | | - | | 2 | J | 2 | J | - | | - | | 4 | J | - | | 1 | J | - | | CLP |
| | 9/27-28/06 | 0.50 | U | 0.73 | J | 5.4 | J | - | | - | | 0.39 | J | 1.2 | J | 0.21 | J | 2.7 | J | 3.1 | J | 0.50 | U | 1.6 | J | 0.50 | J | 8260B |
| | 4/2-3/07 | - | | 13 | U | 5 | J | - | | - | | 0.4 | J | 1.4 | | - | | - | | 2.9 | | - | | 1 | J | - | | 8260B |
| | 9/18-19/07 | 0.50 | U | 0.63 | J | 5.6 | J | - | | - | | 0.73 | | 1.7 | | 0.50 | U | 2.8 | | 4.6 | | 0.50 | U | 1.2 | J | 0.50 | U | 8260B |
| | 3/11/08 | - | | 10 | U | 2.1 | | - | | - | | 0.2 | J | 1.2 | | - | | - | | 4.1 | | - | | 1.3 | | - | | 8260B |
| | 9/8-9/08 | 0.50 | U | 8.3 | U | 3.4 | | - | | - | | 0.41 | J | 1.6 | | 0.19 | J | 2.7 | | 4.7 | | 0.50 | U | 1.3 | | 0.50 | U | 8260B |
| | 3/11-12/09 | - | | 0.50 | U | 2.5 | | - | | - | | 0.4 | J | 1.4 | | - | | - | | 5.1 | | - | | 1.1 | | - | | 8260B |
| | 9/1-2/09 | 0.50 | U | 0.44 | J | 2.3 | | - | | - | | 0.50 | U | 1.4 | | 0.16 | J | 2.6 | | 4.4 | | 0.50 | U | 0.47 | J | 0.50 | U | 8260B |
| | 3/17-18/10 | - | | 0.54 | | 2.3 | | - | | - | | 0.50 | U | 1.2 | | - | | - | | 3.9 | | - | | 0.43 | J | - | | |
| | 9/13-14/10 | 0.50 | U | 0.44 | J | 2.8 | | - | | - | | 0.29 | J | 1.1 | | 0.50 | U | 2.1 | | 3.6 | | 0.50 | U | 0.73 | | 0.50 | U | |

Watauga County Landfill
Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

Table 5A
Assessment Organic Target Parameter Analytical Results
1994-2010
Core Groundwater Monitoring Wells

| Parameter | Event | Results ug/l(ppb) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-1 | | MW-2 | | MW-3 | | MW-6 | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | Analysis Type |
| 1,1,1-Trichloroethane | 6/20/94 | 10 | U | 1800 | | 31 | | 25 | U | 30.11 | U | 2.42 | J | 11.89 | J | 130.14 | J | 4.83 | J | 16.79 | J | 0.08 | J | 13.39 | J | | | CLP/8021 |
| | 9/27/94 | 10 | U | 1900 | | 35 | | 25 | U | 10 | U | 6 | J | 18 | | 1830 | | 5 | J | 24 | | 5 | J | 16 | | | | CLP |
| MCL= 200 ug/l | 2/06/95 | 10 | U | 2700 | | 31 | | 25 | U | 1 | U | 6 | J | 14 | | 650 | | 5 | J | 18 | | 2.5 | | 14 | | | | CLP |
| NCS = 200 ug/l | 4/11/95 | 10 | U | 2000 | | 21 | | 25 | U | 10 | U | 5 | J | 16 | | 1300 | | 5 | J | 17 | | 3 | J | 10 | | | | CLP |
| | 7/10/95 | 2 | U | 1600 | | 26 | | 2 | U | 2 | U | 6 | | 12 | | 990 | | 5.9 | | 17 | | 10 | U | 7.8 | | | | 8021 |
| | 7/10/95 | 5 | U | 1600 | | 21 | | 5 | U | 5 | U | 4.9 | J | 9.8 | | 740 | | 4.8 | J | 16 | | - | | 7 | | | | 8260 |
| | 4/10/96 | 10 | U | 1300 | | 21 | | 25 | U | 10 | U | 8 | J | 8 | J | 290 | | 6 | J | 15 | | 4 | J | 7 | J | | | CLP |
| | 4/8/97 | 1 | U | 770 | | 8.2 | | - | | 1 | U | 4.5 | | 1.5 | | 570 | | 6.1 | | 11 | | 4.1 | | 2.9 | | | | 8021 |
| | 1/15/98 | 10 | U | 320 | | 7 | J | - | | 10 | U | 4 | J | 10 | U | 150 | | 7 | J | 9 | J | 5 | J | 3 | J | | | CLP |
| | 6/23/98 | - | | 710 | J | 3 | J | - | | - | | 3 | J | 10 | UJ | - | | - | | 6 | J | - | | 3 | J | | | CLP |
| | 1/12/99 | 1 | U | 310 | | 4.7 | | - | | 1 | U | 2.5 | | 1 | U | 170 | | 6.3 | | 5.4 | | 3.4 | | 1.2 | | | | 8021B |
| | 7/12/99 | - | | 190 | | 3 | J | - | | - | | 2 | J | 10 | U | - | | - | | 10 | U | - | | 1 | J | | | CLP |
| | 2/1/00 | 1 | U | 110 | | 2.8 | | - | | 1.7 | | 1 | U | 180 | J | 6 | | 3.9 | | 3.9 | | 1.7 | | 1.7 | | | | 8021B |
| | 8/8/00 | - | | 250 | J | 3 | J | - | | - | | 2 | J | 10 | U | - | | - | | 10 | U | - | | 1 | J | | | CLP |
| | 2/12-14/01 | 1 | U | 89 | | 3.4 | | - | | 1 | U | 1 | U | 1 | U | 380 | | 1 | U | 2.5 | | 2.4 | | 2.8 | | | | 8021B |
| | 8/7-8/01 | - | | 89 | | 1 | J | - | | - | | 10 | U | 10 | U | - | | - | | 2 | J | - | | 2 | J | | | CLP |
| | 2/11-14/02 | 0.5 | U | 41 | | 3 | U | - | | 0.5 | U | 0.5 | U | 0.5 | U | 130 | | 3 | | 2 | | 1 | | 2 | | 0.50 | U | 8260B |
| | 8/12-14/02 | 0.5 | U | 130 | | 10 | U | - | | 1 | U | 10 | U | 10 | U | 58 | | 0.5 | U | 10 | U | 0.5 | U | 10 | U | 0.50 | U | CLP/8260B |
| | 1/21-22/03 | - | | 180 | | 1 | J | - | | - | | - | | 10 | U | - | | - | | 2 | J | - | | 1 | J | | | CLP |
| | 7/14-15/03 | 1 | U | 550 | | 4 | U | - | | - | | 1 | U | 1 | U | 70 | | 3.3 | J | 1 | U | 1.1 | J | 1 | U | 0.50 | J | 8260B |
| | 3/16-17/04 | - | | 630 | | 10 | U | - | | - | | 10 | U | 3 | J | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 9/29-30/04 | 0.5 | U | 580 | J | 0.5 | U | - | | - | | 0.95 | J | 0.37 | J | 40 | | 3.2 | J | 2.1 | | 1.2 | | 0.33 | J | | | 8260B |
| | 3/30-31/05 | - | | 760 | U | 10 | U | - | | - | | 10 | U | 10 | U | - | | - | | 10 | U | - | | 10 | U | | | CLP |
| | 10/3-4/05 | - | | 740 | | 0.5 | U | - | | - | | 0.5 | U | 0.5 | U | 150 | | 1 | U | 1.4 | | 0.86 | | 0.5 | U | 0.50 | U | 8260B |
| | 4/4-5/06 | - | | 700 | | 10 | U | - | | - | | 10 | U | 10 | U | - | | - | | 1 | J | - | | 10 | U | - | | CLP |
| | 9/27-28/06 | 0.50 | U | 350 | J | 2.5 | U | - | | - | | 0.50 | U | 0.50 | U | 25 | J | 1.2 | | 1.4 | | 0.59 | J | 0.50 | U | 0.50 | J | 8260B |
| | 4/2-3/07 | - | | 300 | | 10 | U | - | | - | | 0.50 | U | 0.50 | U | - | | - | | 2.5 | U | - | | 0.50 | U | - | | 8260B |
| | 9/18-19/07 | 0.50 | U | 570 | | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | 25 | | 0.56 | | 1.4 | | 0.64 | | 0.50 | U | 0.50 | U | 8260B |
| | 3/11/08 | - | | 320 | | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | - | | - | | 2.5 | U | - | | 0.50 | U | - | | 8260B |
| | 9/8-9/08 | 0.50 | U | 310 | J | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | 91 | | 0.50 | U | 0.50 | U | 0.93 | | 0.50 | U | 0.50 | U | 8260B |
| | 3/11-12/09 | - | | 200 | | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | - | | - | | 0.50 | U | - | | 0.50 | U | - | | 8260B |
| | 9/1-2/09 | 0.50 | U | 370 | | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | 72 | | 0.12 | J | 0.50 | U | 0.43 | J | 0.50 | U | 0.50 | U | 8260B |
| | 3/17-18/10 | - | | 470 | | 0.50 | U | - | | - | | 0.1 | J | 0.50 | U | - | | - | | 0.082 | J | - | | 0.50 | U | - | | |
| | 9/13-14/10 | 0.50 | U | 330 | | 0.50 | U | - | | - | | 0.50 | U | 0.50 | U | 58 | | 0.50 | U | 0.50 | U | 0.35 | J | 0.50 | U | 0.50 | U | 8260B |

Watauga County Landfill
Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

# Table 5A
## Assessment Organic Target Parameter Analytical Results
## 1994-2010
## Core Groundwater Monitoring Wells

| Parameter | Event | Results ug/l(ppb) | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-1 | | MW-2 | | MW-3 | | MW-6 | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | Analysis Type |
| Vinyl Chloride | 6/20/94 | 10 | U | 120 | U | 10 | U | 10 | J | 6.6 | UJ | 6.6 | UJ | 6.6 | UJ | 6.6 | UJ | 6.6 | UJ | 6.6 | UJ | 6.6 | UJ | 6.6 | UJ | | | CLP/8021 |
| | 9/27/94 | 10 | U | 170 | U | 3 | J | 10 | J | 10 | U | 5 | J | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 14 | U | | | CLP |
| MCL= 2 ug/l | 2/06/95 | 10 | U | 150 | U | 2 | J | 20 | J | 3.6 | | 6 | J | 10 | U | 50 | U | 10 | U | 10 | U | 1 | U | 10 | U | | | CLP |
| NCS = 0.03 ug/l | 4/11/95 | 10 | U | 200 | U | 10 | U | 10 | J | 2 | J | 6 | J | 10 | UJ | 71 | U | 10 | U | 10 | UJ | 10 | UJ | 10 | U | | | CLP |
| | 7/10/95 | 2 | U | 2 | U | 2.9 | J | 12 | J | 2 | U | 11 | J | 2 | U | 2 | U | 2 | U | 2.3 | | 10 | U | 0.94 | J | | | 8021 |
| | 7/10/95 | 5 | U | 5 | U | 3.1 | J | 23 | | 5 | U | 7.2 | | 5 | U | 5 | U | 5 | U | 5 | U | - | | 5 | U | | | 8260 |
| | 4/10/96 | 10 | U | 91 | U | 2 | J | 14 | J | 10 | U | 5 | J | 10 | U | 23 | U | 10 | U | 10 | U | 10 | U | 10 | U | | | CLP |
| | 4/8/97 | 1 | U | 1 | U | 0.98 | | - | | 1 | U | 3 | J | 1 | U | 1 | U | 2.8 | J | 1 | U | 1 | U | 4 | J | | | 8021 |
| | 1/15/98 | 10 | U | 20 | U | 10 | U | - | | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | | | CLP |
| | 6/23/98 | - | | 25 | UJ | 10 | UJ | - | | - | | 2 | J | 10 | UJ | - | | - | | 2 | J | - | | 2 | J | | | CLP |
| | 1/12/99 | 1 | U | 1 | U | 5 | | - | | 1 | U | 1.8 | | 2 | | 1 | U | 1 | U | 2.8 | | 1 | U | 3.1 | | | | 8021B |
| | 7/12/99 | - | | 10 | U | 2 | J | - | | - | | 10 | U | 10 | U | - | | - | | 10 | U | - | | 2 | J | | | CLP |
| | 2/1/00 | 1 | U | 1 | U | 4.2 | | - | | 0.75 | J | 1.7 | | 3.1 | | 1 | U | 2.4 | | 3.8 | | 1 | U | 5.5 | | | | 8021B |
| | 8/8/00 | - | | 10 | U | 5 | J | - | | - | | 10 | U | 2 | J | - | | - | | 2 | J | - | | 2 | J | | | CLP |
| | 2/12-14/01 | 1 | U | 1 | U | 6.6 | J | - | | 1 | U | 1 | U | 2.8 | J | 1 | U | 2.9 | J | 3.9 | J | 1 | U | 8 | J | | | 8021B |
| | 8/7-8/01 | - | | 10 | U | 10 | U | - | | - | | 10 | U | 2 | J | - | | - | | 3 | J | - | | 8 | J | | | CLP |
| | 2/11-14/02 | 0.5 | U | 0.5 | U | 4 | | - | | 2 | | 0.5 | U | 1 | | 0.5 | U | 3 | | 4 | | 0.5 | U | 6 | | 0.50 | U | 8060B |
| | 8/12-14/02 | 0.5 | U | 10 | U | 5 | J | - | | 2 | J | 10 | U | 10 | U | 1 | U | 0.5 | U | 3 | J | 0.5 | U | 4 | J | 0.50 | U | CLP/8260B |
| | 1/21-22/03 | - | | 10 | U | 0.9 | J | - | | - | | - | | 0.9 | J | - | | - | | 2 | J | - | | 4 | J | - | | CLP |
| | 7/14-15/03 | 1 | U | 17 | U | 4 | U | - | | - | | 1 | U | 1 | U | 4.2 | U | 1.8 | J | 1 | U | 1 | UJ | 1.2 | | 0.50 | J | 8060B |
| | 3/16-17/04 | - | | 10 | U | 10 | U | - | | - | | 10 | U | 3 | J | - | | - | | 10 | U | - | | 10 | U | - | | CLP |
| | 9/29-30/04 | 0.5 | U | 1.3 | J | 4.7 | J | - | | - | | 0.5 | U | 2.9 | J | 0.84 | U | 3.1 | J | 3.3 | | 0.5 | U | 2.4 | J | - | | 8260B |
| | 3/30-31/05 | - | | 67 | U | 10 | U | - | | - | | 10 | U | 10 | U | - | | - | | 10 | U | - | | 10 | U | - | | CLP |
| | 10/3-4/05 | - | | 25 | UJ | 5.8 | J | - | | - | | 0.5 | UJ | 2.4 | J | 0.5 | UJ | 3.4 | J | 4.3 | J | 0.5 | UJ | 0.25 | J | 0.50 | J | 8260B |
| | 4/4-5/06 | - | | 10 | U | 8 | J | - | | - | | 10 | U | 10 | U | - | | - | | 5 | J | - | | 10 | U | - | | CLP |
| | 9/27-28/06 | 0.50 | U | 0.48 | J | 3.6 | | - | | - | | 0.50 | U | 0.76 | | 0.50 | U | 2.8 | | 2.6 | | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 4/2-3/07 | - | | 13 | U | 1.2 | J | - | | - | | 0.50 | U | 1.5 | | - | | - | | 3.4 | | - | | 0.50 | U | - | | 8260B |
| | 9/18-19/07 | 0.50 | U | 0.41 | J | 3.2 | | - | | - | | 0.50 | U | 1.3 | | 0.50 | U | 3.1 | | 4 | | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/11/08 | - | | 10 | U | 0.50 | U | - | | - | | 0.50 | U | 1.4 | | - | | - | | 4.2 | | - | | 0.50 | U | - | | 8260B |
| | 9/8-9/08 | 0.50 | U | 8.3 | U | 0.50 | U | - | | - | | 0.50 | U | 1.4 | | 0.50 | U | 2.6 | | 3 | | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/11-12/09 | - | | 0.2 | J | 0.1 | J | - | | - | | 0.50 | U | 1.7 | | - | | - | | 2.9 | | - | | 0.50 | U | - | | 8260B |
| | 9/1-2/09 | 0.50 | U | 0.38 | J | 0.18 | J | - | | - | | 0.50 | U | 1.8 | | 0.50 | U | 1.5 | | 1.9 | | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |
| | 3/17-18/10 | - | | 0.55 | J | 0.23 | J | - | | - | | 0.50 | U | 1.9 | J | - | | - | | 1.7 | J | - | | 0.50 | U | - | | |
| | 9/13-14/10 | 0.50 | U | 0.37 | J | 0.50 | U | - | | - | | 0.50 | U | 2 | J | 0.50 | U | 0.37 | J | 1.3 | | 0.50 | U | 0.50 | U | 0.50 | U | 8260B |

Watauga County Landfill
Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

Table 5A
Assessment Organic Target Parameter Analytical Results
1994-2010
Core Groundwater Monitoring Wells

| Parameter | Event | Results ug/l(ppb) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MW-1 | | MW-2 | | MW-3 | | MW-6 | | MW-7 | | MW-8 | | MW-9 | | MW-10 | | MW-11 | | MW-12 | | MW-15 | | MW-17 | | MW-19 | | Analysis Type |

TABLE 5A NOTES:

U Denotes not detected (the associated numerical value is the CRQL/LOQ).
J Denotes an estimated value
CRQL Contract Required Quantification Limit (CLP Methods)
LOQ Limit of Quantitation (SW-846 Methods)
- Denotes Not Avaliable or Not Sampled
Shading - denotes Parameter results that exceed U.S. EPA Maximum Contaminant Levels.

NCS Denotes North Carolina Groundwater Quality Standard (T15A: 02L .0200)
MCL Denotes EPA Maximum Contaminant Level (EPA 822-R-94-001)

ANALYSIS TYPE:
1) Organic parameters were analyzed utilizing CLP Statement of Work OLMO1.9(3/90), SW-846 Method #8260 and/or #8021, as noted.
2) For the 6/94 event, monitoring wells MW-8, MW-9, MW-10, MW-11, MW-12, MW-15 and MW-17, SW-846 anlytical method #8021 analysis was performed.
For the 8//02 event, monitoring wells MW-1, MW-10, MW-11, and MW-15, SW-846 analytical method #8260b, 25 ml purge analysis was performed.
Other monitoring locations were analyzed using CLP analytical methods.

j:\6520-21\CORRESP\REPORTS\TABLE5A3.XLS

Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

Table 5C
Assessment Organic Target Parameter Analytical Results
Surface Water Sampling Locations

Results ug/l(ppb)

| Parameter | Event | S1 | | S2 | | S3 | | S4 | | S5 | | S6 | | L1 | | Mt. Spring | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ORGANICS | | | | | | | | | | | | | | | | | |
| Benzene | 6/20/94 | 10 | U | 3 | J | 10 | U | 1 | J | 10 | U | - | | - | | - | |
| | 9/27/94 | - | | - | | - | | - | | - | | - | | 10 | U | 10 | U |
| WQS = 51 ug/l | 2/06/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | 10 | U | - | |
| | 4/11/95 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | | - | |
| | 4/10/96 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/8/97 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 1/15/98 | 10 | U | 3 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 6/23/98 | 10 | UJ | 1 | J | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | - | | - | |
| | 1/12/99 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 7/12/99 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/1/00 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 8/8/00 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/12-14/01 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | UJ | - | | - | |
| | 8/7-8/01 | 10 | U | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | - | | - | |
| | 2/11-14/02 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | UJ | - | | - | |
| | 8/12-14/02 | DRY | | 4 | J | 10 | U | 10 | U | DRY | | 10 | U | - | | - | |
| | 1/21-22/03 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | UJ | - | | - | |
| | 7/14-15/03 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | UJ | - | | - | |
| | 3/16-17/04 | 10 | U | 10 | J | 10 | U | 10 | U | 10 | U | 10 | UJ | - | | - | |
| | 9/29-30/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 3/30-31/05 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 10/3-4/05 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/4-5/06 | 10 | U | 1 | J | 10 | U | 10 | U | 10 | U | NS | U | - | | - | |
| | 9/27-28/06 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/2-3/07 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/18-19/07 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11/08 | 10 | U | 1 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/8-9/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11-12/09 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/1-2/09 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | - | | - | |
| | 3/17-18/10 | 5 | U | 1.1 | J | 5 | U | 5 | U | 5 | U | 5 | U | - | | - | |
| Chloroethane | 6/20/94 | 10 | U | 56 | | 10 | U | 10 | U | 11 | | - | | - | | - | |
| | 9/27/94 | - | | - | | - | | - | | - | | - | | 13 | | 10 | U |
| WQS = 550 ug/l | 2/06/95 | 10 | U | 26 | | 10 | U | 2 | J | 7 | J | - | | 6 | J | - | |
| | 4/11/95 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 7/10/95 | 15 | | 10 | U | 10 | U | 4 | J | 10 | U | - | | - | | - | |
| | 4/10/96 | 8 | J | 46 | | 10 | U | 3 | J | 5 | J | 10 | U | - | | - | |
| | 4/8/97 | 10 | U | 50 | | 10 | U | 1 | J | 23 | | 10 | U | - | | - | |
| | 1/15/98 | 10 | U | 56 | | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 6/23/98 | 2 | J | 26 | J | 10 | UJ | 1 | J | 4 | J | 10 | UJ | - | | - | |
| | 1/12/99 | 10 | U | 71 | | 10 | U | 3 | J | 10 | U | 10 | U | - | | - | |
| | 7/12/99 | 10 | U | 58 | | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/1/00 | 1 | J | 70 | | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 8/8/00 | 5 | J | 44 | | 10 | U | 2 | J | 10 | U | 10 | UJ | - | | - | |
| | 2/12-14/01 | 10 | U | 110 | | 23 | | 10 | U | 4 | J | 10 | U | - | | - | |
| | 8/7-8/01 | 10 | U | 10 | U | 10 | U | 10 | U | 72 | | 10 | U | - | | - | |
| | 2/11-14/02 | 10 | U | 55 | | 23 | | 10 | U | 10 | U | 10 | U | - | | - | |
| | 8/12-14/02 | DRY | | 150 | J | 10 | UJ | 10 | UJ | DRY | | 10 | UJ | - | | - | |
| | 1/21-22/03 | 10 | U | 57 | | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 7/14-15/03 | 10 | U | 47 | | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/16-17/04 | 10 | U | 9 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/29-30/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 3/30-31/05 | 10 | U | 31 | | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 10/3-4/05 | 10 | U | 44 | | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/4-5/06 | 10 | U | 39 | | 10 | U | 10 | U | 10 | U | NS | | - | | - | |
| | 9/27-28/06 | 10 | U | 10 | U | 10 | U | 10 | U | 3 | J | 10 | U | - | | - | |
| | 4/2-3/07 | 10 | U | 29 | | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/18-19/07 | 10 | U | 18 | | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11/08 | 10 | U | 26 | | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/8-9/08 | 10 | U | 6 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11-12/09 | 10 | U | 6 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/1-2/09 | 5 | U | 4.6 | J | 5 | U | 5 | U | 5 | U | 5 | U | - | | - | |
| | 3/17-18/10 | 5 | U | 16 | | 5 | U | 5 | U | 5 | U | 5 | U | - | | - | |

Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

Table 5C
Assessment Organic Target Parameter Analytical Results
Surface Water Sampling Locations

Results ug/l(ppb)

| Parameter | Event | S1 | | S2 | | S3 | | S4 | | S5 | | S6 | | L1 | | Mt. Spring | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 6/20/94 | 10 | U | 4 | J | 10 | U | 10 | U | 10 | U | - | | - | | - | |
| | 9/27/94 | - | | - | | - | | - | | - | | - | | 10 | U | 10 | U |
| WQS = 77000 ug/l | 2/06/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | 10 | U | - | |
| | 4/11/95 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 7/10/95 | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | - | | - | | - | |
| | 4/10/96 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/8/97 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 6/23/98 | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | - | | - | |
| | 1/12/99 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 7/12/99 | 10 | U | 17 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/1/00 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | UJ | 10 | UJ | - | | - | |
| | 8/8/00 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/12-14/01 | 10 | U | 14 | | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 8/7-8/01 | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 3 | J | 10 | UJ | - | | - | |
| | 2/11-14/02 | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | U | 10 | UJ | - | | - | |
| | 8/12-14/02 | DRY | | 10 | UJ | 10 | UJ | 10 | UJ | DRY | | 10 | UJ | - | | - | |
| | 1/21-22/03 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 7/14-15/03 | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | - | | - | |
| | 3/16-17/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/29-30/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 3/30-31/05 | 10 | U | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | - | | - | |
| | 10/3-4/05 | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | - | | - | |
| | 4/4-5/06 | 10 | U | 10 | J | 10 | J | 10 | J | 4 | J | NS | | - | | - | |
| | 9/27-28/06 | 10 | U | 10 | U | 10 | U | 10 | U | 4 | J | 10 | U | - | | - | |
| | 4/2-3/07 | 10 | U | 0.4 | J | 10 | U | 10 | U | 1 | J | 10 | U | - | | - | |
| | 9/18-19/07 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/8-9/08 | 10 | U | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | - | | - | |
| | 3/11-12/09 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/1-2/09 | 5 | U | 5 | U | 5 | U | 5 | U | 2.5 | J | 5 | U | - | | - | |
| | 3/17-18/10 | 5 | U | 5 | U | 5 | U | 5 | U | 0.4 | J | 5 | U | - | | - | |
| 1,1-Dichloroethane | 6/20/94 | 1 | J | 23 | | 10 | U | 59 | | 2 | J | - | | - | | - | |
| | 9/27/94 | - | | - | | - | | - | | - | | - | | 10 | U | 10 | U |
| WQS = 170000 ug/l | 2/06/95 | 10 | U | 10 | U | 10 | U | 45 | | 10 | U | - | | 10 | U | - | |
| | 4/11/95 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 7/10/95 | 6 | J | 20 | | 10 | U | 41 | | 2 | J | - | | - | | - | |
| | 4/10/96 | 3 | J | 15 | | 10 | U | 30 | | 2 | J | 14 | | - | | - | |
| | 4/8/97 | 10 | U | 14 | | 10 | U | 12 | | 10 | U | 14 | | - | | - | |
| | 1/15/98 | 10 | U | 15 | | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 6/23/98 | 10 | UJ | 8 | J | 10 | UJ | 15 | J | 10 | UJ | 10 | UJ | - | | - | |
| | 1/12/99 | 10 | U | 12 | | 10 | U | 14 | | 10 | U | 1 | J | - | | - | |
| | 7/12/99 | 10 | U | 11 | J | 10 | U | 5 | J | 10 | U | 10 | U | - | | - | |
| | 2/1/00 | 10 | U | 9 | J | 10 | U | 12 | | 10 | U | 1 | J | - | | - | |
| | 8/8/00 | 3 | J | 7 | J | 10 | U | 13 | | 10 | U | 1 | J | - | | - | |
| | 2/12-14/01 | 10 | U | 10 | U | 2 | J | 10 | U | 14 | | 1 | J | - | | - | |
| | 8/7-8/01 | 10 | U | 10 | U | 10 | U | 7 | J | 10 | J | 10 | U | - | | - | |
| | 2/11-14/02 | 10 | U | 11 | | 10 | U | 9 | J | 10 | U | 10 | U | - | | - | |
| | 8/12-14/02 | DRY | | 17 | | 10 | U | 10 | | DRY | | 10 | U | - | | - | |
| | 1/21-22/03 | 10 | U | 9 | J | 10 | U | 7 | J | 10 | U | 10 | U | - | | - | |
| | 7/14-15/03 | 10 | U | 12 | | 10 | U | 8 | J | 10 | U | 10 | U | - | | - | |
| | 3/16-17/04 | 10 | U | 10 | U | 10 | U | 6 | J | 10 | U | 10 | U | - | | - | |
| | 9/29-30/04 | 10 | U | 10 | U | 10 | U | 1 | J | 10 | U | DRY | | - | | - | |
| | 3/30-31/05 | 10 | U | 8 | J | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 10/3-4/05 | 10 | U | 9 | J | 10 | U | 3 | J | 10 | U | 10 | U | - | | - | |
| | 4/4-5/06 | 10 | U | 7 | J | 10 | U | 3 | J | 10 | U | NS | | - | | - | |
| | 9/27-28/06 | 10 | U | 6 | J | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 4/2-3/07 | 10 | U | 5 | J | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 9/18-19/07 | 10 | U | 6 | J | 10 | U | 3 | J | 10 | U | 10 | U | - | | - | |
| | 3/11/08 | 10 | U | 3 | J | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 9/8-9/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11-12/09 | 10 | U | 10 | U | 10 | U | 4 | J | 10 | U | 10 | U | - | | - | |
| | 0.54 | 0.54 | J | 5 | U | 5 | U | 1.8 | J | 0.81 | J | 10 | U | - | | - | |
| | 3/17-18/10 | 5 | U | 2 | J | 5 | U | 1.4 | J | 5 | U | 5 | U | - | | - | |

Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

Table 5C
Assessment Organic Target Parameter Analytical Results
Surface Water Sampling Locations

Results ug/l(ppb)

| Parameter | Event | S1 | | S2 | | S3 | | S4 | | S5 | | S6 | | L1 | | Mt. Spring | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 6/20/94 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | | - | |
| | 9/27/94 | - | | - | | - | | - | | - | | - | | 10 | U | 10 | U |
| WQS = 7100 ug/l | 2/06/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | 10 | U | - | |
| | 4/11/95 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | | - | |
| | 4/10/96 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/8/97 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 6/23/98 | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | - | | - | |
| | 1/12/99 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 7/12/99 | 10 | U | 17 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/1/00 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | UJ | - | | - | |
| | 8/8/00 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/12-14/01 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 8/7-8/01 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/11-14/02 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 8/12-14/02 | DRY | | 10 | U | 10 | U | 10 | U | DRY | | 10 | U | - | | - | |
| | 1/21-22/03 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 7/14-15/03 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/16-17/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/29-30/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 3/30-31/05 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 10/3-4/05 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/4-5/06 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | NS | | - | | - | |
| | 9/27-28/06 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/2-3/07 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/18-19/07 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/8-9/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11-12/09 | 10 | U | 10 | U | 10 | U | 4 | J | 10 | U | 10 | U | - | | - | |
| | 9/1-2/09 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | - | | - | |
| | 3/17-18/10 | 5 | U | 5 | U | 5 | U | 10 | U | 5 | U | 5 | U | - | | - | |
| cis-1,2-Dichloroethene(2) | 6/20/94 | 10 | U | 4 | J | 10 | U | 58 | | 10 | U | - | | - | | - | |
| | 9/27/94 | - | | - | | - | | - | | - | | - | | 10 | U | 10 | U |
| WQS = 4900 ug/l | 2/06/95 | 10 | U | 10 | U | 10 | U | 42 | | 10 | U | - | | 10 | U | - | |
| | 4/11/95 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 7/10/95 | 1 | J | 3 | J | 10 | U | 42 | | 10 | U | - | | - | | - | |
| | 4/10/96 | 10 | U | 5 | J | 10 | U | 35 | | 10 | U | 16 | | - | | - | |
| | 4/8/97 | 10 | U | 6 | J | 10 | U | 15 | | 10 | U | 16 | | - | | - | |
| | 1/15/98 | 10 | U | 5 | J | 10 | U | 1 | J | 10 | U | 10 | U | - | | - | |
| | 6/23/98 | 10 | UJ | 4 | J | 10 | UJ | 21 | J | 10 | UJ | 10 | UJ | - | | - | |
| | 1/12/99 | 10 | U | 4 | J | 10 | U | 30 | | 10 | U | 2 | J | - | | - | |
| | 7/12/99 | 10 | U | 5 | J | 10 | U | 8 | J | 10 | U | 10 | U | - | | - | |
| | 2/1/00 | 4 | J | 4 | J | 10 | U | 25 | | 10 | U | 2 | J | - | | - | |
| | 8/8/00 | 10 | U | 2 | J | 10 | U | 27 | | 10 | U | 2 | J | - | | - | |
| | 2/12-14/01 | 10 | U | 2 | J | 10 | U | 28 | | 10 | U | 2 | J | - | | - | |
| | 8/7-8/01 | 10 | U | 10 | U | 10 | U | 14 | | 10 | U | 3 | J | - | | - | |
| | 2/11-14/02 | 10 | U | 2 | J | 10 | U | 17 | | 10 | U | 2 | J | - | | - | |
| | 8/12-14/02 | DRY | | 3 | J | 10 | U | 22 | | DRY | | 3 | J | - | | - | |
| | 1/21-22/03 | 10 | U | 3 | J | 10 | U | 18 | | 10 | U | 0.7 | J | - | | - | |
| | 7/14-15/03 | 10 | U | 3 | J | 10 | U | 15 | | 10 | U | 10 | U | - | | - | |
| | 3/16-17/04 | 10 | U | 10 | U | 10 | U | 16 | | 10 | U | 10 | U | - | | - | |
| | 9/29-30/04 | 10 | U | 10 | U | 10 | U | 3 | J | 10 | U | DRY | | - | | - | |
| | 3/30-31/05 | 10 | U | 3 | J | 10 | U | 8 | J | 10 | U | DRY | | - | | - | |
| | 10/3-4/05 | 10 | U | 2 | J | 10 | U | 5 | J | 10 | U | 10 | U | - | | - | |
| | 4/4-5/06 | 10 | U | 2 | J | 10 | U | 7 | J | 10 | U | NS | | - | | - | |
| | 9/27-28/06 | 10 | U | 1 | J | 10 | U | 6 | J | 10 | U | 10 | U | - | | - | |
| | 4/2-3/07 | 10 | U | 1 | J | 10 | U | 7 | J | 10 | U | 10 | U | - | | - | |
| | 9/18-19/07 | 10 | U | 10 | U | 10 | U | 5 | J | 10 | U | 10 | U | - | | - | |
| | 3/11/08 | 10 | U | 10 | U | 10 | U | 6 | J | 10 | U | 10 | U | - | | - | |
| | 9/8-9/08 | 10 | U | 10 | U | 10 | U | 3 | J | 10 | U | 10 | U | - | | - | |
| | 3/11-12/09 | 10 | U | 10 | U | 10 | U | 9 | J | 10 | U | 10 | U | - | | - | |
| | 9/1-2/09 | 5 | U | 0.29 | J | 5 | U | 4.8 | J | 5 | U | 5 | U | - | | - | |
| | 3/17-18/10 | 5 | U | 1 | J | 5 | U | 3.4 | J | 5 | U | 5 | U | - | | - | |

Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

Table 5C
Assessment Organic Target Parameter Analytical Results
Surface Water Sampling Locations

Results ug/l(ppb)

| Parameter | Event | S1 | | S2 | | S3 | | S4 | | S5 | | S6 | | L1 | | Mt. Spring | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | 6/20/94 | 6 | J | 9 | J | 3 | J | 1 | J | 8 | J | - | | - | | - | |
| | 9/27/94 | - | | - | | - | | - | | - | | - | | 10 | U | 10 | U |
| WQS = 590 ug/l | 2/06/95 | 10 | U | 2 | J | 3 | J | 1 | J | 10 | U | - | | 10 | U | - | |
| | 4/11/95 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | | - | |
| | 4/10/96 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/8/97 | 10 | U | 3 | J | 1 | J | 10 | U | 10 | U | 10 | U | - | | - | |
| | 1/15/98 | 1 | J | 4 | J | 4 | J | 1 | J | 2 | J | 2 | J | - | | - | |
| | 6/23/98 | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | - | | - | |
| | 1/12/99 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 7/12/99 | 10 | U | 17 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/1/00 | 10 | U | 10 | UJ | 10 | UJ | 10 | UJ | 10 | U | 10 | UJ | - | | - | |
| | 8/8/00 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/12-14/01 | 10 | U | 3 | J | 10 | U | 10 | U | 2 | J | 10 | U | - | | - | |
| | 8/7-8/01 | 10 | U | 3 | J | 10 | U | 10 | U | 1 | J | 10 | U | - | | - | |
| | 2/11-14/02 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 8/12-14/02 | DRY | | 10 | U | 10 | U | 10 | U | DRY | | 10 | U | - | | - | |
| | 1/21-22/03 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 7/14-15/03 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/16-17/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/29-30/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 3/30-31/05 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 10/3-4/05 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/4-5/06 | 10 | U | 1 | J | 10 | U | 10 | U | 10 | U | NS | | - | | - | |
| | 9/27-28/06 | 2 | J | 2 | J | 1 | J | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/2-3/07 | 10 | U | 1 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/18-19/07 | 10 | U | 0.9 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/8-9/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11-12/09 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/1-2/09 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | - | | - | |
| | 3/17-18/10 | 5 | U | 5 | U | 5 | U | 2.2 | J | 1.5 | J | 5 | U | - | | - | |
| Tetrachloroethene | 6/20/94 | 10 | U | 10 | U | 10 | U | 18 | | 10 | U | - | | - | | - | |
| | 9/27/94 | - | | - | | - | | - | | - | | - | | 10 | U | 10 | U |
| WQS = 3.3 ug/l | 2/06/95 | 10 | U | 10 | U | 10 | U | 12 | | 10 | U | - | | 10 | U | - | |
| | 4/11/95 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 11 | | 10 | U | - | | - | | - | |
| | 4/10/96 | 10 | U | 10 | U | 10 | U | 9 | J | 1 | J | 4 | J | - | | - | |
| | 4/8/97 | 10 | U | 10 | U | 10 | U | 4 | J | 10 | U | 4 | J | - | | - | |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 6/23/98 | 10 | UJ | 10 | UJ | 10 | UJ | 5 | J | 10 | UJ | 10 | UJ | - | | - | |
| | 1/12/99 | 10 | U | 10 | U | 10 | U | 6 | J | 10 | U | 10 | U | - | | - | |
| | 7/12/99 | 10 | U | 17 | U | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 2/1/00 | 10 | U | 10 | U | 10 | U | 3 | J | 10 | U | 10 | UJ | - | | - | |
| | 8/8/00 | 10 | U | 10 | U | 10 | U | 4 | J | 10 | U | 10 | U | - | | - | |
| | 2/12-14/01 | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 8/7-8/01 | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 2/11-14/02 | 10 | U | 10 | U | 10 | U | 3 | J | 10 | U | 10 | U | - | | - | |
| | 8/12-14/02 | DRY | | 10 | U | 10 | U | 2 | J | DRY | | 10 | U | - | | - | |
| | 1/21-22/03 | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 7/14-15/03 | 10 | U | 10 | U | 10 | U | 1 | J | 10 | U | 10 | U | - | | - | |
| | 3/16-17/04 | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 9/29-30/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 3/30-31/05 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 10/3-4/05 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/4-5/06 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | NS | | - | | - | |
| | 9/27-28/06 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/2-3/07 | 10 | U | 10 | U | 10 | U | 0.5 | J | 10 | U | 10 | U | - | | - | |
| | 9/18-19/07 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/8-9/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11-12/09 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/1-2/09 | 5 | U | 0.36 | J | 0.54 | J | 0.33 | J | 5 | U | 5 | U | - | | - | |
| | 3/17-18/10 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | - | | - | |

Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

Table 5C
Assessment Organic Target Parameter Analytical Results
Surface Water Sampling Locations

Results ug/l(ppb)

| Parameter | Event | S1 | | S2 | | S3 | | S4 | | S5 | | S6 | | L1 | | Mt. Spring | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | 6/20/94 | 10 | U | 1 | J | 10 | U | 13 | | 10 | U | - | | - | | - | |
| | 9/27/94 | - | | - | | - | | - | | - | | - | | 10 | U | 10 | U |
| WQS = 30 ug/l | 2/06/95 | 10 | U | 10 | U | 10 | U | 8 | J | 10 | U | - | | 10 | U | - | |
| | 4/11/95 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 7/10/95 | 10 | U | 1 | J | 10 | U | 8 | J | 10 | U | - | | - | - | - | - |
| | 4/10/96 | 10 | U | 1 | J | 10 | U | 6 | J | 1 | J | 3 | J | - | | - | |
| | 4/8/97 | 10 | U | 1 | J | 10 | U | 3 | J | 10 | U | 3 | J | - | | - | |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 6/23/98 | 10 | UJ | 10 | UJ | 10 | UJ | 3 | J | 10 | UJ | 10 | UJ | - | | - | |
| | 1/12/99 | 10 | U | 10 | U | 10 | U | 4 | J | 10 | U | 10 | U | - | | - | |
| | 7/12/99 | 10 | U | 17 | U | 10 | U | 1 | J | 10 | U | 10 | U | - | | - | |
| | 2/1/00 | 10 | U | 10 | U | 10 | U | 3 | J | 10 | U | 10 | UJ | - | | - | |
| | 8/8/00 | 10 | U | 10 | U | 10 | U | 3 | JB | 10 | U | 10 | UJ | - | | - | |
| | 2/12-14/01 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 8/7-8/01 | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 2/11-14/02 | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 8/12-14/02 | DRY | | 10 | U | 10 | U | 10 | U | DRY | | 10 | U | - | | - | |
| | 1/21-22/03 | 10 | U | 0.5 | J | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 7/14-15/03 | 10 | U | 10 | U | 10 | U | 1 | J | 10 | U | 10 | U | - | | - | |
| | 3/16-17/04 | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | 10 | U | - | | - | |
| | 9/29-30/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 3/30-31/05 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 10/3-4/05 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/4-5/06 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | NS | | - | | - | |
| | 9/27-28/06 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/2-3/07 | 10 | U | 10 | U | 10 | U | 0.6 | J | 10 | U | 10 | U | - | | - | |
| | 9/18-19/07 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/8-9/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11-12/09 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/1-2/09 | 5 | U | 0.41 | J | 5 | U | 0.67 | J | 5 | U | 5 | U | - | | - | |
| | 3/17-18/10 | 5 | U | 5 | U | 5 | U | 0.5 | J | 5 | U | 5 | U | - | | - | |
| 1,1,1-Trichloroethane | 6/20/94 | 10 | U | 2 | J | 10 | U | 3 | J | 10 | U | - | | - | | - | |
| | 9/27/94 | - | | - | | - | | - | | - | | - | | 10 | U | 10 | U |
| WQS = 2500 ug/l* | 2/06/95 | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | - | | 10 | U | - | |
| | 4/11/95 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 7/10/95 | 10 | U | 1 | J | 10 | U | 2 | J | 10 | U | - | | - | | - | |
| | 4/10/96 | 10 | U | 10 | U | 10 | U | 2 | J | 2 | J | 1 | J | - | | - | |
| | 4/8/97 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 1 | J | - | | - | |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | - | | - | |
| | 6/23/98 | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | - | | - | |
| | 1/12/99 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 7/12/99 | 10 | U | 17 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/1/00 | 10 | U | 10 | U | 10 | U | 10 | U | 3 | J | 10 | UJ | - | | - | |
| | 8/8/00 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | UJ | - | | - | |
| | 2/12-14/01 | 10 | U | 10 | U | 10 | U | 3 | J | 3 | J | 10 | U | - | | - | |
| | 8/7-8/01 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | UJ | - | | - | |
| | 2/11-14/02 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 8/12-14/02 | DRY | | 10 | U | 10 | U | 10 | U | DRY | | 10 | U | - | | - | |
| | 1/21-22/03 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 7/14-15/03 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/16-17/04 | 10 | U | 10 | U | 10 | U | 10 | U | 5 | J | 10 | U | - | | - | |
| | 9/29-30/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 3/30-31/05 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 10/3-4/05 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/4-5/06 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | NS | | - | | - | |
| | 9/27-28/06 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/2-3/07 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/18-19/07 | 10 | U | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | - | | - | |
| | 3/11/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/8-9/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11-12/09 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/1-2/09 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | - | | - | |
| | 3/17-18/10 | 5 | U | 5 | U | 5 | U | 5 | U | 0.7 | J | 5 | U | - | | - | |

Watauga County, North Carolina
Upgradient Well: MW-1
06/06/11

Table 5C
Assessment Organic Target Parameter Analytical Results
Surface Water Sampling Locations

Results ug/l(ppb)

| Parameter | Event | S1 | | S2 | | S3 | | S4 | | S5 | | S6 | | L1 | | Mt. Spring | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vinyl Chloride | 6/20/94 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | | - | |
| | 9/27/94 | - | | - | | - | | - | | - | | - | | 10 | U | 10 | U |
| WQS = 2.4 ug/l | 2/06/95 | 10 | U | 10 | U | 10 | U | 2 | J | 10 | U | - | | 10 | U | - | |
| | 4/11/95 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 7/10/95 | 10 | U | 10 | U | 10 | U | 3 | J | 10 | U | - | | - | | - | |
| | 4/10/96 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/8/97 | 10 | U | 2 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 1/15/98 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 6/23/98 | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | - | | - | |
| | 1/12/99 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 7/12/99 | 10 | U | 17 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/1/00 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | UJ | 10 | UJ | - | | - | |
| | 8/8/00 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/12-14/01 | 10 | U | 10 | U | 10 | U | 10 | U | 4 | J | 10 | U | - | | - | |
| | 8/7-8/01 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 2/11-14/02 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 8/12-14/02 | DRY | | 10 | U | 10 | U | 10 | U | DRY | | 10 | U | - | | - | |
| | 1/21-22/03 | 10 | U | 0.9 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 7/14-15/03 | 10 | U | 1 | J | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/16-17/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/29-30/04 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 3/30-31/05 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | DRY | | - | | - | |
| | 10/3-4/05 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/4-5/06 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | NS | | - | | - | |
| | 9/27-28/06 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 4/2-3/07 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/18-19/07 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/8-9/08 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 3/11-12/09 | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | 10 | U | - | | - | |
| | 9/1-2/09 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | - | | - | |
| | 3/17-18/2010 | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | 5 | U | - | | - | |

TABLE 5B NOTES:

U Denotes not detected (the associated numerical value is the CRQL).

J Denotes an estimated value

CRQL Contract Required Quantification Limit (CLP Methods)

\- Denotes Not Avaliable or Not Sampled

WQS Denotes North Carolina 15A NCAC 2B Surface Water Quality Standard (Human Health) or National Criteria per EPA, current 4/30/09

* freshwater aquatic life standard (no human health standard available).

Shading Denotes results that exceed North Carolina Surface Water Quality Standard.

ANALYSIS TYPE:

1) Organic parameters were analyzed utilizing CLP Statement of Work OLMO3.2.

2) For CLP analyses, 1,2-Dichloroethene is reported as total concentration.

**PRIVATE WELL TESTING**
**WATAUGA COUNTY, NC**
**RESULTS OF ANALYSIS**

| CONSTITUENT | 3/23/93** | 2/19/01** | 8/7/01*** | 1/11/02*** | 3/14/02**** | 1/22/03**** | 7/15/03**** | 3/16/04**** | 9/29/04**** | 3/30/05^^ | 10/05/05^^ | 4/05/05^^ | 9/27/06^^ | 4/3/07^^ | 9/18/07^^ | 3/11/08^^ | 9/9/08^^ | 3/12/09^^ | 9/2/09^^ | 3/18/10^^ | NCS | MCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2737 Hwy 421 S (Well Ref. No.16) Connected to public water in 2004.** | | | | | | | | | | | | | | | | | | | | | | |
| Methyl-t-butyl-ether | ND | <1.0 | ND | ND | 1.2 | 1.2 | ND | 1.5 | 1.7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 200 | --- |
| cis-1,2-Dichloroethene | ND | <1.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.5 | ND | 0,5(J) | 0.3 (J) | 70 | 70 |
| Tetrachloroethene | ND | <1.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.1(J) | 0.2(J) | 0.1(J) | 0.7 | 5 |

| CONSTITUENT | 3/18/93* | 5/11/93** | 9/21/93** | 11/2/99** | 9/6/00** | 3/30/05^^ | 3/11/08^^ | NCS | MCL |
|---|---|---|---|---|---|---|---|---|---|
| **139,152,163,166 Margot Rd; 151,180 Greenbriar Ln; 306, 344 Greenbriar Rd. Shared Well #1 (8 Houses) (Well Ref. No.13)** | | | | | | | | | |
| sec-Butylbenzene | 0.2 | ND | ND | ND | ND | ND | ND | 70 | --- |
| Carbon Tetrachloride | 0.1 | ND | ND | ND | ND | ND | ND | 0.3 | 5 |
| Methylene Chloride | 1.5 | ND | ND | ND | ND | ND | ND | 5 | 5 |
| alpha-Chlordane | 0.4 | ND | ND | ND | ND | ND | ND | - | 2 |
| gamma-Chlordane | 0.3 | ND | ND | ND | ND | ND | ND | - | 2 |
| 1,4-Dichlorobenzene | ND | ND | ND | trace | ND | ND | ND | 6 | 75 |
| 2-Butanone | ND | ND | ND | ND | 2.3J | ND | ND | 4000 | --- |
| Chloroform | ND | ND | ND | trace | ND | ND | ND | 70 | 80 |

| CONSTITUENT | 3/5/93** | 4/26/95** | 4/9/96** | 2/10/98** | NCS | MCL |
|---|---|---|---|---|---|---|
| **Mack Brown Chevrolet dealership, 2704/2705 Hwy 421 S (Well Ref. No.7) Public water in 2000.** | | | | | | |
| Chloroform | ND | ND | ND | 39.7 | 70 | 80 |
| Bromodichloromethane | ND | ND | ND | 5 | 0.6 | 80 |
| Methyl-t-butyl-ether | ND | 24.4 | 2.5 | ND | 20 | --- |

| CONSTITUENT | 3/18/93* | 3/30/94** | 11/12/95** | 10/24/95* | 4/9/96** | 10/9/96** | 6/12/97** | 2/10/98** | 6/9/99** | NCS | MCL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **118, 132, 138, 191 Grapevine Circle, Shared Well #2 (4 Houses) (Well Ref. No.14) Connected to public water in 2000.** | | | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | 6 | 75 |
| 1,1-Dichloroethane | ND | ND | ND | <1.0 | <1.0 | <1.0 | ND | ND | ND | 6 | --- |
| 1,1-Dichloroethene | ND | <1.0 | <1.0 | ND | ND | ND | ND | ND | ND | 7 | 7 |
| Tetrachloroethene | ND | ND | ND | trace | ND | trace | ND | ND | ND | 0.7 | 5 |
| 1,1,1-Trichoroethane | ND | <1.0 | ND | trace | ND | ND | ND | ND | ND | 200 | 200 |
| Chloroform | ND | trace | ND | 9.0 | ND | ND | ND | ND | ND | 70 | 80 |
| Bromodichloromethane | ND | ND | ND | 1.4 | ND | ND | ND | ND | ND | 0.6 | 80 |
| Dibromochloromethane | ND | ND | ND | <1.0 | ND | ND | ND | ND | ND | 0.4 | 80 |
| 2-Chlorotoluene | ND | ND | ND | 1.2 | ND | ND | ND | ND | ND | 100 | --- |
| 4-Chlorotoluene | ND | ND | ND | 1.0 | ND | ND | ND | ND | ND | --- | --- |
| Methyl Ethyl Ketone | ND | ND | ND | 24.6 | ND | ND | ND | ND | ND | 4000 | --- |
| Tetrahydrofuran | ND | ND | ND | 13.4 | ND | ND | ND | ND | ND | --- | --- |

| CONSTITUENT | 3/23/93** | 5/20/96** | 10/9/96** | 6/12/97** | 6/9/99** | NCS | MCL |
|---|---|---|---|---|---|---|---|
| **601 Green Briar Rd (Well Ref. No.20) Connected to public water in 2000.** | | | | | | | |
| 1,1,1-Trichloroethane | trace | trace | trace | trace | ND | 200 | 200 |
| Methyl-t-butyl-ether | ND | ND | ND | ND | <1.0 | 20 | --- |
| Chloroform | <1.0 | <1.0 | NDT | ND | <1.0 | 70 | 80 |

| CONSTITUENT | 10/20/93** | 2/21/96** | 8/19/98** | 2/18/99** | 9/6/00** | NCS | MCL |
|---|---|---|---|---|---|---|---|
| **Meadowridge condominiums, Complex 9 (Well Ref. No.38)** | | | | | | | |
| Chloroform | <1.0 | ND | ND | ND | ND | 70 | 80 |
| trans-1,2-Dichloroethene | <1.0 | ND | ND | ND | ND | 100 | 100 |
| 1,1,1-Trichloroethane | trace | ND | ND | ND | ND | 200 | 200 |
| Trichloroethene | trace | ND | ND | ND | ND | 3 | 5 |

| CONSTITUENT | 5/11/93** | 5/20/96** | 6/12/97** | 2/10/98** | 11/2/99** | 5/22/00** | 2/14/02*** | 3/11/08^^ | NCS | MCL |
|---|---|---|---|---|---|---|---|---|---|---|
| **604 Green Briar Rd (Well Ref. No.23)** | | | | | | | | | | |
| Chloroform | trace | <1.0 | <1.0 | ND | trace | trace | ND | ND | 70 | 80 |
| Methyl-t-butyl-ether | ND | ND | ND | ND | ND | trace | ND | ND | 20 | --- |
| Toluene | ND | ND | ND | ND | trace | ND | ND | ND | 600 | 1000 |
| Ethyl Benzene | ND | ND | ND | ND | trace | ND | ND | ND | 600 | 700 |
| Xylenes | ND | ND | ND | ND | trace | ND | ND | ND | 500 | 10000 |
| 1,4-Dichlorobenzene | ND | ND | ND | ND | trace | ND | ND | ND | 6 | 75 |

| CONSTITUENT | 5/11/93** | 11/2/99** | 2/11/02*** | 3/11/08^^ | NCS | MCL |
|---|---|---|---|---|---|---|
| **313 Green Briar Rd (Well Ref. No.25)** | | | | | | |
| Tetrahydrofuran | ND | 1.2 J | ND | ND | --- | --- |

| CONSTITUENT | 8/9/93** | 10/20/93** | 9/21/94** | NCS | MCL |
|---|---|---|---|---|---|
| **535 Green Briar Rd (Well Ref. No.33) Connected to public water in 2000.** | | | | | |
| 1,2-Dichloroethane | <1.0 | <1.0 | ND | 0.4 | 5 |
| Chloroform | <1.0 | ND | <1.0 | 70 | 80 |

NOTE: All Concentrations are in ppb (ug/L)

**PRIVATE WELL TESTING**
**WATAUGA COUNTY, NC**
**RESULTS OF ANALYSIS**

| CONSTITUENT | 3/93* | 4/94** | 10/95** | 4/96** | 10/96** | 6/97** | 2/98** | 2/99** | 5/00** | 8/01*** | 2/02*** | 8/02**** | 1/03**** | 7/03**** | 4/07^^ | 9/07^^ | 3/11/08^^ | 9/9/08^^ | 3/12/09^^ | 9/2/09^^ | 3/18/10^^ | NCS | MCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2347 Hwy 421 S (Well Ref. No. 2) Connected to public water in 20** | | | | | | | | | | | | | | | | | | | | | | | |
| tert-Butylbenzene | 1.1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 70 | --- |
| Isopropylbenzene | 0.7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 70 | --- |
| Trichloroethene | 0.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.2(J) | ND | ND | 0.2(J) | ND | 0.2(J) | ND | 3 | 5 |
| Tetrachloroethene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.1(J) | ND | 0.7 | 5 |
| 1,3,5-Trimethylbenzene | 0.7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 400 | --- |
| 1,1-Dichloroethane | ND | trace | <1.0 | trace | <1.0 | trace | ND | <1.0 | 0.6 | ND | 0.7 | 0.99 | 0.53 | 0.77 | 3.3 | 3.7 | 4.5 | 4.8 | 4.2 | 6.4 | 1.0 | 6 | --- |
| 1,1-Dichloroethene | ND | trace | trace | ND | trace | ND | ND | ND | trace | ND | ND | ND | ND | ND | 0.3(J) | 0.3(J) | 0.2(J) | 0.3(J) | ND | 0.3(J) | ND | 7 | 7 |
| cis-1,2-Dichloroethene | ND | ND | ND | ND | ND | ND | ND | ND | trace | ND | ND | ND | ND | ND | 0.5 | 0.2(J) | 0.6 | 0.8 | 0.1J | 0.9 | ND | 70 | 70 |
| Dichlorodifluoromethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.3(J) | 0.3(J) | 0.3(J) | 0. 4(J) | 0.3(J) | 0.3(J) | ND | 1000 | --- |
| Chloroethane | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.3(J) | 0.5(J) | 0.5 | 0.7 | 0.5(J) | 0.9 | ND | 3000 | --- |
| Vinyl Chloride | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.1(J) | ND | ND | 0.03 | 2 |
| Methyl Ethyl Ketone | ND | trace | 35.3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 4000 | --- |
| Tetrahydrofuran | ND | ND | 42.3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | --- |
| Benezene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0. 4(J) | ND | 1 | 5 |
| Toluene | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.3(J) | ND | ND | 1.0 | ND | ND | 600 | 1000 |
| Methylene Chloride | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.5(J) | ND | ND | ND | ND | ND | 5 | 5 |

| CONSTITUENT | 5/93** | 6/23/93** | 3/94** | 8/94** | 12/94** | 4/95** | 10/95** | 5/96** | 10/96** | 2/98** | 8/98** | 6/99** | 9/00** | 5/01** | 2/02*** | 8/02**** | 1/03**** | 7/03**** | 3/04**** | 9/04**** | NCS | MCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **648 Green Briar Rd (Well Ref. No. 24) Declined connection to public water in 2000; unoccuppied in 2005, connected in 2008.** | | | | | | | | | | | | | | | | | | | | | | |
| Methylene Chloride | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 | 5 |
| 1,1,1-Trichloroethane | <1.0 | <1.0 | <1.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 200 | 200 |
| Trichloroethene | trace | trace | <1.0 | ND | trace | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 3 | 5 |
| Tetrachloroethene | ND | trace | <1.0 | ND | trace | trace | <1.0 | <1.0 | trace | ND | trace | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.7 | 5 |
| Carbon Tetrachloride | ND | ND | <1.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.3 | 5 |
| 1,1-Dichloroethane | ND | ND | <1.0 | ND | <1.0 | <1.0 | trace | <1.0 | ND | ND | trace | trace | ND | trace | ND | ND | ND | ND | ND | ND | 6 | --- |
| Chloroform | ND | ND | trace | ND | ND | trace | trace | ND | ND | ND | trace | ND | ND | ND | 37 | 38 | ND | ND | ND | ND | 70 | 80 |
| Bromodichloromethane | | | | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 4.8 | 8.0 | ND | ND | ND | ND | 0.6 | 80 |
| Dibromochloromethane | | | | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.81 | 1.6 | ND | ND | ND | ND | 0.4 | 80 |
| 1,2-Dibromoethane (EDB) | ND | ND | ND | ND | ND | ND | trace | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.02 | 0.05 |

| CONSTITUENT | 3/93* | 4/94** | 12/94** | 2/01** | 8/01*** | 2/02*** | 8/02**** | 1/03**** | 7/03**** | 3/04**** | 9/04**** | 3/05^^ | 10/05^^ | 4/06^^ | 9/06^^ | 4/07^^ | 9/07^^ | 3/11/08^^ | 9/9/08^^ | 3/12/09^^ | 9/2/09^^ | 3/18/10^^ | NCS | MCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2711 Hwy 421 S (Well Ref. No. 15) Declined connection to public water in 2002, connected in 2006.** | | | | | | | | | | | | | | | | | | | | | | | | |
| Benzene | ND | <1.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1 | 5 |
| Toluene | ND | 6.4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 600 | 1000 |
| Tetrachloroethene | ND | trace | ND | <1.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.1(J) | 0.2(J) | 02(J) | 0.7 | 5 |
| Ethylbenzene | ND | trace | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 600 | 700 |
| p and m - Xylene | ND | <1.0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 500 | 10,000 |
| Styrene | ND | trace | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 70 | 100 |
| cis-1,2-Dichloroethene | ND | trace | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.3(J) | ND | ND | ND | ND | ND | ND | 70 | 70 |

| | 3/93* | 2/96** | 2/02*** | 8/02**** | 1/03**** | 3/04**** | 10/05^^ | 4/06^^ | 4/07^^ | 9/07^^ | 3/08^^ | 9/08^^ | 3/09^^ | 9/09^^ | 3/09^^ | 9/09^^ | 3/10^^ | NCS | MCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2239 Hwy 421 S (Well Ref. No. 1)** | | | | | | | | | | | | | | | | | | | |
| Total Xylenes | ND | ND | 0.7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 500 | 10000 |

| CONSTITUENT | 3/93* | 6/93** | 3/94** | 10/96** | NCS | MCL |
|---|---|---|---|---|---|---|
| **513 Green Briar Rd (Well Ref. No. 11) Connected to public water in 2000.** | | | | | | |
| Dichlorodifluoromethane | 2.5 | ND | ND | ND | 1000 | --- |
| Naphthalene | 0.7 | ND | ND | ND | 6 | --- |
| Chloromethane | <9 | ND | ND | ND | 3 | --- |
| Methylene Chloride | <0.6 | ND | ND | ND | 5 | 5 |
| Chloroform | | ND | <1.0 | NDT | 70 | 80 |

NOTE: All Concentrations are in ppb (ug/L)

**PRIVATE WELL TESTING - WATAUGA COUNTY, NC**
**WELLS SHOWING NO DETECTED ORGANIC COMPOUNDS**

| SAMPLING LOCATION | SAMPLING DATES |
|---|---|
| Mack Brown rental residence (Well Ref. No.3) **REMOVED** | March 5, 1993*, July 3, 1994** and Feb. 19, 2001 |
| BREMCO residence (36) **REMOVED** | September 21, 1993** |
| Hollar and Green Produce, 230 Cabbage Rd (Well Ref. No.6) | 3/93*,9/98&5/01**, 7/03***,3/05,4/06,4/07,9/07,3/08.9/08,3/09,9/09,3/10^^ |
| 497/513 Old Hwy 421 S (Well Ref. No.8) | March 5, 1993* |
| Martin High Country Rentals #1 (9) | March 5, 1993* connected to public water. |
| Martin High Country Rentals #2 (10) | March 5, 1993* connected to public water. |
| 190 Green Briar Rd (Well Ref. No.30) | August 3, 1993** |
| 253 Green Briar Rd (Well Ref. No.39) | November 16, 1994** and August 7, 2001*** |
| 331 Green Briar Rd (Well Ref. No.19) | March 1993*, Oct. 1999**, Feb. 2002*** |
| 378 Green Briar Rd (Well Ref. No.18) | March 1993*, Oct. 1996**, Nov. 1999*, 3/05&3/08^^ |
| 425 Green Briar Rd (Well Ref. No.17) | 3/1993*, 9/1993**, 7/1994**, 10/1999**, 3/05&3/11/08^^ |
| 662 Green Briar Rd (Well Ref. No.27) | June 23, 1993**, March 30, 2005 and March 11, 2008^^ |
| 690 Green Briar Rd (Well Ref. No.29) | June 23, 1993**, March 30, 2005 and March 11, 2008^^ |
| 699 Green Briar Rd (Well Ref. No.26) | June 23, 1993** |
| 732 Green Briar Rd (Well Ref. No.28) | June 23, 1993** |
| 142 Greenbriar Ln (Well Ref. No.21) | 3/18/1993*, 5/22/2000**, 3/30/2005^^, 10/5/2005^^ , and 9/9/08^^ |
| 110 Greenbriar Ln (Well Ref. No.22) | March 23, 1993* and October 12, 1999** |
| 330 Wild Rose Ln (Well Ref. No.45) | Oct. 1999**, Aug. 2001***, Feb. 2002***, and March 2005^^ |
| 378 Wild Rose Ln (Well Ref. No.46) | Feb. 2001**, Aug. 2001***, Feb. 2002***, and March 2005^^ |
| 356 Wild Rose Ln (Well Ref. No.54) | February 14, 2002*** and March 30, 2005^^ |
| 171 Chipmunk Tr (Well Ref. No.31) | August 3, 1993** |
| Animal Control Office, 411 Landfill Rd (Well Ref. No.32) | August 3, 1993** |
| Brook Hollow Trailer Park (Well Ref. No.37) | October 11, 1993** |
| 860 Green Briar Rd (Well Ref. No.34) | October 20, 1993** |
| 182/216 Cane Rd, Shared well #3 (Well Ref. No.35) | October 20, 1993** and March 11, 2008^^ |
| 221/219Cane Rd, Shared well #3 (Well Ref. No.57) | March 11, 2008^^ |
| 177 Cane Rd, Shared well #3 (Well Ref. No.56) | March 11, 2008^^ |
| 220 Margot Rd (Well Ref. No.55) | March 30, 2005^^ |
| 191 Sunny Knoll Ln (Well Ref. No.40) | January 12, 1995** |
| 200 Sunny Knoll Ln (Well Ref. No.61) | March 11, 2008^^ |
| 315 Sunny Knoll Ln (Well Ref. No.60) | March 11, 2008^^ |
| 233 Chipmunk Tr (Well Ref. No.41) | January 12, 1995** |
| Meadowridge Condominiums (42) | February 16&17, 1998** |
| Meadowridge Condominiums (43) | February 16&17, 1998** |
| Meadowridge Condominiums (44) | August 19, 1998** |
| 214/252 Will Cook Rd (Well Ref. No.47) | May 24, 2001** |
| 5259 Bamboo Rd (Well Ref. No.59) | March 2005^^ |
| 5233 Bamboo Rd (Well Ref. No.51) | August 7, 2001*** |
| 5229 Bamboo Rd (Well Ref. No.52) | August 7, 2001*** |
| 5195 Bamboo Rd (Well Ref. No.48) | August 7, 2001*** |
| 5177 Bamboo Rd (Well Ref. No.53) | August 7, 2001*** |
| 5147 and 5145 Bamboo Rd (Well Ref. No.50) | August 7, 2001*** |
| 5111 Bamboo Rd (Well Ref. No. 49) | August 7, 2001*** |

TABLE NOTES:

The sampled well reference number as presented on the Vicinity Map (Figure 1) is denoted in parentheses following the sampling locations name.
* Laboratory analysis performed by Central Virginia Laboratories and Consultants (CVLC) utilizing EPA Methods 502.2 (Volatiles) and 525.1 (Semi-Volatiles).
** Laboratory Analysis performed by NCDENR Division of Laboratory Services utilizing EPA Method 502.2 (Volatiles).
*** Laboratory Analysis performed by Severn Trent Services utilizing EPA Method 524.2 (Volatiles).
**** Laboratory Analysis performed by Toxikon utilizing EPA Method 524.2 (Volatiles)
^^ Laboratory Analysis performed by Lancaster Lanoratories utilizing EPA Method 524.2 (Volatiles)
NSC - North Carolina Water Quality Standard (DEHNR-15A NCAC 2L.0202) - as last updated 2/5/2010
MCL - EPA Primary Drinking Water Standard Maximum Contaminant Level
ND denotes no compounds detected for entire analytical scan.
NDT denotes compound detected in trip blank at same concentration as well sample.
NS denotes not sampled on that date.
NA denotes compound not analyzed on that date.
(J) denotes estimated result. # denotes compound co-elutes.
(T) denotes found in Trip Blank. trace = < 0.5 ppb (ug/l)

Note that chloroform was detected in the residential wells 17, 18, 19, 22, 26, 30, 40, 45 and 46.
Chloroform has not been detected in any of the landfill assessment monitoring wells to date, and is likely a transformation product resulting from the chlorination of the well systems.
Martin High Country Rentals (9 and 10) was connected to public water in 2000.

**PRIVATE WELL TESTING**
**WATAUGA COUNTY, NC**
**RESULTS OF BREMCO WELL ANALYSIS**

| CONSTITUENT | 3/5/93* | 4/6/94** | 8/2/94** | 12/7/94** | 4/26/95** | 10/24/95** | 4/9/96** | 10/9/96** | 6/4/97** | 2/10/98** | 8/17/98** | 2/18/99** | 5/22/00** | NCS | MCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blue Ridge Electric Membership Company (BREMCO), 2491 Hwy 421 S (Well Ref. No. 5) Connected to public water in 2003.** | | | | | | | | | | | | | | | |
| Benzene | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 3.2 (J) | trace | trace | trace | 1 | 5 |
| 1.1-Dichloroethane | 0.7 | <1.0 | 1.4 | 1.0 | 1.2 | 1.8 | 1.5 | 1.5 | 2.0 | 3.2 (J) | 1.6 | 1.5 | 5.0 | 6 | --- |
| 1,1,1-Trichlorothane | 0.2 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | trace | trace | trace | trace | 200 | 200 |
| Trichloroethene | 0.5 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 1.2 (J) | 0.5 | trace | 0.6 | 3 | 5 |
| 1,1-Dichloroethene | **ND** | 1.0 | 1.9 | <1.0 | 1.1 | 1.7 | 1.0 | <1.0 | 1.7 | 3.9 (J) | 2.6 | **ND** | 2.7 | 7 | 7 |
| cis-1,2-Dichloroethene | **ND** | <1.0 | **ND** | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 0.5 (J) | trace | trace | 0.5 | 70 | 70 |
| Tetrachloroethene | **ND** | <1.0 | <1.0 | trace | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | trace | trace | trace | trace | 0.7 | 5 |
| Cloroform | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | trace | **ND** | 70 | 80 |
| Methylene Chloride | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.8 | 5 | 5 |
| Methyl-t-butyl-ether | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | trace | 20 | --- |
| Tetrahydrofuran | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.5 (J) | **ND** | **ND** | --- | --- |
| Chloroethane | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 3000 | --- |
| Dichlorodifluoromethane | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 1000 | --- |

| CONSTITUENT | 8/7/01*** | 2/11/02*** | 8/14/02**** | 1/22/03**** | 7/15/03**** | 3/16/04**** | 9/29/04**** | 3/30/05^^ | 10/5/05^^ | 4/05/06^^ | 9/27/06^^ | 4/3/07^^ | 9/18/07^^ | 3/11/08^^ | 9/9/08^^ | 3/12/09^^ | 9/2/09^^ | 3/18/10^^ | NCS | MCL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Blue Ridge Electric Membership Company (BREMCO), 2491 Hwy 421 S (Well Ref. No. 5) Connected to public water in 2003.** | | | | | | | | | | | | | | | | | | | | |
| Benzene | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.1 | 0.6 | 0.5 | 0.5 | 0.6 | 0.4(J) | 0.5(J) | 1 | 5 |
| sec-Butylbenzene | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.01(J) | **ND** | 0.01(J) | 0.2(J) | 70 | --- |
| 1,4-Dichlorobenzene | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.3 | 0.8 | 1 | 1.3 | 1.4 | 1.6 | 2.3 | 6 | 75 |
| 1.1-Dichloroethane | 6 | 6 | 7.7 | | 8.8 | 5,7 | 4.1 | **ND** | 4.7 | 0.5 | 1.6 | 11 | 29 | 38 | 30 | 33 | 36 | 28 | 6 | --- |
| 1,1,1-Trichlorothane | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 200 | 200 |
| Trichloroethene | 0.8 | 0.6 | 0.72 | | 0.69 | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 1 | 1 | 1 | 1 | 0.9 | 1 | 3 | 5 |
| 1,1-Dichloroethene | 2 | **ND** | 1.6 | | 1.4 | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.8 | 1.8 | 1.7 | 1.5 | 1.5 | 1.3 | 1.4 | 7 | 7 |
| cis-1,2-Dichloroethene | 0.9 | 1 | 1.4 | | 1.6 | **ND** | **ND** | **ND** | 0.7 | **ND** | **ND** | 1.9 | 5.3 | 6 | 6 | 6.5 | 5.5 | 6.2 | 70 | 70 |
| trans-1,2-Dichloroethene | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.2(J) | 0.2(J) | 0.2(J) | 0.2(J) | 0.2(J) | 100 | 70 |
| Tetrachloroethene | **ND** | **ND** | **ND** | NS | 0.53 | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.4 (J) | 0.5 (J) | 0.4 (J) | 0.4 (J) | 0.4 (J) | 0.4 (J) | 0.7 | 5 |
| Cloroform | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 70 | 80 |
| Methylene Chloride | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.4 | 1.6 | 1.7 | 1.4 | 1.7 | 0.8 | 1.5 | 5 | 5 |
| Methyl-t-butyl-ether | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 200 | --- |
| Tetrahydrofuran | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | --- | --- |
| Chloroethane | 0.5 | 1 | 1.3 | | 1.3 | 1.1 | 0.52 | **ND** | 1.1 | **ND** | **ND** | 2.2 | 8.1 | 12 | 11 | 11 | 9 | 11 | 3000 | --- |
| Dichlorodifluoromethane | 1 | 1 | 1.6 | | 0.94 | 0.59 | 0.58 | **ND** | **ND** | **ND** | **ND** | 0.6 | 1.2 | 1.2 | 1 | 1 | 0.9 | 0.9 | 1000 | --- |
| Chlorobenzene | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.1 (J) | 0.2 (J) | 0.2 (J) | 0.2 (J) | 0.3 (J) | 0.3 (J) | 50 | 100 |
| 1,2-Dichloroethane | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.2 (J) | 0.2 (J) | **ND** | **ND** | **ND** | 0.2 (J) | 0.4 | --- |
| 1,2-Dichloropropane | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.2 (J) | 0.3 (J) | 0.2 (J) | 0.2 (J) | 0.2 (J) | 0.2 (J) | 0.6 | 5 |
| Toluene | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 1.1 | **ND** | **ND** | **ND** | **ND** | **ND** | 600 | 1000 |
| Vinyl Chloride | **ND** | **ND** | **ND** | | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | **ND** | 0.4 (J) | 0.5 | 0.5(J) | 0.4(J) | 0.4(J) | 0.5(J) | 0.03 | 2 |

NOTE: All Concentrations are in ppb (ug/L)

## PRIVATE WELL TESTING - WATAUGA COUNTY, NC
## RESULTS OF VOLATILE AND SEMIVOLATILE ANALYSIS

| CONSTITUENT | MARCH 5, 1993* | MARCH 18, 1993* | MARCH 24, 1993* | JUNE 23, 1993** | JULY 13, 1994** | NCS | MCL |
|---|---|---|---|---|---|---|---|
| **Carroll residence, 491 Green Briar Rd (Well Ref. No. 12) WELL ABANDONED IN 1995** | | | | | | | |
| Benzene | 2.1 | 1.7 | | 1.9 | | 1 | 5 |
| Chloroethane | 173.4 | 74.5 | | **ND** | | 3000 | --- |
| Chloromethane | **ND** | 14.8 | | **ND** | | 3 | --- |
| Dichlorodifluoromethane | 30.6 | **ND** | | **ND** | | 1000 | --- |
| 1,1-Dichloroethane | 20.9 | 17.4 | | **ND** | | 6 | --- |
| 1,1-Dichloroethene | 4.1 | 1.5 | | **ND** | | 7 | 7 |
| cis-1,2-Dichloroethene# | 1.2 | 0.9 | | <1.0 | | 70 | 70 |
| 2,2-Dichloropropane# | 1.2 | 0.9 | | **ND** | | --- | --- |
| 4-Isopropyltoluene | **ND** | 0.2 | NS | **ND** | NS | --- | --- |
| Isopropylbenzene | 0.6 | **ND** | | **ND** | | 70 | --- |
| Methylene Chloride | **ND** | 43.0 (T) | | 138.2 | | 5 | 5 |
| Styrene | 2.8 | 0.5 | | **ND** | | 70 | 100 |
| Tert-Butyl Methyl Ether | **ND** | **ND** | | 2.4 | | 20 | --- |
| Tetrachloroethene | 5.4 | 4.7 | | 4.2 | | 0.7 | 5 |
| Toluene | **ND** | 0.6 (T) | | **ND** | | 600 | 1000 |
| 1,1,1-Trichloroethane | 19.7 | 15.7 | | 29.4 | | 200 | 200 |
| Trichloroethene | 7 | 5.5 | | 7.0 | | 3 | 5 |
| Trichlorofluoromethane | 37.1 | 20.2 | | **ND** | | 2000 | --- |
| Vinyl Chloride | 1.7 (T) | **ND** | | **ND** | | 0.03 | 2 |
| p and m-Xylene | **ND** | **ND** | | <1.0 | | 500 | 10,000 |
| o-Xylene | **ND** | 3.4 | | 2.9 | | 500 | 10,000 |
| **Nissan-Mazda Dealership, 2464 Hwy 421 S (Well Ref. No. 4) WELL ABANDONED IN 1995** | | | | | | | |
| Carbon Tetrachloride | 0.2 | | **ND** | | **ND** | 0.3 | 5 |
| Chloroethane | 19.1 | | **ND** | | **ND** | 3000 | --- |
| Dichlorodifluoromethane | 8.2 | | 8.7 | | **ND** | 1000 | --- |
| 1,1-Dichloroethane | 98.5 | | 63.1 | | 104.3 | 6 | --- |
| 1,2-Dichloroethane | **ND** | | 0.5 | | **ND** | 0.4 | --- |
| 1,1-Dichloroethene | 5.4 | | 3.7 | | 4.7 | 7 | 7 |
| cis-1,2-Dichloroethene# | 22.2 | | 13.0 | | 23.7 | 70 | 70 |
| 1,2-Dichloropropane | 0.5 | | 0.3 | | **ND** | 0.6 | 5 |
| 2,2-Dichloropropane# | 22.2 | NS | 13.0 | NS | **ND** | --- | --- |
| Tetrachloroethene | 21.8 | | 28.1 | | 30.9 | 0.7 | 5 |
| Toluene | **ND** | | 0.8(T) | | **ND** | 600 | 1000 |
| 1,1,1-Trichloroethane | 14.7 | | 19.3 | | 22.9 | 200 | 200 |
| Trichloroethene | 11.2 | | 9.1 | | 12.6 | 3 | 5 |
| Trichlorofluoromethane | 0.4 | | **ND** | | **ND** | 2000 | --- |
| o-Xylene | 0.4 | | 0.5(T) | | **ND** | 500 | 10,000 |

NOTE: All Concentrations are in ppb (ug/L).

# Data Validation Report

## USEPA CLP SOW SOM01.2 - VOLATILE ORGANIC ANALYSIS (VOA) DATA VALIDATION SUMMARY

Draper Aden Associates performed a limited review of the analytical results for the September 13-14, 2010 groundwater monitoring event at the Watauga County Landfill, Facility ID 95-02. Draper Aden Associates collected samples from surface water locations S-1, S-2, S-3, S-4, S-5 and S-6. Samples were analyzed for sixteen target analytes which included benzene, chlorobenzene; 1,4-dichlorobenzene; chloroethane, dichlorodifluoromethane; 1,1-dichloroethane; 1,2-dichloroethane; 1,1-dichloroethylene; cis-1,2-dichloroethylene; trans-1,2-dichloroethylene; 1,2-dichloropropane, tetrachloroethylene; 1,1,1-trichloroethane, trichloroethylene, methylene chloride, vinyl chloride. Samples were analyzed in general accordance with the requirements of the USEPA CLP Statement of Work (SOW) document number SOM01.2. The following information and attached table summarize the data validation results.

CompuChem, a Division of Liberty Analytical Corp., (CompuChem), of Cary, North Carolina, performed the GC/MS analysis. On behalf of Watauga County, CompuChem submitted results to Draper Aden Associates in a final certificate of analysis, which included sample analytical results as well as relevant documentation to validate and verify the analytical results. The original certificate of analysis was received September 29, 2010.

The evaluation of CompuChem's compliance with the method was based on a limited review of the following items: QC deliverables package, case narrative, technical holding time and preservation requirements, instrument performance check, instrument calibrations, blank analysis, system monitoring recoveries, matrix spike/matrix spike duplicate (MS/MSD) analysis, internal standard requirements, laboratory control samples (LCS), and confirmation of detected analytes. Review of transcriptions from raw data to summary sheets was performed. Specific representative calculations were not performed except where noted. The following information is intended to summarize data review results and any observed significant deviations from method and/or contractual requirements.

CompuChem received the samples on ice and in good condition with custody seals intact. The chain of custody was appropriately signed and dated by field and laboratory personnel. Technical holding time and preservation criteria were met, except the samples were received in the laboratory at 0.4°C. The samples were not frozen and were received at less than 6°C. As per SW-846 and 40 CFR Part 136, no data qualification was required due to the sample receipt temperature.

The certificate of analysis presented data which were of acceptable quality. Holding time, preservation, BFB tuning, initial and continuing calibration, blank, system (surrogate) monitoring, MS/MSD, internal standard and LCS requirements were met, except where noted below. No transcription errors were noted. Deviations from specific QA/QC criteria that were identified during the data review process are summarized below.

Methylene chloride was detected in the storage blank (1.6 µg/l) and in the trip blank (1.5 µg/l). Detected results less than the CRQL or less than five times the blank contamination

concentration for this analyte were attributed to the laboratory contamination and validated as "U" (see data validation summary).

One deuterated surrogate recovered low in sample S-6 and two deuterated surrogates low recovered in S-6. The associated analytes were qualified as estimated to note that the CRQL was estimated due to this QC deficiency (see data validation report).

Chloroethane was detected above the CRQL in sample S-2 and cis-1,2-dichloroethene was detected above the CRQL in sample S-4. Several target analytes were detected below the CRQL in samples S-1, S-2, S-4, S-5 and S-6. No other target analytes were detected in any sample. Except where noted above, results remain as reported by the laboratory.

## CLP VOLATILE ORGANIC ANALYSIS DATA VALIDATION

**Sample ID:** S-1, S-2, S-3, S-4, S-5, S-6
**QC Samples:** MS/MSD (not requested for project), Trip blank, Lab blanks, LCSs
**Laboratory:** CompuChem, a Division of Liberty Analytical Corp, Cary, NC, SDG 1009181

- Were the samples analyzed under CLP SOW for organic analysis and did the analyte list include dichlorodifluoromethane? ☑ YES ☐ NO

**Comment:** Samples were analyzed under CLP protocol (SOM01.2). Target analytes included: benzene, chlorobenzene, chloroethane, 1,4-dichlorobenzene, dichlorodifluoromethane, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichlroethene, 1,2-dichlopropane, methylene chloride, tetrachloroethene, 1,1,1-trichloroethane, trichloroethene, vinyl chloride

### A. CLP TECHNICAL HOLDING TIME AND PRESERVATION CRITERIA:

1. Was the 14-day sample collection to analysis holding time met? ☑ YES ☐ NO
2. Were the samples received at 4°C (± 2°C) and zero headspace? ☑ YES ☐ NO
3. Were the samples preserved & pHs adjusted to <2 with HCl? ☑ YES ☐ NO
4. If samples were not preserved, were they analyzed within 7 days? ☑ NA

**Comment:** Holding time and preservation criteria were met.

### B. GCMS INSTRUMENT PERFORMANCE CHECK CRITERIA:

1. Was analysis of the instrument performance check solution performed every 12 hours with the injection of bromofluorobenzene (BFB) solution or using a continuing calibration verification (CCV) that meets opening CCV criteria analyzed within the 12-hour window? ☑ YES ☐ NO
2. Was there documentation of the injection of a 50 ng BFB solution? ☑ YES ☐ NO
3. Were the ion abundance criteria met? (CLP Form V VOA) ☑ YES ☐ NO

**Comment:** Instrument performance check criteria were met.

### C. INITIAL GCMS CALIBRATION CRITERIA:

* Were initial calibrations (ICAL) and any directly associated blanks and samples analyzed within 12 hours of the associated instrument performance check? ☑ YES ☐ NO

1. ***CLP Validation Criteria:***
   * Did the ICAL contain the target analytes and Deuterated Monitoring Compounds (DMCs) at the required concentrations? ☑ YES ☐ NO
   * Were quantitation ions randomly checked against the primary quantitation ions required by the method? ☑ YES ☐ NO
   * Were the RRFs calculated based on the internal standard associated

with that analyte as listed in the method? ☑ YES ☐ NO

* Did the target analytes, except those listed in Table 15, have RRFs ≥ 0.05 and %RSDs ≤ 20.0%? ☑ YES ☐ NO
* Did the target analytes listed in Table 15 and the DMCs have RRFs ≥ 0.01 and %RSDs ≤ 40.0%? ☑ YES ☐ NO
  If not, list compounds which exceed criteria:
* Were 10% of the target analytes recalculated? ☑ YES ☐ NO

2. ***CLP Contractual Requirements:***
   * Refer to Table 5 of SOMO1.2 and evaluate the relative response factors and % RSD results for method compliance.
   * Did ICAL meet the CLP initial calibration criteria? ☑ YES ☐ NO
   * If not, explain:

**Comment:** Initial calibration criteria were met.

## D. CONTINUING CALIBRATION VERIFICATION (CCV) CRITERIA:

* Opening and closing CCV standard contains target analytes and DMCs
* Were CCVs analyzed at the beginning and end of each 12 hour period? The opening CCV may be part of the ICAL or run independently on another 12 hour analysis period. ☑ YES ☐ NO

1. ***CLP Validation Criteria:***
   * Opening CCV-Did the target analytes, except those listed in Table 15, have RRFs ≥ 0.05 and %Ds within ±25.0%? ☑ YES ☐ NO
     If not, list compounds which exceed criteria:
   * Opening CCV-Did the target analytes listed in Table 15 and the system monitoring compounds have RRFs ≥ 0.01 and %Ds ±40.0%? ☑ YES ☐ NO
     If not, list compounds which exceed criteria:
   * Closing CCV- %Ds within ±50.0%? ☑ YES ☐ NO
     If not, list compounds which exceed criteria:
   * Were 10% of the target analytes recalculated? ☑ YES ☐ NO
2. ***CLP Contractual Requirements:***
   * Evaluate RRFs and %D results based on Table 5 of SOM01.2
   * Did CCV meet CLP continuing calibration verification criteria? ☑ YES ☐ NO

**Comment:** Continuing calibration criteria were met.

## E. BLANK CRITERIA:

1. Was a method blank analyzed after the calibration standards, prior to sample analysis, and once for every 12 hour period? ☑ YES ☐ NO
2. Was a storage blank prepared upon sample receipt of sample delivery group (SDG) and analyzed with samples. ☑ YES ☐ NO
3. Was a blank also analyzed after highly contaminated samples to prevent carry over contamination? ☑ NA ☐ YES ☐ NO
4. Was a trip blank analyzed with this sample batch? ☑ YES ☐ NO

5. Were the trip blanks and method blanks interference free? ☐ YES ☑ NO
6. Were any target analytes detected in other associated blanks? ☑ YES ☐ NO
7. List target analytes detected in the blanks: *methylene chloride*

**Comment:** Methylene chloride was detected in the storage blank (1.6 µg/l) and in the trip blank (1.5 µg/l). Detected results less than the CRQL or less than five times the blank contamination concentration for this analyte were attributed to the laboratory contamination and validated as "U" (see data validation summary). The remaining blank criteria were met.

## F. SYSTEM MONITORING (SURROGATE) COMPOUNDS CRITERIA:

***CLP Performance Criteria:***

1. Were fourteen deuterated monitoring compounds (DMC) added to the samples and blanks just prior to purging to measure their recoveries? ☑ YES ☐ NO
2. Were recoveries for the following analytes within the limits? ☐ YES ☑ NO

| DMC | Recovery Limits (%) for Water Samples |
|---|---|
| Vinyl chloride-$d_3$ | 65 - 131 |
| Chloroethane-$d_5$ | 71 - 131 |
| 1,1-Dichloroethene-$d_2$ | 55 - 104 |
| 2-Butanone-$d_5$ | 49 - 155 |
| Chloroform-d | 78 - 121 |
| 1,2-Dichloroethane-$d_4$ | 78 - 129 |
| Benzene-$d_6$ | 77 - 124 |
| 1,2-Dichloropropane-$d_6$ | 79 - 124 |
| Toluene-$d_8$ | 77 - 121 |
| trans-1,3-Dichloropropene-$d_4$ | 73 - 121 |
| 2-Hexanone-$d_5$ | 28 - 135 |
| 1,4-Dioxane-$d_8$ | 50 - 150 |
| 1,1,2,2-Tetrachloroethane-$d_2$ | 73 - 125 |
| 1,2-Dichlorobenzene-$d_4$ | 80 - 131 |

**Comment:** One surrogate recovered low in sample S-4 and two surrogates low recovered in S-6. The associated analytes were qualified as estimated (see data validation summary). The remaining system monitoring compounds criteria were met.

## G. MATRIX SPIKE, MATRIX SPIKE DUPLICATE CRITERIA:

1. Was the MS/MSD analyzed at a frequency of one MS and MSD per 20 samples of a similar matrix? ☑ NA ☐ YES ☐ NO
2. Were spike recoveries within limits provided below, and as shown on Form III VOA? ☑ NA ☐ YES ☐ NO

| *Compound* | *% R-Water* | *% RPD Water* |
|---|---|---|
| 1,1-dichloroethene | 61-145 | ≤ 14 |
| trichloroethene | 71-120 | ≤ 14 |
| benzene | 76-127 | ≤ 11 |
| toluene | 76-125 | ≤ 13 |
| chlorobenzene | 75-130 | ≤ 13 |

3. Were relative percent differences (RPDs) between MS/MSD recoveries within the advisory limits provided above, and as shown on Form III VOA? ☑ NA ☐ YES ☐ NO

**Comment:** MS/MSD was not requested as allowed by the method and project requirements.

## H. INTERNAL STANDARDS CRITERIA:

1. Were internal standard (IS) areas -50% to 200% of the CCV? ☑ YES ☐ NO
2. Were the IS retention times within ± 30 seconds of the last CCV? ☑ YES ☐ NO
3. Were the following IS used? ☑ YES ☐ NO
   * 1,4-difluorobenzene
   * chlorobenzene-$d_5$
   * 1,4-dichlorobenzene-$d_4$

**Comment:** Internal standards criteria were met.

## I. TARGET ANALYTE IDENTIFICATION:

1. Were the RRTs of the reported analytes within +/- 0.06 RRT units of the standard RRT? ☑ YES ☐ NO
2. Check the sample spectra against the laboratory standard spectra to see that the following criteria were met:
   * Were the ions present in the standard spectra at a relative intensity of >10 %, present in the sample spectra?
   * Were the relative intensities of the ion between the standard and sample spectra within +/-20%? Consider and account for ions present at > 10% in the sample spectra and not in the standard spectra.
3. Were the reported analytes confirmed? ☑ YES ☐ NO
4. Were the analyte concentrations which were recorded on the raw sample quantitation reports accurately transferred to the sample summary sheets? ☑ YES ☐ NO

**Comment:** Target analyte identification criteria were met. Several target analytes were detected below the contract required quantitation limit (CRQL) in samples S-1, S-2, S-4, S-5 and S-6.

## J. TARGET ANALYTE QUANTITATION:

1. Was the correct internal standard, quantitation ion, and RRF used to quantitate the analyte? ☑ YES ☐ NO
2. Were the same internal standards, quantitation ions, and RRFs used consistently throughout, in both the calibration and quantitation process? ☑ YES ☐ NO
3. Were checks for peak splitting and tailing performed? ☑ YES ☐ NO
4. List all samples which required dilution: *None*

**Comment**: Target analyte quantitation was accurate. Chloroethane was detected above the CRQL in sample S-2 and cis-1,2-dichloroethene was detected above the CRQL in sample S-4. Results remain as reported by the laboratory. No other target analytes were detected in any sample.

## K. TENTATIVELY IDENTIFIED COMPOUNDS (TICs) VIA LIBRARY SEARCHES

**Comments:** Tentatively identified compounds denoted as laboratory contaminants and compounds that could not be tentatively identified, "unknowns", were not tabulated.

| PARAMETER | SAMPLE ID | LAB RESULT (µg/l) | VALIDATED RESULT (µg/l) | NOTES[1] |
|---|---|---|---|---|
| Dichlorofluoromethane | S-2 | 5.3 JN | 5.3 JN | Tentatively identified through comparison with the NIST/EPA/MSDS library of spectra. Estimated concentration calculated based on nearest internal standard. |

[1] See definition section of report for additional information on Data Validation and Reporting Qualifiers.

## L. SYSTEM PERFORMANCE:

1. Evaluate the overall system performance over the course of the 12 hour tune/calibration period based on:
   * shifts in chromatographic baseline
   * extraneous peaks
   * loss of resolution
   * peak tailing or splitting
   * trends in increase or decrease of IS areas
2. Was the overall system performance ☑ satisfactory ☐ unsatisfactory

**Comment:** The operation system appeared stable.

## M. ADDITIONAL COMMENTS:

**Comment:** The laboratory prepared and analyzed the samples using the CLP Statement of Work (SOW) document number SOM01.2. Data was evaluated using the *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).* No revisions were needed.

## REFERENCES:

Draper Aden Associates conducted a limited data validation of the above noted data set using summary tables and raw data provided by the analyzing laboratory. Data evaluation was conducted in general accordance with *USEPA Contract Laboratory Program National*

*Functional Guidelines for Superfund Organic Methods Data Review (June 2008).* Validation of this data set is limited to the items detailed in this report.

**LIMITATIONS:**

Draper Aden Associates prepared this document (which may include drawings, specifications, reports, studies and attachments) in accordance with the agreement between Draper Aden Associates and the client. The standard of care for all professional engineering, environmental and surveying and related services performed or furnished by Draper Aden Associates under this Agreement are the care and skill ordinarily used by members of these professions practicing under similar circumstances at the same time and in the same locality. Draper Aden Associates makes no warranties, express or implied, under this Agreement in connection with Draper Aden Associates' services. Conclusions presented are based upon a review of available information, the results of our field studies, and/or professional judgment. To the best of our knowledge, information provided by others is true and accurate, unless otherwise noted. Draper Aden Associates' liability, hereunder, shall be limited to amounts due Draper Aden Associates for services actually rendered, or reimbursable expenses actually incurred. Any reuse or modification of any of the aforementioned documents (whether hard copies or electronic transmittals) prepared by Draper Aden Associates without written verification or adaptation by Draper Aden Associates will be at the sole risk of the individual or entity utilizing said documents and such use is without the authorization of Draper Aden Associates. Draper Aden Associates shall have no legal liability resulting from any and all claims, damages, losses, and expenses, including attorney's fees arising out of the unauthorized reuse or modification of these documents. Client shall indemnify Draper Aden Associates from any claims arising out of unauthorized use or modification of the documents whether hard copy or electronic.

♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦

Draper Aden Associates
Engineering • Surveying • Environmental Services

**This Report has been prepared by:**

Kathy Olsen — 10-4-10

Kathy Olsen, Environmental Scientist
2206 South Main Street, Blacksburg, Virginia 24060
540-552-0444, kolsen@daa.com, www.daa.com

Date:

**This Report has been subjected to technical and quality review by:**

11-29-2010

Janet C. Frazier, Project Manager
2206 South Main Street, Blacksburg, Virginia 24060
540-552-0444, jfrazier@daa.com, www.daa.com

Date:

## SW-846 METHOD 8260B VOLATILE ORGANIC DATA REVIEW SUMMARY

Draper Aden Associates performed a limited review of the analytical results for the September 13-14, 2010 groundwater monitoring event at the Watauga County Landfill, Facility ID 95-02. Draper Aden Associates collected groundwater samples from monitoring wells MW-1, MW-2, MW-3, MW-8, MW-9, MW-10, MW-11, MW-12, MW-15, MW-17 and MW-19. Samples were analyzed for 62 volatile organic analytes by USEPA SW-846 Method 8260B/5030B using a 25 ml purge volume.

CompuChem, a Division of Liberty Analytical, (CompuChem), of Cary, North Carolina, performed the GC/MS analysis. CompuChem submitted results to Draper Aden Associates in a final certificate of analysis, which included sample analytical results, as well as relevant documentation to validate and verify the results. The laboratory revised the deliverables package to include the method detection limit study.

The evaluation of CompuChem's compliance with Method 8260B and validation of the results was based on a limited review of the following items: QC deliverables package, QC history documentation, case narrative, technical holding time and preservation requirements, instrument performance (tune) check, instrument calibrations, blank, surrogate spike, matrix spike and matrix spike duplicate (MS/MSD), laboratory control sample (LCS) data, and internal standard requirements. The following information is intended to summarize data review results and any observed significant deviations from method and/or contractual requirements.

CompuChem received the samples on ice and in good condition with custody seals intact. The chain of custody was appropriately signed and dated by field and laboratory personnel. Technical holding time criteria were met. Preservation criteria were met, except the samples were received at the laboratory at 0.4°C. The samples were not frozen and as per SW-846 and 40 CFR Part 136, no data qualification was required. Additionally, as noted below, acrolein analysis was performed on samples preserved at pH < 2 instead of pH 4-5.

### *Method 8260B*

The original certificate of analysis for Method 8260B was received on September 28, 2010. The final certificate of analysis was complete and no data was rejected. The data set demonstrated the laboratory's ability to achieve the reported limit of quantitation (LOQ), as supported by the initial calibration data and laboratory method detection limit (MDL) study.

QC history documentation was provided. Instrument performance check (tuning) criteria, initial calibration, calibration verification, blanks, surrogates, MS/MSD, internal standard and LCS requirements were met, except where noted below. Deviations from specific QA/QC criteria that were identified during the data review process are summarized below.

Holding time requirements were met. Sample preservation criteria were met with the exception of acrolein. Acrolein analysis was performed on samples preserved at pH < 2 instead of pH 4-5. Acrolein was not detected in any sample and the LOQ for acrolein was qualified as estimated for all sample results.

Acetone (1.5-1.6 µg/l) and toluene (0.12-0.15 µg/l) were reported in the method blank and trip blank. Detected results less than the LOQ or less than five times the blank concentration for these two analytes were attributed to laboratory contamination and validated as "U" (see data validation summary).

Vinyl chloride recovered high in the MS/MSD (187/152%) and chloroethane recovered high in the MS (232%). Detected results for vinyl chloride and chloroethane greater than the detection limit (DL) were considered biased high and qualified as estimated, "J" (see data validation report).

Samples MW-2 and MW-10 required dilution and re-analysis to obtain the reported sample result for 1,1,1-trichloroethane (MW-2 and MW-10); 1,1-dichloroethane (MW-2) and 1,1-dichloroethene (MW-2). Both the undiluted and diluted results were reported by the laboratory. Based on historical data, the laboratory analyzed MW-12 in dilution only (1:1.67) and the LOQs and DLs were adjusted accordingly (see validation report).

The accuracy of the laboratory computer generated results was verified for 10% of the data.

Target analytes detected at or above the MDL and/or analytical data that required a data validation qualifier due to quality control deviations noted above are summarized on the attached table. Except where attributed to laboratory contamination as noted above, target analytes reported by the laboratory as detected less than the corresponding LOQs are validated and qualified as "J" to note that the reported concentration should be considered estimated.

Target analytes detected greater than the LOQ remain as reported by the laboratory, unless noted. Except where noted above, other sample results were validated and reported as "U" to note the target analyte was analyze for, but not detected at or above the method detection limit or LOQ. No results were rejected based on the data validation criteria.

## SW-846 METHOD 8260B (GC/MS) VOLATILE ORGANIC DATA VALIDATION

**Sample ID:** MW-1, MW-2, MW-3, MW-8, MW-9, MW-10, MW-11, MW-12, MW-15, MW-17, MW-19
**QC Samples:** MW-3 MS, MW-3 MSD, Trip Blank, Method Blanks, LCSs
**Laboratory:** CompuChem, a division of Liberty Analytical of Cary NC; SDG 1009180
NC Certification No 79

***Comment:*** *Volatile organic analysis uses a purge and trap system to remove volatile organic target analytes from a 25 ml water sample (SW-846 5030B). Target analytes are separated and quantified using a capillary column gas chromatograph (GC)/mass spectrometer (MS).*

### A. QC DELIVERABLES PACKAGE:

1. Was the case narrative present/signed by a lab representative? ☑ YES ☐ NO
2. Was the Chain of Custody present/signed by a lab representative? ☑ YES ☐ NO
3. Were the sample results included for the sample locations? ☑ YES ☐ NO
4. Did the laboratory analyte list correspond to the project specific analyte list? ☑ YES ☐ NO
5. Were the analyte LOQs reported on sample summary sheets in agreement with the instrument specific MDL study? ☑ YES ☐ NO

**Comments:** QC deliverables package requirements were met.

### B. QC HISTORY DOCUMENTATION CRITERIA:

1. Was an instrument specific MDL study provided, which included LOD and LOQ values for the target analytes? ☑ YES ☐ NO
2. Was the instrument calibration range specified? ☑ YES ☐ NO
3. Was analyst initial demonstration of proficiency data provided for each target analyte? ☑ YES ☐ NO

**Comments:** QC history documentation criteria were met.

### C. TECHNICAL HOLDING TIME AND PRESERVATION CRITERIA:

1. Was the 14-day sample collection to analysis holding time met? ☑ YES ☐ NO
2. Were the samples received at $\leq 6^{o}C$ and zero headspace? ☑ YES ☐ NO
3. Was the pH of each sample adjusted to $< 2$ with HCl? ☑ YES ☐ NO
4. Was a separate sample aliquot adjusted with HCl to a pH between 4-5? (For analysis of acrolein only). ☐ YES ☑ NO

**Comments:** Technical holding time criteria were met. Sample preservation criteria were met. Acrolein analyses were performed on samples preserved at pH < 2 instead of pH 4-5. Acrolein results were qualified as estimated.

## D. GC/MS INSTRUMENT PERFORMANCE (TUNING) CHECK CRITERIA:

1. Was analysis of the instrument performance check solution performed at the beginning of each 12-hour period during which standards or samples were analyzed? ☑ YES ☐ NO
2. Was there documentation of the injection of 5-50 ng BFB? ☑ YES ☐ NO
3. Were the ion abundance criteria met? ☑ YES ☐ NO
4. Were calibration, blank, and sample analyses performed within 12 hours of tuning? ☑ YES ☐ NO

**Comments:** Instrument performance check criteria were met.

## E. INITIAL GC/MS CALIBRATION CRITERIA:

***SW-846 Criteria:***

1. Was data randomly checked to ensure that the internal standard (IS) which was selected for target analyte RF calculation was the IS that had the closest retention time? ☑ YES ☐ NO
2. Were the target analytes included in the ICAL? (ICAL Summary) ☑ YES ☐ NO
3. Did the ICALs consist of a minimum of 5 calibration levels? ☑ YES ☐ NO
4. Was the lowest concentration calibration standard at or below the associated MCL, regulatory compliance, or action limit? ☑ YES ☐ NO
5. Were any calibration levels removed from the curve that would negatively influence the data integrity? ☐ YES ☑ NO
6. Was the calibration curve developed using the same purge volume used for sample analysis? ☑ YES ☐ NO
7. Were 8260B SPCC criteria met? ☑ YES ☐ NO
   - chloromethane (0.100)
   - 1,1-dichloroethane (0.100)
   - bromoform (0.100)
   - 1,1,2,2-tetrachloroethane (0.300)
   - chlorobenzene (0.300)
8. Were 8260B CCC criteria met? (%RSD ≤ 30%) ☑ YES ☐ NO
   - 1,1-dichloroethene
   - chloroform
   - 1,2-dichloropropane
   - toluene
   - ethylbenzene
   - vinyl chloride
9. Was each target analyte %RSD ≤ 15% (excluding CCCs)? ☐ YES ☑ NO
10. Was the correlation coefficient >0.99 for target analytes with ≥15 % RSD? ☑ YES ☐ NO

***Method Validation Performance Criteria:***

1. Did target analytes and surrogates have % RSDs ≤ 15% and / or >0.99 correlation coefficient? ☑ YES ☐ NO
   (Evaluate RRFs < 0.05 for potential problems.)

**Comments:** Initial calibration criteria were met.

## F. CALIBRATION VERIFICATION CRITERIA:

***SW-846 Criteria:***

1. Was a calibration verification (CV) analyzed at the beginning of each 12-hour period following the analysis of the instrument performance check and prior to analysis of the method blank and samples? The calibration verification may be part of the ICAL or analyzed independently during another 12-hour analysis period. ☑ YES ☐ NO
2. Were 8260B SPCC criteria met? ☑ YES ☐ NO
   - chloromethane (0.100)
   - 1,1-dichloroethane (0.100)
   - bromoform (0.100)
   - 1,1,2,2-tetrachloroethane (0.300)
   - chlorobenzene (0.300)
3. Were 8260B CCC criteria met? (%Drift or % Difference (%D) within ± 20% ) ☑ YES ☐ NO
   - 1,1-dichloroethene
   - chloroform
   - 1,2-dichloropropane
   - toluene
   - ethylbenzene
   - vinyl chloride

***Method Validation Performance Criteria:***

1. Did the target analytes and system monitoring analytes (surrogates) have the % D within ± 25.0%? ☑ YES ☐ NO
   (Evaluate RRFs < 0.05 for potential problems.)
   If "NO", list analytes that exceed these criteria: *See attached table.*

***Draper Aden Associates Contractual Requirements:***

1. Did the target analytes and system monitoring analytes (surrogates) have % Ds within ± 25.0%? ☑ YES ☐ NO
2. Three analytes may fail to meet maximum % D as long as the % D is w/in ± 40.0%. Did the CV meet this criteria? ☐ YES ☑ NO

**Comments:** The calibration verification criteria were met.

## G. BLANK CRITERIA:

1. Was a method blank analyzed after the calibration standards,

prior to sample analysis, and once for every 12 hour period beginning with the injection of BFB? ☑ YES ☐ NO

2. Was a trip blank analyzed with this sample batch? ☑ YES ☐ NO
3. Were the trip blanks and method blanks interference free? ☐ NA ☐ YES ☑ NO
4. List analytes detected in the blanks: *methylene chloride, toluene*
5. Was the level of blank contamination less than 5% of the MCL associated with the analyte? ☑ YES ☐ NO
6. Did any samples contain high concentrations of VOCs in excess of the linear range of the calibration curve? ☑ YES ☐ NO
7. Were one or more blanks analyzed following the high concentration sample to prevent cross contamination? ☐ YES ☑ NO (NA)

**Comments:** Acetone (1.5-1.6 µg/l) and toluene (0.12-0.15 µg/l) were reported in the method blank and trip blank. Detected results less than the LOQ or less than five times the blank contamination concentration for these two analytes were attributed to the laboratory contamination and validated as "U" (see data validation summary).

## H. SURROGATE CRITERIA:

***SW-846 Criteria:***

1. Were the following surrogates used? See comment
   - dibromofluoromethane ( 86%-118%)
   - 4-bromofluorobenzene (86%-115%)
   - toluene-$d_8$ (88%-110%)
   - 1,2-dichloroethane-$d_4$ (80%-120%)
2. Were recoveries within the specified ranges? ☑ YES ☐ NO
   If "NO", corrective action is required. Flagging of the data as estimated is not acceptable until corrective action has been attempted.
3. Were samples with surrogates outside the QC window reanalyzed as required? ☑ NA ☐ YES ☐ NO

**Comments:** The laboratory substituted bromofluorobenzene for 4-bromofluorobenzene as allowed by the method. Surrogate criteria were met.

## I. MATRIX SPIKE, MATRIX SPIKE DUPLICATE CRITERIA:

(MS/MSD Requirements - CLP Guidelines)

| *Analyte* | *% R Water* | *RPD Water* |
|---|---|---|
| 1,1-dichloroethene | 61-145 | 14 |
| trichloroethene | 71-120 | 14 |
| benzene | 76-127 | 11 |
| toluene | 76-125 | 13 |
| chlorobenzene | 75-130 | 13 |

1. Was a matrix spike and matrix spike duplicate (MS/MSD) analyzed per sample batch or every 20 samples, whichever may occur first? ☑ YES ☐ NO
2. Did the MS/MSD spike contain additional target analytes? ☑ YES ☐ NO

3. Was the MS/MSD analyzed on the specific project matrix? ☑ YES ☐ NO
4. List matrix spike target analytes not within recovery ranges: See comment
5. Was a LCS analyzed to address failed matrix spike criteria? ☑ YES ☐ NO
6. Did the LCS for the failed matrix spike analyte fall in the acceptable recovery ranges and was the problem identified as matrix interference? ☑ YES ☐ NO
7. Were any analytes flagged as estimated concentrations? ☑ YES ☐ NO
8. List analytes flagged as estimated concentrations: See comment

**Comments:** Vinyl chloride recovered high in the MS/MSD (187/152%) and chloroethane recovered high in the MS (232%). Detected results for vinyl chloride and chloroethane greater than the detection limit (DL) were considered biased high and qualified as estimated. The remaining MS/MSD recovery was met.

## J. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

1. Was a LCS included in the sample analysis? ☑ YES ☐ NO
2. Did the LCS contain the required target analytes? ☑ YES ☐ NO
3. List the LCS analytes and the laboratory's acceptable recovery range. *See certificate of analysis, for most analytes*
4. List analytes flagged as estimated concentrations:

**Comments:** LCS criteria were met.

## K. INTERNAL STANDARDS CRITERIA:

1. Were the following internal standards used? ☑ YES ☐ NO
   - fluorobenzene
   - chlorobenzene-$d_5$
   - 1,4-dichlorobenzene-$d_4$
2. Were internal standard areas within - 50% to + 100% of the last calibration verification? ☑ YES ☐ NO
3. Were internal standard retention times within ± 30 seconds of the last calibration verification? ☑ YES ☐ NO
4. Were samples failing items 2. and/or 3. above reanalyzed as required by the method? ☑ NA ☐ YES ☐ NO

**Comments:** Internal standards criteria were met.

## L. TARGET ANALYTE IDENTIFICATION:

1. Were the RRTs of the reported analytes within ± 0.06 RRT units of the standard RRT? ☑ YES ☐ NO
2. Check the sample spectra against the laboratory standard spectra to see that the following criteria were met:

* Did characteristic ions maximize in the same scan or within one scan of each other?
* Were the characteristic ions present in the standard spectra present in the sample spectra for analytes detected above the LOQ?
* Were the relative intensities of the ions between standard and sample spectra within ± 30%?

3. Were the reported analytes confirmed? ☑ YES ☐ NO

**Comments:** Detected target analyte concentrations were generally consistent with previous sampling events.

## M. TARGET ANALYTE QUANTITATION:

* If the %RSD of an analyte was 15% or less, then the average relative response factor should have been used for quantitation.
* If the %RSD of an analyte was greater than 15%, then the quantitation should be based on a calibration curve using the first or higher order regression fit of the five calibration points (6 calibration points for 2nd order).

1. List the analytes detected above the LOQ whose %RSD was >15%:
   a. Was the subsequent quantitation based on a linear regression fit? ☑ NA
   b. Was the curve forced through the origin? ☑ NA
2. Did the initial analysis of any sample have a target analyte concentration that exceeded the initial calibration range? ☑ YES ☐ NO
   -If so, was the sample reanalyzed at a higher dilution? ☑ YES ☐ NO
3. Were the analyte concentrations that were recorded on the raw sample quantitation reports accurately transferred to the sample summary sheets? ☑ YES ☐ NO

**Comments:** Samples MW-2 and MW-10 required dilution and re-analysis to obtain the reported sample result for 1,1,1-trichloroethane (MW-2 and MW-10); 1,1-dichloroethane (MW-2) and 1,1-dichloroethene (MW-2). Both the undiluted and diluted results were reported by the laboratory. Based on historical data, the laboratory analyzed MW-12 in dilution only (1:1.67) and the LOQs and DLs were adjusted accordingly (see validation report).

## N. LIBRARY SEARCHES:

**Comments:** Library searches were provided and reviewed.

## O. CORRECTIVE ACTION TAKEN AND GENERAL COMMENTS:

**Comments:** The laboratory provided the MDL study as a revision. No other corrective action was taken.

## P. TENTATIVELY IDENTIFIED PARAMETER NOTES:

**Comments:** Tentatively identified compounds denoted as laboratory contaminants and compounds that could not be tentatively identified, "unknowns", were not tabulated.

| PARAMETER | SAMPLE ID | LAB RESULT (µg/l) | VALIDATED RESULT (µg/l) | NOTES[1] |
|---|---|---|---|---|
| Dichlorofluoromethane | MW-9 | 1.4 J | 1.4 J | Tentatively identified through comparison with the NIST/EPA/MSDS library of spectra. Estimated concentration calculated based on nearest internal standard. |
| Fluorodichloromethane | MW-9 | 2.0 JN | 2.0 JN | |
| Chlorofluoromethane | MW-9 | 7.1 JN | 7.1 JN | |
| Ethyl Ether | MW-9 | 1.4 JN | 1.4 JN | |
| Dichlorofluoromethane | MW-11 | 2.5 J | 2.5 J | |
| Fluorodichloromethane | MW-12 | 1.2 JDN | 1.2 JDN | |
| Ethyl Ether | MW-12 | 2.7 JDN | 2.7 JDN | |

[1] See definition section of report for additional information on Data Validation and Reporting Qualifiers.

## Q. REFERENCES:

Draper Aden Associates conducted data validation of the above noted data set using summary tables and raw data provided by the analyzing laboratory. Data validation was conducted in general accordance with SW-846 Method requirements (Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods, USEPA SW-846, 3rd edition - Final Update I, II/IIA and III) and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, October, 1999) and where applicable with *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).where applicable*. Validation of this data set is limited to the items detailed in this report.

**LIMITATIONS:**

Draper Aden Associates prepared this document (which may include drawings, specifications, reports, studies and attachments) in accordance with the agreement between Draper Aden Associates and the client.

The standard of care for all professional engineering, environmental and surveying and related services performed or furnished by Draper Aden Associates under this Agreement are the care and skill ordinarily used by members of these professions practicing under similar circumstances at the same time and in the same locality. Draper Aden Associates makes no warranties, express or implied, under this Agreement in connection with Draper Aden Associates' services.

Conclusions presented are based upon a review of available information, the results of our field studies, and/or professional judgment. To the best of our knowledge, information provided by others is true and accurate, unless otherwise noted.

Draper Aden Associates' liability, hereunder, shall be limited to amounts due Draper Aden Associates for services actually rendered, or reimbursable expenses actually incurred.

Any reuse or modification of any of the aforementioned documents (whether hard copies or electronic transmittals) prepared by Draper Aden Associates without written verification or adaptation by Draper Aden Associates will be at the sole risk of the individual or entity utilizing said documents and such use is without the authorization of Draper Aden Associates. Draper Aden Associates shall have no legal liability resulting from any and all claims, damages, losses, and expenses, including attorney's fees arising out of the unauthorized reuse or modification of these documents. Client shall indemnify Draper Aden Associates from any claims arising out of unauthorized use or modification of the documents whether hard copy or electronic.

♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦

**Draper Aden Associates**
Engineering ♦ Surveying ♦ Environmental Services

**This Report has been prepared by:**

Kathy Olsen — 10-4-10
Kathy Olsen, Environmental Scientist — Date:
2206 South Main Street, Blacksburg, Virginia 24060
540-552-0444, kolsen@daa.com, www.daa.com

**This Report has been subjected to technical and quality review by:**

6.3.2011
Janet C. Frazier, Project Manager — Date:
2206 South Main Street, Blacksburg, Virginia 24060
540-552-0444, jfrazier@daa.com, www.daa.com

# Data Validation Report for GC/MS Fraction. Monitoring Event: 9/14/2010

## Watauga County Landfill Facility ID 95-02

Draper Aden Associates
Engineering ◆ Surveying ◆ Environmental Services

| Analyte | Sample ID | Laboratory Results (ug/L) | | Validated Results (ug/L) | | LOQ/CRQL (ug/L) | Dilution | Validation Notes |
|---|---|---|---|---|---|---|---|---|
| *Laboratory: CompuChem, a division of Liberty Analytical, Cary, NC* | | | | | | | | |
| **Method: *8260B*** | | | | | | | | |
| **Acetone** | MW-1 | 1.4 | J | U | | 2.5 | 1 | Result < LOQ. Blank contamination in the method blank (1.6 ug/l) and trip blank (1.5 ug/l). |
| **Acrolein** | MW-1 | 5 | U | U | J | 5 | 1 | Analyte not detected. Sample pH <2. |
| **Toluene** | MW-1 | 0.14 | J | U | | 0.5 | 1 | Result < LOQ. Blank contamination in the method blank (0.12 ug/l) and trip blank (0.15 ug/l). |
| **Method: *8260B*** | | | | | | | | |
| **Acetone** | MW-10 | 1.3 | J | U | | 2.5 | 1 | Result < LOQ. Blank contamination in the method blank (1.6 ug/l) and trip blank (1.5 ug/l). |
| **Acrolein** | MW-10 | 5 | U | U | J | 5 | 1 | Analyte not detected. Sample pH <2. |
| **1,1-Dichloroethane** | MW-10 | 8.9 | | 8.9 | | 0.5 | 1 | No action taken. |
| **1,1-Dichloroethene** | MW-10 | 12 | | 12 | | 0.5 | 1 | No action taken. |
| **Tetrachloroethene** | MW-10 | 2.1 | | 2.1 | | 0.5 | 1 | No action taken. |
| **Toluene** | MW-10 | 0.092 | J | U | | 0.5 | 1 | Result < LOQ. Blank contamination in the method blank (0.12 ug/l) and trip blank (0.15 ug/l). |
| **1,1,1-Trichloroethane** | MW-10 | 58 | | 58 | | 1 | 2 | Result reported in dilution (1:2). LOQ adjusted. |
| **Method: *8260B*** | | | | | | | | |
| **Acrolein** | MW-11 | 5 | U | U | J | 5 | 1 | Analyte not detected. Sample pH <2. |
| **Chloroethane** | MW-11 | 2.1 | | 2.1 | J | 0.5 | 1 | MS recovered high (232%). |
| **1,1-Dichloroethane** | MW-11 | 11 | | 11 | | 0.5 | 1 | No action taken. |
| **1,2-Dichloroethane** | MW-11 | 0.12 | J | 0.12 | J | 0.5 | 1 | Result < LOQ. |
| **1,1-Dichloroethene** | MW-11 | 0.083 | J | 0.083 | J | 0.5 | 1 | Result < LOQ. |
| **cis-1,2-Dichloroethene** | MW-11 | 19 | | 19 | | 0.5 | 1 | No action taken. |
| **trans-1,2-Dichloroethene** | MW-11 | 0.24 | J | 0.24 | J | 0.5 | 1 | Result < LOQ. |
| **1,2-Dichloropropane** | MW-11 | 0.41 | J | 0.41 | J | 0.5 | 1 | Result < LOQ. |
| **Tetrachloroethene** | MW-11 | 0.39 | J | 0.39 | J | 0.5 | 1 | Result < LOQ. |
| **Toluene** | MW-11 | 0.081 | J | U | | 0.5 | 1 | Result < LOQ. Blank contamination in the method blank (0.12 ug/l) and trip blank (0.15 ug/l). |
| **Trichloroethene** | MW-11 | 2.1 | | 2.1 | | 0.5 | 1 | No action taken. |
| **Vinyl chloride** | MW-11 | 0.37 | J | 0.37 | J | 0.5 | 1 | Result < LOQ. MS/MSD recovered high (187%152%). |

**Definitions: LOQ** Denotes laboratory limit of quantitation. **CRQL** Denotes laboratory contract required quantitation limit.
**U** Denotes analyte not detected above detection limit or LOQ/CRQL. **J** Denotes analyte is estimated. When used with a "U" (i.e., "UJ"), denotes analyte not detected above detection limit or LOQ/CRQL and LOQ/CRQL is estimated. **UA** denotes analyte not detected at or above the adjusted LOQ. **B** Denotes result attributed to blank contamination, a laboratory data qualifier. R Denotes result rejected.
Target analytes not listed above were not detected at or above the laboratory detection limit , LOQ/CRQL and no data qualification was required. For method reference CLP SOW-use CRQL.
CompuChem NC Certification Number 79. Lancaster Laboratories NC Certification Number 42705.

# Data Validation Report for GC/MS Fraction. Monitoring Event: 9/14/2010

## Watauga County Landfill Facility ID 95-02

Draper Aden Associates
Engineering ◆ Surveying ◆ Environmental Services

| Analyte | Sample ID | Laboratory Results (ug/L) | | Validated Results (ug/L) | | LOQ/CRQL (ug/L) | Dilution | Validation Notes |
|---|---|---|---|---|---|---|---|---|
| *Laboratory: CompuChem, a division of Liberty Analytical, Cary, NC* | | | | | | | | |
| **Method: *8260B*** | | | | | | | | |
| **Acrolein** | MW-12 | 8.4 | U | U | J | 8.4 | 1.67 | Analyte not detected. Sample pH <2. Result reported in dilution (1:1.67). LOQ adjusted. |
| **Benzene** | MW-12 | 0.16 | J | 0.16 | J | 0.84 | 1.67 | Result < LOQ. Result reported in dilution (1:1.67). LOQ adjusted. |
| **Chloroethane** | MW-12 | 7 | | 7 | J | 0.84 | 1.67 | MS recovered high (232%). Result reported in dilution (1:1.67). LOQ adjusted. |
| **Chloroform** | MW-12 | 0.42 | J | 0.42 | J | 0.84 | 1.67 | Result < LOQ. Result reported in dilution (1:1.67). LOQ adjusted. |
| **1,4-Dichlorobenzene** | MW-12 | 1.4 | | 1.4 | | 0.84 | 1.67 | No action taken. Result reported in dilution (1:1.67). LOQ adjusted. |
| **1,1-Dichloroethane** | MW-12 | 17 | | 17 | | 0.84 | 1.67 | No action taken. Result reported in dilution (1:1.67). LOQ adjusted. |
| **1,2-Dichloroethane** | MW-12 | 0.34 | J | 0.34 | J | 0.84 | 1.67 | Result < LOQ. Result reported in dilution (1:1.67). LOQ adjusted. |
| **1,1-Dichloroethene** | MW-12 | 0.23 | J | 0.23 | J | 0.84 | 1.67 | Result < LOQ. Result reported in dilution (1:1.67). LOQ adjusted. |
| **cis-1,2-Dichloroethene** | MW-12 | 35 | | 35 | | 0.84 | 1.67 | No action taken. Result reported in dilution (1:1.67). LOQ adjusted. |
| **trans-1,2-Dichloroethene** | MW-12 | 0.49 | J | 0.49 | J | 0.84 | 1.67 | Result < LOQ. Result reported in dilution (1:1.67). LOQ adjusted. |
| **1,2-Dichloropropane** | MW-12 | 0.56 | J | 0.56 | J | 0.84 | 1.67 | Result < LOQ. Result reported in dilution (1:1.67). LOQ adjusted. |
| **Tetrachloroethene** | MW-12 | 0.82 | J | 0.82 | J | 0.84 | 1.67 | Result < LOQ. Result reported in dilution (1:1.67). LOQ adjusted. |
| **Toluene** | MW-12 | 0.16 | J | U | | 0.84 | 1.67 | Result < LOQ. Blank contamination in the method blank (0.12 ug/l) and trip blank (0.15 ug/l). |
| **Trichloroethene** | MW-12 | 3.6 | | 3.6 | | 0.84 | 1.67 | No action taken. Result reported in dilution (1:1.67). LOQ adjusted. |
| **Vinyl chloride** | MW-12 | 1.3 | | 1.3 | J | 0.84 | 1.67 | MS/MSD recovered high (187%152%). Result reported in dilution (1:1.67). LOQ adjusted. |
| **Method: *8260B*** | | | | | | | | |
| **Acrolein** | MW-15 | 5 | U | U | J | 5 | 1 | Analyte not detected. Sample pH <2. |
| **1,1-Dichloroethane** | MW-15 | 0.1 | J | 0.1 | J | 0.5 | 1 | Result < LOQ. |
| **Toluene** | MW-15 | 0.096 | J | U | | 0.5 | 1 | Result < LOQ. Blank contamination in the method blank (0.12 ug/l) and trip blank (0.15 ug/l). |
| **1,1,1-Trichloroethane** | MW-15 | 0.35 | J | 0.35 | J | 0.5 | 1 | Result < LOQ. |

**Definitions: LOQ** Denotes laboratory limit of quantitation. **CRQL** Denotes laboratory contract required quantitation limit.
**U** Denotes analyte not detected above detection limit or LOQ/CRQL. **J** Denotes analyte is estimated. When used with a "U" (i.e., "UJ"), denotes analyte not detected above detection limit or LOQ/CRQL and LOQ/CRQL is estimated. **UA** denotes analyte not detected at or above the adjusted LOQ. **B** Denotes result attributed to blank contamination, a laboratory data qualifier. R Denotes result rejected.
Target analytes not listed above were not detected at or above the laboratory detection limit , LOQ/CRQL and no data qualification was required. For method reference CLP SOW-use CRQL.
CompuChem NC Certification Number 79. Lancaster Laboratories NC Certification Number 42705.

# Data Validation Report for GC/MS Fraction. Monitoring Event: 9/14/2010

Draper Aden Associates
Engineering ♦ Surveying ♦ Environmental Services

## Watauga County Landfill Facility ID 95-02

| Analyte | Sample ID | Laboratory Results (ug/L) | Validated Results (ug/L) | LOQ/CRQL (ug/L) | Dilution | Validation Notes |
|---|---|---|---|---|---|---|
| *Laboratory: CompuChem, a division of Liberty Analytical, Cary, NC* | | | | | | |
| **Method: *8260B*** | | | | | | |
| **Acrolein** | MW-17 | 5 U | U J | 5 | 1 | Analyte not detected. Sample pH <2. |
| **1,1-Dichloroethane** | MW-17 | 2.2 | 2.2 | 0.5 | 1 | No action taken. |
| **cis-1,2-Dichloroethene** | MW-17 | 3.5 | 3.5 | 0.5 | 1 | No action taken. |
| **trans-1,2-Dichloroethene** | MW-17 | 0.082 J | 0.082 J | 0.5 | 1 | Result < LOQ. |
| **Tetrachloroethene** | MW-17 | 0.43 J | 0.43 J | 0.5 | 1 | Result < LOQ. |
| **Toluene** | MW-17 | 0.095 J | U | 0.5 | 1 | Result < LOQ. Blank contamination in the method blank (0.12 ug/l) and trip blank (0.15 ug/l). |
| **Trichloroethene** | MW-17 | 0.73 | 0.73 | 0.5 | 1 | No action taken. |
| **Method: *8260B*** | | | | | | |
| **Acetone** | MW-19 | 3.1 | U | 2.5 | 1 | Blank contamination in the method blank (1.6 ug/l) and trip blank (1.5 ug/l). Result < 5x blank contamination. LOQ adjusted to sample result concentration. |
| **Acrolein** | MW-19 | 5 U | U J | 5 | 1 | Analyte not detected. Sample pH <2. |
| **Carbon disulfide** | MW-19 | 0.034 J | 0.034 J | 0.5 | 1 | Result < LOQ. |
| **Chloroform** | MW-19 | 0.2 J | 0.2 J | 0.5 | 1 | Result < LOQ. |
| **1,1-Dichloroethane** | MW-19 | 1.4 | 1.4 | 0.5 | 1 | No action taken. |
| **cis-1,2-Dichloroethene** | MW-19 | 0.17 J | 0.17 J | 0.5 | 1 | Result < LOQ. |
| **Tetrachloroethene** | MW-19 | 0.84 | 0.84 | 0.5 | 1 | No action taken. |
| **Toluene** | MW-19 | 0.095 J | U | 0.5 | 1 | Result < LOQ. Blank contamination in the method blank (0.12 ug/l) and trip blank (0.15 ug/l). |

**Definitions: LOQ** Denotes laboratory limit of quantitation. **CRQL** Denotes laboratory contract required quantitation limit.
**U** Denotes analyte not detected above detection limit or LOQ/CRQL. **J** Denotes analyte is estimated. When used with a "U" (i.e., "UJ"), denotes analyte not detected above detection limit or LOQ/CRQL and LOQ/CRQL is estimated. **UA** denotes analyte not detected at or above the adjusted LOQ. **B** Denotes result attributed to blank contamination, a laboratory data qualifier. R Denotes result rejected.
Target analytes not listed above were not detected at or above the laboratory detection limit, LOQ/CRQL and no data qualification was required. For method reference CLP SOW-use CRQL.
CompuChem NC Certification Number 79. Lancaster Laboratories NC Certification Number 42705.

# Data Validation Report for GC/MS Fraction. Monitoring Event: 9/14/2010

## Watauga County Landfill Facility ID 95-02

Draper Aden Associates
Engineering ♦ Surveying ♦ Environmental Services

| Analyte | Sample ID | Laboratory Results (ug/L) | | Validated Results (ug/L) | | LOQ/CRQL (ug/L) | Dilution | Validation Notes |
|---|---|---|---|---|---|---|---|---|
| *Laboratory: CompuChem, a division of Liberty Analytical, Cary, NC* | | | | | | | | |
| **Method: *8260B*** | | | | | | | | |
| **Acrolein** | MW-2 | 5 | U | U | J | 5 | 1 | Analyte not detected. Sample pH <2. |
| **1,1-Dichloroethane** | MW-2 | 48 | | 48 | | 8.3 | 16.67 | Result reported in dilution (1:16.7). LOQ adjusted. |
| **1,1-Dichloroethene** | MW-2 | 70 | | 70 | | 8.3 | 16.67 | Result reported in dilution (1:16.7). LOQ adjusted. |
| **cis-1,2-Dichloroethene** | MW-2 | 0.2 | J | 0.2 | J | 0.5 | 1 | Result < LOQ. |
| **Tetrachloroethene** | MW-2 | 3.3 | | 3.3 | | 0.5 | 1 | No action taken. |
| **Toluene** | MW-2 | 0.11 | J | U | | 0.5 | 1 | Result < LOQ. Blank contamination in the method blank (0.12 ug/l) and trip blank (0.15 ug/l). |
| **1,1,1-Trichloroethane** | MW-2 | 330 | | 330 | | 8.3 | 16.67 | Result reported in dilution (1:16.7). LOQ adjusted. |
| **Trichloroethene** | MW-2 | 0.44 | J | 0.44 | J | 0.5 | 1 | Result < LOQ. |
| **Vinyl chloride** | MW-2 | 0.37 | J | 0.37 | J | 0.5 | 1 | Result < LOQ. MS/MSD recovered high (187%152%). |
| **Method: *8260B*** | | | | | | | | |
| **Acrolein** | MW-3 | 5 | U | U | J | 5 | 1 | Analyte not detected. Sample pH <2. |
| **Chloroethane** | MW-3 | 5.1 | | 5.1 | J | 0.5 | 1 | MS recovered high (232%). |
| **1,1-Dichloroethane** | MW-3 | 10 | | 10 | | 0.5 | 1 | No action taken. |
| **1,2-Dichloroethane** | MW-3 | 0.18 | J | 0.18 | J | 0.5 | 1 | Result < LOQ. |
| **cis-1,2-Dichloroethene** | MW-3 | 25 | | 25 | | 0.5 | 1 | No action taken. |
| **trans-1,2-Dichloroethene** | MW-3 | 0.35 | J | 0.35 | J | 0.5 | 1 | Result < LOQ. |
| **1,2-Dichloropropane** | MW-3 | 0.37 | J | 0.37 | J | 0.5 | 1 | Result < LOQ. |
| **Toluene** | MW-3 | 0.12 | J | U | | 0.5 | 1 | Result < LOQ. Blank contamination in the method blank (0.12 ug/l) and trip blank (0.15 ug/l). |
| **Trichloroethene** | MW-3 | 2.8 | | 2.8 | | 0.5 | 1 | No action taken. |

**Definitions: LOQ** Denotes laboratory limit of quantitation. **CRQL** Denotes laboratory contract required quantitation limit.
**U** Denotes analyte not detected above detection limit or LOQ/CRQL. **J** Denotes analyte is estimated. When used with a "U" (i.e., "UJ"), denotes analyte not detected above detection limit or LOQ/CRQL and LOQ/CRQL is estimated. **UA** denotes analyte not detected at or above the adjusted LOQ. **B** Denotes result attributed to blank contamination, a laboratory data qualifier. R Denotes result rejected.
Target analytes not listed above were not detected at or above the laboratory detection limit, LOQ/CRQL and no data qualification was required. For method reference CLP SOW-use CRQL.
CompuChem NC Certification Number 79. Lancaster Laboratories NC Certification Number 42705.

# Data Validation Report for GC/MS Fraction. Monitoring Event: 9/14/2010

Draper Aden Associates
Engineering ♦ Surveying ♦ Environmental Services

## Watauga County Landfill Facility ID 95-02

| Analyte | Sample ID | Laboratory Results (ug/L) | | Validated Results (ug/L) | | LOQ/CRQL (ug/L) | Dilution | Validation Notes |
|---|---|---|---|---|---|---|---|---|
| *Laboratory: CompuChem, a division of Liberty Analytical, Cary, NC* | | | | | | | | |
| **Method: *8260B*** | | | | | | | | |
| **Acetone** | MW-8 | 2.8 | | U | | 2.5 | 1 | Blank contamination in the method blank (1.6 ug/l) and trip blank (1.5 ug/l). Result < 5x blank contamination. LOQ adjusted to sample result concentration. |
| **Acrolein** | MW-8 | 5 | U | U | J | 5 | 1 | Analyte not detected. Sample pH <2. |
| **Chloroethane** | MW-8 | 2.2 | | 2.2 | J | 0.5 | 1 | MS recovered high (232%). |
| **1,1-Dichloroethane** | MW-8 | 0.71 | | 0.71 | | 0.5 | 1 | No action taken. |
| **cis-1,2-Dichloroethene** | MW-8 | 0.51 | | 0.51 | | 0.5 | 1 | No action taken. |
| **Toluene** | MW-8 | 0.089 | J | U | | 0.5 | 1 | Result < LOQ. Blank contamination in the method blank (0.12 ug/l) and trip blank (0.15 ug/l). |
| **Trichloroethene** | MW-8 | 0.29 | J | 0.29 | J | 0.5 | 1 | Result < LOQ. |
| **Method: *8260B*** | | | | | | | | |
| **Acetone** | MW-9 | 1.1 | J | U | | 2.5 | 1 | Result < LOQ. Blank contamination in the method blank (1.6 ug/l) and trip blank (1.5 ug/l). |
| **Acrolein** | MW-9 | 5 | U | U | J | 5 | 1 | Analyte not detected. Sample pH <2. |
| **Benzene** | MW-9 | 2.8 | | 2.8 | | 0.5 | 1 | No action taken. |
| **Chlorobenzene** | MW-9 | 0.42 | J | 0.42 | J | 0.5 | 1 | Result < LOQ. |
| **Chloroethane** | MW-9 | 4.2 | | 4.2 | J | 0.5 | 1 | MS recovered high (232%). |
| **1,4-Dichlorobenzene** | MW-9 | 1.6 | | 1.6 | | 0.5 | 1 | No action taken. |
| **Dichlorodifluoromethane** | MW-9 | 0.55 | | 0.55 | | 0.5 | 1 | No action taken. |
| **1,1-Dichloroethane** | MW-9 | 10 | | 10 | | 0.5 | 1 | No action taken. |
| **cis-1,2-Dichloroethene** | MW-9 | 6.9 | | 6.9 | | 0.5 | 1 | No action taken. |
| **trans-1,2-Dichloroethene** | MW-9 | 0.32 | J | 0.32 | J | 0.5 | 1 | Result < LOQ. |
| **1,2-Dichloropropane** | MW-9 | 0.24 | J | 0.24 | J | 0.5 | 1 | Result < LOQ. |
| **Tetrachloroethene** | MW-9 | 0.83 | | 0.83 | | 0.5 | 1 | No action taken. |
| **Toluene** | MW-9 | 0.11 | J | U | | 0.5 | 1 | Result < LOQ. Blank contamination in the method blank (0.12 ug/l) and trip blank (0.15 ug/l). |
| **Trichloroethene** | MW-9 | 1.1 | | 1.1 | | 0.5 | 1 | No action taken. |
| **Vinyl chloride** | MW-9 | 2 | | 2 | J | 0.5 | 1 | MS/MSD recovered high (187%152%). |

**Definitions: LOQ** Denotes laboratory limit of quantitation. **CRQL** Denotes laboratory contract required quantitation limit.
**U** Denotes analyte not detected above detection limit or LOQ/CRQL. **J** Denotes analyte is estimated. When used with a "U" (i.e., "UJ"), denotes analyte not detected above detection limit or LOQ/CRQL and LOQ/CRQL is estimated. **UA** denotes analyte not detected at or above the adjusted LOQ. **B** Denotes result attributed to blank contamination, a laboratory data qualifier. R Denotes result rejected.
Target analytes not listed above were not detected at or above the laboratory detection limit , LOQ/CRQL and no data qualification was required. For method reference CLP SOW-use CRQL.
CompuChem NC Certification Number 79. Lancaster Laboratories NC Certification Number 42705.

# Data Validation Report for GC/MS Fraction. Monitoring Event: 9/14/2010

Draper Aden Associates
Engineering ♦ Surveying ♦ Environmental Services

## Watauga County Landfill Facility ID 95-02

| Analyte | Sample ID | Laboratory Results (ug/L) | | Validated Results (ug/L) | | LOQ/CRQL (ug/L) | Dilution | Validation Notes |
|---|---|---|---|---|---|---|---|---|
| *Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC* | | | | | | | | |
| **Method: *SOM01.2 VOA LOW*** | | | | | | | | |
| 1,1-Dichloroethane | S-1 | 0.59 | J | 0.59 | J | 5 | 1 | Result < CRDL. |
| Methylene chloride | S-1 | 1.5 | J | U | | 5 | 1 | Result < CRDL. Blank contamination in the method blank (1.6 ug/l) and trip blank (1.5 ug/l). |
| **Method: *SOM01.2 VOA LOW*** | | | | | | | | |
| Chloroethane | S-2 | 25 | | 25 | | 5 | 1 | No action taken. |
| 1,4-Dichlorobenzene | S-2 | 2.5 | J | 2.5 | J | 5 | 1 | Result < CRDL. |
| 1,1-Dichloroethane | S-2 | 2.5 | J | 2.5 | J | 5 | 1 | Result < CRDL. |
| cis-1,2-Dichloroethene | S-2 | 0.79 | J | 0.79 | J | 5 | 1 | Result < CRDL. |
| Methylene chloride | S-2 | 2.1 | J | U | | 5 | 1 | Result < CRDL. Blank contamination in the method blank (1.6 ug/l) and trip blank (1.5 ug/l). |
| **Method: *SOM01.2 VOA LOW*** | | | | | | | | |
| Methylene chloride | S-3 | 1.7 | J | U | | 5 | 1 | Result < CRDL. Blank contamination in the method blank (1.6 ug/l) and trip blank (1.5 ug/l). |
| **Method: *SOM01.2 VOA LOW*** | | | | | | | | |
| Chloroethane | S-4 | 2.4 | J | 2.4 | J | 5 | 1 | Result < CRDL. |
| 1,1-Dichloroethane | S-4 | 3.9 | J | 3.9 | J | 5 | 1 | Result < CRDL. Associated surrogate recovered low. |
| cis-1,2-Dichloroethene | S-4 | 8.3 | | 8.3 | | 5 | 1 | No action taken. |
| Methylene chloride | S-4 | 1.7 | J | U | | 5 | 1 | Result < CRDL. Blank contamination in the method blank (1.6 ug/l) and trip blank (1.5 ug/l). |
| Trichloroethene | S-4 | 1.5 | J | 1.5 | J | 5 | 1 | Result < CRDL. |
| **Method: *SOM01.2 VOA LOW*** | | | | | | | | |
| Dichlorodifluoromethane | S-5 | 3.3 | J | 3.3 | J | 5 | 1 | Result < CRDL. |
| Methylene chloride | S-5 | 1.8 | J | U | | 5 | 1 | Result < CRDL. Blank contamination in the method blank (1.6 ug/l) and trip blank (1.5 ug/l). |
| 1,1,1-Trichloroethane | S-5 | 0.89 | J | 0.89 | J | 5 | 1 | Result < CRDL. |
| **Method: *SOM01.2 VOA LOW*** | | | | | | | | |
| 1,1-Dichloroethane | S-6 | 5 | U | U | J | 5 | 1 | Analyte not detected. Associated surrogate recovered low. |
| 1,2-Dichloropropane | S-6 | 5 | U | U | J | 5 | 1 | Analyte not detected. Associated surrogate recovered low. |
| Methylene chloride | S-6 | 2.1 | J | U | | 5 | 1 | Result < CRDL. Blank contamination in the method blank (1.6 ug/l) and trip blank (1.5 ug/l). |

**Definitions: LOQ** Denotes laboratory limit of quantitation. **CRQL** Denotes laboratory contract required quantitation limit.
**U** Denotes analyte not detected above detection limit or LOQ/CRQL. **J** Denotes analyte is estimated. When used with a "U" (i.e., "UJ"), denotes analyte not detected above detection limit or LOQ/CRQL and LOQ/CRQL is estimated. **UA** denotes analyte not detected at or above the adjusted LOQ. **B** Denotes result attributed to blank contamination, a laboratory data qualifier. R Denotes result rejected.
Target analytes not listed above were not detected at or above the laboratory detection limit , LOQ/CRQL and no data qualification was required. For method reference CLP SOW-use CRQL.
CompuChem NC Certification Number 79. Lancaster Laboratories NC Certification Number 42705.

# Data Validation Report for GC/MS Fraction. Monitoring Event: 9/14/2010

Draper Aden Associates
Engineering ♦ Surveying ♦ Environmental Services

## Watauga County Landfill Facility ID 95-02

| Analyte | Sample ID | Laboratory Results (ug/L) | | Validated Results (ug/L) | LOQ/CRQL (ug/L) | Dilution | Validation Notes |
|---|---|---|---|---|---|---|---|
| *Laboratory: CompuChem, a division of Liberty Analytical, Cary, NC* | | | | | | | |
| **Method: *8260B*** | | | | | | | |
| **Acetone** | TRIP BLANK | 1.5 | J | U | 2.5 | 1 | Result < LOQ. Blank contamination in the method blank (1.6 ug/l). |
| **Methylene chloride** | TRIP BLANK | 1.5 | J | U | 5 | 1 | Result < CRDL. Blank contamination in the method blank (1.6 ug/l) and trip blank (1.5 ug/l). |
| **Naphthalene** | TRIP BLANK | 0.19 | J | 0.19 | 0.5 | 1 | Result < LOQ. |
| **Toluene** | TRIP BLANK | 0.15 | J | U | 0.5 | 1 | Result < LOQ. Blank contamination in the method blank (0.12 ug/l). |

**Definitions: LOQ** Denotes laboratory limit of quantitation. **CRQL** Denotes laboratory contract required quantitation limit.
**U** Denotes analyte not detected above detection limit or LOQ/CRQL. **J** Denotes analyte is estimated. When used with a "U" (i.e., "UJ"), denotes analyte not detected above detection limit or LOQ/CRQL and LOQ/CRQL is estimated. **UA** denotes analyte not detected at or above the adjusted LOQ. **B** Denotes result attributed to blank contamination, a laboratory data qualifier. R Denotes result rejected.
Target analytes not listed above were not detected at or above the laboratory detection limit , LOQ/CRQL and no data qualification was required. For method reference CLP SOW-use CRQL.
CompuChem NC Certification Number 79. Lancaster Laboratories NC Certification Number 42705.

CompuChem

A Division Of

Liberty Analytical Corp.

9/27/2010

JANET FRAZIER

DRAPER

2206 SOUTH MAIN STREET

BLACKSBURG, VA 24060

Subject:

Report of Data - Project: WATAUGA COUNTY LANDFILL 6520-39 WorkOrder: 1009180

Attn.: JANET FRAZIER

Enclosed are the results of analytical work performed in accordance with the referenced account number. This report covers sample(s) appearing on the listing.

Thank you for selecting CompuChem for your sample analysis. If you should have questions or require additional analytical services, please contact your representative at 1-800-833-5097

Sincerely,

Joan Purdie

Compuchem

a division of Liberty Analytical Corporation

Attachment

TOTAL NUMBER

OF PAGES _____

**501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050**

## CompuChem, a division of Liberty Analytical

**Client:** DRAPER **Work:** 1009180

**Project:** WATAUGA COUNTY LANDFILL 6520-39 **Sdg:** 1009180

| Lab ID | Client ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| 1009180-01 | MW-3 | Water | 09/14/2010 14:15 | 09/16/2010 09:32 |
| 1009180-02 | MW-1 | Water | 09/13/2010 12:20 | 09/16/2010 09:32 |
| 1009180-03 | MW-8 | Water | 09/14/2010 13:10 | 09/16/2010 09:32 |
| 1009180-04 | MW-9 | Water | 09/13/2010 13:15 | 09/16/2010 09:32 |
| 1009180-05 | MW-11 | Water | 09/14/2010 15:50 | 09/16/2010 09:32 |
| 1009180-06 | MW-12 | Water | 09/14/2010 16:30 | 09/16/2010 09:32 |
| 1009180-07 | MW-15 | Water | 09/14/2010 12:15 | 09/16/2010 09:32 |
| 1009180-08 | MW-17 | Water | 09/14/2010 14:25 | 09/16/2010 09:32 |
| 1009180-09 | MW-19 | Water | 09/14/2010 11:10 | 09/16/2010 09:32 |
| 1009180-10 | TRIP BLANK | Water | 09/03/2010 00:00 | 09/16/2010 09:32 |
| 1009180-11 | MW-2 | Water | 09/13/2010 15:40 | 09/16/2010 09:32 |
| 1009180-12 | MW-10 | Water | 09/13/2010 18:00 | 09/16/2010 09:32 |

# ANALYSES DATA PACKAGE COVER PAGE

**Client:** DRAPER

**Project:** WATAUGA COUNTY LANDFILL 6520-39

**Laboratory:** COMPUCHEM

**SDG:** 1009180

| Client Sample Id: | Lab Sample Id: |
|---|---|
| MW-3 | 1009180-01 |
| MW-1 | 1009180-02 |
| MW-8 | 1009180-03 |
| MW-9 | 1009180-04 |
| MW-11 | 1009180-05 |
| MW-12 | 1009180-06 |
| MW-15 | 1009180-07 |
| MW-17 | 1009180-08 |
| MW-19 | 1009180-09 |
| TRIP BLANK | 1009180-10 |
| MW-2 | 1009180-11 |
| MW-2 | 1009180-11RE1 |
| MW-10 | 1009180-12 |
| MW-10 | 1009180-12RE1 |

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the Electronic Data Deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Preeti Khare

Name: Preeti Khare

Date: 9-25-10

Title: Data Reviewer I

CompuChem
A Division Of
Liberty Analytical Corp.

CompuChem, a Division of Liberty Analytical Corporation

# I. SAMPLE DATA SUMMARY PACKAGE

GC/MS by SW-846

The sample data summary package shall contain data for all samples in one Workorder/Sample Delivery Group (SDG), as follows:

A. SDG Narrative

B. Target Compound Results
(ANALYSIS DATA SHEET)

C. Laboratory Control Sample Results
(LCS/LCS DUPLICATE RECOVERY)

D. Matrix Spike Results
(MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY)

E. Surrogate Recovery Results
(SURROGATE STANDARD RECOVERY AND RT SUMMARY)

F. Internal Standard Results
(INTERNAL STANDARD AREA AND RT SUMMARY)

G. Blank data
(PREPARATION BATCH SUMMARY)

H. Sample Preparation and Analysis Holding Time Data
(HOLDING TIME SUMMARY)

METHOD: 8260B

SDG: 1009180

# A. SDG Narrative

# CompuChem

**A division of Liberty Analytical Corporation**
**501 Madison Avenue**
**Cary, N.C. 27513**
**Tel: 919/379-4100 Fax: 919/379-4050**


**SDG NARRATIVE**
**SDG # 1009180**
**PROTOCOL: SW-846**
**SAMPLE IDENTIFICATIONS: MW-3, MW-1, MW-8, MW-9, MW-11, MW-12, MW-15, MW-17, MW-19, TRIP BLANK, MW-2, and MW-10**

The 12 aqueous samples listed above were received intact, refrigerated at 0.6C, with proper documentations, in sealed shipping containers, on September 16th, 2010. The samples were scheduled for the requested analyses of the volatile fraction. SW-846, 3rd Edition, Update 3, 8260B was used to prepare and analyze the samples, with the exceptions and/or additions requested by the client. All pertinent Quality Assurance notices are included in the narrative section, and all pertinent Laboratory notices for SDG 1009180 are included in the sample data sections.

Analysis holding time requirements was met for all samples, except sample TRIP BLANK. The sample, TRIP BLANK, was received out of holding time. The pH values of the samples were equal to 1. There were volatile Project/Target Compound List (TCL) analytes above the Contract Required Quantitation Limit (CRQL) identified in eight/12 of the samples. Tentatively Identified Compounds (TICs) were found in five/12 of these samples. All of the system monitoring compounds met recovery criteria in the analyses of the samples. All of the internal standards met response and retention time criteria in the analyses of the samples.

Based on historical data, the sample MW-12 was analyzed and reported using dilution of raw sample. As per client request, the samples, MW-2 and MW-10, were analyzed and reported using neat and dilution of the raw samples. In the initial analyses of samples, MW-2 and MW-10, the on-column amounts exceeded the instrument's analytical range as defined by the highest concentration level of the Initial Calibration. The samples were reanalyzed using smaller aliquot of raw samples to bring the on-column amounts into range. We have reported both analyses of the samples MW-2 and MW-10.

All Bromofluorobenzene (BFB) abundance criteria were met for tunes associated to this SDG. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG. There were no manual integrations performed on any of the process files associated with this SDG. The associated method blank met all quality control criteria. The associated Laboratory Control Samples (VHFLCS/VHFLCSD) met all accuracy and precision criteria. Sample MW-3 was requested for matrix spike/matrix spike duplicate (MS/MSD) for the volatile fraction with this SDG. The associated duplicate matrix spikes met most of the advisory accuracy and precision criteria.

I certify that this data package complies with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Furthermore, I certify that the tests used in this report meet all requirements of the NELAC standards unless otherwise stated in the SDG narrative or QA notice. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Preeti Khare
Data Reviewer I
September 25th, 2010

## GC and GC/MS Column and Trap Specifications Table

**SDG #:** 1009180

### COLUMNS

| Columns Utilized | Brand Name | Coating Material | ID (mm) | Film Thickness (um) | Length (m) |
|---|---|---|---|---|---|
| | **GC Laboratory** | | | | |
| | Restek | RTX-5 | 0.53 | 1.0 | 30 |
| | Restek | RTX-SMS | 0.53 | 1.0 | 30 |
| √ | Restek | clpest | 0.32 | 0.5 | 30 |
| √ | Restek | clpest2 | 0.32 | 0.42 | 30 |
| | J&W | DB-210 | 0.53 | 1.0 | 30 |
| | J&W | GS-GASPRO | 0.32 | N/A | 30 |
| | **GC Volatiles Laboratory** | | | | |
| | Restek | RTX-Volatiles | 0.53 | 2.0 | 30 |
| | **GC/MS Volatiles Laboratory** | | | | |
| | Restek | RTX-VMS | 0.18 | 1.0 | 20 |
| √ | Supelco | SPB-624 | 0.32 | 1.8 | 60 |
| | Supelco | SPB-624 | 0.53 | 3.0 | 75 |
| | Phenomonex | ZB-624 | 0.32 | 1.8 | 60 |
| | **GC/MS Semivolatiles Laboratory** | | | | |
| √ | Restek | RTX-5MS | 0.32 | 0.25 | 30 |
| | Phenomonex | ZB-5MS | 0.32 | 0.25 | 30 |
| | **HPLC Laboratory** | | | | |
| | Supelco | Supelcosil LC-PAH | 4.6 | 5.0 | 15 cm |
| | Supelco | Discovery RP Amide C16 | 4.6 | 5.0 | 25 cm |
| | Restek | Pinnacle Cyano | 4.6 | 5.0 | 25 cm |
| | Restek | Allure C18 | 4.6 | 5.0 | 25 cm |

### TRAPS

| | | |
|---|---|---|
| | **GC and GC/MS Volatiles Laboratory** | |
| | Supelco J (BETXTRAP™) | * 7.7 cm Carbopack C |
| | | * 1.2 cm Carbopack B |
| √ | Supelco K (Vocarb3000) | * 10 cm of Carbopack B (Graphitized Carbons) |
| | | * 6 cm of Carboxen 1000 (Carbon molecular sieves) |
| | | * 1 cm of Carboxen 1001 (Carbon molecular sieves) |

Rev. 28

# CompuChem's Pagination Convention

As required by the EPA CLP Statement of Work (SOW) documents, data to be delivered must be paginated (by machine or hand). In the event that the initial numbering is incorrect (a page numbered twice or a page skipped, for example), it is CompuChem's policy to add an alphabetic suffix to a page number when necessary (e.g., 100A, 100B, etc.).

# Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC chemists. An Extracted Ion Current Profile (EICP) or a GC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC analysis. The manual editing/integration flags are:

**M** - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak.

**H** - Denotes that the data reviewer, GC/MS operator, or GC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

**MH** - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

**L** - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

**ML** - Denotes that an alternate library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

The EPA CLP SOW documents require additional explanations for manual editing/integration. In the accompanying raw data packages, additional codes have been applied to the "M" flag and carry the following meanings;

**M1** - The compound was not found by the automatic integration routine.

**M2** - The compound was incorrectly integrated by the automatic integration routine.

**M3** - The co-eluting compounds were incorrectly integrated by the automatic integration routine.

These codes will appear in the GC/MS and GC raw data.

Revision 7 (12/6/2005)

# DATA REPORTING QUALIFIERS

On the Form I, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on Form I for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 □g/L, but a concentration of 3 □g/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥85% in the SOM01.2 SOW document), the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.

For SW 846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the lower of the two values is reported and flagged with a P. When the RPD is equal to or less than 40%, our policy is to also report the lower of the two values, although the choice could be a project specific issue. These SW-846 policies are consistent with Method 8000C. If Method 8000B is required, the higher of the two values is reported. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

# DATA REPORTING QUALIFIERS (continued)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on Form I for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the Form I for the more diluted sample, and **all** reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate Forms I are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses <u>are not combined</u> on a single Form I.

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

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

Revision 12 (04-14-2010)

# B. Target Compound Results

(ANALYSIS DATA SHEETS)

Organic Analysis Data Sheets (OADS), Tentatively Identified Compounds (TICs) and Surrogate Recovery Results

- All samples in alphanumeric order

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-1**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0271.d | Sampled: 09/13/10 12:20

Initial/Final: 25mL / 25mL | Lab ID: 1009180-02 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 13:56

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | 1.4 | 0.44 | | 2.5 | JB |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.020 | | 0.50 | U |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.030 | | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | | 0.030 | | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-1**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0271.d | Sampled: 09/13/10 12:20

Initial/Final: 25mL / 25mL | Lab ID: 1009180-02 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 13:56

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.14 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | | 0.060 | | 0.50 | U |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.629 | 93 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.933 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.676 | 94 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.921 | 98 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-10**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-1271.d | Sampled: 09/13/10 18:00

Initial/Final: 25mL / 25mL | Lab ID: 1009180-12 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 20:57

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 12 | 0.040 | | 0.50 | |
| 67-64-1 | Acetone | 1.3 | 0.44 | | 2.5 | JB |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 8.9 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.030 | | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 60 | 0.020 | | 0.50 | E |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | | 0.030 | | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-10**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-1271.d | Sampled: 09/13/10 18:00

Initial/Final: 25mL / 25mL | Lab ID: 1009180-12 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 20:57

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.092 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 2.1 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.889 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.973 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.642 | 93 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.894 | 98 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-10DL**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-12D71.d | Sampled: 09/13/10 18:00

Initial/Final: 25mL / 25mL | Lab ID: 1009180-12RE1 | Received: 09/16/10 09:32

Dilution: 2 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 22:19

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.060 | | 1.0 | U |
| 74-87-3 | Chloromethane | | 0.22 | | 1.0 | U |
| 75-01-4 | Vinyl chloride | | 0.14 | | 1.0 | U |
| 74-83-9 | Bromomethane | | 0.22 | | 1.0 | U |
| 75-00-3 | Chloroethane | | 0.40 | | 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.12 | | 1.0 | U |
| 107-02-8 | Acrolein | | 2.1 | | 10 | U |
| 75-35-4 | 1,1-Dichloroethene | 12 | 0.080 | | 1.0 | D |
| 67-64-1 | Acetone | 2.3 | 0.88 | | 5.0 | JBD |
| 74-88-4 | Iodomethane | | 0.060 | | 1.0 | U |
| 75-15-0 | Carbon disulfide | | 0.040 | | 1.0 | U |
| 107-05-1 | 3-Chloropropene | | 0.10 | | 1.0 | U |
| 75-05-8 | Acetonitrile | | 0.060 | | 1.0 | U |
| 75-09-2 | Methylene chloride | | 0.040 | | 1.0 | U |
| 107-13-1 | Acrylonitrile | | 0.72 | | 10 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.10 | | 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 8.9 | 0.040 | | 1.0 | D |
| 126-99-8 | Chloroprene | | 0.040 | | 1.0 | U |
| 108-05-4 | Vinyl acetate | | 0.12 | | 2.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.060 | | 1.0 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.060 | | 1.0 | U |
| 107-12-0 | Propionitrile | | 2.8 | | 50 | U |
| 78-93-3 | 2-Butanone | | 0.56 | | 5.0 | U |
| 126-98-7 | Methacrylonitrile | | 0.78 | | 10 | U |
| 74-97-5 | Bromochloromethane | | 0.080 | | 1.0 | U |
| 67-66-3 | Chloroform | | 0.060 | | 1.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 58 | 0.040 | | 1.0 | D |
| 563-58-6 | 1,1-Dichloropropene | | 0.060 | | 1.0 | U |
| 56-23-5 | Carbon tetrachloride | | 0.060 | | 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.060 | | 1.0 | U |
| 78-83-1 | Isobutyl alcohol | | 12 | | 50 | U |
| 71-43-2 | Benzene | | 0.060 | | 1.0 | U |
| 79-01-6 | Trichloroethene | | 0.060 | | 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.24 | | 1.0 | U |
| 74-95-3 | Dibromomethane | | 0.060 | | 1.0 | U |
| 80-62-6 | Methyl Methacrylate | | 1.1 | | 10 | U |
| 75-27-4 | Bromodichloromethane | | 0.060 | | 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.080 | | 1.0 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.84 | | 5.0 | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-10DL**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-12D71.d | Sampled: 09/13/10 18:00

Initial/Final: 25mL / 25mL | Lab ID: 1009180-12RE1 | Received: 09/16/10 09:32

Dilution: 2 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 22:19

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.16 | 0.060 | | 1.0 | JBD |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.10 | | 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.080 | | 1.0 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.82 | | 10 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.060 | | 1.0 | U |
| 127-18-4 | Tetrachloroethene | 2.0 | 0.12 | | 1.0 | D |
| 591-78-6 | 2-Hexanone | | 1.0 | | 5.0 | U |
| 124-48-1 | Dibromochloromethane | | 0.080 | | 1.0 | U |
| 108-90-7 | Chlorobenzene | | 0.040 | | 1.0 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.040 | | 1.0 | U |
| 100-41-4 | Ethylbenzene | | 0.080 | | 1.0 | U |
| 179601-23-1 | m,p-Xylene | | 0.16 | | 2.0 | U |
| 95-47-6 | o-Xylene | | 0.060 | | 1.0 | U |
| 100-42-5 | Styrene | | 0.040 | | 1.0 | U |
| 75-25-2 | Bromoform | | 0.060 | | 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.10 | | 1.0 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.18 | | 1.0 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.66 | | 4.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.080 | | 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.060 | | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.060 | | 1.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.12 | | 1.0 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.060 | | 1.0 | U |
| 91-20-3 | Naphthalene | | 0.30 | | 1.0 | U |
| 1330-20-7 | Xylenes (total) | | 0.060 | | 1.0 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 5.125 | 103 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 5.306 | 106 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.537 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.690 | 94 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-11**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0571.d | Sampled: 09/14/10 15:50

Initial/Final: 25mL / 25mL | Lab ID: 1009180-05 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 14:23

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | 0.37 | 0.070 | | 0.50 | J |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | 2.1 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.083 | 0.040 | | 0.50 | J |
| 67-64-1 | Acetone | | 0.44 | | 2.5 | U |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.24 | 0.050 | | 0.50 | J |
| 75-34-3 | 1,1-Dichloroethane | 11 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 19 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 0.12 | 0.030 | | 0.50 | J |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | 2.1 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 0.41 | 0.12 | | 0.50 | J |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-11**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0571.d | Sampled: 09/14/10 15:50

Initial/Final: 25mL / 25mL | Lab ID: 1009180-05 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 14:23

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.081 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 0.39 | 0.060 | | 0.50 | J |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.919 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.910 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.606 | 92 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.944 | 99 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| 000075-45-6 | Difluorochloromethane | 2.5 | 584873 | 4.224 | 83 | J |
| NA | Unknown 6.665 | 0.62 | 142415 | 6.665 | 0 | J |
| NA | Unknown 7.315 | 0.50 | 115792 | 7.315 | 0 | J |
| NA | Unknown 8.938 | 0.81 | 186709 | 8.938 | 0 | J |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-12**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0671.d | Sampled: 09/14/10 16:30

Initial/Final: 25mL / 25mL | Lab ID: 1009180-06 | Received: 09/16/10 09:32

Dilution: 1.67 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 20:29

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.050 | | 0.84 | U |
| 74-87-3 | Chloromethane | | 0.18 | | 0.84 | U |
| 75-01-4 | Vinyl chloride | 1.3 | 0.12 | | 0.84 | D |
| 74-83-9 | Bromomethane | | 0.18 | | 0.84 | U |
| 75-00-3 | Chloroethane | 7.0 | 0.33 | | 0.84 | D |
| 75-69-4 | Trichlorofluoromethane | | 0.10 | | 0.84 | U |
| 107-02-8 | Acrolein | | 1.7 | | 8.4 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.23 | 0.067 | | 0.84 | JD |
| 67-64-1 | Acetone | | 0.73 | | 4.2 | U |
| 74-88-4 | Iodomethane | | 0.050 | | 0.84 | U |
| 75-15-0 | Carbon disulfide | | 0.033 | | 0.84 | U |
| 107-05-1 | 3-Chloropropene | | 0.084 | | 0.84 | U |
| 75-05-8 | Acetonitrile | | 0.050 | | 0.84 | U |
| 75-09-2 | Methylene chloride | | 0.033 | | 0.84 | U |
| 107-13-1 | Acrylonitrile | | 0.60 | | 8.4 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.49 | 0.084 | | 0.84 | JD |
| 75-34-3 | 1,1-Dichloroethane | 17 | 0.033 | | 0.84 | D |
| 126-99-8 | Chloroprene | | 0.033 | | 0.84 | U |
| 108-05-4 | Vinyl acetate | | 0.10 | | 1.7 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 35 | 0.050 | | 0.84 | D |
| 594-20-7 | 2,2-Dichloropropane | | 0.050 | | 0.84 | U |
| 107-12-0 | Propionitrile | | 2.3 | | 42 | U |
| 78-93-3 | 2-Butanone | | 0.47 | | 4.2 | U |
| 126-98-7 | Methacrylonitrile | | 0.65 | | 8.4 | U |
| 74-97-5 | Bromochloromethane | | 0.067 | | 0.84 | U |
| 67-66-3 | Chloroform | 0.42 | 0.050 | | 0.84 | JD |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.033 | | 0.84 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.050 | | 0.84 | U |
| 56-23-5 | Carbon tetrachloride | | 0.050 | | 0.84 | U |
| 107-06-2 | 1,2-Dichloroethane | 0.34 | 0.050 | | 0.84 | JD |
| 78-83-1 | Isobutyl alcohol | | 9.9 | | 42 | U |
| 71-43-2 | Benzene | 0.16 | 0.050 | | 0.84 | JD |
| 79-01-6 | Trichloroethene | 3.6 | 0.050 | | 0.84 | D |
| 78-87-5 | 1,2-Dichloropropane | 0.56 | 0.20 | | 0.84 | JD |
| 74-95-3 | Dibromomethane | | 0.050 | | 0.84 | U |
| 80-62-6 | Methyl Methacrylate | | 0.94 | | 8.4 | U |
| 75-27-4 | Bromodichloromethane | | 0.050 | | 0.84 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.067 | | 0.84 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.70 | | 4.2 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-12**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0671.d | Sampled: 09/14/10 16:30

Initial/Final: 25mL / 25mL | Lab ID: 1009180-06 | Received: 09/16/10 09:32

Dilution: 1.67 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 20:29

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.16 | 0.050 | | 0.84 | JBD |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.084 | | 0.84 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.067 | | 0.84 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.68 | | 8.4 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.050 | | 0.84 | U |
| 127-18-4 | Tetrachloroethene | 0.82 | 0.10 | | 0.84 | JD |
| 591-78-6 | 2-Hexanone | | 0.85 | | 4.2 | U |
| 124-48-1 | Dibromochloromethane | | 0.067 | | 0.84 | U |
| 108-90-7 | Chlorobenzene | | 0.033 | | 0.84 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.033 | | 0.84 | U |
| 100-41-4 | Ethylbenzene | | 0.067 | | 0.84 | U |
| 179601-23-1 | m,p-Xylene | | 0.13 | | 1.7 | U |
| 95-47-6 | o-Xylene | | 0.050 | | 0.84 | U |
| 100-42-5 | Styrene | | 0.033 | | 0.84 | U |
| 75-25-2 | Bromoform | | 0.050 | | 0.84 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.084 | | 0.84 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.15 | | 0.84 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.55 | | 3.3 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.067 | | 0.84 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.4 | 0.050 | | 0.84 | D |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.050 | | 0.84 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.10 | | 0.84 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.050 | | 0.84 | U |
| 91-20-3 | Naphthalene | | 0.25 | | 0.84 | U |
| 1330-20-7 | Xylenes (total) | | 0.050 | | 0.84 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.947 | 99 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 5.065 | 101 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.726 | 95 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.989 | 100 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| 60-29-7 | Ethyl Ether | 2.7 | 352305 | 7.311 | 90 | JDN |
| 000075-43-4 | Fluorodichloromethane | 1.2 | 153384 | 6.652 | 94 | JDN |
| NA | Unknown 4.231 | 2.2 | 282982 | 4.231 | 0 | JD |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-15**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0771.d | Sampled: 09/14/10 12:15

Initial/Final: 25mL / 25mL | Lab ID: 1009180-07 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 14:50

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | | 0.44 | | 2.5 | U |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.10 | 0.020 | | 0.50 | J |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.030 | | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 0.35 | 0.020 | | 0.50 | J |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | | 0.030 | | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-15**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0771.d | Sampled: 09/14/10 12:15

Initial/Final: 25mL / 25mL | Lab ID: 1009180-07 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 14:50

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.096 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | | 0.060 | | 0.50 | U |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 5.078 | 102 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 5.398 | 108 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.586 | 92 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.958 | 99 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-17**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0871.d | Sampled: 09/14/10 14:25

Initial/Final: 25mL / 25mL | Lab ID: 1009180-08 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 17:07

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | | 0.44 | | 2.5 | U |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.082 | 0.050 | | 0.50 | J |
| 75-34-3 | 1,1-Dichloroethane | 2.2 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 3.5 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | 0.73 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-17**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0871.d | Sampled: 09/14/10 14:25

Initial/Final: 25mL / 25mL | Lab ID: 1009180-08 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 17:07

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.095 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 0.43 | 0.060 | | 0.50 | J |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.888 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.924 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.722 | 94 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.929 | 99 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-19**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0971.d | Sampled: 09/14/10 11:10

Initial/Final: 25mL / 25mL | Lab ID: 1009180-09 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 15:18

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | 3.1 | 0.44 | | 2.5 | B |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | 0.034 | 0.020 | | 0.50 | J |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.4 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.17 | 0.030 | | 0.50 | J |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | 0.20 | 0.030 | | 0.50 | J |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | | 0.030 | | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-19**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0971.d | Sampled: 09/14/10 11:10

Initial/Final: 25mL / 25mL | Lab ID: 1009180-09 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 15:18

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.095 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 0.84 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.862 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.987 | 100 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.659 | 93 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 5.014 | 100 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-2**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-1171.d | Sampled: 09/13/10 15:40

Initial/Final: 25mL / 25mL | Lab ID: 1009180-11 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 21:24

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | 0.37 | 0.070 | | 0.50 | J |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 71 | 0.040 | | 0.50 | E |
| 67-64-1 | Acetone | | 0.44 | | 2.5 | U |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 47 | 0.020 | | 0.50 | E |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.20 | 0.030 | | 0.50 | J |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 370 | 0.020 | | 0.50 | E |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | 0.44 | 0.030 | | 0.50 | J |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-2**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-1171.d | Sampled: 09/13/10 15:40

Initial/Final: 25mL / 25mL | Lab ID: 1009180-11 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 21:24

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.11 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 3.3 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.987 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 5.166 | 103 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.569 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.880 | 98 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-2DL**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-11D71.d | Sampled: 09/13/10 15:40

Initial/Final: 25mL / 25mL | Lab ID: 1009180-11RE1 | Received: 09/16/10 09:32

Dilution: 16.67 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 22:46

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.50 | | 8.3 | U |
| 74-87-3 | Chloromethane | | 1.8 | | 8.3 | U |
| 75-01-4 | Vinyl chloride | | 1.2 | | 8.3 | U |
| 74-83-9 | Bromomethane | | 1.8 | | 8.3 | U |
| 75-00-3 | Chloroethane | | 3.3 | | 8.3 | U |
| 75-69-4 | Trichlorofluoromethane | | 1.0 | | 8.3 | U |
| 107-02-8 | Acrolein | | 17 | | 83 | U |
| 75-35-4 | 1,1-Dichloroethene | 70 | 0.67 | | 8.3 | D |
| 67-64-1 | Acetone | 14 | 7.3 | | 42 | JBD |
| 74-88-4 | Iodomethane | | 0.50 | | 8.3 | U |
| 75-15-0 | Carbon disulfide | | 0.33 | | 8.3 | U |
| 107-05-1 | 3-Chloropropene | | 0.83 | | 8.3 | U |
| 75-05-8 | Acetonitrile | | 0.50 | | 8.3 | U |
| 75-09-2 | Methylene chloride | | 0.33 | | 8.3 | U |
| 107-13-1 | Acrylonitrile | | 6.0 | | 83 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.83 | | 8.3 | U |
| 75-34-3 | 1,1-Dichloroethane | 48 | 0.33 | | 8.3 | D |
| 126-99-8 | Chloroprene | | 0.33 | | 8.3 | U |
| 108-05-4 | Vinyl acetate | | 1.0 | | 17 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.50 | | 8.3 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.50 | | 8.3 | U |
| 107-12-0 | Propionitrile | | 23 | | 420 | U |
| 78-93-3 | 2-Butanone | | 4.7 | | 42 | U |
| 126-98-7 | Methacrylonitrile | | 6.5 | | 83 | U |
| 74-97-5 | Bromochloromethane | | 0.67 | | 8.3 | U |
| 67-66-3 | Chloroform | | 0.50 | | 8.3 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 330 | 0.33 | | 8.3 | D |
| 563-58-6 | 1,1-Dichloropropene | | 0.50 | | 8.3 | U |
| 56-23-5 | Carbon tetrachloride | | 0.50 | | 8.3 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.50 | | 8.3 | U |
| 78-83-1 | Isobutyl alcohol | | 98 | | 420 | U |
| 71-43-2 | Benzene | | 0.50 | | 8.3 | U |
| 79-01-6 | Trichloroethene | | 0.50 | | 8.3 | U |
| 78-87-5 | 1,2-Dichloropropane | | 2.0 | | 8.3 | U |
| 74-95-3 | Dibromomethane | | 0.50 | | 8.3 | U |
| 80-62-6 | Methyl Methacrylate | | 9.3 | | 83 | U |
| 75-27-4 | Bromodichloromethane | | 0.50 | | 8.3 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.67 | | 8.3 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 7.0 | | 42 | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-2DL**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-11D71.d | Sampled: 09/13/10 15:40

Initial/Final: 25mL / 25mL | Lab ID: 1009180-11RE1 | Received: 09/16/10 09:32

Dilution: 16.67 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 22:46

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 1.2 | 0.50 | | 8.3 | JBD |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.83 | | 8.3 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.67 | | 8.3 | U |
| 97-63-2 | Ethyl Methacrylate | | 6.8 | | 83 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.50 | | 8.3 | U |
| 127-18-4 | Tetrachloroethene | 4.2 | 1.0 | | 8.3 | JD |
| 591-78-6 | 2-Hexanone | | 8.5 | | 42 | U |
| 124-48-1 | Dibromochloromethane | | 0.67 | | 8.3 | U |
| 108-90-7 | Chlorobenzene | | 0.33 | | 8.3 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.33 | | 8.3 | U |
| 100-41-4 | Ethylbenzene | | 0.67 | | 8.3 | U |
| 179601-23-1 | m,p-Xylene | | 1.3 | | 17 | U |
| 95-47-6 | o-Xylene | | 0.50 | | 8.3 | U |
| 100-42-5 | Styrene | | 0.33 | | 8.3 | U |
| 75-25-2 | Bromoform | | 0.50 | | 8.3 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.83 | | 8.3 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 1.5 | | 8.3 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 5.5 | | 33 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.67 | | 8.3 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.50 | | 8.3 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.50 | | 8.3 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 1.0 | | 8.3 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.50 | | 8.3 | U |
| 91-20-3 | Naphthalene | | 2.5 | | 8.3 | U |
| 1330-20-7 | Xylenes (total) | | 0.50 | | 8.3 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 5.012 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 5.008 | 100 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.756 | 95 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.711 | 94 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-3**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0171.d | Sampled: 09/14/10 14:15

Initial/Final: 25mL / 25mL | Lab ID: 1009180-01 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 15:45

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U J |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U J |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | 5.1 | 0.20 | | 0.50 | J |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | | 0.44 | | 2.5 | U |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.35 | 0.050 | | 0.50 | J |
| 75-34-3 | 1,1-Dichloroethane | 10 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 25 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 0.18 | 0.030 | | 0.50 | J |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | 2.8 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 0.37 | 0.12 | | 0.50 | J |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-3**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0171.d | Sampled: 09/14/10 14:15

Initial/Final: 25mL / 25mL | Lab ID: 1009180-01 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 15:45

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.12 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | | 0.060 | | 0.50 | U |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.989 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.972 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.848 | 97 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.764 | 95 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Unknown 4.230 | 0.93 | 272690 | 4.23 | 0 | J |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-8**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0371.d | Sampled: 09/14/10 13:10

Initial/Final: 25mL / 25mL | Lab ID: 1009180-03 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 16:12

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | 2.2 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | 2.8 | 0.44 | | 2.5 | B |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.71 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.51 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | 0.29 | 0.030 | | 0.50 | J |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-8**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0371.d | Sampled: 09/14/10 13:10

Initial/Final: 25mL / 25mL | Lab ID: 1009180-03 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 16:12

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.089 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | | 0.060 | | 0.50 | U |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.862 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.940 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.636 | 93 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.929 | 99 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Unknown 7.320 | 0.57 | 119086 | 7.32 | 0 | J |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-9**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0471.d | Sampled: 09/13/10 13:15

Initial/Final: 25mL / 25mL | Lab ID: 1009180-04 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 16:40

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 0.55 | 0.030 | | 0.50 | |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | 2.0 | 0.070 | | 0.50 | |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | 4.2 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | 1.1 | 0.44 | | 2.5 | JB |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.32 | 0.050 | | 0.50 | J |
| 75-34-3 | 1,1-Dichloroethane | 10 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 6.9 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | 2.8 | 0.030 | | 0.50 | |
| 79-01-6 | Trichloroethene | 1.1 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 0.24 | 0.12 | | 0.50 | J |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-9**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0471.d | Sampled: 09/13/10 13:15

Initial/Final: 25mL / 25mL | Lab ID: 1009180-04 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 16:40

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.11 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 0.83 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | 0.42 | 0.020 | | 0.50 | J |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.6 | 0.030 | | 0.50 | |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.874 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.875 | 97 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.688 | 94 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.744 | 95 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| 000075-45-6 | Difluorochloromethane | 1.4 | 334812 | 4.225 | 83 | J |
| 60-29-7 | Ethyl Ether | 1.4 | 345278 | 7.315 | 86 | JN |
| 000075-43-4 | Fluorodichloromethane | 2.0 | 471073 | 6.665 | 96 | JN |
| 000593-70-4 | Methane, chlorofluoro- | 7.1 | 1688833 | 4.953 | 90 | JN |
| NA | Unknown 4.539 | 1.7 | 405317 | 4.539 | 0 | J |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**TRIP BLANK**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-1071.d | Sampled: 09/03/10 00:00

Initial/Final: 25mL / 25mL | Lab ID: 1009180-10 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 13:29

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | 1.5 | 0.44 | | 2.5 | JB |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.020 | | 0.50 | U |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.030 | | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | | 0.030 | | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**TRIP BLANK**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-1071.d | Sampled: 09/03/10 00:00

Initial/Final: 25mL / 25mL | Lab ID: 1009180-10 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 13:29

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.15 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | | 0.060 | | 0.50 | U |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | 0.19 | 0.15 | | 0.50 | J |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.583 | 92 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.148 | 83 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.874 | 97 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.957 | 99 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**VBLKHF**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-BLK171.d | QC Type: Blank

Initial/Final: 25mL / 25mL | Lab ID: 0092014-BLK1 | Column ID: SPB-624

Dilution: 1 | pH: | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 11:54

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | 1.6 | 0.44 | | 2.5 | J |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.020 | | 0.50 | U |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.030 | | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | | 0.030 | | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**VBLKHF**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-BLK171.d | QC Type: Blank

Initial/Final: 25mL / 25mL | Lab ID: 0092014-BLK1 | Column ID: SPB-624

Dilution: 1 | pH: | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 11:54

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |
| 108-88-3 | Toluene | 0.12 | 0.030 | | 0.50 | J |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | | 0.060 | | 0.50 | U |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 5.009 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 5.116 | 102 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.540 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.901 | 98 | 63 - 143 | |

| CAS NO. | TICS | CONC.(ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**VHFLCS**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-BS171.d | QC Type: LCS

Initial/Final: 25mL / 25mL | Lab ID: 0092014-BS1 | Column ID: SPB-624

Dilution: 1 | pH: | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 12:29

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 6.008 | 0.030 | | 0.50 | |
| 74-87-3 | Chloromethane | 5.887 | 0.11 | | 0.50 | |
| 75-01-4 | Vinyl chloride | 5.702 | 0.070 | | 0.50 | |
| 74-83-9 | Bromomethane | 4.802 | 0.11 | | 0.50 | |
| 75-00-3 | Chloroethane | 5.492 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 6.006 | 0.060 | | 0.50 | |
| 107-02-8 | Acrolein | 46.31 | 1.0 | | 5.0 | |
| 75-35-4 | 1,1-Dichloroethene | 5.752 | 0.040 | | 0.50 | |
| 67-64-1 | Acetone | 24.43 | 0.44 | | 2.5 | B |
| 74-88-4 | Iodomethane | 4.855 | 0.030 | | 0.50 | |
| 75-15-0 | Carbon disulfide | 5.452 | 0.020 | | 0.50 | |
| 107-05-1 | 3-Chloropropene | 4.948 | 0.050 | | 0.50 | |
| 75-05-8 | Acetonitrile | 4.863 | 0.030 | | 0.50 | |
| 75-09-2 | Methylene chloride | 5.895 | 0.020 | | 0.50 | |
| 107-13-1 | Acrylonitrile | 52.99 | 0.36 | | 5.0 | |
| 156-60-5 | trans-1,2-Dichloroethene | 5.658 | 0.050 | | 0.50 | |
| 75-34-3 | 1,1-Dichloroethane | 5.469 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | 5.208 | 0.020 | | 0.50 | |
| 108-05-4 | Vinyl acetate | 10.07 | 0.060 | | 1.0 | |
| 156-59-2 | cis-1,2-Dichloroethene | 5.423 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | 5.276 | 0.030 | | 0.50 | |
| 107-12-0 | Propionitrile | 254.0 | 1.4 | | 25 | |
| 78-93-3 | 2-Butanone | 24.87 | 0.28 | | 2.5 | |
| 126-98-7 | Methacrylonitrile | 52.40 | 0.39 | | 5.0 | |
| 74-97-5 | Bromochloromethane | 5.644 | 0.040 | | 0.50 | |
| 67-66-3 | Chloroform | 5.483 | 0.030 | | 0.50 | |
| 71-55-6 | 1,1,1-Trichloroethane | 5.418 | 0.020 | | 0.50 | |
| 563-58-6 | 1,1-Dichloropropene | 5.751 | 0.030 | | 0.50 | |
| 56-23-5 | Carbon tetrachloride | 5.653 | 0.030 | | 0.50 | |
| 107-06-2 | 1,2-Dichloroethane | 5.429 | 0.030 | | 0.50 | |
| 78-83-1 | Isobutyl alcohol | 225.0 | 5.9 | | 25 | |
| 71-43-2 | Benzene | 5.440 | 0.030 | | 0.50 | |
| 79-01-6 | Trichloroethene | 5.626 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 5.412 | 0.12 | | 0.50 | |
| 74-95-3 | Dibromomethane | 5.428 | 0.030 | | 0.50 | |
| 80-62-6 | Methyl Methacrylate | 53.93 | 0.56 | | 5.0 | |
| 75-27-4 | Bromodichloromethane | 5.515 | 0.030 | | 0.50 | |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.513 | 0.040 | | 0.50 | |
| 108-10-1 | 4-Methyl-2-pentanone | 23.99 | 0.42 | | 2.5 | |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**VHFLCS**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-BS171.d | QC Type: LCS

Initial/Final: 25mL / 25mL | Lab ID: 0092014-BS1 | Column ID: SPB-624

Dilution: 1 | pH: | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 12:29

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 4.735 | 0.030 | | 0.50 | B |
| 10061-02-6 | trans-1,3-Dichloropropene | 4.821 | 0.050 | | 0.50 | |
| 79-00-5 | 1,1,2-Trichloroethane | 4.834 | 0.040 | | 0.50 | |
| 97-63-2 | Ethyl Methacrylate | 48.37 | 0.41 | | 5.0 | |
| 142-28-9 | 1,3-Dichloropropane | 4.792 | 0.030 | | 0.50 | |
| 127-18-4 | Tetrachloroethene | 5.393 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | 23.57 | 0.51 | | 2.5 | |
| 124-48-1 | Dibromochloromethane | 4.690 | 0.040 | | 0.50 | |
| 108-90-7 | Chlorobenzene | 4.938 | 0.020 | | 0.50 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 4.687 | 0.020 | | 0.50 | |
| 100-41-4 | Ethylbenzene | 4.912 | 0.040 | | 0.50 | |
| 179601-23-1 | m,p-Xylene | 9.954 | 0.080 | | 1.0 | |
| 95-47-6 | o-Xylene | 4.890 | 0.030 | | 0.50 | |
| 100-42-5 | Styrene | 4.852 | 0.020 | | 0.50 | |
| 75-25-2 | Bromoform | 4.763 | 0.030 | | 0.50 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.053 | 0.050 | | 0.50 | |
| 96-18-4 | 1,2,3-Trichloropropane | 4.703 | 0.090 | | 0.50 | |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 18.68 | 0.33 | | 2.0 | |
| 541-73-1 | 1,3-Dichlorobenzene | 5.318 | 0.040 | | 0.50 | |
| 106-46-7 | 1,4-Dichlorobenzene | 5.377 | 0.030 | | 0.50 | |
| 95-50-1 | 1,2-Dichlorobenzene | 5.167 | 0.030 | | 0.50 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.972 | 0.060 | | 0.50 | |
| 87-68-3 | Hexachlorobutadiene | 5.566 | 0.030 | | 0.50 | |
| 91-20-3 | Naphthalene | 4.783 | 0.15 | | 0.50 | |
| 1330-20-7 | Xylenes (total) | 14.84 | 0.030 | | 0.50 | |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.904 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.879 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.436 | 89 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.759 | 95 | 63 - 143 | |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**VHFLCSD**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-BSD171.d | QC Type: LCS Dup

Initial/Final: 25mL / 25mL | Lab ID: 0092014-BSD1 | Column ID: SPB-624

Dilution: 1 | pH: | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 12:57

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.918 | 0.030 | | 0.50 | |
| 74-87-3 | Chloromethane | 6.190 | 0.11 | | 0.50 | |
| 75-01-4 | Vinyl chloride | 5.717 | 0.070 | | 0.50 | |
| 74-83-9 | Bromomethane | 5.334 | 0.11 | | 0.50 | |
| 75-00-3 | Chloroethane | 5.558 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 5.562 | 0.060 | | 0.50 | |
| 107-02-8 | Acrolein | 47.00 | 1.0 | | 5.0 | |
| 75-35-4 | 1,1-Dichloroethene | 5.482 | 0.040 | | 0.50 | |
| 67-64-1 | Acetone | 24.75 | 0.44 | | 2.5 | B |
| 74-88-4 | Iodomethane | 5.525 | 0.030 | | 0.50 | |
| 75-15-0 | Carbon disulfide | 5.461 | 0.020 | | 0.50 | |
| 107-05-1 | 3-Chloropropene | 5.422 | 0.050 | | 0.50 | |
| 75-05-8 | Acetonitrile | 5.336 | 0.030 | | 0.50 | |
| 75-09-2 | Methylene chloride | 5.839 | 0.020 | | 0.50 | |
| 107-13-1 | Acrylonitrile | 55.02 | 0.36 | | 5.0 | |
| 156-60-5 | trans-1,2-Dichloroethene | 5.653 | 0.050 | | 0.50 | |
| 75-34-3 | 1,1-Dichloroethane | 5.773 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | 5.455 | 0.020 | | 0.50 | |
| 108-05-4 | Vinyl acetate | 10.83 | 0.060 | | 1.0 | |
| 156-59-2 | cis-1,2-Dichloroethene | 5.391 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | 5.479 | 0.030 | | 0.50 | |
| 107-12-0 | Propionitrile | 268.1 | 1.4 | | 25 | |
| 78-93-3 | 2-Butanone | 27.12 | 0.28 | | 2.5 | |
| 126-98-7 | Methacrylonitrile | 55.73 | 0.39 | | 5.0 | |
| 74-97-5 | Bromochloromethane | 5.687 | 0.040 | | 0.50 | |
| 67-66-3 | Chloroform | 5.572 | 0.030 | | 0.50 | |
| 71-55-6 | 1,1,1-Trichloroethane | 5.323 | 0.020 | | 0.50 | |
| 563-58-6 | 1,1-Dichloropropene | 5.668 | 0.030 | | 0.50 | |
| 56-23-5 | Carbon tetrachloride | 5.357 | 0.030 | | 0.50 | |
| 107-06-2 | 1,2-Dichloroethane | 5.372 | 0.030 | | 0.50 | |
| 78-83-1 | Isobutyl alcohol | 263.2 | 5.9 | | 25 | |
| 71-43-2 | Benzene | 5.564 | 0.030 | | 0.50 | |
| 79-01-6 | Trichloroethene | 5.263 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 5.689 | 0.12 | | 0.50 | |
| 74-95-3 | Dibromomethane | 5.225 | 0.030 | | 0.50 | |
| 80-62-6 | Methyl Methacrylate | 53.88 | 0.56 | | 5.0 | |
| 75-27-4 | Bromodichloromethane | 5.512 | 0.030 | | 0.50 | |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.438 | 0.040 | | 0.50 | |
| 108-10-1 | 4-Methyl-2-pentanone | 24.26 | 0.42 | | 2.5 | |

# ANALYSIS DATA SHEET

*SW 8260B*

**VHFLCSD**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-BSD171.d | QC Type: LCS Dup

Initial/Final: 25mL / 25mL | Lab ID: 0092014-BSD1 | Column ID: SPB-624

Dilution: 1 | pH: | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 12:57

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 4.651 | 0.030 | | 0.50 | B |
| 10061-02-6 | trans-1,3-Dichloropropene | 4.935 | 0.050 | | 0.50 | |
| 79-00-5 | 1,1,2-Trichloroethane | 4.884 | 0.040 | | 0.50 | |
| 97-63-2 | Ethyl Methacrylate | 48.08 | 0.41 | | 5.0 | |
| 142-28-9 | 1,3-Dichloropropane | 4.895 | 0.030 | | 0.50 | |
| 127-18-4 | Tetrachloroethene | 4.721 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | 23.79 | 0.51 | | 2.5 | |
| 124-48-1 | Dibromochloromethane | 4.725 | 0.040 | | 0.50 | |
| 108-90-7 | Chlorobenzene | 4.746 | 0.020 | | 0.50 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 4.688 | 0.020 | | 0.50 | |
| 100-41-4 | Ethylbenzene | 4.655 | 0.040 | | 0.50 | |
| 179601-23-1 | m,p-Xylene | 9.335 | 0.080 | | 1.0 | |
| 95-47-6 | o-Xylene | 4.674 | 0.030 | | 0.50 | |
| 100-42-5 | Styrene | 4.758 | 0.020 | | 0.50 | |
| 75-25-2 | Bromoform | 4.618 | 0.030 | | 0.50 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.064 | 0.050 | | 0.50 | |
| 96-18-4 | 1,2,3-Trichloropropane | 4.485 | 0.090 | | 0.50 | |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 18.22 | 0.33 | | 2.0 | |
| 541-73-1 | 1,3-Dichlorobenzene | 4.690 | 0.040 | | 0.50 | |
| 106-46-7 | 1,4-Dichlorobenzene | 4.729 | 0.030 | | 0.50 | |
| 95-50-1 | 1,2-Dichlorobenzene | 4.664 | 0.030 | | 0.50 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4.750 | 0.060 | | 0.50 | |
| 87-68-3 | Hexachlorobutadiene | 4.833 | 0.030 | | 0.50 | |
| 91-20-3 | Naphthalene | 4.506 | 0.15 | | 0.50 | |
| 1330-20-7 | Xylenes (total) | 14.01 | 0.030 | | 0.50 | |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.841 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.847 | 97 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.488 | 90 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.578 | 92 | 63 - 143 | |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-3MS**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-MS171.d | QC Type: Matrix Spike

Initial/Final: 25mL / 25mL | Lab ID: 0092014-MS1 | Column ID: SPB-624

Dilution: 1 | pH: 1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 19:35

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 6.195 | 0.030 | | 0.50 | |
| 74-87-3 | Chloromethane | 7.309 | 0.11 | | 0.50 | |
| 75-01-4 | Vinyl chloride | 9.342 | 0.070 | | 0.50 | |
| 74-83-9 | Bromomethane | 5.299 | 0.11 | | 0.50 | |
| 75-00-3 | Chloroethane | 16.75 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 5.929 | 0.060 | | 0.50 | |
| 107-02-8 | Acrolein | 67.54 | 1.0 | | 5.0 | |
| 75-35-4 | 1,1-Dichloroethene | 5.728 | 0.040 | | 0.50 | |
| 67-64-1 | Acetone | 25.09 | 0.44 | | 2.5 | B |
| 74-88-4 | Iodomethane | 4.476 | 0.030 | | 0.50 | |
| 75-15-0 | Carbon disulfide | 5.730 | 0.020 | | 0.50 | |
| 107-05-1 | 3-Chloropropene | 6.540 | 0.050 | | 0.50 | |
| 75-05-8 | Acetonitrile | 6.541 | 0.030 | | 0.50 | |
| 75-09-2 | Methylene chloride | 6.179 | 0.020 | | 0.50 | |
| 107-13-1 | Acrylonitrile | 58.89 | 0.36 | | 5.0 | |
| 156-60-5 | trans-1,2-Dichloroethene | 6.428 | 0.050 | | 0.50 | |
| 75-34-3 | 1,1-Dichloroethane | 16.39 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | 6.477 | 0.020 | | 0.50 | |
| 108-05-4 | Vinyl acetate | 9.441 | 0.060 | | 1.0 | |
| 156-59-2 | cis-1,2-Dichloroethene | 30.75 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | 6.119 | 0.030 | | 0.50 | |
| 107-12-0 | Propionitrile | 297.8 | 1.4 | | 25 | |
| 78-93-3 | 2-Butanone | 24.84 | 0.28 | | 2.5 | |
| 126-98-7 | Methacrylonitrile | 58.52 | 0.39 | | 5.0 | |
| 74-97-5 | Bromochloromethane | 5.955 | 0.040 | | 0.50 | |
| 67-66-3 | Chloroform | 6.162 | 0.030 | | 0.50 | |
| 71-55-6 | 1,1,1-Trichloroethane | 5.632 | 0.020 | | 0.50 | |
| 563-58-6 | 1,1-Dichloropropene | 5.906 | 0.030 | | 0.50 | |
| 56-23-5 | Carbon tetrachloride | 5.493 | 0.030 | | 0.50 | |
| 107-06-2 | 1,2-Dichloroethane | 5.627 | 0.030 | | 0.50 | |
| 78-83-1 | Isobutyl alcohol | 268.7 | 5.9 | | 25 | |
| 71-43-2 | Benzene | 6.026 | 0.030 | | 0.50 | |
| 79-01-6 | Trichloroethene | 8.464 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 6.594 | 0.12 | | 0.50 | |
| 74-95-3 | Dibromomethane | 5.201 | 0.030 | | 0.50 | |
| 80-62-6 | Methyl Methacrylate | 58.80 | 0.56 | | 5.0 | |
| 75-27-4 | Bromodichloromethane | 5.711 | 0.030 | | 0.50 | |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.508 | 0.040 | | 0.50 | |
| 108-10-1 | 4-Methyl-2-pentanone | 23.61 | 0.42 | | 2.5 | |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-3MS**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-MS171.d | QC Type: Matrix Spike

Initial/Final: 25mL / 25mL | Lab ID: 0092014-MS1 | Column ID: SPB-624

Dilution: 1 | pH: 1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 19:35

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 4.907 | 0.030 | | 0.50 | B |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.188 | 0.050 | | 0.50 | |
| 79-00-5 | 1,1,2-Trichloroethane | 5.238 | 0.040 | | 0.50 | |
| 97-63-2 | Ethyl Methacrylate | 53.85 | 0.41 | | 5.0 | |
| 142-28-9 | 1,3-Dichloropropane | 5.303 | 0.030 | | 0.50 | |
| 127-18-4 | Tetrachloroethene | 5.225 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | 22.99 | 0.51 | | 2.5 | |
| 124-48-1 | Dibromochloromethane | 4.724 | 0.040 | | 0.50 | |
| 108-90-7 | Chlorobenzene | 5.038 | 0.020 | | 0.50 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 4.916 | 0.020 | | 0.50 | |
| 100-41-4 | Ethylbenzene | 4.782 | 0.040 | | 0.50 | |
| 179601-23-1 | m,p-Xylene | 9.662 | 0.080 | | 1.0 | |
| 95-47-6 | o-Xylene | 4.873 | 0.030 | | 0.50 | |
| 100-42-5 | Styrene | 4.798 | 0.020 | | 0.50 | |
| 75-25-2 | Bromoform | 4.538 | 0.030 | | 0.50 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.302 | 0.050 | | 0.50 | |
| 96-18-4 | 1,2,3-Trichloropropane | 4.734 | 0.090 | | 0.50 | |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 20.38 | 0.33 | | 2.0 | |
| 541-73-1 | 1,3-Dichlorobenzene | 4.803 | 0.040 | | 0.50 | |
| 106-46-7 | 1,4-Dichlorobenzene | 4.763 | 0.030 | | 0.50 | |
| 95-50-1 | 1,2-Dichlorobenzene | 4.771 | 0.030 | | 0.50 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4.438 | 0.060 | | 0.50 | |
| 87-68-3 | Hexachlorobutadiene | 4.212 | 0.030 | | 0.50 | |
| 91-20-3 | Naphthalene | 4.121 | 0.15 | | 0.50 | |
| 1330-20-7 | Xylenes (total) | 14.54 | 0.030 | | 0.50 | |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.918 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.738 | 95 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.546 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.686 | 94 | 63 - 143 | |

| CAS NO. | TICS | CONC.(ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.000 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-3MSD**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-MSD171.d | QC Type: Matrix Spike Dup

Initial/Final: 25mL / 25mL | Lab ID: 0092014-MSD1 | Column ID: SPB-624

Dilution: 1 | pH: 1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 20:02

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 6.602 | 0.030 | | 0.50 | |
| 74-87-3 | Chloromethane | 7.625 | 0.11 | | 0.50 | |
| 75-01-4 | Vinyl chloride | 8.247 | 0.070 | | 0.50 | |
| 74-83-9 | Bromomethane | 5.216 | 0.11 | | 0.50 | |
| 75-00-3 | Chloroethane | 10.59 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 5.880 | 0.060 | | 0.50 | |
| 107-02-8 | Acrolein | 71.50 | 1.0 | | 5.0 | |
| 75-35-4 | 1,1-Dichloroethene | 5.679 | 0.040 | | 0.50 | |
| 67-64-1 | Acetone | 25.42 | 0.44 | | 2.5 | B |
| 74-88-4 | Iodomethane | 5.252 | 0.030 | | 0.50 | |
| 75-15-0 | Carbon disulfide | 5.653 | 0.020 | | 0.50 | |
| 107-05-1 | 3-Chloropropene | 6.523 | 0.050 | | 0.50 | |
| 75-05-8 | Acetonitrile | 6.479 | 0.030 | | 0.50 | |
| 75-09-2 | Methylene chloride | 6.020 | 0.020 | | 0.50 | |
| 107-13-1 | Acrylonitrile | 60.77 | 0.36 | | 5.0 | |
| 156-60-5 | trans-1,2-Dichloroethene | 6.279 | 0.050 | | 0.50 | |
| 75-34-3 | 1,1-Dichloroethane | 15.78 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | 6.224 | 0.020 | | 0.50 | |
| 108-05-4 | Vinyl acetate | 9.607 | 0.060 | | 1.0 | |
| 156-59-2 | cis-1,2-Dichloroethene | 29.89 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | 5.946 | 0.030 | | 0.50 | |
| 107-12-0 | Propionitrile | 312.3 | 1.4 | | 25 | |
| 78-93-3 | 2-Butanone | 27.26 | 0.28 | | 2.5 | |
| 126-98-7 | Methacrylonitrile | 61.28 | 0.39 | | 5.0 | |
| 74-97-5 | Bromochloromethane | 5.928 | 0.040 | | 0.50 | |
| 67-66-3 | Chloroform | 6.019 | 0.030 | | 0.50 | |
| 71-55-6 | 1,1,1-Trichloroethane | 5.582 | 0.020 | | 0.50 | |
| 563-58-6 | 1,1-Dichloropropene | 5.876 | 0.030 | | 0.50 | |
| 56-23-5 | Carbon tetrachloride | 5.587 | 0.030 | | 0.50 | |
| 107-06-2 | 1,2-Dichloroethane | 5.603 | 0.030 | | 0.50 | |
| 78-83-1 | Isobutyl alcohol | 300.6 | 5.9 | | 25 | |
| 71-43-2 | Benzene | 6.005 | 0.030 | | 0.50 | |
| 79-01-6 | Trichloroethene | 8.396 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 6.467 | 0.12 | | 0.50 | |
| 74-95-3 | Dibromomethane | 5.402 | 0.030 | | 0.50 | |
| 80-62-6 | Methyl Methacrylate | 62.32 | 0.56 | | 5.0 | |
| 75-27-4 | Bromodichloromethane | 5.758 | 0.030 | | 0.50 | |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.642 | 0.040 | | 0.50 | |
| 108-10-1 | 4-Methyl-2-pentanone | 24.50 | 0.42 | | 2.5 | |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-3MSD**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-MSD171.d | QC Type: Matrix Spike Dup

Initial/Final: 25mL / 25mL | Lab ID: 0092014-MSD1 | Column ID: SPB-624

Dilution: 1 | pH: 1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 20:02

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 4.813 | 0.030 | | 0.50 | B |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.159 | 0.050 | | 0.50 | |
| 79-00-5 | 1,1,2-Trichloroethane | 5.248 | 0.040 | | 0.50 | |
| 97-63-2 | Ethyl Methacrylate | 55.37 | 0.41 | | 5.0 | |
| 142-28-9 | 1,3-Dichloropropane | 5.181 | 0.030 | | 0.50 | |
| 127-18-4 | Tetrachloroethene | 5.104 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | 24.10 | 0.51 | | 2.5 | |
| 124-48-1 | Dibromochloromethane | 4.794 | 0.040 | | 0.50 | |
| 108-90-7 | Chlorobenzene | 4.958 | 0.020 | | 0.50 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 4.964 | 0.020 | | 0.50 | |
| 100-41-4 | Ethylbenzene | 4.824 | 0.040 | | 0.50 | |
| 179601-23-1 | m,p-Xylene | 9.799 | 0.080 | | 1.0 | |
| 95-47-6 | o-Xylene | 4.920 | 0.030 | | 0.50 | |
| 100-42-5 | Styrene | 4.910 | 0.020 | | 0.50 | |
| 75-25-2 | Bromoform | 4.630 | 0.030 | | 0.50 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.337 | 0.050 | | 0.50 | |
| 96-18-4 | 1,2,3-Trichloropropane | 4.903 | 0.090 | | 0.50 | |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 21.25 | 0.33 | | 2.0 | |
| 541-73-1 | 1,3-Dichlorobenzene | 4.938 | 0.040 | | 0.50 | |
| 106-46-7 | 1,4-Dichlorobenzene | 4.864 | 0.030 | | 0.50 | |
| 95-50-1 | 1,2-Dichlorobenzene | 4.868 | 0.030 | | 0.50 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4.761 | 0.060 | | 0.50 | |
| 87-68-3 | Hexachlorobutadiene | 4.419 | 0.030 | | 0.50 | |
| 91-20-3 | Naphthalene | 4.559 | 0.15 | | 0.50 | |
| 1330-20-7 | Xylenes (total) | 14.72 | 0.030 | | 0.50 | |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.888 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.915 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.428 | 89 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.677 | 94 | 63 - 143 | |

| CAS NO. | TICS | CONC.(ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.000 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# C. Laboratory Control Sample Results

## (LCS/LCS DUPLICATE RECOVERY)

LCS/LCSD recovery, relative percent difference and quality control acceptance criteria

# LCS / LCS DUPLICATE RECOVERY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-BS1 Matrix: Water Client ID: VHFLCS Batch: 0092014

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Dichlorodifluoromethane | 5.000 | 6.008 | 120 | 50 - 150 |
| Chloromethane | 5.000 | 5.887 | 118 | 50 - 150 |
| Vinyl chloride | 5.000 | 5.702 | 114 | 61 - 150 |
| Bromomethane | 5.000 | 4.802 | 96 | 50 - 150 |
| Chloroethane | 5.000 | 5.492 | 110 | 54 - 150 |
| Trichlorofluoromethane | 5.000 | 6.006 | 120 | 56 - 150 |
| Acrolein | 50.00 | 46.31 | 93 | 50 - 150 |
| 1,1-Dichloroethene | 5.000 | 5.752 | 115 | 74 - 143 |
| Acetone | 25.00 | 24.43 | 98 | 50 - 150 |
| Iodomethane | 5.000 | 4.855 | 97 | 50 - 150 |
| Carbon disulfide | 5.000 | 5.452 | 109 | 50 - 150 |
| 3-Chloropropene | 5.000 | 4.948 | 99 | 50 - 150 |
| Acetonitrile | 5.000 | 4.863 | 97 | 50 - 150 |
| Methylene chloride | 5.000 | 5.895 | 118 | 50 - 139 |
| Acrylonitrile | 50.00 | 52.99 | 106 | 50 - 150 |
| trans-1,2-Dichloroethene | 5.000 | 5.658 | 113 | 50 - 137 |
| 1,1-Dichloroethane | 5.000 | 5.469 | 109 | 59 - 138 |
| Chloroprene | 5.000 | 5.208 | 104 | 50 - 150 |
| Vinyl acetate | 10.00 | 10.07 | 101 | 50 - 150 |
| cis-1,2-Dichloroethene | 5.000 | 5.423 | 108 | 69 - 140 |
| 2,2-Dichloropropane | 5.000 | 5.276 | 106 | 50 - 150 |
| Propionitrile | 250.0 | 254.0 | 102 | 50 - 150 |
| 2-Butanone | 25.00 | 24.87 | 99 | 65 - 134 |
| Methacrylonitrile | 50.00 | 52.40 | 105 | 50 - 150 |
| Bromochloromethane | 5.000 | 5.644 | 113 | 50 - 150 |
| Chloroform | 5.000 | 5.483 | 110 | 67 - 147 |
| 1,1,1-Trichloroethane | 5.000 | 5.418 | 108 | 71 - 137 |
| 1,1-Dichloropropene | 5.000 | 5.751 | 115 | 50 - 150 |
| Carbon tetrachloride | 5.000 | 5.653 | 113 | 68 - 145 |
| 1,2-Dichloroethane | 5.000 | 5.429 | 109 | 61 - 150 |
| Isobutyl alcohol | 250.0 | 225.0 | 90 | 50 - 150 |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# LCS / LCS DUPLICATE RECOVERY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-BS1 Matrix: Water Client ID: VHFLCS Batch: 0092014

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Benzene | 5.000 | 5.440 | 109 | 68 - 138 |
| Trichloroethene | 5.000 | 5.626 | 113 | 55 - 150 |
| 1,2-Dichloropropane | 5.000 | 5.412 | 108 | 67 - 137 |
| Dibromomethane | 5.000 | 5.428 | 109 | 50 - 150 |
| Methyl Methacrylate | 50.00 | 53.93 | 108 | 50 - 150 |
| Bromodichloromethane | 5.000 | 5.515 | 110 | 73 - 142 |
| cis-1,3-Dichloropropene | 5.000 | 5.513 | 110 | 74 - 134 |
| 4-Methyl-2-pentanone | 25.00 | 23.99 | 96 | 66 - 127 |
| Toluene | 5.000 | 4.735 | 95 | 60 - 142 |
| trans-1,3-Dichloropropene | 5.000 | 4.821 | 96 | 66 - 130 |
| 1,1,2-Trichloroethane | 5.000 | 4.834 | 97 | 68 - 130 |
| Ethyl Methacrylate | 50.00 | 48.37 | 97 | 50 - 150 |
| 1,3-Dichloropropane | 5.000 | 4.792 | 96 | 50 - 150 |
| Tetrachloroethene | 5.000 | 5.393 | 108 | 65 - 137 |
| 2-Hexanone | 25.00 | 23.57 | 94 | 53 - 140 |
| Dibromochloromethane | 5.000 | 4.690 | 94 | 68 - 137 |
| Chlorobenzene | 5.000 | 4.938 | 99 | 68 - 129 |
| 1,1,1,2-Tetrachloroethane | 5.000 | 4.687 | 94 | 50 - 150 |
| Ethylbenzene | 5.000 | 4.912 | 98 | 67 - 127 |
| m,p-Xylene | 10.00 | 9.954 | 100 | 60 - 140 |
| o-Xylene | 5.000 | 4.890 | 98 | 60 - 140 |
| Styrene | 5.000 | 4.852 | 97 | 66 - 139 |
| Bromoform | 5.000 | 4.763 | 95 | 62 - 138 |
| 1,1,2,2-Tetrachloroethane | 5.000 | 5.053 | 101 | 63 - 122 |
| 1,2,3-Trichloropropane | 5.000 | 4.703 | 94 | 50 - 150 |
| trans-1,4-Dichloro-2-butene | 20.00 | 18.68 | 93 | 50 - 150 |
| 1,3-Dichlorobenzene | 5.000 | 5.318 | 106 | 64 - 136 |
| 1,4-Dichlorobenzene | 5.000 | 5.377 | 108 | 69 - 125 |
| 1,2-Dichlorobenzene | 5.000 | 5.167 | 103 | 71 - 127 |
| 1,2,4-Trichlorobenzene | 5.000 | 5.972 | 119 | 52 - 147 |
| Hexachlorobutadiene | 5.000 | 5.566 | 111 | 50 - 150 |

# LCS / LCS DUPLICATE RECOVERY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-BS1 Matrix: Water Client ID: VHFLCS Batch: 0092014

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Naphthalene | 5.000 | 4.783 | 96 | 50 - 150 |
| Xylenes (total) | 15.00 | 14.84 | 99 | 60 - 140 |

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 5.000 | 5.918 | 118 | 2 | 25 | 50 - 150 |
| Chloromethane | 5.000 | 6.190 | 124 | 5 | 25 | 50 - 150 |
| Vinyl chloride | 5.000 | 5.717 | 114 | 0.3 | 25 | 61 - 150 |
| Bromomethane | 5.000 | 5.334 | 107 | 10 | 25 | 50 - 150 |
| Chloroethane | 5.000 | 5.558 | 111 | 1 | 25 | 54 - 150 |
| Trichlorofluoromethane | 5.000 | 5.562 | 111 | 8 | 25 | 56 - 150 |
| Acrolein | 50.00 | 47.00 | 94 | 1 | 25 | 50 - 150 |
| 1,1-Dichloroethene | 5.000 | 5.482 | 110 | 5 | 14 | 74 - 143 |
| Acetone | 25.00 | 24.75 | 99 | 1 | 25 | 50 - 150 |
| Iodomethane | 5.000 | 5.525 | 110 | 13 | 25 | 50 - 150 |
| Carbon disulfide | 5.000 | 5.461 | 109 | 0.2 | 25 | 50 - 150 |
| 3-Chloropropene | 5.000 | 5.422 | 108 | 9 | 25 | 50 - 150 |
| Acetonitrile | 5.000 | 5.336 | 107 | 9 | 25 | 50 - 150 |
| Methylene chloride | 5.000 | 5.839 | 117 | 0.9 | 25 | 50 - 139 |
| Acrylonitrile | 50.00 | 55.02 | 110 | 4 | 25 | 50 - 150 |
| trans-1,2-Dichloroethene | 5.000 | 5.653 | 113 | 0.09 | 25 | 50 - 137 |
| 1,1-Dichloroethane | 5.000 | 5.773 | 115 | 5 | 25 | 59 - 138 |
| Chloroprene | 5.000 | 5.455 | 109 | 5 | 25 | 50 - 150 |
| Vinyl acetate | 10.00 | 10.83 | 108 | 7 | 25 | 50 - 150 |
| cis-1,2-Dichloroethene | 5.000 | 5.391 | 108 | 0.6 | 25 | 69 - 140 |
| 2,2-Dichloropropane | 5.000 | 5.479 | 110 | 4 | 25 | 50 - 150 |
| Propionitrile | 250.0 | 268.1 | 107 | 5 | 25 | 50 - 150 |
| 2-Butanone | 25.00 | 27.12 | 108 | 9 | 25 | 65 - 134 |
| Methacrylonitrile | 50.00 | 55.73 | 111 | 6 | 25 | 50 - 150 |
| Bromochloromethane | 5.000 | 5.687 | 114 | 0.8 | 25 | 50 - 150 |
| Chloroform | 5.000 | 5.572 | 111 | 2 | 25 | 67 - 147 |

# LCS / LCS DUPLICATE RECOVERY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-BSD1 Matrix: Water Client ID: VHFLCSD Batch: 0092014

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 5.000 | 5.323 | 106 | 2 | 25 | 71 - 137 |
| 1,1-Dichloropropene | 5.000 | 5.668 | 113 | 1 | 25 | 50 - 150 |
| Carbon tetrachloride | 5.000 | 5.357 | 107 | 5 | 25 | 68 - 145 |
| 1,2-Dichloroethane | 5.000 | 5.372 | 107 | 1 | 25 | 61 - 150 |
| Isobutyl alcohol | 250.0 | 263.2 | 105 | 16 | 25 | 50 - 150 |
| Benzene | 5.000 | 5.564 | 111 | 2 | 11 | 68 - 138 |
| Trichloroethene | 5.000 | 5.263 | 105 | 7 | 14 | 55 - 150 |
| 1,2-Dichloropropane | 5.000 | 5.689 | 114 | 5 | 25 | 67 - 137 |
| Dibromomethane | 5.000 | 5.225 | 104 | 4 | 25 | 50 - 150 |
| Methyl Methacrylate | 50.00 | 53.88 | 108 | 0.09 | 25 | 50 - 150 |
| Bromodichloromethane | 5.000 | 5.512 | 110 | 0.06 | 25 | 73 - 142 |
| cis-1,3-Dichloropropene | 5.000 | 5.438 | 109 | 1 | 25 | 74 - 134 |
| 4-Methyl-2-pentanone | 25.00 | 24.26 | 97 | 1 | 25 | 66 - 127 |
| Toluene | 5.000 | 4.651 | 93 | 2 | 13 | 60 - 142 |
| trans-1,3-Dichloropropene | 5.000 | 4.935 | 99 | 2 | 25 | 66 - 130 |
| 1,1,2-Trichloroethane | 5.000 | 4.884 | 98 | 1 | 25 | 68 - 130 |
| Ethyl Methacrylate | 50.00 | 48.08 | 96 | 0.6 | 25 | 50 - 150 |
| 1,3-Dichloropropane | 5.000 | 4.895 | 98 | 2 | 25 | 50 - 150 |
| Tetrachloroethene | 5.000 | 4.721 | 94 | 13 | 25 | 65 - 137 |
| 2-Hexanone | 25.00 | 23.79 | 95 | 0.9 | 25 | 53 - 140 |
| Dibromochloromethane | 5.000 | 4.725 | 95 | 0.7 | 25 | 68 - 137 |
| Chlorobenzene | 5.000 | 4.746 | 95 | 4 | 13 | 68 - 129 |
| 1,1,1,2-Tetrachloroethane | 5.000 | 4.688 | 94 | 0.01 | 25 | 50 - 150 |
| Ethylbenzene | 5.000 | 4.655 | 93 | 5 | 25 | 67 - 127 |
| m,p-Xylene | 10.00 | 9.335 | 93 | 6 | 25 | 60 - 140 |
| o-Xylene | 5.000 | 4.674 | 93 | 5 | 25 | 60 - 140 |
| Styrene | 5.000 | 4.758 | 95 | 2 | 25 | 66 - 139 |
| Bromoform | 5.000 | 4.618 | 92 | 3 | 25 | 62 - 138 |
| 1,1,2,2-Tetrachloroethane | 5.000 | 5.064 | 101 | 0.2 | 25 | 63 - 122 |
| 1,2,3-Trichloropropane | 5.000 | 4.485 | 90 | 5 | 25 | 50 - 150 |
| trans-1,4-Dichloro-2-butene | 20.00 | 18.22 | 91 | 2 | 25 | 50 - 150 |

# LCS / LCS DUPLICATE RECOVERY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-BSD1 Matrix: Water Client ID: VHFLCSD Batch: 0092014

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 5.000 | 4.690 | 94 | 13 | 25 | 64 - 136 |
| 1,4-Dichlorobenzene | 5.000 | 4.729 | 95 | 13 | 25 | 69 - 125 |
| 1,2-Dichlorobenzene | 5.000 | 4.664 | 93 | 10 | 25 | 71 - 127 |
| 1,2,4-Trichlorobenzene | 5.000 | 4.750 | 95 | 23 | 25 | 52 - 147 |
| Hexachlorobutadiene | 5.000 | 4.833 | 97 | 14 | 25 | 50 - 150 |
| Naphthalene | 5.000 | 4.506 | 90 | 6 | 25 | 50 - 150 |
| Xylenes (total) | 15.00 | 14.01 | 93 | 6 | 25 | 60 - 140 |

# D. Matrix Spike Results

(MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY)

MS/MSD recovery, relative percent difference and quality control acceptance criteria

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

*SW 8260B*

**MW-3MS**

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-MS1 % Solid: NA Matrix: Water Lab Source ID: 1009180-01 Source Sample: MW-3

| ANALYTE | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC. | Q | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 5.000 | 0.000 | 6.195 | 124 | | 50 - 150 |
| Chloromethane | 5.000 | 0.000 | 7.309 | 146 | | 50 - 150 |
| Vinyl chloride | 5.000 | 0.000 | 9.342 | 187 | * | 61 - 150 |
| Bromomethane | 5.000 | 0.000 | 5.299 | 106 | | 50 - 150 |
| Chloroethane | 5.000 | 5.136 | 16.75 | 232 | * | 54 - 150 |
| Trichlorofluoromethane | 5.000 | 0.000 | 5.929 | 119 | | 56 - 150 |
| Acrolein | 50.00 | 0.000 | 67.54 | 135 | | 50 - 150 |
| 1,1-Dichloroethene | 5.000 | 0.000 | 5.728 | 115 | | 74 - 143 |
| Acetone | 25.00 | 0.000 | 25.09 | 100 | | 50 - 150 |
| Iodomethane | 5.000 | 0.000 | 4.476 | 90 | | 50 - 150 |
| Carbon disulfide | 5.000 | 0.000 | 5.730 | 115 | | 50 - 150 |
| 3-Chloropropene | 5.000 | 0.000 | 6.540 | 131 | | 50 - 150 |
| Acetonitrile | 5.000 | 0.000 | 6.541 | 131 | | 50 - 150 |
| Methylene chloride | 5.000 | 0.000 | 6.179 | 124 | | 50 - 139 |
| Acrylonitrile | 50.00 | 0.000 | 58.89 | 118 | | 50 - 150 |
| trans-1,2-Dichloroethene | 5.000 | 0.3482 | 6.428 | 122 | | 50 - 137 |
| 1,1-Dichloroethane | 5.000 | 10.43 | 16.39 | 119 | | 59 - 138 |
| Chloroprene | 5.000 | 0.000 | 6.477 | 130 | | 50 - 150 |
| Vinyl acetate | 10.00 | 0.000 | 9.441 | 94 | | 50 - 150 |
| cis-1,2-Dichloroethene | 5.000 | 25.00 | 30.75 | 115 | | 69 - 140 |
| 2,2-Dichloropropane | 5.000 | 0.000 | 6.119 | 122 | | 50 - 150 |
| Propionitrile | 250.0 | 0.000 | 297.8 | 119 | | 50 - 150 |
| 2-Butanone | 25.00 | 0.000 | 24.84 | 99 | | 65 - 134 |
| Methacrylonitrile | 50.00 | 0.000 | 58.52 | 117 | | 50 - 150 |
| Bromochloromethane | 5.000 | 0.000 | 5.955 | 119 | | 50 - 150 |
| Chloroform | 5.000 | 0.000 | 6.162 | 123 | | 67 - 147 |
| 1,1,1-Trichloroethane | 5.000 | 0.000 | 5.632 | 113 | | 71 - 137 |
| 1,1-Dichloropropene | 5.000 | 0.000 | 5.906 | 118 | | 50 - 150 |
| Carbon tetrachloride | 5.000 | 0.000 | 5.493 | 110 | | 68 - 145 |
| 1,2-Dichloroethane | 5.000 | 0.1841 | 5.627 | 109 | | 61 - 150 |
| Isobutyl alcohol | 250.0 | 0.000 | 268.7 | 107 | | 50 - 150 |
| Benzene | 5.000 | 0.000 | 6.026 | 121 | | 68 - 138 |
| Trichloroethene | 5.000 | 2.782 | 8.464 | 114 | | 55 - 150 |
| 1,2-Dichloropropane | 5.000 | 0.3737 | 6.594 | 124 | | 67 - 137 |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

*SW 8260B*

**MW-3MS**

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-MS1 % Solid: NA Matrix: Water Lab Source ID: 1009180-01 Source Sample: MW-3

| ANALYTE | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC. | Q | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Dibromomethane | 5.000 | 0.000 | 5.201 | 104 | | 50 - 150 |
| Methyl Methacrylate | 50.00 | 0.000 | 58.80 | 118 | | 50 - 150 |
| Bromodichloromethane | 5.000 | 0.000 | 5.711 | 114 | | 73 - 142 |
| cis-1,3-Dichloropropene | 5.000 | 0.000 | 5.508 | 110 | | 74 - 134 |
| 4-Methyl-2-pentanone | 25.00 | 0.000 | 23.61 | 94 | | 66 - 127 |
| Toluene | 5.000 | 0.1180 | 4.907 | 96 | | 60 - 142 |
| trans-1,3-Dichloropropene | 5.000 | 0.000 | 5.188 | 104 | | 66 - 130 |
| 1,1,2-Trichloroethane | 5.000 | 0.000 | 5.238 | 105 | | 68 - 130 |
| Ethyl Methacrylate | 50.00 | 0.000 | 53.85 | 108 | | 50 - 150 |
| 1,3-Dichloropropane | 5.000 | 0.000 | 5.303 | 106 | | 50 - 150 |
| Tetrachloroethene | 5.000 | 0.000 | 5.225 | 105 | | 65 - 137 |
| 2-Hexanone | 25.00 | 0.000 | 22.99 | 92 | | 53 - 140 |
| Dibromochloromethane | 5.000 | 0.000 | 4.724 | 94 | | 68 - 137 |
| Chlorobenzene | 5.000 | 0.000 | 5.038 | 101 | | 68 - 129 |
| 1,1,1,2-Tetrachloroethane | 5.000 | 0.000 | 4.916 | 98 | | 50 - 150 |
| Ethylbenzene | 5.000 | 0.000 | 4.782 | 96 | | 67 - 127 |
| m,p-Xylene | 10.00 | 0.000 | 9.662 | 97 | | 60 - 140 |
| o-Xylene | 5.000 | 0.000 | 4.873 | 97 | | 60 - 140 |
| Styrene | 5.000 | 0.000 | 4.798 | 96 | | 66 - 139 |
| Bromoform | 5.000 | 0.000 | 4.538 | 91 | | 62 - 139 |
| 1,1,2,2-Tetrachloroethane | 5.000 | 0.000 | 5.302 | 106 | | 63 - 122 |
| 1,2,3-Trichloropropane | 5.000 | 0.000 | 4.734 | 95 | | 50 - 150 |
| trans-1,4-Dichloro-2-butene | 20.00 | 0.000 | 20.38 | 102 | | 50 - 150 |
| 1,3-Dichlorobenzene | 5.000 | 0.000 | 4.803 | 96 | | 64 - 136 |
| 1,4-Dichlorobenzene | 5.000 | 0.000 | 4.763 | 95 | | 69 - 125 |
| 1,2-Dichlorobenzene | 5.000 | 0.000 | 4.771 | 95 | | 71 - 127 |
| 1,2,4-Trichlorobenzene | 5.000 | 0.000 | 4.438 | 89 | | 52 - 147 |
| Hexachlorobutadiene | 5.000 | 0.000 | 4.212 | 84 | | 50 - 150 |
| Naphthalene | 5.000 | 0.000 | 4.121 | 82 | | 50 - 150 |
| Xylenes (total) | 15.00 | 0.000 | 14.54 | 97 | | 60 - 140 |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

*SW 8260B*

**MW-3MSD**

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-MSD1 % Solid: NA Matrix: Water Lab Source ID: 1009180-01 Source Sample: MW-3

| ANALYTE | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC. # | % RPD | Q | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 5.000 | 6.602 | 132 | 6 | | 25 | 50 - 150 |
| Chloromethane | 5.000 | 7.625 | 152 | 4 | * | 25 | 50 - 150 |
| Vinyl chloride | 5.000 | 8.247 | 165 | 12 | * | 25 | 61 - 150 |
| Bromomethane | 5.000 | 5.216 | 104 | 2 | | 25 | 50 - 150 |
| Chloroethane | 5.000 | 10.59 | 109 | 45 | * | 25 | 54 - 150 |
| Trichlorofluoromethane | 5.000 | 5.880 | 118 | 0.8 | | 25 | 56 - 150 |
| Acrolein | 50.00 | 71.50 | 143 | 6 | | 25 | 50 - 150 |
| 1,1-Dichloroethene | 5.000 | 5.679 | 114 | 0.9 | | 14 | 74 - 143 |
| Acetone | 25.00 | 25.42 | 102 | 1 | | 25 | 50 - 150 |
| Iodomethane | 5.000 | 5.252 | 105 | 16 | | 25 | 50 - 150 |
| Carbon disulfide | 5.000 | 5.653 | 113 | 1 | | 25 | 50 - 150 |
| 3-Chloropropene | 5.000 | 6.523 | 130 | 0.3 | | 25 | 50 - 150 |
| Acetonitrile | 5.000 | 6.479 | 130 | 1 | | 25 | 50 - 150 |
| Methylene chloride | 5.000 | 6.020 | 120 | 3 | | 25 | 50 - 139 |
| Acrylonitrile | 50.00 | 60.77 | 122 | 3 | | 25 | 50 - 150 |
| trans-1,2-Dichloroethene | 5.000 | 6.279 | 119 | 2 | | 25 | 50 - 137 |
| 1,1-Dichloroethane | 5.000 | 15.78 | 107 | 4 | | 25 | 59 - 138 |
| Chloroprene | 5.000 | 6.224 | 124 | 4 | | 25 | 50 - 150 |
| Vinyl acetate | 10.00 | 9.607 | 96 | 2 | | 25 | 50 - 150 |
| cis-1,2-Dichloroethene | 5.000 | 29.89 | 98 | 3 | | 25 | 69 - 140 |
| 2,2-Dichloropropane | 5.000 | 5.946 | 119 | 3 | | 25 | 50 - 150 |
| Propionitrile | 250.0 | 312.3 | 125 | 5 | | 25 | 50 - 150 |
| 2-Butanone | 25.00 | 27.26 | 109 | 9 | | 25 | 65 - 134 |
| Methacrylonitrile | 50.00 | 61.28 | 123 | 5 | | 25 | 50 - 150 |
| Bromochloromethane | 5.000 | 5.928 | 119 | 0.4 | | 25 | 50 - 150 |
| Chloroform | 5.000 | 6.019 | 120 | 2 | | 25 | 67 - 147 |
| 1,1,1-Trichloroethane | 5.000 | 5.582 | 112 | 0.9 | | 25 | 71 - 137 |
| 1,1-Dichloropropene | 5.000 | 5.876 | 118 | 0.5 | | 25 | 50 - 150 |
| Carbon tetrachloride | 5.000 | 5.587 | 112 | 2 | | 25 | 68 - 145 |
| 1,2-Dichloroethane | 5.000 | 5.603 | 108 | 0.4 | | 25 | 61 - 150 |
| Isobutyl alcohol | 250.0 | 300.6 | 120 | 11 | | 25 | 50 - 150 |
| Benzene | 5.000 | 6.005 | 120 | 0.3 | | 11 | 68 - 138 |
| Trichloroethene | 5.000 | 8.396 | 112 | 0.8 | | 14 | 55 - 150 |
| 1,2-Dichloropropane | 5.000 | 6.467 | 122 | 2 | | 25 | 67 - 137 |
| Dibromomethane | 5.000 | 5.402 | 108 | 4 | | 25 | 50 - 150 |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

*SW 8260B*

**MW-3MSD**

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-MSD1 % Solid: NA Matrix: Water Lab Source ID: 1009180-01 Source Sample: MW-3

| ANALYTE | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC. # | % RPD | Q | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|---|
| Methyl Methacrylate | 50.00 | 62.32 | 125 | 6 | | 25 | 50 - 150 |
| Bromodichloromethane | 5.000 | 5.758 | 115 | 0.8 | | 25 | 73 - 142 |
| cis-1,3-Dichloropropene | 5.000 | 5.642 | 113 | 2 | | 25 | 74 - 134 |
| 4-Methyl-2-pentanone | 25.00 | 24.50 | 98 | 4 | | 25 | 66 - 127 |
| Toluene | 5.000 | 4.813 | 94 | 2 | | 13 | 60 - 142 |
| trans-1,3-Dichloropropene | 5.000 | 5.159 | 103 | 0.6 | | 25 | 66 - 130 |
| 1,1,2-Trichloroethane | 5.000 | 5.248 | 105 | 0.2 | | 25 | 68 - 130 |
| Ethyl Methacrylate | 50.00 | 55.37 | 111 | 3 | | 25 | 50 - 150 |
| 1,3-Dichloropropane | 5.000 | 5.181 | 104 | 2 | | 25 | 50 - 150 |
| Tetrachloroethene | 5.000 | 5.104 | 102 | 2 | | 25 | 65 - 137 |
| 2-Hexanone | 25.00 | 24.10 | 96 | 5 | | 25 | 53 - 140 |
| Dibromochloromethane | 5.000 | 4.794 | 96 | 1 | | 25 | 68 - 137 |
| Chlorobenzene | 5.000 | 4.958 | 99 | 2 | | 13 | 68 - 129 |
| 1,1,1,2-Tetrachloroethane | 5.000 | 4.964 | 99 | 1 | | 25 | 50 - 150 |
| Ethylbenzene | 5.000 | 4.824 | 96 | 0.9 | | 25 | 67 - 127 |
| m,p-Xylene | 10.00 | 9.799 | 98 | 1 | | 25 | 60 - 140 |
| o-Xylene | 5.000 | 4.920 | 98 | 1 | | 25 | 60 - 140 |
| Styrene | 5.000 | 4.910 | 98 | 2 | | 25 | 66 - 139 |
| Bromoform | 5.000 | 4.630 | 93 | 2 | | 25 | 62 - 139 |
| 1,1,2,2-Tetrachloroethane | 5.000 | 5.337 | 107 | 0.7 | | 25 | 63 - 122 |
| 1,2,3-Trichloropropane | 5.000 | 4.903 | 98 | 4 | | 25 | 50 - 150 |
| trans-1,4-Dichloro-2-butene | 20.00 | 21.25 | 106 | 4 | | 25 | 50 - 150 |
| 1,3-Dichlorobenzene | 5.000 | 4.938 | 99 | 3 | | 25 | 64 - 136 |
| 1,4-Dichlorobenzene | 5.000 | 4.864 | 97 | 2 | | 25 | 69 - 125 |
| 1,2-Dichlorobenzene | 5.000 | 4.868 | 97 | 2 | | 25 | 71 - 127 |
| 1,2,4-Trichlorobenzene | 5.000 | 4.761 | 95 | 7 | | 25 | 52 - 147 |
| Hexachlorobutadiene | 5.000 | 4.419 | 88 | 5 | | 25 | 50 - 150 |
| Naphthalene | 5.000 | 4.559 | 91 | 10 | | 25 | 50 - 150 |
| Xylenes (total) | 15.00 | 14.72 | 98 | 1 | | 25 | 60 - 140 |

# E. Surrogate Recovery Results

(SURROGATE STANDARD RECOVERY AND RT SUMMARY)

# SURROGATE STANDARD RECOVERY

*SW 8260B*

Client: DRAPER

Project: WATAUGA COUNTY LANDFILL 6520-39

SDG: 1009180 Instrument: 5972hp71

Sequence: 0I20003 Calibration: 0092207

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | Q |
|---|---|---|---|---|
| **Blank (0092014-BLK1 ) ug/L** Lab File ID: 0092014-BLK171.c Analyzed: 09/20/10 11:54 | | | | |
| Dibromofluoromethane | 5.000 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 102 | 59 - 150 | |
| Toluene-d8 | 5.000 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 98 | 63 - 143 | |
| **LCS (0092014-BS1 ) ug/L** Lab File ID: 0092014-BS171.d Analyzed: 09/20/10 12:29 | | | | |
| Dibromofluoromethane | 5.000 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 89 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 95 | 63 - 143 | |
| **LCS Dup (0092014-BSD1 ) ug/L** Lab File ID: 0092014-BSD171.d Analyzed: 09/20/10 12:57 | | | | |
| Dibromofluoromethane | 5.000 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 97 | 59 - 150 | |
| Toluene-d8 | 5.000 | 90 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 92 | 63 - 143 | |
| **TRIP BLANK (1009180-10 ) ug/L** Lab File ID: 1009180-1071.d Analyzed: 09/20/10 13:29 | | | | |
| Dibromofluoromethane | 5.000 | 92 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 83 | 59 - 150 | |
| Toluene-d8 | 5.000 | 97 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 99 | 63 - 143 | |
| **MW-1 (1009180-02 ) ug/L** Lab File ID: 1009180-0271.d Analyzed: 09/20/10 13:56 | | | | |
| Dibromofluoromethane | 5.000 | 93 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 94 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 98 | 63 - 143 | |

# SURROGATE STANDARD RECOVERY

*SW 8260B*

Client: DRAPER

Project: WATAUGA COUNTY LANDFILL 6520-39

SDG: 1009180 Instrument: 5972hp71

Sequence: 0I20003 Calibration: 0092207

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | Q |
|---|---|---|---|---|
| **MW-11 (1009180-05 ) ug/L** Lab File ID: 1009180-0571.d Analyzed: 09/20/10 14:23 | | | | |
| Dibromofluoromethane | 5.000 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 92 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 99 | 63 - 143 | |
| **MW-15 (1009180-07 ) ug/L** Lab File ID: 1009180-0771.d Analyzed: 09/20/10 14:50 | | | | |
| Dibromofluoromethane | 5.000 | 102 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 108 | 59 - 150 | |
| Toluene-d8 | 5.000 | 92 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 99 | 63 - 143 | |
| **MW-19 (1009180-09 ) ug/L** Lab File ID: 1009180-0971.d Analyzed: 09/20/10 15:18 | | | | |
| Dibromofluoromethane | 5.000 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 100 | 59 - 150 | |
| Toluene-d8 | 5.000 | 93 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 100 | 63 - 143 | |
| **MW-3 (1009180-01 ) ug/L** Lab File ID: 1009180-0171.d Analyzed: 09/20/10 15:45 | | | | |
| Dibromofluoromethane | 5.000 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 97 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 95 | 63 - 143 | |
| **MW-8 (1009180-03 ) ug/L** Lab File ID: 1009180-0371.d Analyzed: 09/20/10 16:12 | | | | |
| Dibromofluoromethane | 5.000 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 93 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 99 | 63 - 143 | |

# SURROGATE STANDARD RECOVERY

*SW 8260B*

Client: DRAPER

Project: WATAUGA COUNTY LANDFILL 6520-39

SDG: 1009180 Instrument: 5972hp71

Sequence: 0I20003 Calibration: 0092207

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | Q |
|---|---|---|---|---|
| **MW-9 (1009180-04 ) ug/L** | | | | |
| Lab File ID: 1009180-0471.d Analyzed: 09/20/10 16:40 | | | | |
| Dibromofluoromethane | 5.000 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 97 | 59 - 150 | |
| Toluene-d8 | 5.000 | 94 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 95 | 63 - 143 | |
| **MW-17 (1009180-08 ) ug/L** | | | | |
| Lab File ID: 1009180-0871.d Analyzed: 09/20/10 17:07 | | | | |
| Dibromofluoromethane | 5.000 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 94 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 99 | 63 - 143 | |
| **Matrix Spike (0092014-MS1 ) ug/L** | | | | |
| Lab File ID: 0092014-MS171.d Analyzed: 09/20/10 19:35 | | | | |
| Dibromofluoromethane | 5.000 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 95 | 59 - 150 | |
| Toluene-d8 | 5.000 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 94 | 63 - 143 | |
| **Matrix Spike Dup (0092014-MSD1 ) ug/L** | | | | |
| Lab File ID: 0092014-MSD171.d Analyzed: 09/20/10 20:02 | | | | |
| Dibromofluoromethane | 5.000 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 89 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 94 | 63 - 143 | |
| **MW-12 (1009180-06 ) ug/L** | | | | |
| Lab File ID: 1009180-0671.d Analyzed: 09/20/10 20:29 | | | | |
| Dibromofluoromethane | 5.000 | 99 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 101 | 59 - 150 | |
| Toluene-d8 | 5.000 | 95 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 100 | 63 - 143 | |

# SURROGATE STANDARD RECOVERY

*SW 8260B*

Client: DRAPER

Project: WATAUGA COUNTY LANDFILL 6520-39

SDG: 1009180 Instrument: 5972hp71

Sequence: 0I20003 Calibration: 0092207

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | Q |
|---|---|---|---|---|
| **MW-10 (1009180-12 ) ug/L** Lab File ID: 1009180-1271.d Analyzed: 09/20/10 20:57 | | | | |
| Dibromofluoromethane | 5.000 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 93 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 98 | 63 - 143 | |
| **MW-2 (1009180-11 ) ug/L** Lab File ID: 1009180-1171.d Analyzed: 09/20/10 21:24 | | | | |
| Dibromofluoromethane | 5.000 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 103 | 59 - 150 | |
| Toluene-d8 | 5.000 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 98 | 63 - 143 | |
| **MW-10 (1009180-12RE1 ) ug/L** Lab File ID: 1009180-12D71.d Analyzed: 09/20/10 22:19 | | | | |
| Dibromofluoromethane | 5.000 | 103 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 106 | 59 - 150 | |
| Toluene-d8 | 5.000 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 94 | 63 - 143 | |
| **MW-2 (1009180-11RE1 ) ug/L** Lab File ID: 1009180-11D71.d Analyzed: 09/20/10 22:46 | | | | |
| Dibromofluoromethane | 5.000 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 100 | 59 - 150 | |
| Toluene-d8 | 5.000 | 95 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 94 | 63 - 143 | |

# F. Internal Standard Results

(INTERNAL STANDARD AREA AND RT SUMMARY)

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW 8260B

Laboratory: COMPUCHEM
Client: DRAPER
Sequence: 0I20003

SDG: 1009180
Project: WATAUGA COUNTY LANDFILL 6520-39
Instrument: 5972hp71
Calibration: 0092207

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Check (0I20003-CCV1 )** | | | Lab File ID: 0I20003-CCV171.d | | | Analyzed: 09/20/10 11:17 | | | |
| Fluorobenzene | 594735 | 11.362 | 674405 | 11.364 | 88 | 50 - 200 | -0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 420017 | 13.646 | 422342 | 13.648 | 99 | 50 - 200 | -0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 213551 | 15.289 | 217011 | 15.291 | 98 | 50 - 200 | -0.0020 | +/-0.06 | |
| **Blank (0092014-BLK1 )** | | | Lab File ID: 0092014-BLK171.d | | | Analyzed: 09/20/10 11:54 | | | |
| Fluorobenzene | 579775 | 11.364 | 594735 | 11.362 | 97 | 50 - 200 | 0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 396418 | 13.648 | 420017 | 13.646 | 94 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 186513 | 15.291 | 213551 | 15.289 | 87 | 50 - 200 | 0.0020 | +/-0.06 | |
| **LCS (0092014-BS1 )** | | | Lab File ID: 0092014-BS171.d | | | Analyzed: 09/20/10 12:29 | | | |
| Fluorobenzene | 560088 | 11.359 | 594735 | 11.362 | 94 | 50 - 200 | -0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 398242 | 13.642 | 420017 | 13.646 | 95 | 50 - 200 | -0.0040 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 200765 | 15.296 | 213551 | 15.289 | 94 | 50 - 200 | 0.0070 | +/-0.06 | |
| **LCS Dup (0092014-BSD1 )** | | | Lab File ID: 0092014-BSD171.d | | | Analyzed: 09/20/10 12:57 | | | |
| Fluorobenzene | 540773 | 11.36 | 594735 | 11.362 | 91 | 50 - 200 | -0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 375350 | 13.643 | 420017 | 13.646 | 89 | 50 - 200 | -0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 191028 | 15.286 | 213551 | 15.289 | 89 | 50 - 200 | -0.0030 | +/-0.06 | |
| **TRIP BLANK (1009180-10 )** | | | Lab File ID: 1009180-1071.d | | | Analyzed: 09/20/10 13:29 | | | |
| Fluorobenzene | 511005 | 11.365 | 594735 | 11.362 | 86 | 50 - 200 | 0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 320165 | 13.648 | 420017 | 13.646 | 76 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 139097 | 15.291 | 213551 | 15.289 | 65 | 50 - 200 | 0.0020 | +/-0.06 | |
| **MW-1 (1009180-02 )** | | | Lab File ID: 1009180-0271.d | | | Analyzed: 09/20/10 13:56 | | | |
| Fluorobenzene | 524164 | 11.36 | 594735 | 11.362 | 88 | 50 - 200 | -0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 341126 | 13.643 | 420017 | 13.646 | 81 | 50 - 200 | -0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 155044 | 15.286 | 213551 | 15.289 | 73 | 50 - 200 | -0.0030 | +/-0.06 | |
| **MW-11 (1009180-05 )** | | | Lab File ID: 1009180-0571.d | | | Analyzed: 09/20/10 14:23 | | | |
| Fluorobenzene | 508919 | 11.359 | 594735 | 11.362 | 86 | 50 - 200 | -0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 336657 | 13.643 | 420017 | 13.646 | 80 | 50 - 200 | -0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 150627 | 15.296 | 213551 | 15.289 | 71 | 50 - 200 | 0.0070 | +/-0.06 | |
| **MW-15 (1009180-07 )** | | | Lab File ID: 1009180-0771.d | | | Analyzed: 09/20/10 14:50 | | | |
| Fluorobenzene | 486424 | 11.365 | 594735 | 11.362 | 82 | 50 - 200 | 0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 327412 | 13.648 | 420017 | 13.646 | 78 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 149572 | 15.292 | 213551 | 15.289 | 70 | 50 - 200 | 0.0030 | +/-0.06 | |

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW 8260B

Laboratory: COMPUCHEM
Client: DRAPER
Sequence: 0I20003

SDG: 1009180
Project: WATAUGA COUNTY LANDFILL 6520-39
Instrument: 5972hp71
Calibration: 0092207

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **MW-19 (1009180-09 )** | | | Lab File ID: 1009180-0971.d | | | Analyzed: 09/20/10 15:18 | | | |
| Fluorobenzene | 488402 | 11.366 | 594735 | 11.362 | 82 | 50 - 200 | 0.0040 | +/-0.06 | |
| Chlorobenzene-d5 | 320326 | 13.649 | 420017 | 13.646 | 76 | 50 - 200 | 0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 143906 | 15.292 | 213551 | 15.289 | 67 | 50 - 200 | 0.0030 | +/-0.06 | |
| **MW-3 (1009180-01 )** | | | Lab File ID: 1009180-0171.d | | | Analyzed: 09/20/10 15:45 | | | |
| Fluorobenzene | 454973 | 11.365 | 594735 | 11.362 | 77 | 50 - 200 | 0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 283115 | 13.648 | 420017 | 13.646 | 67 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 133106 | 15.291 | 213551 | 15.289 | 62 | 50 - 200 | 0.0020 | +/-0.06 | |
| **MW-8 (1009180-03 )** | | | Lab File ID: 1009180-0371.d | | | Analyzed: 09/20/10 16:12 | | | |
| Fluorobenzene | 454385 | 11.364 | 594735 | 11.362 | 76 | 50 - 200 | 0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 302282 | 13.648 | 420017 | 13.646 | 72 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 136275 | 15.291 | 213551 | 15.289 | 64 | 50 - 200 | 0.0020 | +/-0.06 | |
| **MW-9 (1009180-04 )** | | | Lab File ID: 1009180-0471.d | | | Analyzed: 09/20/10 16:40 | | | |
| Fluorobenzene | 464040 | 11.36 | 594735 | 11.362 | 78 | 50 - 200 | -0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 303330 | 13.643 | 420017 | 13.646 | 72 | 50 - 200 | -0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 141244 | 15.296 | 213551 | 15.289 | 66 | 50 - 200 | 0.0070 | +/-0.06 | |
| **MW-17 (1009180-08 )** | | | Lab File ID: 1009180-0871.d | | | Analyzed: 09/20/10 17:07 | | | |
| Fluorobenzene | 455037 | 11.359 | 594735 | 11.362 | 77 | 50 - 200 | -0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 299798 | 13.642 | 420017 | 13.646 | 71 | 50 - 200 | -0.0040 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 134512 | 15.296 | 213551 | 15.289 | 63 | 50 - 200 | 0.0070 | +/-0.06 | |
| **Matrix Spike (0092014-MS1 )** | | | Lab File ID: 0092014-MS171.d | | | Analyzed: 09/20/10 19:35 | | | |
| Fluorobenzene | 454578 | 11.365 | 594735 | 11.362 | 76 | 50 - 200 | 0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 312271 | 13.648 | 420017 | 13.646 | 74 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 157325 | 15.291 | 213551 | 15.289 | 74 | 50 - 200 | 0.0020 | +/-0.06 | |
| **Matrix Spike Dup (0092014-MSD1 )** | | | Lab File ID: 0092014-MSD171.d | | | Analyzed: 09/20/10 20:02 | | | |
| Fluorobenzene | 491445 | 11.364 | 594735 | 11.362 | 83 | 50 - 200 | 0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 346994 | 13.648 | 420017 | 13.646 | 83 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 175029 | 15.291 | 213551 | 15.289 | 82 | 50 - 200 | 0.0020 | +/-0.06 | |
| **MW-12 (1009180-06 )** | | | Lab File ID: 1009180-0671.d | | | Analyzed: 09/20/10 20:29 | | | |
| Fluorobenzene | 471326 | 11.366 | 594735 | 11.362 | 79 | 50 - 200 | 0.0040 | +/-0.06 | |
| Chlorobenzene-d5 | 311938 | 13.649 | 420017 | 13.646 | 74 | 50 - 200 | 0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 138337 | 15.293 | 213551 | 15.289 | 65 | 50 - 200 | 0.0040 | +/-0.06 | |

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW 8260B

| | | | |
|---|---|---|---|
| Laboratory: | COMPUCHEM | SDG: | 1009180 |
| Client: | DRAPER | Project: | WATAUGA COUNTY LANDFILL 6520-39 |
| Sequence: | 0I20003 | Instrument: | 5972hp71 |
| | | Calibration: | 0092207 |

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **MW-10 (1009180-12 )** | | | Lab File ID: 1009180-1271.d | | | Analyzed: 09/20/10 20:57 | | | |
| Fluorobenzene | 445214 | 11.366 | 594735 | 11.362 | 75 | 50 - 200 | 0.0040 | +/-0.06 | |
| Chlorobenzene-d5 | 298824 | 13.649 | 420017 | 13.646 | 71 | 50 - 200 | 0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 137318 | 15.292 | 213551 | 15.289 | 64 | 50 - 200 | 0.0030 | +/-0.06 | |
| **MW-2 (1009180-11 )** | | | Lab File ID: 1009180-1171.d | | | Analyzed: 09/20/10 21:24 | | | |
| Fluorobenzene | 444779 | 11.36 | 594735 | 11.362 | 75 | 50 - 200 | -0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 301825 | 13.643 | 420017 | 13.646 | 72 | 50 - 200 | -0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 134463 | 15.286 | 213551 | 15.289 | 63 | 50 - 200 | -0.0030 | +/-0.06 | |
| **MW-10 (1009180-12RE1 )** | | | Lab File ID: 1009180-12D71.d | | | Analyzed: 09/20/10 22:19 | | | |
| Fluorobenzene | 422646 | 11.365 | 594735 | 11.362 | 71 | 50 - 200 | 0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 295827 | 13.648 | 420017 | 13.646 | 70 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 136982 | 15.292 | 213551 | 15.289 | 64 | 50 - 200 | 0.0030 | +/-0.06 | |
| **MW-2 (1009180-11RE1 )** | | | Lab File ID: 1009180-11D71.d | | | Analyzed: 09/20/10 22:46 | | | |
| Fluorobenzene | 421706 | 11.359 | 594735 | 11.362 | 71 | 50 - 200 | -0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 282933 | 13.643 | 420017 | 13.646 | 67 | 50 - 200 | -0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 128782 | 15.286 | 213551 | 15.289 | 60 | 50 - 200 | -0.0030 | +/-0.06 | |

# G. Blank Data

(PREPARATION BATCH SUMMARY)

Organic Analysis Data Sheets (OADS), Tentatively Identified Compounds (TICs) and Surrogate Recovery Results

# PREPARATION BATCH SUMMARY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Batch: 0092014 Matrix: Water Preparation: SW 5030A/5030B

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL/WT (mL) | FINAL VOL/WT (mL) |
|---|---|---|---|---|
| VBLKHF | 0092014-BLK1 | 09/20/10 11:54 | 25.0 | 25.0 |
| VHFLCS | 0092014-BS1 | 09/20/10 11:54 | 25.0 | 25.0 |
| VHFLCSD | 0092014-BSD1 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-3MS | 0092014-MS1 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-3MSD | 0092014-MSD1 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-3 | 1009180-01 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-1 | 1009180-02 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-8 | 1009180-03 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-9 | 1009180-04 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-11 | 1009180-05 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-12 | 1009180-06 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-15 | 1009180-07 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-17 | 1009180-08 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-19 | 1009180-09 | 09/20/10 11:54 | 25.0 | 25.0 |
| TRIP BLANK | 1009180-10 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-2 | 1009180-11 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-2DL | 1009180-11RE1 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-10 | 1009180-12 | 09/20/10 11:54 | 25.0 | 25.0 |
| MW-10DL | 1009180-12RE1 | 09/20/10 11:54 | 25.0 | 25.0 |

# H. Sample Preparation and Analysis Holding Time Data

(HOLDING TIME SUMMARY)

Sample collection, receipt, preparation and analysis dates with quality control acceptance criteria.

# ANALYSIS SEQUENCE SUMMARY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Sequence: 0I20003 Instrument: 5972hp71

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| BFB | 0I20003-TUN1 | 0I20003-TUN171.d | 09/20/10 10:53:00 |
| VSTD005 | 0I20003-CCV1 | 0I20003-CCV171.d | 09/20/10 11:17:00 |
| VBLKHF | 0092014-BLK1 | 0092014-BLK171.d | 09/20/10 11:54:00 |
| VHFLCS | 0092014-BS1 | 0092014-BS171.d | 09/20/10 12:29:00 |
| VHFLCSD | 0092014-BSD1 | 0092014-BSD171.d | 09/20/10 12:57:00 |
| TRIP BLANK | 1009180-10 | 1009180-1071.d | 09/20/10 13:29:00 |
| MW-1 | 1009180-02 | 1009180-0271.d | 09/20/10 13:56:00 |
| MW-11 | 1009180-05 | 1009180-0571.d | 09/20/10 14:23:00 |
| MW-15 | 1009180-07 | 1009180-0771.d | 09/20/10 14:50:00 |
| MW-19 | 1009180-09 | 1009180-0971.d | 09/20/10 15:18:00 |
| MW-3 | 1009180-01 | 1009180-0171.d | 09/20/10 15:45:00 |
| MW-8 | 1009180-03 | 1009180-0371.d | 09/20/10 16:12:00 |
| MW-9 | 1009180-04 | 1009180-0471.d | 09/20/10 16:40:00 |
| MW-17 | 1009180-08 | 1009180-0871.d | 09/20/10 17:07:00 |
| MW-3MS | 0092014-MS1 | 0092014-MS171.d | 09/20/10 19:35:00 |
| MW-3MSD | 0092014-MSD1 | 0092014-MSD171.d | 09/20/10 20:02:00 |
| MW-12 | 1009180-06 | 1009180-0671.d | 09/20/10 20:29:00 |
| MW-10 | 1009180-12 | 1009180-1271.d | 09/20/10 20:57:00 |
| MW-2 | 1009180-11 | 1009180-1171.d | 09/20/10 21:24:00 |
| MW-10DL | 1009180-12RE1 | 1009180-12D71.d | 09/20/10 22:19:00 |
| MW-2DL | 1009180-11RE1 | 1009180-11D71.d | 09/20/10 22:46:00 |

CompuChem, a Division of Liberty Analytical Corporation

# I. SAMPLE DATA PACKAGE

GC/MS by SW-846

The sample data package shall include data for all analyses of all samples in one Workorder/Sample Delivery Group (SDG), including field samples, dilutions, reanalyses, blanks, matrix spikes, matrix spike duplicates, and laboratory control samples. The sample data package consists of the following:

## A. SDG Narrative

## B. Chain-of-Custody Documentation

## C. SDG Data

METHOD: 8260B

SDG: 1009180

# A. SDG Narrative

# CompuChem

**A division of Liberty Analytical Corporation**
**501 Madison Avenue**
**Cary, N.C. 27513**
**Tel: 919/379-4100 Fax: 919/379-4050**


**SDG NARRATIVE**
**SDG # 1009180**
**PROTOCOL: SW-846**
**SAMPLE IDENTIFICATIONS: MW-3, MW-1, MW-8, MW-9, MW-11, MW-12, MW-15, MW-17, MW-19, TRIP BLANK, MW-2, and MW-10**

The 12 aqueous samples listed above were received intact, refrigerated at 0.6C, with proper documentations, in sealed shipping containers, on September 16th, 2010. The samples were scheduled for the requested analyses of the volatile fraction. SW-846, 3rd Edition, Update 3, 8260B was used to prepare and analyze the samples, with the exceptions and/or additions requested by the client. All pertinent Quality Assurance notices are included in the narrative section, and all pertinent Laboratory notices for SDG 1009180 are included in the sample data sections.

Analysis holding time requirements was met for all samples, except sample TRIP BLANK. The sample, TRIP BLANK, was received out of holding time. The pH values of the samples were equal to 1. There were volatile Project/Target Compound List (TCL) analytes above the Contract Required Quantitation Limit (CRQL) identified in eight/12 of the samples. Tentatively Identified Compounds (TICs) were found in five/12 of these samples. All of the system monitoring compounds met recovery criteria in the analyses of the samples. All of the internal standards met response and retention time criteria in the analyses of the samples.

Based on historical data, the sample MW-12 was analyzed and reported using dilution of raw sample. As per client request, the samples, MW-2 and MW-10, were analyzed and reported using neat and dilution of the raw samples. In the initial analyses of samples, MW-2 and MW-10, the on-column amounts exceeded the instrument's analytical range as defined by the highest concentration level of the Initial Calibration. The samples were reanalyzed using smaller aliquot of raw samples to bring the on-column amounts into range. We have reported both analyses of the samples MW-2 and MW-10.

All Bromofluorobenzene (BFB) abundance criteria were met for tunes associated to this SDG. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG. There were no manual integrations performed on any of the process files associated with this SDG. The associated method blank met all quality control criteria. The associated Laboratory Control Samples (VHFLCS/VHFLCSD) met all accuracy and precision criteria. Sample MW-3 was requested for matrix spike/matrix spike duplicate (MS/MSD) for the volatile fraction with this SDG. The associated duplicate matrix spikes met most of the advisory accuracy and precision criteria.

I certify that this data package complies with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Furthermore, I certify that the tests used in this report meet all requirements of the NELAC standards unless otherwise stated in the SDG narrative or QA notice. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Preeti Khare

Preeti Khare
Data Reviewer I
September 25th, 2010

## GC and GC/MS Column and Trap Specifications Table

| SDG #: | 1009180 |
|---|---|

### COLUMNS

| Columns Utilized | Brand Name | Coating Material | ID (mm) | Film Thickness (um) | Length (m) |
|---|---|---|---|---|---|
| | **GC Laboratory** | | | | |
| | Restek | RTX-5 | 0.53 | 1.0 | 30 |
| | Restek | RTX-SMS | 0.53 | 1.0 | 30 |
| √ | Restek | clpest | 0.32 | 0.5 | 30 |
| √ | Restek | clpest2 | 0.32 | 0.42 | 30 |
| | J&W | DB-210 | 0.53 | 1.0 | 30 |
| | J&W | GS-GASPRO | 0.32 | N/A | 30 |
| | **GC Volatiles Laboratory** | | | | |
| | Restek | RTX-Volatiles | 0.53 | 2.0 | 30 |
| | **GC/MS Volatiles Laboratory** | | | | |
| | Restek | RTX-VMS | 0.18 | 1.0 | 20 |
| √ | Supelco | SPB-624 | 0.32 | 1.8 | 60 |
| | Supelco | SPB-624 | 0.53 | 3.0 | 75 |
| | Phenomonex | ZB-624 | 0.32 | 1.8 | 60 |
| | **GC/MS Semivolatiles Laboratory** | | | | |
| √ | Restek | RTX-5MS | 0.32 | 0.25 | 30 |
| | Phenomonex | ZB-5MS | 0.32 | 0.25 | 30 |
| | **HPLC Laboratory** | | | | |
| | Supelco | Supelcosil LC-PAH | 4.6 | 5.0 | 15 cm |
| | Supelco | Discovery RP Amide C16 | 4.6 | 5.0 | 25 cm |
| | Restek | Pinnacle Cyano | 4.6 | 5.0 | 25 cm |
| | Restek | Allure C18 | 4.6 | 5.0 | 25 cm |

### TRAPS

| | | |
|---|---|---|
| | **GC and GC/MS Volatiles Laboratory** | |
| | Supelco J (BETXTRAP™) | * 7.7 cm Carbopack C |
| | | * 1.2 cm Carbopack B |
| √ | Supelco K (Vocarb3000) | * 10 cm of Carbopack B (Graphitized Carbons) |
| | | * 6 cm of Carboxen 1000 (Carbon molecular sieves) |
| | | * 1 cm of Carboxen 1001 (Carbon molecular sieves) |

Rev. 28

# CompuChem's Pagination Convention

As required by the EPA CLP Statement of Work (SOW) documents, data to be delivered must be paginated (by machine or hand). In the event that the initial numbering is incorrect (a page numbered twice or a page skipped, for example), it is CompuChem's policy to add an alphabetic suffix to a page number when necessary (e.g., 100A, 100B, etc.).

Revision 6 (12/6/2005)

# Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC chemists. An Extracted Ion Current Profile (EICP) or a GC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC analysis. The manual editing/integration flags are:

**M** - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak.

**H** - Denotes that the data reviewer, GC/MS operator, or GC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

**MH** - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

**L** - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

**ML** - Denotes that an alternate library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

The EPA CLP SOW documents require additional explanations for manual editing/integration. In the accompanying raw data packages, additional codes have been applied to the "M" flag and carry the following meanings;

**M1** - The compound was not found by the automatic integration routine.

**M2** - The compound was incorrectly integrated by the automatic integration routine.

**M3** - The co-eluting compounds were incorrectly integrated by the automatic integration routine.

These codes will appear in the GC/MS and GC raw data.

Revision 7 (12/6/2005)

# DATA REPORTING QUALIFIERS

On the Form I, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on Form I for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 □g/L, but a concentration of 3 □g/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥85% in the SOM01.2 SOW document), the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.

For SW 846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the lower of the two values is reported and flagged with a P. When the RPD is equal to or less than 40%, our policy is to also report the lower of the two values, although the choice could be a project specific issue. These SW-846 policies are consistent with Method 8000C. If Method 8000B is required, the higher of the two values is reported. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

# DATA REPORTING QUALIFIERS (continued)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on Form I for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the Form I for the more diluted sample, and **all** reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate Forms I are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses <u>are not combined</u> on a single Form I.

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

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

Revision 12 (04-14-2010)

# B. Chain-of-Custody

The laboratory shall include a copy of the Chain-of-Custody (CoC) documentation for all of the samples in the SDG. The CoC documents shall be arranged in increasing Client Sample ID number order, considering both letters and numbers.

# CHAIN OF CUSTODY RECORD

KPC 8-26-10

1003173

82

**Laboratory:** CompuChem Environmental Corp., Liberty Analytical 501 Madison Ave. Cary, NC 27513 (800) 833 5097 Fax (919) 379-4050 Attn: Cathy Dover

| | | | | | |
|---|---|---|---|---|---|
| **Client:** | Watauga County, NC | **Consultant:** | Draper Aden Associates | **Sample Site:** | Watauga County Landfill |
| **Attn:** | Mr. J.V. Potter | **Attn:** | Janet C. Frazier | **Location:** | Watauga County, NC |
| **Address:** | 842 West King Street?/Courthouse, Suite 1<br>Boone, NC 28607 | **Address:** | 2206 South Main Street<br>Blacksburg, Virginia 24060 | **Event:** | September 2010 Semiannual Assess. Monitoring Event |
| **Phone:** | (828) 264-5305 | **Phone:** | (540) 552-0444 | **DAA JN:** | 6520-39 |
| **Fax:** | 0 | **Fax:** | (540) 552-0291 | **Lab JN:** | |
| **Fax:** | 0 | | | | |

**Project Specific (PS) or Batch (B) QC:** YES
**Sample Collection for Project Complete?** YES
**Carrier:** _____
**Tracking Number:** _____

**Box 1: Matrix**
SW Surface Water; GW Groundwater; L Leachate; S Soil; T Trip Blank; E Equipment Blank; P Product; O Other

**Box 2: Preservative**
A HCL; B $HNO_3$; C $H_2SO_4$; D $Na_2S_2O_3$; E NaOH; F ZnAc; G Other (Specify); H None

**Box 3: Filtered/Unfiltered**
F Filtered; U Unfiltered

**Box 4: Sample Type**
G Grab; C Composite

**Box 5: Sample Container Type**
P Plastic; V VOA; AG Amber Glass; CG Clear Glass

**Invoice**
Copy to Consultant: YES
Bill: CLIENT OTHER _____
Preserved and shipped on Ice: YES

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Box 4 - Sample Type | | | | | G | | | | | | | |
| Box 3 - Filtered/Unfiltered | | | | | U | | | | | | | |
| Required pH of Sample | | | | | <2 | | | | | | | |
| Box 2 - Preservative | | | | | A | | | | | | | |
| Box 5 - Sample Container Type | | | | | 3-40ml V | | | | | | | |
| **Sample ID** | **Date: 2010** | **Time** | **Box 1: Matrix** | **Number of Bottles** | **8260B - 25mL Purge** | | | | | | | |
| MW-1 | 9/13 | 1220 | GW | 3 | X | | | | | 1009180-02 | | |
| MW-2 | 9/13 | 1540 | GW | ~~3~~ 5 | X | | | | | -11 | | |
| MW-3 | 9/14 | 1415 | GW | 3 | X | | | | | 1009180-01 | | |
| MW-3ms | | 1415 | GW | 3 | X | | | | | | | |
| MW-3msd | | 1415 | GW | 3 | X | | | | | | | |
| MW-8 | 9/14 | 1310 | GW | 3 | X | | | | | 1009180-03 | | |
| MW-9 | 9/13 | 1315 | GW | 3 | X | | | | | -04 | | |
| MW-10 | 9/13 | 1800 | GW | ~~3~~ 5 | X | | | | | -12 | | |
| MW-11 | 9/14 | 1550 | GW | 3 | X | | | | | -05 | | |
| MW-12 | | 1630 | GW | 3 | X | | | | | -06 | | |
| MW-15 | | 1215 | GW | 3 | X | | | | | -07 | | |
| MW-17 | | 1425 | GW | 3 | X | | | | | -08 | | |
| MW-19 | 9/14 | 1110 | GW | 3 | X | | | | | -09 | | |
| Trip Blank | 9/3 | | T | 3 | X | | | | | -10 | | |

**GENERAL NOTES:**
1. Level 4 with EDD & PDF.
2. Report all calibrated target analytes, same as previous events.
3. Note that project required quantitation and detectionlimits, are same as previous.

(*) analyze and report undiluted + w/dilution (MW-2). JVP 8/26/2

(*) analyze + report undiluted + w/ dilution (MW-10) JVP 8/26/2

**Clients Special Instructions:** Level 4 deliverables w/ EDD & PDF.

SN0015

Received by lab in Good Condition ✓ Yes ____ No Custody Seal Intact ✓ Yes ____ No Temperature upon arrival 0.6°C Received on Ice ✓ Yes ____ No
Describe problems, if any:

| | | | | | | |
|---|---|---|---|---|---|---|
| Sampler Name (Print): Dale Slaughter | Date: 9/13/10 | #1 Relinquished by (Signature): Dale Slaughter | Date: 9/15/10 | #2 Relinquished by (Signature): | Date: | Sample Storage Time Requested: |
| Sampler Signature: Dale Slaughter | Time: 0730 | Company Name: DAA | Time: 1700 | Company Name: | Time: | |
| Sampler Name (Print): Chris Branscome | Date: 9/13/10 | #1 Received by (Signature): Jennifer Dorel | Date: 9/16/10 | #2 Received by (Signature): | Date: | 30 DYS ORG/6 MTHS INORG |
| Sampler Signature: Chris Branscome | Time: 0730 | Company Name: CompuChem | Time: 0932 | Company Name: | Time: | |

**ANALYTICAL METHOD: 8260B/5030B – 25mL Purge**
**TYPE METHOD: GCMS**
**CLASS: VOLATILE**

**Run For All Monitoring Wells & Trip Blank:**

| No. | ANALYTE | CAS RN |
|---|---|---|
| 1. | Acetone | 67-64-1 |
| 2. | Acetonitrile (methyl cyanide) | 75-05-8 |
| 3. | Acrolein | 107-02-8 |
| 4. | Acrylonitrile | 107-13-1 |
| 5. | Allyl chloride | 107-05-1 |
| 6. | Benzene | 71-43-2 |
| 7. | Bromochloromethane | 74-97-5 |
| 8. | Bromodichloromethane | 75-27-4 |
| 9. | Bromoform (tribromomethane) | 75-25-2 |
| 10. | Bromomethane; (Methyl bromide) | 74-83-9 |
| 11. | 2-butanone (methyl ethyl ketone - MEK) | 78-93-3 |
| 12. | Carbon disulfide | 75-15-0 |
| 13. | Carbon tetrachloride | 56-23-5 |
| 14. | Chlorobenzene | 108-90-7 |
| 15. | Chloroethane (ethyl chloride) | 75-00-3 |
| 16. | Chloroform (trichloromethane) | 67-66-3 |
| 17. | chloromethane ; (Methyl chloride) | 74-87-3 |
| 18. | Chloroprene | 126-99-8 |
| 19. | Dibromochloromethane | 124-48-1 |
| 20. | dibromomethane, (Methylene bromide) | 74-95-3 |
| 21. | 1,2-dichlorobenzene; (o-dichlorobenzene) | 95-50-1 |
| 22. | 1,3-dichlorobenzene, (m-dichlorobenzene) | 541-73-1 |
| 23. | 1,4-dichlorobenzene; (p-dichlorobenzene) | 106-46-7 |
| 24. | trans-1,4-dichloro-2-butene | 110-57-6 |
| 25. | Dichlorodifluoromethane | 75-71-8 |
| 26. | 1,1-dichloroethane | 75-34-3 |
| 27. | 1,2-dichloroethane | 107-06-2 |
| 28. | 1,1-dichloroethene (vinylidene chloride) | 75-35-4 |
| 29. | cis-1,2-dichloroethene | 156-59-2 |
| 30. | trans-1,2-dichloroethene | 156-60-5 |
| 31. | 1,2-dichloropropane | 78-87-5 |
| 32. | 1,3-dichloropropane | 142-28-9 |
| 33. | 2,2-dichloropropane | 594-20-7 |
| 34. | 1,1-dichloropropene | 563-58-6 |
| 35. | cis-1,3-dichloropropene | 10061-01-5 |
| 36. | trans-1,3-dichloropropene | 10061-02-6 |
| 37. | Ethylbenzene | 100-41-4 |
| 38. | Ethyl methacrylate | 97-63-2 |
| 39. | Hexachlorobutadiene | 87-68-3 |
| 40. | 2-hexanone (methyl butyl ketone - MBK) | 591-78-6 |
| 41. | iodomethane; (Methyl iodide) | 74-88-4 |
| 42. | Isobutyl alcohol | 78-83-1 |
| 43. | Methacrylonitrile | 126-98-7 |
| 44. | Methyl methacrylate | 80-62-6 |
| 45. | 4-methyl-2-pentanone (methyl isobutyl ketone) | 108-10-1 |
| 46. | Naphthalene | 91-20-3 |
| 47. | Propionitrile | 107-12-0 |
| 48. | Styrene (phenylethene) | 100-42-5 |

JWS 03-24-10

KFC – 2/19/2009
\\bbg-files\projects\admin\divisions\envr\templates\bburg eteam temp\field events\watauga\pre-event set up\2010 02-coremw's,surf,& res.parameterlists.doc 11/25/98 3:04 PM

3/5

| | |
|---|---|
| 49. 1,1,1,2-tetrachloroethane | 630-20-6 |
| 50. 1,1,2,2-tetrachloroethane | 79-34-5 |
| 51. Tetrachloroethene | 127-18-4 |
| 52. Toluene (methyl benzene) | 108-88-3 |
| 53. 1,2,4-trichlorobenzene | 120-82-1 |
| 54. 1,1,1-trichloroethane (methyl chloroform) | 71-55-6 |
| 55. 1,1,2-trichloroethane | 79-00-5 |
| 56. Trichloroethene | 79-01-6 |
| 57. Trichlorofluoromethane (CFC-11) | 75-69-4 |
| 58. 1,2,3-trichloropropane | 96-18-4 |
| 59. Vinyl acetate | 108-05-4 |
| 60. Xylenes (total) | 1330-20-7 |

## ADDITIONAL ANALYTES FOR 8260B

| | | |
|---|---|---|
| 61 | methylene chloride | 75-09-2 |
| 62 | Vinyl chloride | 75-01-4 |

TETRA TECH NUS, INC

CHAIN OF CUSTODY
NUMBER: ED00000136-6

| Project No: | Facility: | Project Manager: | Carrier: | Laboratory Name: |
|---|---|---|---|---|
| **112G02122** | **CRANE NSWC** | **Tony Klimek** | **Federal Express** | **CompuChem (Div of Liberty Analytical Inc.)**<br>**501 Madison Avenue**<br>**Cary, NC 27513** |
| Task No: | Turn Around Time: | Field Ops Leader: | Carrier/Waybill No. | Point of Contact: |
| **F274** | **Standard** | **George TenEyck** | **8631 3888 4898** | **Cathy Dover**<br>**(919) 379-4089** |

| Date | Sample ID # | Time | Analysis | Loc ID | Matrix | Description | Preservative | Container Count | Container Type | Container Reqs | Comments | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 09/17/2010 | 21FD091710-01 | 00:00 | SW-846 8270C/8082 | QC | SO | PAHs/PCBs | 4°C | 1 | Glass - Clear | 8 oz. wide-mouth w/Teflon cap | 1009203-12 | |
| 09/17/2010 | 21FD091710-01 | 00:00 | SW-846 6010B/7471A | QC | SO | TAL Metals (full list)/Mercury | 4°C | 1 | Glass - Clear | 2 oz. wide-mouth w/Teflon cap | | |
| 09/17/2010 | 21FD091710-01 | 00:00 | SW-846 8260B | QC | SO | VOCs | 4°C | 3 | EnCore | 5 gram EnCore | | |
| 09/17/2010 | 21FD091710-01 | 00:00 | Percent Moisture | QC | SO | Percent Moisture for VOCs | None | 1 | Glass - Clear | 4 oz. wide-mouth w/Teflon cap | | |
| 09/17/2010 | 21RB091710-01 | 08:30 | SW-846 8270C/8082 | QC | AQ | PAHs/PCBs | 4°C | 4 | Glass - Amber | 1L | equipment rinsate blank | 1009180-05 |
| 09/17/2010 | 21RB091710-01 | 08:30 | SW-846 8260B | QC | AQ | VOCs | 4°C/HCL | 3 | Glass - Clear | 40ml vials | equipment rinsate blank | |
| 09/17/2010 | 21RB091710-01 | 08:30 | SW-846 6010B/7470A | QC | AQ | Metals and Mercury (Total) | 4°C/HNO3 | 1 | Plastic - PE | 500ml | equipment rinsate blank | |
| 09/17/2010 | 21RB091710-01 | 08:30 | SW-846 6010B/7470A-Filtered | QC | AQ | Metals and Mercury (Dissolved) | 4°C/HNO3 | 1 | Plastic - PE | 500ml | equipment rinsate blank | 1009205-04 |
| 09/17/2010 | 21RB091710-02 | 09:10 | SW-846 8270C/8082 * | QC | AQ | PAHs/PCBs | 4°C | 4 (3) | Glass - Amber | 1L | equipment rinsate blank | 1009180-06 |
| 09/17/2010 | 21RB091710-02 | 09:10 | SW-846 8260B | QC | AQ | VOCs | 4°C/HCL | 3 | Glass - Clear | 40ml vials | equipment rinsate blank | |
| 09/17/2010 | 21RB091710-02 | 09:10 | SW-846 6010B/7470A | QC | AQ | Metals and Mercury (Total) | 4°C/HNO3 | 1 | Plastic - PE | 500ml | equipment rinsate blank | |
| 09/17/2010 | 21RB091710-02 | 09:10 | SW-846 6010B/7470A-Filtered | QC | AQ | Metals and Mercury (Dissolved) | 4°C/HNO3 | 1 | Plastic - PE | 500ml | equipment rinsate blank | 1009205-05 |
| 09/17/2010 | 21SB35-SO-0002 | 11:30 | SW-846 8270C/8082 | 21SB35 | SO | PAHs/PCBs | 4°C | 1 | Glass - Clear | 8 oz. wide-mouth w/Teflon cap | 1009203-13 | |
| 09/17/2010 | 21SB35-SO-0002 | 11:30 | SW-846 6010B/7471A | 21SB35 | SO | TAL Metals (full list)/Mercury | 4°C | 1 | Glass - Clear | 2 oz. wide-mouth w/Teflon cap | | |
| 09/17/2010 | 21SB35-SO-0002 | 11:30 | SW-846 8260B | 21SB35 | SO | VOCs | 4°C | 3 | EnCore | 5 gram EnCore | | |
| 09/17/2010 | 21SB35-SO-0002 | 11:30 | Percent Moisture | 21SB35 | SO | Percent Moisture for VOCs | None | 1 | Glass - Clear | 4 oz. wide-mouth w/Teflon cap | | |
| 09/17/2010 | 21SB35-SO-0507 | 11:35 | Percent Moisture | 21SB35 | SO | Percent Moisture for VOCs | None | 1 | Glass - Clear | 4 oz. wide-mouth w/Teflon cap | 1009203-14 | |
| 09/17/2010 | 21SB35-SO-0507 | 11:35 | SW-846 6010B/7471A | 21SB35 | SO | TAL Metals (full list)/Mercury | 4°C | 1 | Glass - Clear | 2 oz. wide-mouth w/Teflon cap | | |
| 09/17/2010 | 21SB35-SO-0507 | 11:35 | SW-846 8270C/8082 | 21SB35 | SO | PAHs/PCBs | 4°C | 1 | Glass - Clear | 8 oz. wide-mouth w/Teflon cap | | |
| 09/17/2010 | 21SB35-SO-0507 | 11:35 | SW-846 8260B | 21SB35 | SO | VOCs | 4°C | 3 | EnCore | 5 gram EnCore | | |
| 09/17/2010 | 21SB46-SO-0002 | 10:45 | SW-846 8270C/8082 | 21SB46 | SO | PAHs/PCBs | 4°C | 1 | Glass - Clear | 8 oz. wide-mouth w/Teflon cap | 1009200-18 | |
| 09/17/2010 | 21SB46-SO-0002 | 10:45 | SW-846 6010B/7471A | 21SB46 | SO | TAL Metals (full list)/Mercury | 4°C | 1 | Glass - Clear | 2 oz. wide-mouth w/Teflon cap | | |
| 09/17/2010 | 21SB47-SO-0002 | 10:30 | SW-846 6010B/7471A | 21SB47 | SO | TAL Metals (full list)/Mercury | 4°C | 1 | Glass - Clear | 2 oz. wide-mouth w/Teflon cap | 1009200-19 | |
| 09/17/2010 | 21SB47-SO-0002 | 10:30 | SW-846 8270C/8082 | 21SB47 | SO | PAHs/PCBs | 4°C | 1 | Glass - Clear | 8 oz. wide-mouth w/Teflon cap | | |
| 09/17/2010 | 21SB48-SO-0002 | 10:15 | SW-846 6010B/7471A | 21SB48 | SO | TAL Metals (full list)/Mercury | 4°C | 1 | Glass - Clear | 2 oz. wide-mouth w/Teflon cap | 1009200-20 | |
| 09/17/2010 | 21SB48-SO-0002 | 10:15 | SW-846 8270C/8082 | 21SB48 | SO | PAHs/PCBs | 4°C | 1 | Glass - Clear | 8 oz. wide-mouth w/Teflon cap | | |
| 09/17/2010 | 21SB49-SO-0002 | 10:00 | SW-846 6010B/7471A | 21SB49 | SO | TAL Metals (full list)/Mercury | 4°C | 1 | Glass - Clear | 2 oz. wide-mouth w/Teflon cap | 1009200-21 | |
| 09/17/2010 | 21SB49-SO-0002 | 10:00 | SW-846 8270C/8082 | 21SB49 | SO | PAHs/PCBs | 4°C | 1 | Glass - Clear | 8 oz. wide-mouth w/Teflon cap | | |
| 09/17/2010 | 21SB50-SO-0002 | 08:55 | SW-846 6010B/7471A | 21SB50 | SO | TAL Metals (full list)/Mercury | 4°C | 1 | Glass - Clear | 2 oz. wide-mouth w/Teflon cap | 1009203-15 | |
| 09/17/2010 | 21SB50-SO-0002 | 08:55 | SW-846 8270C/8082 | 21SB50 | SO | PAHs/PCBs | 4°C | 1 | Glass - Clear | 8 oz. wide-mouth w/Teflon cap | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 09/17/2010 | 21SB50-SO-0002 | 08:55 | SW-846 8260B | 21SB50 | SO | VOCs | 4°C | 3 | EnCore | 5 gram EnCore | 1009203-15 |
| 09/17/2010 | 21SB50-SO-0002 | 08:55 | Percent Moisture | 21SB50 | SO | Percent Moisture for VOCs | None | 1 | Glass - Clear | 4 oz. wide-mouth w/Teflon cap | |
| 09/17/2010 | 21SB50-SO-0204 | 09:00 | SW-846 6010B/7471A | 21SB50 | SO | TAL Metals (full list)/Mercury | 4°C | 1 | Glass - Clear | 2 oz. wide-mouth w/Teflon cap | 1009203-16 |
| 09/17/2010 | 21SB50-SO-0204 | 09:00 | SW-846 8270C/8082 | 21SB50 | SO | PAHs/PCBs | 4°C | 1 | Glass - Clear | 8 oz. wide-mouth w/Teflon cap | |
| 09/17/2010 | 21SB50-SO-0204 | 09:00 | Percent Moisture | 21SB50 | SO | Percent Moisture for VOCs | None | 1 | Glass - Clear | 4 oz. wide-mouth w/Teflon cap | |
| 09/17/2010 | 21SB50-SO-0204 | 09:00 | SW-846 8260B | 21SB50 | SO | VOCs | 4°C | 3 | EnCore | 5 gram EnCore | |
| 09/17/2010 | 21SB55-SO-0002 | 12:30 | SW-846 8260B | 21SB55 | SO | VOCs | 4°C | 3 | EnCore | 5 gram EnCore | 1009203-17 |
| 09/17/2010 | 21SB55-SO-0002 | 12:30 | SW-846 6010B/7471A | 21SB55 | SO | TAL Metals (full list)/Mercury | 4°C | 1 | Glass - Clear | 2 oz. wide-mouth w/Teflon cap | |
| 09/17/2010 | 21SB55-SO-0002 | 12:30 | SW-846 8270C/8082 | 21SB55 | SO | PAHs/PCBs | 4°C | 1 | Glass - Clear | 8 oz. wide-mouth w/Teflon cap | |
| 09/17/2010 | 21SB55-SO-0002 | 12:30 | Percent Moisture | 21SB55 | SO | Percent Moisture for VOCs | None | 1 | Glass - Clear | 4 oz. wide-mouth w/Teflon cap | |
| 09/17/2010 | 21SB55-SO-0507 | 12:35 | SW-846 6010B/7471A | 21SB55 | SO | TAL Metals (full list)/Mercury | 4°C | 1 | Glass - Clear | 2 oz. wide-mouth w/Teflon cap | 1009203-18 |
| 09/17/2010 | 21SB55-SO-0507 | 12:35 | SW-846 8260B | 21SB55 | SO | VOCs | 4°C | 3 | EnCore | 5 gram EnCore | |
| 09/17/2010 | 21SB55-SO-0507 | 12:35 | Percent Moisture | 21SB55 | SO | Percent Moisture for VOCs | None | 1 | Glass - Clear | 4 oz. wide-mouth w/Teflon cap | |
| 09/17/2010 | 21SB55-SO-0507 | 12:35 | SW-846 8270C/8082 | 21SB55 | SO | PAHs/PCBs | 4°C | 1 | Glass - Clear | 8 oz. wide-mouth w/Teflon cap | |
| 09/17/2010 | 21TB09171001 | 07:00 | SW-846 8260B | QC | AQ | VOCs | 4°C/HCL | 2 | Glass - Clear | 40ml vials | trip blank for SO and AQ 1009188-07 |

| | | | | | |
|---|---|---|---|---|---|
| 1. Relinquished By: Lauren Foster | Date: 09/17/2010 | Time: 19:00 | Received By: Federal Express | Date: 09/17/2010 | Time: 19:00 |
| 2. Relinquished By: | Date: | Time: | Received By: Jennifer Dover | Date: 9/18/10 | Time: 1120 |
| 3. Relinquished By: | Date: | Time: | Received By: | Date: | Time: |

Comments: * one AL received broken for ID#: 21RB091710-02 (KM-9.20.10)

temps SN0010
0.2°C → ALL VOC encores + H2O VOC
1.1°C → H2O PAH/PCBs metals
1.1°C → 4oz, 2oz, 8oz jars

WORK ORDER

Printed: 9/25/2010 9:14:25AM

**1009180**

# COMPUCHEM

| | | | |
|---|---|---|---|
| **Client:** | **DRAPER** | **Project Manager:** | **Cathy Dover** |
| **Project:** | **WATAUGA COUNTY LANDFILL 6520-39** | **Project Number:** | **WATAUGA COUNTY LANDFILL 6520-39** |
| **SDG:** | **1009180** **CASE:** | **Status:** | **Reported** |

**Report To:**
DRAPER
JANET FRAZIER
2206 SOUTH MAIN STREET
BLACKSBURG, VA 24060
Phone: (540)552-0444
Fax: -

**Invoice To:**
WATAUGA COUNTY, NC
MR. J.V. POLTER
842 WESTKING STREET/COURTHOUSE, SUITE 1
BOONE, NC 28607
Phone :-
Fax: -

| | | | |
|---|---|---|---|
| Date Due: | 10/06/2010 00:00 (20 day TAT) | | |
| Received By: | Cathy Dover | Date Received: | 09/16/2010 09:32 |
| Logged In By: | Cathy Dover | Date Logged In: | 09/17/2010 12:35 |

| | | | |
|---|---|---|---|
| J & B Flags?: **YES**<br>Metals ND to? **MDL** | TICS?:**EPA-TICS**<br>Spike Level: **FULL Spike** | Deliverable: **Style 9** | EDD : **36) DRAPER ACCESS** |

USE 1009180-01 FOR QC*VOC 8260B 25 ML LIST=PPS897O.SUB*CLIENT REQUEST: PLEASE RUN MW-2 & MW-10 NEAT AND DILUTED*HISTORICAL DATA IN WO#1003173

| Analysis | Due | TAT | Expires | Received | Comments |
|---|---|---|---|---|---|
| **1009180-01 MW-3 [Water] Sampled 09/14/2010 14:15 Eastern** | | | | | **USE FOR QC** |
| VOA-8260B 25ML | 10/06/2010 16:00 | 20 | 09/28/2010 14:15 | 09/16/2010 09:32 | |
| **1009180-02 MW-1 [Water] Sampled 09/13/2010 12:20 Eastern** | | | | | |
| VOA-8260B 25ML | 10/06/2010 16:00 | 20 | 09/27/2010 12:20 | 09/16/2010 09:32 | |
| **1009180-03 MW-8 [Water] Sampled 09/14/2010 13:10 Eastern** | | | | | |
| VOA-8260B 25ML | 10/06/2010 16:00 | 20 | 09/28/2010 13:10 | 09/16/2010 09:32 | |
| **1009180-04 MW-9 [Water] Sampled 09/13/2010 13:15 Eastern** | | | | | |
| VOA-8260B 25ML | 10/06/2010 16:00 | 20 | 09/27/2010 13:15 | 09/16/2010 09:32 | |
| **1009180-05 MW-11 [Water] Sampled 09/14/2010 15:50 Eastern** | | | | | |
| VOA-8260B 25ML | 10/06/2010 16:00 | 20 | 09/28/2010 15:50 | 09/16/2010 09:32 | |
| **1009180-06 MW-12 [Water] Sampled 09/14/2010 16:30 Eastern** | | | | | |
| VOA-8260B 25ML | 10/06/2010 16:00 | 20 | 09/28/2010 16:30 | 09/16/2010 09:32 | |
| **1009180-07 MW-15 [Water] Sampled 09/14/2010 12:15 Eastern** | | | | | |
| VOA-8260B 25ML | 10/06/2010 16:00 | 20 | 09/28/2010 12:15 | 09/16/2010 09:32 | |
| **1009180-08 MW-17 [Water] Sampled 09/14/2010 14:25 Eastern** | | | | | |
| VOA-8260B 25ML | 10/06/2010 16:00 | 20 | 09/28/2010 14:25 | 09/16/2010 09:32 | |

WORK ORDER

Printed: 9/25/2010 9:14:25AM

1009180

COMPUCHEM

| | | | |
|---|---|---|---|
| Client: | DRAPER | Project Manager: | Cathy Dover |
| Project: | WATAUGA COUNTY LANDFILL 6520-39 | Project Number: | WATAUGA COUNTY LANDFILL 6520-39 |
| SDG: | 1009180 CASE: | Status: | Reported |

| Analysis | Due | TAT | Expires | Comments |
|---|---|---|---|---|
| **1009180-09 MW-19 [Water] Sampled 09/14/2010 11:10 Eastern** | | | | |
| VOA-8260B 25ML | 10/06/2010 16:00 | 20 | 09/28/2010 11:10 | 09/16/2010 09:32 |
| **1009180-10 TRIP BLANK [Water] Sampled 09/03/2010 00:00 Eastern** | | | | |
| VOA-8260B 25ML | 10/06/2010 16:00 | 20 | 09/17/2010 00:00 | 09/16/2010 09:32 |
| **1009180-11 MW-2 [Water] Sampled 09/13/2010 15:40 Eastern** | | | | **NEAT + DILUTION** |
| VOA-8260B 25ML | 10/06/2010 16:00 | 20 | 09/27/2010 15:40 | 09/16/2010 09:32 |
| **1009180-12 MW-10 [Water] Sampled 09/13/2010 18:00 Eastern** | | | | **NEAT + DILUTION** |
| VOA-8260B 25ML | 10/06/2010 16:00 | 20 | 09/27/2010 18:00 | 09/16/2010 09:32 |

# VOA Internal Chain of Custody Sheet

**Matrix** Water **Batch**: 0091718 **Status:** Batched **Analysis**: VOA-8260B 25ML

| Lab Id | Client Id | Received | Container | Extraction |
|---|---|---|---|---|
| 1009180-01 A | MW-3 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009180-02 A | MW-1 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009180-03 A | MW-8 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009180-04 A | MW-9 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009180-05 A | MW-11 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009180-06 A | MW-12 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009180-07 A | MW-15 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009180-08 A | MW-17 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009180-09 A | MW-19 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009180-10 A | TRIP BLANK | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009180-11 A | MW-2 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009180-12 A | MW-10 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| #2B | 9-20-10 | JAO | 9-20-10 |
| JAO | 9-20-10 | #2B | 9-20-10 |
| | | | |
| | | | |
| | | | |
| | | | |

# C. SDG Data

1. **QC Summary**
2. **Sample Data**
3. **Standards Data**
4. **Raw QC Data**

METHOD: 8260B

SDG: 1009180

# 1. QC Summary

**a. Surrogate Recovery Results**
(SURROGATE STANDARD RECOVERY AND RT SUMMARY)

**b. Internal Standard Results**
(INTERNAL STANDARD AREA AND RT SUMMARY)

**c. Laboratory Control Sample Results**
(LCS/LCS DUPLICATE RECOVERY)

**d. Matrix Spike Results**
(MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY)

**e. Instrument Performance Check**
(MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK)

**f. Analysis Sequence Summary**
(ANALYSIS SEQUENCE SUMMARY)

**g. Sample Preparation and Analysis Holding Time Data**
(HOLDING TIME SUMMARY)

## a. Surrogate Recovery Results

(SURROGATE STANDARD RECOVERY AND RT SUMMARY)

# SURROGATE STANDARD RECOVERY

*SW 8260B*

Client: DRAPER

Project: WATAUGA COUNTY LANDFILL 6520-39

SDG: 1009180 Instrument: 5972hp71

Sequence: 0I20003 Calibration: 0092207

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | Q |
|---|---|---|---|---|
| **Blank (0092014-BLK1 ) ug/L** Lab File ID: 0092014-BLK171.c Analyzed: 09/20/10 11:54 | | | | |
| Dibromofluoromethane | 5.000 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 102 | 59 - 150 | |
| Toluene-d8 | 5.000 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 98 | 63 - 143 | |
| **LCS (0092014-BS1 ) ug/L** Lab File ID: 0092014-BS171.d Analyzed: 09/20/10 12:29 | | | | |
| Dibromofluoromethane | 5.000 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 89 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 95 | 63 - 143 | |
| **LCS Dup (0092014-BSD1 ) ug/L** Lab File ID: 0092014-BSD171.d Analyzed: 09/20/10 12:57 | | | | |
| Dibromofluoromethane | 5.000 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 97 | 59 - 150 | |
| Toluene-d8 | 5.000 | 90 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 92 | 63 - 143 | |
| **TRIP BLANK (1009180-10 ) ug/L** Lab File ID: 1009180-1071.d Analyzed: 09/20/10 13:29 | | | | |
| Dibromofluoromethane | 5.000 | 92 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 83 | 59 - 150 | |
| Toluene-d8 | 5.000 | 97 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 99 | 63 - 143 | |
| **MW-1 (1009180-02 ) ug/L** Lab File ID: 1009180-0271.d Analyzed: 09/20/10 13:56 | | | | |
| Dibromofluoromethane | 5.000 | 93 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 94 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 98 | 63 - 143 | |

# SURROGATE STANDARD RECOVERY

*SW 8260B*

Client: DRAPER

Project: WATAUGA COUNTY LANDFILL 6520-39

SDG: 1009180 Instrument: 5972hp71

Sequence: 0I20003 Calibration: 0092207

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | Q |
|---|---|---|---|---|
| **MW-11 (1009180-05 ) ug/L** Lab File ID: 1009180-0571.d Analyzed: 09/20/10 14:23 | | | | |
| Dibromofluoromethane | 5.000 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 92 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 99 | 63 - 143 | |
| **MW-15 (1009180-07 ) ug/L** Lab File ID: 1009180-0771.d Analyzed: 09/20/10 14:50 | | | | |
| Dibromofluoromethane | 5.000 | 102 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 108 | 59 - 150 | |
| Toluene-d8 | 5.000 | 92 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 99 | 63 - 143 | |
| **MW-19 (1009180-09 ) ug/L** Lab File ID: 1009180-0971.d Analyzed: 09/20/10 15:18 | | | | |
| Dibromofluoromethane | 5.000 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 100 | 59 - 150 | |
| Toluene-d8 | 5.000 | 93 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 100 | 63 - 143 | |
| **MW-3 (1009180-01 ) ug/L** Lab File ID: 1009180-0171.d Analyzed: 09/20/10 15:45 | | | | |
| Dibromofluoromethane | 5.000 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 97 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 95 | 63 - 143 | |
| **MW-8 (1009180-03 ) ug/L** Lab File ID: 1009180-0371.d Analyzed: 09/20/10 16:12 | | | | |
| Dibromofluoromethane | 5.000 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 93 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 99 | 63 - 143 | |

# SURROGATE STANDARD RECOVERY

*SW 8260B*

Client: DRAPER

Project: WATAUGA COUNTY LANDFILL 6520-39

SDG: 1009180 Instrument: 5972hp71

Sequence: 0I20003 Calibration: 0092207

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | Q |
|---|---|---|---|---|
| **MW-9 (1009180-04 ) ug/L** Lab File ID: 1009180-0471.d Analyzed: 09/20/10 16:40 | | | | |
| Dibromofluoromethane | 5.000 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 97 | 59 - 150 | |
| Toluene-d8 | 5.000 | 94 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 95 | 63 - 143 | |
| **MW-17 (1009180-08 ) ug/L** Lab File ID: 1009180-0871.d Analyzed: 09/20/10 17:07 | | | | |
| Dibromofluoromethane | 5.000 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 94 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 99 | 63 - 143 | |
| **Matrix Spike (0092014-MS1 ) ug/L** Lab File ID: 0092014-MS171.d Analyzed: 09/20/10 19:35 | | | | |
| Dibromofluoromethane | 5.000 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 95 | 59 - 150 | |
| Toluene-d8 | 5.000 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 94 | 63 - 143 | |
| **Matrix Spike Dup (0092014-MSD1 ) ug/L** Lab File ID: 0092014-MSD171.d Analyzed: 09/20/10 20:02 | | | | |
| Dibromofluoromethane | 5.000 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 89 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 94 | 63 - 143 | |
| **MW-12 (1009180-06 ) ug/L** Lab File ID: 1009180-0671.d Analyzed: 09/20/10 20:29 | | | | |
| Dibromofluoromethane | 5.000 | 99 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 101 | 59 - 150 | |
| Toluene-d8 | 5.000 | 95 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 100 | 63 - 143 | |

# SURROGATE STANDARD RECOVERY

*SW 8260B*

Client: DRAPER

Project: WATAUGA COUNTY LANDFILL 6520-39

SDG: 1009180 Instrument: 5972hp71

Sequence: 0I20003 Calibration: 0092207

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | Q |
|---|---|---|---|---|
| **MW-10 (1009180-12 ) ug/L**<br>Lab File ID: 1009180-1271.d Analyzed: 09/20/10 20:57 | | | | |
| Dibromofluoromethane | 5.000 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 93 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 98 | 63 - 143 | |
| **MW-2 (1009180-11 ) ug/L**<br>Lab File ID: 1009180-1171.d Analyzed: 09/20/10 21:24 | | | | |
| Dibromofluoromethane | 5.000 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 103 | 59 - 150 | |
| Toluene-d8 | 5.000 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 98 | 63 - 143 | |
| **MW-10 (1009180-12RE1 ) ug/L**<br>Lab File ID: 1009180-12D71.d Analyzed: 09/20/10 22:19 | | | | |
| Dibromofluoromethane | 5.000 | 103 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 106 | 59 - 150 | |
| Toluene-d8 | 5.000 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 94 | 63 - 143 | |
| **MW-2 (1009180-11RE1 ) ug/L**<br>Lab File ID: 1009180-11D71.d Analyzed: 09/20/10 22:46 | | | | |
| Dibromofluoromethane | 5.000 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 100 | 59 - 150 | |
| Toluene-d8 | 5.000 | 95 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 94 | 63 - 143 | |

## b. Internal Standard Results

(INTERNAL STANDARD AREA AND RT SUMMARY)

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW 8260B

Laboratory: COMPUCHEM
Client: DRAPER
Sequence: 0I20003

SDG: 1009180
Project: WATAUGA COUNTY LANDFILL 6520-39
Instrument: 5972hp71
Calibration: 0092207

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Check (0I20003-CCV1 )** | | | Lab File ID: 0I20003-CCV171.d | | | Analyzed: 09/20/10 11:17 | | | |
| Fluorobenzene | 594735 | 11.362 | 674405 | 11.364 | 88 | 50 - 200 | -0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 420017 | 13.646 | 422342 | 13.648 | 99 | 50 - 200 | -0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 213551 | 15.289 | 217011 | 15.291 | 98 | 50 - 200 | -0.0020 | +/-0.06 | |
| **Blank (0092014-BLK1 )** | | | Lab File ID: 0092014-BLK171.d | | | Analyzed: 09/20/10 11:54 | | | |
| Fluorobenzene | 579775 | 11.364 | 594735 | 11.362 | 97 | 50 - 200 | 0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 396418 | 13.648 | 420017 | 13.646 | 94 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 186513 | 15.291 | 213551 | 15.289 | 87 | 50 - 200 | 0.0020 | +/-0.06 | |
| **LCS (0092014-BS1 )** | | | Lab File ID: 0092014-BS171.d | | | Analyzed: 09/20/10 12:29 | | | |
| Fluorobenzene | 560088 | 11.359 | 594735 | 11.362 | 94 | 50 - 200 | -0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 398242 | 13.642 | 420017 | 13.646 | 95 | 50 - 200 | -0.0040 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 200765 | 15.296 | 213551 | 15.289 | 94 | 50 - 200 | 0.0070 | +/-0.06 | |
| **LCS Dup (0092014-BSD1 )** | | | Lab File ID: 0092014-BSD171.d | | | Analyzed: 09/20/10 12:57 | | | |
| Fluorobenzene | 540773 | 11.36 | 594735 | 11.362 | 91 | 50 - 200 | -0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 375350 | 13.643 | 420017 | 13.646 | 89 | 50 - 200 | -0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 191028 | 15.286 | 213551 | 15.289 | 89 | 50 - 200 | -0.0030 | +/-0.06 | |
| **TRIP BLANK (1009180-10 )** | | | Lab File ID: 1009180-1071.d | | | Analyzed: 09/20/10 13:29 | | | |
| Fluorobenzene | 511005 | 11.365 | 594735 | 11.362 | 86 | 50 - 200 | 0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 320165 | 13.648 | 420017 | 13.646 | 76 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 139097 | 15.291 | 213551 | 15.289 | 65 | 50 - 200 | 0.0020 | +/-0.06 | |
| **MW-1 (1009180-02 )** | | | Lab File ID: 1009180-0271.d | | | Analyzed: 09/20/10 13:56 | | | |
| Fluorobenzene | 524164 | 11.36 | 594735 | 11.362 | 88 | 50 - 200 | -0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 341126 | 13.643 | 420017 | 13.646 | 81 | 50 - 200 | -0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 155044 | 15.286 | 213551 | 15.289 | 73 | 50 - 200 | -0.0030 | +/-0.06 | |
| **MW-11 (1009180-05 )** | | | Lab File ID: 1009180-0571.d | | | Analyzed: 09/20/10 14:23 | | | |
| Fluorobenzene | 508919 | 11.359 | 594735 | 11.362 | 86 | 50 - 200 | -0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 336657 | 13.643 | 420017 | 13.646 | 80 | 50 - 200 | -0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 150627 | 15.296 | 213551 | 15.289 | 71 | 50 - 200 | 0.0070 | +/-0.06 | |
| **MW-15 (1009180-07 )** | | | Lab File ID: 1009180-0771.d | | | Analyzed: 09/20/10 14:50 | | | |
| Fluorobenzene | 486424 | 11.365 | 594735 | 11.362 | 82 | 50 - 200 | 0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 327412 | 13.648 | 420017 | 13.646 | 78 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 149572 | 15.292 | 213551 | 15.289 | 70 | 50 - 200 | 0.0030 | +/-0.06 | |

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW 8260B

Laboratory: COMPUCHEM
Client: DRAPER
Sequence: 0I20003

SDG: 1009180
Project: WATAUGA COUNTY LANDFILL 6520-39
Instrument: 5972hp71
Calibration: 0092207

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **MW-19 (1009180-09 )** | | | Lab File ID: 1009180-0971.d | | | Analyzed: 09/20/10 15:18 | | | |
| Fluorobenzene | 488402 | 11.366 | 594735 | 11.362 | 82 | 50 - 200 | 0.0040 | +/-0.06 | |
| Chlorobenzene-d5 | 320326 | 13.649 | 420017 | 13.646 | 76 | 50 - 200 | 0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 143906 | 15.292 | 213551 | 15.289 | 67 | 50 - 200 | 0.0030 | +/-0.06 | |
| **MW-3 (1009180-01 )** | | | Lab File ID: 1009180-0171.d | | | Analyzed: 09/20/10 15:45 | | | |
| Fluorobenzene | 454973 | 11.365 | 594735 | 11.362 | 77 | 50 - 200 | 0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 283115 | 13.648 | 420017 | 13.646 | 67 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 133106 | 15.291 | 213551 | 15.289 | 62 | 50 - 200 | 0.0020 | +/-0.06 | |
| **MW-8 (1009180-03 )** | | | Lab File ID: 1009180-0371.d | | | Analyzed: 09/20/10 16:12 | | | |
| Fluorobenzene | 454385 | 11.364 | 594735 | 11.362 | 76 | 50 - 200 | 0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 302282 | 13.648 | 420017 | 13.646 | 72 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 136275 | 15.291 | 213551 | 15.289 | 64 | 50 - 200 | 0.0020 | +/-0.06 | |
| **MW-9 (1009180-04 )** | | | Lab File ID: 1009180-0471.d | | | Analyzed: 09/20/10 16:40 | | | |
| Fluorobenzene | 464040 | 11.36 | 594735 | 11.362 | 78 | 50 - 200 | -0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 303330 | 13.643 | 420017 | 13.646 | 72 | 50 - 200 | -0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 141244 | 15.296 | 213551 | 15.289 | 66 | 50 - 200 | 0.0070 | +/-0.06 | |
| **MW-17 (1009180-08 )** | | | Lab File ID: 1009180-0871.d | | | Analyzed: 09/20/10 17:07 | | | |
| Fluorobenzene | 455037 | 11.359 | 594735 | 11.362 | 77 | 50 - 200 | -0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 299798 | 13.642 | 420017 | 13.646 | 71 | 50 - 200 | -0.0040 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 134512 | 15.296 | 213551 | 15.289 | 63 | 50 - 200 | 0.0070 | +/-0.06 | |
| **Matrix Spike (0092014-MS1 )** | | | Lab File ID: 0092014-MS171.d | | | Analyzed: 09/20/10 19:35 | | | |
| Fluorobenzene | 454578 | 11.365 | 594735 | 11.362 | 76 | 50 - 200 | 0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 312271 | 13.648 | 420017 | 13.646 | 74 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 157325 | 15.291 | 213551 | 15.289 | 74 | 50 - 200 | 0.0020 | +/-0.06 | |
| **Matrix Spike Dup (0092014-MSD1 )** | | | Lab File ID: 0092014-MSD171.d | | | Analyzed: 09/20/10 20:02 | | | |
| Fluorobenzene | 491445 | 11.364 | 594735 | 11.362 | 83 | 50 - 200 | 0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 346994 | 13.648 | 420017 | 13.646 | 83 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 175029 | 15.291 | 213551 | 15.289 | 82 | 50 - 200 | 0.0020 | +/-0.06 | |
| **MW-12 (1009180-06 )** | | | Lab File ID: 1009180-0671.d | | | Analyzed: 09/20/10 20:29 | | | |
| Fluorobenzene | 471326 | 11.366 | 594735 | 11.362 | 79 | 50 - 200 | 0.0040 | +/-0.06 | |
| Chlorobenzene-d5 | 311938 | 13.649 | 420017 | 13.646 | 74 | 50 - 200 | 0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 138337 | 15.293 | 213551 | 15.289 | 65 | 50 - 200 | 0.0040 | +/-0.06 | |

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW 8260B

| | | | |
|---|---|---|---|
| Laboratory: | COMPUCHEM | SDG: | 1009180 |
| Client: | DRAPER | Project: | WATAUGA COUNTY LANDFILL 6520-39 |
| Sequence: | 0I20003 | Instrument: | 5972hp71 |
| | | Calibration: | 0092207 |

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **MW-10 (1009180-12 )** | | | Lab File ID: 1009180-1271.d | | | Analyzed: 09/20/10 20:57 | | | |
| Fluorobenzene | 445214 | 11.366 | 594735 | 11.362 | 75 | 50 - 200 | 0.0040 | +/-0.06 | |
| Chlorobenzene-d5 | 298824 | 13.649 | 420017 | 13.646 | 71 | 50 - 200 | 0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 137318 | 15.292 | 213551 | 15.289 | 64 | 50 - 200 | 0.0030 | +/-0.06 | |
| **MW-2 (1009180-11 )** | | | Lab File ID: 1009180-1171.d | | | Analyzed: 09/20/10 21:24 | | | |
| Fluorobenzene | 444779 | 11.36 | 594735 | 11.362 | 75 | 50 - 200 | -0.0020 | +/-0.06 | |
| Chlorobenzene-d5 | 301825 | 13.643 | 420017 | 13.646 | 72 | 50 - 200 | -0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 134463 | 15.286 | 213551 | 15.289 | 63 | 50 - 200 | -0.0030 | +/-0.06 | |
| **MW-10 (1009180-12RE1 )** | | | Lab File ID: 1009180-12D71.d | | | Analyzed: 09/20/10 22:19 | | | |
| Fluorobenzene | 422646 | 11.365 | 594735 | 11.362 | 71 | 50 - 200 | 0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 295827 | 13.648 | 420017 | 13.646 | 70 | 50 - 200 | 0.0020 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 136982 | 15.292 | 213551 | 15.289 | 64 | 50 - 200 | 0.0030 | +/-0.06 | |
| **MW-2 (1009180-11RE1 )** | | | Lab File ID: 1009180-11D71.d | | | Analyzed: 09/20/10 22:46 | | | |
| Fluorobenzene | 421706 | 11.359 | 594735 | 11.362 | 71 | 50 - 200 | -0.0030 | +/-0.06 | |
| Chlorobenzene-d5 | 282933 | 13.643 | 420017 | 13.646 | 67 | 50 - 200 | -0.0030 | +/-0.06 | |
| 1,4-Dichlorobenzene-d4 | 128782 | 15.286 | 213551 | 15.289 | 60 | 50 - 200 | -0.0030 | +/-0.06 | |

## c. Laboratory Control Sample Results

(LCS/LCS DUPLICATE RECOVERY)

LCS/LCSD recovery, relative percent difference and quality control acceptance criteria

# LCS / LCS DUPLICATE RECOVERY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-BS1 Matrix: Water Client ID: VHFLCS Batch: 0092014

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Dichlorodifluoromethane | 5.000 | 6.008 | 120 | 50 - 150 |
| Chloromethane | 5.000 | 5.887 | 118 | 50 - 150 |
| Vinyl chloride | 5.000 | 5.702 | 114 | 61 - 150 |
| Bromomethane | 5.000 | 4.802 | 96 | 50 - 150 |
| Chloroethane | 5.000 | 5.492 | 110 | 54 - 150 |
| Trichlorofluoromethane | 5.000 | 6.006 | 120 | 56 - 150 |
| Acrolein | 50.00 | 46.31 | 93 | 50 - 150 |
| 1,1-Dichloroethene | 5.000 | 5.752 | 115 | 74 - 143 |
| Acetone | 25.00 | 24.43 | 98 | 50 - 150 |
| Iodomethane | 5.000 | 4.855 | 97 | 50 - 150 |
| Carbon disulfide | 5.000 | 5.452 | 109 | 50 - 150 |
| 3-Chloropropene | 5.000 | 4.948 | 99 | 50 - 150 |
| Acetonitrile | 5.000 | 4.863 | 97 | 50 - 150 |
| Methylene chloride | 5.000 | 5.895 | 118 | 50 - 139 |
| Acrylonitrile | 50.00 | 52.99 | 106 | 50 - 150 |
| trans-1,2-Dichloroethene | 5.000 | 5.658 | 113 | 50 - 137 |
| 1,1-Dichloroethane | 5.000 | 5.469 | 109 | 59 - 138 |
| Chloroprene | 5.000 | 5.208 | 104 | 50 - 150 |
| Vinyl acetate | 10.00 | 10.07 | 101 | 50 - 150 |
| cis-1,2-Dichloroethene | 5.000 | 5.423 | 108 | 69 - 140 |
| 2,2-Dichloropropane | 5.000 | 5.276 | 106 | 50 - 150 |
| Propionitrile | 250.0 | 254.0 | 102 | 50 - 150 |
| 2-Butanone | 25.00 | 24.87 | 99 | 65 - 134 |
| Methacrylonitrile | 50.00 | 52.40 | 105 | 50 - 150 |
| Bromochloromethane | 5.000 | 5.644 | 113 | 50 - 150 |
| Chloroform | 5.000 | 5.483 | 110 | 67 - 147 |
| 1,1,1-Trichloroethane | 5.000 | 5.418 | 108 | 71 - 137 |
| 1,1-Dichloropropene | 5.000 | 5.751 | 115 | 50 - 150 |
| Carbon tetrachloride | 5.000 | 5.653 | 113 | 68 - 145 |
| 1,2-Dichloroethane | 5.000 | 5.429 | 109 | 61 - 150 |
| Isobutyl alcohol | 250.0 | 225.0 | 90 | 50 - 150 |

# LCS / LCS DUPLICATE RECOVERY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-BS1 Matrix: Water Client ID: VHFLCS Batch: 0092014

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Benzene | 5.000 | 5.440 | 109 | 68 - 138 |
| Trichloroethene | 5.000 | 5.626 | 113 | 55 - 150 |
| 1,2-Dichloropropane | 5.000 | 5.412 | 108 | 67 - 137 |
| Dibromomethane | 5.000 | 5.428 | 109 | 50 - 150 |
| Methyl Methacrylate | 50.00 | 53.93 | 108 | 50 - 150 |
| Bromodichloromethane | 5.000 | 5.515 | 110 | 73 - 142 |
| cis-1,3-Dichloropropene | 5.000 | 5.513 | 110 | 74 - 134 |
| 4-Methyl-2-pentanone | 25.00 | 23.99 | 96 | 66 - 127 |
| Toluene | 5.000 | 4.735 | 95 | 60 - 142 |
| trans-1,3-Dichloropropene | 5.000 | 4.821 | 96 | 66 - 130 |
| 1,1,2-Trichloroethane | 5.000 | 4.834 | 97 | 68 - 130 |
| Ethyl Methacrylate | 50.00 | 48.37 | 97 | 50 - 150 |
| 1,3-Dichloropropane | 5.000 | 4.792 | 96 | 50 - 150 |
| Tetrachloroethene | 5.000 | 5.393 | 108 | 65 - 137 |
| 2-Hexanone | 25.00 | 23.57 | 94 | 53 - 140 |
| Dibromochloromethane | 5.000 | 4.690 | 94 | 68 - 137 |
| Chlorobenzene | 5.000 | 4.938 | 99 | 68 - 129 |
| 1,1,1,2-Tetrachloroethane | 5.000 | 4.687 | 94 | 50 - 150 |
| Ethylbenzene | 5.000 | 4.912 | 98 | 67 - 127 |
| m,p-Xylene | 10.00 | 9.954 | 100 | 60 - 140 |
| o-Xylene | 5.000 | 4.890 | 98 | 60 - 140 |
| Styrene | 5.000 | 4.852 | 97 | 66 - 139 |
| Bromoform | 5.000 | 4.763 | 95 | 62 - 138 |
| 1,1,2,2-Tetrachloroethane | 5.000 | 5.053 | 101 | 63 - 122 |
| 1,2,3-Trichloropropane | 5.000 | 4.703 | 94 | 50 - 150 |
| trans-1,4-Dichloro-2-butene | 20.00 | 18.68 | 93 | 50 - 150 |
| 1,3-Dichlorobenzene | 5.000 | 5.318 | 106 | 64 - 136 |
| 1,4-Dichlorobenzene | 5.000 | 5.377 | 108 | 69 - 125 |
| 1,2-Dichlorobenzene | 5.000 | 5.167 | 103 | 71 - 127 |
| 1,2,4-Trichlorobenzene | 5.000 | 5.972 | 119 | 52 - 147 |
| Hexachlorobutadiene | 5.000 | 5.566 | 111 | 50 - 150 |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# LCS / LCS DUPLICATE RECOVERY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-BS1 Matrix: Water Client ID: VHFLCS Batch: 0092014

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Naphthalene | 5.000 | 4.783 | 96 | 50 - 150 |
| Xylenes (total) | 15.00 | 14.84 | 99 | 60 - 140 |

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 5.000 | 5.918 | 118 | 2 | 25 | 50 - 150 |
| Chloromethane | 5.000 | 6.190 | 124 | 5 | 25 | 50 - 150 |
| Vinyl chloride | 5.000 | 5.717 | 114 | 0.3 | 25 | 61 - 150 |
| Bromomethane | 5.000 | 5.334 | 107 | 10 | 25 | 50 - 150 |
| Chloroethane | 5.000 | 5.558 | 111 | 1 | 25 | 54 - 150 |
| Trichlorofluoromethane | 5.000 | 5.562 | 111 | 8 | 25 | 56 - 150 |
| Acrolein | 50.00 | 47.00 | 94 | 1 | 25 | 50 - 150 |
| 1,1-Dichloroethene | 5.000 | 5.482 | 110 | 5 | 14 | 74 - 143 |
| Acetone | 25.00 | 24.75 | 99 | 1 | 25 | 50 - 150 |
| Iodomethane | 5.000 | 5.525 | 110 | 13 | 25 | 50 - 150 |
| Carbon disulfide | 5.000 | 5.461 | 109 | 0.2 | 25 | 50 - 150 |
| 3-Chloropropene | 5.000 | 5.422 | 108 | 9 | 25 | 50 - 150 |
| Acetonitrile | 5.000 | 5.336 | 107 | 9 | 25 | 50 - 150 |
| Methylene chloride | 5.000 | 5.839 | 117 | 0.9 | 25 | 50 - 139 |
| Acrylonitrile | 50.00 | 55.02 | 110 | 4 | 25 | 50 - 150 |
| trans-1,2-Dichloroethene | 5.000 | 5.653 | 113 | 0.09 | 25 | 50 - 137 |
| 1,1-Dichloroethane | 5.000 | 5.773 | 115 | 5 | 25 | 59 - 138 |
| Chloroprene | 5.000 | 5.455 | 109 | 5 | 25 | 50 - 150 |
| Vinyl acetate | 10.00 | 10.83 | 108 | 7 | 25 | 50 - 150 |
| cis-1,2-Dichloroethene | 5.000 | 5.391 | 108 | 0.6 | 25 | 69 - 140 |
| 2,2-Dichloropropane | 5.000 | 5.479 | 110 | 4 | 25 | 50 - 150 |
| Propionitrile | 250.0 | 268.1 | 107 | 5 | 25 | 50 - 150 |
| 2-Butanone | 25.00 | 27.12 | 108 | 9 | 25 | 65 - 134 |
| Methacrylonitrile | 50.00 | 55.73 | 111 | 6 | 25 | 50 - 150 |
| Bromochloromethane | 5.000 | 5.687 | 114 | 0.8 | 25 | 50 - 150 |
| Chloroform | 5.000 | 5.572 | 111 | 2 | 25 | 67 - 147 |

# LCS / LCS DUPLICATE RECOVERY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-BSD1 Matrix: Water Client ID: VHFLCSD Batch: 0092014

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 5.000 | 5.323 | 106 | 2 | 25 | 71 - 137 |
| 1,1-Dichloropropene | 5.000 | 5.668 | 113 | 1 | 25 | 50 - 150 |
| Carbon tetrachloride | 5.000 | 5.357 | 107 | 5 | 25 | 68 - 145 |
| 1,2-Dichloroethane | 5.000 | 5.372 | 107 | 1 | 25 | 61 - 150 |
| Isobutyl alcohol | 250.0 | 263.2 | 105 | 16 | 25 | 50 - 150 |
| Benzene | 5.000 | 5.564 | 111 | 2 | 11 | 68 - 138 |
| Trichloroethene | 5.000 | 5.263 | 105 | 7 | 14 | 55 - 150 |
| 1,2-Dichloropropane | 5.000 | 5.689 | 114 | 5 | 25 | 67 - 137 |
| Dibromomethane | 5.000 | 5.225 | 104 | 4 | 25 | 50 - 150 |
| Methyl Methacrylate | 50.00 | 53.88 | 108 | 0.09 | 25 | 50 - 150 |
| Bromodichloromethane | 5.000 | 5.512 | 110 | 0.06 | 25 | 73 - 142 |
| cis-1,3-Dichloropropene | 5.000 | 5.438 | 109 | 1 | 25 | 74 - 134 |
| 4-Methyl-2-pentanone | 25.00 | 24.26 | 97 | 1 | 25 | 66 - 127 |
| Toluene | 5.000 | 4.651 | 93 | 2 | 13 | 60 - 142 |
| trans-1,3-Dichloropropene | 5.000 | 4.935 | 99 | 2 | 25 | 66 - 130 |
| 1,1,2-Trichloroethane | 5.000 | 4.884 | 98 | 1 | 25 | 68 - 130 |
| Ethyl Methacrylate | 50.00 | 48.08 | 96 | 0.6 | 25 | 50 - 150 |
| 1,3-Dichloropropane | 5.000 | 4.895 | 98 | 2 | 25 | 50 - 150 |
| Tetrachloroethene | 5.000 | 4.721 | 94 | 13 | 25 | 65 - 137 |
| 2-Hexanone | 25.00 | 23.79 | 95 | 0.9 | 25 | 53 - 140 |
| Dibromochloromethane | 5.000 | 4.725 | 95 | 0.7 | 25 | 68 - 137 |
| Chlorobenzene | 5.000 | 4.746 | 95 | 4 | 13 | 68 - 129 |
| 1,1,1,2-Tetrachloroethane | 5.000 | 4.688 | 94 | 0.01 | 25 | 50 - 150 |
| Ethylbenzene | 5.000 | 4.655 | 93 | 5 | 25 | 67 - 127 |
| m,p-Xylene | 10.00 | 9.335 | 93 | 6 | 25 | 60 - 140 |
| o-Xylene | 5.000 | 4.674 | 93 | 5 | 25 | 60 - 140 |
| Styrene | 5.000 | 4.758 | 95 | 2 | 25 | 66 - 139 |
| Bromoform | 5.000 | 4.618 | 92 | 3 | 25 | 62 - 138 |
| 1,1,2,2-Tetrachloroethane | 5.000 | 5.064 | 101 | 0.2 | 25 | 63 - 122 |
| 1,2,3-Trichloropropane | 5.000 | 4.485 | 90 | 5 | 25 | 50 - 150 |
| trans-1,4-Dichloro-2-butene | 20.00 | 18.22 | 91 | 2 | 25 | 50 - 150 |

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

# LCS / LCS DUPLICATE RECOVERY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-BSD1 Matrix: Water Client ID: VHFLCSD Batch: 0092014

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 5.000 | 4.690 | 94 | 13 | 25 | 64 - 136 |
| 1,4-Dichlorobenzene | 5.000 | 4.729 | 95 | 13 | 25 | 69 - 125 |
| 1,2-Dichlorobenzene | 5.000 | 4.664 | 93 | 10 | 25 | 71 - 127 |
| 1,2,4-Trichlorobenzene | 5.000 | 4.750 | 95 | 23 | 25 | 52 - 147 |
| Hexachlorobutadiene | 5.000 | 4.833 | 97 | 14 | 25 | 50 - 150 |
| Naphthalene | 5.000 | 4.506 | 90 | 6 | 25 | 50 - 150 |
| Xylenes (total) | 15.00 | 14.01 | 93 | 6 | 25 | 60 - 140 |

## d. Matrix Spike Results

(MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY)

MS/MSD recovery, relative percent difference and quality control acceptance criteria

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

*SW 8260B*

**MW-3MS**

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-MS1 % Solid: NA Matrix: Water Lab Source ID: 1009180-01 Source Sample: MW-3

| ANALYTE | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC. | Q | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 5.000 | 0.000 | 6.195 | 124 | | 50 - 150 |
| Chloromethane | 5.000 | 0.000 | 7.309 | 146 | | 50 - 150 |
| Vinyl chloride | 5.000 | 0.000 | 9.342 | 187 | * | 61 - 150 |
| Bromomethane | 5.000 | 0.000 | 5.299 | 106 | | 50 - 150 |
| Chloroethane | 5.000 | 5.136 | 16.75 | 232 | * | 54 - 150 |
| Trichlorofluoromethane | 5.000 | 0.000 | 5.929 | 119 | | 56 - 150 |
| Acrolein | 50.00 | 0.000 | 67.54 | 135 | | 50 - 150 |
| 1,1-Dichloroethene | 5.000 | 0.000 | 5.728 | 115 | | 74 - 143 |
| Acetone | 25.00 | 0.000 | 25.09 | 100 | | 50 - 150 |
| Iodomethane | 5.000 | 0.000 | 4.476 | 90 | | 50 - 150 |
| Carbon disulfide | 5.000 | 0.000 | 5.730 | 115 | | 50 - 150 |
| 3-Chloropropene | 5.000 | 0.000 | 6.540 | 131 | | 50 - 150 |
| Acetonitrile | 5.000 | 0.000 | 6.541 | 131 | | 50 - 150 |
| Methylene chloride | 5.000 | 0.000 | 6.179 | 124 | | 50 - 139 |
| Acrylonitrile | 50.00 | 0.000 | 58.89 | 118 | | 50 - 150 |
| trans-1,2-Dichloroethene | 5.000 | 0.3482 | 6.428 | 122 | | 50 - 137 |
| 1,1-Dichloroethane | 5.000 | 10.43 | 16.39 | 119 | | 59 - 138 |
| Chloroprene | 5.000 | 0.000 | 6.477 | 130 | | 50 - 150 |
| Vinyl acetate | 10.00 | 0.000 | 9.441 | 94 | | 50 - 150 |
| cis-1,2-Dichloroethene | 5.000 | 25.00 | 30.75 | 115 | | 69 - 140 |
| 2,2-Dichloropropane | 5.000 | 0.000 | 6.119 | 122 | | 50 - 150 |
| Propionitrile | 250.0 | 0.000 | 297.8 | 119 | | 50 - 150 |
| 2-Butanone | 25.00 | 0.000 | 24.84 | 99 | | 65 - 134 |
| Methacrylonitrile | 50.00 | 0.000 | 58.52 | 117 | | 50 - 150 |
| Bromochloromethane | 5.000 | 0.000 | 5.955 | 119 | | 50 - 150 |
| Chloroform | 5.000 | 0.000 | 6.162 | 123 | | 67 - 147 |
| 1,1,1-Trichloroethane | 5.000 | 0.000 | 5.632 | 113 | | 71 - 137 |
| 1,1-Dichloropropene | 5.000 | 0.000 | 5.906 | 118 | | 50 - 150 |
| Carbon tetrachloride | 5.000 | 0.000 | 5.493 | 110 | | 68 - 145 |
| 1,2-Dichloroethane | 5.000 | 0.1841 | 5.627 | 109 | | 61 - 150 |
| Isobutyl alcohol | 250.0 | 0.000 | 268.7 | 107 | | 50 - 150 |
| Benzene | 5.000 | 0.000 | 6.026 | 121 | | 68 - 138 |
| Trichloroethene | 5.000 | 2.782 | 8.464 | 114 | | 55 - 150 |
| 1,2-Dichloropropane | 5.000 | 0.3737 | 6.594 | 124 | | 67 - 137 |

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

*SW 8260B*

**MW-3MS**

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-MS1 % Solid: NA Matrix: Water Lab Source ID: 1009180-01 Source Sample: MW-3

| ANALYTE | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC. | Q | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Dibromomethane | 5.000 | 0.000 | 5.201 | 104 | | 50 - 150 |
| Methyl Methacrylate | 50.00 | 0.000 | 58.80 | 118 | | 50 - 150 |
| Bromodichloromethane | 5.000 | 0.000 | 5.711 | 114 | | 73 - 142 |
| cis-1,3-Dichloropropene | 5.000 | 0.000 | 5.508 | 110 | | 74 - 134 |
| 4-Methyl-2-pentanone | 25.00 | 0.000 | 23.61 | 94 | | 66 - 127 |
| Toluene | 5.000 | 0.1180 | 4.907 | 96 | | 60 - 142 |
| trans-1,3-Dichloropropene | 5.000 | 0.000 | 5.188 | 104 | | 66 - 130 |
| 1,1,2-Trichloroethane | 5.000 | 0.000 | 5.238 | 105 | | 68 - 130 |
| Ethyl Methacrylate | 50.00 | 0.000 | 53.85 | 108 | | 50 - 150 |
| 1,3-Dichloropropane | 5.000 | 0.000 | 5.303 | 106 | | 50 - 150 |
| Tetrachloroethene | 5.000 | 0.000 | 5.225 | 105 | | 65 - 137 |
| 2-Hexanone | 25.00 | 0.000 | 22.99 | 92 | | 53 - 140 |
| Dibromochloromethane | 5.000 | 0.000 | 4.724 | 94 | | 68 - 137 |
| Chlorobenzene | 5.000 | 0.000 | 5.038 | 101 | | 68 - 129 |
| 1,1,1,2-Tetrachloroethane | 5.000 | 0.000 | 4.916 | 98 | | 50 - 150 |
| Ethylbenzene | 5.000 | 0.000 | 4.782 | 96 | | 67 - 127 |
| m,p-Xylene | 10.00 | 0.000 | 9.662 | 97 | | 60 - 140 |
| o-Xylene | 5.000 | 0.000 | 4.873 | 97 | | 60 - 140 |
| Styrene | 5.000 | 0.000 | 4.798 | 96 | | 66 - 139 |
| Bromoform | 5.000 | 0.000 | 4.538 | 91 | | 62 - 139 |
| 1,1,2,2-Tetrachloroethane | 5.000 | 0.000 | 5.302 | 106 | | 63 - 122 |
| 1,2,3-Trichloropropane | 5.000 | 0.000 | 4.734 | 95 | | 50 - 150 |
| trans-1,4-Dichloro-2-butene | 20.00 | 0.000 | 20.38 | 102 | | 50 - 150 |
| 1,3-Dichlorobenzene | 5.000 | 0.000 | 4.803 | 96 | | 64 - 136 |
| 1,4-Dichlorobenzene | 5.000 | 0.000 | 4.763 | 95 | | 69 - 125 |
| 1,2-Dichlorobenzene | 5.000 | 0.000 | 4.771 | 95 | | 71 - 127 |
| 1,2,4-Trichlorobenzene | 5.000 | 0.000 | 4.438 | 89 | | 52 - 147 |
| Hexachlorobutadiene | 5.000 | 0.000 | 4.212 | 84 | | 50 - 150 |
| Naphthalene | 5.000 | 0.000 | 4.121 | 82 | | 50 - 150 |
| Xylenes (total) | 15.00 | 0.000 | 14.54 | 97 | | 60 - 140 |

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

*SW 8260B*

**MW-3MSD**

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-MSD1 % Solid: NA Matrix: Water Lab Source ID: 1009180-01 Source Sample: MW-3

| ANALYTE | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC. # | % RPD | Q | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 5.000 | 6.602 | 132 | 6 | | 25 | 50 - 150 |
| Chloromethane | 5.000 | 7.625 | 152 | 4 | * | 25 | 50 - 150 |
| Vinyl chloride | 5.000 | 8.247 | 165 | 12 | * | 25 | 61 - 150 |
| Bromomethane | 5.000 | 5.216 | 104 | 2 | | 25 | 50 - 150 |
| Chloroethane | 5.000 | 10.59 | 109 | 45 | * | 25 | 54 - 150 |
| Trichlorofluoromethane | 5.000 | 5.880 | 118 | 0.8 | | 25 | 56 - 150 |
| Acrolein | 50.00 | 71.50 | 143 | 6 | | 25 | 50 - 150 |
| 1,1-Dichloroethene | 5.000 | 5.679 | 114 | 0.9 | | 14 | 74 - 143 |
| Acetone | 25.00 | 25.42 | 102 | 1 | | 25 | 50 - 150 |
| Iodomethane | 5.000 | 5.252 | 105 | 16 | | 25 | 50 - 150 |
| Carbon disulfide | 5.000 | 5.653 | 113 | 1 | | 25 | 50 - 150 |
| 3-Chloropropene | 5.000 | 6.523 | 130 | 0.3 | | 25 | 50 - 150 |
| Acetonitrile | 5.000 | 6.479 | 130 | 1 | | 25 | 50 - 150 |
| Methylene chloride | 5.000 | 6.020 | 120 | 3 | | 25 | 50 - 139 |
| Acrylonitrile | 50.00 | 60.77 | 122 | 3 | | 25 | 50 - 150 |
| trans-1,2-Dichloroethene | 5.000 | 6.279 | 119 | 2 | | 25 | 50 - 137 |
| 1,1-Dichloroethane | 5.000 | 15.78 | 107 | 4 | | 25 | 59 - 138 |
| Chloroprene | 5.000 | 6.224 | 124 | 4 | | 25 | 50 - 150 |
| Vinyl acetate | 10.00 | 9.607 | 96 | 2 | | 25 | 50 - 150 |
| cis-1,2-Dichloroethene | 5.000 | 29.89 | 98 | 3 | | 25 | 69 - 140 |
| 2,2-Dichloropropane | 5.000 | 5.946 | 119 | 3 | | 25 | 50 - 150 |
| Propionitrile | 250.0 | 312.3 | 125 | 5 | | 25 | 50 - 150 |
| 2-Butanone | 25.00 | 27.26 | 109 | 9 | | 25 | 65 - 134 |
| Methacrylonitrile | 50.00 | 61.28 | 123 | 5 | | 25 | 50 - 150 |
| Bromochloromethane | 5.000 | 5.928 | 119 | 0.4 | | 25 | 50 - 150 |
| Chloroform | 5.000 | 6.019 | 120 | 2 | | 25 | 67 - 147 |
| 1,1,1-Trichloroethane | 5.000 | 5.582 | 112 | 0.9 | | 25 | 71 - 137 |
| 1,1-Dichloropropene | 5.000 | 5.876 | 118 | 0.5 | | 25 | 50 - 150 |
| Carbon tetrachloride | 5.000 | 5.587 | 112 | 2 | | 25 | 68 - 145 |
| 1,2-Dichloroethane | 5.000 | 5.603 | 108 | 0.4 | | 25 | 61 - 150 |
| Isobutyl alcohol | 250.0 | 300.6 | 120 | 11 | | 25 | 50 - 150 |
| Benzene | 5.000 | 6.005 | 120 | 0.3 | | 11 | 68 - 138 |
| Trichloroethene | 5.000 | 8.396 | 112 | 0.8 | | 14 | 55 - 150 |
| 1,2-Dichloropropane | 5.000 | 6.467 | 122 | 2 | | 25 | 67 - 137 |
| Dibromomethane | 5.000 | 5.402 | 108 | 4 | | 25 | 50 - 150 |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

*SW 8260B*

**MW-3MSD**

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Lab ID: 0092014-MSD1 % Solid: NA Matrix: Water Lab Source ID: 1009180-01 Source Sample: MW-3

| ANALYTE | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC. # | % RPD | Q | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|---|
| Methyl Methacrylate | 50.00 | 62.32 | 125 | 6 | | 25 | 50 - 150 |
| Bromodichloromethane | 5.000 | 5.758 | 115 | 0.8 | | 25 | 73 - 142 |
| cis-1,3-Dichloropropene | 5.000 | 5.642 | 113 | 2 | | 25 | 74 - 134 |
| 4-Methyl-2-pentanone | 25.00 | 24.50 | 98 | 4 | | 25 | 66 - 127 |
| Toluene | 5.000 | 4.813 | 94 | 2 | | 13 | 60 - 142 |
| trans-1,3-Dichloropropene | 5.000 | 5.159 | 103 | 0.6 | | 25 | 66 - 130 |
| 1,1,2-Trichloroethane | 5.000 | 5.248 | 105 | 0.2 | | 25 | 68 - 130 |
| Ethyl Methacrylate | 50.00 | 55.37 | 111 | 3 | | 25 | 50 - 150 |
| 1,3-Dichloropropane | 5.000 | 5.181 | 104 | 2 | | 25 | 50 - 150 |
| Tetrachloroethene | 5.000 | 5.104 | 102 | 2 | | 25 | 65 - 137 |
| 2-Hexanone | 25.00 | 24.10 | 96 | 5 | | 25 | 53 - 140 |
| Dibromochloromethane | 5.000 | 4.794 | 96 | 1 | | 25 | 68 - 137 |
| Chlorobenzene | 5.000 | 4.958 | 99 | 2 | | 13 | 68 - 129 |
| 1,1,1,2-Tetrachloroethane | 5.000 | 4.964 | 99 | 1 | | 25 | 50 - 150 |
| Ethylbenzene | 5.000 | 4.824 | 96 | 0.9 | | 25 | 67 - 127 |
| m,p-Xylene | 10.00 | 9.799 | 98 | 1 | | 25 | 60 - 140 |
| o-Xylene | 5.000 | 4.920 | 98 | 1 | | 25 | 60 - 140 |
| Styrene | 5.000 | 4.910 | 98 | 2 | | 25 | 66 - 139 |
| Bromoform | 5.000 | 4.630 | 93 | 2 | | 25 | 62 - 139 |
| 1,1,2,2-Tetrachloroethane | 5.000 | 5.337 | 107 | 0.7 | | 25 | 63 - 122 |
| 1,2,3-Trichloropropane | 5.000 | 4.903 | 98 | 4 | | 25 | 50 - 150 |
| trans-1,4-Dichloro-2-butene | 20.00 | 21.25 | 106 | 4 | | 25 | 50 - 150 |
| 1,3-Dichlorobenzene | 5.000 | 4.938 | 99 | 3 | | 25 | 64 - 136 |
| 1,4-Dichlorobenzene | 5.000 | 4.864 | 97 | 2 | | 25 | 69 - 125 |
| 1,2-Dichlorobenzene | 5.000 | 4.868 | 97 | 2 | | 25 | 71 - 127 |
| 1,2,4-Trichlorobenzene | 5.000 | 4.761 | 95 | 7 | | 25 | 52 - 147 |
| Hexachlorobutadiene | 5.000 | 4.419 | 88 | 5 | | 25 | 50 - 150 |
| Naphthalene | 5.000 | 4.559 | 91 | 10 | | 25 | 50 - 150 |
| Xylenes (total) | 15.00 | 14.72 | 98 | 1 | | 25 | 60 - 140 |

## e. Instrument Performance Check

(MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK)

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW 8260B

| | | | |
|---|---|---|---|
| Laboratory: | COMPUCHEM | SDG: | 1009180 |
| Client: | DRAPER | Project: | WATAUGA COUNTY LANDFILL 6520-39 |
| Lab File ID: | 0I15002-TUN171.d | Injection Date: | 09/15/10 |
| Instrument ID: | 5972hp71 | Injection Time: | 10:05 |
| Sequence: | 0I15002 | Lab Sample ID: | 0I15002-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15 - 40% of 95 | 23.5 | PASS |
| 75 | 30 - 60% of 95 | 46.8 | PASS |
| 95 | Base peak, 100% relative abundance | 100 | PASS |
| 96 | 5 - 9% of 95 | 6.73 | PASS |
| 173 | Less than 2% of 174 | 0 | PASS |
| 174 | (Greater than 50% of 95) | 85.4 | PASS |
| 175 | 5 - 9% of 174 | 8.01 | PASS |
| 176 | (Greater than 95% but less then 101%) | 99.9 | PASS |
| 177 | 5 - 9% of 176 | 6.81 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW 8260B

| | | | |
|---|---|---|---|
| Laboratory: | COMPUCHEM | SDG: | 1009180 |
| Client: | DRAPER | Project: | WATAUGA COUNTY LANDFILL 6520-39 |
| Lab File ID: | 0I20003-TUN171.d | Injection Date: | 09/20/10 |
| Instrument ID: | 5972hp71 | Injection Time: | 10:53 |
| Sequence: | 0I20003 | Lab Sample ID: | 0I20003-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15 - 40% of 95 | 24.4 | PASS |
| 75 | 30 - 60% of 95 | 47.9 | PASS |
| 95 | Base peak, 100% relative abundance | 100 | PASS |
| 96 | 5 - 9% of 95 | 6.17 | PASS |
| 173 | Less than 2% of 174 | 0 | PASS |
| 174 | (Greater than 50% of 95) | 84.4 | PASS |
| 175 | 5 - 9% of 174 | 7.74 | PASS |
| 176 | (Greater than 95% but less then 101%) | 99.2 | PASS |
| 177 | 5 - 9% of 176 | 6.69 | PASS |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

## f. Analysis Sequence Summary

(ANALYSIS SEQUENCE SUMMARY)

# ANALYSIS SEQUENCE SUMMARY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Sequence: 0I15002 Instrument: 5972hp71

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| BFB | 0I15002-TUN1 | 0I15002-TUN171.d | 09/15/10 10:05:00 |
| VSTD001 | 0I15002-CAL2 | 0I15002-CAL271.d | 09/15/10 10:28:00 |
| VSTD0.5 | 0I15002-CAL1 | 0I15002-CAL171.d | 09/15/10 10:56:00 |
| VSTD005 | 0I15002-CAL3 | 0I15002-CAL371.d | 09/15/10 11:23:00 |
| VSTD010 | 0I15002-CAL4 | 0I15002-CAL471.d | 09/15/10 11:51:00 |
| VSTD020 | 0I15002-CAL5 | 0I15002-CAL571.d | 09/15/10 12:19:00 |
| VSTD040 | 0I15002-CAL6 | 0I15002-CAL671.d | 09/15/10 12:46:00 |

# ANALYSIS SEQUENCE SUMMARY

*SW 8260B*

Client: DRAPER SDG: 1009180 Project: WATAUGA COUNTY LANDFILL 6520-39

Sequence: 0I20003 Instrument: 5972hp71

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| BFB | 0I20003-TUN1 | 0I20003-TUN171.d | 09/20/10 10:53:00 |
| VSTD005 | 0I20003-CCV1 | 0I20003-CCV171.d | 09/20/10 11:17:00 |
| VBLKHF | 0092014-BLK1 | 0092014-BLK171.d | 09/20/10 11:54:00 |
| VHFLCS | 0092014-BS1 | 0092014-BS171.d | 09/20/10 12:29:00 |
| VHFLCSD | 0092014-BSD1 | 0092014-BSD171.d | 09/20/10 12:57:00 |
| TRIP BLANK | 1009180-10 | 1009180-1071.d | 09/20/10 13:29:00 |
| MW-1 | 1009180-02 | 1009180-0271.d | 09/20/10 13:56:00 |
| MW-11 | 1009180-05 | 1009180-0571.d | 09/20/10 14:23:00 |
| MW-15 | 1009180-07 | 1009180-0771.d | 09/20/10 14:50:00 |
| MW-19 | 1009180-09 | 1009180-0971.d | 09/20/10 15:18:00 |
| MW-3 | 1009180-01 | 1009180-0171.d | 09/20/10 15:45:00 |
| MW-8 | 1009180-03 | 1009180-0371.d | 09/20/10 16:12:00 |
| MW-9 | 1009180-04 | 1009180-0471.d | 09/20/10 16:40:00 |
| MW-17 | 1009180-08 | 1009180-0871.d | 09/20/10 17:07:00 |
| MW-3MS | 0092014-MS1 | 0092014-MS171.d | 09/20/10 19:35:00 |
| MW-3MSD | 0092014-MSD1 | 0092014-MSD171.d | 09/20/10 20:02:00 |
| MW-12 | 1009180-06 | 1009180-0671.d | 09/20/10 20:29:00 |
| MW-10 | 1009180-12 | 1009180-1271.d | 09/20/10 20:57:00 |
| MW-2 | 1009180-11 | 1009180-1171.d | 09/20/10 21:24:00 |
| MW-10DL | 1009180-12RE1 | 1009180-12D71.d | 09/20/10 22:19:00 |
| MW-2DL | 1009180-11RE1 | 1009180-11D71.d | 09/20/10 22:46:00 |

## g. Sample Preparation and Analysis Holding Time Data

(HOLDING TIME SUMMARY)

Sample collection, receipt, preparation, analysis dates and quality control acceptance criteria.

# HOLDING TIME SUMMARY

*SW 8260B*

Client: DRAPER SDG: 1009180

Project: WATAUGA COUNTY LANDFILL 6520-39

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| MW-3 | 09/14/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 6.06 | 14.00 | |
| MW-1 | 09/13/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 7.07 | 14.00 | |
| MW-8 | 09/14/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 6.13 | 14.00 | |
| MW-9 | 09/13/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 7.14 | 14.00 | |
| MW-11 | 09/14/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 5.94 | 14.00 | |
| MW-12 | 09/14/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 6.17 | 14.00 | |
| MW-15 | 09/14/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 6.11 | 14.00 | |
| MW-17 | 09/14/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 6.11 | 14.00 | |
| MW-19 | 09/14/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 6.17 | 14.00 | |
| TRIP BLANK | 09/03/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 17.56 | 14.00 | * |
| MW-2 | 09/13/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 7.24 | 14.00 | |
| MW-2DL | 09/13/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 7.30 | 14.00 | |
| MW-10 | 09/13/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 7.12 | 14.00 | |
| MW-10DL | 09/13/10 | 09/16/10 | 09/20/10 | N/A | 14.00 | 09/20/10 | 7.18 | 14.00 | |

# 2. Sample Data

Sample data shall be arranged in packets with the Organic Analysis Data Sheet (ANALYSIS DATA SHEET), followed by the raw data for volatile samples. These sample packets shall be placed in increasing Client Sample ID number order, considering both letters and numbers.

a. Target Analyte Results (ANALYSIS DATA SHEET)
Tabulated results (identification and quantitation) shall be included.

b. Reconstructed Ion Chromatograms (RICs)
Include for each sample or sample extract, including dilutions and reanalyses. The RIC shall contain the following header information: Client Sample ID number, date and time of analysis, instrument ID, Lab file ID, and analyst ID.

d. Quantitation Report showing calculations for target analytes
Include a printout of the Extracted Ion Current Profile (EICP) for all manual changes to all compounds, internal standards, and surrogate compounds.

e. Copies of raw spectra and copies of background-subtracted mass spectra of target analytes identified in the sample.
- The spectra shall include the following information: Client Sample ID number, Lab file ID, date and time of analysis, and instrument ID.
- The compound name must be clearly marked.

f. Copies of mass spectra of Tentatively Identified Compounds (TICs) with associated best-match spectra.
- The spectra shall be labeled as follows: Client Sample ID number, Lab file ID, date and time of analysis, and instrument ID.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-1**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0271.d | Sampled: 09/13/10 12:20

Initial/Final: 25mL / 25mL | Lab ID: 1009180-02 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 13:56

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | 1.4 | 0.44 | | 2.5 | JB |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.020 | | 0.50 | U |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.030 | | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | | 0.030 | | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-1**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0271.d | Sampled: 09/13/10 12:20

Initial/Final: 25mL / 25mL | Lab ID: 1009180-02 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 13:56

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.14 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | | 0.060 | | 0.50 | U |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

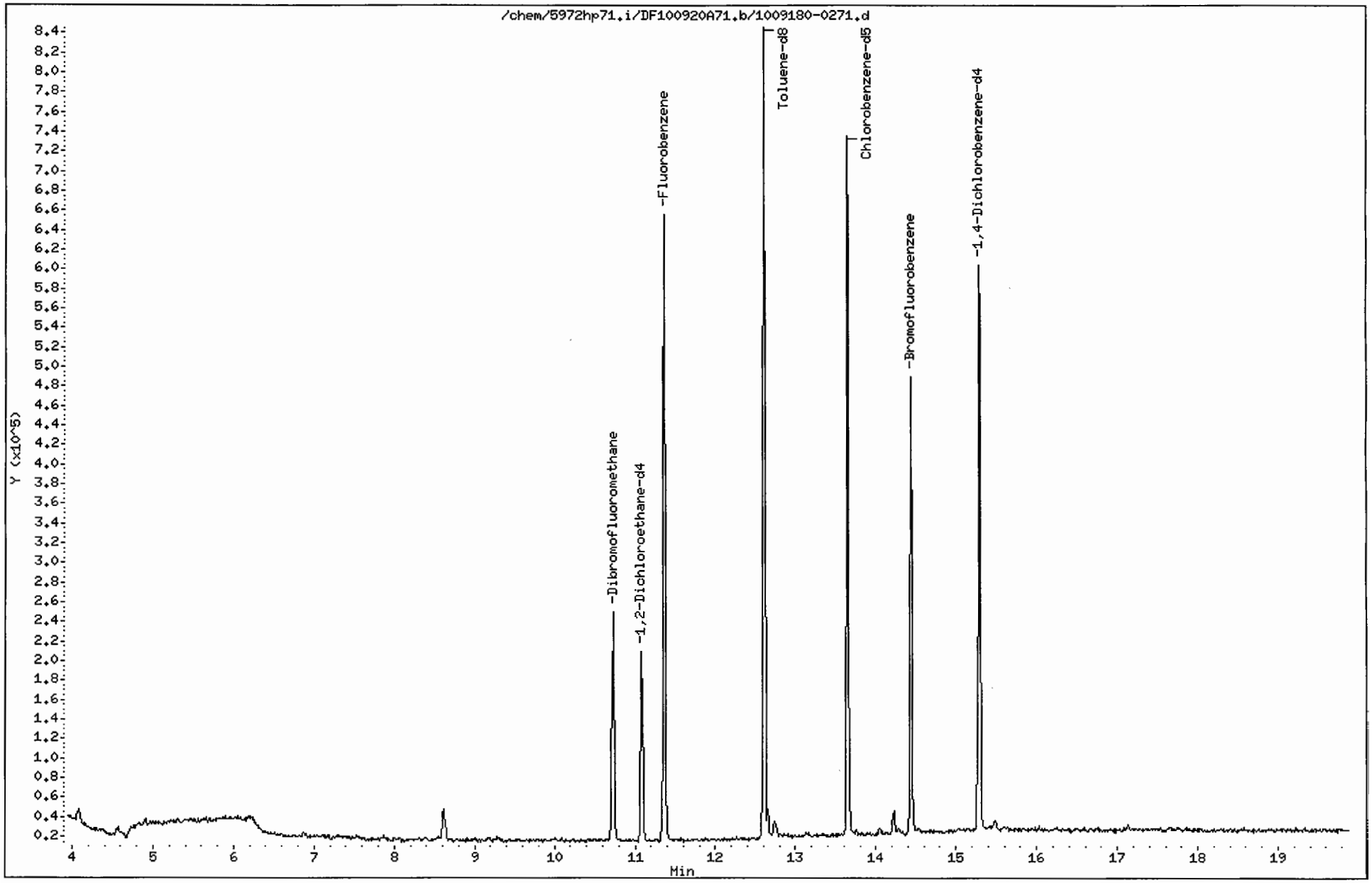
| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.629 | 93 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.933 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.676 | 94 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.921 | 98 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0271.d
Date : 20-SEP-2010 13:56
Client ID: MW-1
Sample Info: 1009180-02:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0271.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0271.d
Lab Smp Id: 1009180-02 Client Smp ID: MW-1
Inj Date : 20-SEP-2010 13:56
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-02:JAO
Misc Info : MW-1
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.360 | 11.362 | (1.000) | 524164 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.643 | 13.646 | (1.000) | 341126 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.286 | 15.289 | (1.000) | 155044 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.730 | 10.733 | (0.945) | 131571 | 115.726 | 4.6 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.084 | 11.087 | (0.976) | 113352 | 123.334 | 4.9 |
| $ 6 Toluene-d8 | 98 | 12.609 | 12.602 | (0.924) | 474911 | 116.912 | 4.7 |
| $ 7 Bromofluorobenzene | 95 | 14.440 | 14.433 | (0.945) | 159201 | 123.034 | 4.9 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | Compound Not Detected. | | | | | |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 18 Acetone | 43 | 7.876 | 7.869 | (0.693) | 5639 | 34.4895 | 1.4(a) |
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |

9-21-10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0271.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 49 Trichloroethene | 130 | Compound Not Detected. | | | | | |
| 51 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.659 | 12.652 | (0.928) | 10618 | 3.53678 | 0.14(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0271.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0271.d

Date : 20-SEP-2010 13:56

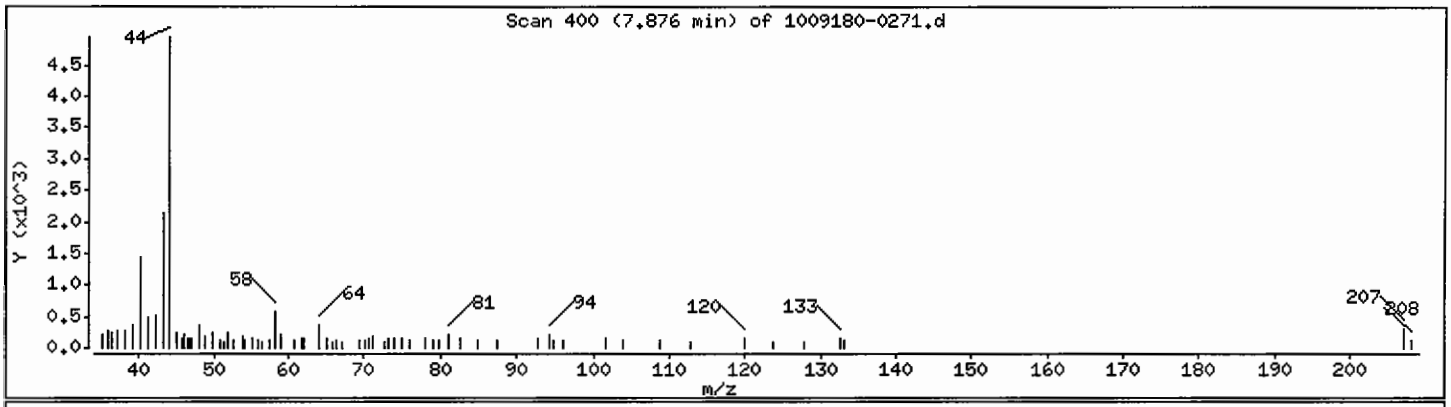
Client ID: MW-1 | Instrument: 5972hp71.i

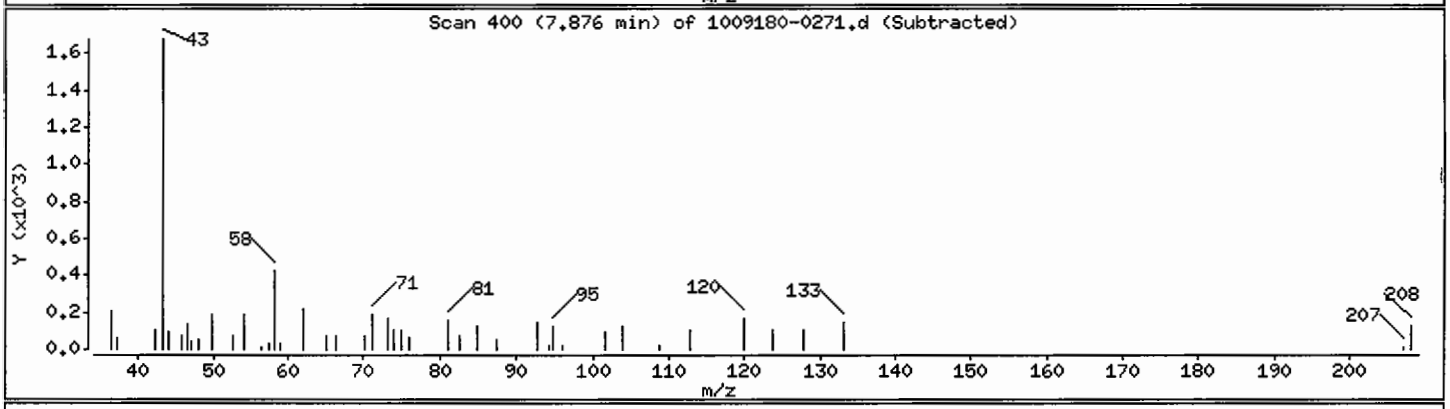
Sample Info: 1009180-02:JAO

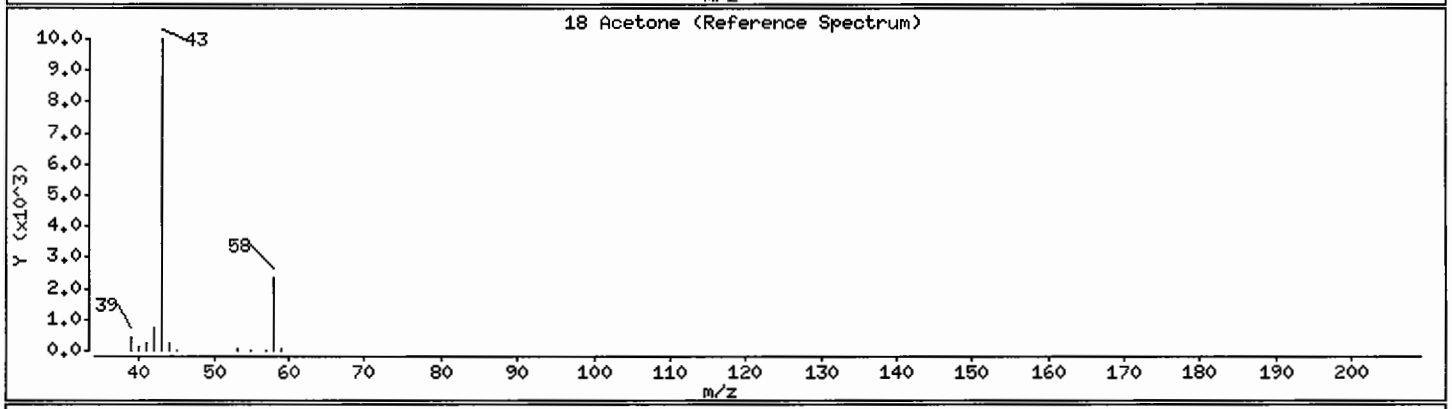
Purge Volume: 25.0 | Operator: JAO

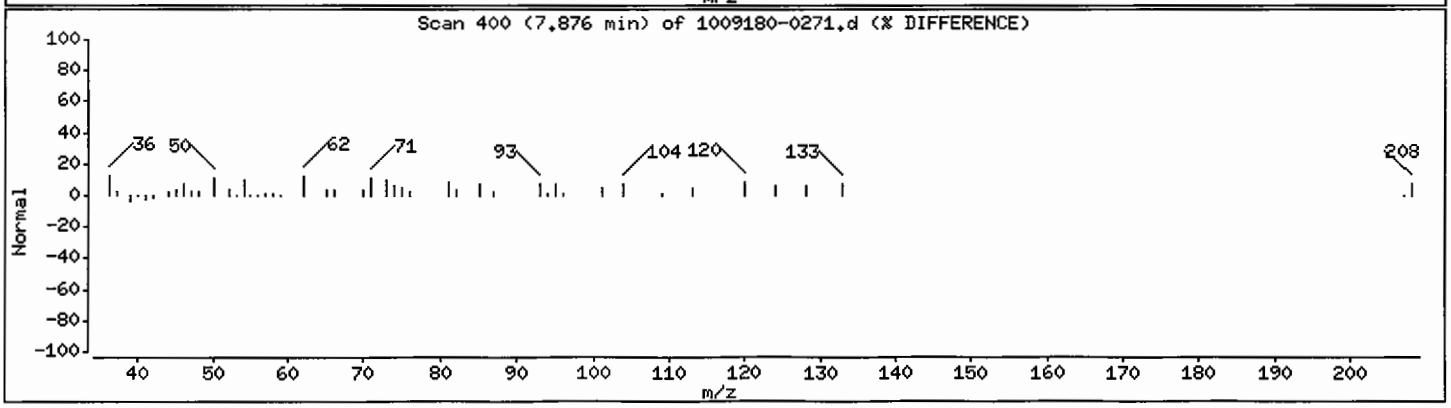
Column phase: SPB-624 | Column diameter: 0.32

18 Acetone | Concentration: 1.4 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0271.d

Date : 20-SEP-2010 13:56

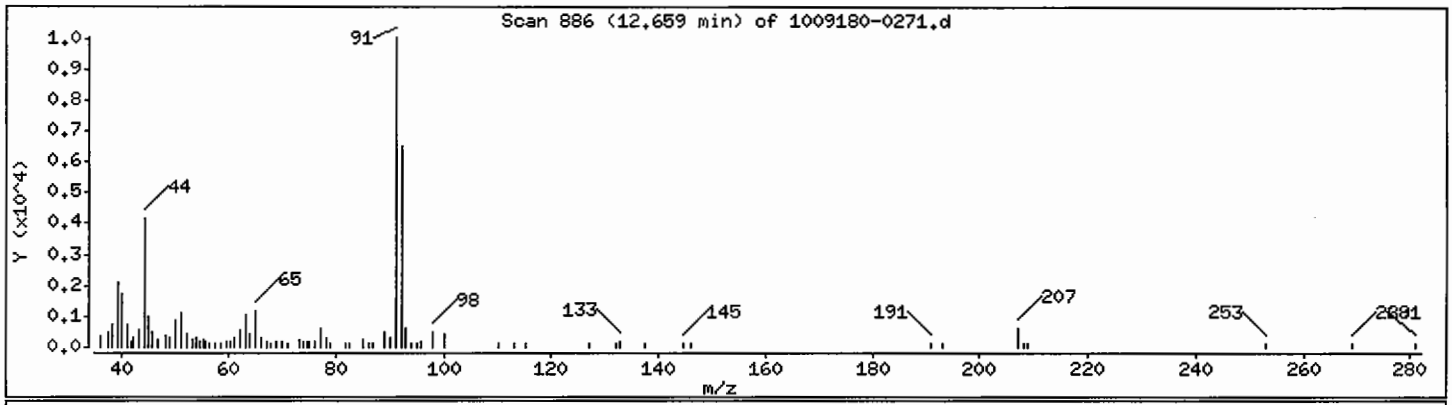
Client ID: MW-1 | Instrument: 5972hp71.i

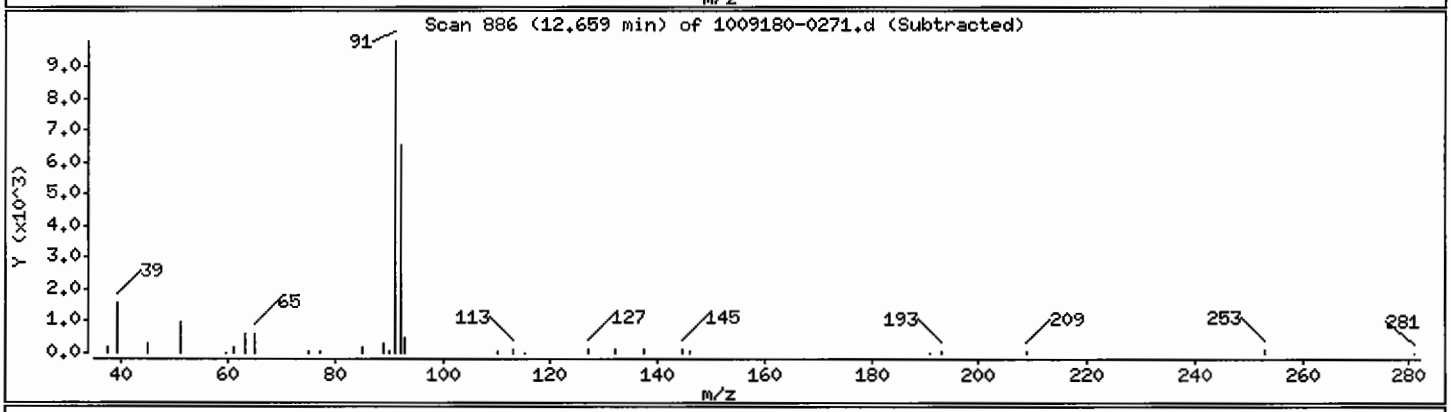
Sample Info: 1009180-02:JAO

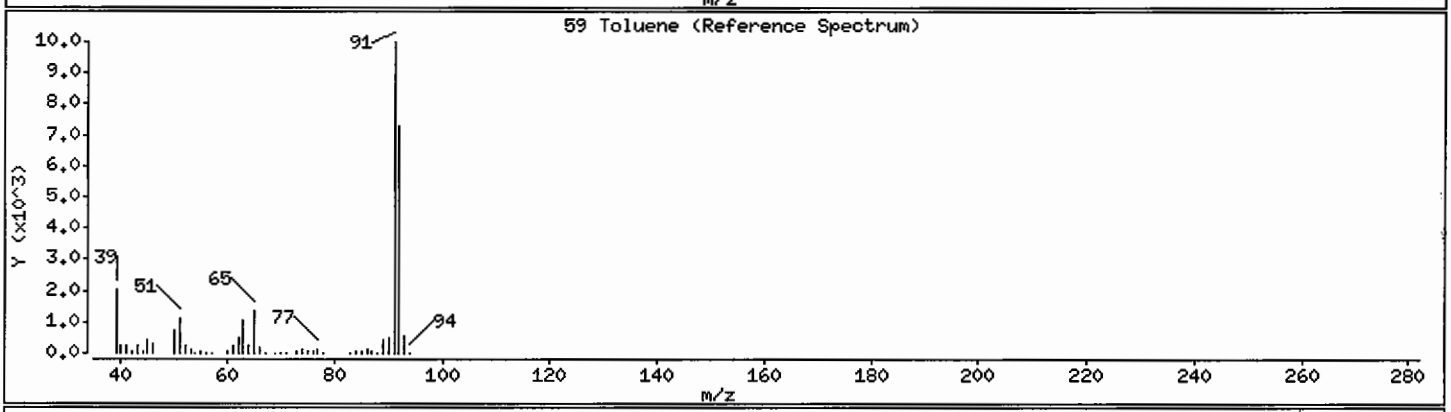
Purge Volume: 25.0 | Operator: JAO

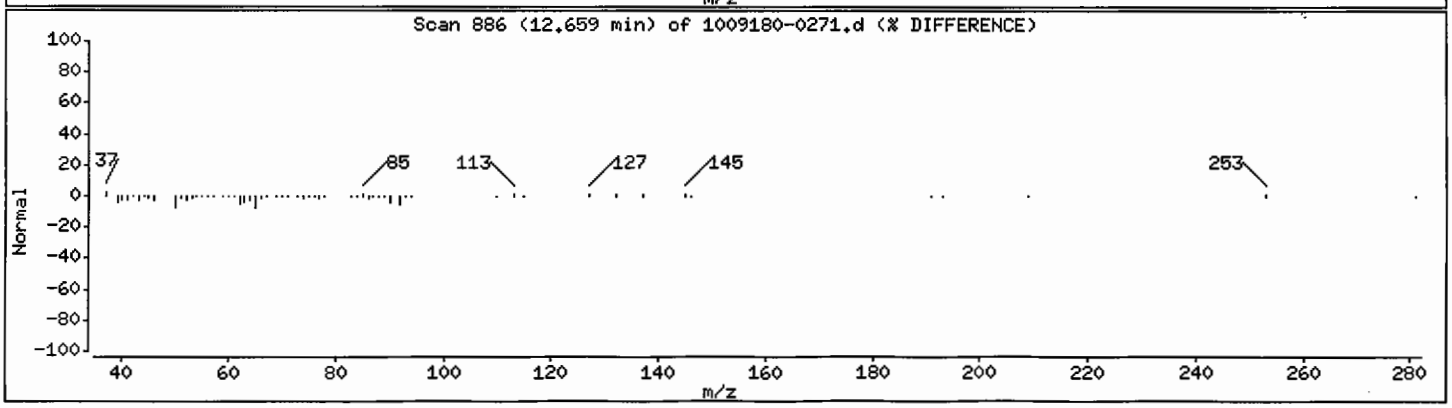
Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.14 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0271.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0271.d
Lab Smp Id: 1009180-02 Client Smp ID: MW-1
Inj Date : 20-SEP-2010 13:56
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-02:JAO
Misc Info : MW-1
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS897O.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-10**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-1271.d | Sampled: 09/13/10 18:00

Initial/Final: 25mL / 25mL | Lab ID: 1009180-12 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 20:57

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 12 | 0.040 | | 0.50 | |
| 67-64-1 | Acetone | 1.3 | 0.44 | | 2.5 | JB |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 8.9 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.030 | | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 60 | 0.020 | | 0.50 | E |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | | 0.030 | | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-10**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-1271.d | Sampled: 09/13/10 18:00

Initial/Final: 25mL / 25mL | Lab ID: 1009180-12 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 20:57

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.092 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 2.1 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.889 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.973 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.642 | 93 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.894 | 98 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories

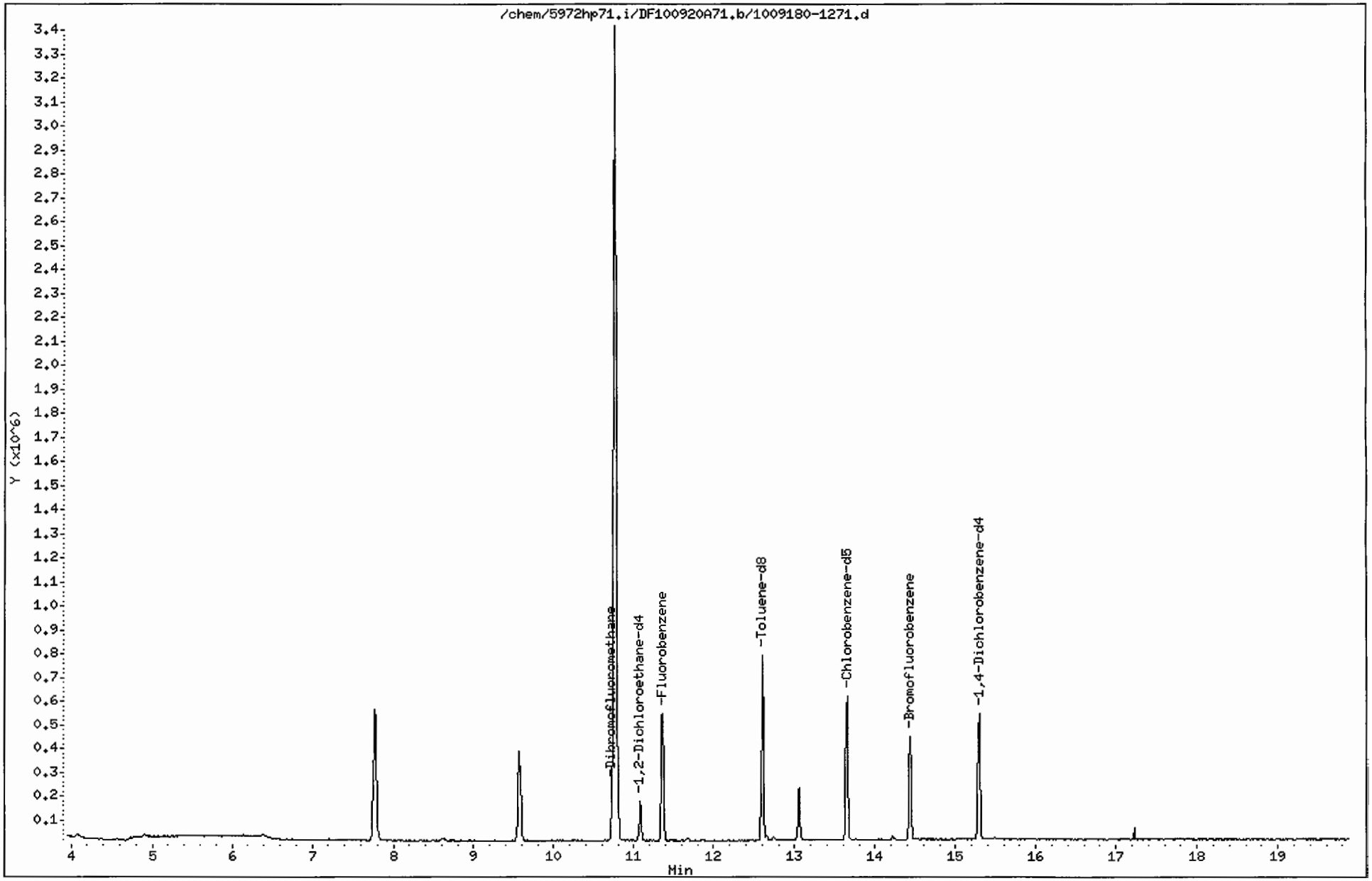
CompuChem

A Division Of

Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1271.d
Date : 20-SEP-2010 20:57
Client ID: MW-10
Sample Info: 1009180-12:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1271.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-1271.d
Lab Smp Id: 1009180-12 Client Smp ID: MW-10
Inj Date : 20-SEP-2010 20:57
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-12:JAO
Misc Info : MW-10
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.366 | 11.362 | (1.000) | 445214 | 125.000 | |
| 2 Chlorobenzene-d5 | 117 | 13.649 | 13.646 | (1.000) | 298824 | 125.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 15.292 | 15.289 | (1.000) | 137318 | 125.000 | |
| 4 Dibromofluoromethane | 113 | 10.726 | 10.733 | (0.944) | 118039 | 122.235 | 4.9 |
| 5 1,2-Dichloroethane-d4 | 65 | 11.080 | 11.087 | (0.975) | 97050 | 124.322 | 5.0 |
| 6 Toluene-d8 | 98 | 12.606 | 12.602 | (0.924) | 412921 | 116.041 | 4.6 |
| 7 Bromofluorobenzene | 95 | 14.436 | 14.433 | (0.944) | 140209 | 122.344 | 4.9 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | Compound Not Detected. | | | | | |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | 7.774 | 7.780 | (0.684) | 264673 | 300.806 | 12 |
| 18 Acetone | 43 | 7.872 | 7.869 | (0.693) | 4562 | 32.8503 | 1.3(a) |
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |

9.21.10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1271.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 9.575 | 9.571 | (0.842) | 417161 | 223.221 | 8.9 |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | 10.765 | 10.772 | (0.947) | 2182088 | 1502.41 | 60(A) |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 49 Trichloroethene | 130 | Compound Not Detected. | | | | | |
| 51 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.655 | 12.652 | (0.927) | 6021 | 2.28946 | 0.092(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | 13.058 | 13.055 | (0.957) | 43870 | 51.6655 | 2.1 |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1271.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1271.d

Date : 20-SEP-2010 20:57

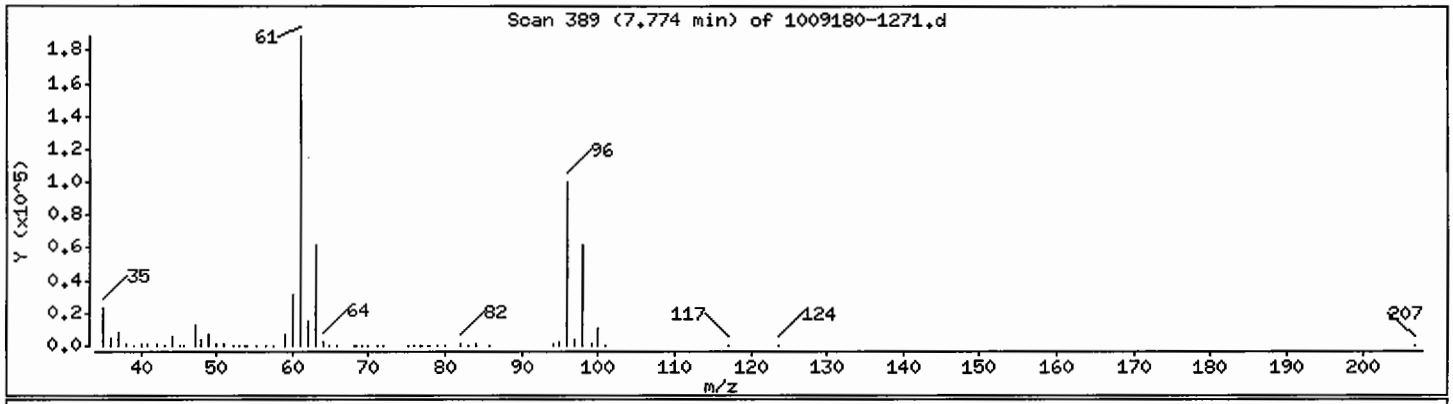
Client ID: MW-10 | Instrument: 5972hp71.i

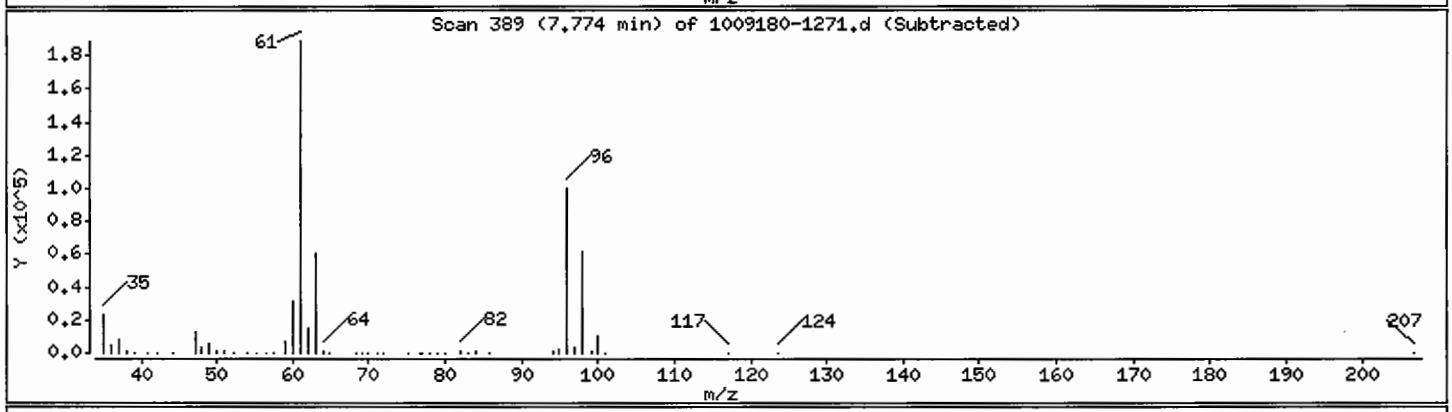
Sample Info: 1009180-12:JAO

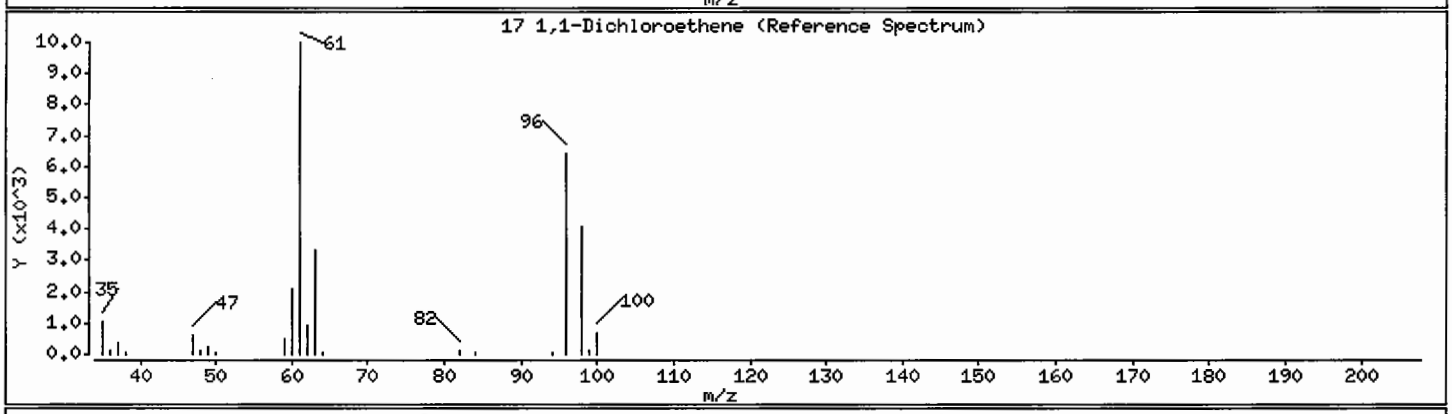
Purge Volume: 25.0 | Operator: JAO

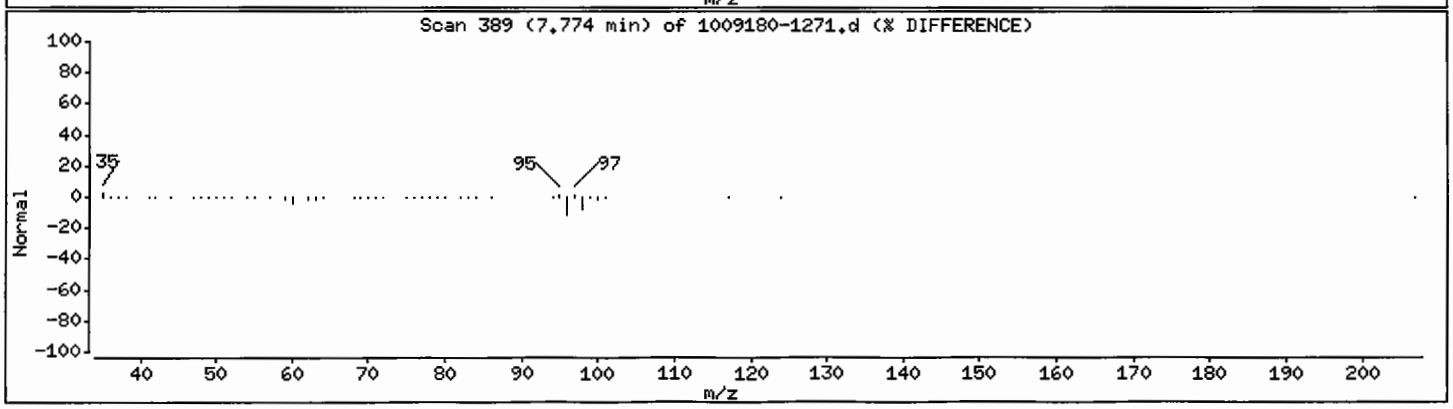
Column phase: SPB-624 | Column diameter: 0.32

17 1,1-Dichloroethene | Concentration: 12 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1271.d

Date : 20-SEP-2010 20:57

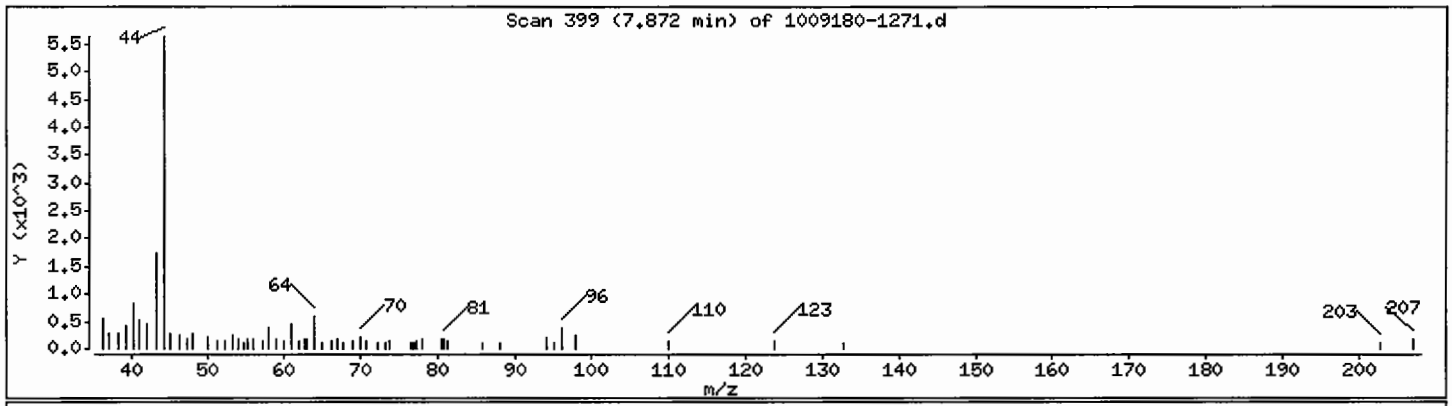
Client ID: MW-10 | Instrument: 5972hp71.i

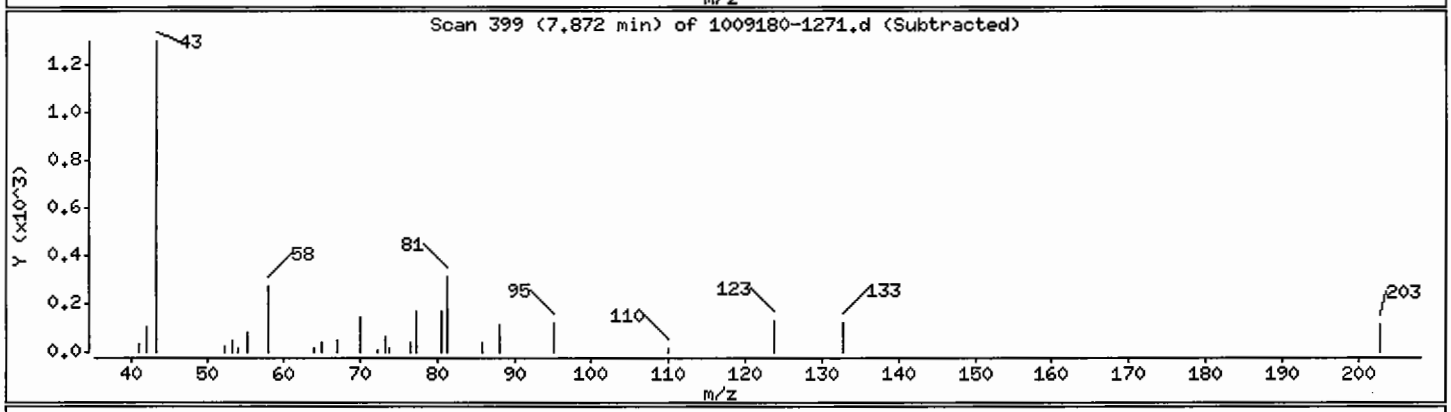
Sample Info: 1009180-12:JAO

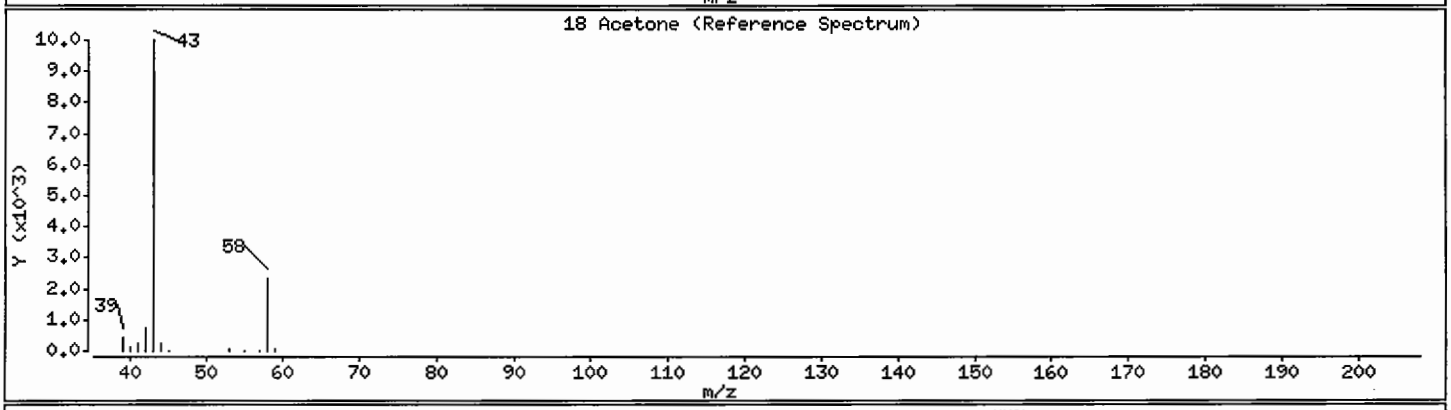
Purge Volume: 25.0 | Operator: JAO

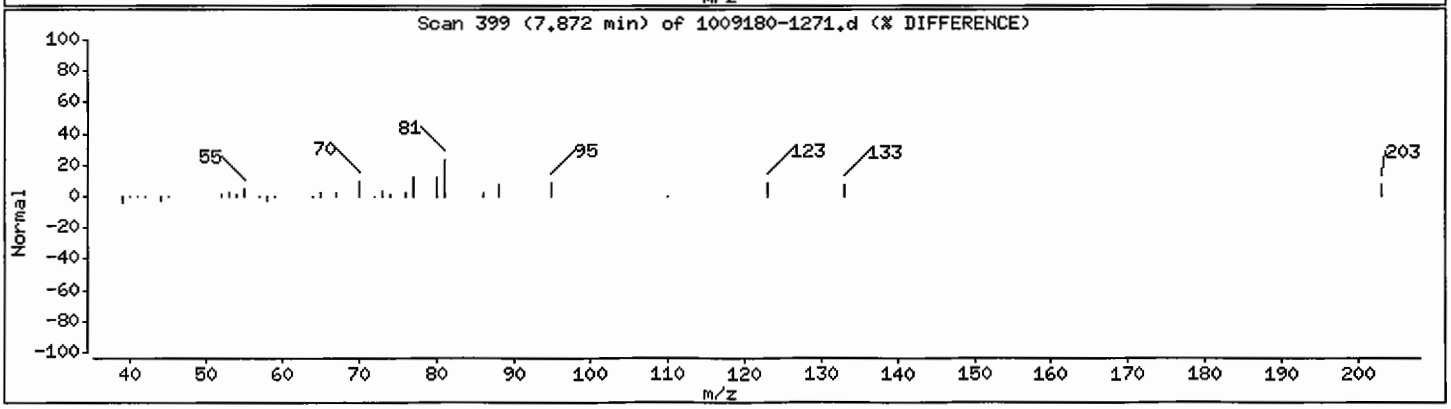
Column phase: SPB-624 | Column diameter: 0.32

18 Acetone | Concentration: 1.3 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1271.d

Date : 20-SEP-2010 20:57

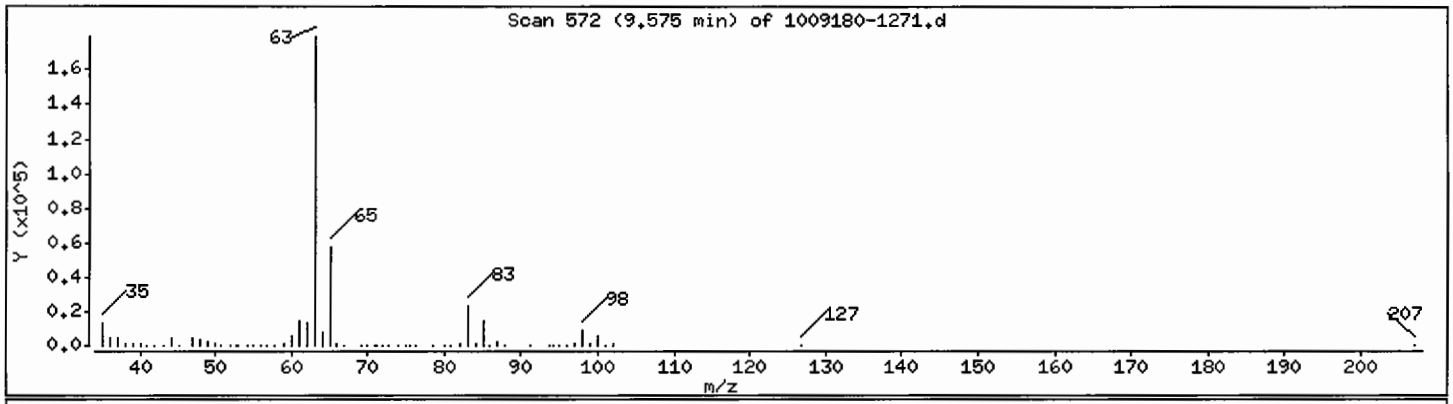
Client ID: MW-10 | Instrument: 5972hp71.i

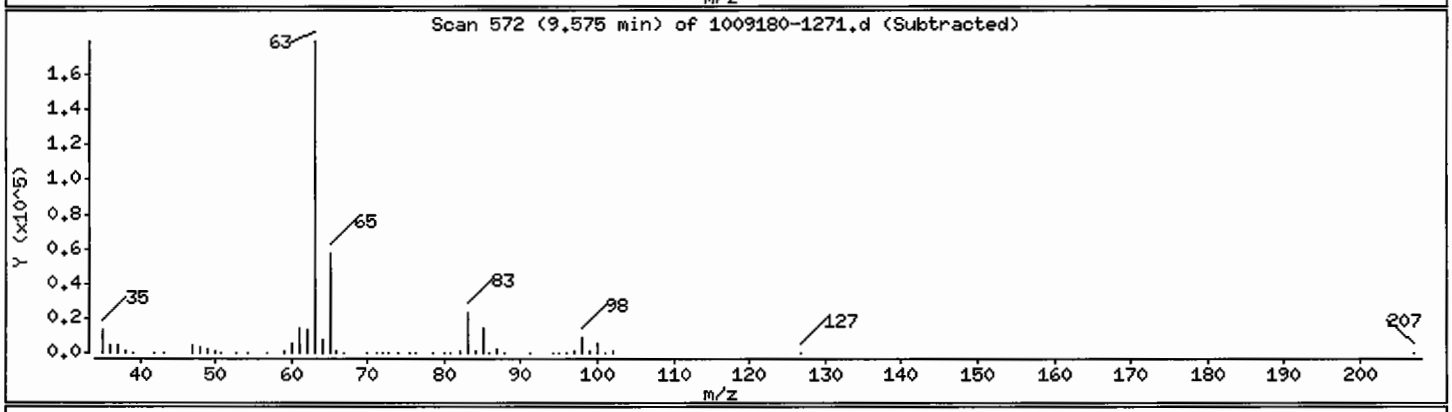
Sample Info: 1009180-12:JAO

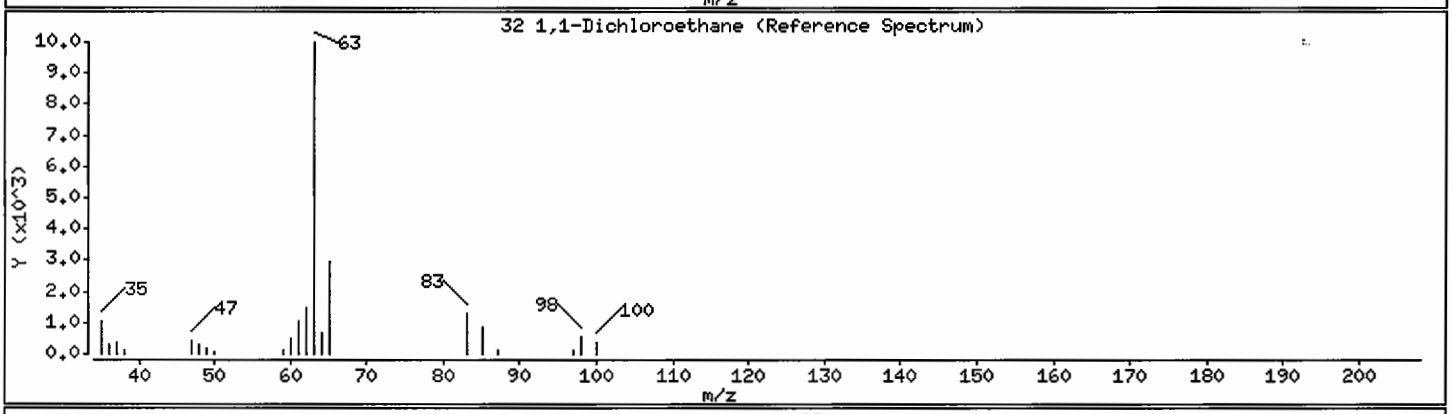
Purge Volume: 25.0 | Operator: JAO

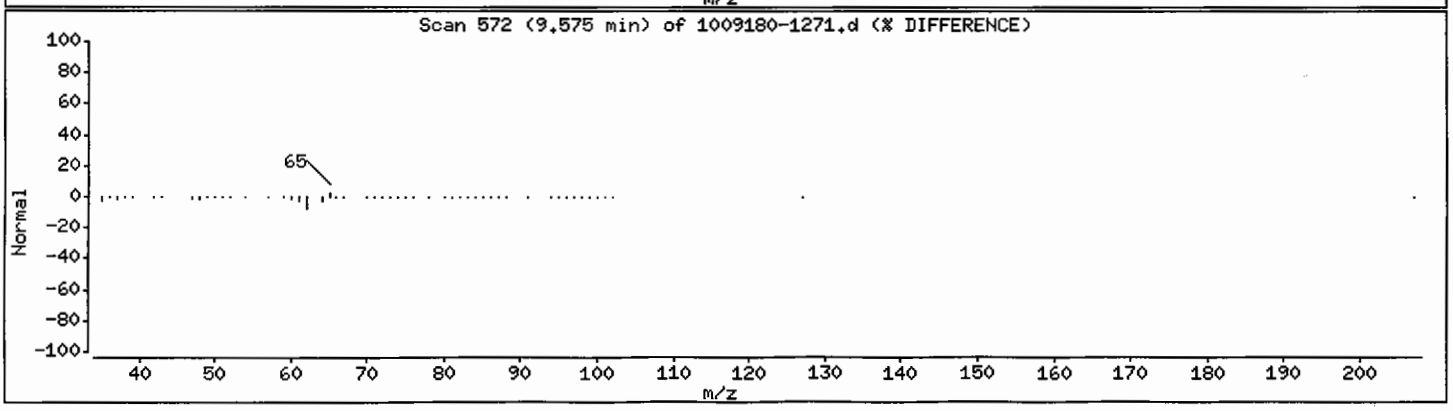
Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 8.9 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1271.d

Date : 20-SEP-2010 20:57

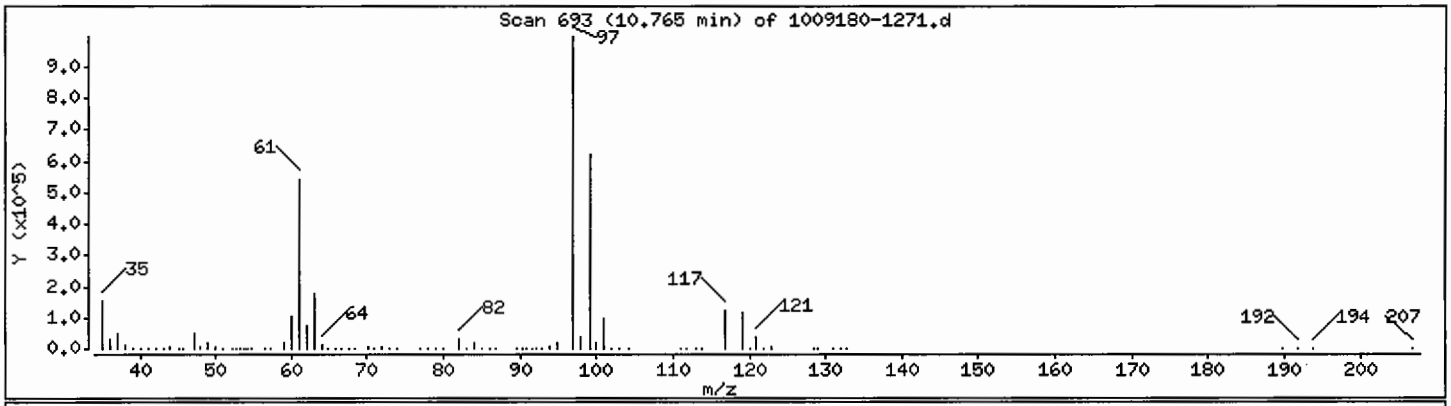
Client ID: MW-10 | Instrument: 5972hp71.i

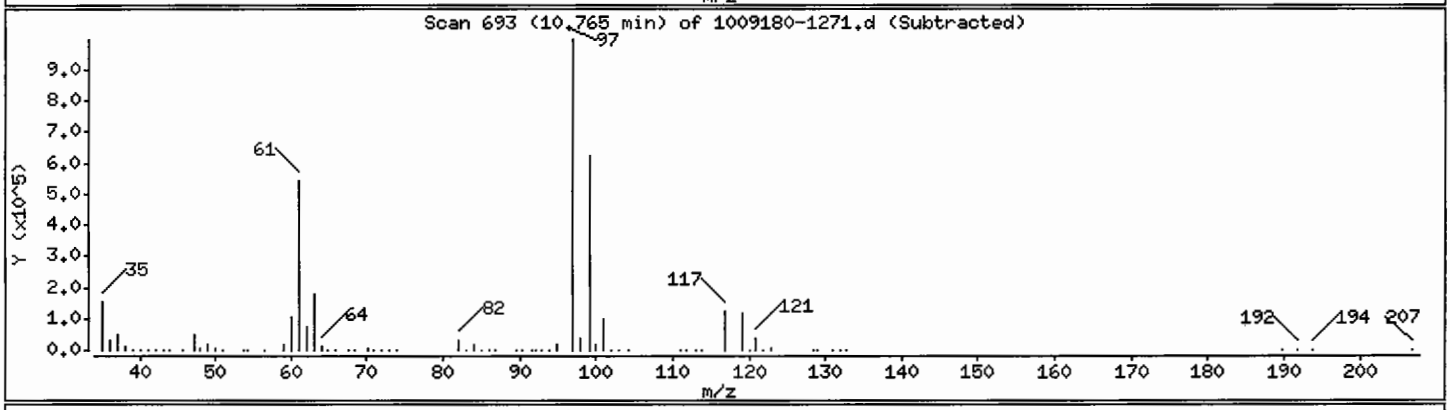
Sample Info: 1009180-12:JAO

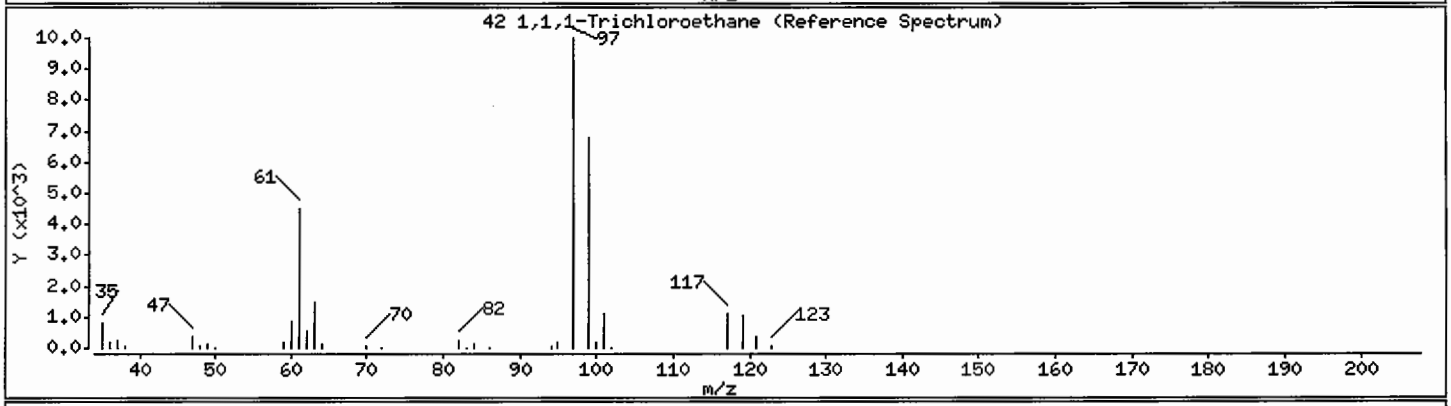
Purge Volume: 25.0 | Operator: JAO

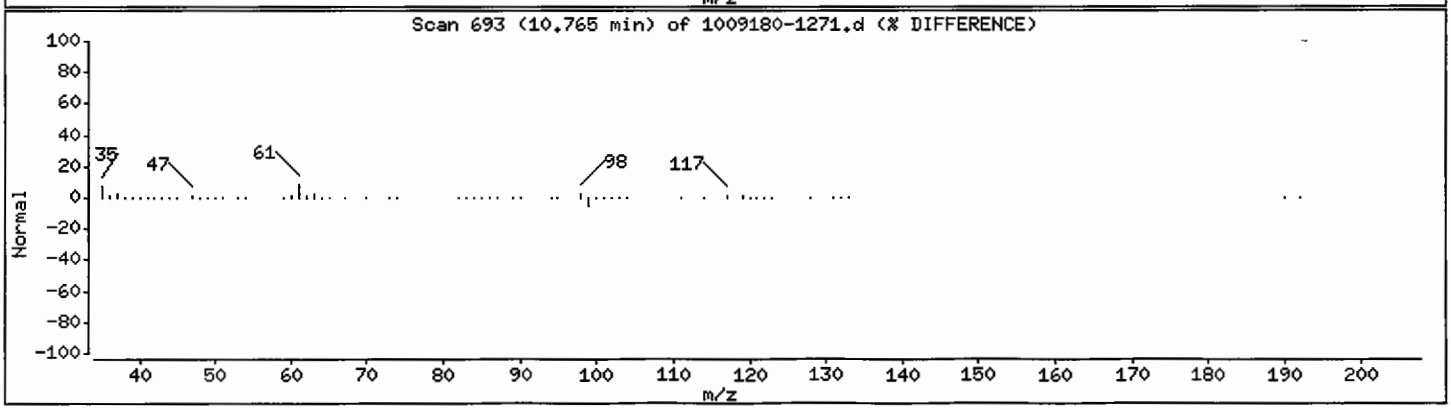
Column phase: SPB-624 | Column diameter: 0.32

42 1,1,1-Trichloroethane | Concentration: 60 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1271.d

Date : 20-SEP-2010 20:57

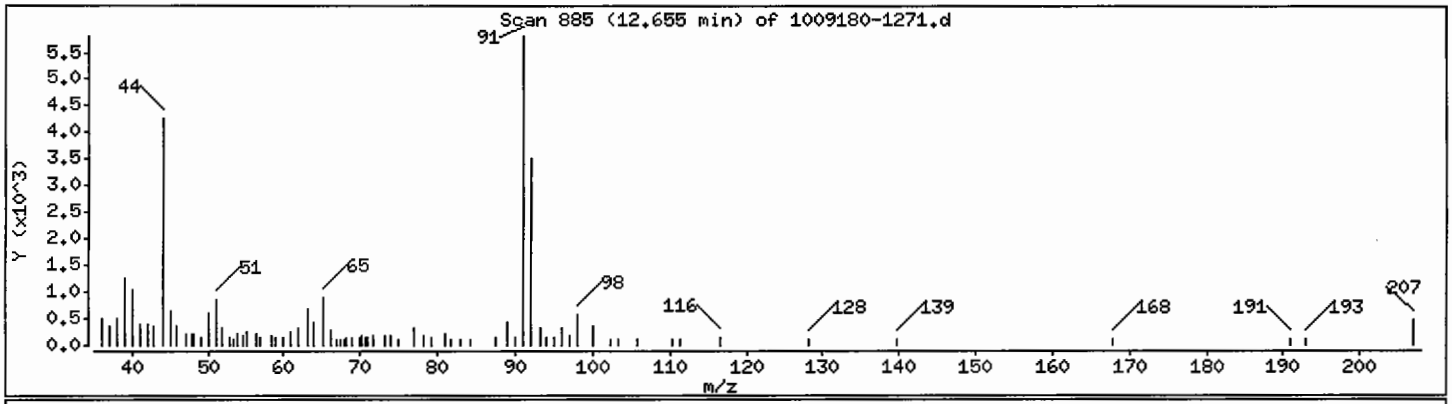
Client ID: MW-10 | Instrument: 5972hp71.i

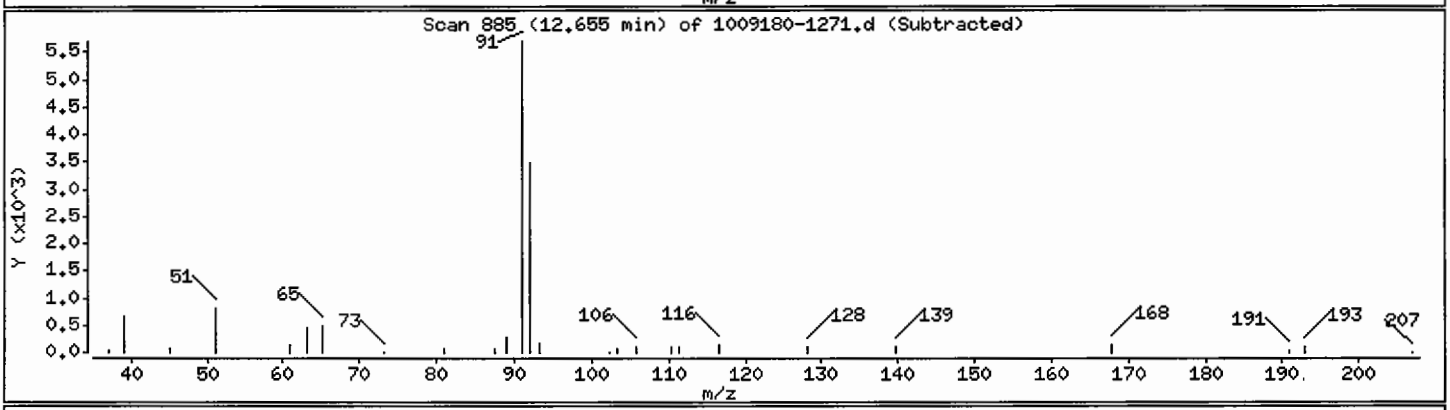
Sample Info: 1009180-12:JAO

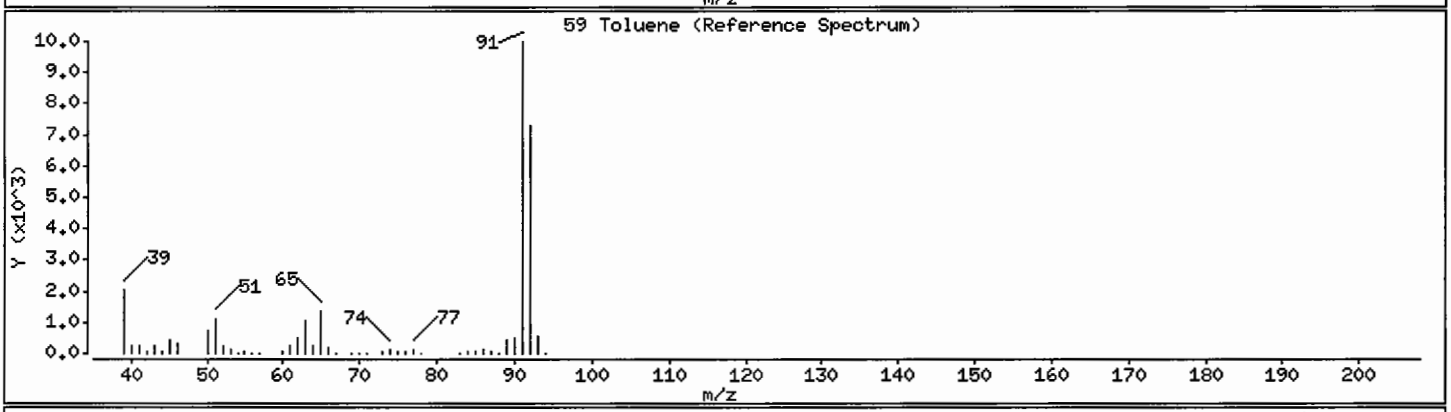
Purge Volume: 25.0 | Operator: JAO

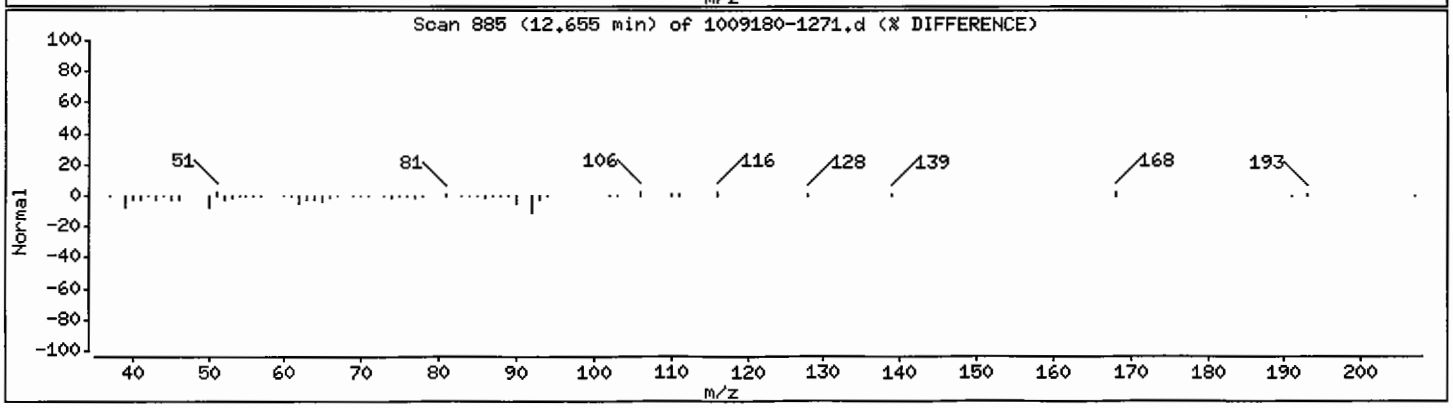
Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.092 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1271.d

Date : 20-SEP-2010 20:57

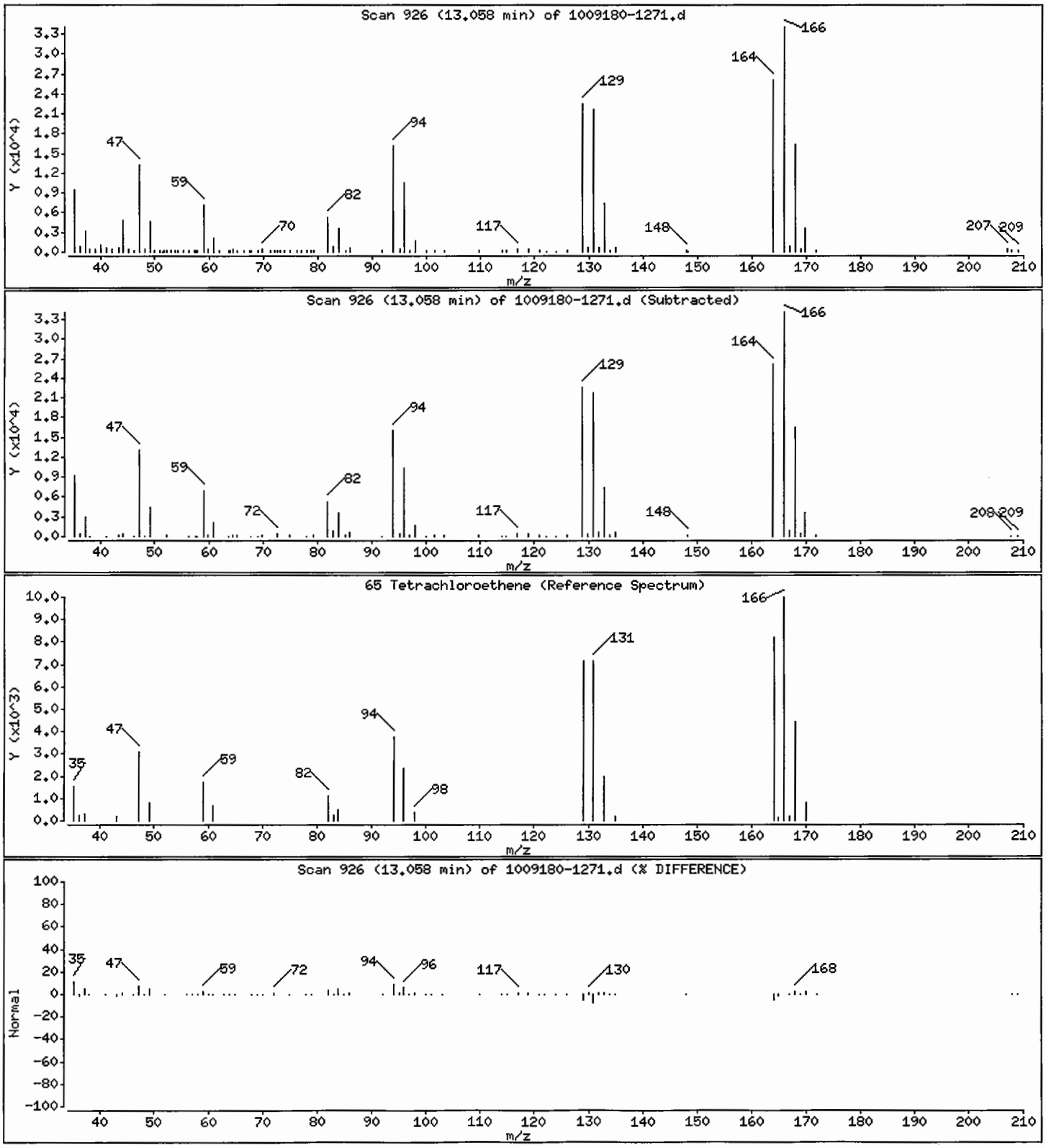
Client ID: MW-10 | Instrument: 5972hp71.i

Sample Info: 1009180-12:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

65 Tetrachloroethene | Concentration: 2.1 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1271.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-1271.d
Lab Smp Id: 1009180-12 Client Smp ID: MW-10
Inj Date : 20-SEP-2010 20:57
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-12:JAO
Misc Info : MW-10
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-10DL**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-12D71.d | Sampled: 09/13/10 18:00

Initial/Final: 25mL / 25mL | Lab ID: 1009180-12RE1 | Received: 09/16/10 09:32

Dilution: 2 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 22:19

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.060 | | 1.0 | U |
| 74-87-3 | Chloromethane | | 0.22 | | 1.0 | U |
| 75-01-4 | Vinyl chloride | | 0.14 | | 1.0 | U |
| 74-83-9 | Bromomethane | | 0.22 | | 1.0 | U |
| 75-00-3 | Chloroethane | | 0.40 | | 1.0 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.12 | | 1.0 | U |
| 107-02-8 | Acrolein | | 2.1 | | 10 | U |
| 75-35-4 | 1,1-Dichloroethene | 12 | 0.080 | | 1.0 | D |
| 67-64-1 | Acetone | 2.3 | 0.88 | | 5.0 | JBD |
| 74-88-4 | Iodomethane | | 0.060 | | 1.0 | U |
| 75-15-0 | Carbon disulfide | | 0.040 | | 1.0 | U |
| 107-05-1 | 3-Chloropropene | | 0.10 | | 1.0 | U |
| 75-05-8 | Acetonitrile | | 0.060 | | 1.0 | U |
| 75-09-2 | Methylene chloride | | 0.040 | | 1.0 | U |
| 107-13-1 | Acrylonitrile | | 0.72 | | 10 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.10 | | 1.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 8.9 | 0.040 | | 1.0 | D |
| 126-99-8 | Chloroprene | | 0.040 | | 1.0 | U |
| 108-05-4 | Vinyl acetate | | 0.12 | | 2.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.060 | | 1.0 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.060 | | 1.0 | U |
| 107-12-0 | Propionitrile | | 2.8 | | 50 | U |
| 78-93-3 | 2-Butanone | | 0.56 | | 5.0 | U |
| 126-98-7 | Methacrylonitrile | | 0.78 | | 10 | U |
| 74-97-5 | Bromochloromethane | | 0.080 | | 1.0 | U |
| 67-66-3 | Chloroform | | 0.060 | | 1.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 58 | 0.040 | | 1.0 | D |
| 563-58-6 | 1,1-Dichloropropene | | 0.060 | | 1.0 | U |
| 56-23-5 | Carbon tetrachloride | | 0.060 | | 1.0 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.060 | | 1.0 | U |
| 78-83-1 | Isobutyl alcohol | | 12 | | 50 | U |
| 71-43-2 | Benzene | | 0.060 | | 1.0 | U |
| 79-01-6 | Trichloroethene | | 0.060 | | 1.0 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.24 | | 1.0 | U |
| 74-95-3 | Dibromomethane | | 0.060 | | 1.0 | U |
| 80-62-6 | Methyl Methacrylate | | 1.1 | | 10 | U |
| 75-27-4 | Bromodichloromethane | | 0.060 | | 1.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.080 | | 1.0 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.84 | | 5.0 | U |

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-10DL**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-12D71.d | Sampled: 09/13/10 18:00

Initial/Final: 25mL / 25mL | Lab ID: 1009180-12RE1 | Received: 09/16/10 09:32

Dilution: 2 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 22:19

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.16 | 0.060 | | 1.0 | JBD |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.10 | | 1.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.080 | | 1.0 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.82 | | 10 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.060 | | 1.0 | U |
| 127-18-4 | Tetrachloroethene | 2.0 | 0.12 | | 1.0 | D |
| 591-78-6 | 2-Hexanone | | 1.0 | | 5.0 | U |
| 124-48-1 | Dibromochloromethane | | 0.080 | | 1.0 | U |
| 108-90-7 | Chlorobenzene | | 0.040 | | 1.0 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.040 | | 1.0 | U |
| 100-41-4 | Ethylbenzene | | 0.080 | | 1.0 | U |
| 179601-23-1 | m,p-Xylene | | 0.16 | | 2.0 | U |
| 95-47-6 | o-Xylene | | 0.060 | | 1.0 | U |
| 100-42-5 | Styrene | | 0.040 | | 1.0 | U |
| 75-25-2 | Bromoform | | 0.060 | | 1.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.10 | | 1.0 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.18 | | 1.0 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.66 | | 4.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.080 | | 1.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.060 | | 1.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.060 | | 1.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.12 | | 1.0 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.060 | | 1.0 | U |
| 91-20-3 | Naphthalene | | 0.30 | | 1.0 | U |
| 1330-20-7 | Xylenes (total) | | 0.060 | | 1.0 | U |

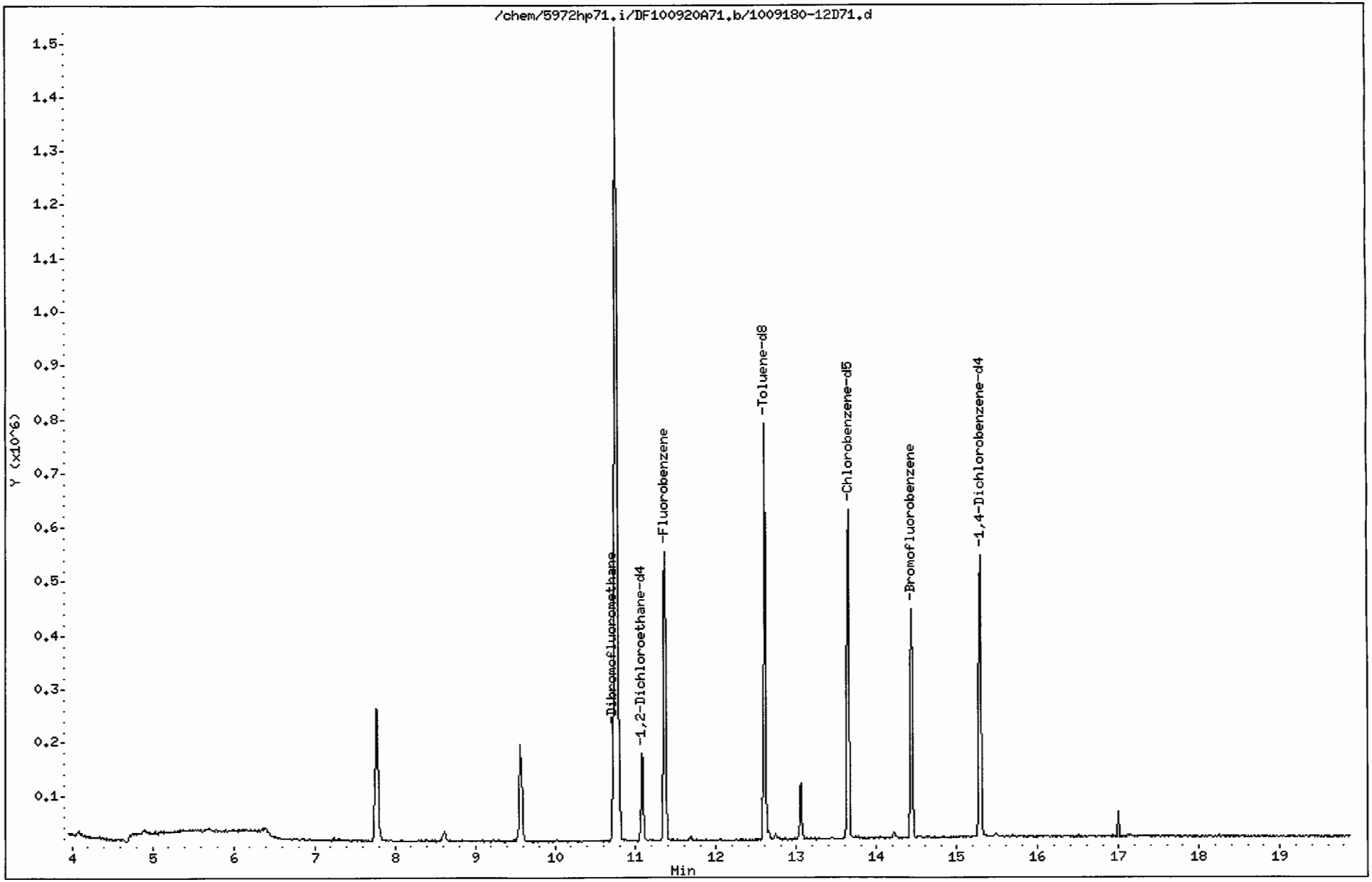
| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 5.125 | 103 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 5.306 | 106 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.537 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.690 | 94 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d
Date : 20-SEP-2010 22:19
Client ID: MW-10DL
Sample Info: 1009180-12RE1:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d
Lab Smp Id: 1009180-12RE1 Client Smp ID: MW-10DL
Inj Date : 20-SEP-2010 22:19
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-12RE1:JAO
Misc Info : MW-10DL
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 31
Dil Factor: 2.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 2.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 2.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.365 | 11.362 | (1.000) | 422646 | 125.000 | |
| 2 Chlorobenzene-d5 | 117 | 13.648 | 13.646 | (1.000) | 295827 | 125.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 15.292 | 15.289 | (1.000) | 136982 | 125.000 | |
| 4 Dibromofluoromethane | 113 | 10.725 | 10.733 | (0.944) | 117465 | 128.136 | 10 |
| 5 1,2-Dichloroethane-d4 | 65 | 11.080 | 11.087 | (0.975) | 98307 | 132.656 | 11 |
| 6 Toluene-d8 | 98 | 12.605 | 12.602 | (0.924) | 399600 | 113.435 | 9.1 |
| 7 Bromofluorobenzene | 95 | 14.435 | 14.433 | (0.944) | 134051 | 117.257 | 9.4 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | Compound Not Detected. | | | | | |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | 7.783 | 7.780 | (0.685) | 122743 | 146.949 | 12 |
| 18 Acetone | 43 | 7.871 | 7.869 | (0.693) | 3865 | 29.3174 | 2.3(a) |
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |

9.21.10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 9.574 | 9.571 | (0.842) | 197397 | 111.267 | 8.9 |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | 10.774 | 10.772 | (0.948) | 995188 | 721.792 | 58 |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 49 Trichloroethene | 130 | Compound Not Detected. | | | | | |
| 51 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.654 | 12.652 | (0.927) | 5129 | 1.97004 | 0.16(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | 13.058 | 13.055 | (0.957) | 21257 | 25.2879 | 2.0 |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d

Date : 20-SEP-2010 22:19

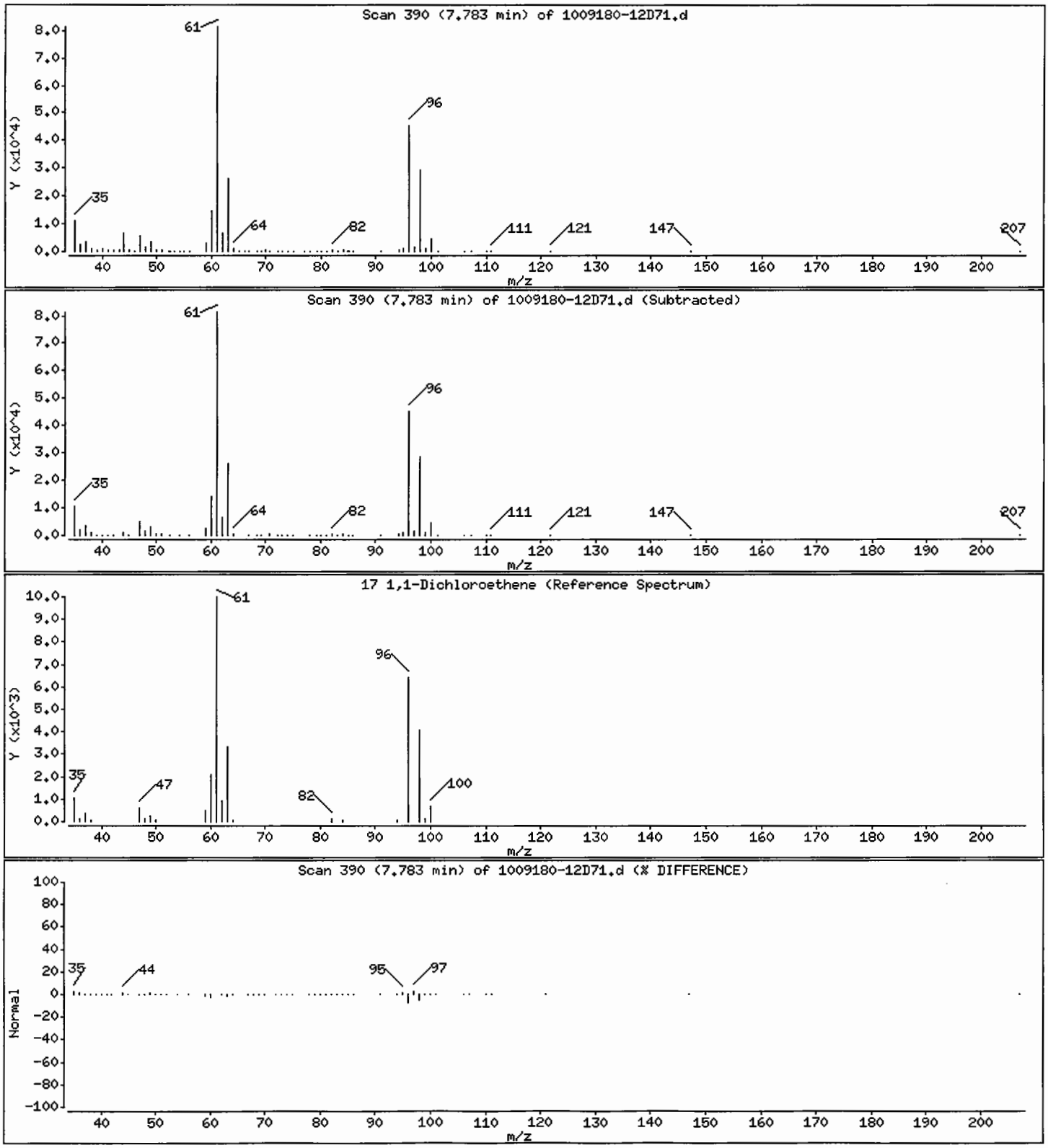
Client ID: MW-10DL | Instrument: 5972hp71.i

Sample Info: 1009180-12RE1:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

17 1,1-Dichloroethene | Concentration: 12 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d

Date : 20-SEP-2010 22:19

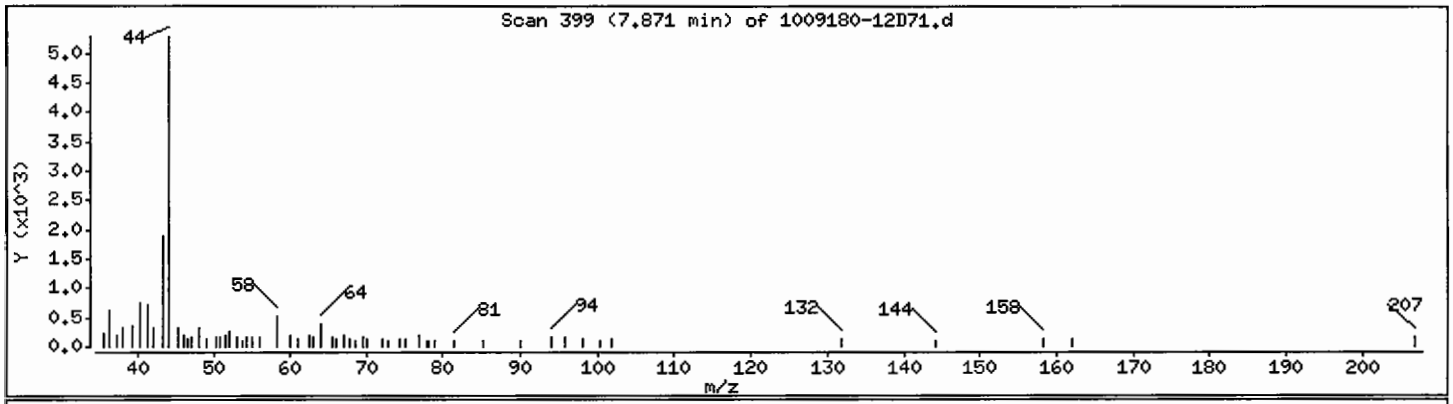
Client ID: MW-10DL | Instrument: 5972hp71.i

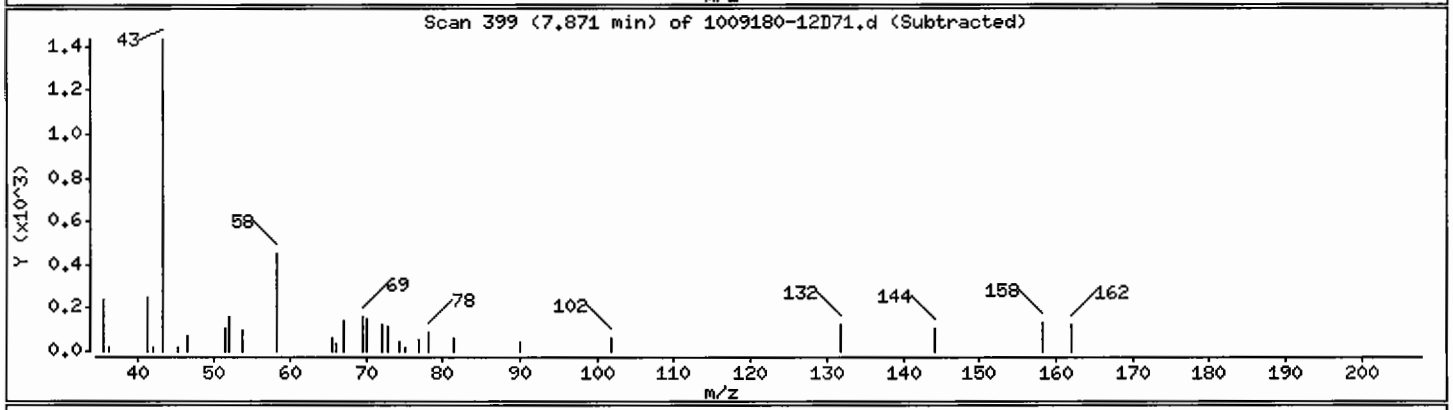
Sample Info: 1009180-12RE1:JAO

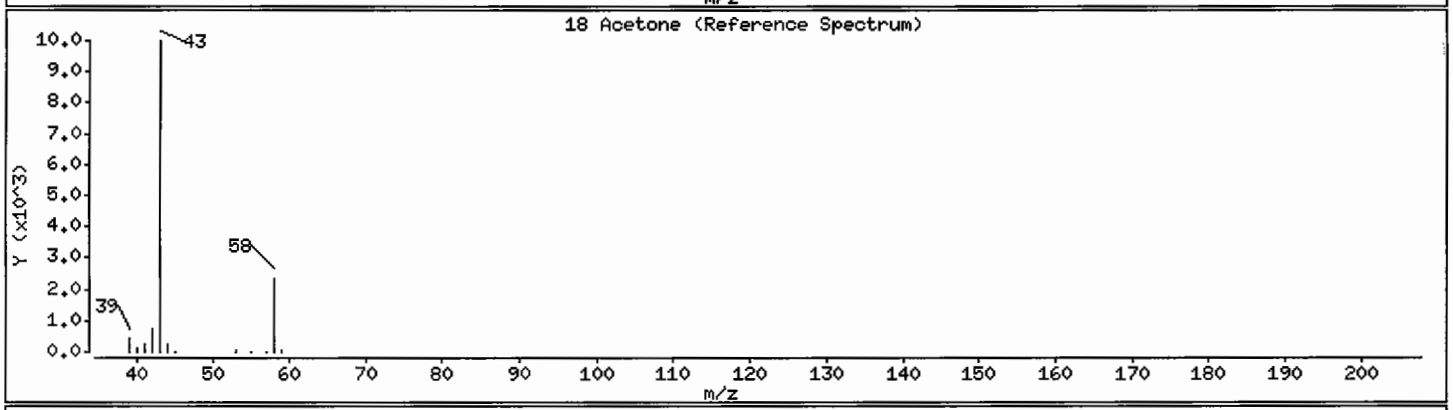
Purge Volume: 25.0 | Operator: JAO

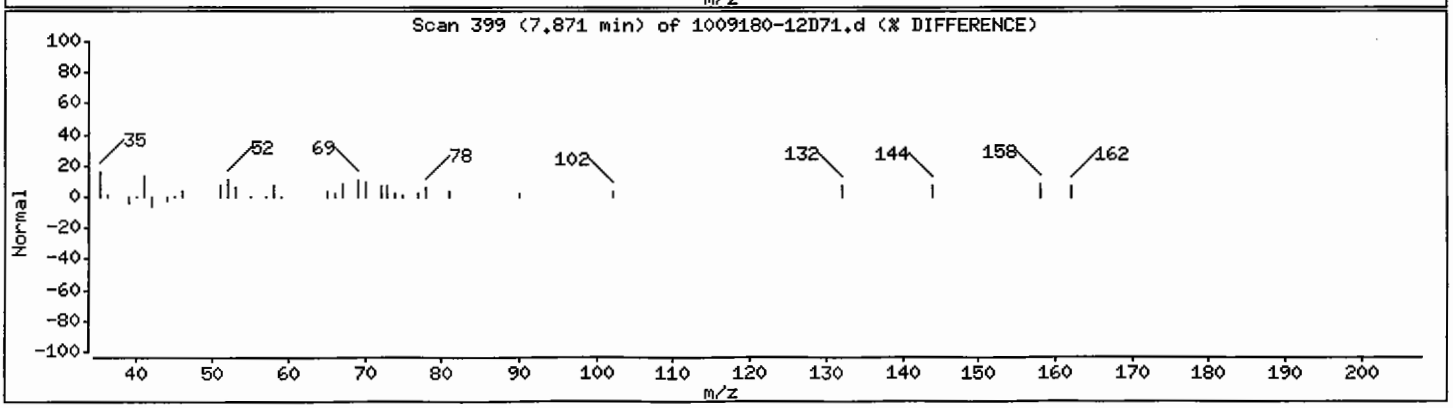
Column phase: SPB-624 | Column diameter: 0.32

18 Acetone | Concentration: 2.3 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d

Date : 20-SEP-2010 22:19

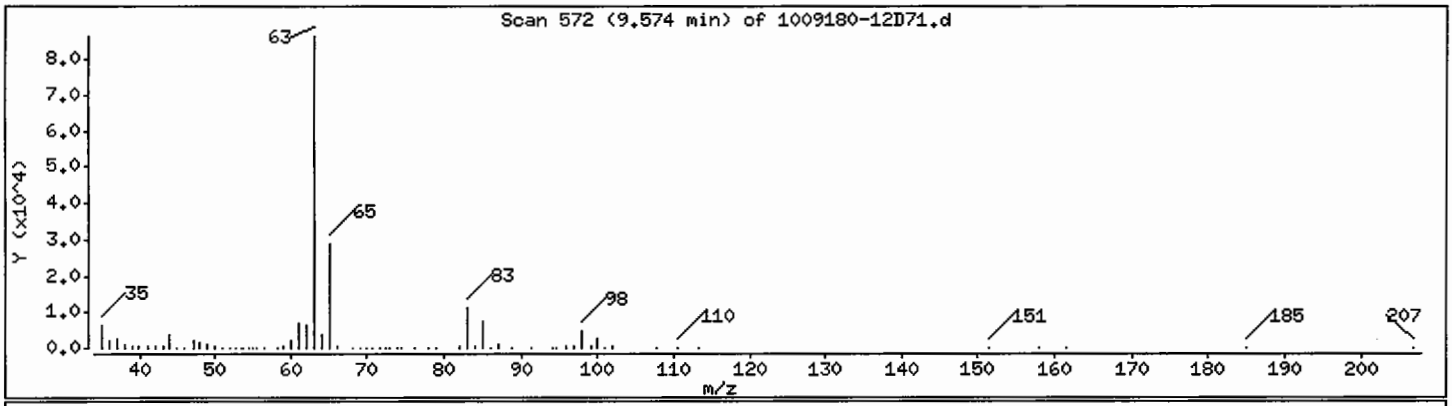
Client ID: MW-10DL | Instrument: 5972hp71.i

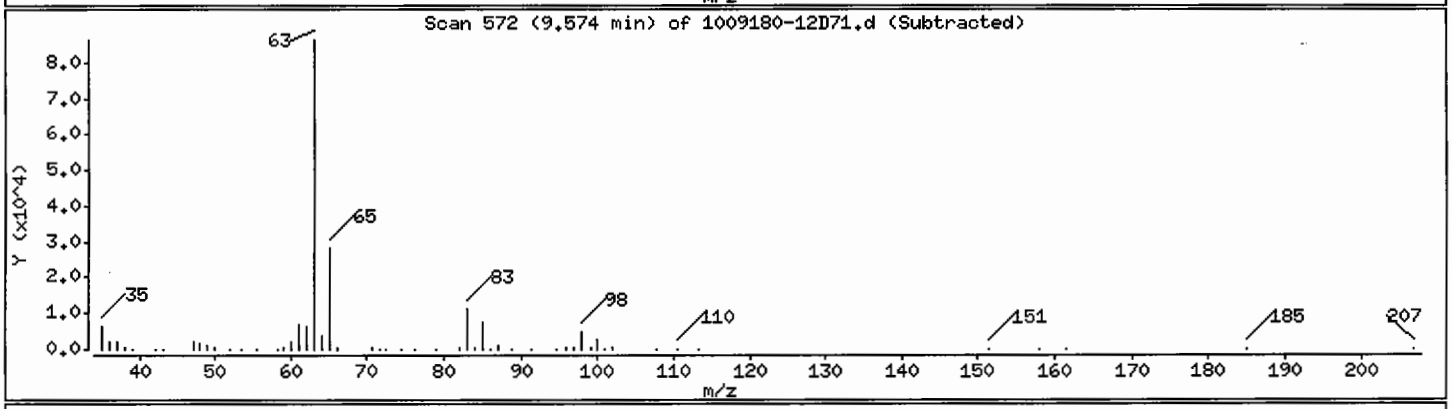
Sample Info: 1009180-12RE1:JAO

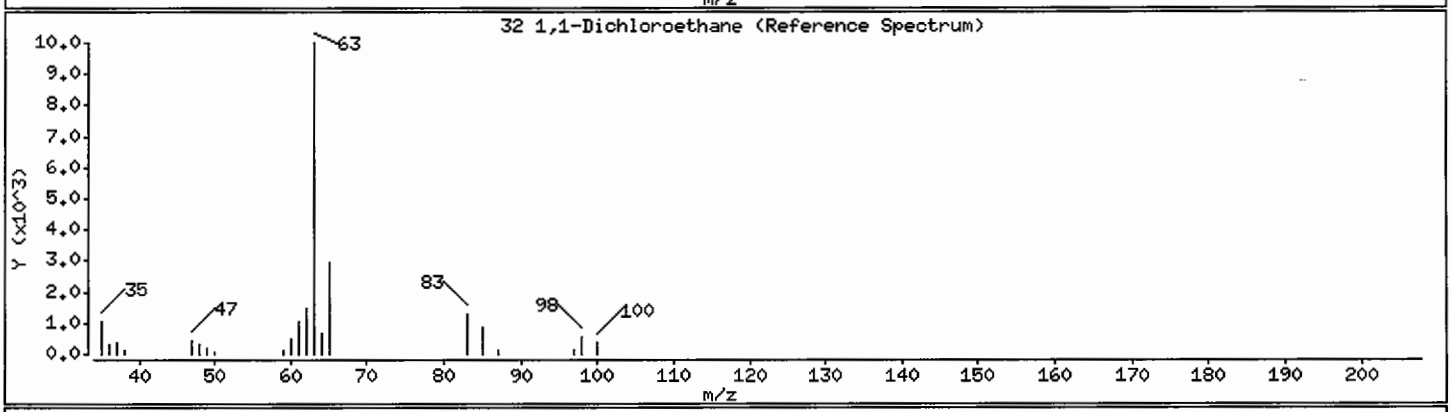
Purge Volume: 25.0 | Operator: JAO

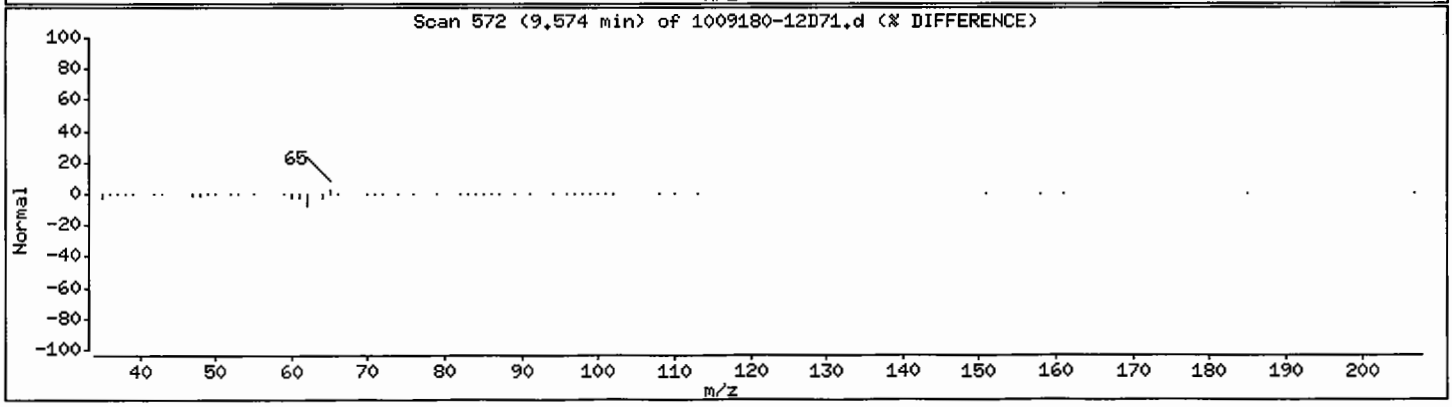
Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 8.9 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d

Date : 20-SEP-2010 22:19

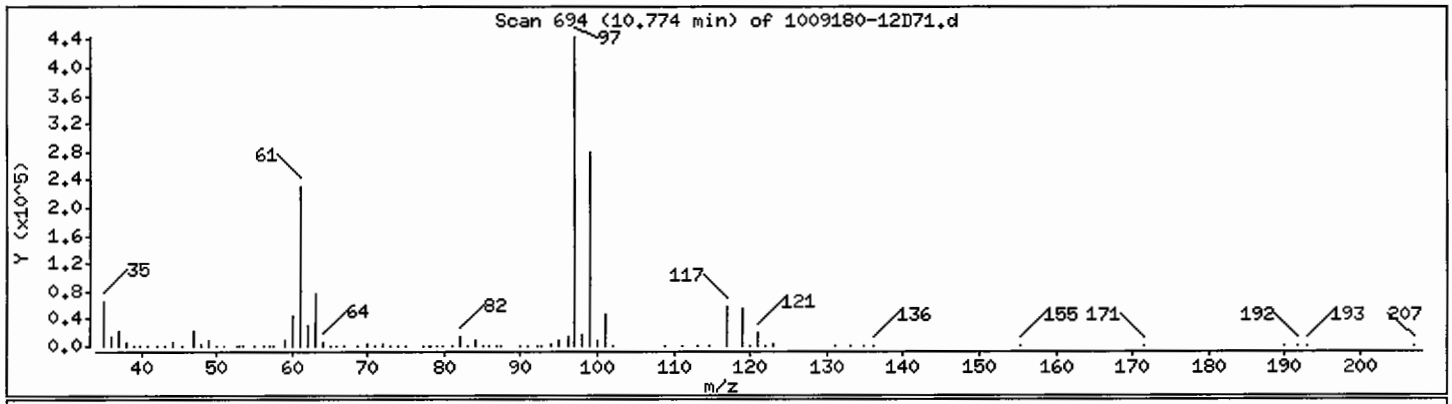
Client ID: MW-10DL | Instrument: 5972hp71.i

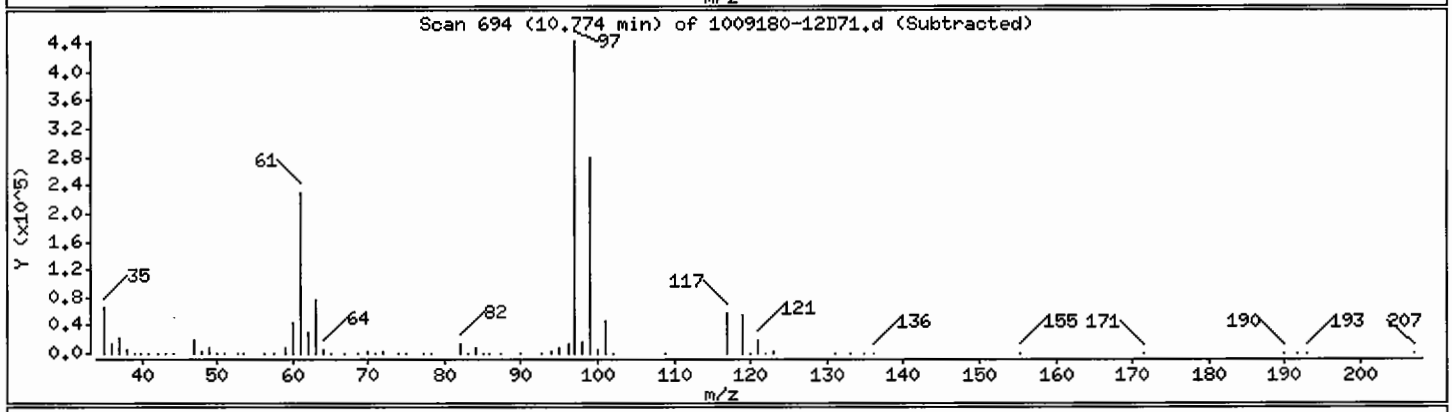
Sample Info: 1009180-12RE1:JAO

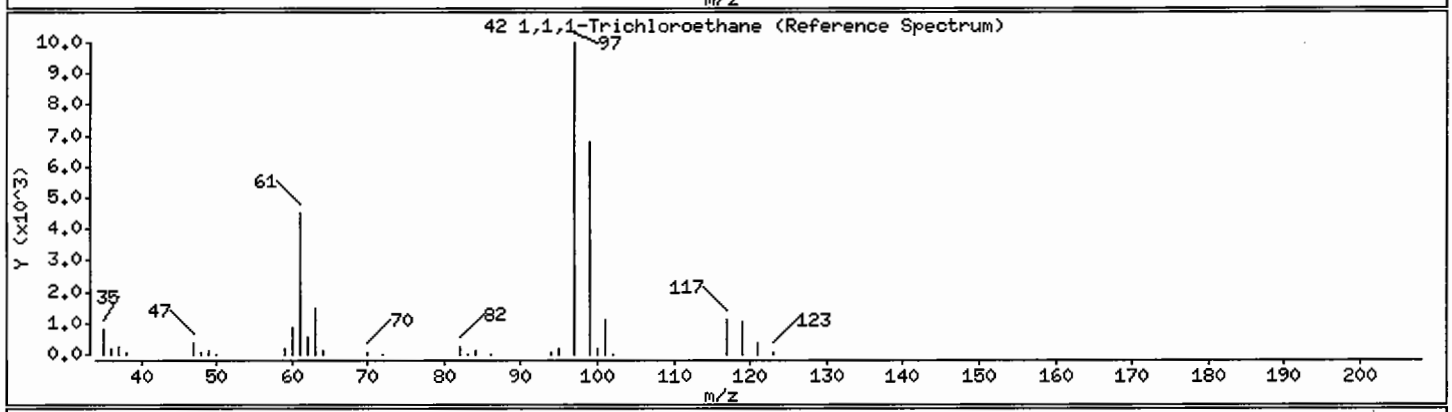
Purge Volume: 25.0 | Operator: JAO

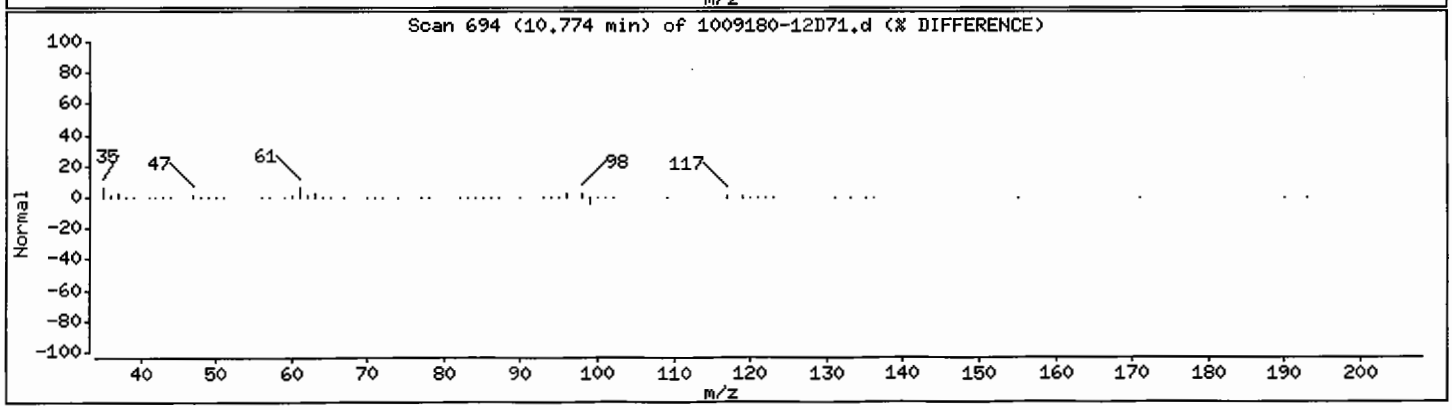
Column phase: SPB-624 | Column diameter: 0.32

42 1,1,1-Trichloroethane | Concentration: 58 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d

Date : 20-SEP-2010 22:19

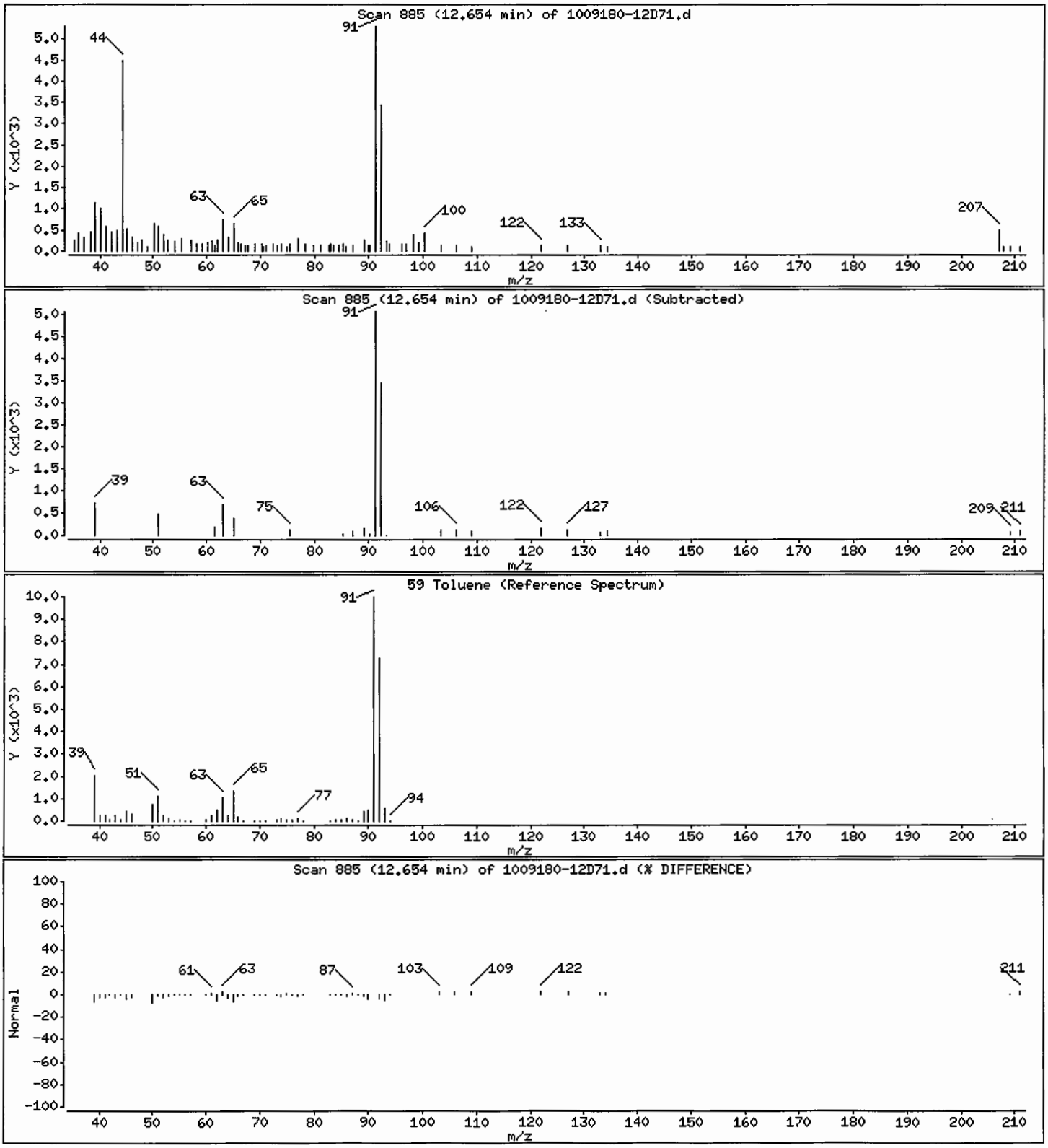
Client ID: MW-10DL | Instrument: 5972hp71.i

Sample Info: 1009180-12RE1:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.16 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d

Date : 20-SEP-2010 22:19

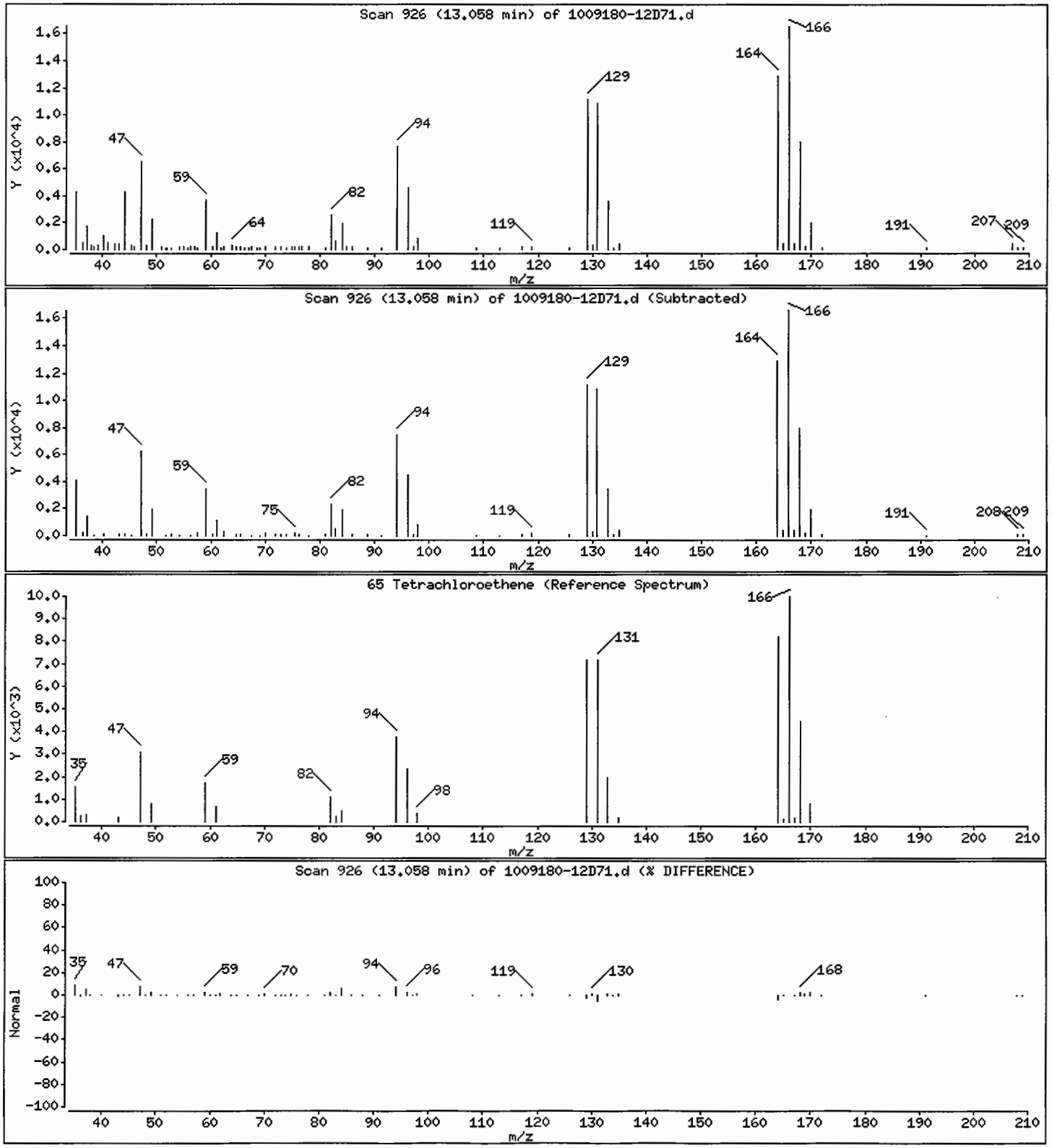
Client ID: MW-10DL | Instrument: 5972hp71.i

Sample Info: 1009180-12RE1:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

65 Tetrachloroethene | Concentration: 2.0 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-12D71.d
Lab Smp Id: 1009180-12RE1 Client Smp ID: MW-10DL
Inj Date : 20-SEP-2010 22:19
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-12RE1:JAO
Misc Info : MW-10DL
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 31
Dil Factor: 2.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-11**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0571.d | Sampled: 09/14/10 15:50

Initial/Final: 25mL / 25mL | Lab ID: 1009180-05 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 14:23

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | 0.37 | 0.070 | | 0.50 | J |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | 2.1 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.083 | 0.040 | | 0.50 | J |
| 67-64-1 | Acetone | | 0.44 | | 2.5 | U |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.24 | 0.050 | | 0.50 | J |
| 75-34-3 | 1,1-Dichloroethane | 11 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 19 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 0.12 | 0.030 | | 0.50 | J |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | 2.1 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 0.41 | 0.12 | | 0.50 | J |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-11**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0571.d | Sampled: 09/14/10 15:50

Initial/Final: 25mL / 25mL | Lab ID: 1009180-05 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 14:23

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.081 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 0.39 | 0.060 | | 0.50 | J |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

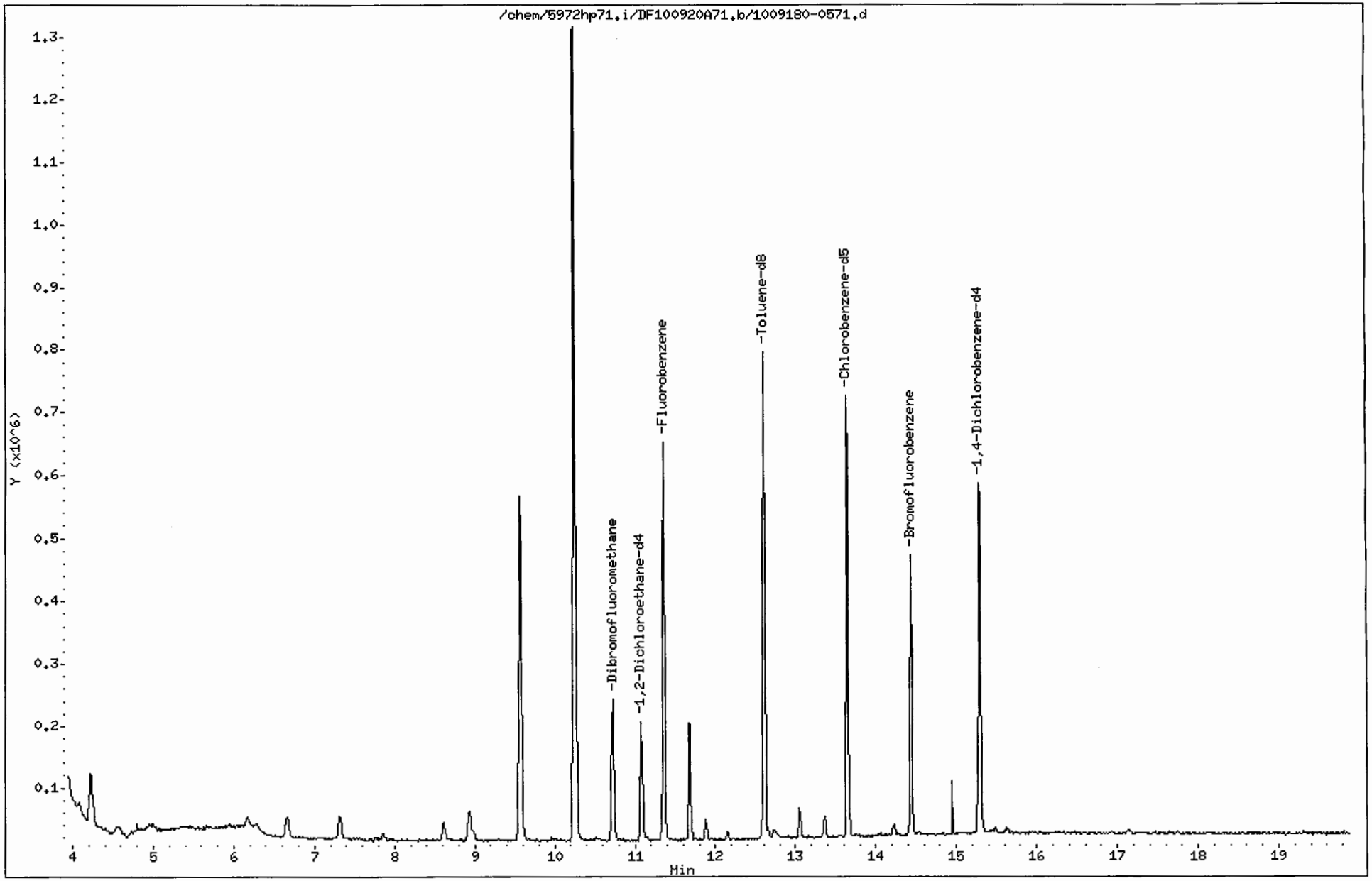
| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.919 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.910 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.606 | 92 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.944 | 99 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| 000075-45-6 | Difluorochloromethane | 2.5 | 584873 | 4.224 | 83 | J |
| NA | Unknown 6.665 | 0.62 | 142415 | 6.665 | 0 | J |
| NA | Unknown 7.315 | 0.50 | 115792 | 7.315 | 0 | J |
| NA | Unknown 8.938 | 0.81 | 186709 | 8.938 | 0 | J |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d
Date : 20-SEP-2010 14:23
Client ID: MW-11
Sample Info: 1009180-05:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0571.d
Lab Smp Id: 1009180-05 Client Smp ID: MW-11
Inj Date : 20-SEP-2010 14:23
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-05:JAO
Misc Info : MW-11
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.359 | 11.362 | (1.000) | 508919 | 125.000 | |
| 2 Chlorobenzene-d5 | 117 | 13.643 | 13.646 | (1.000) | 336657 | 125.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 15.296 | 15.289 | (1.000) | 150627 | 125.000 | |
| 4 Dibromofluoromethane | 113 | 10.730 | 10.733 | (0.945) | 135745 | 122.974 | 4.9 |
| 5 1,2-Dichloroethane-d4 | 65 | 11.084 | 11.087 | (0.976) | 109537 | 122.753 | 4.9 |
| 6 Toluene-d8 | 98 | 12.609 | 12.602 | (0.924) | 461602 | 115.144 | 4.6 |
| 7 Bromofluorobenzene | 95 | 14.440 | 14.433 | (0.944) | 155376 | 123.599 | 4.9 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | 5.002 | 4.995 | (0.440) | 7437 | 9.36106 | 0.37(a) |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | 6.173 | 6.176 | (0.543) | 15822 | 53.6072 | 2.1 |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | 7.777 | 7.780 | (0.685) | 2091 | 2.07898 | 0.083(a) |
| 18 Acetone | 43 | Compound Not Detected. | | | | | |

9-21-10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | 8.988 | 8.981 | (0.791) | 6815 | 6.04727 | 0.24(a) |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 9.568 | 9.571 | (0.842) | 597273 | 279.592 | 11 |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | 10.257 | 10.250 | (0.903) | 567205 | 479.668 | 19 |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | 11.153 | 11.156 | (0.982) | 3287 | 3.05791 | 0.12(a) |
| 49 Trichloroethene | 130 | 11.684 | 11.677 | (1.029) | 53388 | 51.6703 | 2.1 |
| 51 1,2-Dichloropropane | 63 | 11.881 | 11.884 | (1.046) | 11277 | 10.3493 | 0.41(a) |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.649 | 12.652 | (0.927) | 5988 | 2.02104 | 0.081(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | 13.052 | 13.055 | (0.957) | 9272 | 9.69246 | 0.39(a) |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

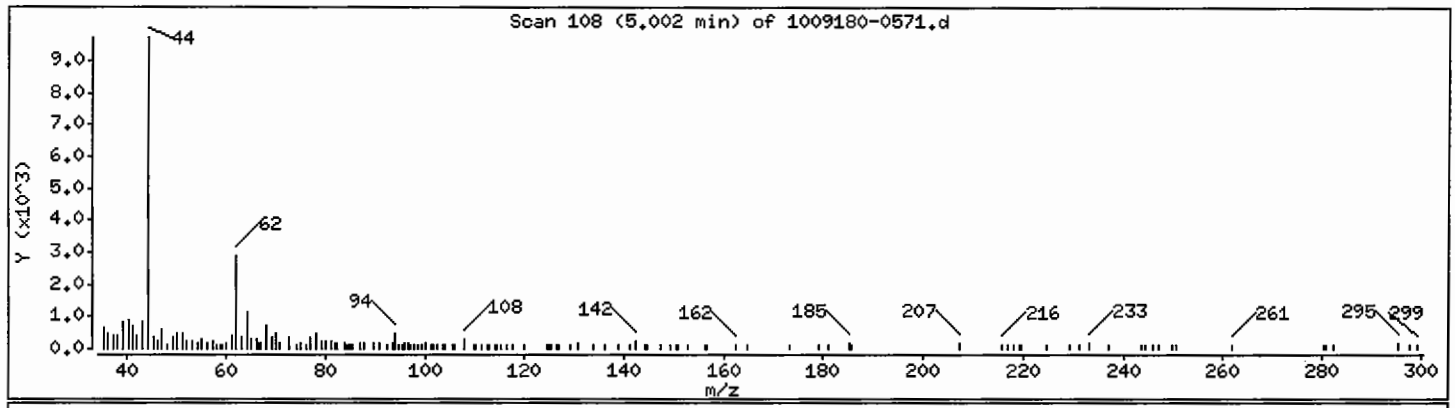
Client ID: MW-11 | Instrument: 5972hp71.i

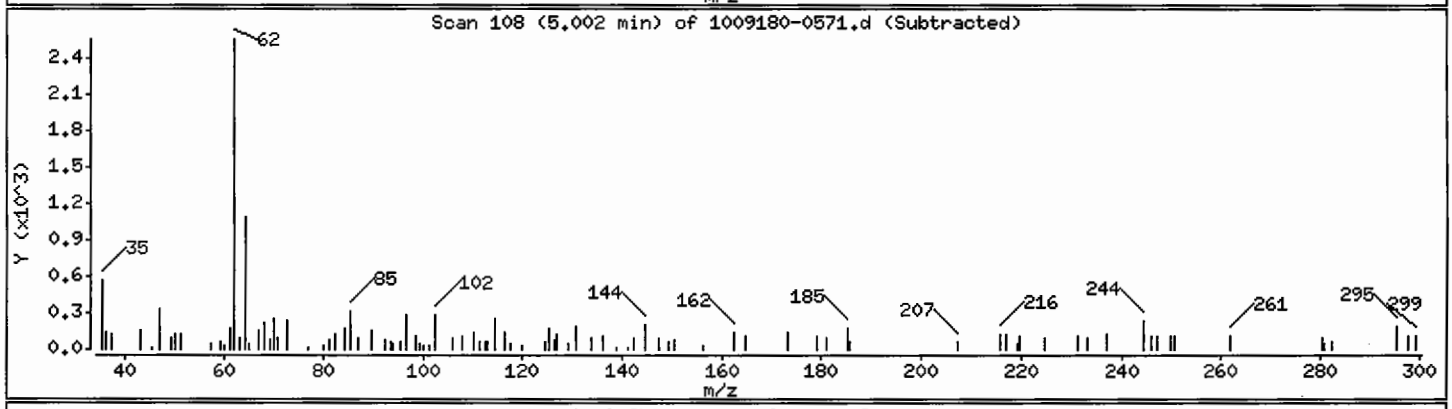
Sample Info: 1009180-05:JAO

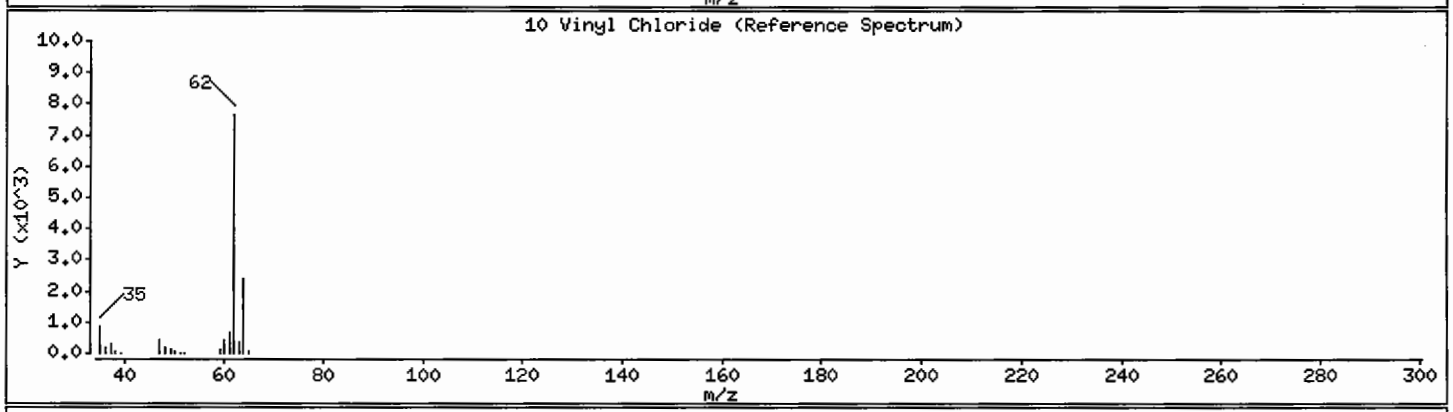
Purge Volume: 25.0 | Operator: JAO

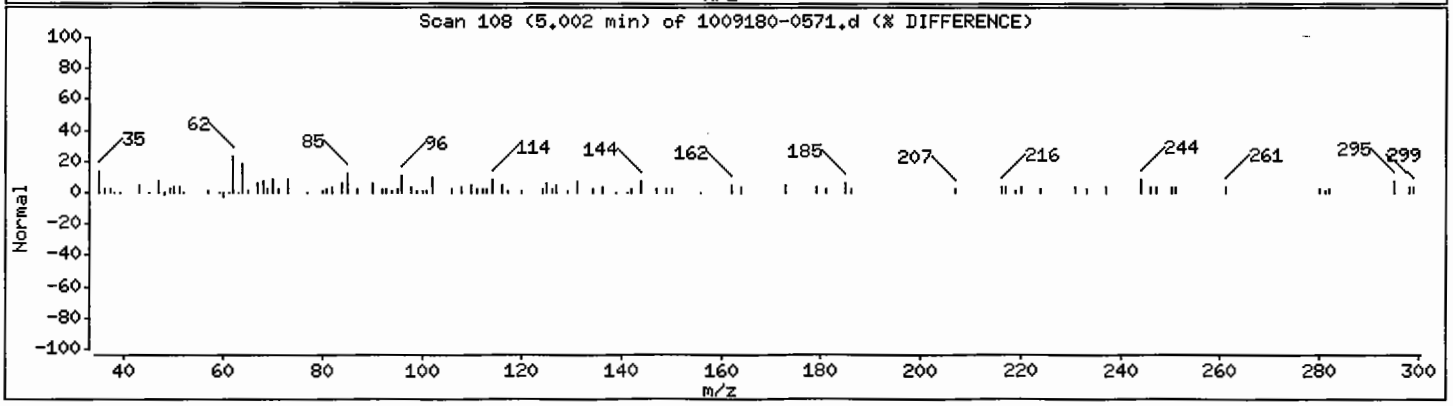
Column phase: SPB-624 | Column diameter: 0.32

10 Vinyl Chloride | Concentration: 0.37 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

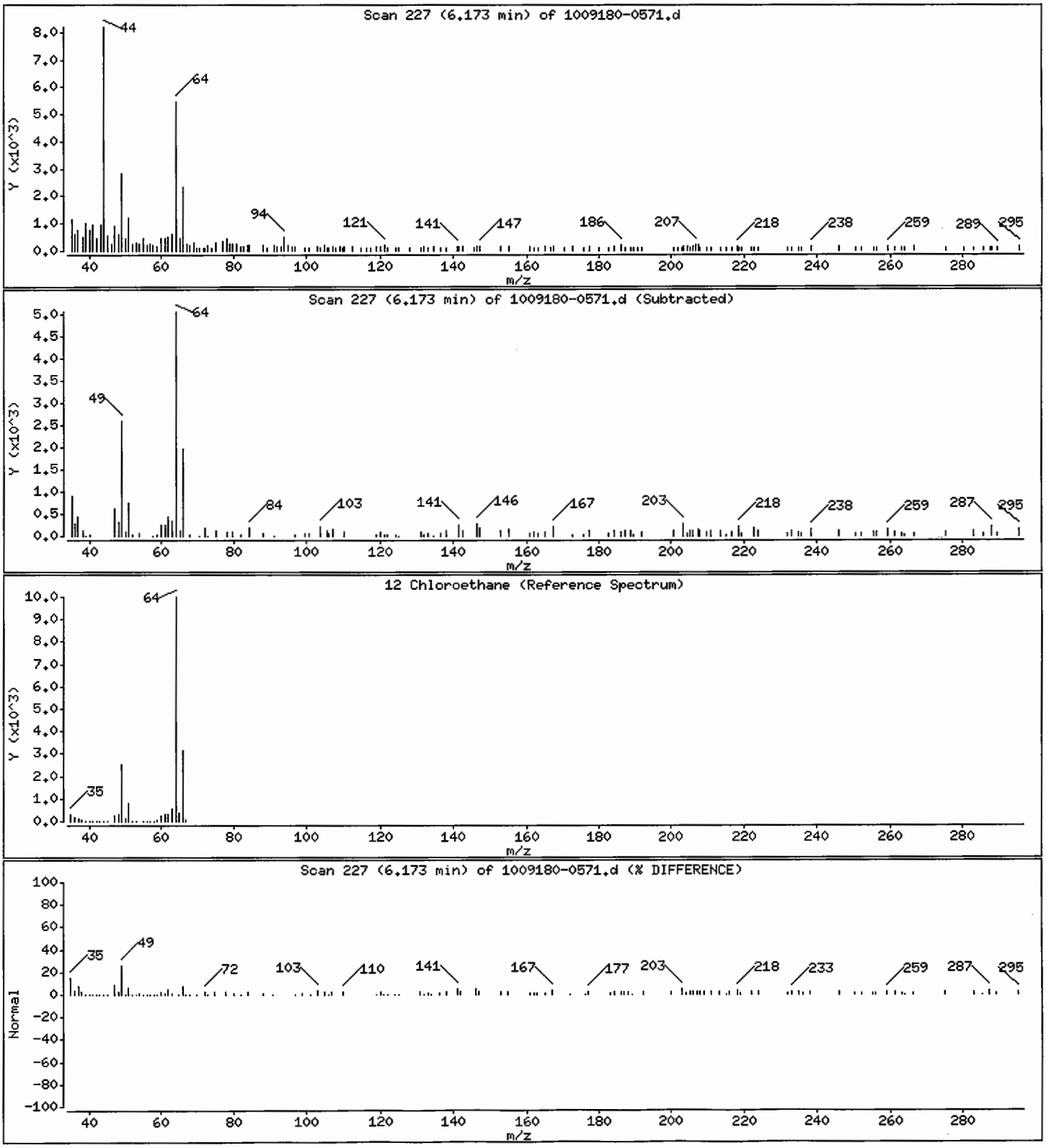
Client ID: MW-11 | Instrument: 5972hp71.i

Sample Info: 1009180-05:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

12 Chloroethane | Concentration: 2.1 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

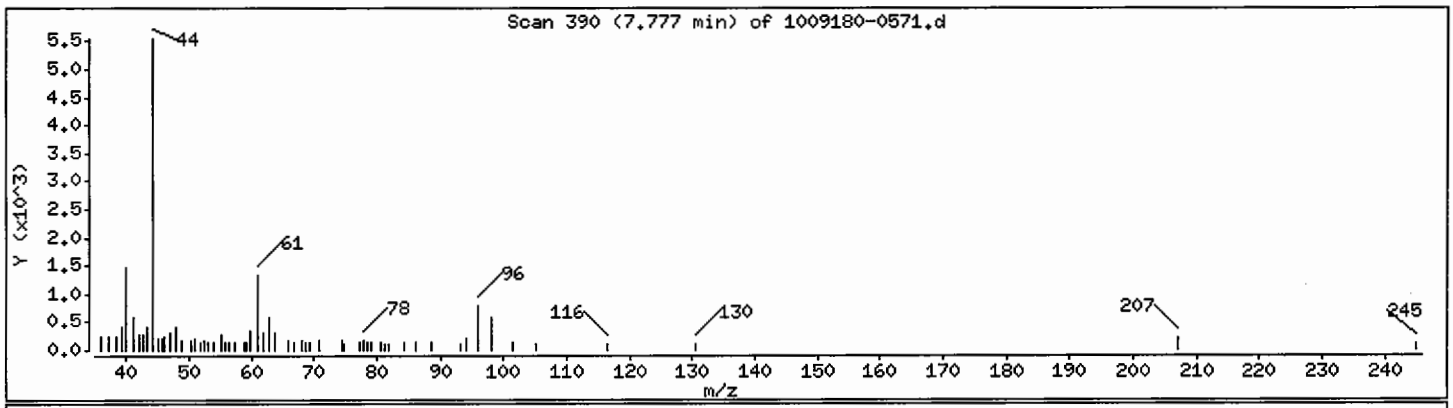
Client ID: MW-11 | Instrument: 5972hp71.i

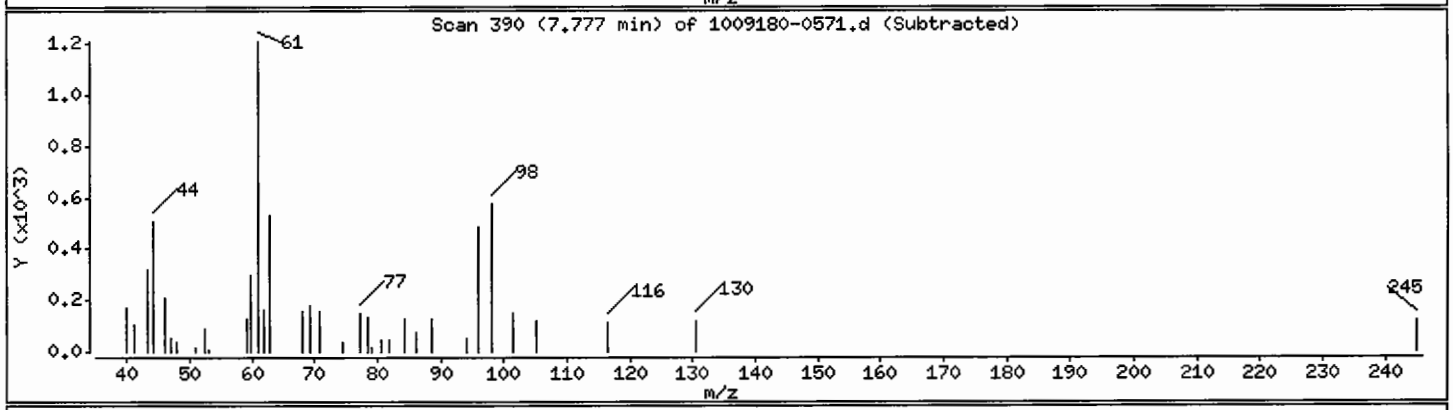
Sample Info: 1009180-05:JAO

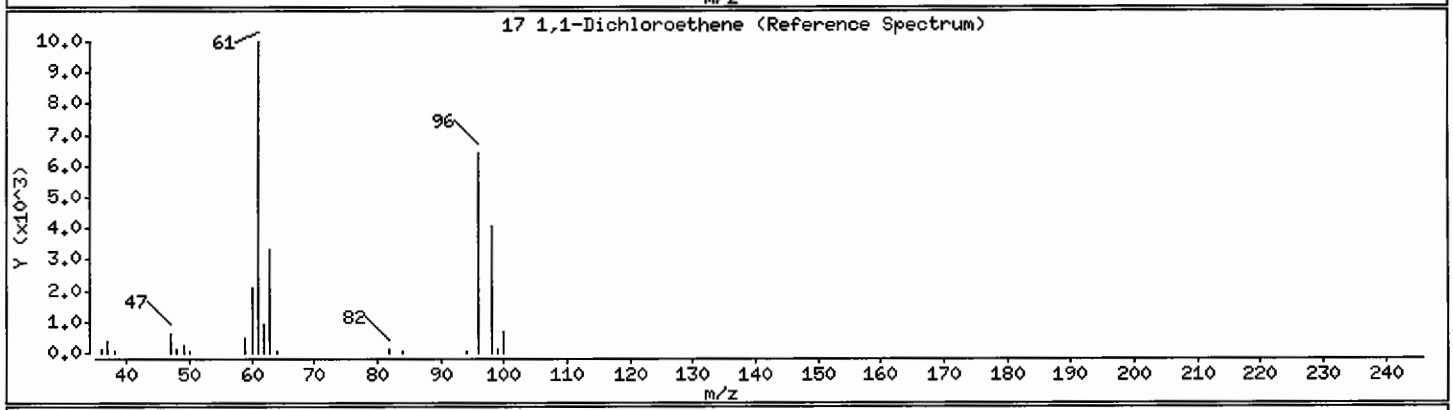
Purge Volume: 25.0 | Operator: JAO

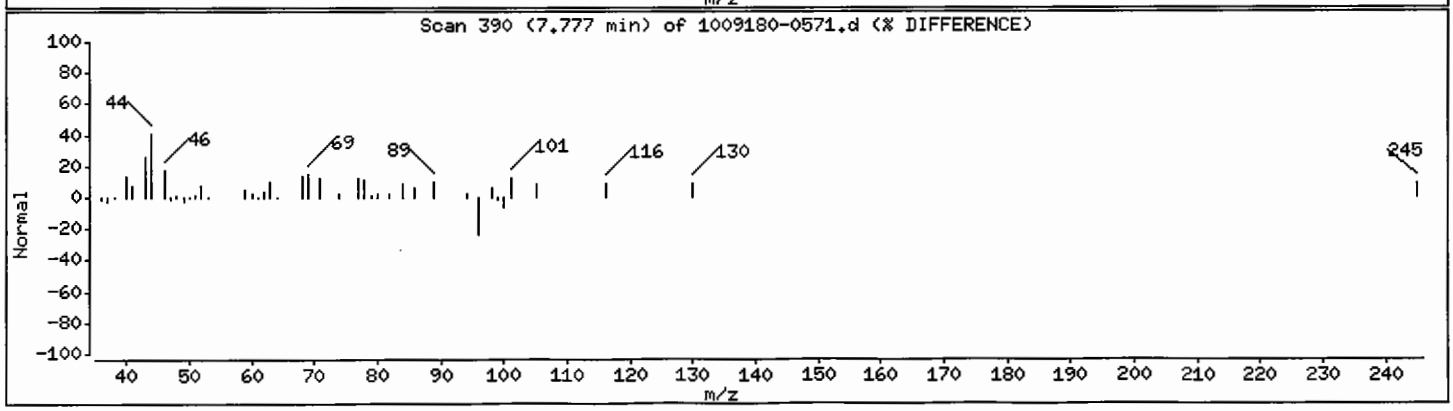
Column phase: SPB-624 | Column diameter: 0.32

17 1,1-Dichloroethene | Concentration: 0.083 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

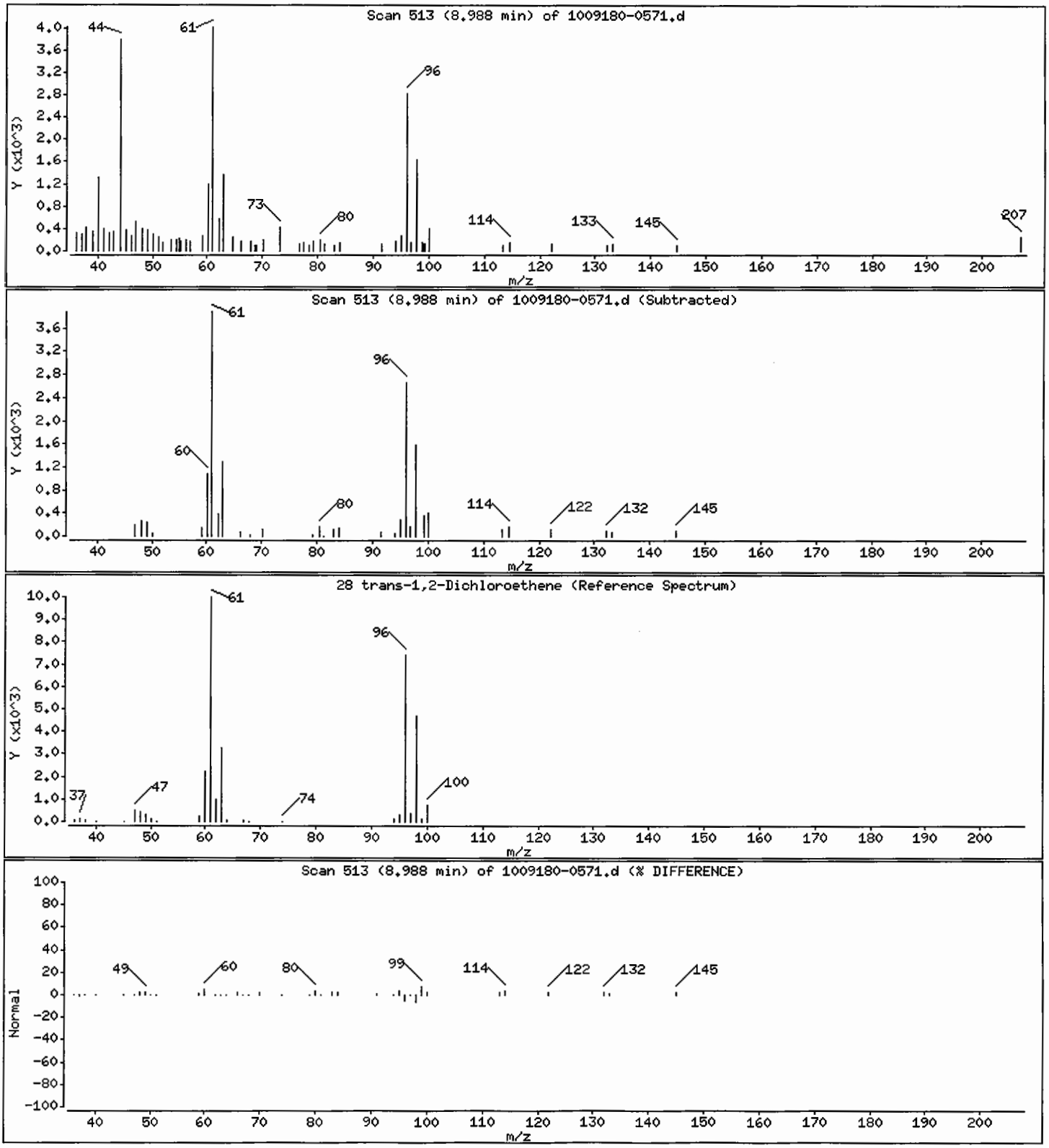
Client ID: MW-11 | Instrument: 5972hp71.i

Sample Info: 1009180-05:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

28 trans-1,2-Dichloroethene | Concentration: 0.24 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

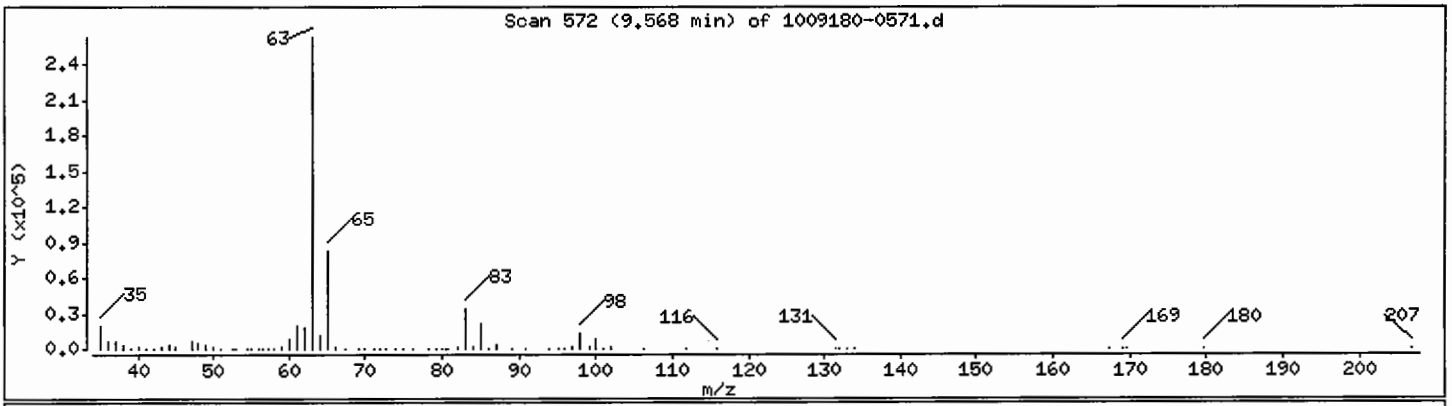
Client ID: MW-11 Instrument: 5972hp71.i

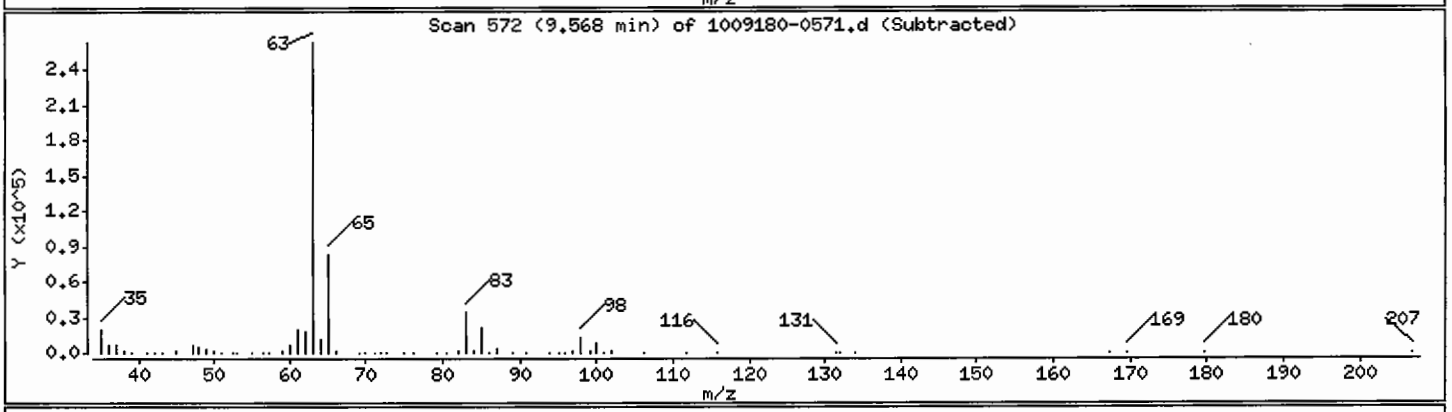
Sample Info: 1009180-05:JAO

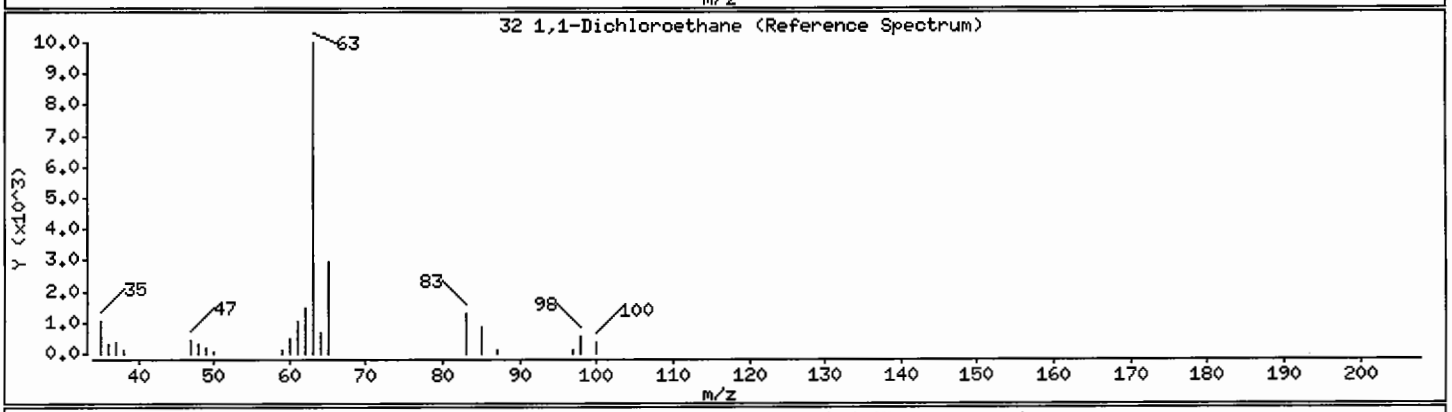
Purge Volume: 25.0 Operator: JAO

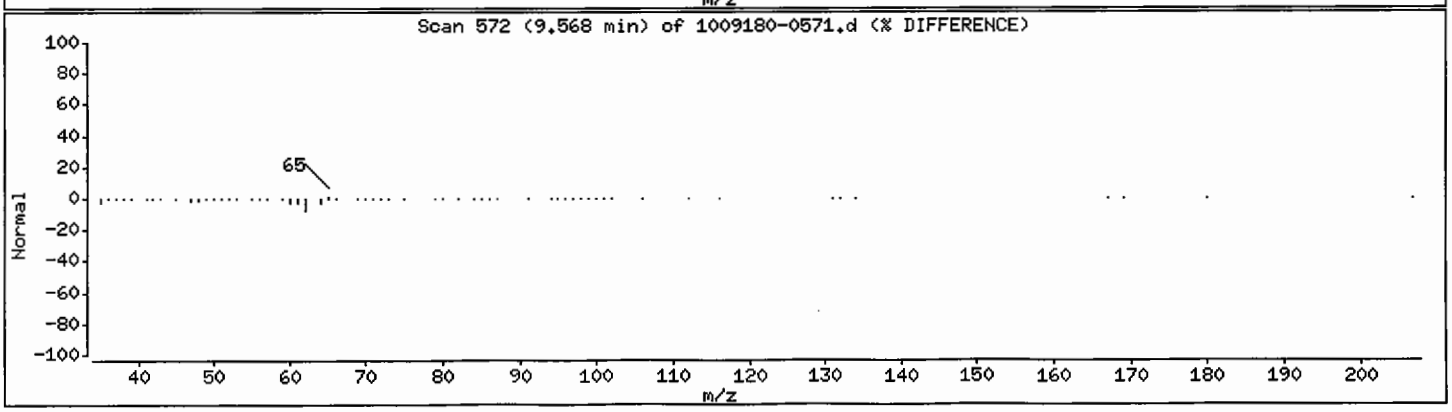
Column phase: SPB-624 Column diameter: 0.32

32 1,1-Dichloroethane Concentration: 11 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

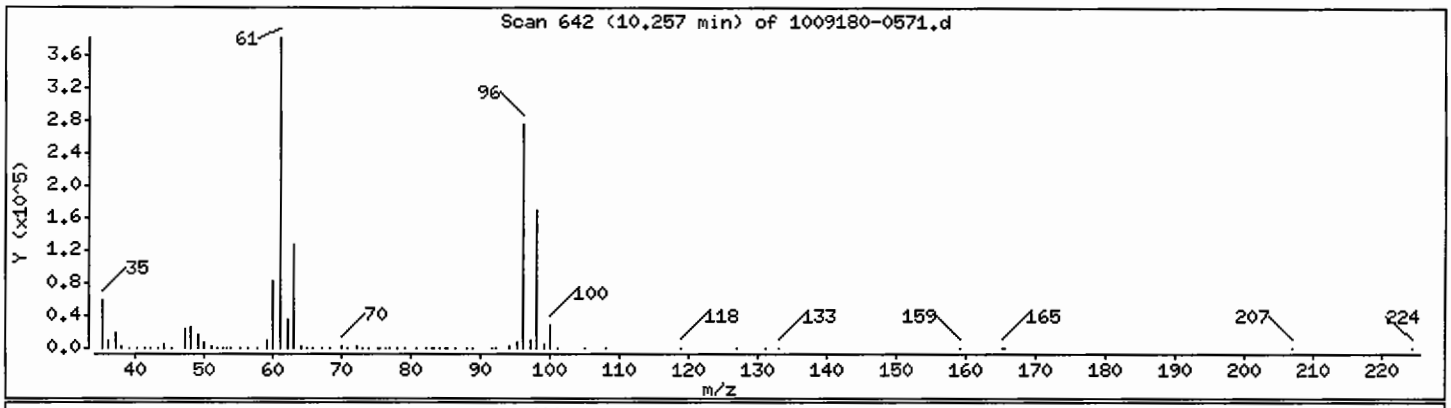
Client ID: MW-11 | Instrument: 5972hp71.i

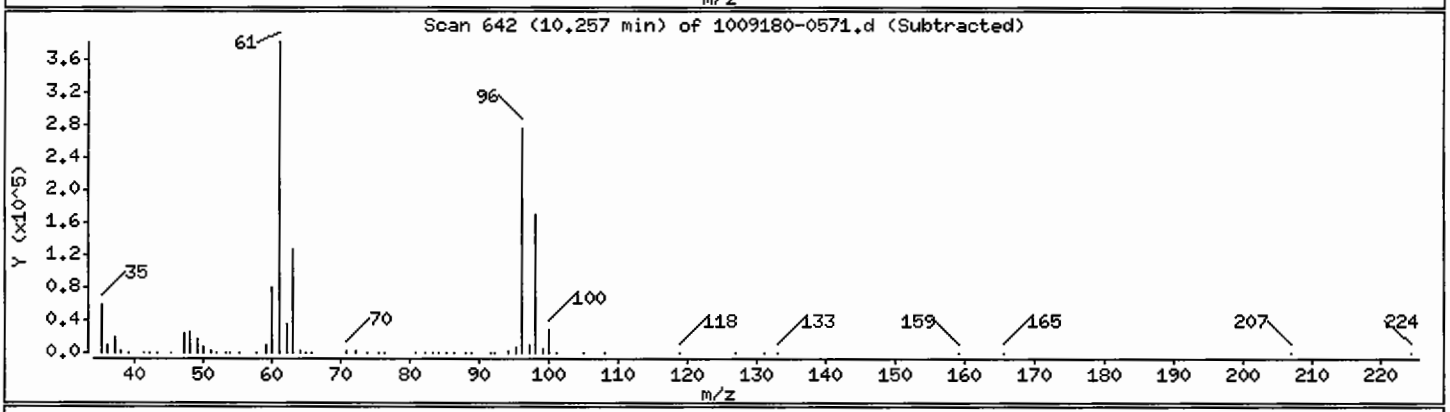
Sample Info: 1009180-05:JAO

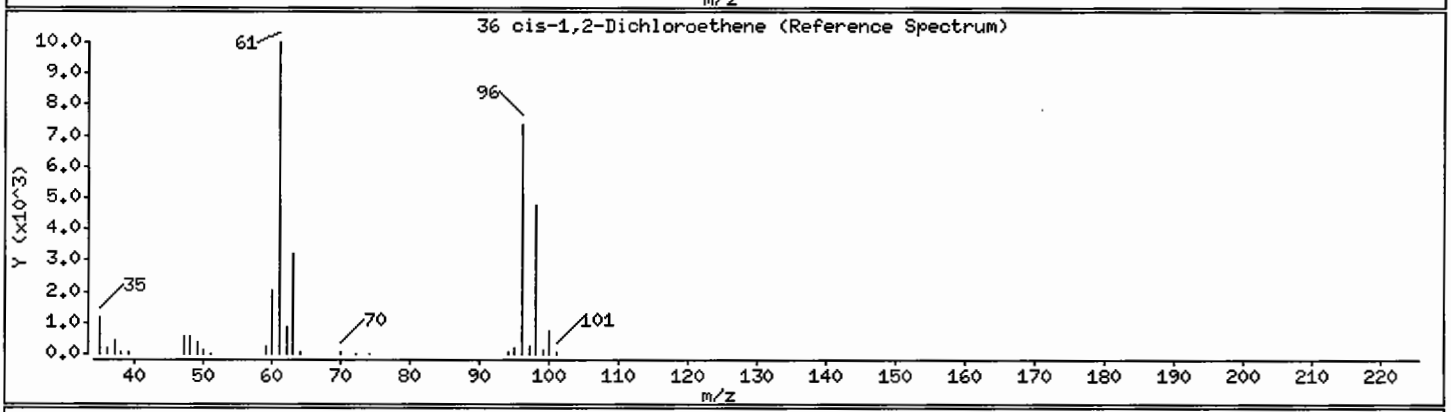
Purge Volume: 25.0 | Operator: JAO

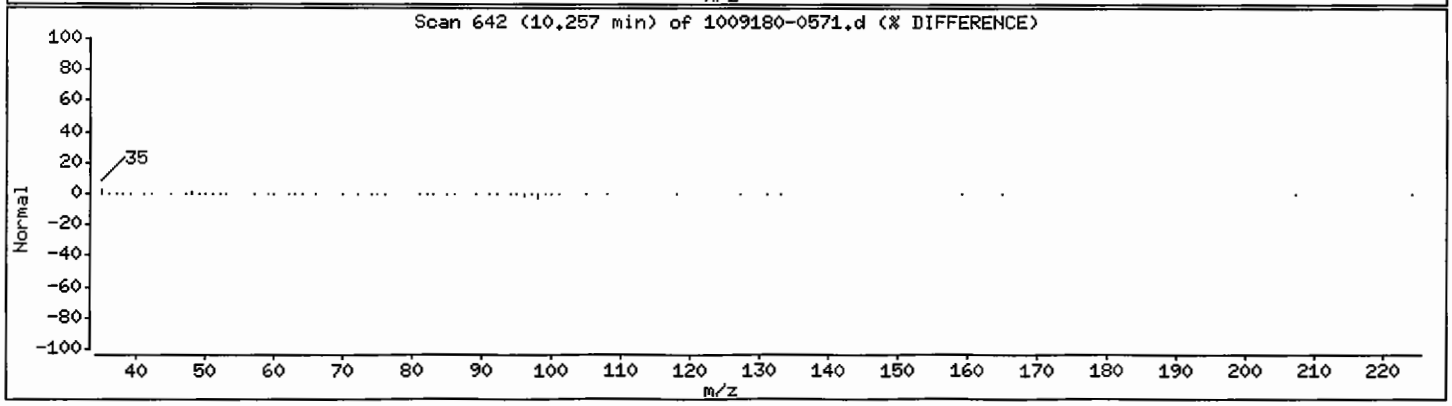
Column phase: SPB-624 | Column diameter: 0.32

36 cis-1,2-Dichloroethene | Concentration: 19 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

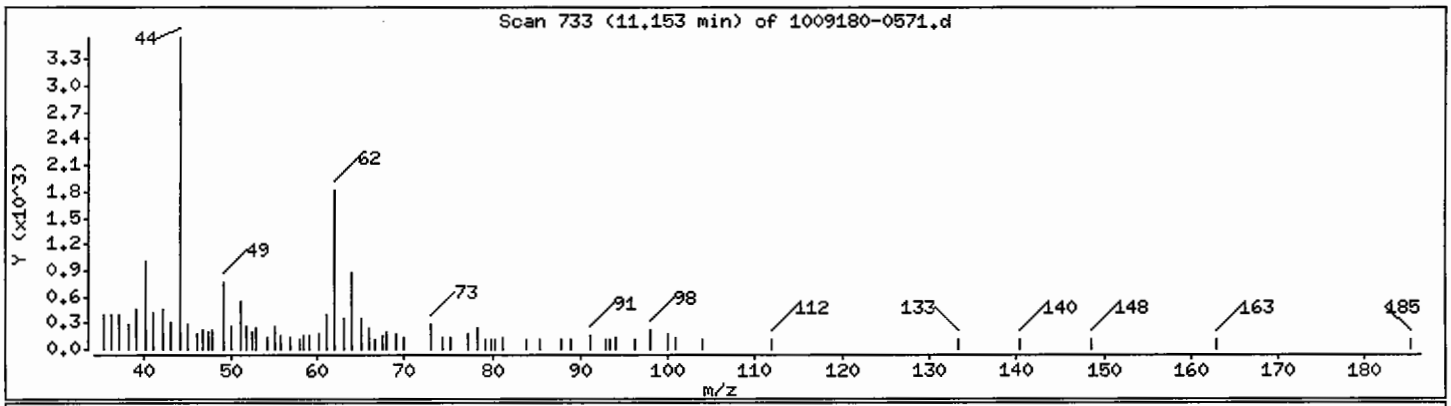
Client ID: MW-11 | Instrument: 5972hp71.i

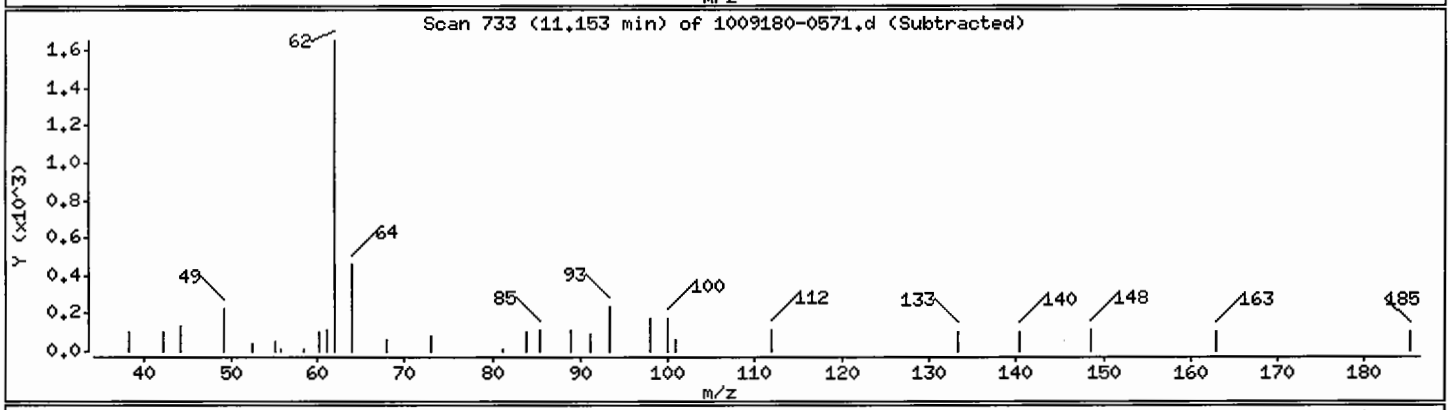
Sample Info: 1009180-05:JAO

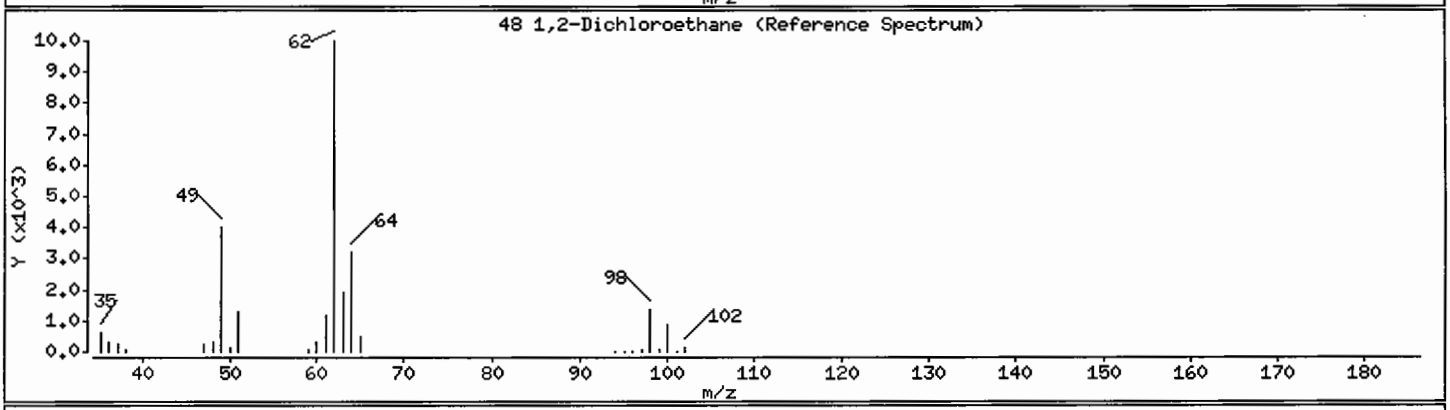
Purge Volume: 25.0 | Operator: JAO

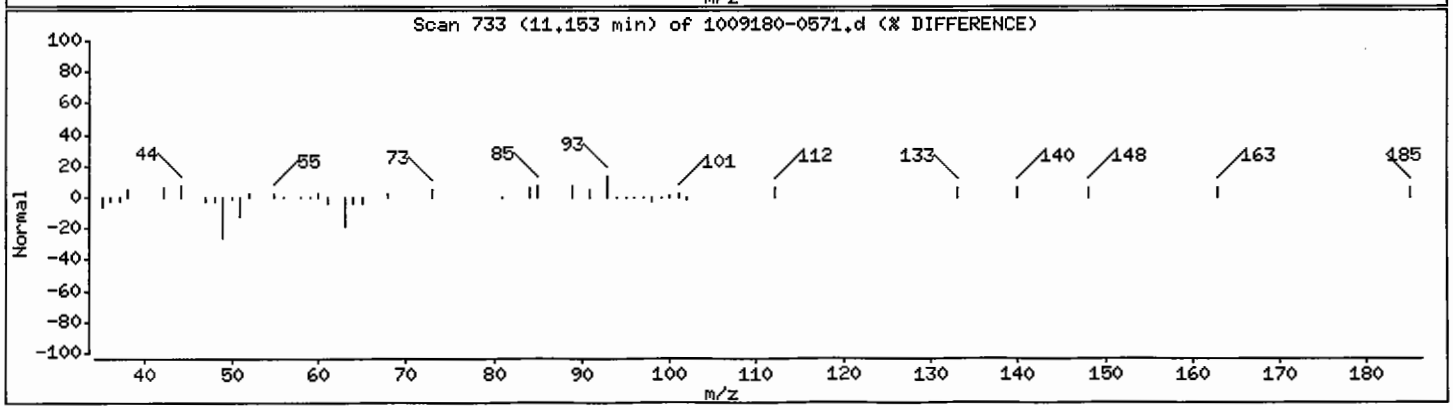
Column phase: SPB-624 | Column diameter: 0.32

48 1,2-Dichloroethane | Concentration: 0.12 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

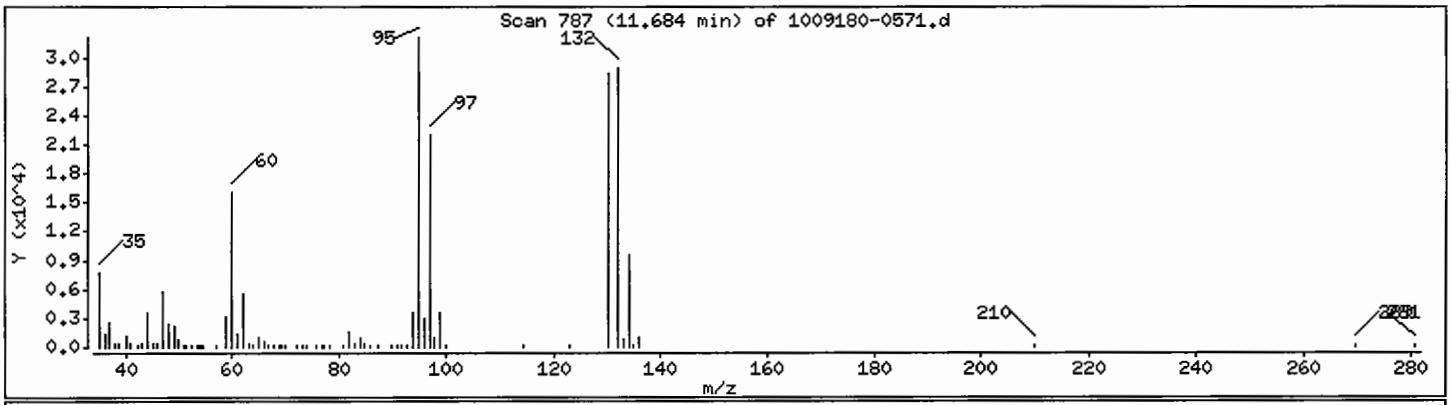
Client ID: MW-11 | Instrument: 5972hp71.i

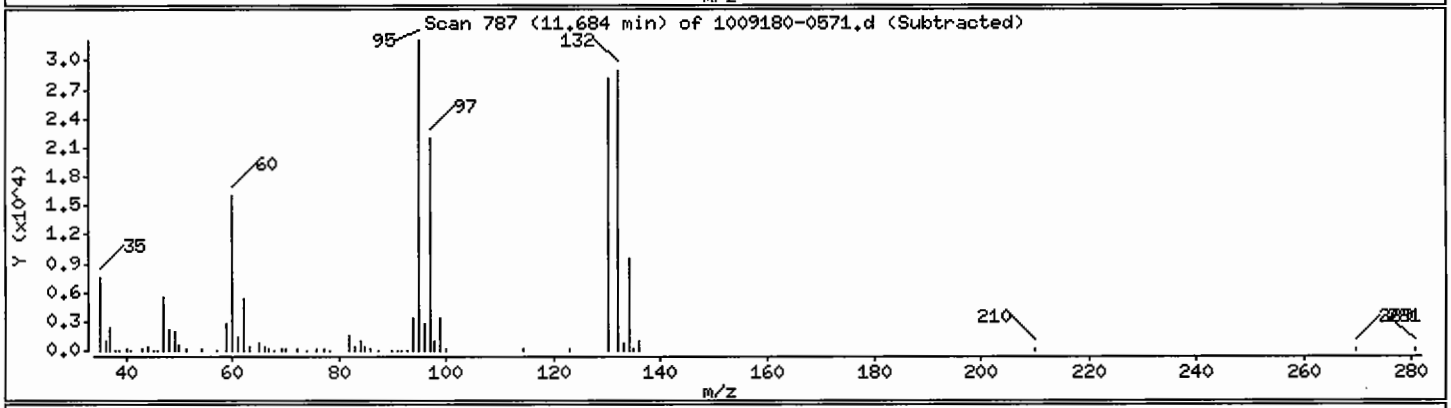
Sample Info: 1009180-05:JAO

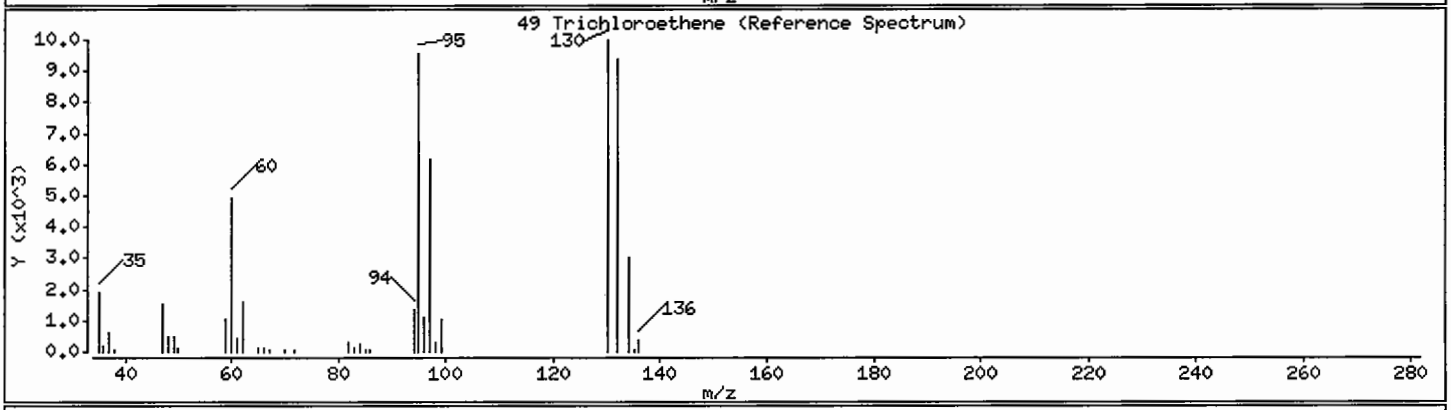
Purge Volume: 25.0 | Operator: JAO

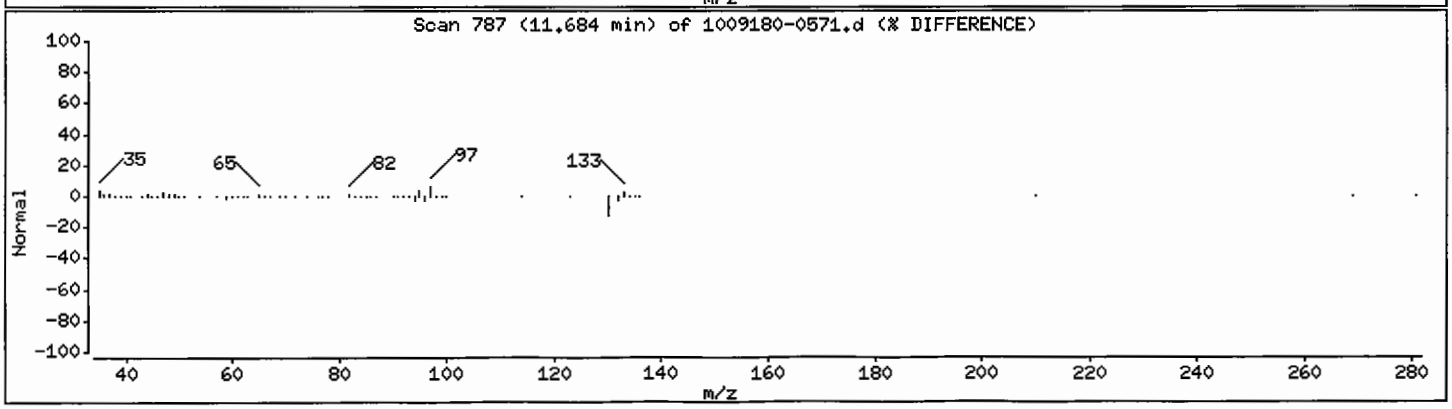
Column phase: SPB-624 | Column diameter: 0.32

49 Trichloroethene | Concentration: 2.1 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

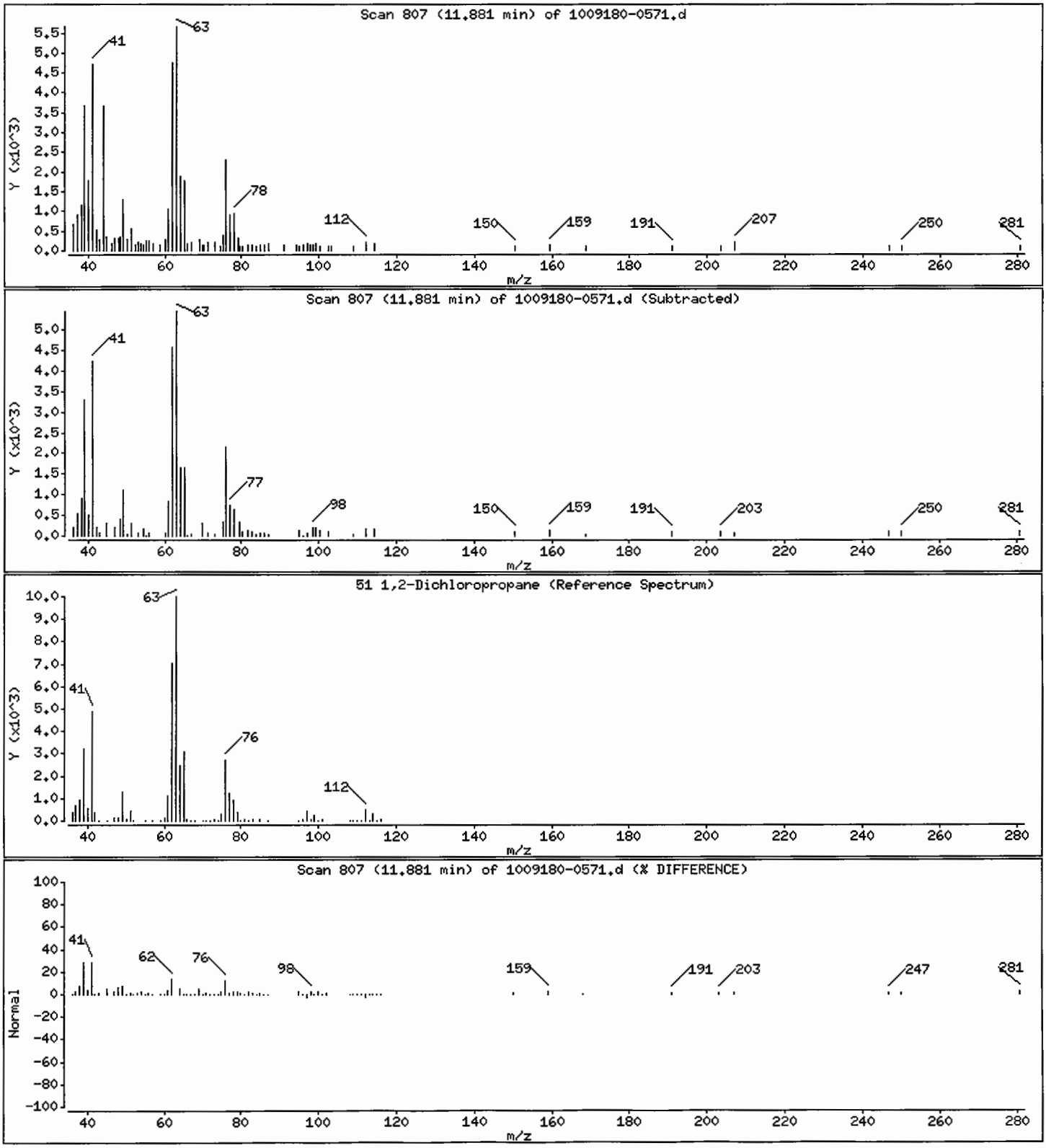
Client ID: MW-11 | Instrument: 5972hp71.i

Sample Info: 1009180-05;JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

51 1,2-Dichloropropane | Concentration: 0.41 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

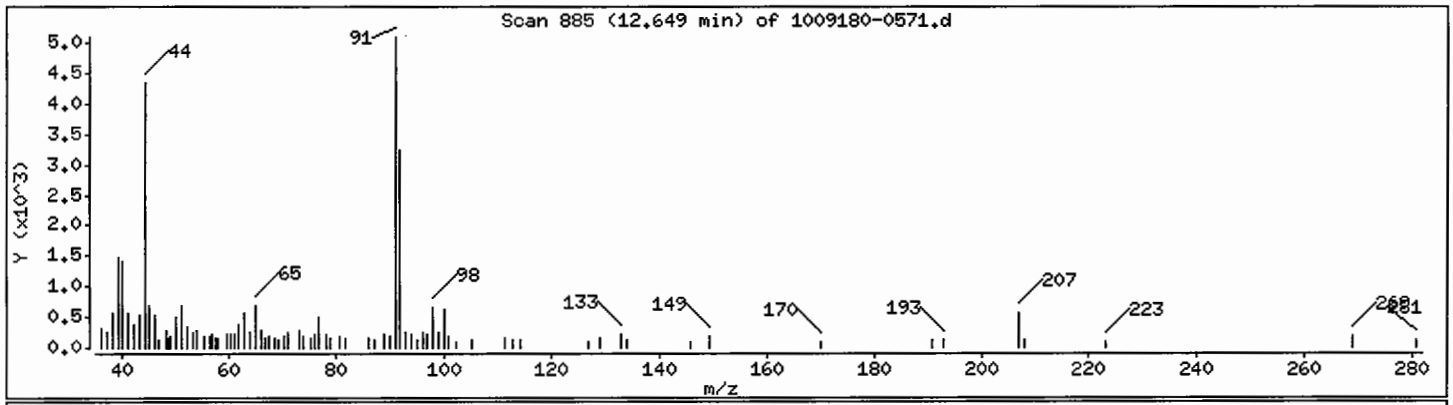
Client ID: MW-11 | Instrument: 5972hp71.i

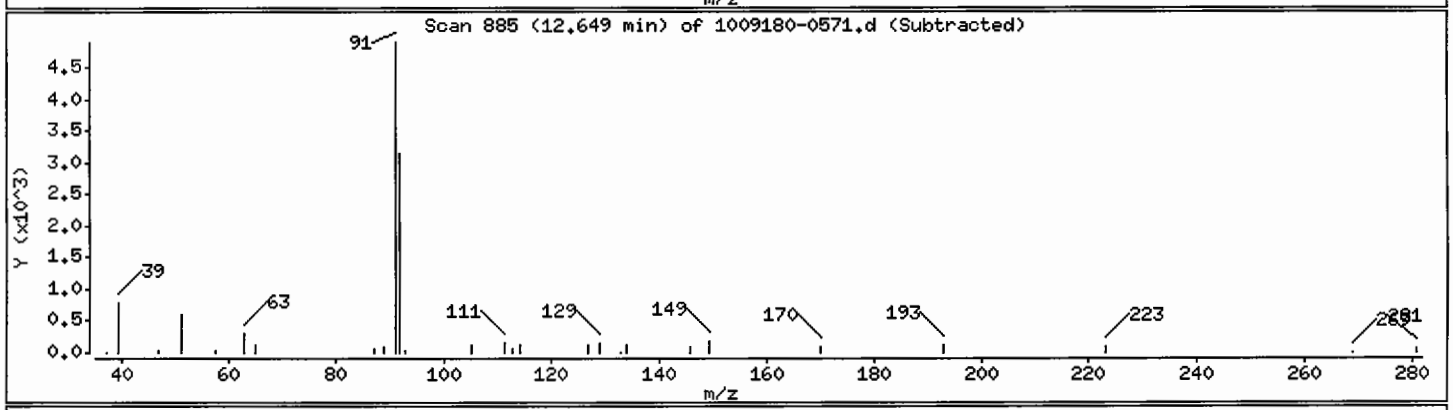
Sample Info: 1009180-05:JAO

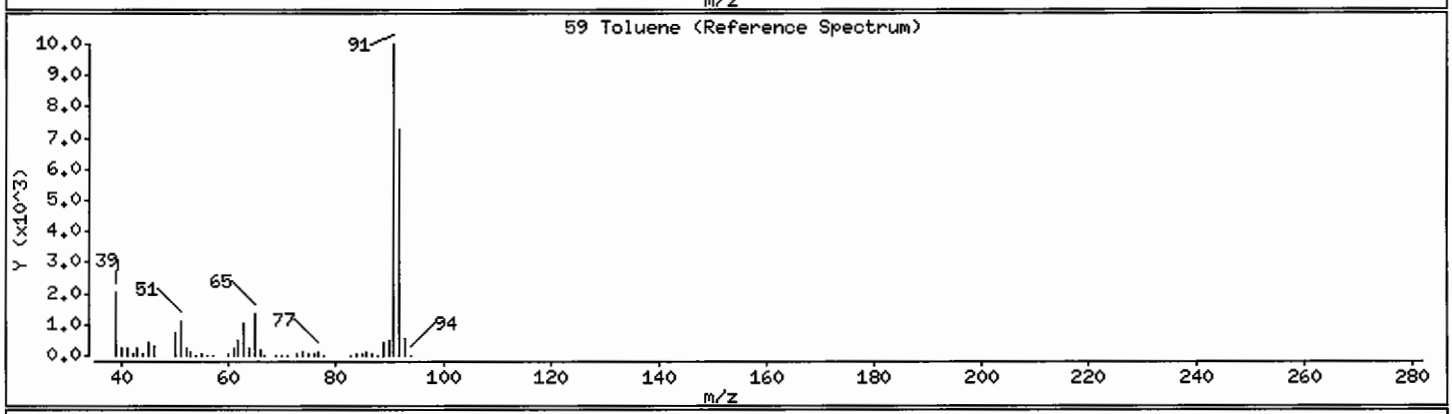
Purge Volume: 25.0 | Operator: JAO

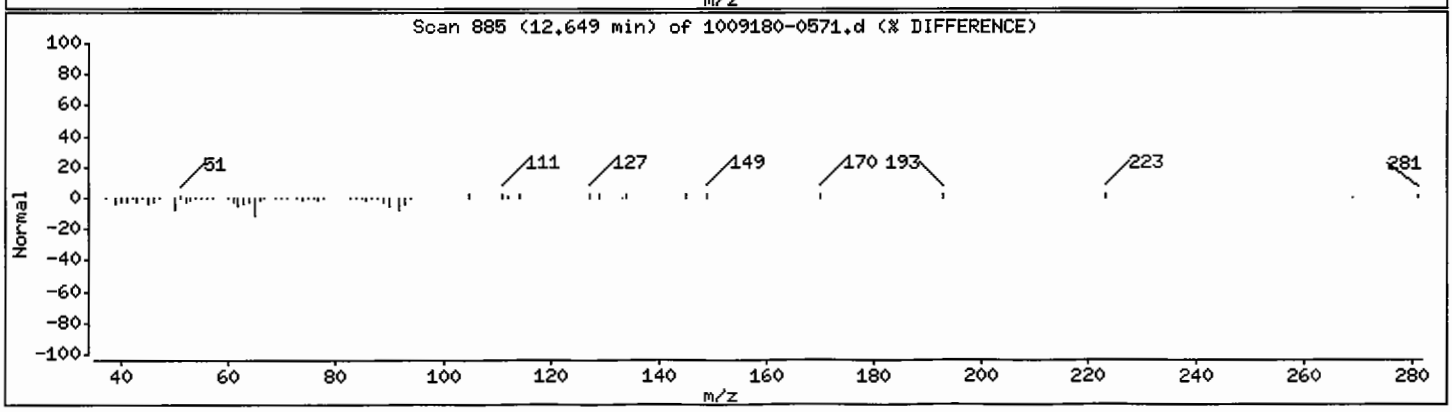
Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.081 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

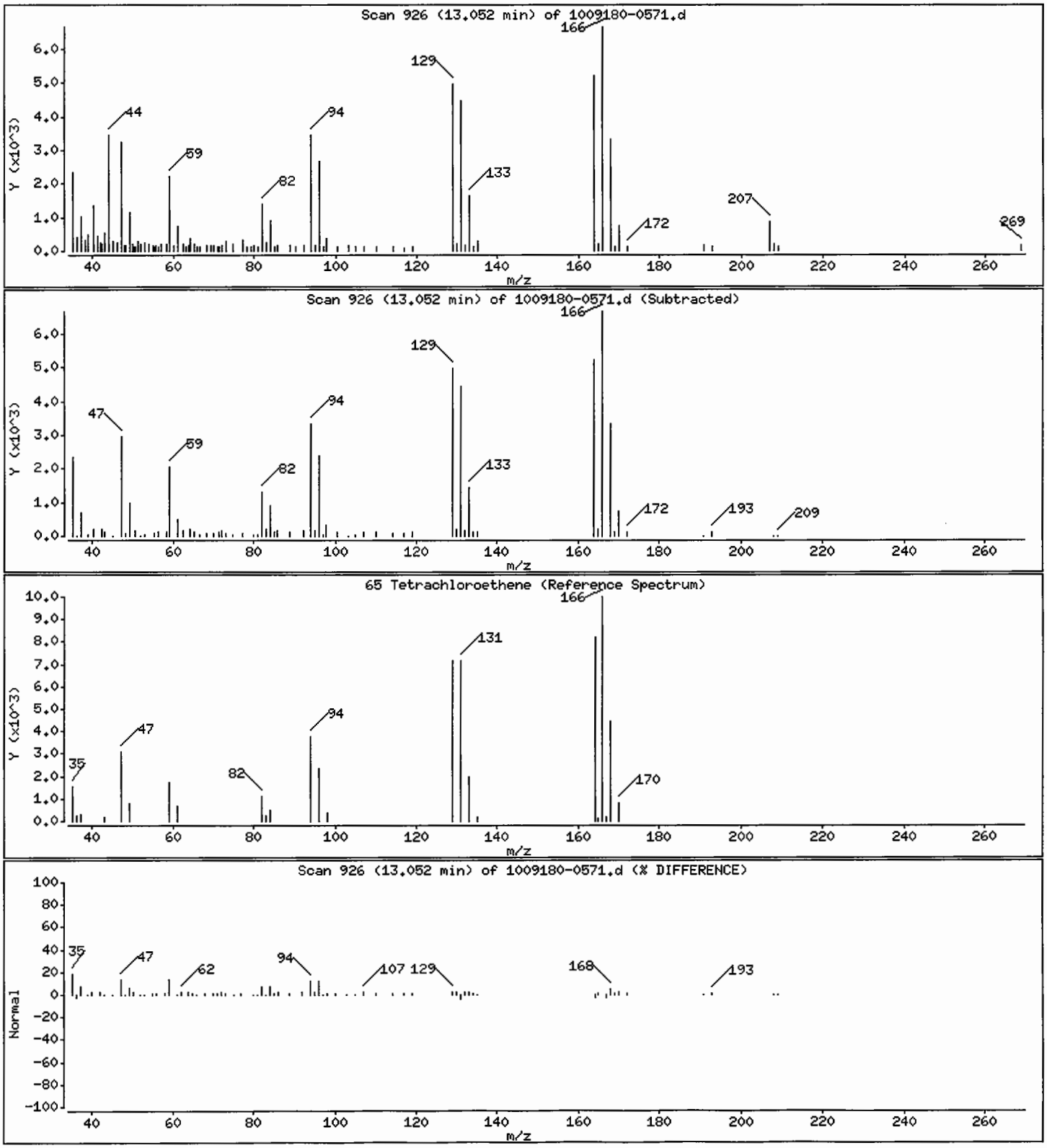
Client ID: MW-11 | Instrument: 5972hp71.i

Sample Info: 1009180-05:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

65 Tetrachloroethene | Concentration: 0.39 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0571.d
Lab Smp Id: 1009180-05 Client Smp ID: MW-11
Inj Date : 20-SEP-2010 14:23
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-05:JAO
Misc Info : MW-11
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 1 Fluorobenzene | 11.359 | 1155582 | 125.000 |

| | CONCENTRATIONS | | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ng) | FINAL( ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Difluorochloromethane | | | | | CAS #: 75-45-6 | | |
| 4.224 | 584873 | 63.2660849 | 2.5 | 83 | NIS08.l | 1830 | 1 |
| Unknown | | | | | CAS #: | | |
| 6.665 | 142415 | 15.4050892 | 0.62 | 0 | | 0 | 1 |
| Unknown | | | | | CAS #: | | |
| 7.315 | 115792 | 12.5253050 | 0.50 | 0 | | 0 | 1 |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d
Report Date: 21-Sep-2010 14:35

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ng) | FINAL( ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Unknown | | | | | CAS #: | | |
| 8.938 | 186709 | 20.1964226 | 0.81 | 0 | | 0 | 1 |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

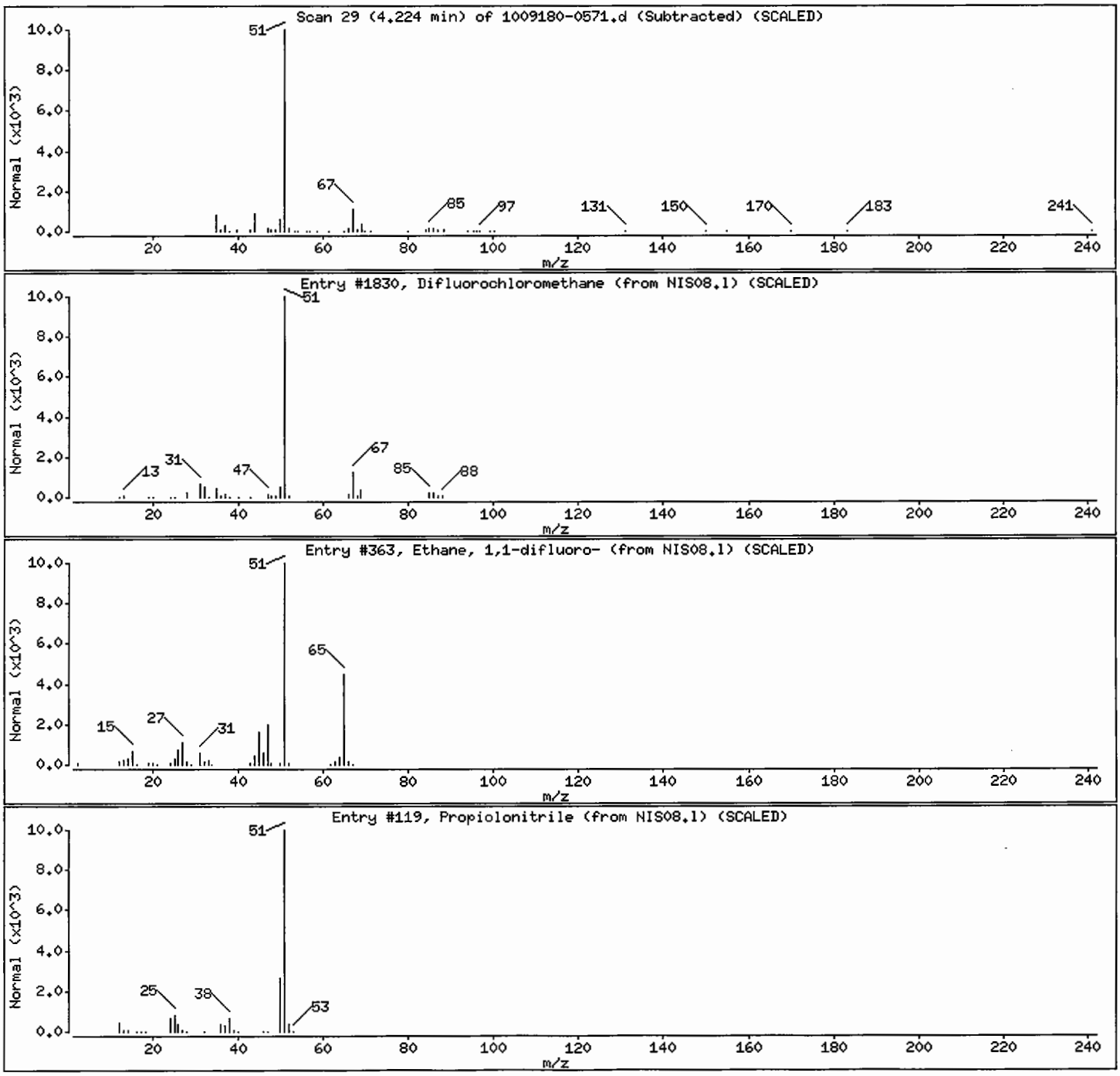
Client ID: MW-11 Instrument: 5972hp71.i

Sample Info: 1009180-05:JAO

Purge Volume: 25.0 Operator: JAO

Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Difluorochloromethane | 75-45-6 | NIS08.l | 1830 | 83 | CHClF2 | 86 |
| Ethane, 1,1-difluoro- | 75-37-6 | NIS08.l | 363 | 9 | C2H4F2 | 66 |
| Propiolonitrile | 1070-71-9 | NIS08.l | 119 | 4 | C3HN | 51 |



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

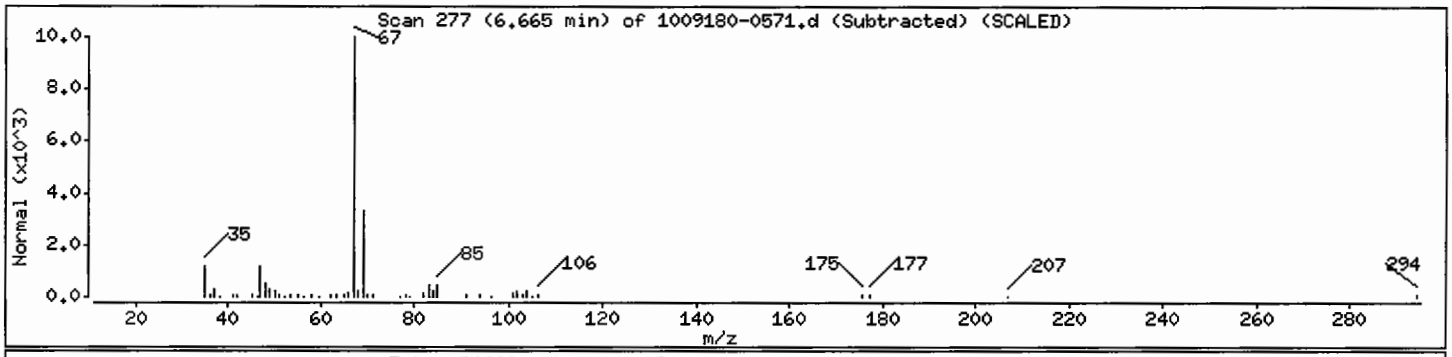
Client ID: MW-11 | Instrument: 5972hp71.i

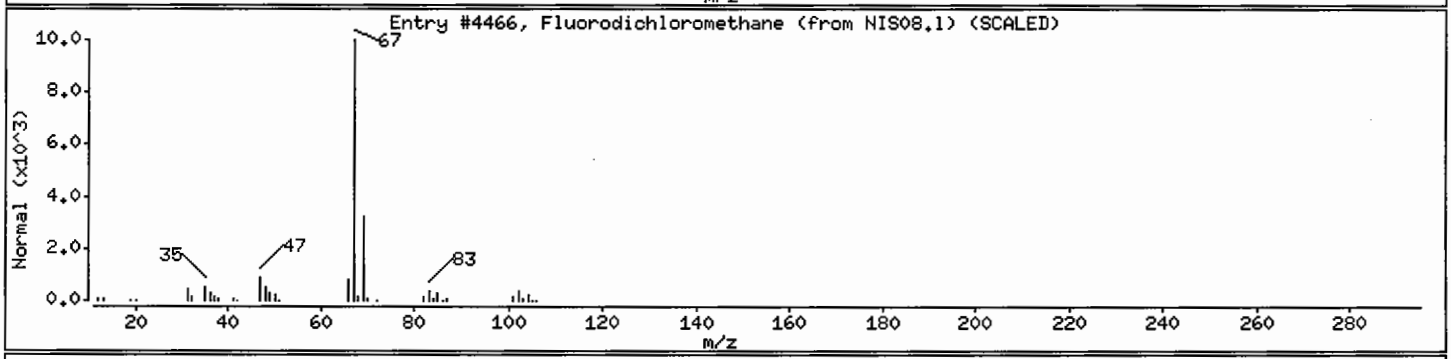
Sample Info: 1009180-05:JAO

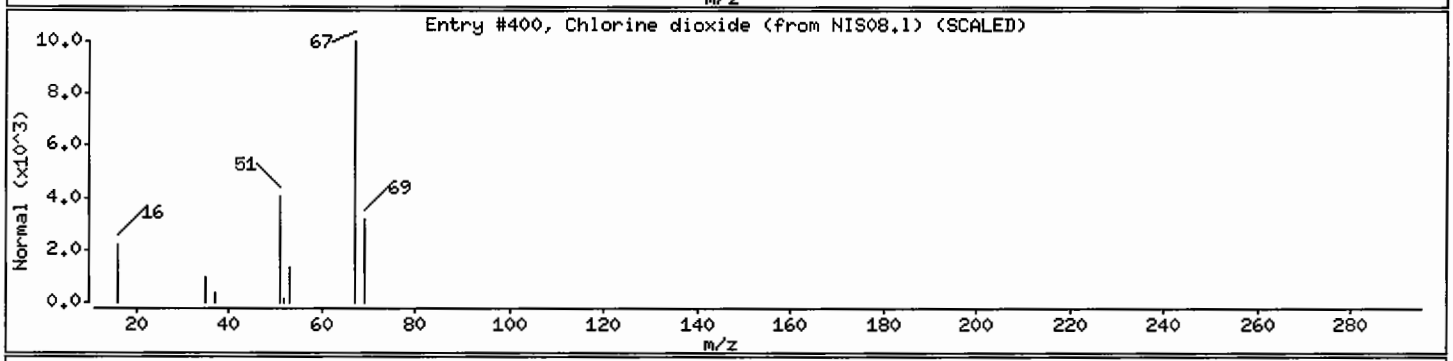
Purge Volume: 25.0 | Operator: JAO

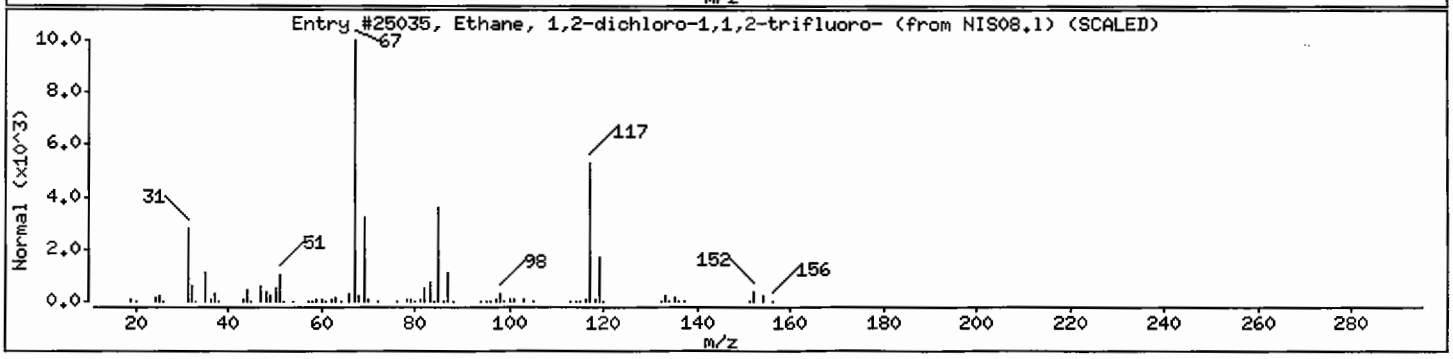
Column phase: SPB-624 | Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | | | | |
| Fluorodichloromethane | 75-43-4 | NIS08.1 | 4466 | 78 | CHCl2F | 102 |
| Chlorine dioxide | 10049-04-4 | NIS08.1 | 400 | 42 | ClO2 | 67 |
| Ethane, 1,2-dichloro-1,1,2-trifluoro- | 354-23-4 | NIS08.1 | 25035 | 40 | C2HCl2F3 | 152 |



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

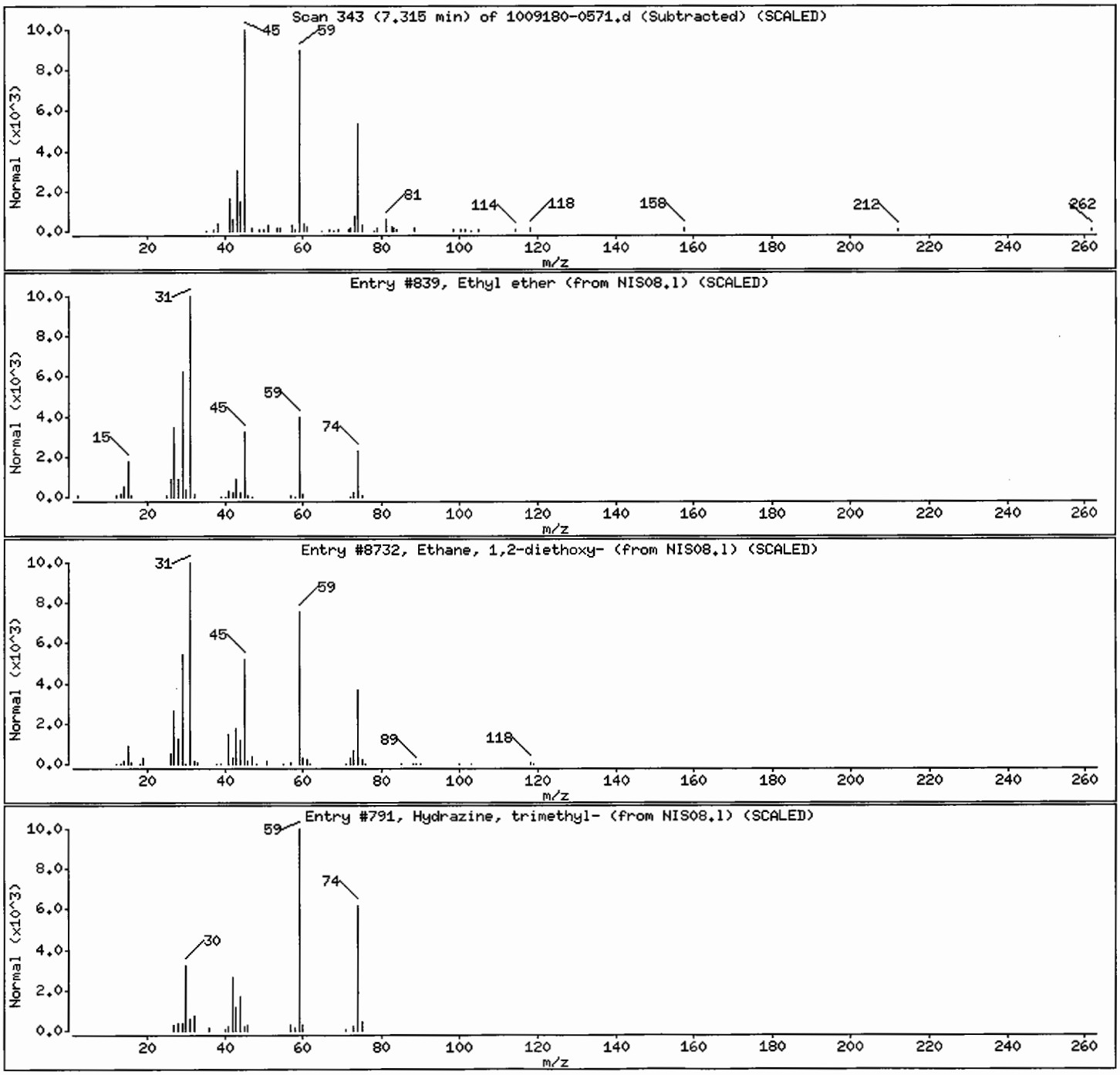
Client ID: MW-11 Instrument: 5972hp71.i

Sample Info: 1009180-05:JAO

Purge Volume: 25.0 Operator: JAO

Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | | | | |
| Ethyl ether | 60-29-7 | NIS08.l | 839 | 78 | C4H10O | 74 |
| Ethane, 1,2-diethoxy- | 629-14-1 | NIS08.l | 8732 | 64 | C6H14O2 | 118 |
| Hydrazine, trimethyl- | 1741-01-1 | NIS08.l | 791 | 47 | C3H10N2 | 74 |



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0571.d

Date : 20-SEP-2010 14:23

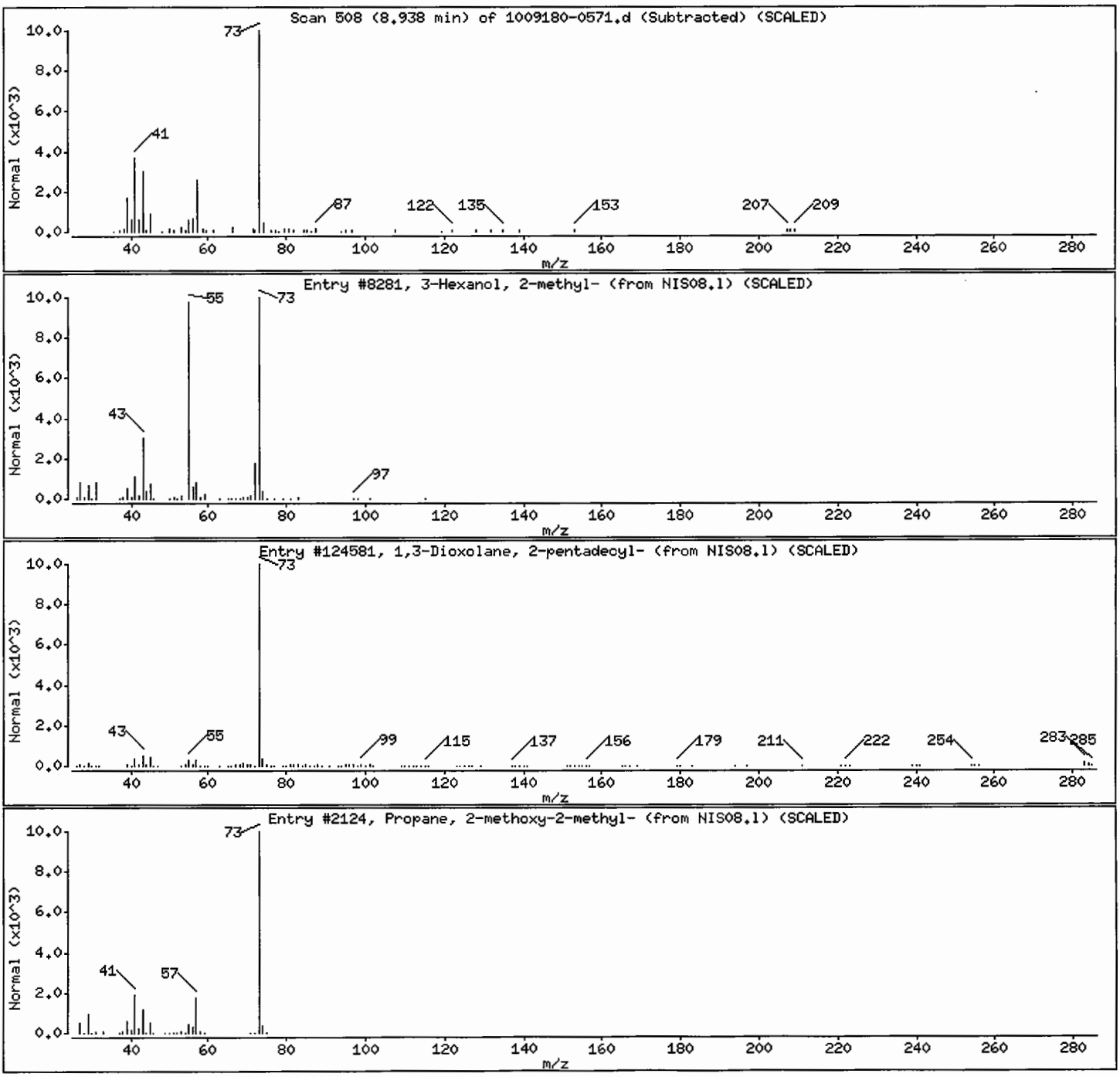
Client ID: MW-11 Instrument: 5972hp71.i

Sample Info: 1009180-05;JAO

Purge Volume: 25.0 Operator: JAO

Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | | | | |
| 3-Hexanol, 2-methyl- | 617-29-8 | NIS08.l | 8281 | 42 | C7H16O | 116 |
| 1,3-Dioxolane, 2-pentadecyl- | 4360-57-0 | NIS08.l | 124581 | 33 | C18H36O2 | 284 |
| Propane, 2-methoxy-2-methyl- | 1634-04-4 | NIS08.l | 2124 | 9 | C5H12O | 88 |



# ANALYSIS DATA SHEET

*SW 8260B*

**MW-12**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0671.d | Sampled: 09/14/10 16:30

Initial/Final: 25mL / 25mL | Lab ID: 1009180-06 | Received: 09/16/10 09:32

Dilution: 1.67 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 20:29

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.050 | | 0.84 | U |
| 74-87-3 | Chloromethane | | 0.18 | | 0.84 | U |
| 75-01-4 | Vinyl chloride | 1.3 | 0.12 | | 0.84 | D |
| 74-83-9 | Bromomethane | | 0.18 | | 0.84 | U |
| 75-00-3 | Chloroethane | 7.0 | 0.33 | | 0.84 | D |
| 75-69-4 | Trichlorofluoromethane | | 0.10 | | 0.84 | U |
| 107-02-8 | Acrolein | | 1.7 | | 8.4 | U |
| 75-35-4 | 1,1-Dichloroethene | 0.23 | 0.067 | | 0.84 | JD |
| 67-64-1 | Acetone | | 0.73 | | 4.2 | U |
| 74-88-4 | Iodomethane | | 0.050 | | 0.84 | U |
| 75-15-0 | Carbon disulfide | | 0.033 | | 0.84 | U |
| 107-05-1 | 3-Chloropropene | | 0.084 | | 0.84 | U |
| 75-05-8 | Acetonitrile | | 0.050 | | 0.84 | U |
| 75-09-2 | Methylene chloride | | 0.033 | | 0.84 | U |
| 107-13-1 | Acrylonitrile | | 0.60 | | 8.4 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.49 | 0.084 | | 0.84 | JD |
| 75-34-3 | 1,1-Dichloroethane | 17 | 0.033 | | 0.84 | D |
| 126-99-8 | Chloroprene | | 0.033 | | 0.84 | U |
| 108-05-4 | Vinyl acetate | | 0.10 | | 1.7 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 35 | 0.050 | | 0.84 | D |
| 594-20-7 | 2,2-Dichloropropane | | 0.050 | | 0.84 | U |
| 107-12-0 | Propionitrile | | 2.3 | | 42 | U |
| 78-93-3 | 2-Butanone | | 0.47 | | 4.2 | U |
| 126-98-7 | Methacrylonitrile | | 0.65 | | 8.4 | U |
| 74-97-5 | Bromochloromethane | | 0.067 | | 0.84 | U |
| 67-66-3 | Chloroform | 0.42 | 0.050 | | 0.84 | JD |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.033 | | 0.84 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.050 | | 0.84 | U |
| 56-23-5 | Carbon tetrachloride | | 0.050 | | 0.84 | U |
| 107-06-2 | 1,2-Dichloroethane | 0.34 | 0.050 | | 0.84 | JD |
| 78-83-1 | Isobutyl alcohol | | 9.9 | | 42 | U |
| 71-43-2 | Benzene | 0.16 | 0.050 | | 0.84 | JD |
| 79-01-6 | Trichloroethene | 3.6 | 0.050 | | 0.84 | D |
| 78-87-5 | 1,2-Dichloropropane | 0.56 | 0.20 | | 0.84 | JD |
| 74-95-3 | Dibromomethane | | 0.050 | | 0.84 | U |
| 80-62-6 | Methyl Methacrylate | | 0.94 | | 8.4 | U |
| 75-27-4 | Bromodichloromethane | | 0.050 | | 0.84 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.067 | | 0.84 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.70 | | 4.2 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-12**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0671.d | Sampled: 09/14/10 16:30

Initial/Final: 25mL / 25mL | Lab ID: 1009180-06 | Received: 09/16/10 09:32

Dilution: 1.67 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 20:29

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.16 | 0.050 | | 0.84 | JBD |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.084 | | 0.84 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.067 | | 0.84 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.68 | | 8.4 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.050 | | 0.84 | U |
| 127-18-4 | Tetrachloroethene | 0.82 | 0.10 | | 0.84 | JD |
| 591-78-6 | 2-Hexanone | | 0.85 | | 4.2 | U |
| 124-48-1 | Dibromochloromethane | | 0.067 | | 0.84 | U |
| 108-90-7 | Chlorobenzene | | 0.033 | | 0.84 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.033 | | 0.84 | U |
| 100-41-4 | Ethylbenzene | | 0.067 | | 0.84 | U |
| 179601-23-1 | m,p-Xylene | | 0.13 | | 1.7 | U |
| 95-47-6 | o-Xylene | | 0.050 | | 0.84 | U |
| 100-42-5 | Styrene | | 0.033 | | 0.84 | U |
| 75-25-2 | Bromoform | | 0.050 | | 0.84 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.084 | | 0.84 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.15 | | 0.84 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.55 | | 3.3 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.067 | | 0.84 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.4 | 0.050 | | 0.84 | D |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.050 | | 0.84 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.10 | | 0.84 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.050 | | 0.84 | U |
| 91-20-3 | Naphthalene | | 0.25 | | 0.84 | U |
| 1330-20-7 | Xylenes (total) | | 0.050 | | 0.84 | U |

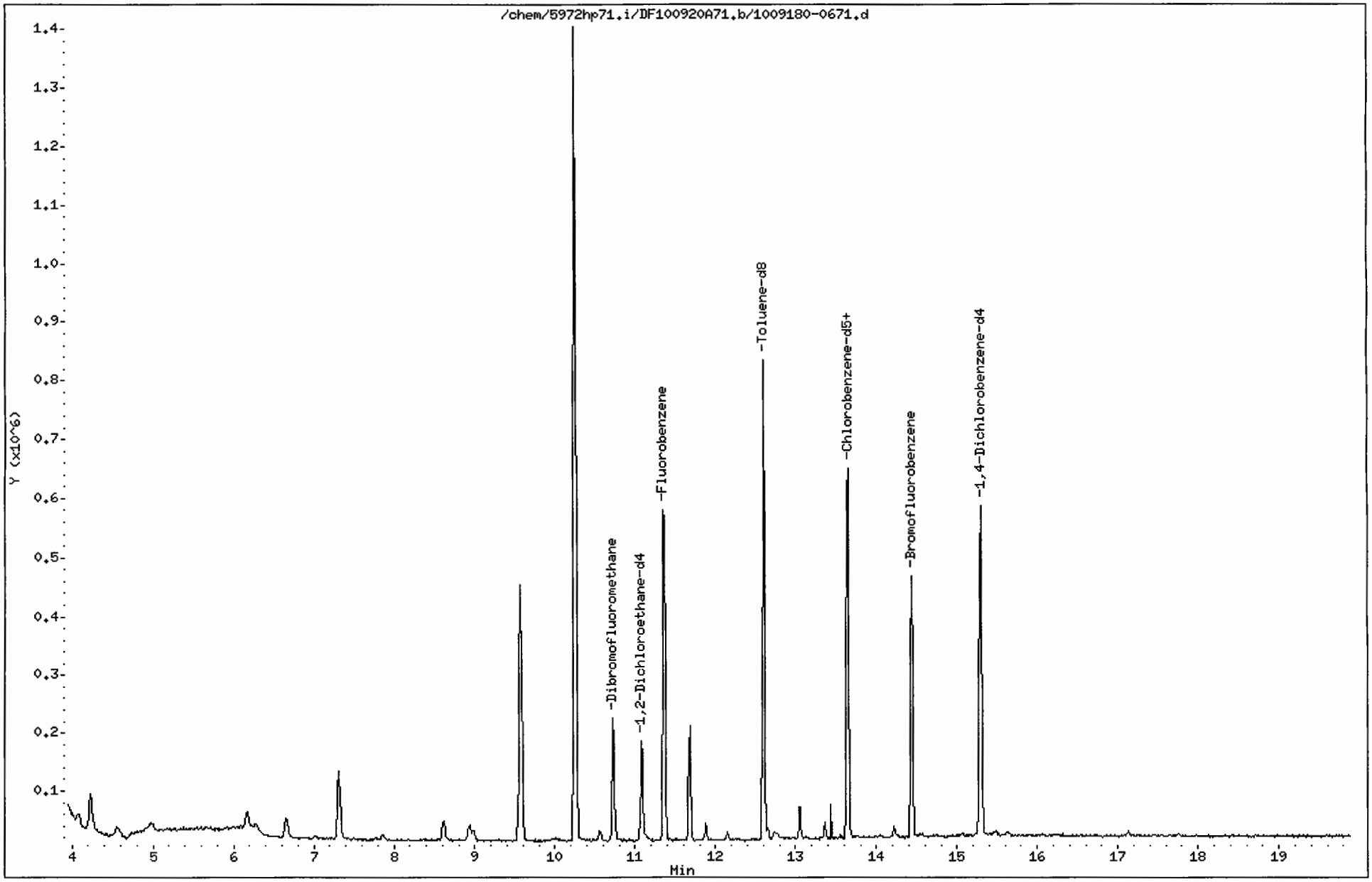
| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.947 | 99 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 5.065 | 101 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.726 | 95 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.989 | 100 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| 60-29-7 | Ethyl Ether | 2.7 | 352305 | 7.311 | 90 | JDN |
| 000075-43-4 | Fluorodichloromethane | 1.2 | 153384 | 6.652 | 94 | JDN |
| NA | Unknown 4.231 | 2.2 | 282982 | 4.231 | 0 | JD |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d
Date : 20-SEP-2010 20:29
Client ID: MW-12
Sample Info: 1009180-06:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0671.d
Lab Smp Id: 1009180-06 Client Smp ID: MW-12
Inj Date : 20-SEP-2010 20:29
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-06:JAO
Misc Info : MW-12
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 27
Dil Factor: 1.67000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.67000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.67000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.366 | 11.362 | (1.000) | 471326 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.649 | 13.646 | (1.000) | 311938 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.293 | 15.289 | (1.000) | 138337 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.726 | 10.733 | (0.944) | 126444 | 123.685 | 8.3 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.081 | 11.087 | (0.975) | 104639 | 126.617 | 8.5 |
| $ 6 Toluene-d8 | 98 | 12.606 | 12.602 | (0.924) | 438834 | 118.139 | 7.9 |
| $ 7 Bromofluorobenzene | 95 | 14.436 | 14.433 | (0.944) | 144006 | 124.731 | 8.3 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | 4.999 | 4.995 | (0.440) | 14097 | 19.1594 | 1.3 |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | 6.170 | 6.176 | (0.543) | 28612 | 104.674 | 7.0 |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | 7.774 | 7.780 | (0.684) | 3176 | 3.40961 | 0.23(a) |
| 18 Acetone | 43 | Compound Not Detected. | | | | | |

9.21.10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | 8.984 | 8.981 | (0.790) | 7657 | 7.33634 | 0.49(a) |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 9.575 | 9.571 | (0.842) | 489041 | 247.186 | 17 |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | 10.254 | 10.250 | (0.902) | 568681 | 519.274 | 35 |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | 10.559 | 10.565 | (0.929) | 11657 | 6.30323 | 0.42(a) |
| 42 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | 11.120 | 11.116 | (0.978) | 9677 | 2.43484 | 0.16(a) |
| 48 1,2-Dichloroethane | 62 | 11.149 | 11.156 | (0.981) | 5058 | 5.08079 | 0.34(a) |
| 49 Trichloroethene | 130 | 11.681 | 11.677 | (1.028) | 51987 | 54.3274 | 3.6 |
| 51 1,2-Dichloropropane | 63 | 11.878 | 11.884 | (1.045) | 8514 | 8.43685 | 0.56(a) |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.655 | 12.652 | (0.927) | 6551 | 2.38627 | 0.16(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | 13.059 | 13.055 | (0.957) | 10944 | 12.3468 | 0.82(a) |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | 15.312 | 15.309 | (1.001) | 36971 | 21.5255 | 1.4 |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

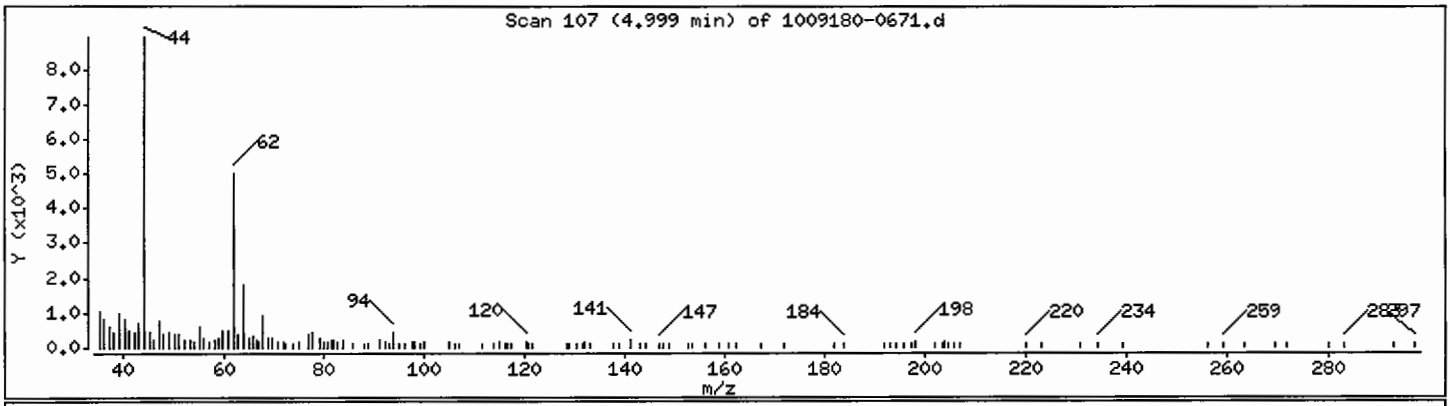
Client ID: MW-12 | Instrument: 5972hp71.i

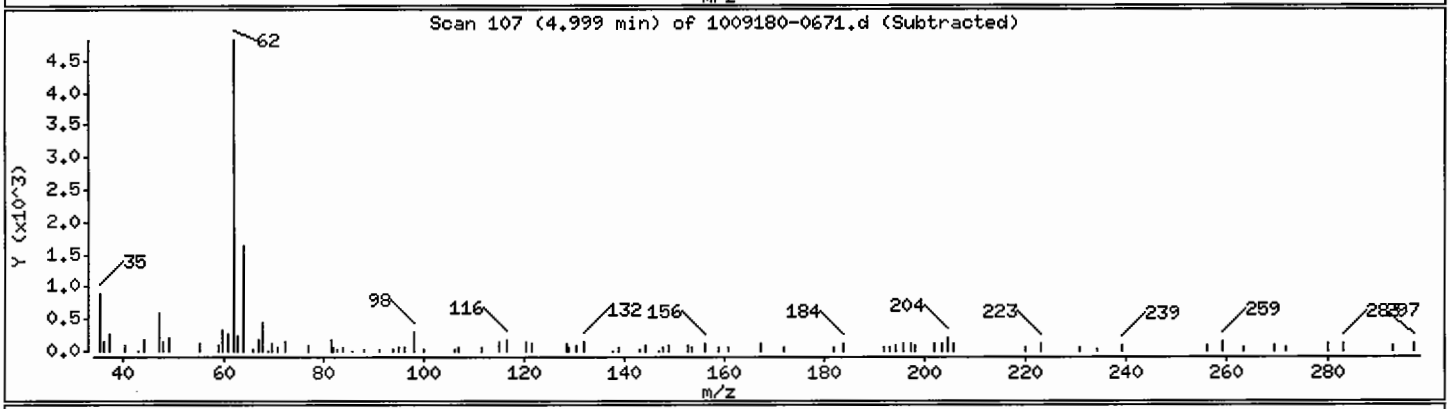
Sample Info: 1009180-06:JAO

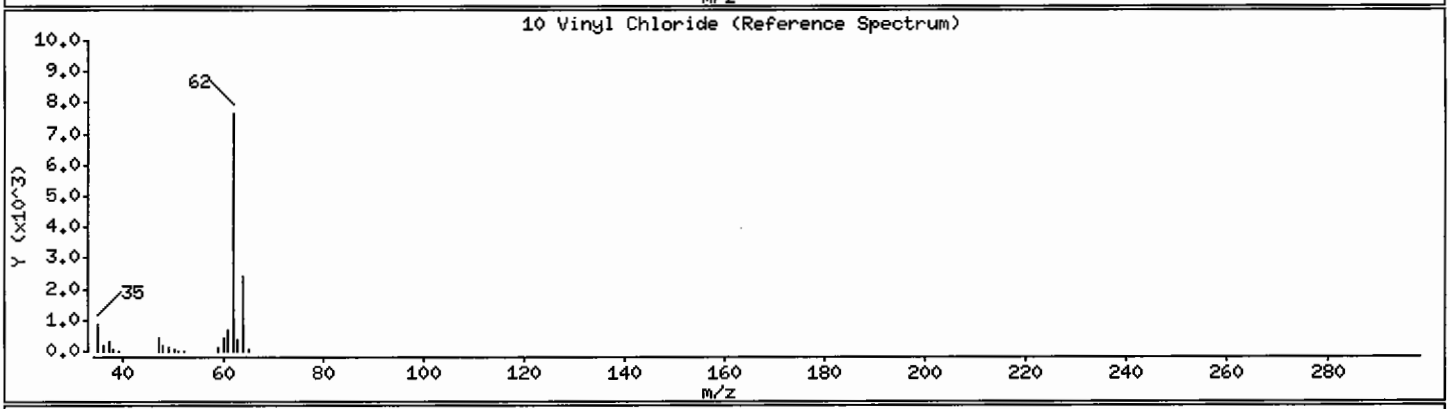
Purge Volume: 25.0 | Operator: JAO

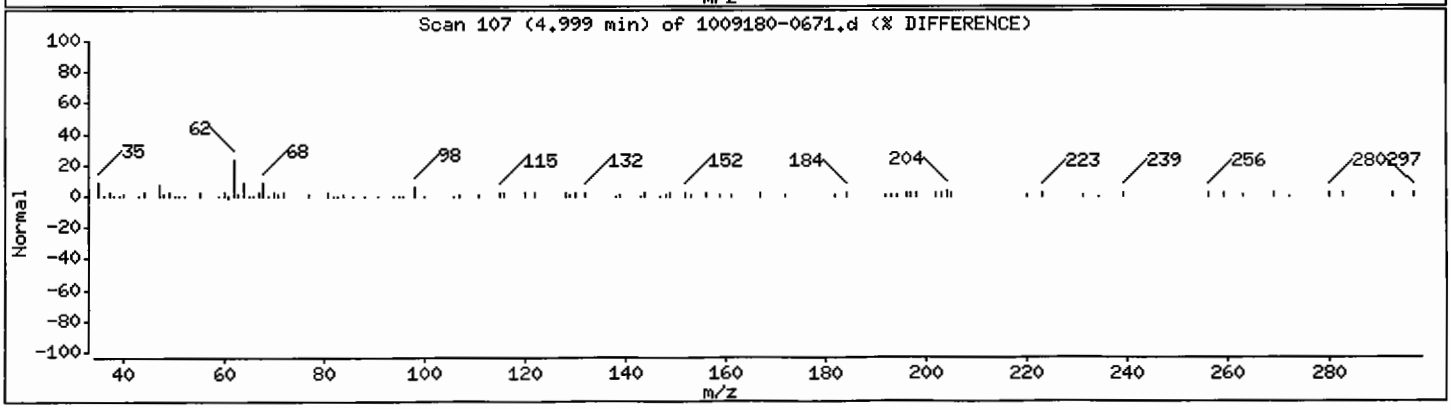
Column phase: SPB-624 | Column diameter: 0.32

10 Vinyl Chloride | Concentration: 1.3 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

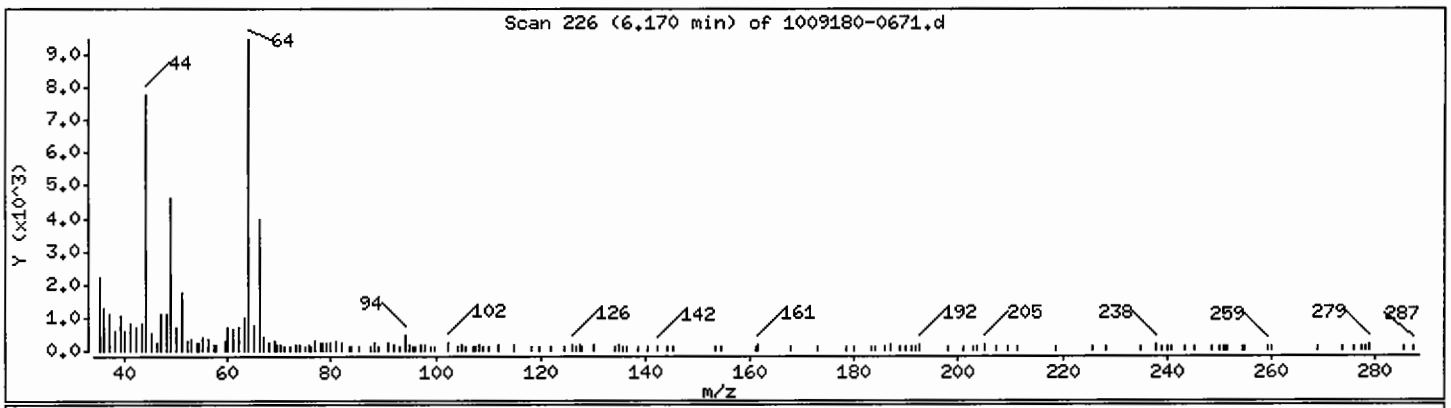
Client ID: MW-12 | Instrument: 5972hp71.i

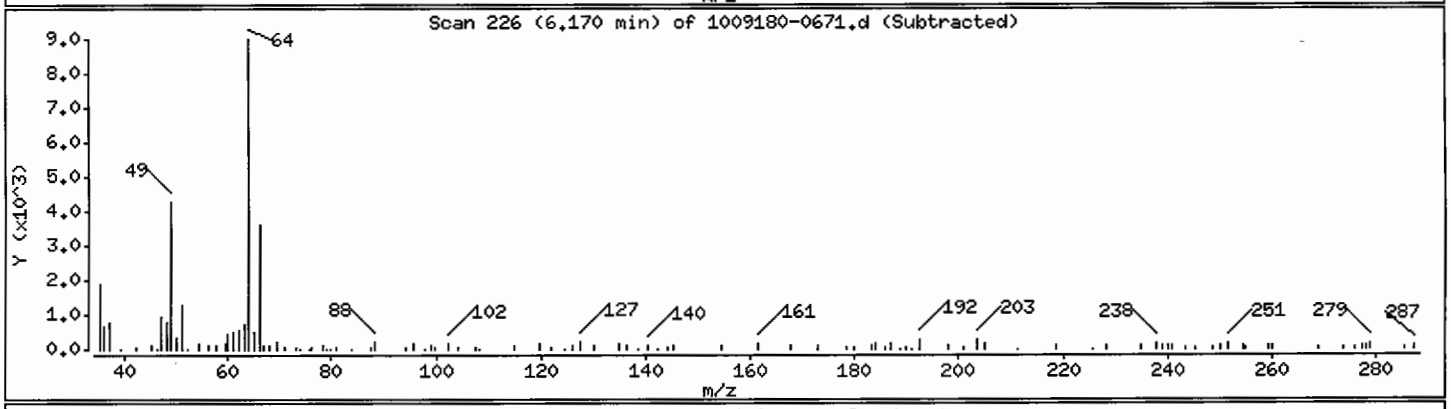
Sample Info: 1009180-06:JAO

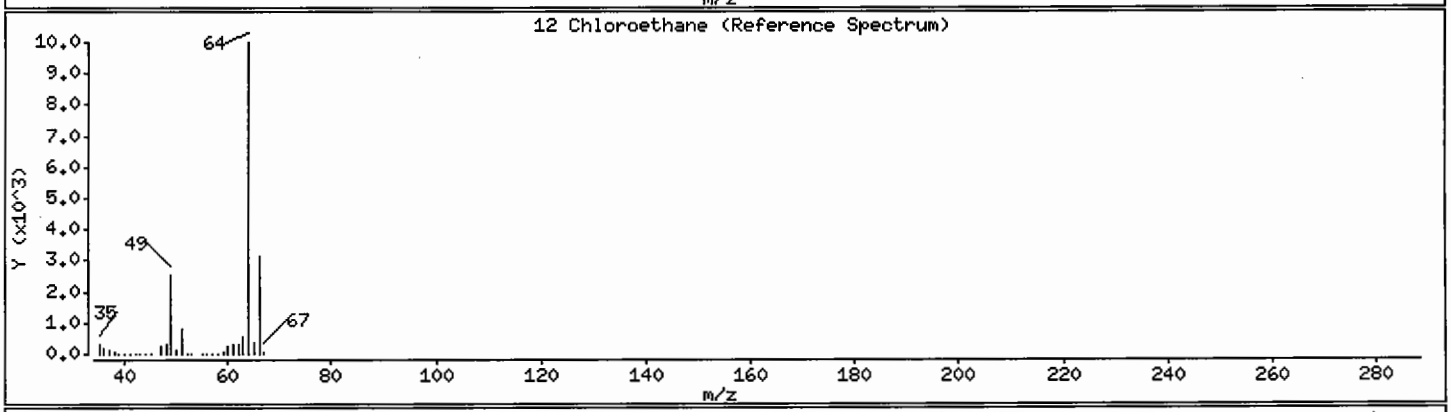
Purge Volume: 25.0 | Operator: JAO

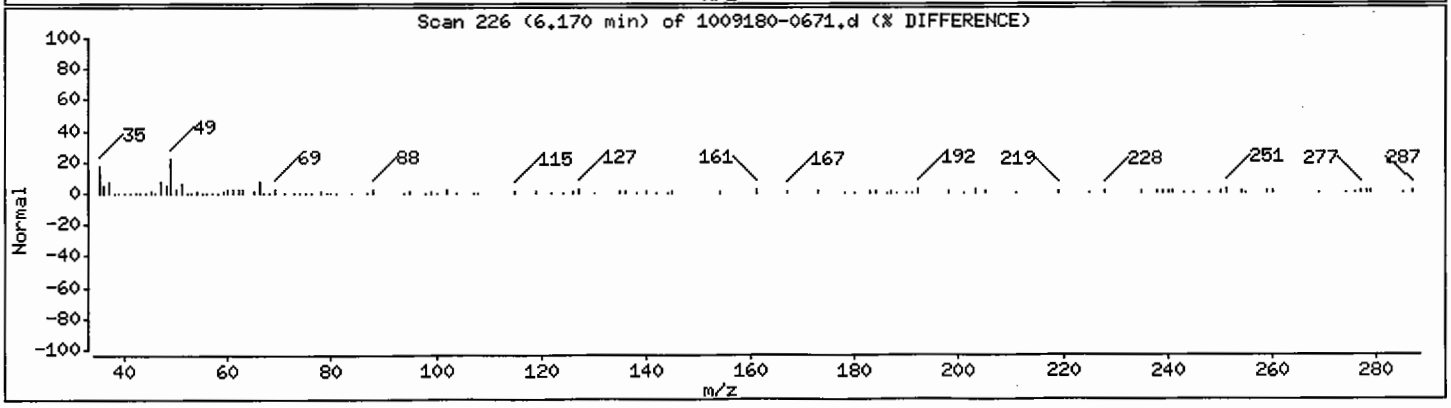
Column phase: SPB-624 | Column diameter: 0.32

12 Chloroethane | Concentration: 7.0 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

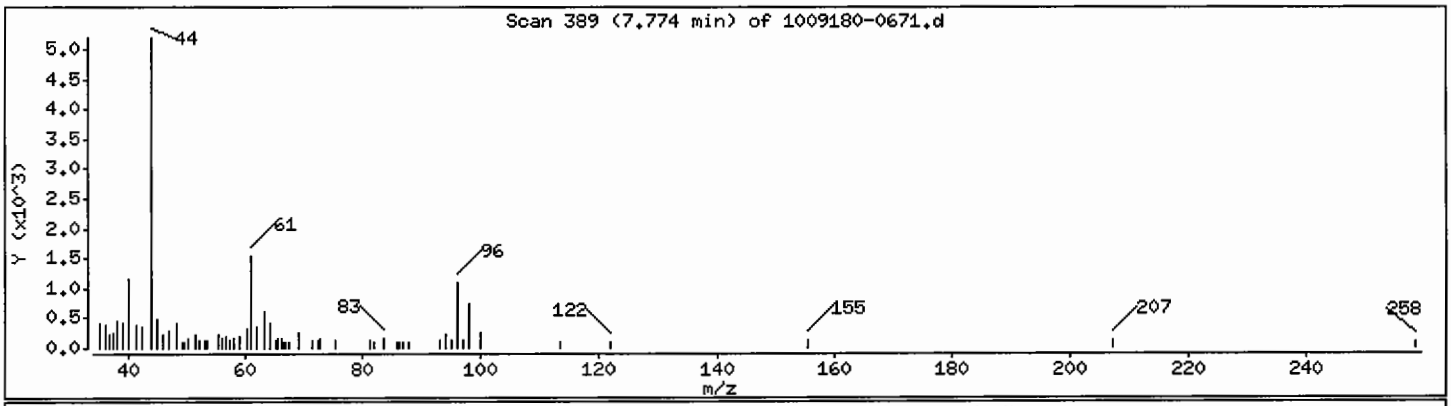
Client ID: HW-12 | Instrument: 5972hp71.i

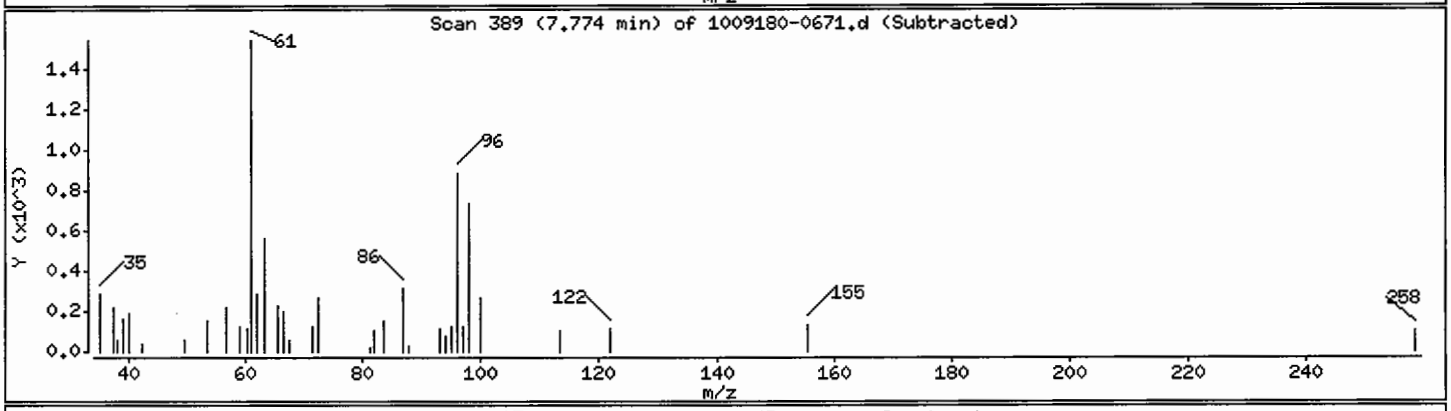
Sample Info: 1009180-06:JAO

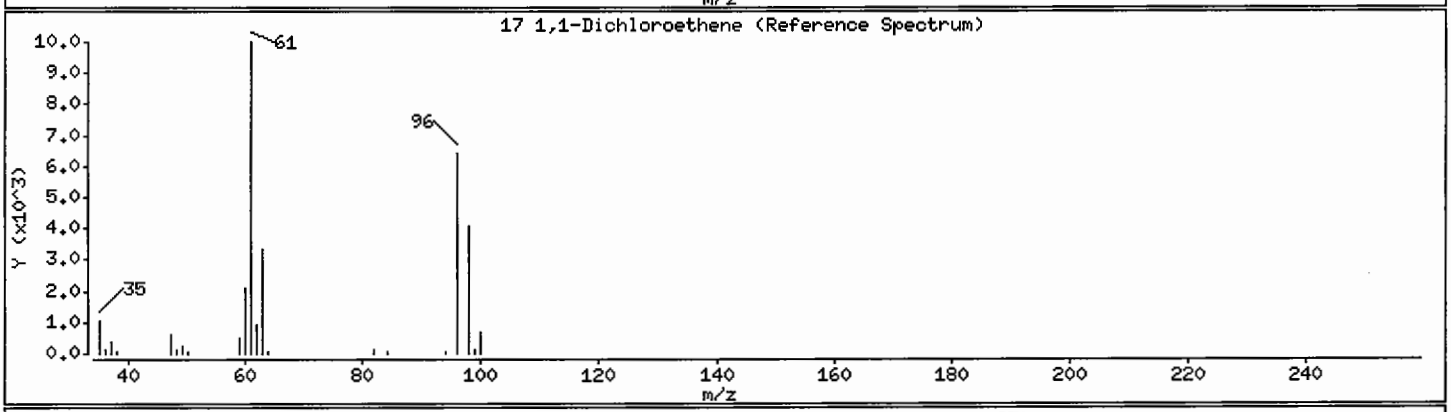
Purge Volume: 25.0 | Operator: JAO

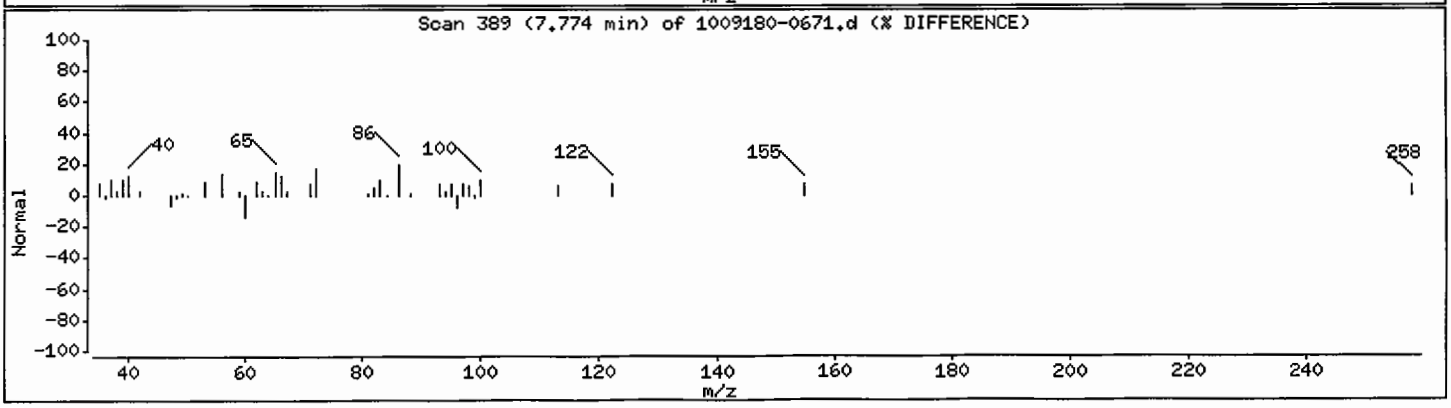
Column phase: SPB-624 | Column diameter: 0.32

17 1,1-Dichloroethene | Concentration: 0.23 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

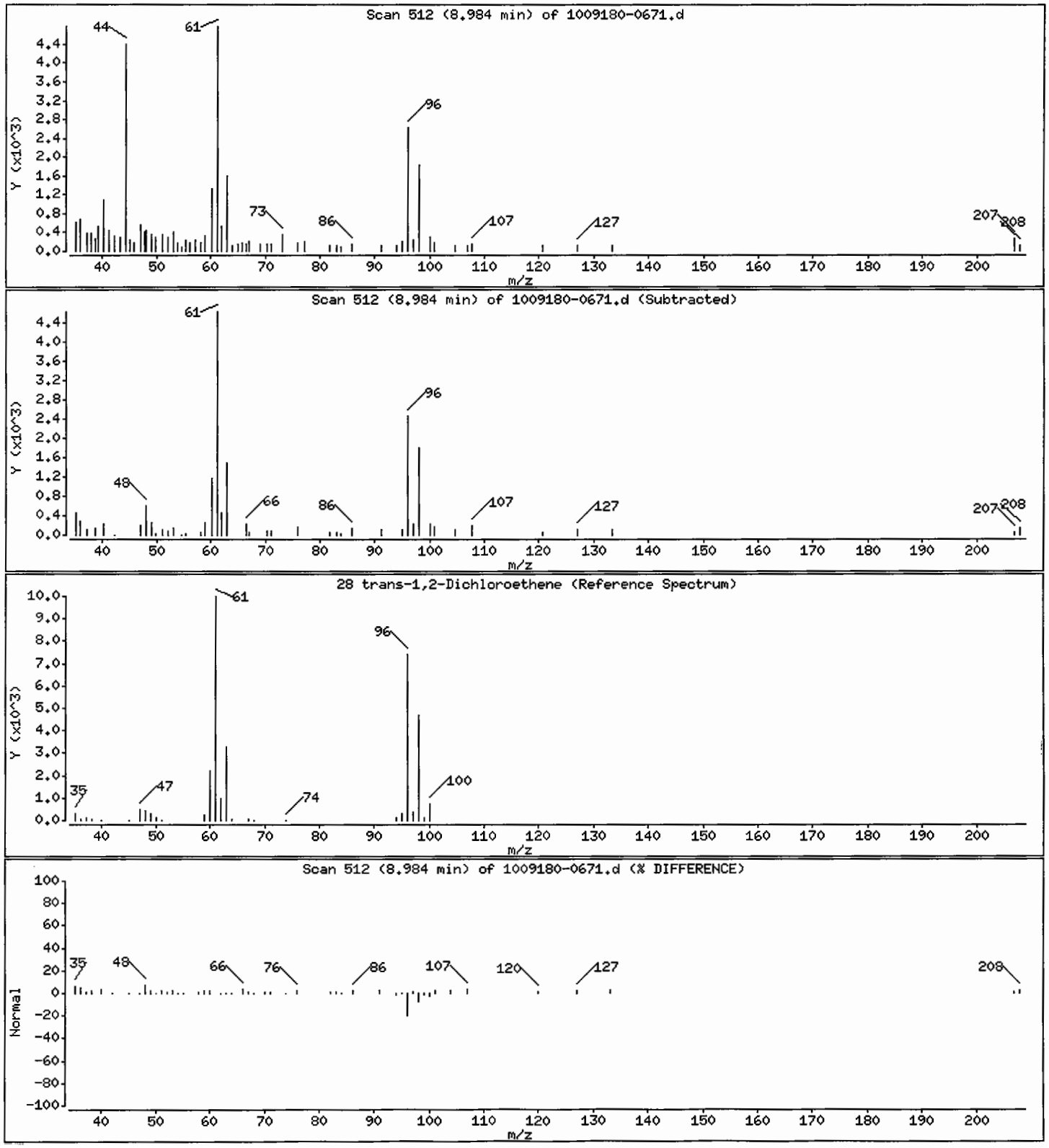
Client ID: MW-12 | Instrument: 5972hp71.i

Sample Info: 1009180-06:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

28 trans-1,2-Dichloroethene | Concentration: 0.49 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

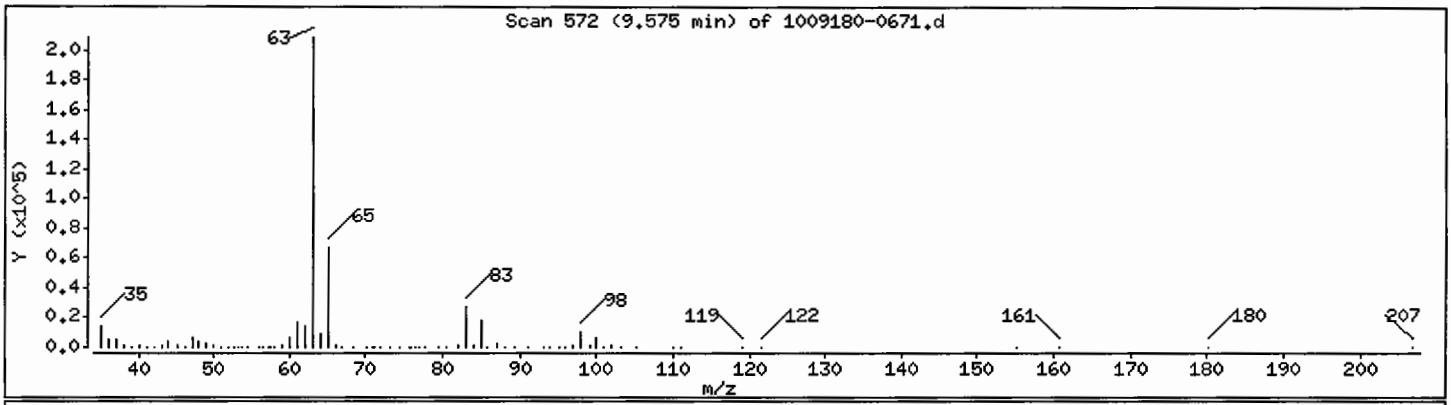
Client ID: MW-12 | Instrument: 5972hp71.i

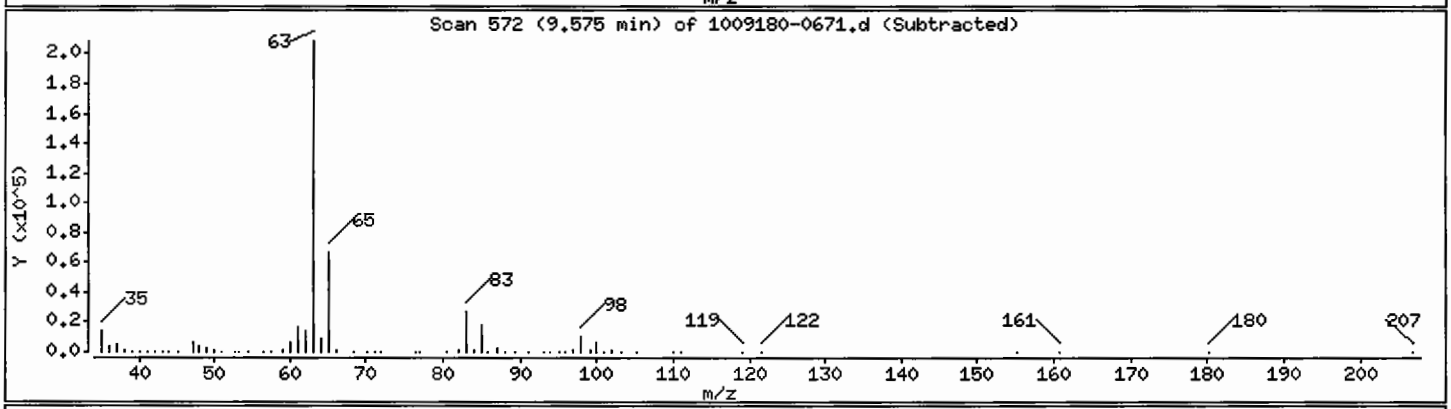
Sample Info: 1009180-06:JAO

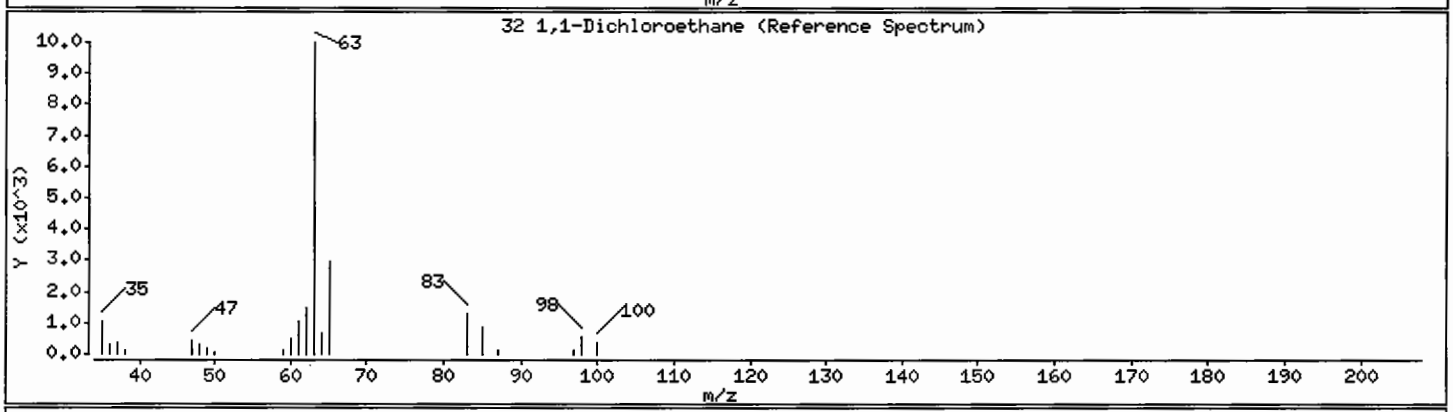
Purge Volume: 25.0 | Operator: JAO

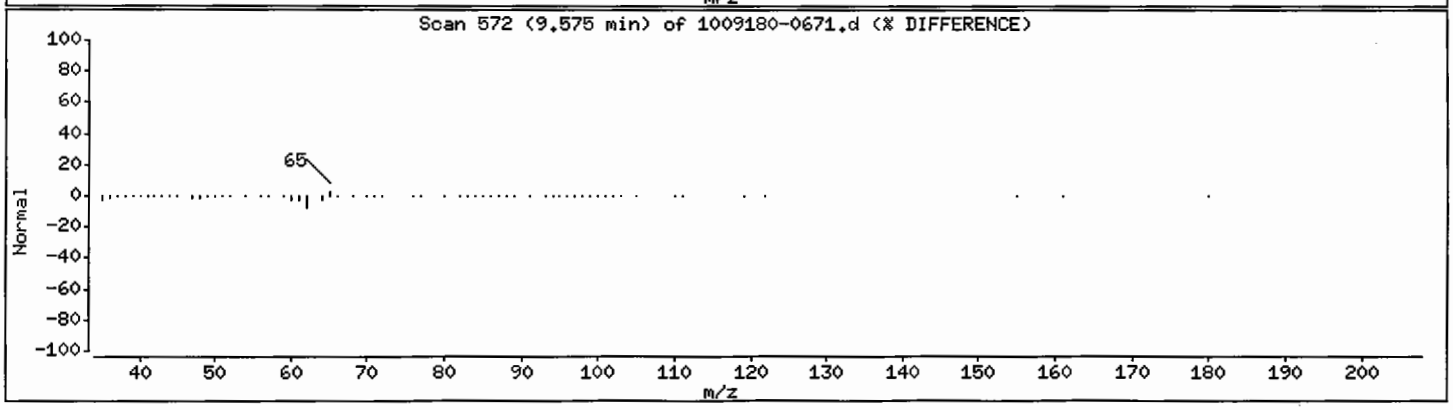
Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 17 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

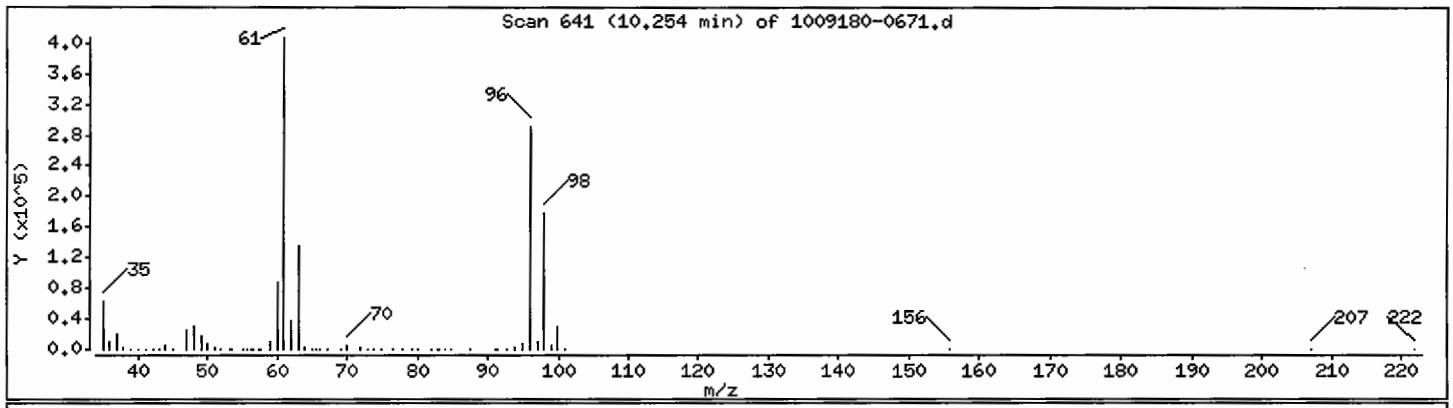
Client ID: MW-12 | Instrument: 5972hp71.i

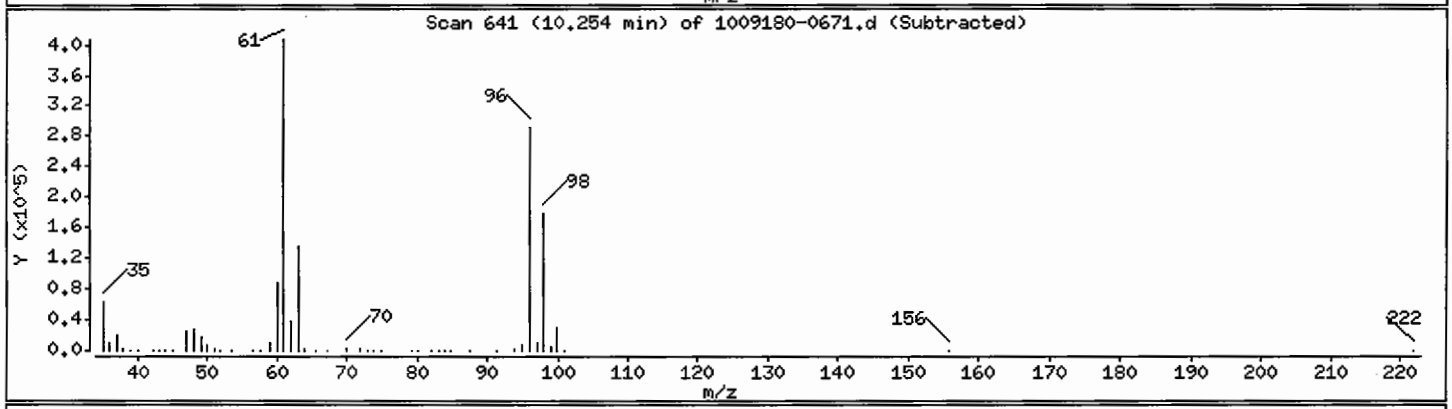
Sample Info: 1009180-06:JAO

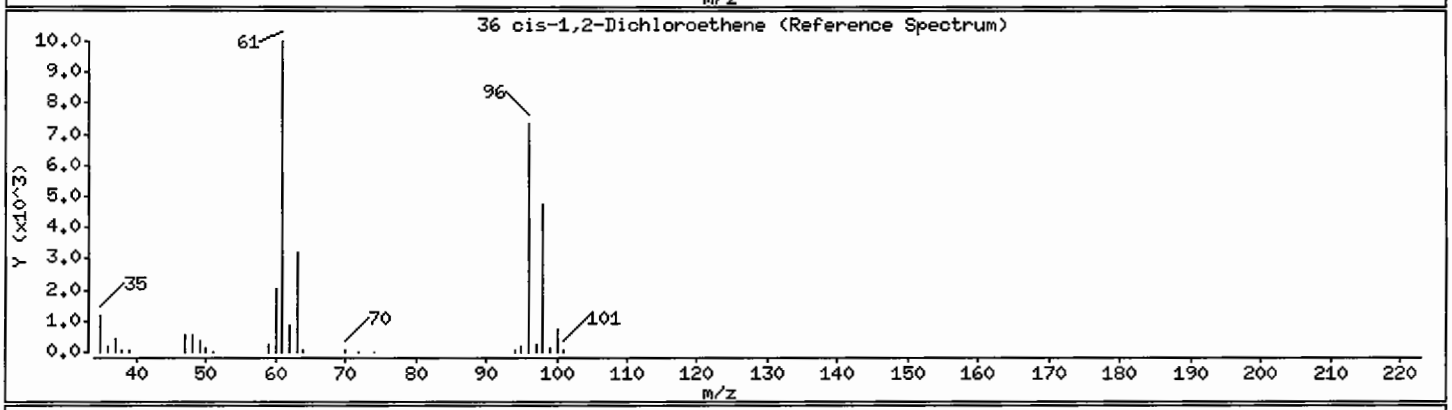
Purge Volume: 25.0 | Operator: JAO

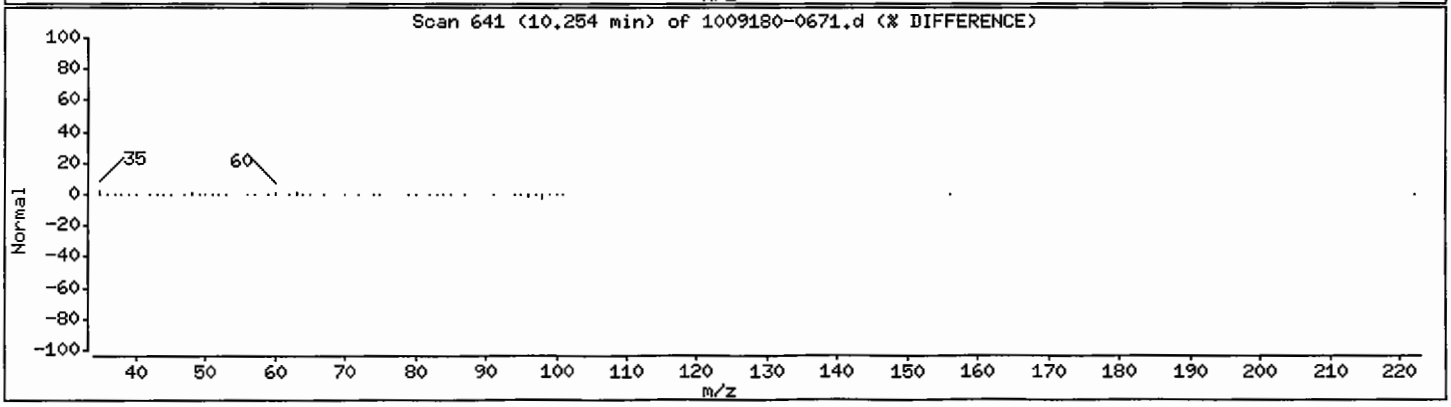
Column phase: SPB-624 | Column diameter: 0.32

36 cis-1,2-Dichloroethene | Concentration: 35 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

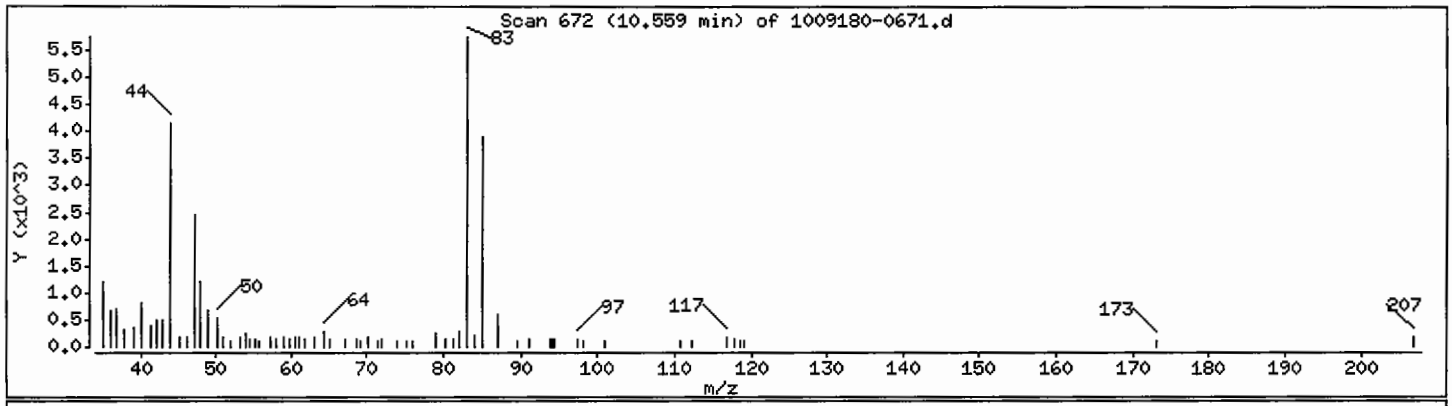
Client ID: MW-12 | Instrument: 5972hp71.i

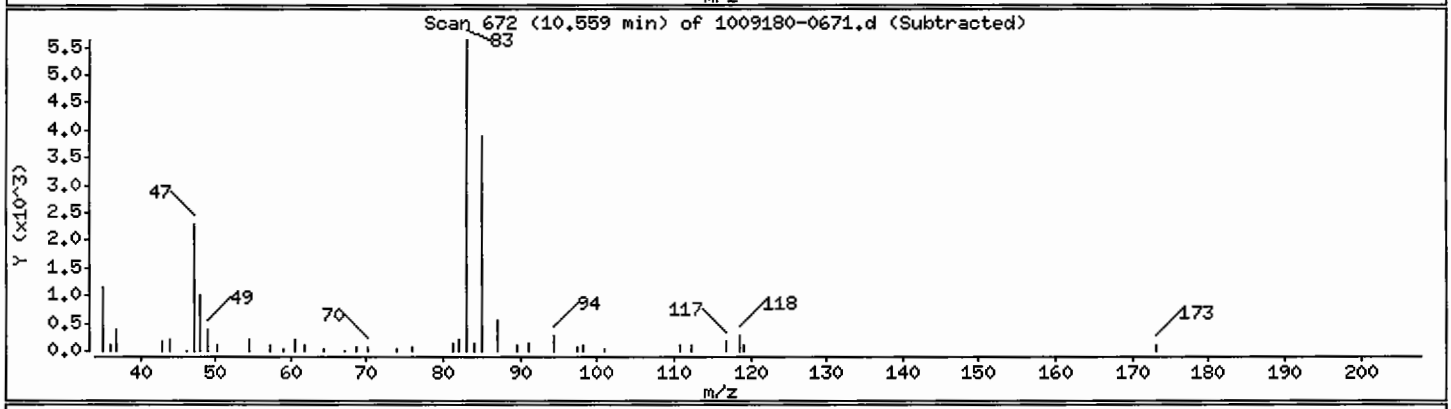
Sample Info: 1009180-06:JAO

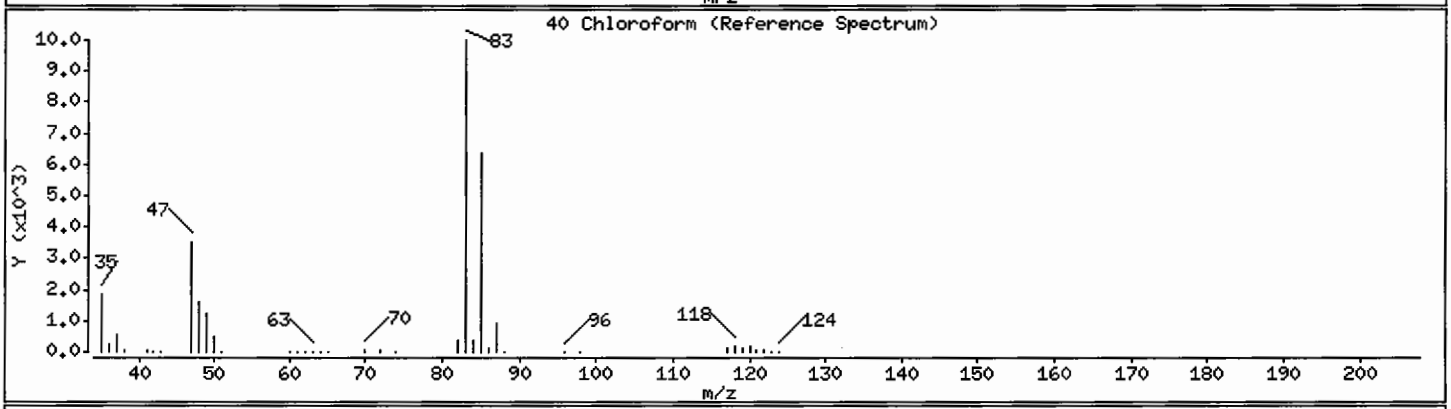
Purge Volume: 25.0 | Operator: JAO

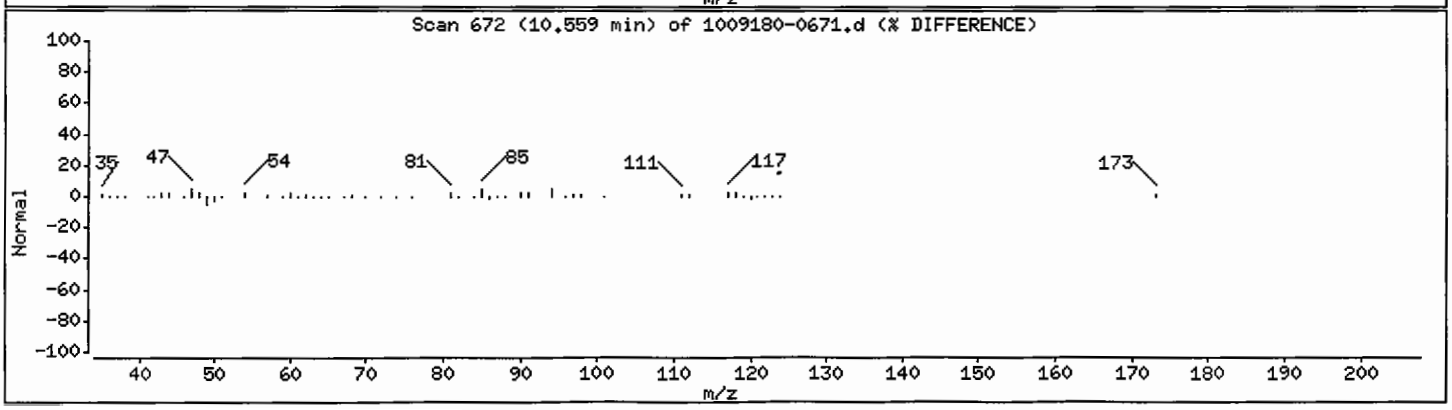
Column phase: SPB-624 | Column diameter: 0.32

40 Chloroform | Concentration: 0.42 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

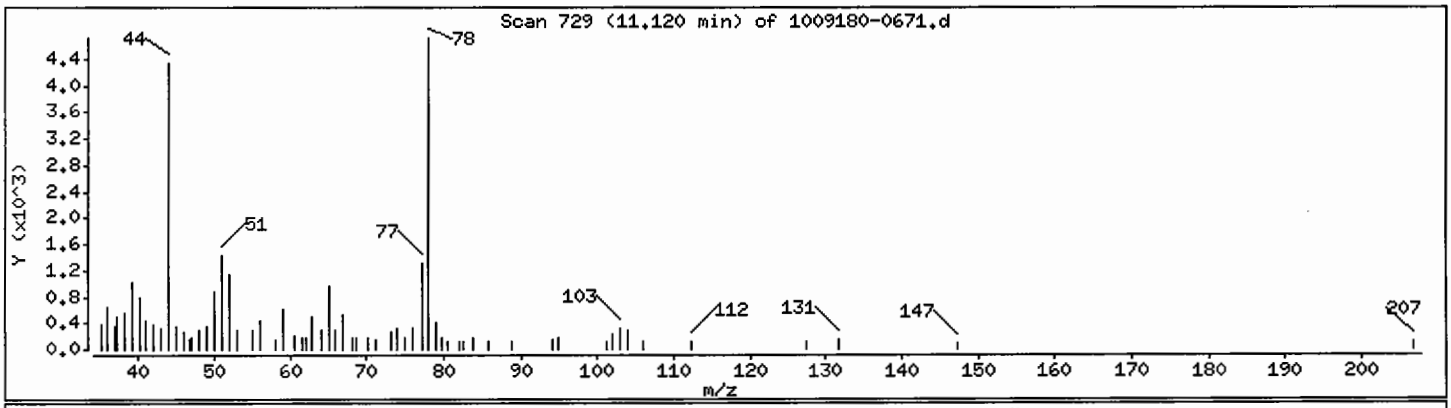
Client ID: MW-12 | Instrument: 5972hp71.i

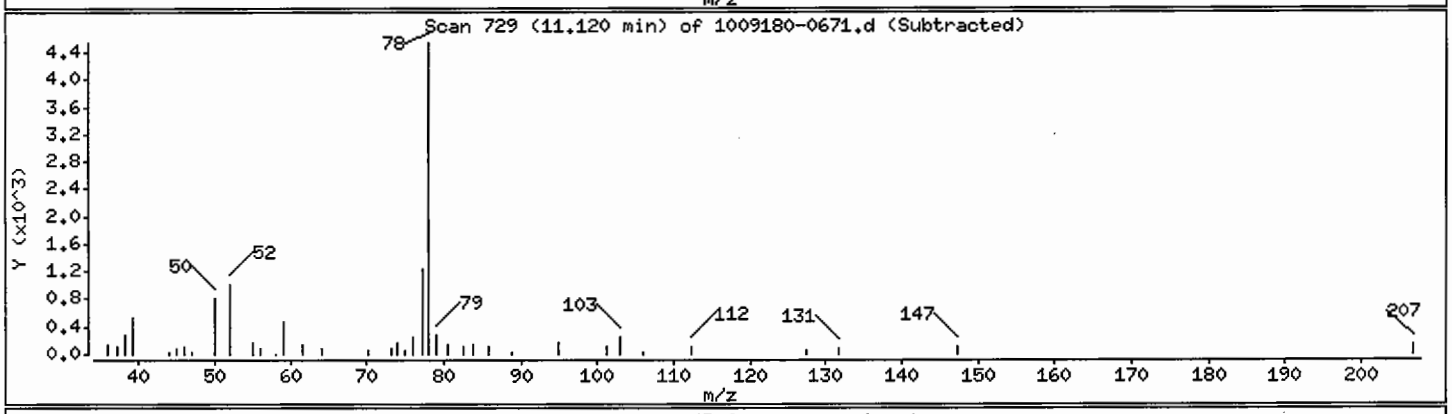
Sample Info: 1009180-06:JAO

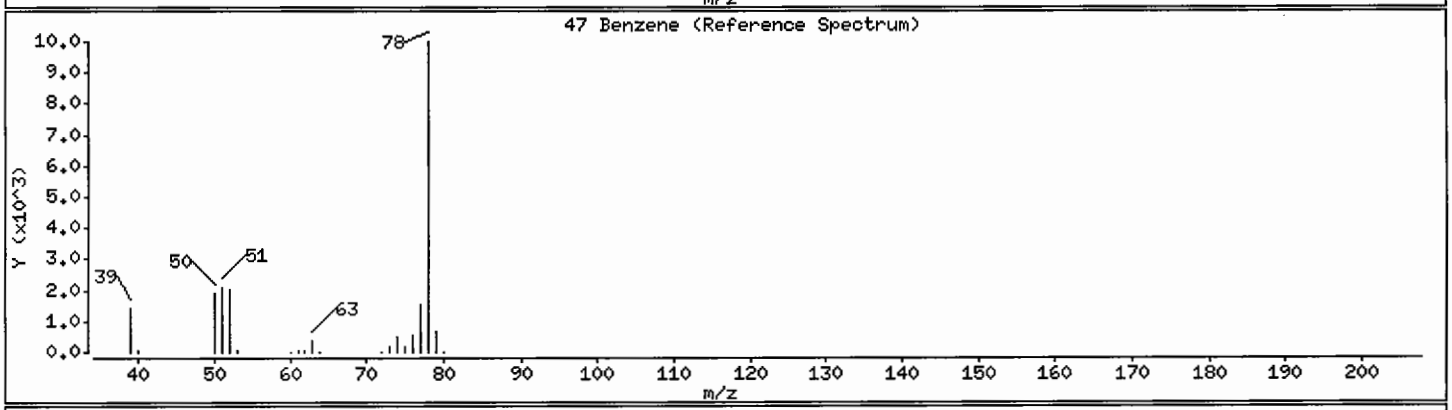
Purge Volume: 25.0 | Operator: JAO

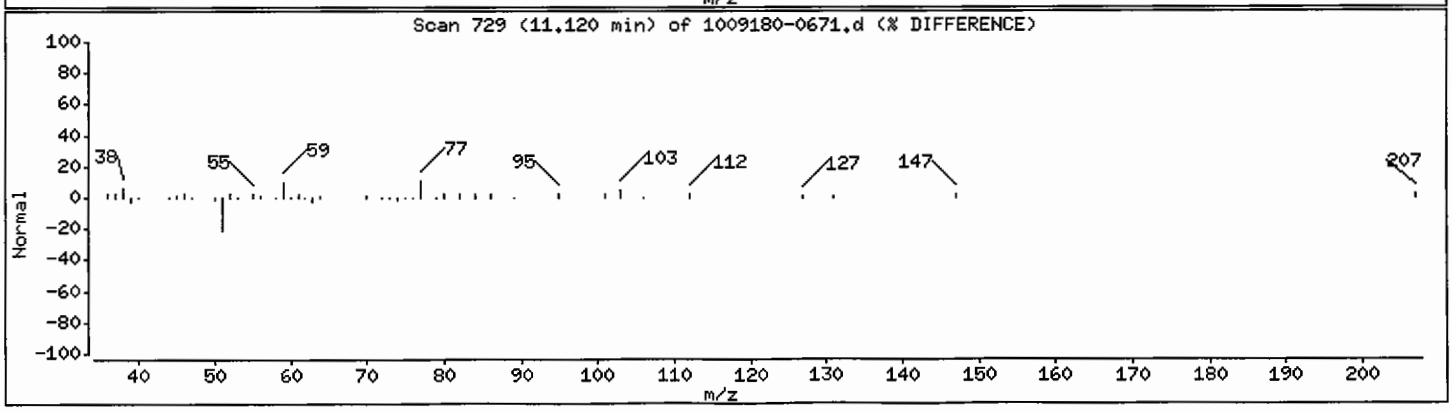
Column phase: SPB-624 | Column diameter: 0.32

47 Benzene | Concentration: 0.16 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

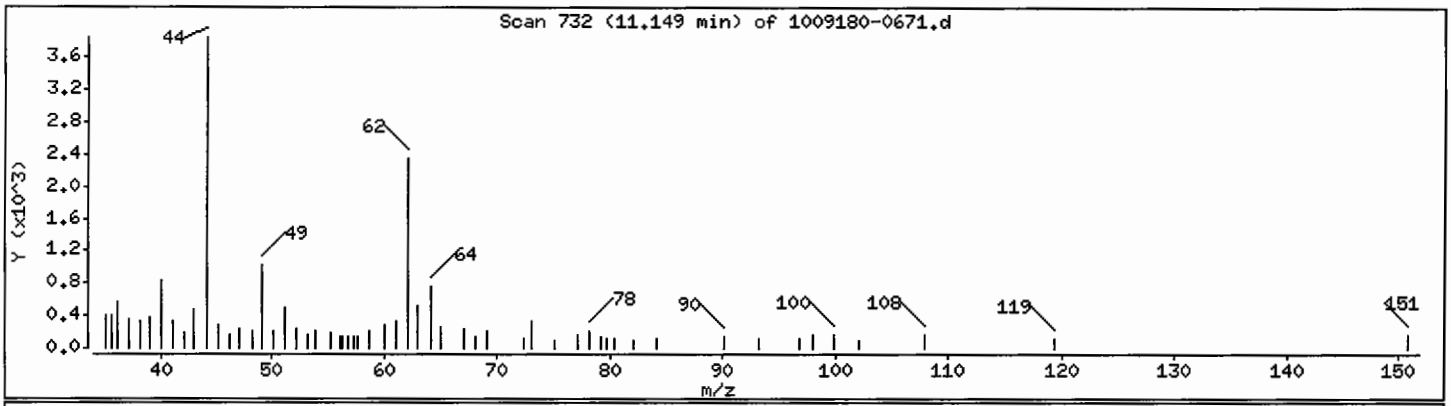
Client ID: MW-12 | Instrument: 5972hp71.i

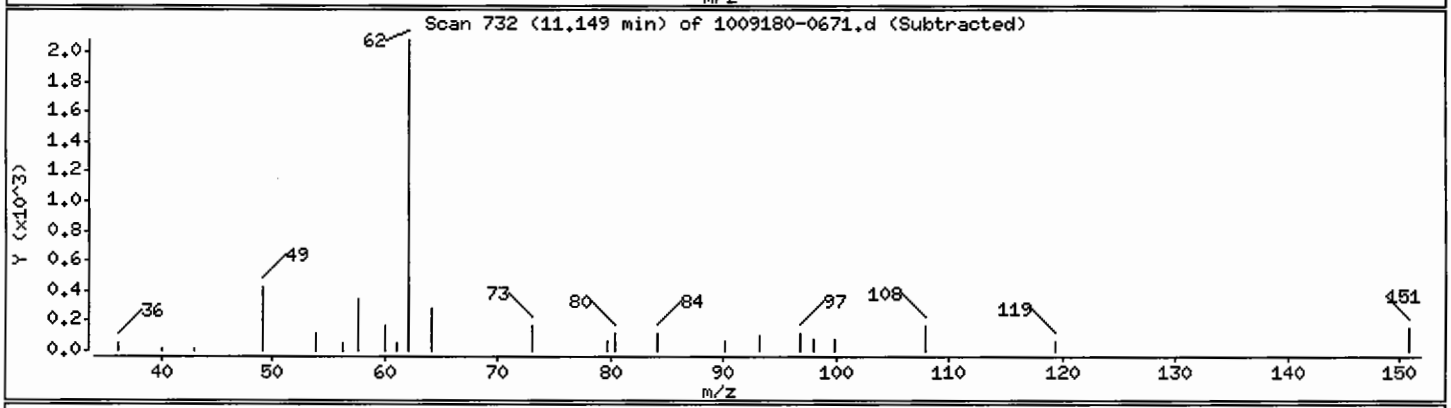
Sample Info: 1009180-06;JAO

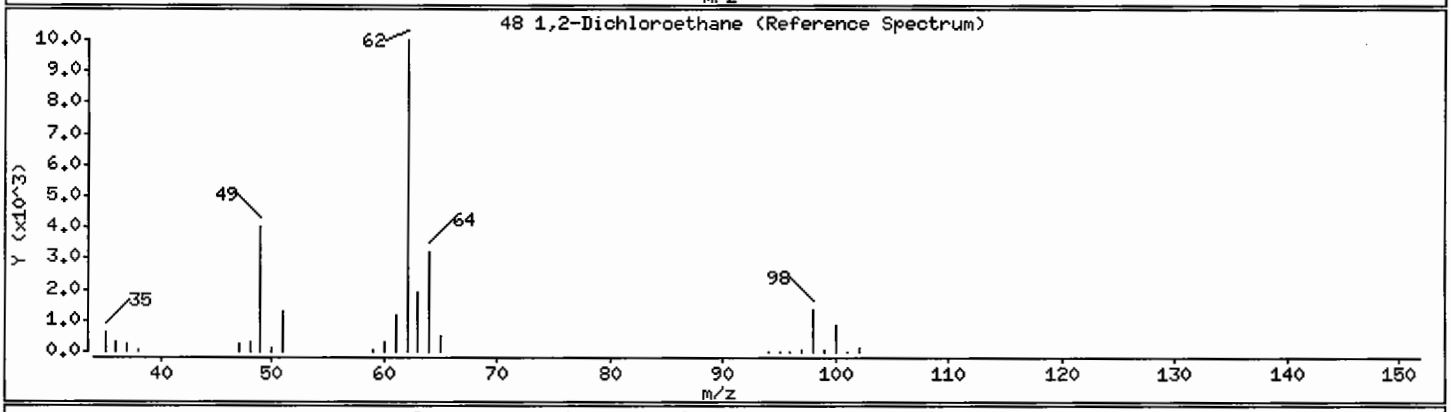
Purge Volume: 25.0 | Operator: JAO

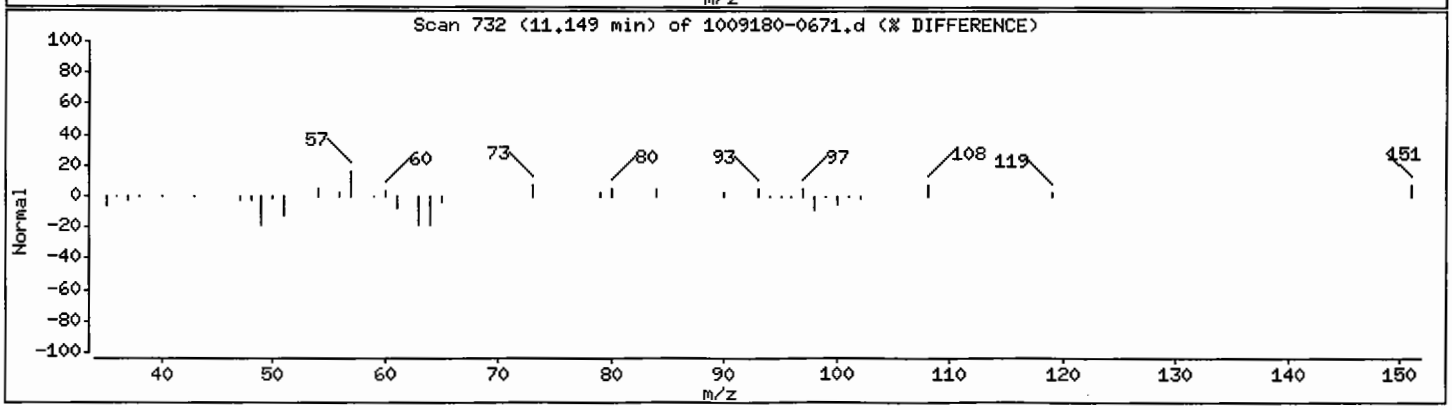
Column phase: SPB-624 | Column diameter: 0.32

48 1,2-Dichloroethane | Concentration: 0.34 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

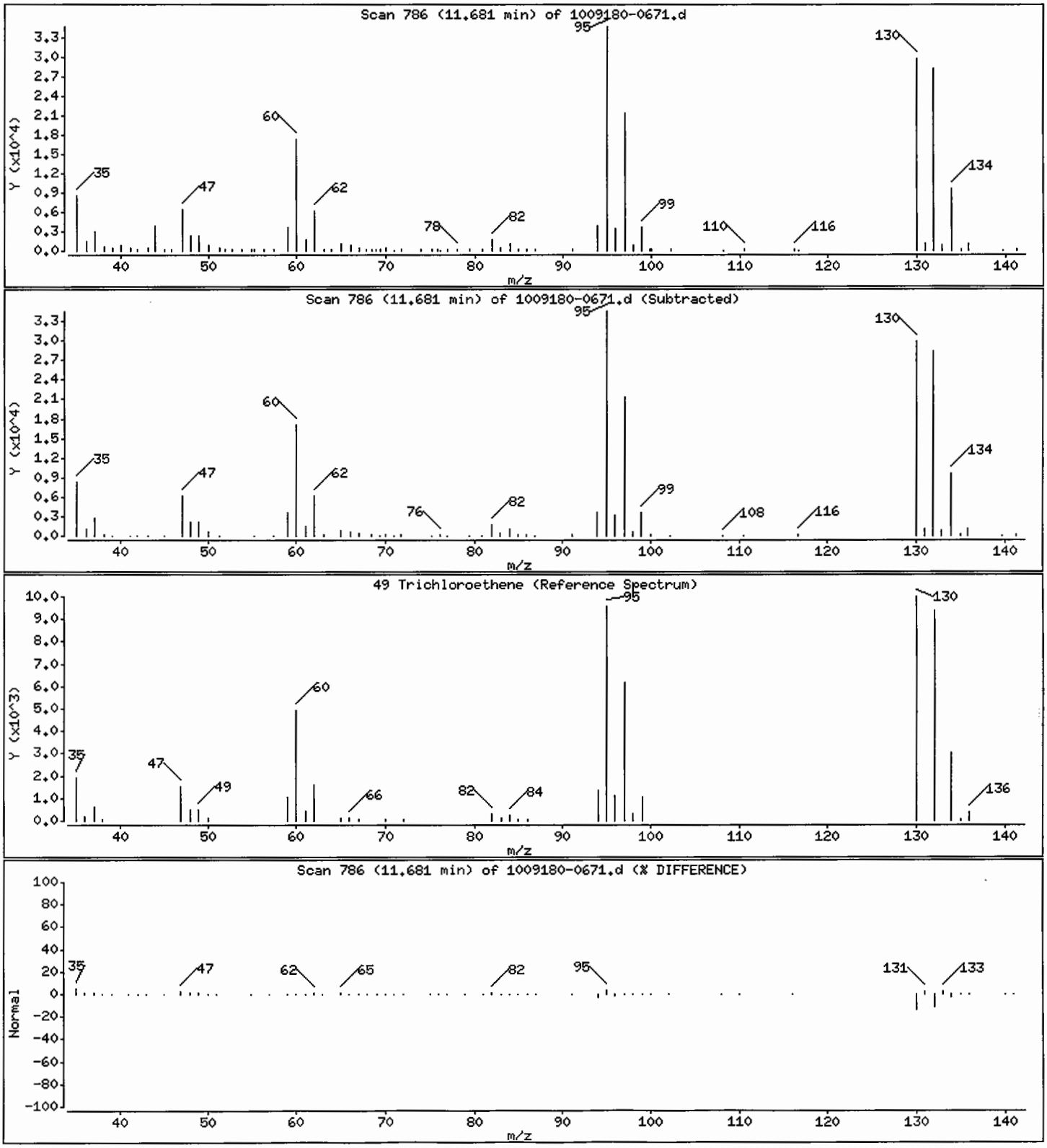
Client ID: MW-12 | Instrument: 5972hp71.i

Sample Info: 1009180-06:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

49 Trichloroethene | Concentration: 3.6 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

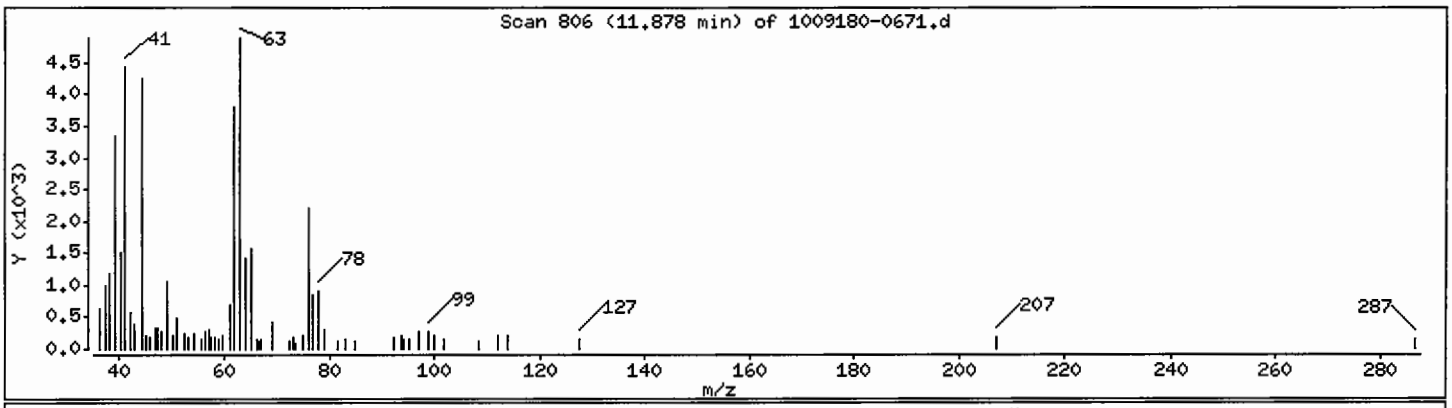
Client ID: MW-12 | Instrument: 5972hp71.i

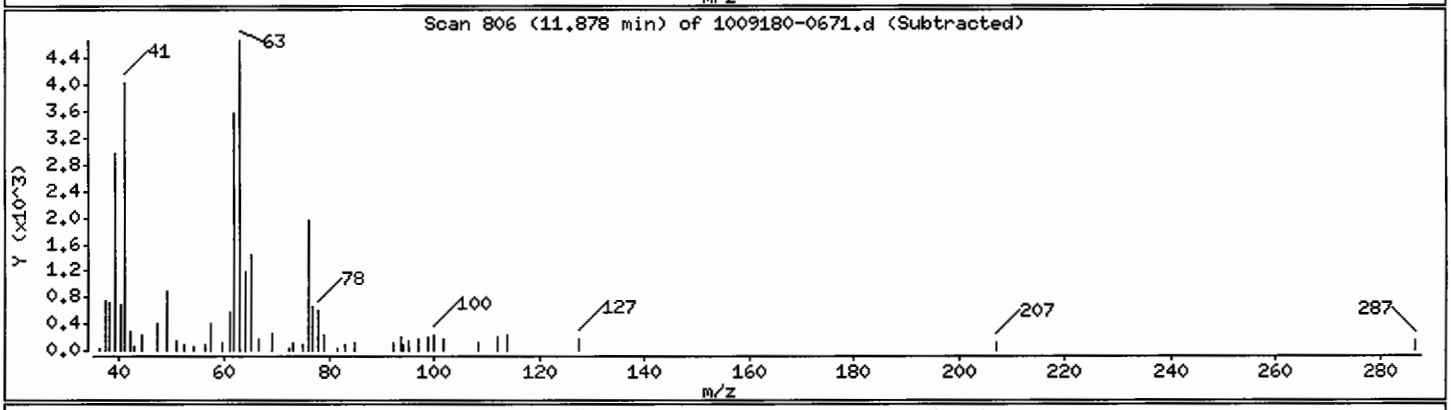
Sample Info: 1009180-06;JAO

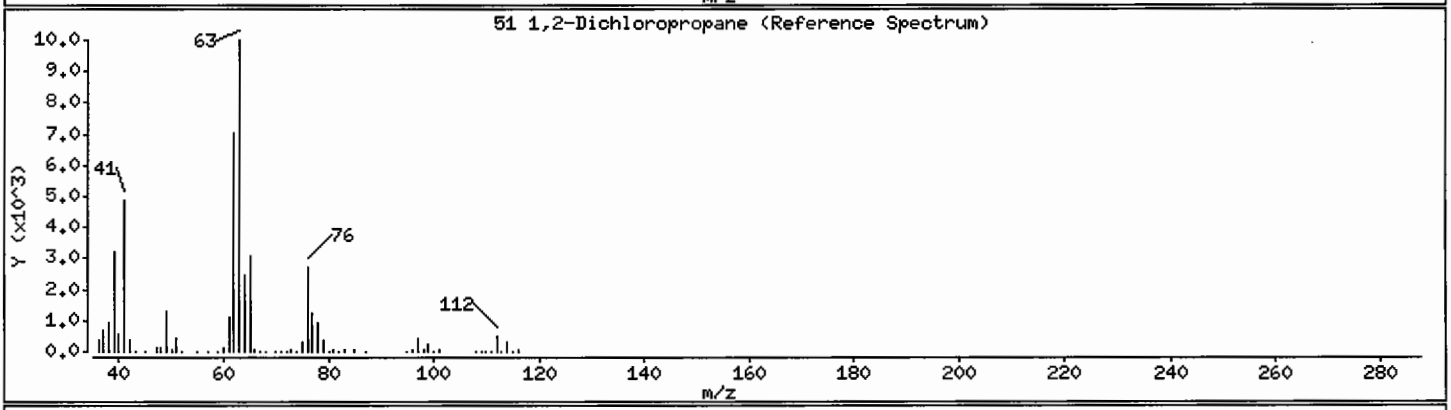
Purge Volume: 25.0 | Operator: JAO

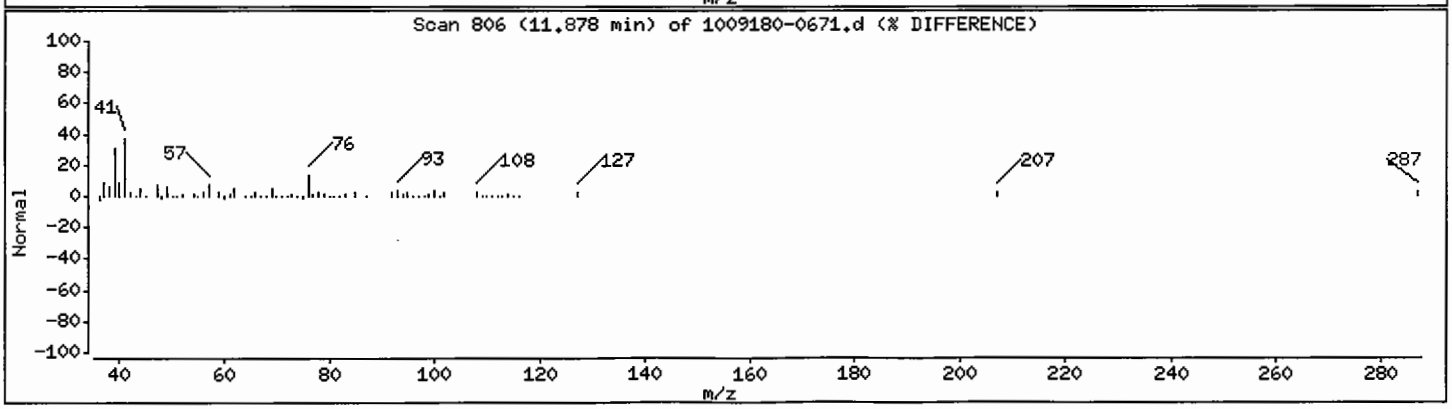
Column phase: SPB-624 | Column diameter: 0.32

51 1,2-Dichloropropane | Concentration: 0.56 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

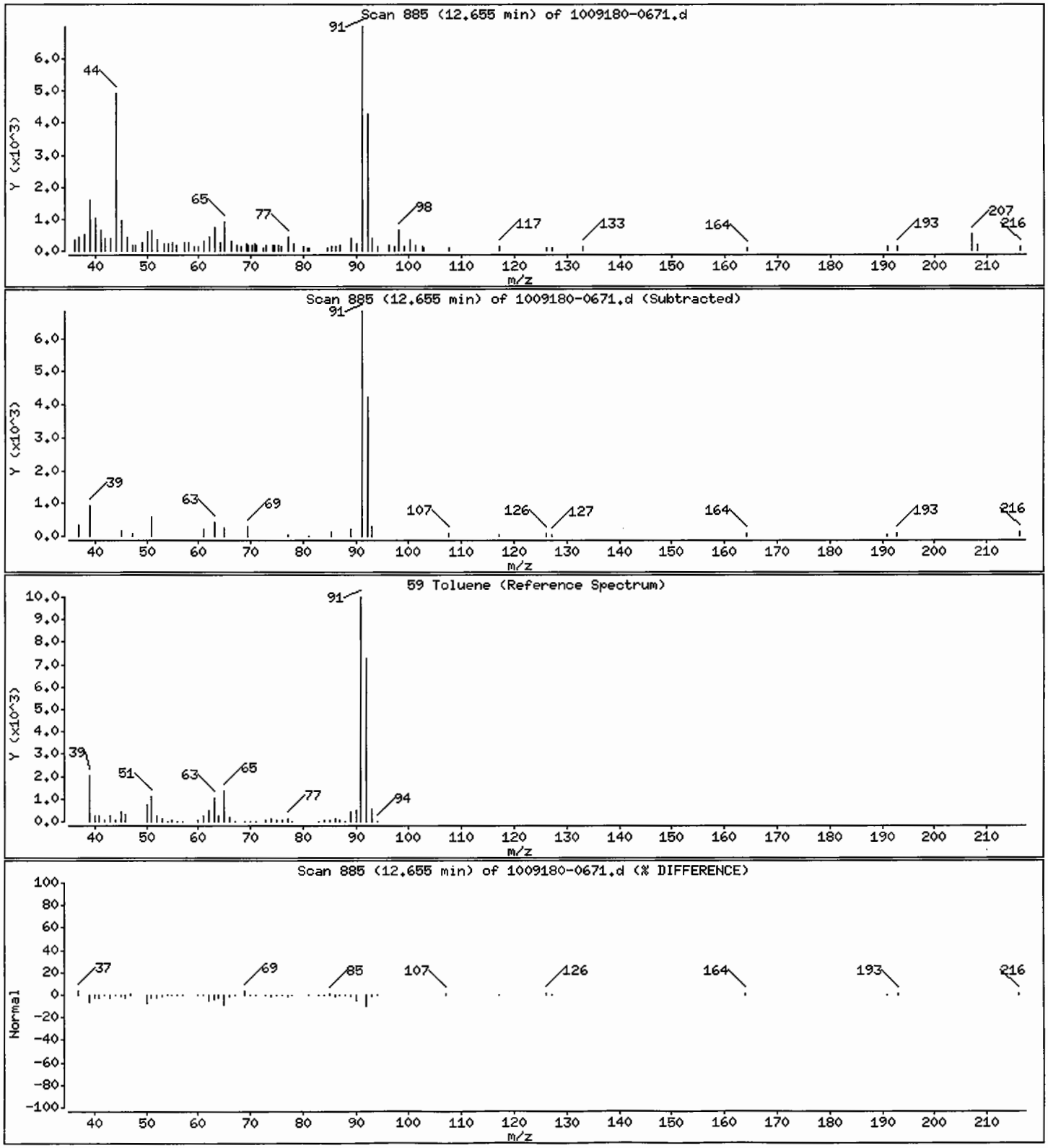
Client ID: MW-12 | Instrument: 5972hp71.i

Sample Info: 1009180-06:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.16 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

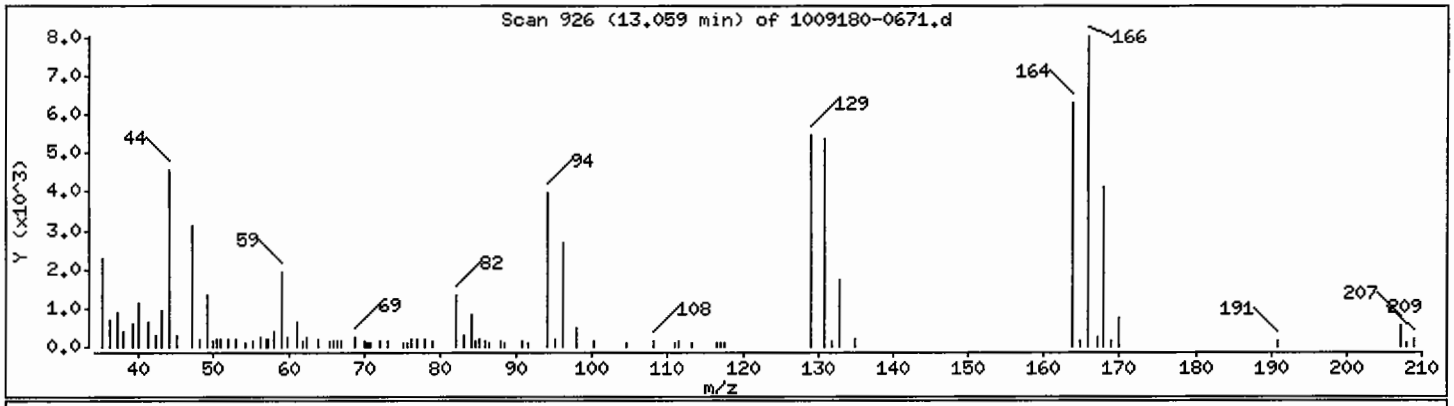
Client ID: MW-12 | Instrument: 5972hp71.i

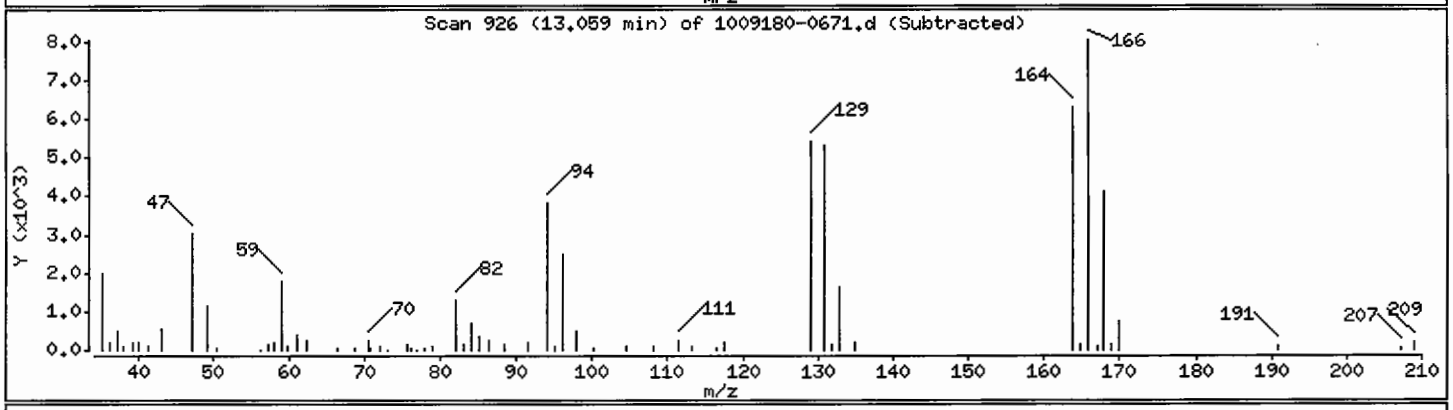
Sample Info: 1009180-06:JAO

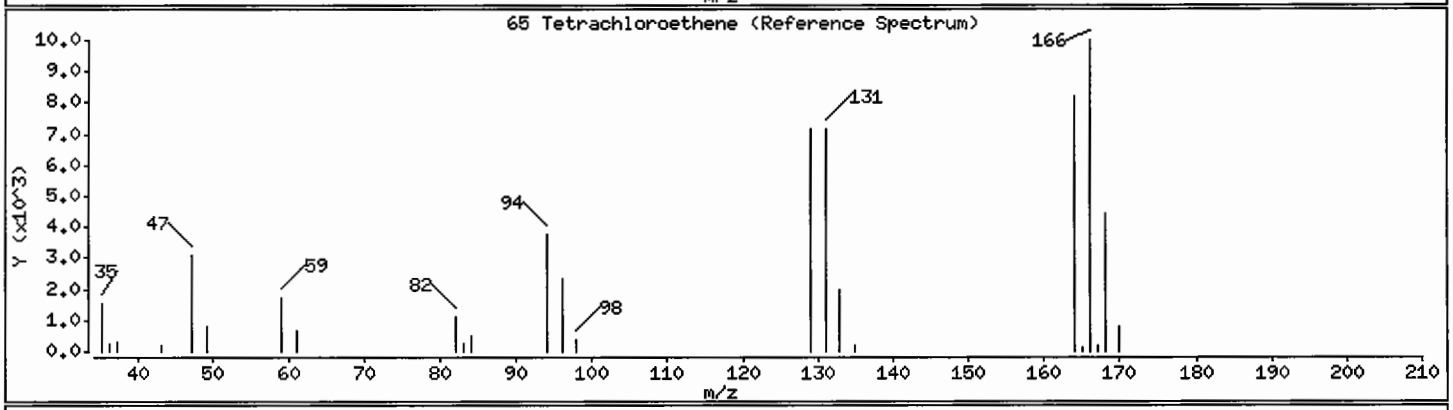
Purge Volume: 25.0 | Operator: JAO

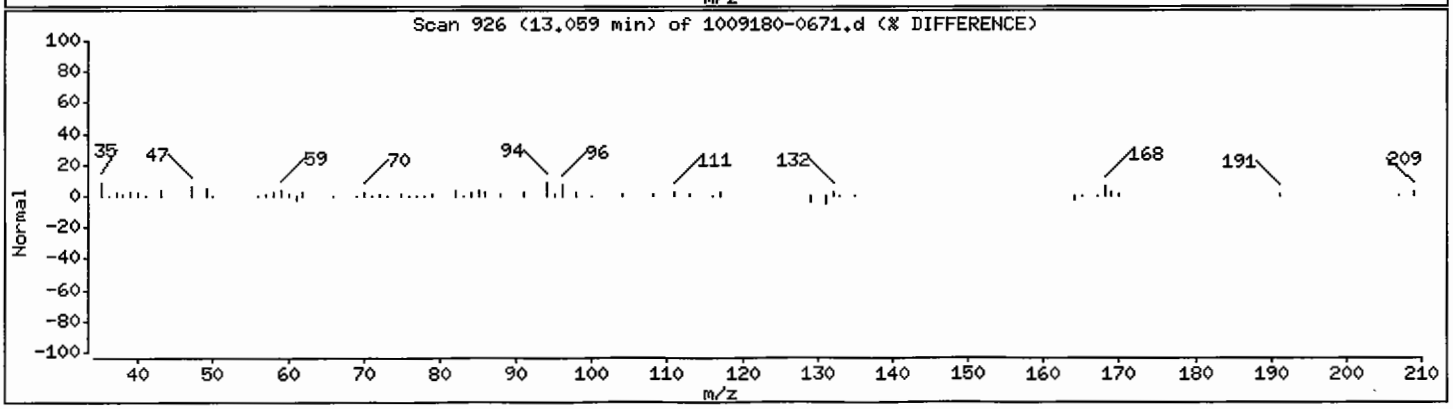
Column phase: SPB-624 | Column diameter: 0.32

65 Tetrachloroethene | Concentration: 0.82 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

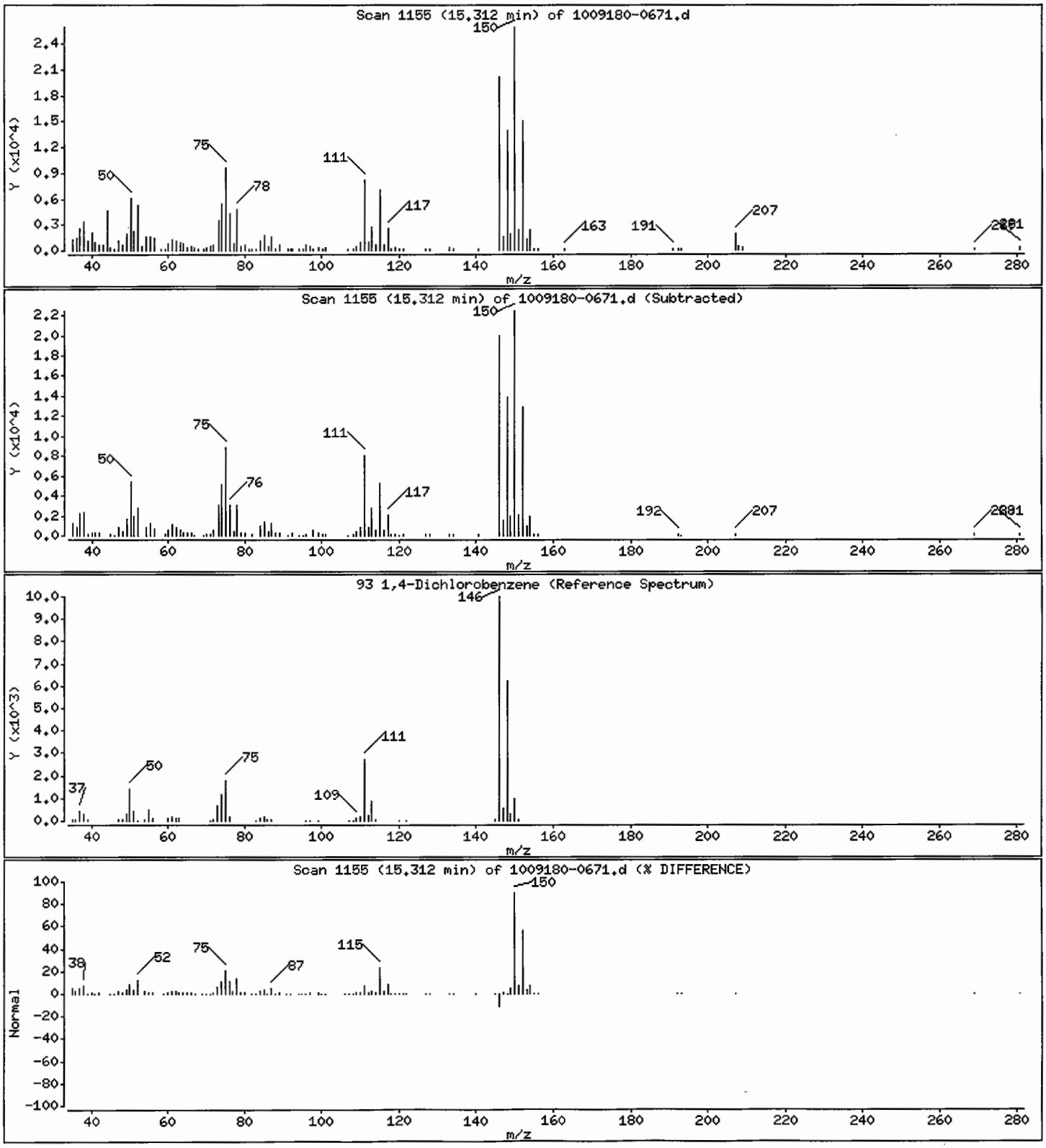
Client ID: MW-12 | Instrument: 5972hp71.i

Sample Info: 1009180-06:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

93 1,4-Dichlorobenzene | Concentration: 1.4 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0671.d
Lab Smp Id: 1009180-06 Client Smp ID: MW-12
Inj Date : 20-SEP-2010 20:29
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-06:JAO
Misc Info : MW-12
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 27
Dil Factor: 1.67000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.67000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.67000 | dilution factor |

Cpnd Variable Local Compound Variable

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 1 Fluorobenzene | 11.366 | 1094988 | 125.000 |

| | CONCENTRATIONS | | | | QUANT | | | |
|---|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ng) | FINAL( ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # | |
| Unknown | | | | | CAS #: | | | |
| 4.231 | 282982 | 32.3041826 | 2.2 | 0 | | 0 | 1 | |
| Fluorodichloromethane | | | | | CAS #: 75-43-4 | | | |
| 6.652 | 153384 | 17.5097304 | 1.2 | 94 | NIS08.1 | 4467 | 1 | |
| Ethyl ether | | | | | CAS #: 60-29-7 | | | |
| 7.311 | 352305 | 40.2179290 | 2.7 | 90 | NIS08.1 | 838 | 1 | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

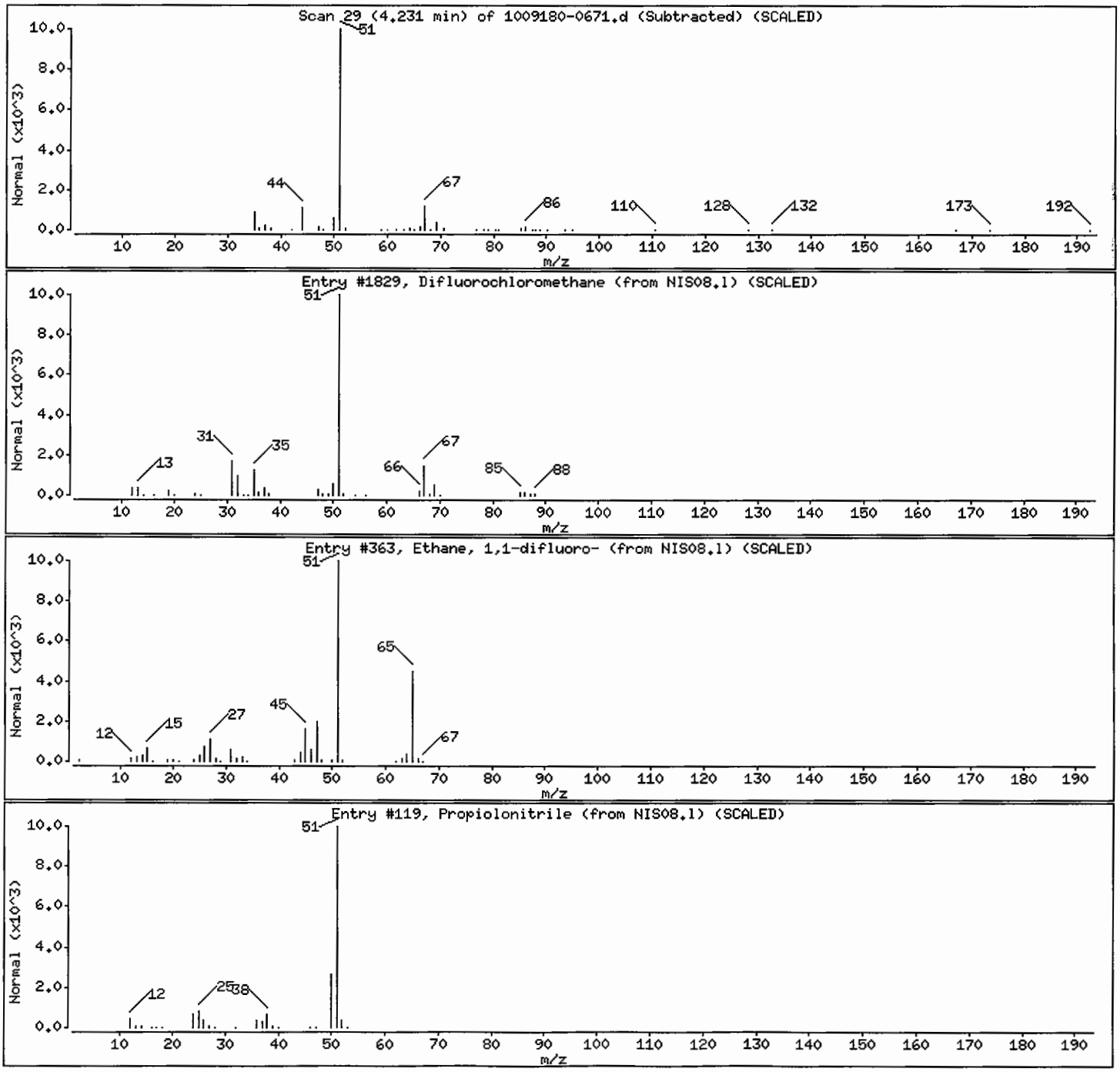
Client ID: MW-12 | Instrument: 5972hp71.i

Sample Info: 1009180-06:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | | | | |
| Difluorochloromethane | 75-45-6 | NIS08.l | 1829 | 11 | CHClF2 | 86 |
| Ethane, 1,1-difluoro- | 75-37-6 | NIS08.l | 363 | 7 | C2H4F2 | 66 |
| Propiolonitrile | 1070-71-9 | NIS08.l | 119 | 4 | C3HN | 51 |



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

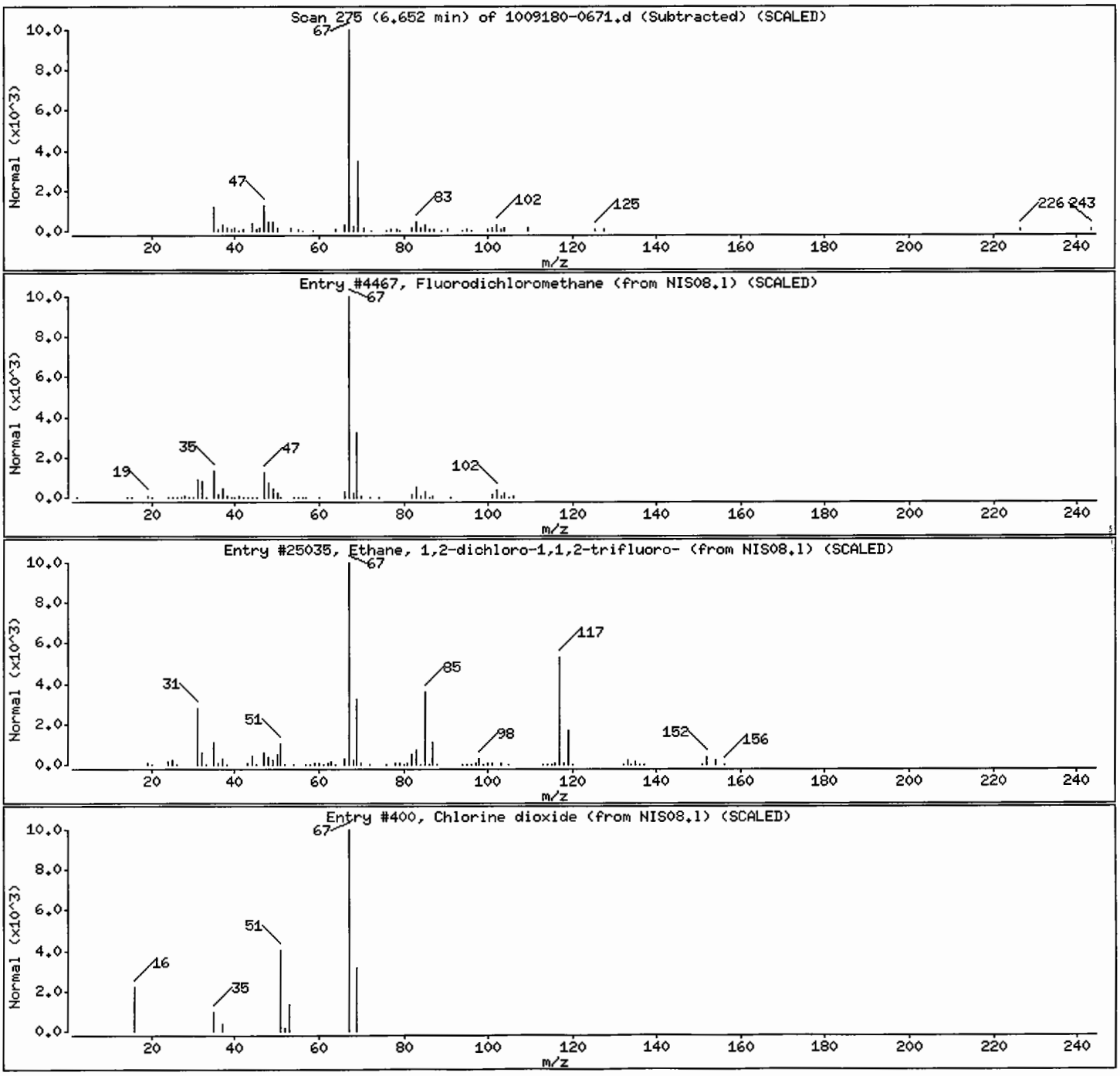
Client ID: MW-12 Instrument: 5972hp71.i

Sample Info: 1009180-06;JAO

Purge Volume: 25.0 Operator: JAO

Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Fluorodichloromethane | 75-43-4 | NIS08.1 | 4467 | 94 | CHCl2F | 102 |
| Ethane, 1,2-dichloro-1,1,2-trifluoro- | 354-23-4 | NIS08.1 | 25035 | 64 | C2HCl2F3 | 152 |
| Chlorine dioxide | 10049-04-4 | NIS08.1 | 400 | 42 | ClO2 | 67 |



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0671.d

Date : 20-SEP-2010 20:29

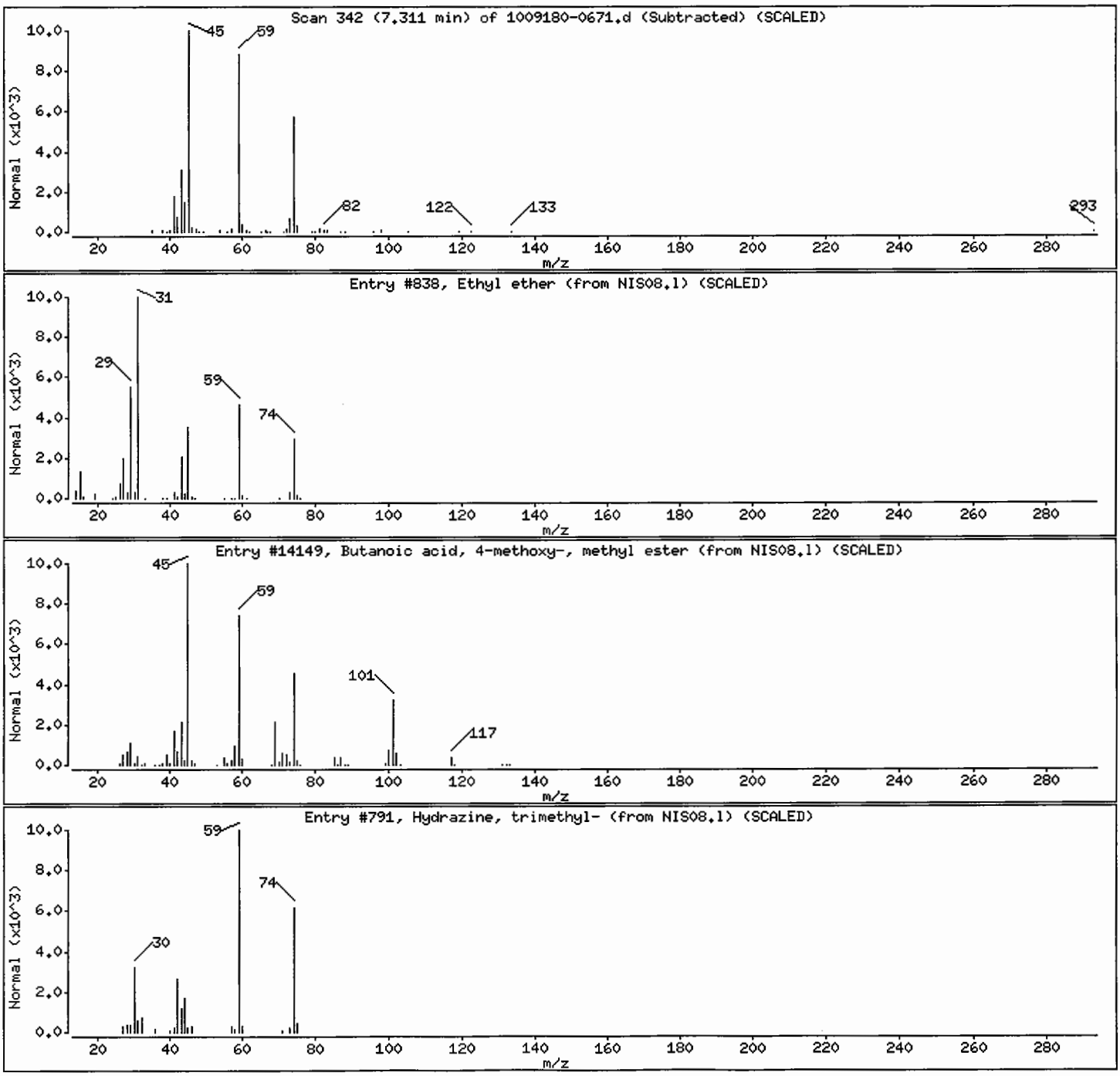
Client ID: MW-12 Instrument: 5972hp71.i

Sample Info: 1009180-06:JAO

Purge Volume: 25.0 Operator: JAO

Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Ethyl ether | 60-29-7 | NIS08.l | 838 | 90 | C4H10O | 74 |
| Butanoic acid, 4-methoxy-, methyl ester | 29006-01-7 | NIS08.l | 14149 | 64 | C6H12O3 | 132 |
| Hydrazine, trimethyl- | 1741-01-1 | NIS08.l | 791 | 47 | C3H10N2 | 74 |



# ANALYSIS DATA SHEET

*SW 8260B*

**MW-15**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0771.d | Sampled: 09/14/10 12:15

Initial/Final: 25mL / 25mL | Lab ID: 1009180-07 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 14:50

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | | 0.44 | | 2.5 | U |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.10 | 0.020 | | 0.50 | J |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.030 | | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 0.35 | 0.020 | | 0.50 | J |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | | 0.030 | | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-15**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0771.d | Sampled: 09/14/10 12:15

Initial/Final: 25mL / 25mL | Lab ID: 1009180-07 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 14:50

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.096 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | | 0.060 | | 0.50 | U |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 5.078 | 102 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 5.398 | 108 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.586 | 92 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.958 | 99 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories

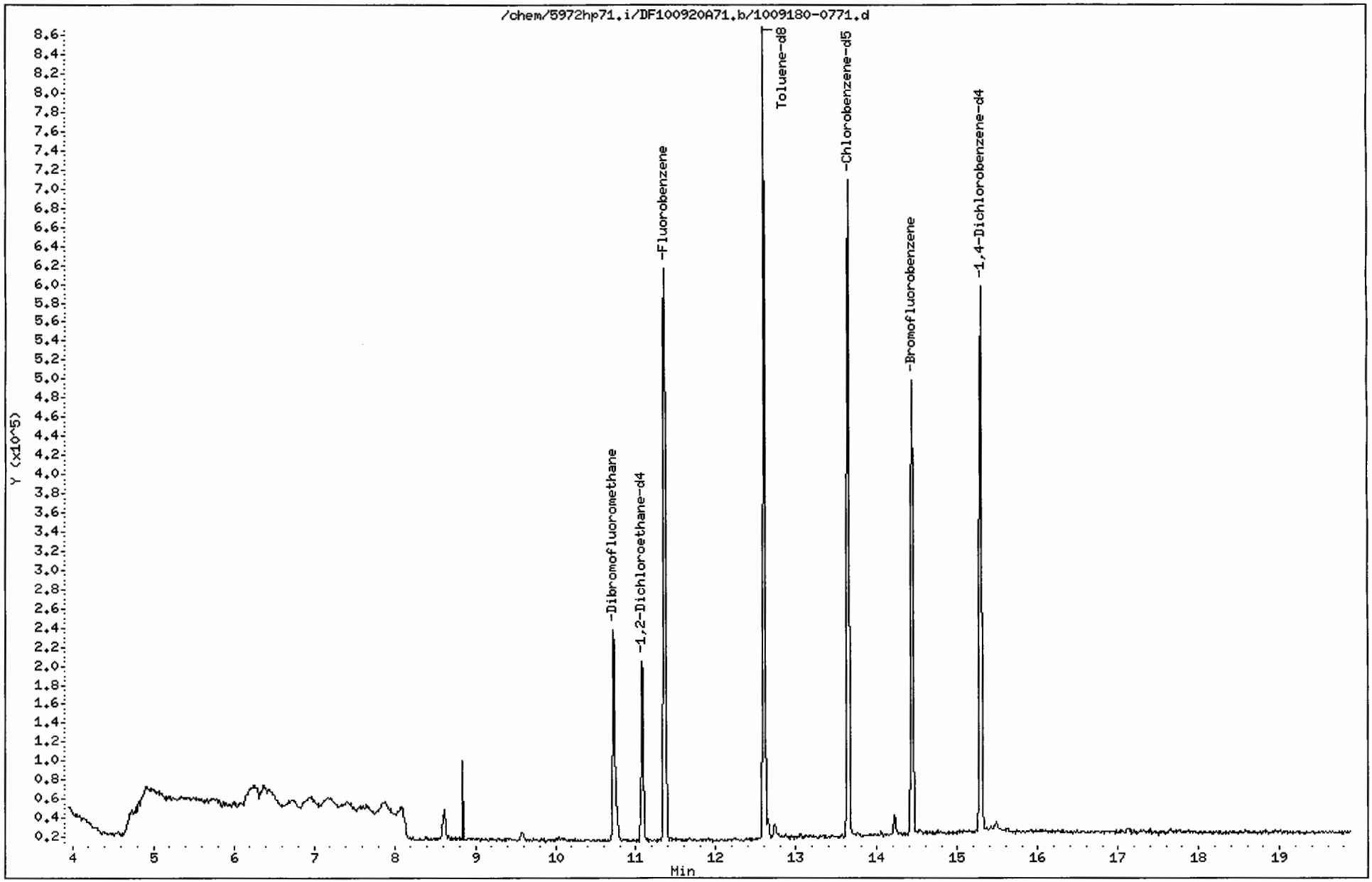
CompuChem

A Division Of

Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0771.d
Date : 20-SEP-2010 14:50
Client ID: MW-15
Sample Info: 1009180-07:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0771.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0771.d
Lab Smp Id: 1009180-07 Client Smp ID: MW-15
Inj Date : 20-SEP-2010 14:50
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-07:JAO
Misc Info :
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.365 | 11.362 | (1.000) | 486424 | 125.000 | |
| 2 Chlorobenzene-d5 | 117 | 13.648 | 13.646 | (1.000) | 327412 | 125.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 15.292 | 15.289 | (1.000) | 149572 | 125.000 | |
| 4 Dibromofluoromethane | 113 | 10.725 | 10.733 | (0.944) | 133948 | 126.958 | 5.1 |
| 5 1,2-Dichloroethane-d4 | 65 | 11.080 | 11.087 | (0.975) | 115089 | 134.939 | 5.4 |
| 6 Toluene-d8 | 98 | 12.605 | 12.602 | (0.924) | 447011 | 114.653 | 4.6 |
| 7 Bromofluorobenzene | 95 | 14.436 | 14.433 | (0.944) | 154713 | 123.940 | 5.0 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | Compound Not Detected. | | | | | |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 18 Acetone | 43 | Compound Not Detected. | | | | | |

9-21-10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0771.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 9.574 | 9.571 | (0.842) | 5179 | 2.53648 | 0.10(a) |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | 10.775 | 10.772 | (0.948) | 13810 | 8.70287 | 0.35(a) |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 49 Trichloroethene | 130 | Compound Not Detected. | | | | | |
| 51 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.654 | 12.652 | (0.927) | 6922 | 2.40224 | 0.096(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0771.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0771.d

Date : 20-SEP-2010 14:50

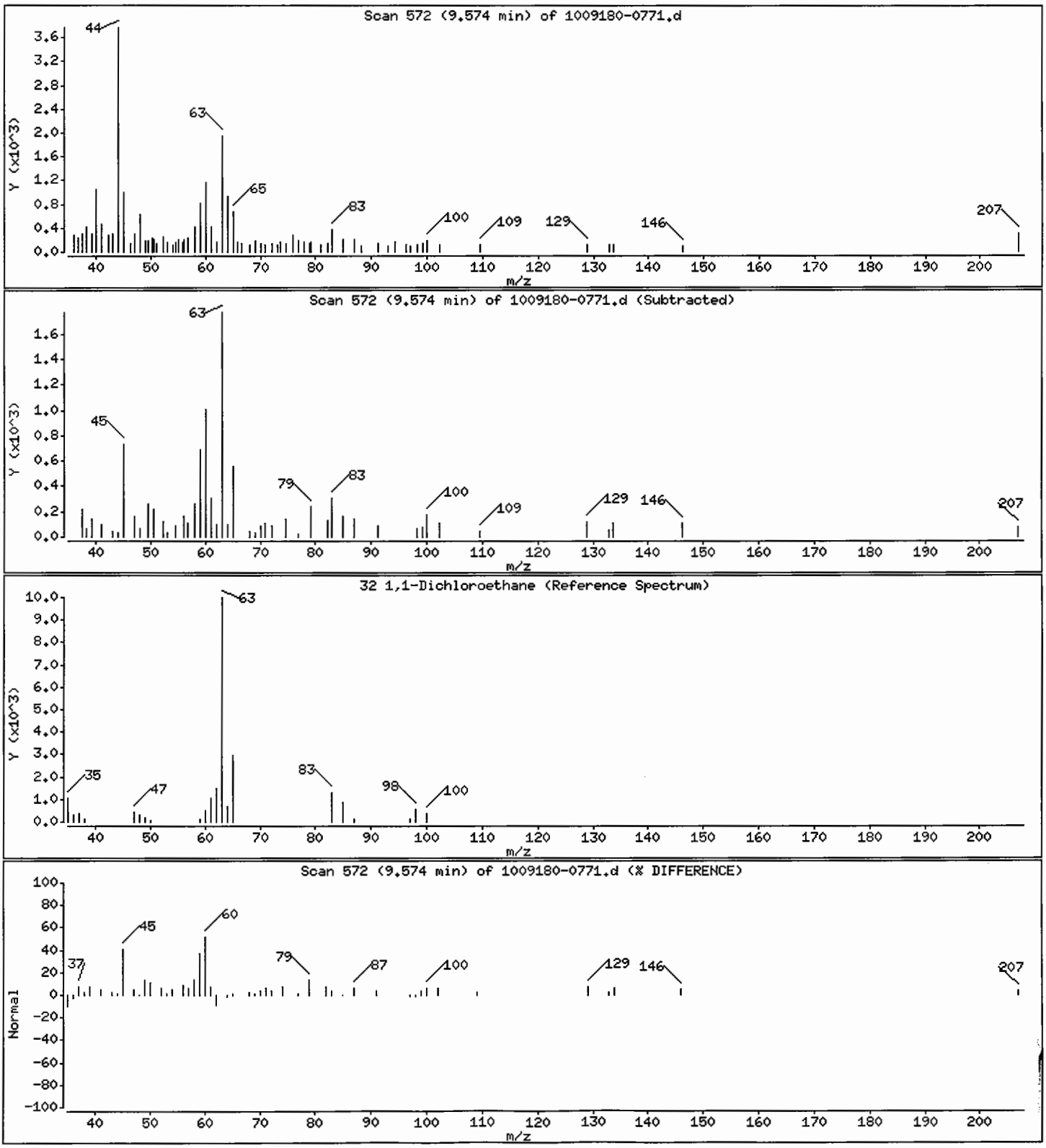
Client ID: MW-15 | Instrument: 5972hp71.i

Sample Info: 1009180-07:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 0.10 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0771.d

Date : 20-SEP-2010 14:50

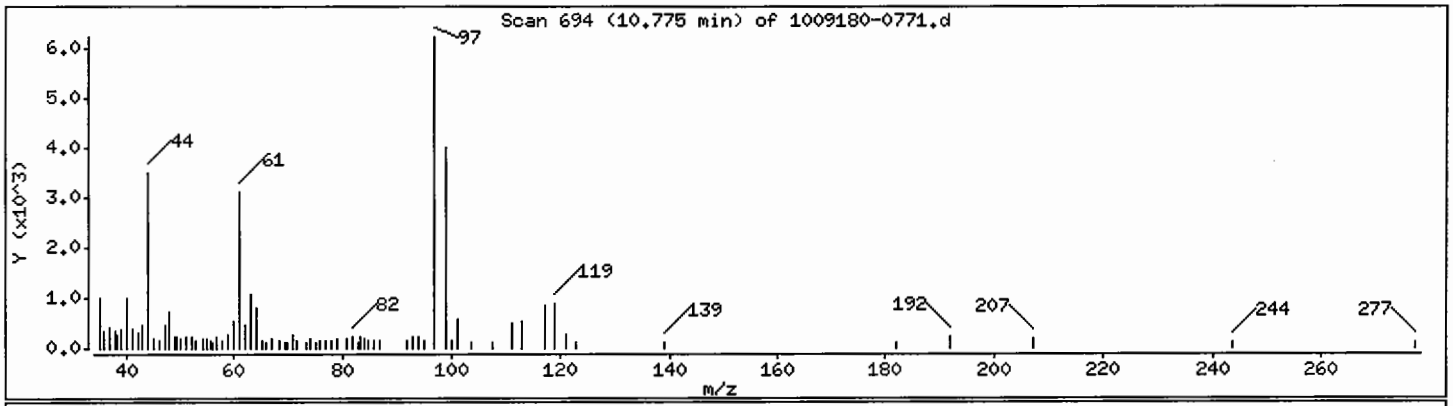
Client ID: MW-15 | Instrument: 5972hp71.i

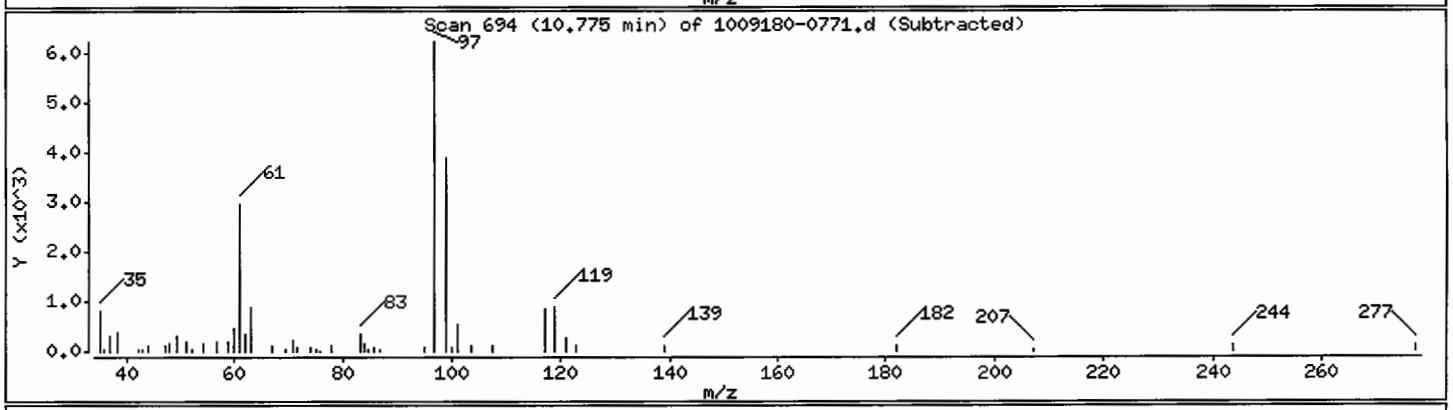
Sample Info: 1009180-07:JAO

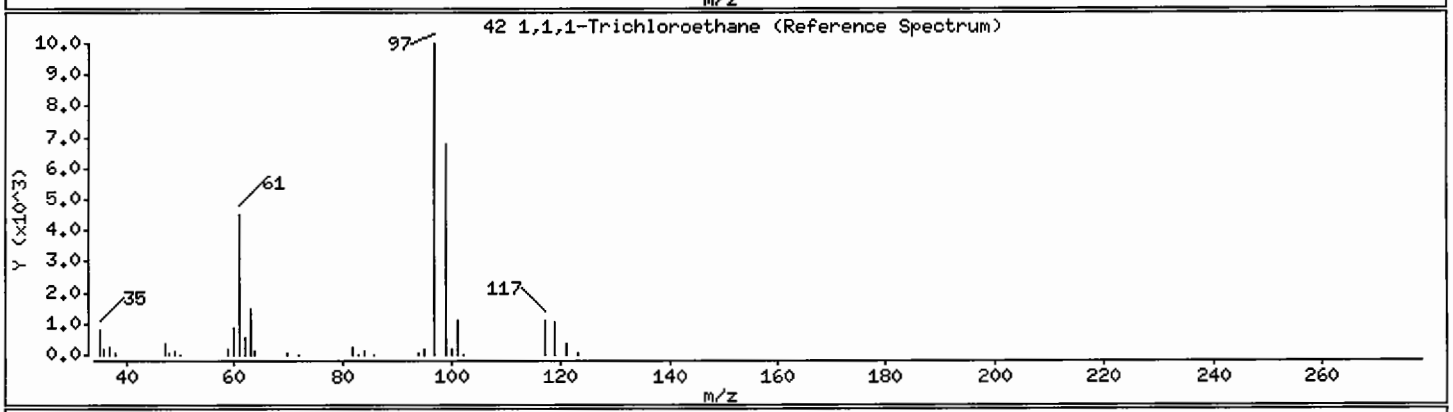
Purge Volume: 25.0 | Operator: JAO

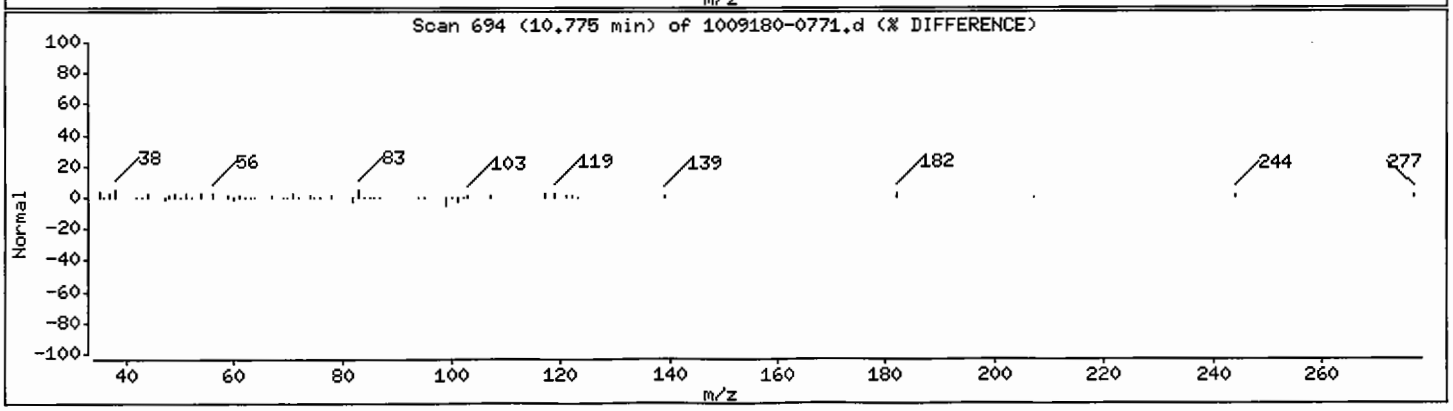
Column phase: SPB-624 | Column diameter: 0.32

42 1,1,1-Trichloroethane | Concentration: 0.35 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0771.d

Date : 20-SEP-2010 14:50

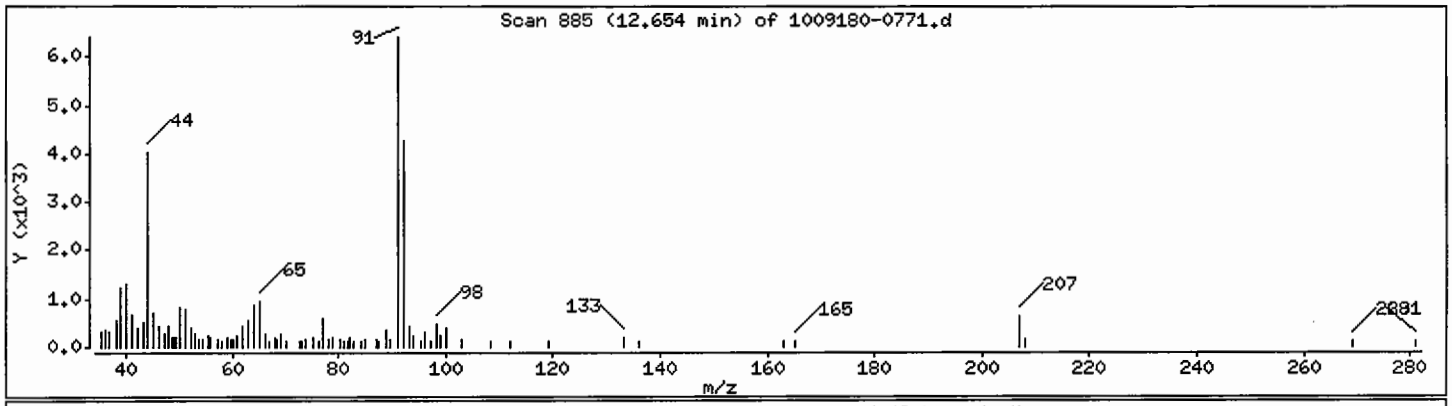
Client ID: MW-15 | Instrument: 5972hp71.i

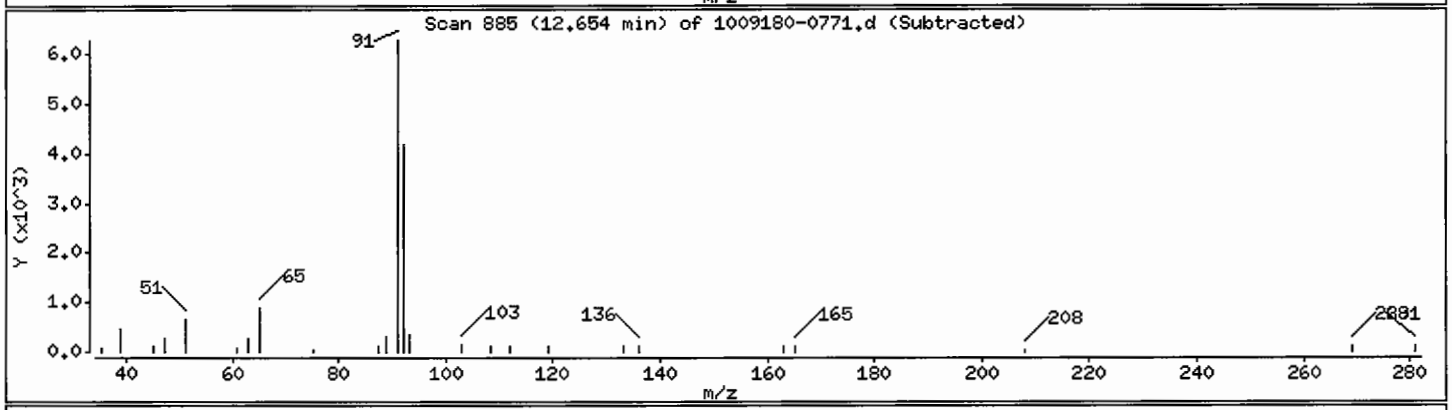
Sample Info: 1009180-07:JAO

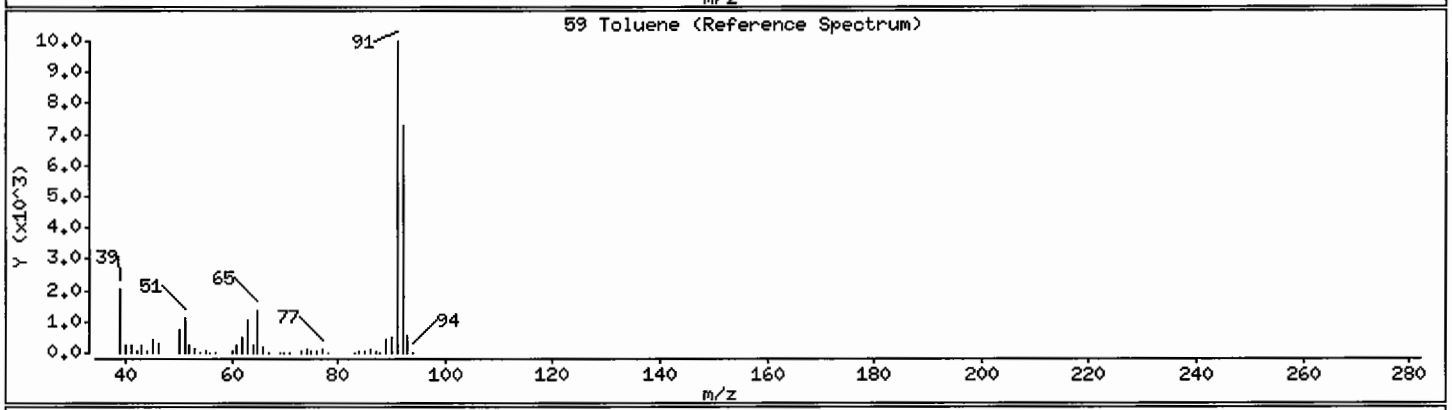
Purge Volume: 25.0 | Operator: JAO

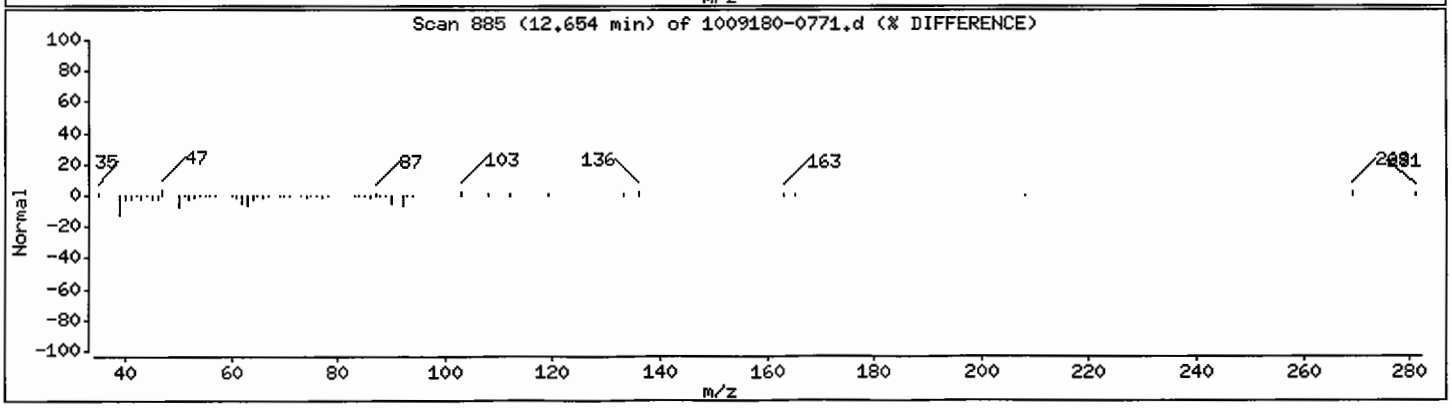
Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.096 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0771.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0771.d
Lab Smp Id: 1009180-07 Client Smp ID: MW-15
Inj Date : 20-SEP-2010 14:50
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-07:JAO
Misc Info :
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-17**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0871.d | Sampled: 09/14/10 14:25

Initial/Final: 25mL / 25mL | Lab ID: 1009180-08 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 17:07

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | | 0.44 | | 2.5 | U |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.082 | 0.050 | | 0.50 | J |
| 75-34-3 | 1,1-Dichloroethane | 2.2 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 3.5 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | 0.73 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-17**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0871.d | Sampled: 09/14/10 14:25

Initial/Final: 25mL / 25mL | Lab ID: 1009180-08 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 17:07

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.095 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 0.43 | 0.060 | | 0.50 | J |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

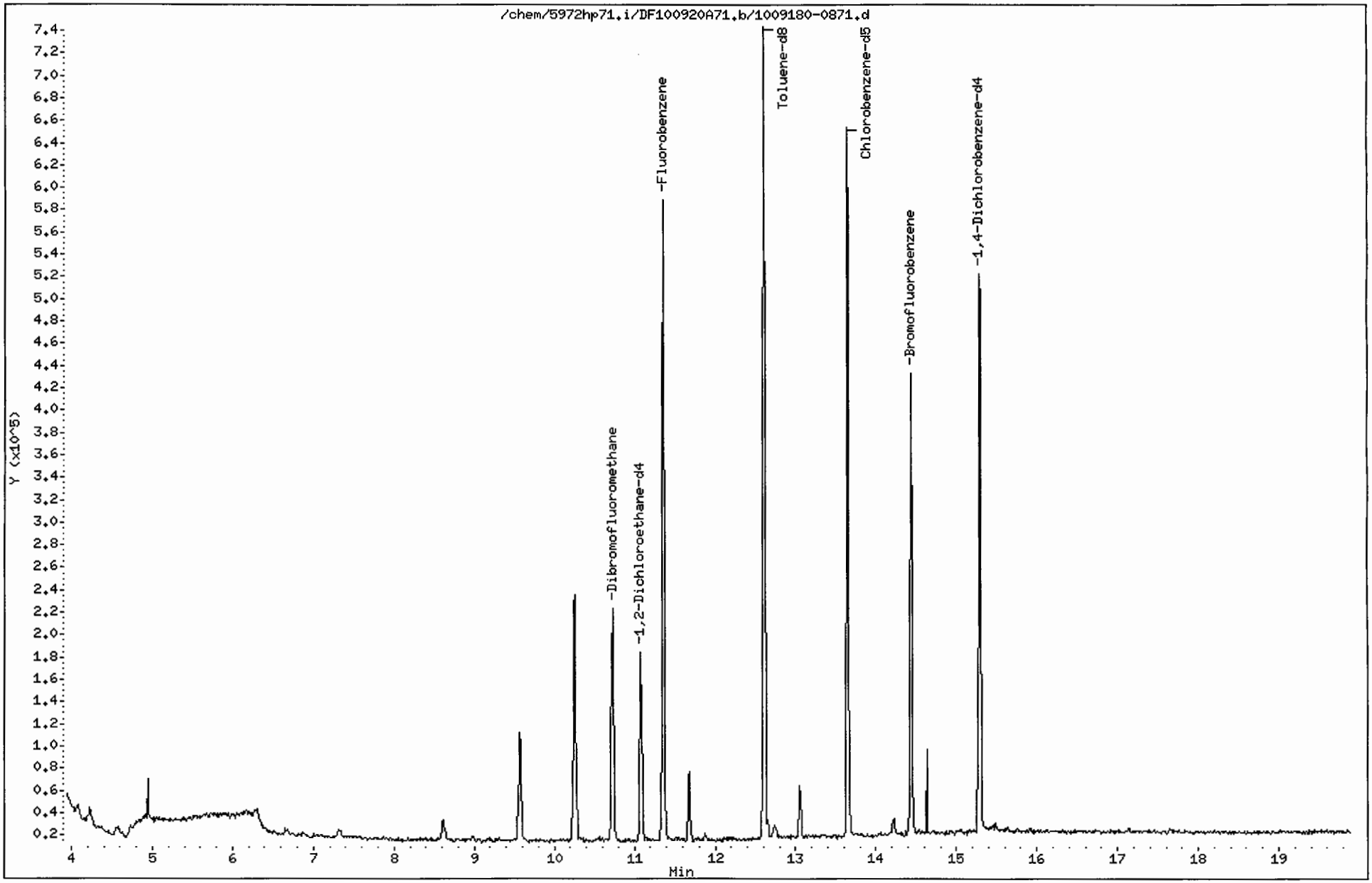
| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.888 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.924 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.722 | 94 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.929 | 99 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0871.d
Date : 20-SEP-2010 17:07
Client ID: MW-17
Sample Info: 1009180-08:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0871.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0871.d
Lab Smp Id: 1009180-08 Client Smp ID: MW-17
Inj Date : 20-SEP-2010 17:07
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-08:JAO
Misc Info : MW-17
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.359 | 11.362 | (1.000) | 455037 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.642 | 13.646 | (1.000) | 299798 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.296 | 15.289 | (1.000) | 134512 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.729 | 10.733 | (0.945) | 120597 | 122.188 | 4.9 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.083 | 11.087 | (0.976) | 98214 | 123.097 | 4.9 |
| $ 6 Toluene-d8 | 98 | 12.609 | 12.602 | (0.924) | 421413 | 118.043 | 4.7 |
| $ 7 Bromofluorobenzene | 95 | 14.439 | 14.433 | (0.944) | 138342 | 123.233 | 4.9 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | Compound Not Detected. | | | | | |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 18 Acetone | 43 | Compound Not Detected. | | | | | |

MIX 9.21.10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0871.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | 8.987 | 8.981 | (0.791) | 2071 | 2.05530 | 0.082(a) |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 9.568 | 9.571 | (0.842) | 102974 | 53.9115 | 2.2 |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | 10.257 | 10.250 | (0.903) | 93449 | 88.3847 | 3.5 |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 49 Trichloroethene | 130 | 11.684 | 11.677 | (1.029) | 16785 | 18.1685 | 0.73 |
| 51 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.658 | 12.652 | (0.928) | 6238 | 2.36427 | 0.095(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | 13.052 | 13.055 | (0.957) | 9242 | 10.8489 | 0.43(a) |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0871.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0871.d

Date : 20-SEP-2010 17:07

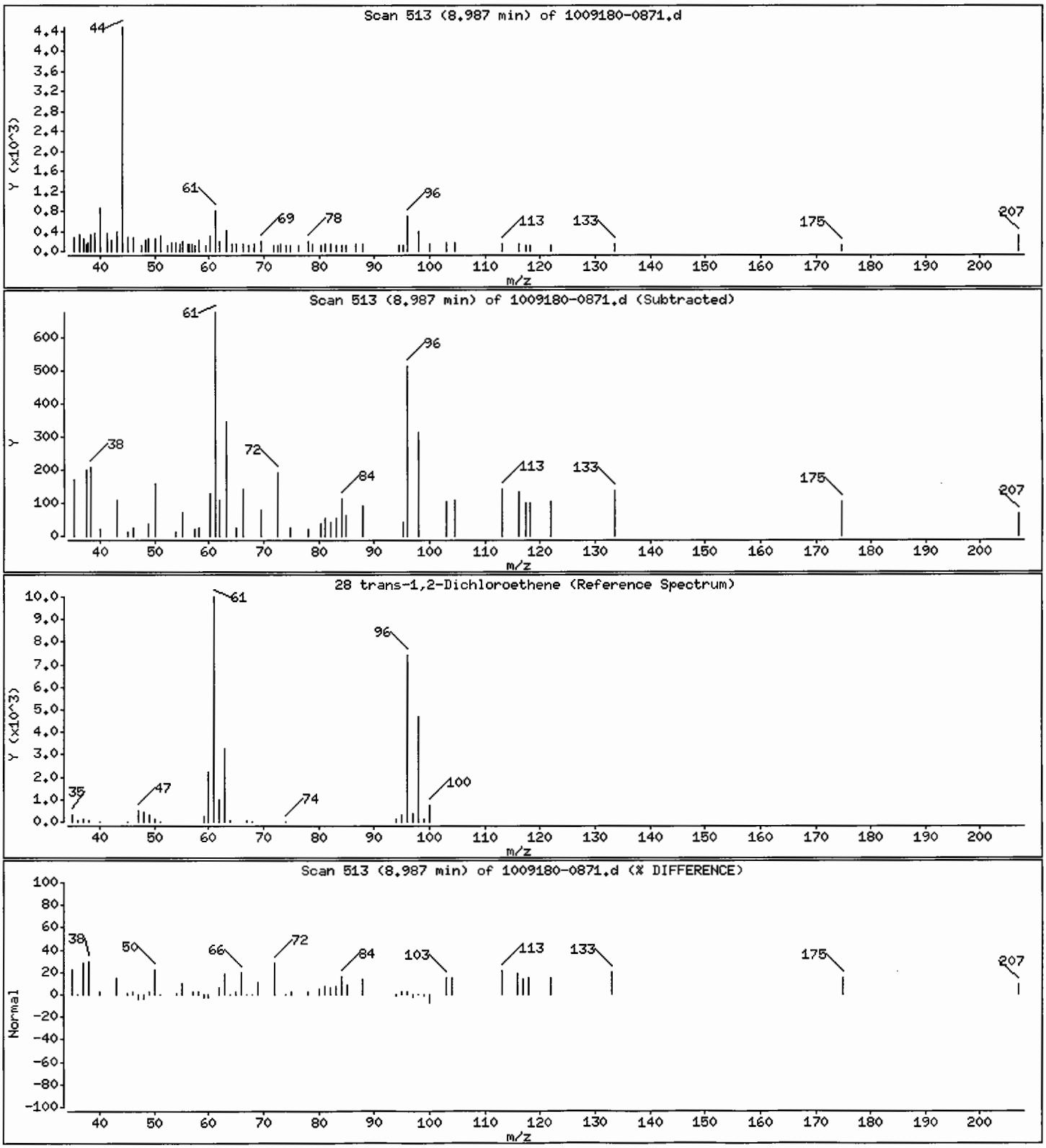
Client ID: MW-17 | Instrument: 5972hp71.i

Sample Info: 1009180-08:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

28 trans-1,2-Dichloroethene | Concentration: 0.082 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0871.d

Date : 20-SEP-2010 17:07

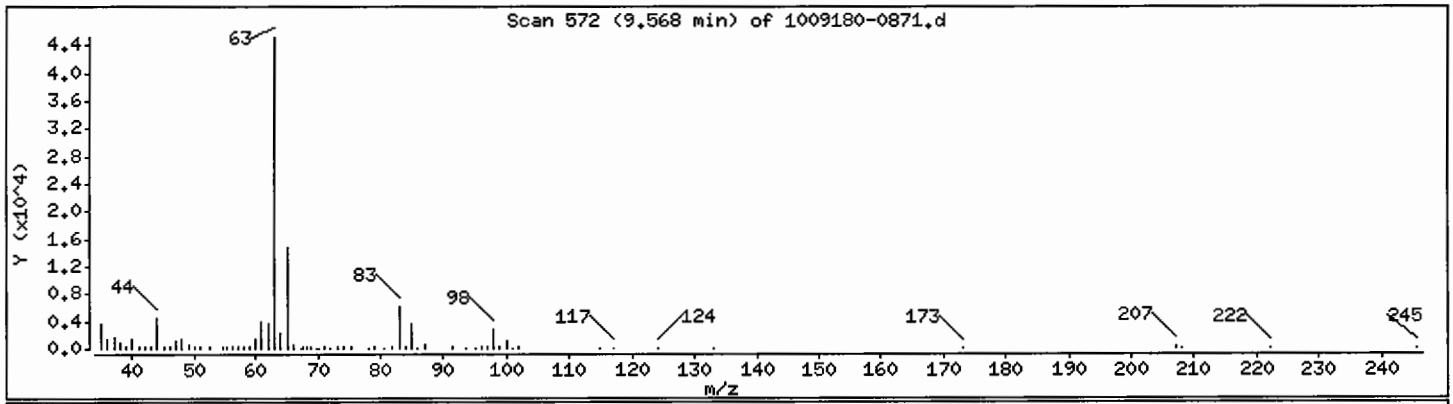
Client ID: MW-17 | Instrument: 5972hp71.i

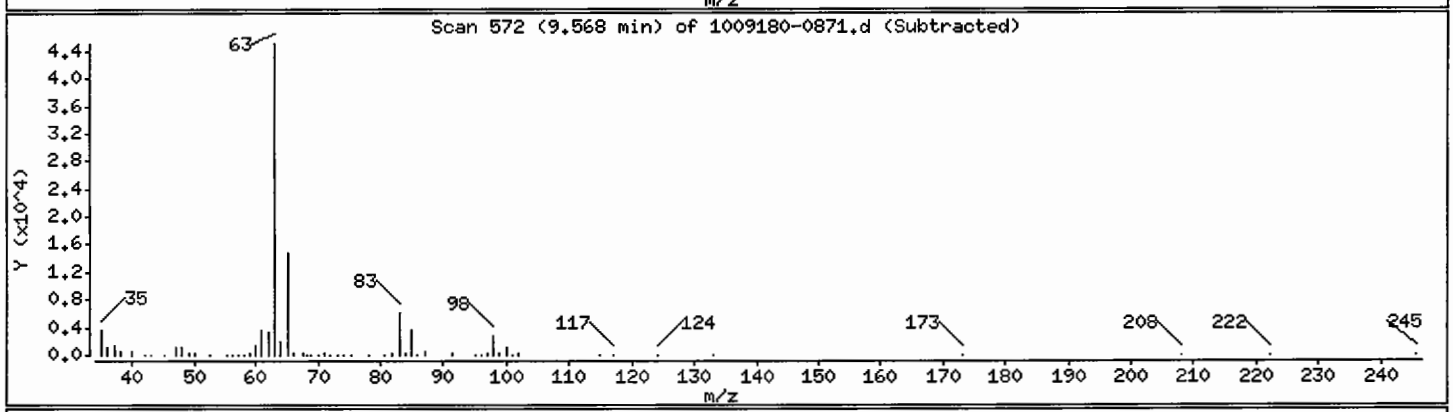
Sample Info: 1009180-08:JAO

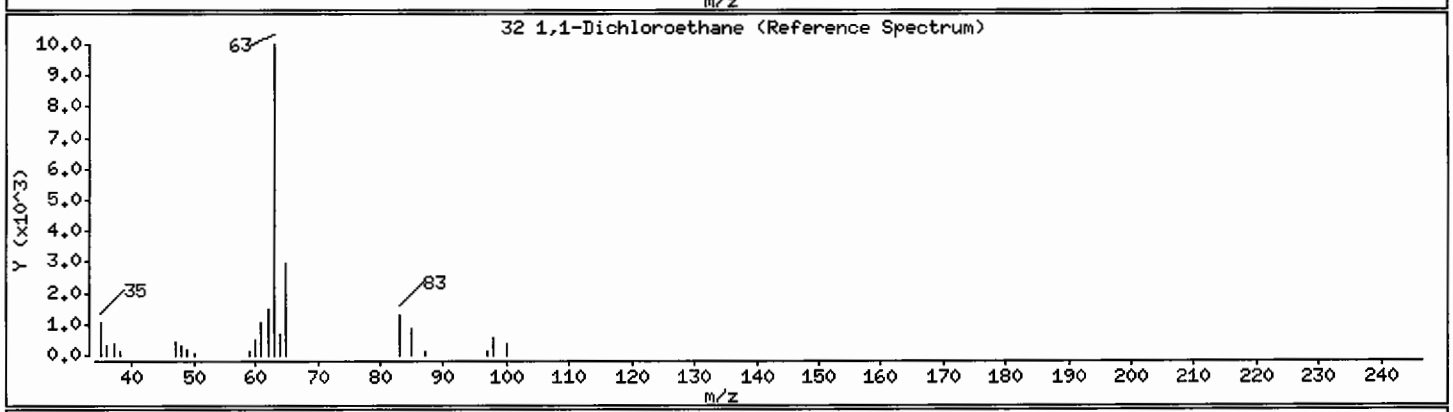
Purge Volume: 25.0 | Operator: JAO

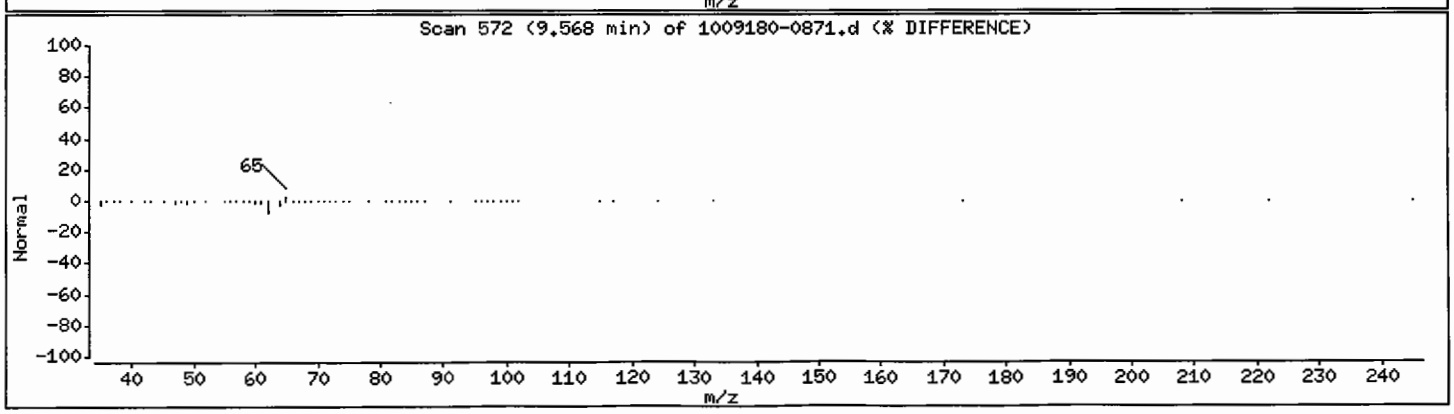
Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 2.2 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0871.d

Date : 20-SEP-2010 17:07

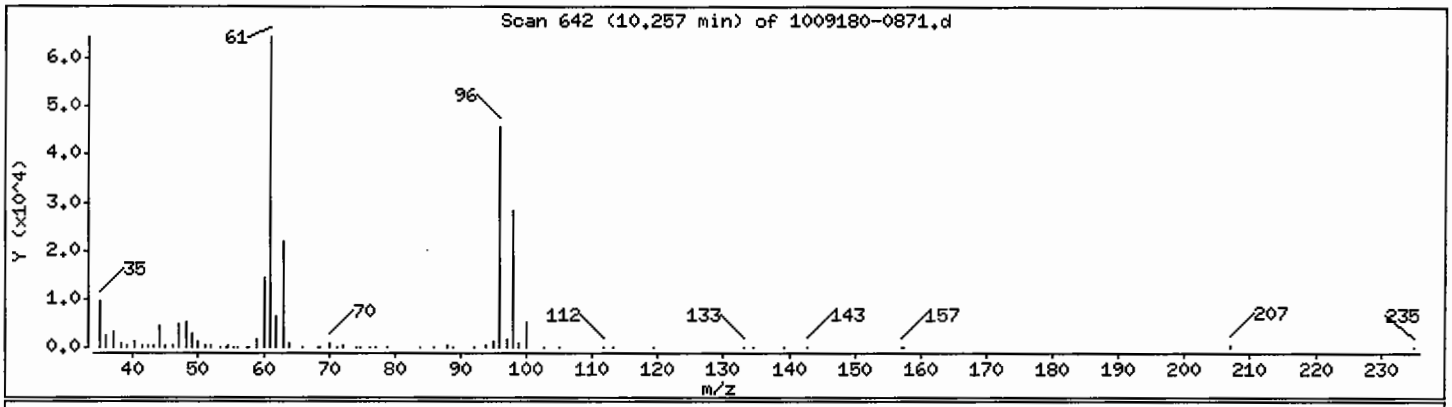
Client ID: MW-17 | Instrument: 5972hp71.i

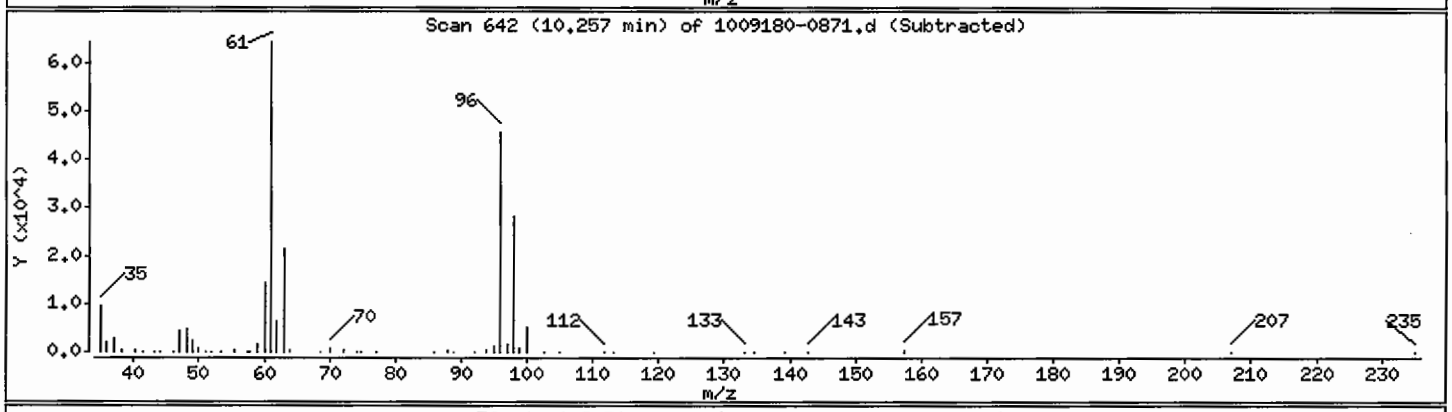
Sample Info: 1009180-08:JAO

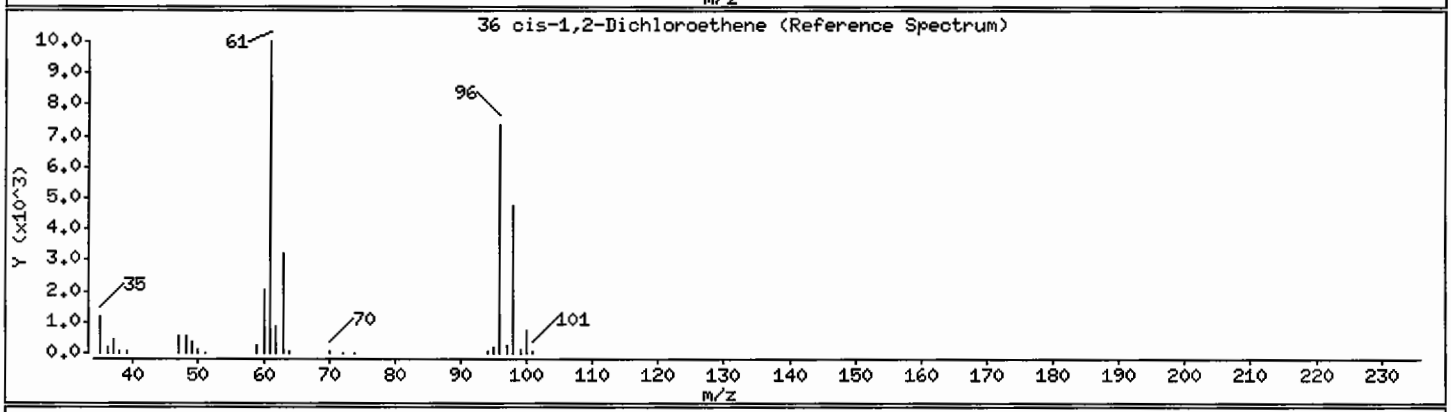
Purge Volume: 25.0 | Operator: JAO

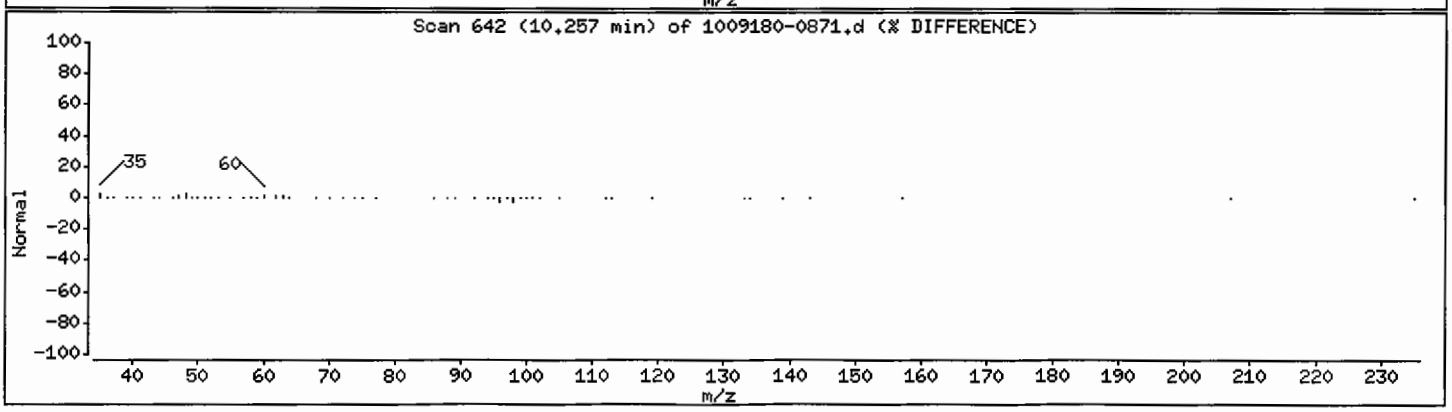
Column phase: SPB-624 | Column diameter: 0.32

36 cis-1,2-Dichloroethene | Concentration: 3.5 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0871.d

Date : 20-SEP-2010 17:07

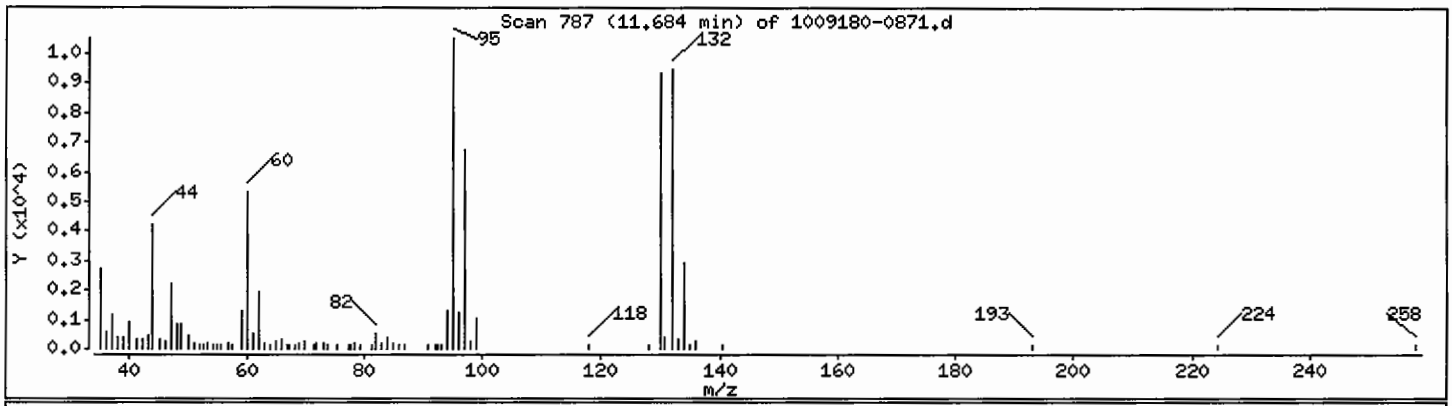
Client ID: MW-17 | Instrument: 5972hp71.i

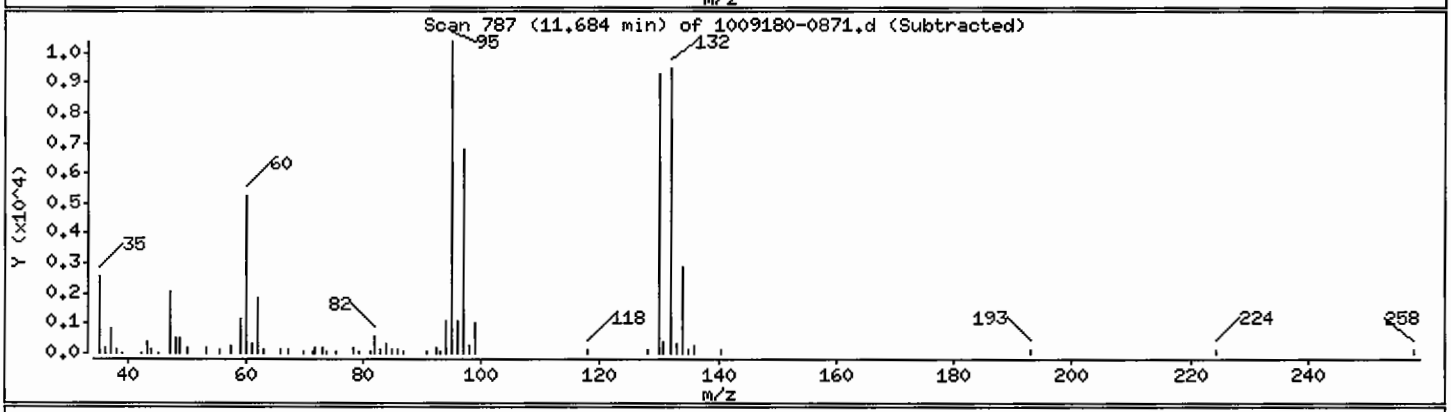
Sample Info: 1009180-08:JAO

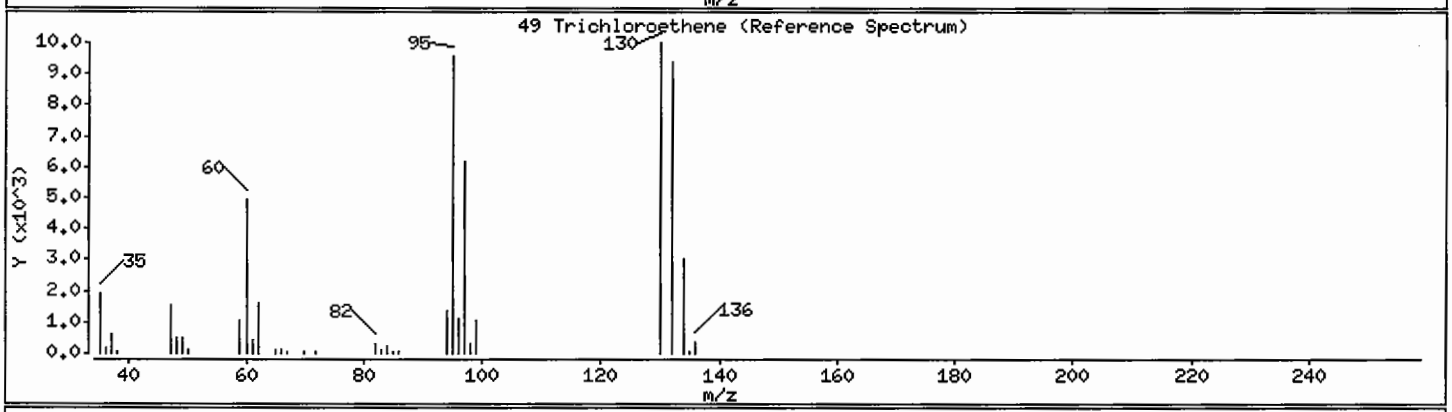
Purge Volume: 25.0 | Operator: JAO

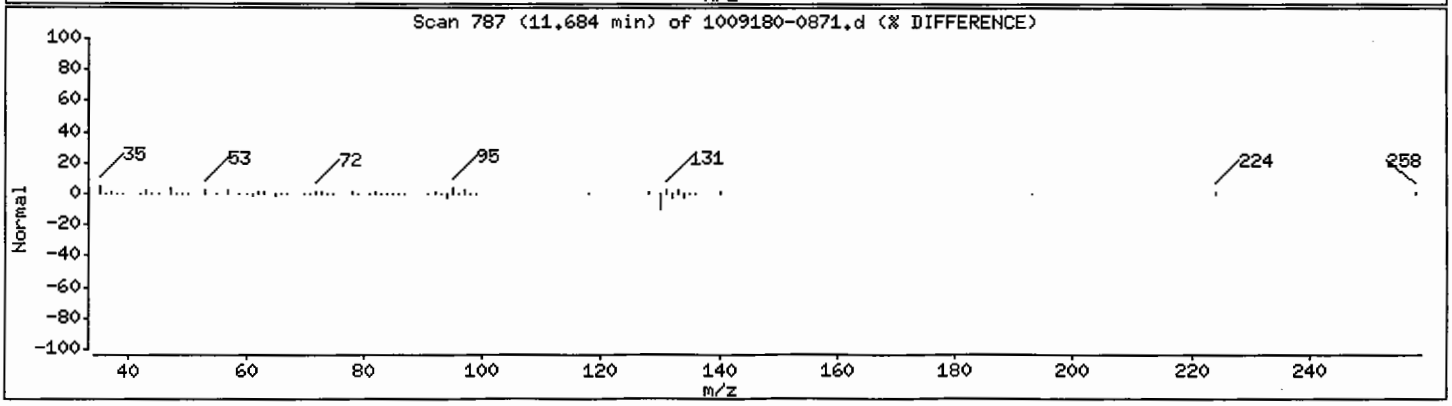
Column phase: SPB-624 | Column diameter: 0.32

49 Trichloroethene | Concentration: 0.73 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0871.d

Date : 20-SEP-2010 17:07

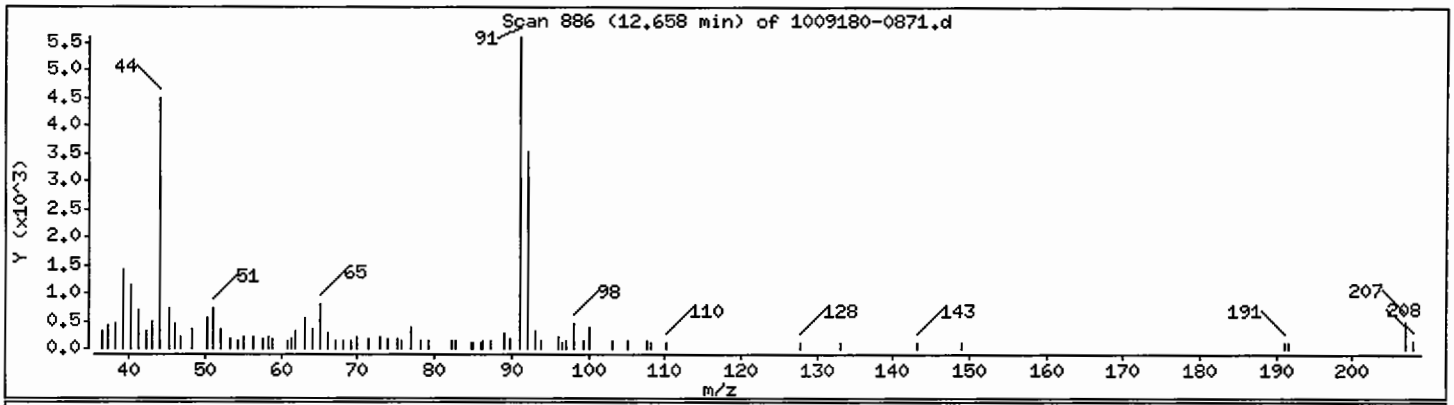
Client ID: MW-17 | Instrument: 5972hp71.i

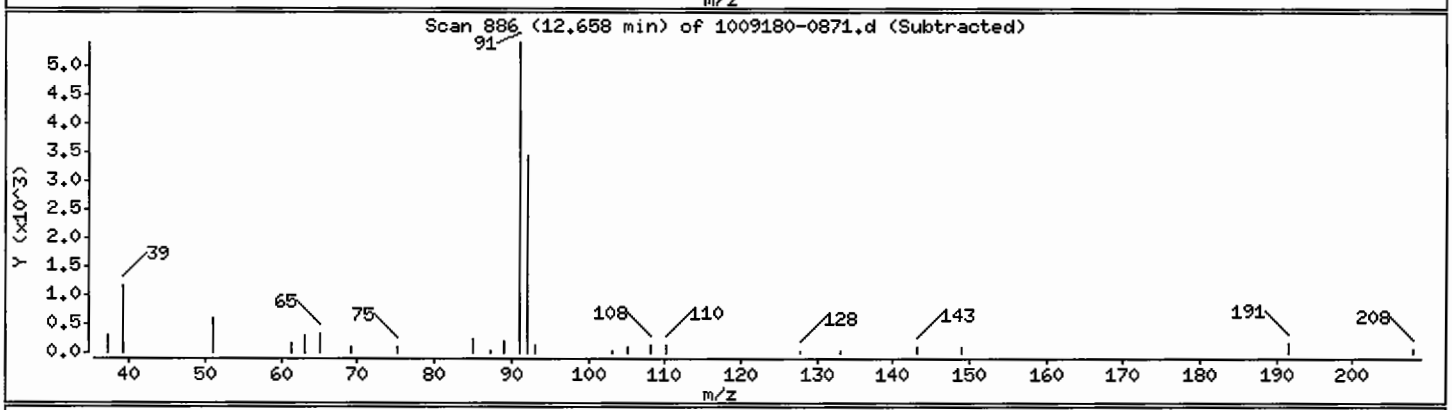
Sample Info: 1009180-08:JAO

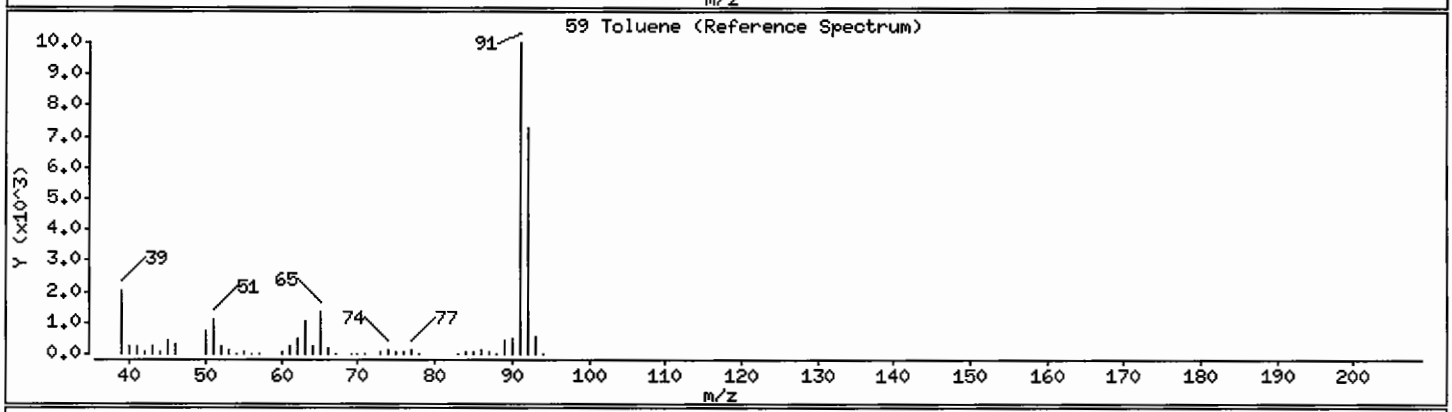
Purge Volume: 25.0 | Operator: JAO

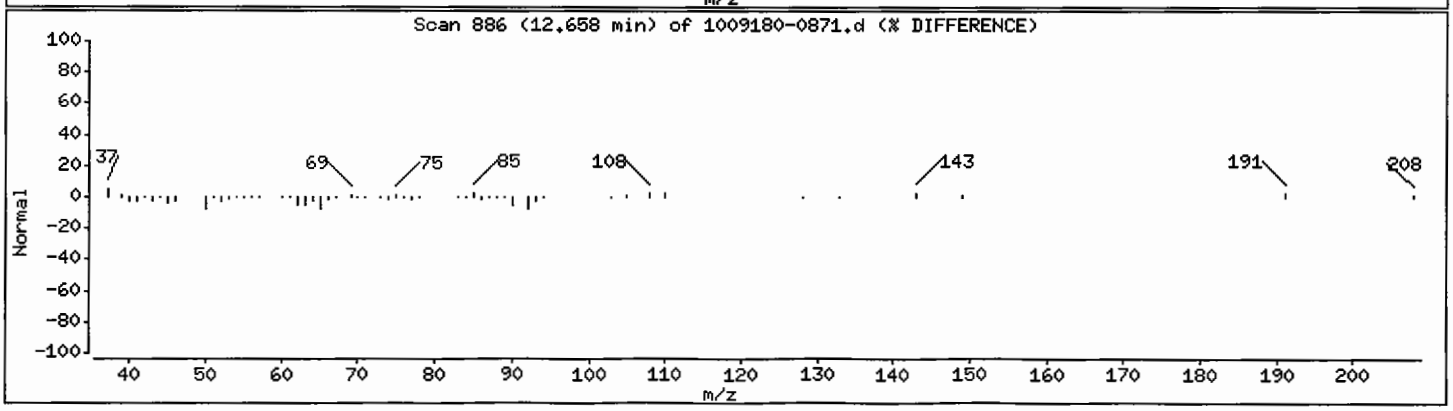
Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.095 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0871.d

Date : 20-SEP-2010 17:07

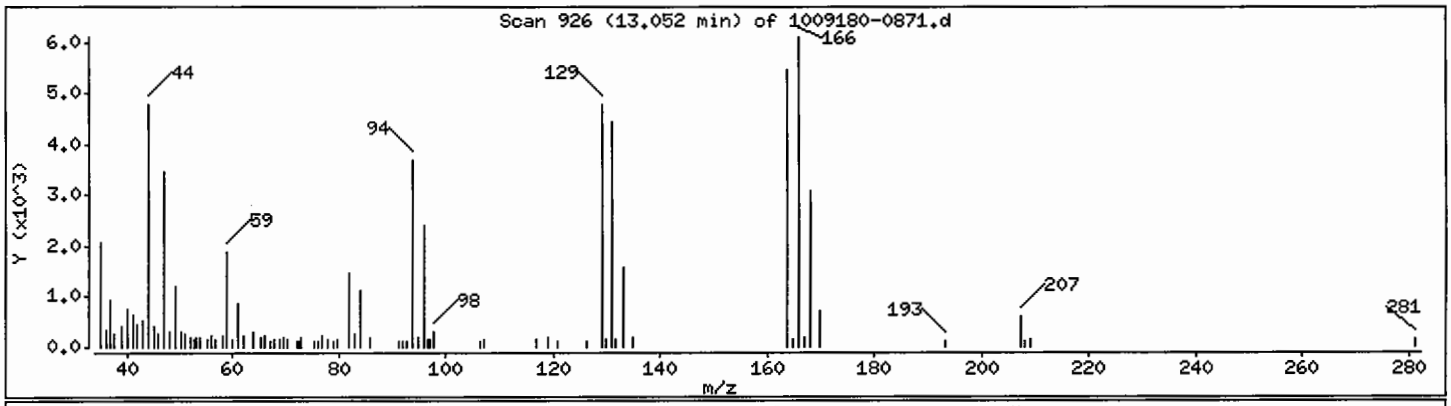
Client ID: MW-17 | Instrument: 5972hp71.i

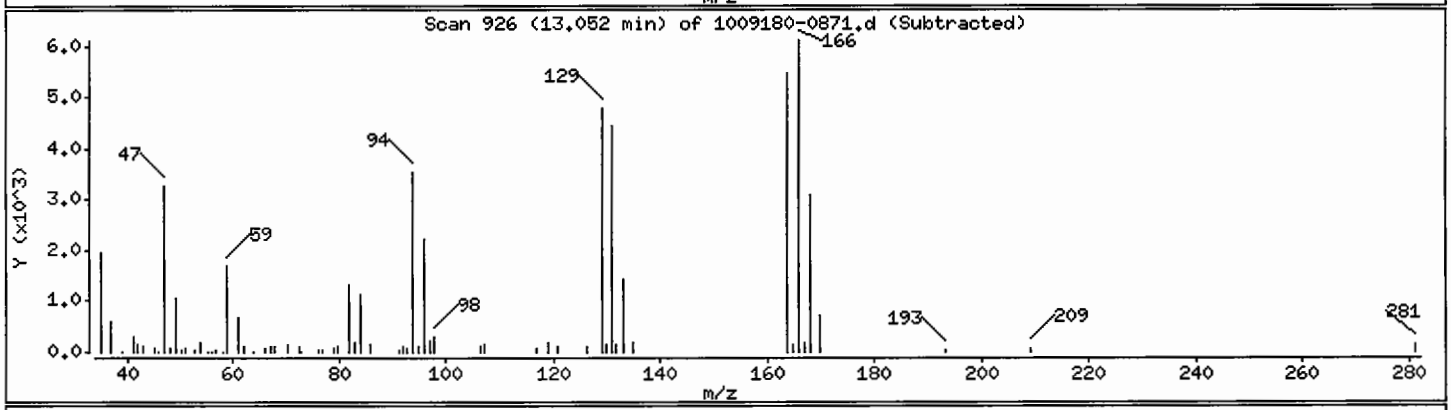
Sample Info: 1009180-08:JAO

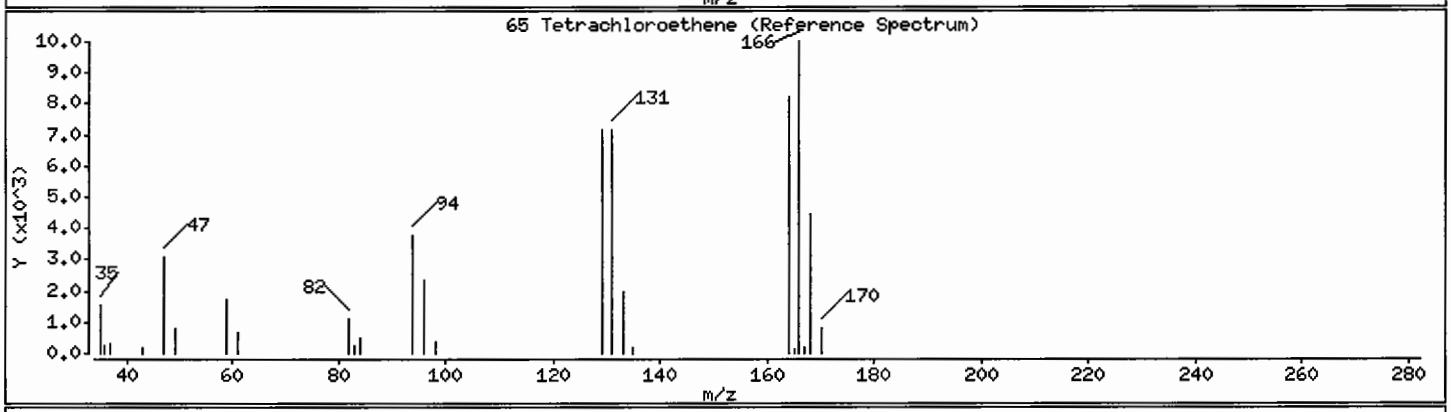
Purge Volume: 25.0 | Operator: JAO

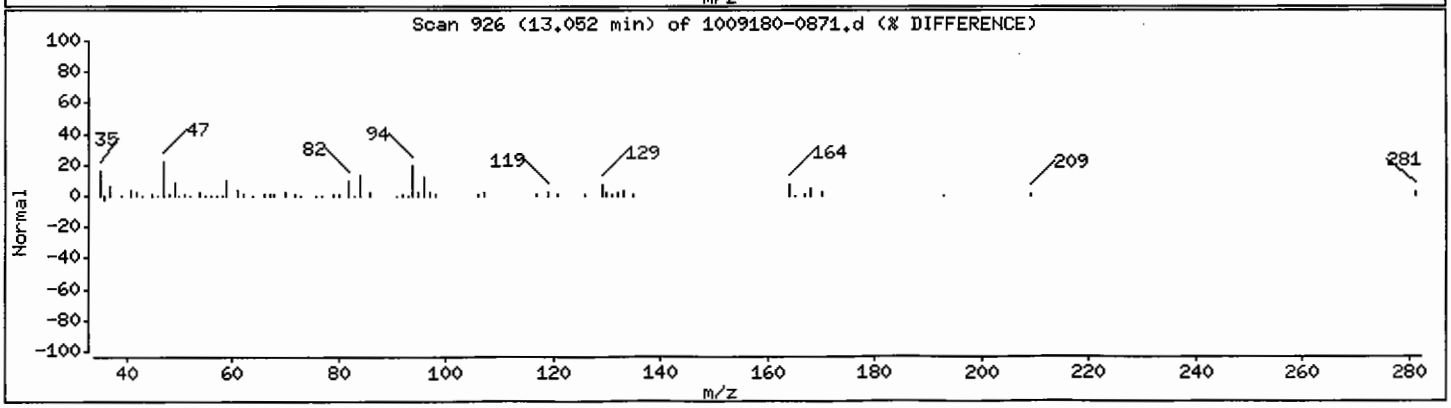
Column phase: SPB-624 | Column diameter: 0.32

65 Tetrachloroethene | Concentration: 0.43 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0871.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0871.d
Lab Smp Id: 1009180-08 Client Smp ID: MW-17
Inj Date : 20-SEP-2010 17:07
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-08:JAO
Misc Info : MW-17
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-19**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0971.d | Sampled: 09/14/10 11:10

Initial/Final: 25mL / 25mL | Lab ID: 1009180-09 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 15:18

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | 3.1 | 0.44 | | 2.5 | B |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | 0.034 | 0.020 | | 0.50 | J |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 1.4 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.17 | 0.030 | | 0.50 | J |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | 0.20 | 0.030 | | 0.50 | J |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | | 0.030 | | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-19**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0971.d | Sampled: 09/14/10 11:10

Initial/Final: 25mL / 25mL | Lab ID: 1009180-09 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 15:18

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.095 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 0.84 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.862 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.987 | 100 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.659 | 93 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 5.014 | 100 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories

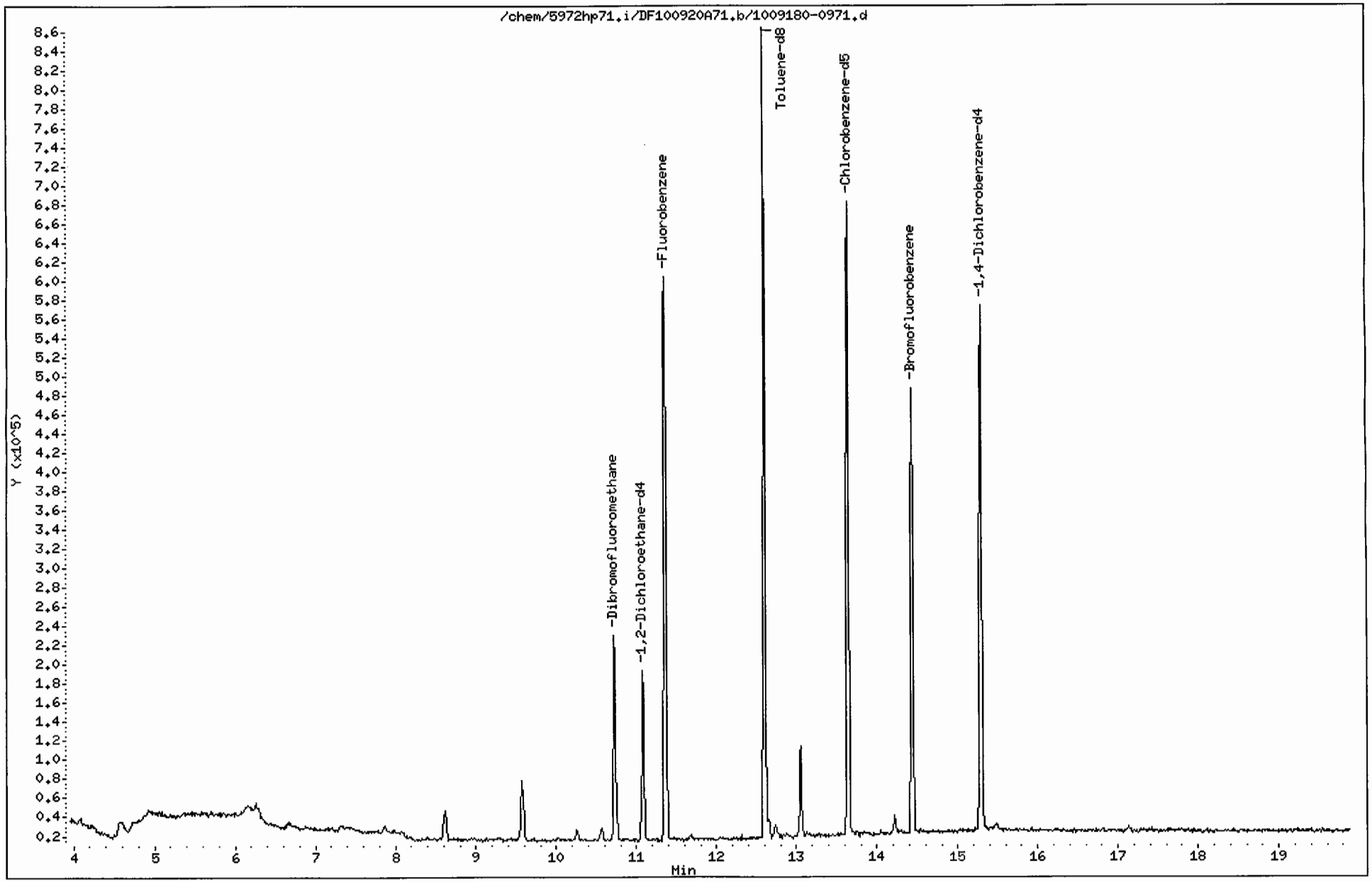
CompuChem

A Division Of

Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0971.d
Date : 20-SEP-2010 15:18
Client ID: MW-19
Sample Info: 1009180-09:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0971.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0971.d
Lab Smp Id: 1009180-09 Client Smp ID: MW-19
Inj Date : 20-SEP-2010 15:18
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-09:JAO
Misc Info :
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.366 | 11.362 | (1.000) | 488402 | 125.000 | |
| 2 Chlorobenzene-d5 | 117 | 13.649 | 13.646 | (1.000) | 320326 | 125.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 15.292 | 15.289 | (1.000) | 143906 | 125.000 | |
| 4 Dibromofluoromethane | 113 | 10.726 | 10.733 | (0.944) | 128774 | 121.560 | 4.9 |
| 5 1,2-Dichloroethane-d4 | 65 | 11.080 | 11.087 | (0.975) | 106762 | 124.669 | 5.0 |
| 6 Toluene-d8 | 98 | 12.606 | 12.602 | (0.924) | 444333 | 116.487 | 4.7 |
| 7 Bromofluorobenzene | 95 | 14.436 | 14.433 | (0.944) | 150545 | 125.349 | 5.0 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | Compound Not Detected. | | | | | |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 18 Acetone | 43 | 7.862 | 7.869 | (0.692) | 11840 | 77.7189 | 3.1 |
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |

9-21-10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0971.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 20 Carbon disulfide | 76 | 8.187 | 8.184 | (0.720) | 3571 | 0.85458 | 0.034(a) |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 9.575 | 9.571 | (0.842) | 70358 | 34.3192 | 1.4 |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | 10.254 | 10.250 | (0.902) | 4886 | 4.30552 | 0.17(a) |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | 10.569 | 10.565 | (0.930) | 9639 | 5.02982 | 0.20(a) |
| 42 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 49 Trichloroethene | 130 | Compound Not Detected. | | | | | |
| 51 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.655 | 12.652 | (0.927) | 6718 | 2.38302 | 0.095(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | 13.058 | 13.055 | (0.957) | 19144 | 21.0324 | 0.84 |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0971.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0971.d

Date : 20-SEP-2010 15:18

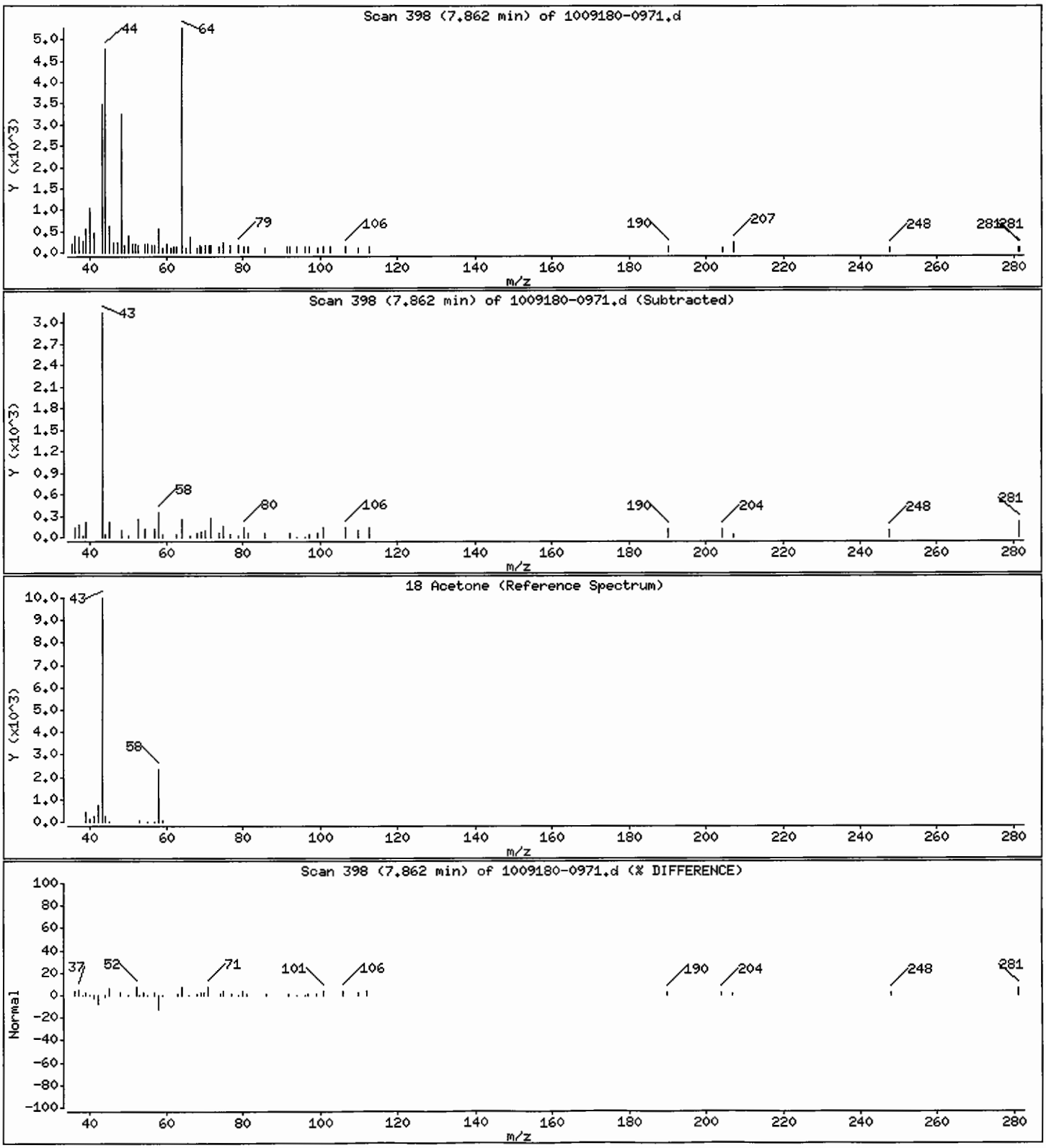
Client ID: MW-19 | Instrument: 5972hp71.i

Sample Info: 1009180-09:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

18 Acetone | Concentration: 3.1 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0971.d

Date : 20-SEP-2010 15:18

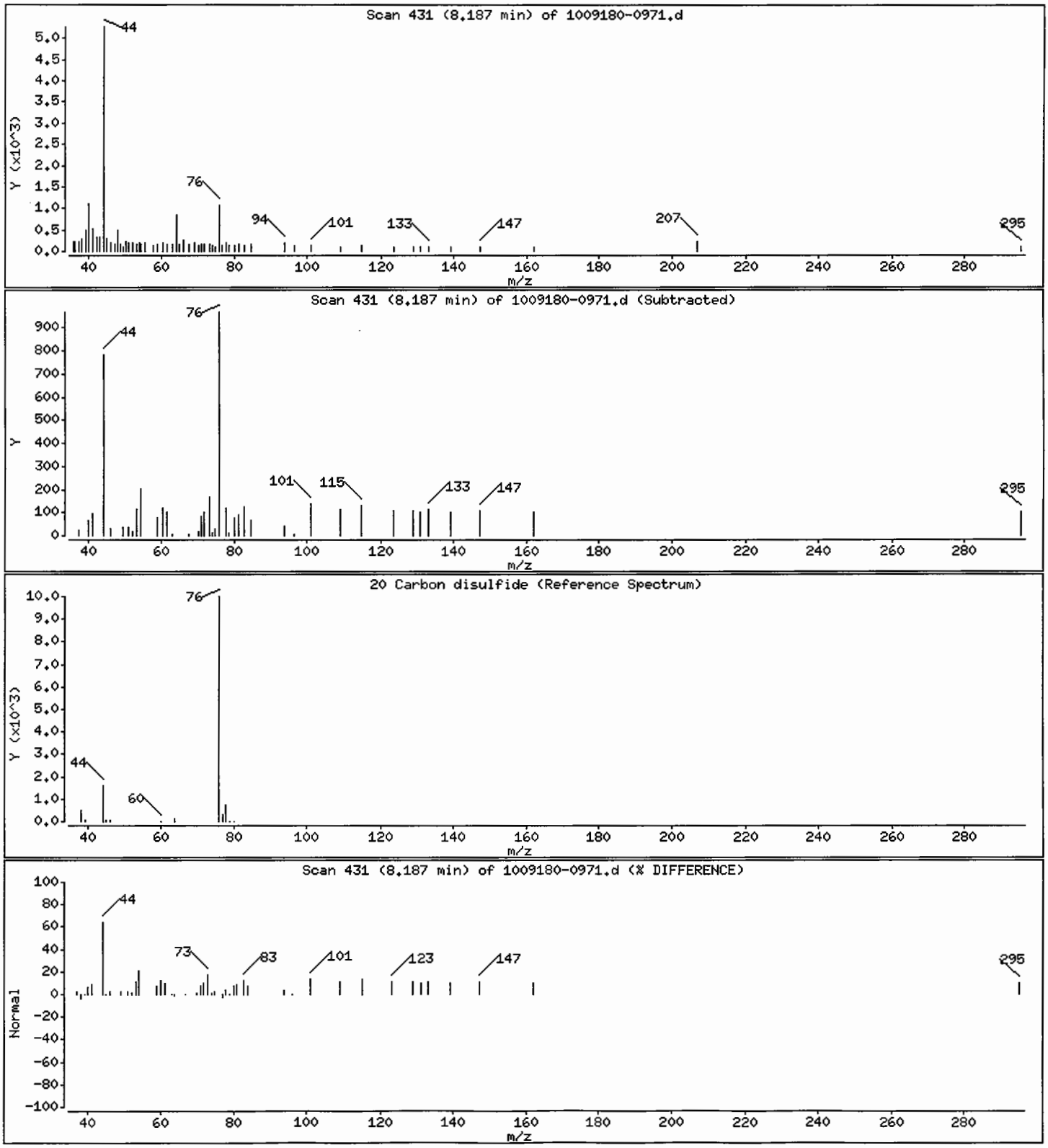
Client ID: MW-19 | Instrument: 5972hp71.i

Sample Info: 1009180-09:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

20 Carbon disulfide | Concentration: 0.034 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0971.d

Date : 20-SEP-2010 15:18

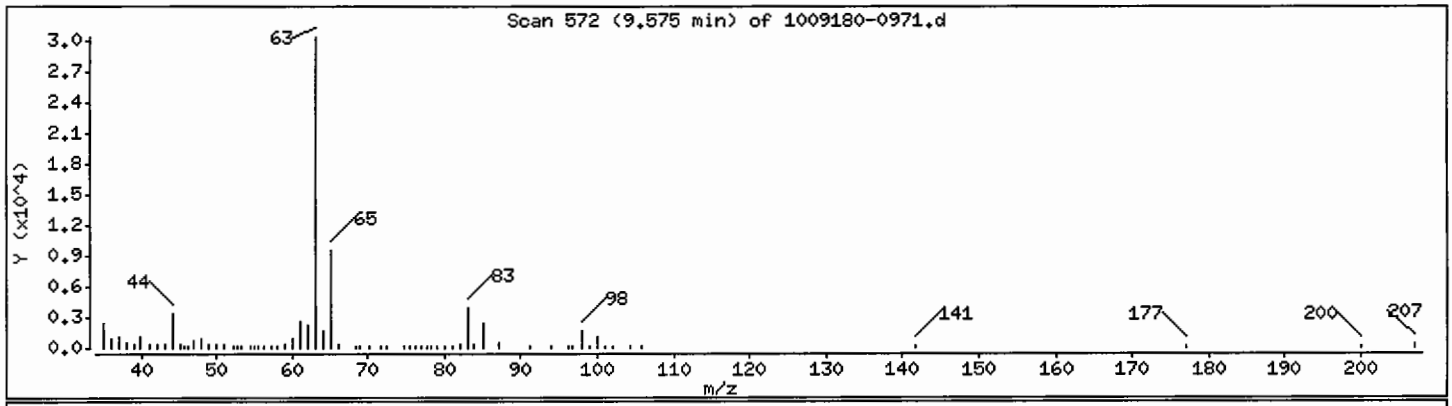
Client ID: MW-19 | Instrument: 5972hp71.i

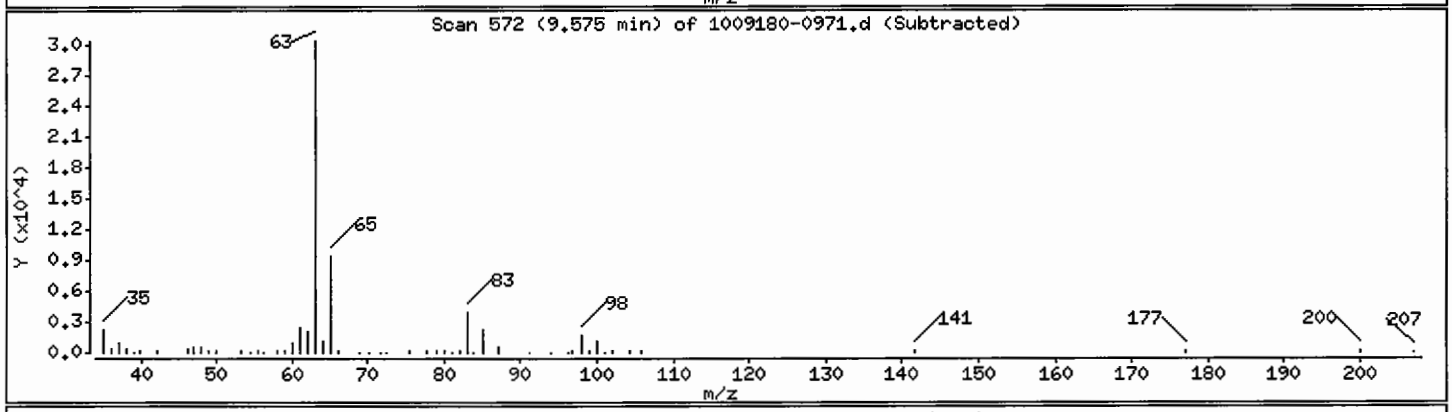
Sample Info: 1009180-09:JAO

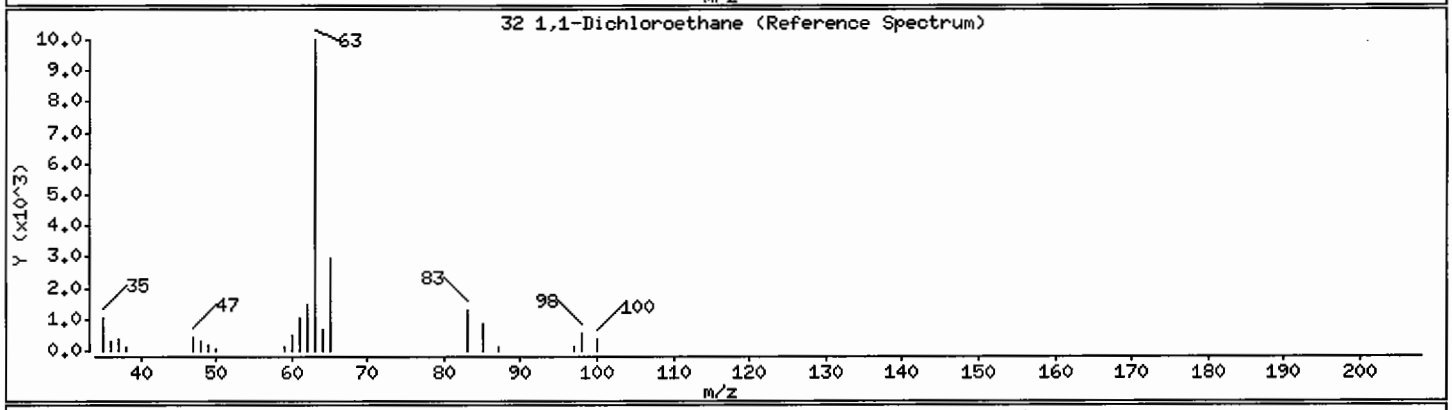
Purge Volume: 25.0 | Operator: JAO

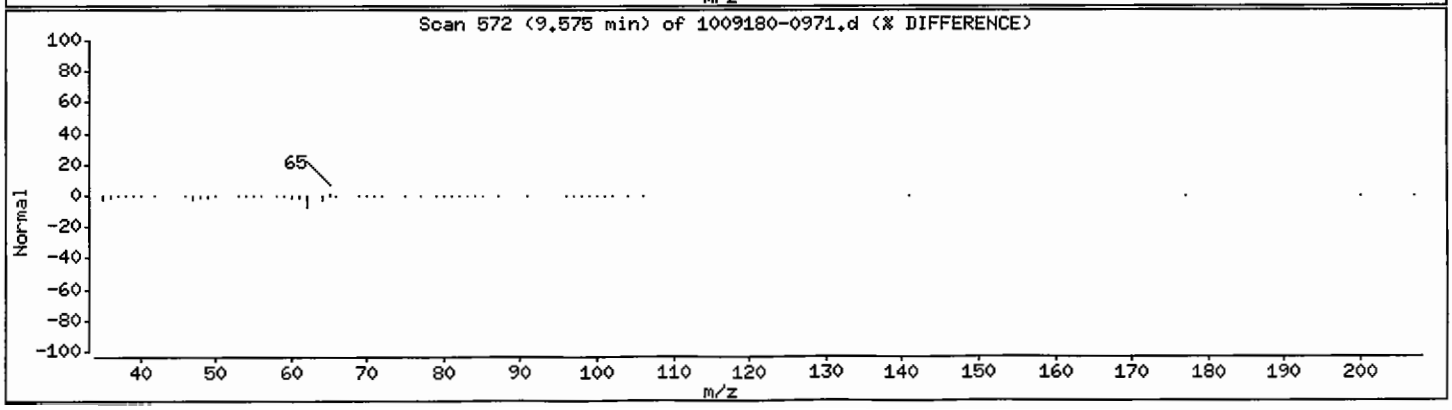
Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 1.4 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0971.d

Date : 20-SEP-2010 15:18

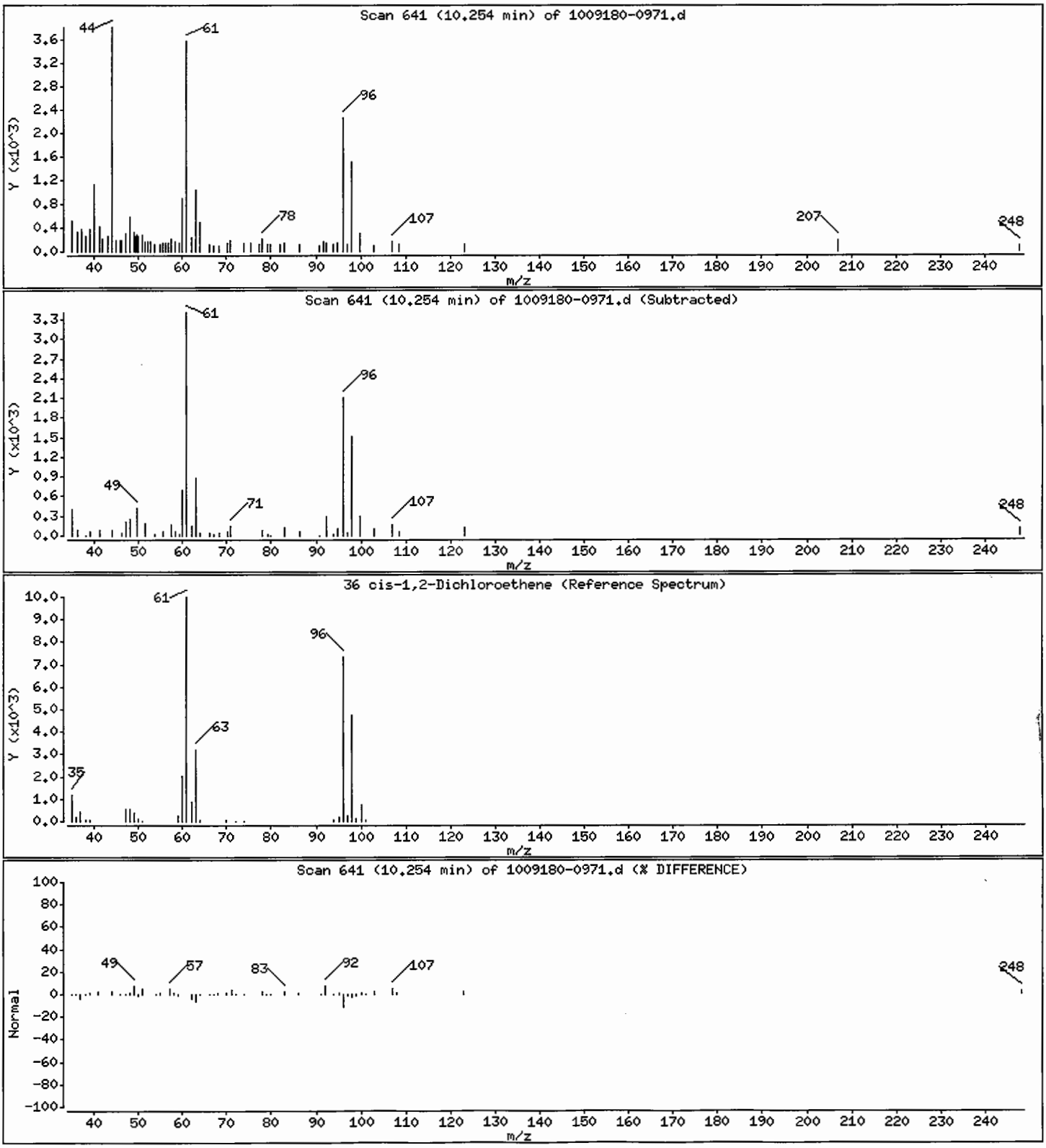
Client ID: MW-19 | Instrument: 5972hp71.i

Sample Info: 1009180-09:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

36 cis-1,2-Dichloroethene | Concentration: 0.17 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0971.d

Date : 20-SEP-2010 15:18

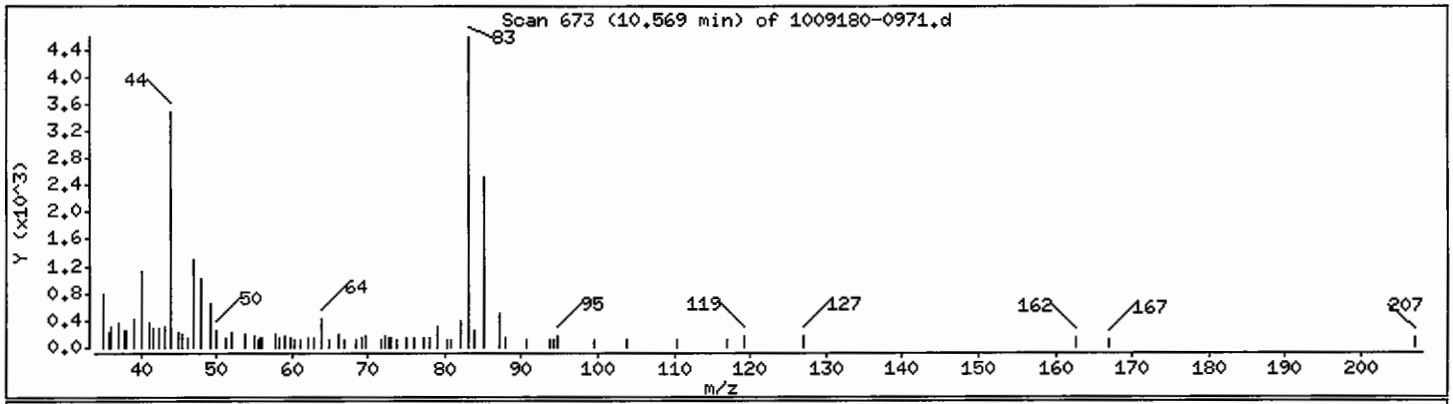
Client ID: MW-19 | Instrument: 5972hp71.i

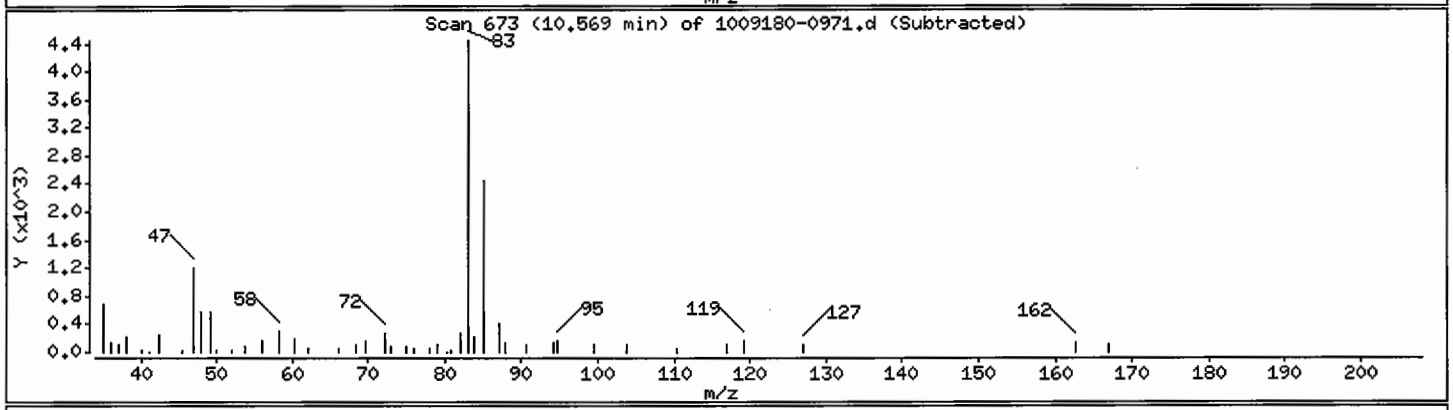
Sample Info: 1009180-09:JAO

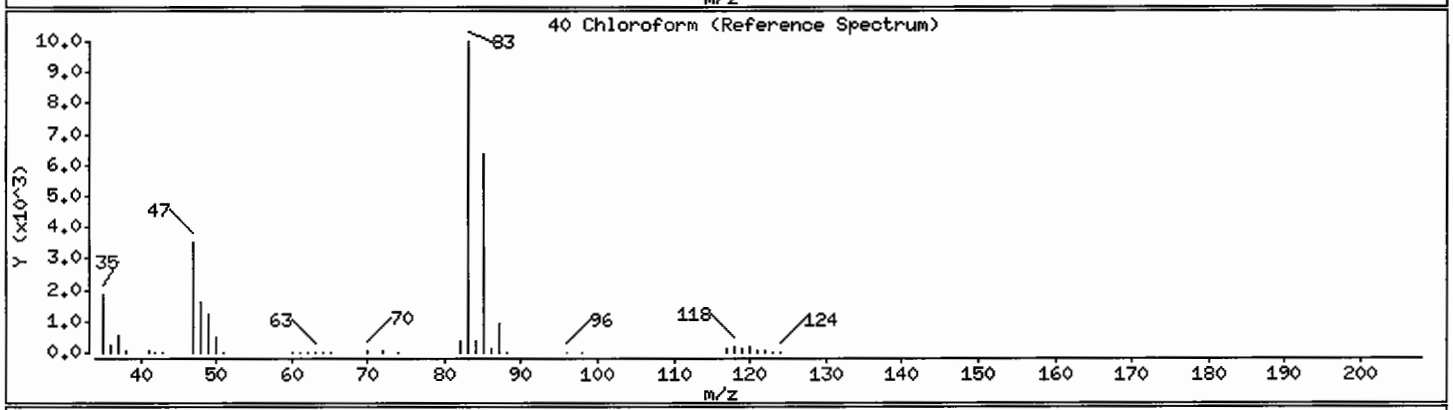
Purge Volume: 25.0 | Operator: JAO

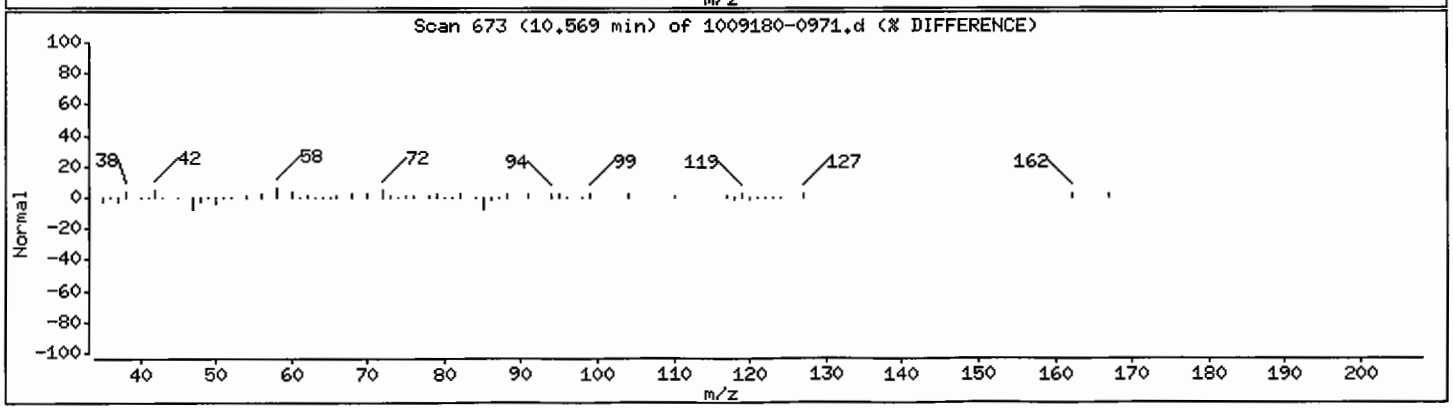
Column phase: SPB-624 | Column diameter: 0.32

40 Chloroform | Concentration: 0.20 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0971.d

Date : 20-SEP-2010 15:18

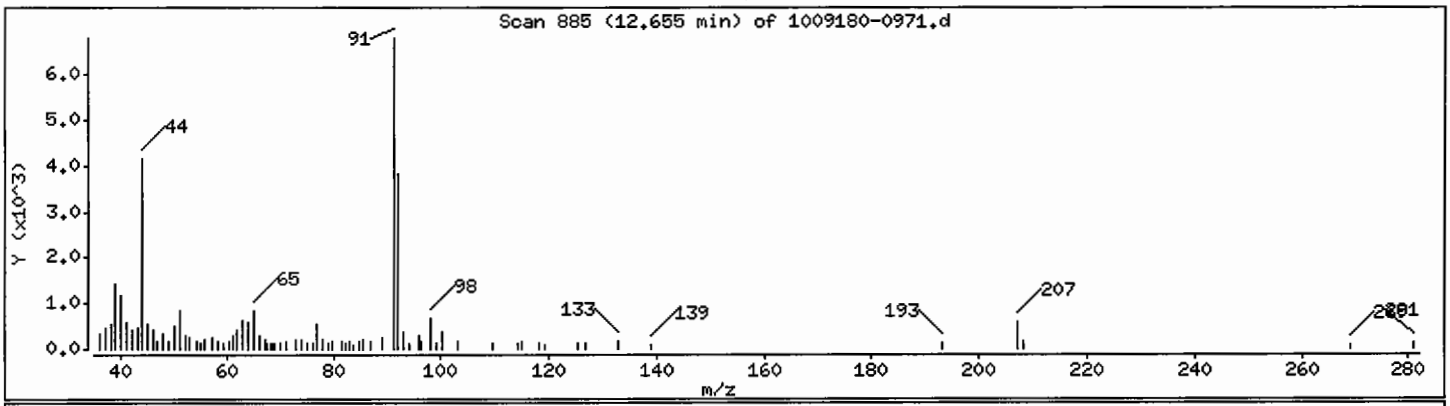
Client ID: MW-19 | Instrument: 5972hp71.i

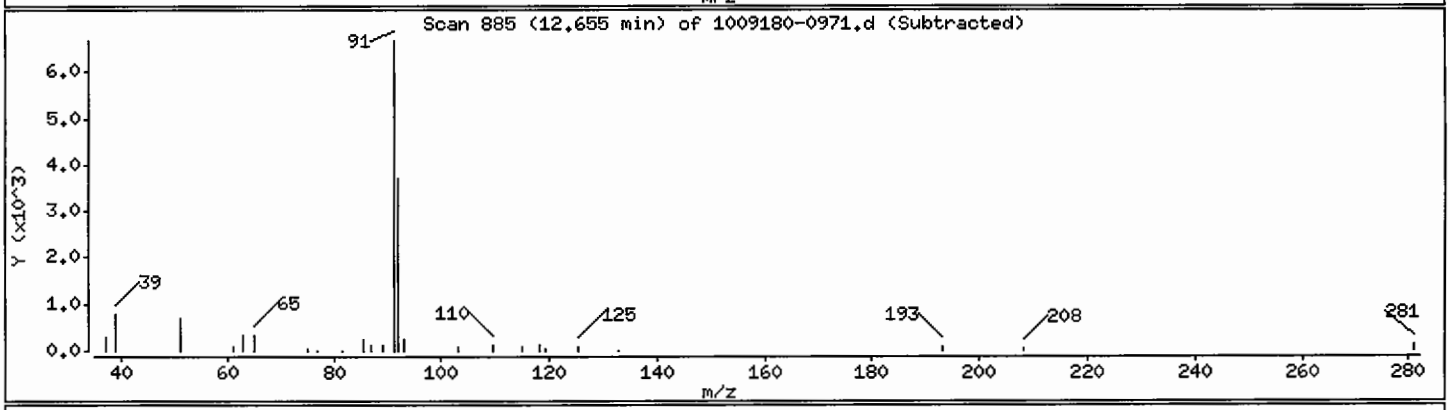
Sample Info: 1009180-09:JAO

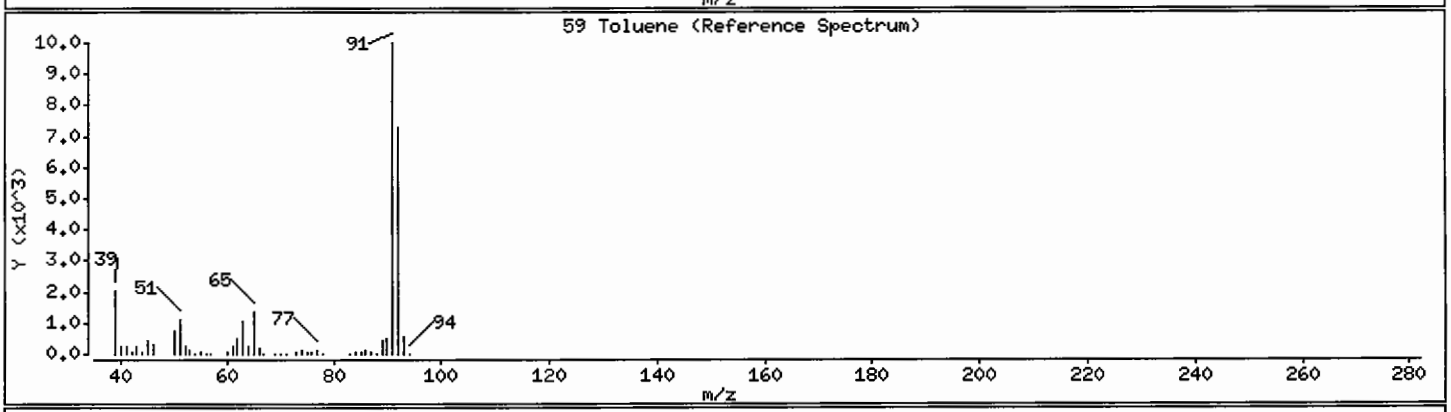
Purge Volume: 25.0 | Operator: JAO

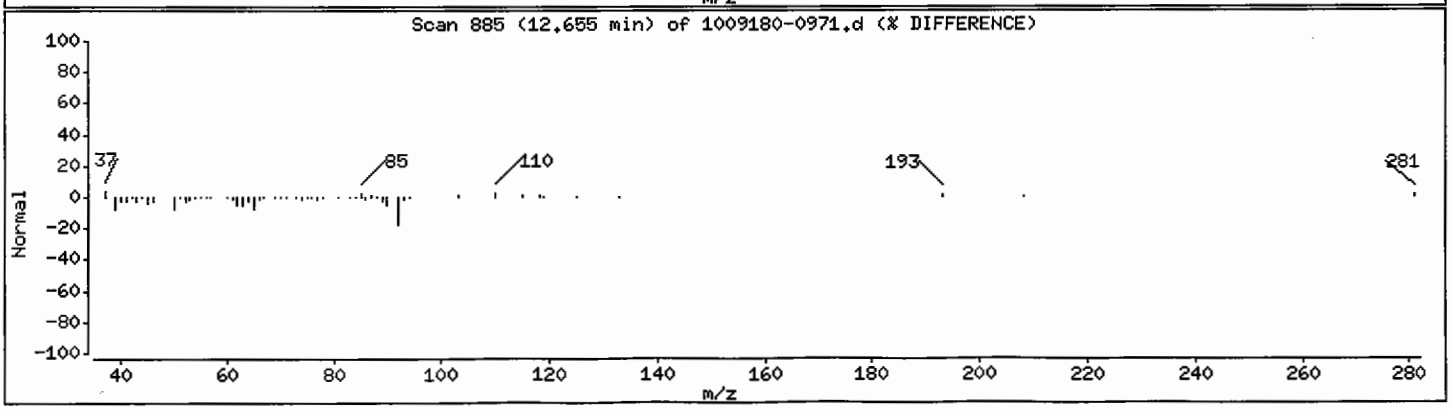
Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.095 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0971.d

Date : 20-SEP-2010 15:18

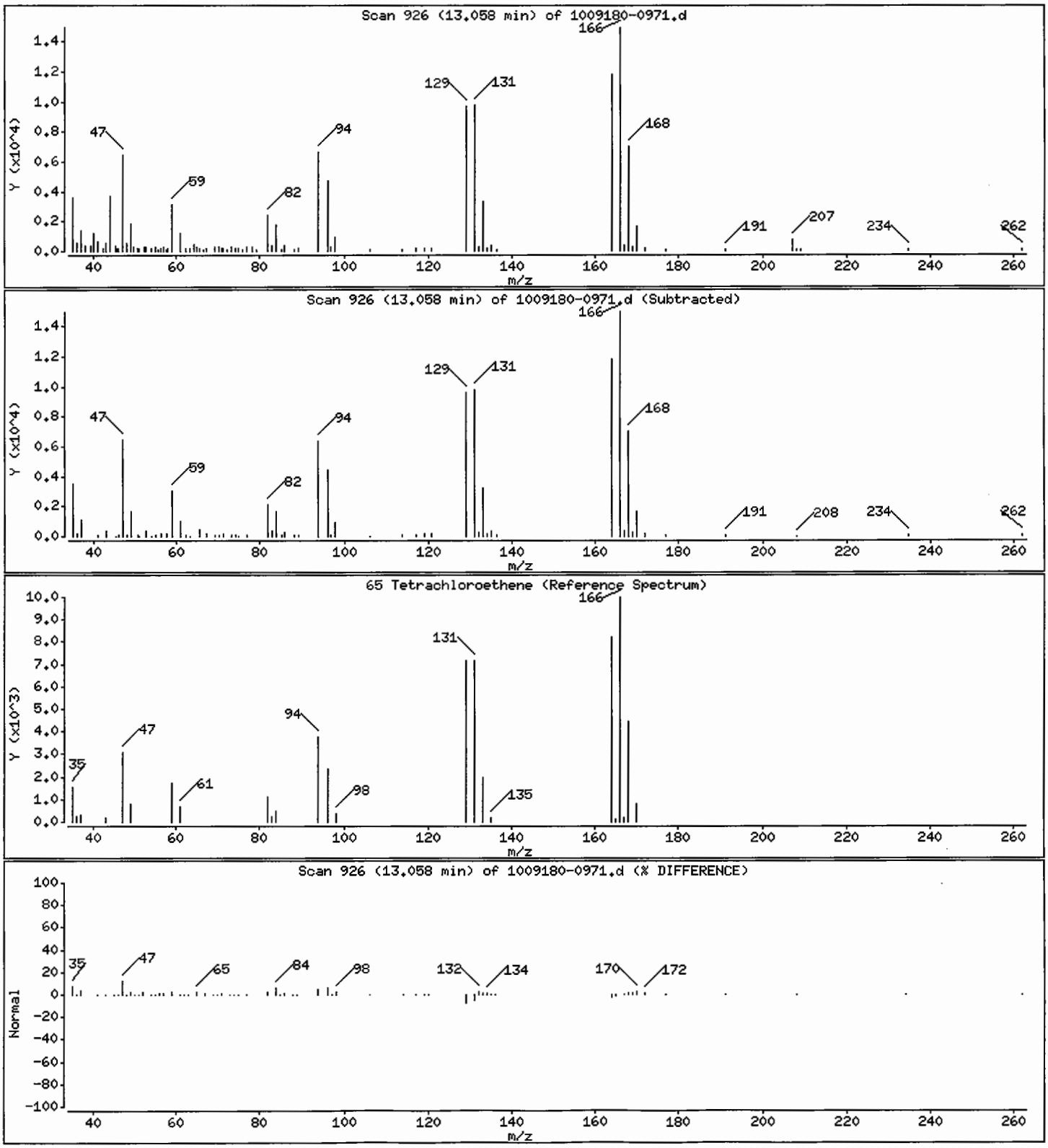
Client ID: MW-19 | Instrument: 5972hp71.i

Sample Info: 1009180-09:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

65 Tetrachloroethene | Concentration: 0.84 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0971.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0971.d
Lab Smp Id: 1009180-09 Client Smp ID: MW-19
Inj Date : 20-SEP-2010 15:18
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-09:JAO
Misc Info :
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-2**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-1171.d | Sampled: 09/13/10 15:40

Initial/Final: 25mL / 25mL | Lab ID: 1009180-11 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 21:24

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | 0.37 | 0.070 | | 0.50 | J |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 71 | 0.040 | | 0.50 | E |
| 67-64-1 | Acetone | | 0.44 | | 2.5 | U |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 47 | 0.020 | | 0.50 | E |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.20 | 0.030 | | 0.50 | J |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 370 | 0.020 | | 0.50 | E |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | 0.44 | 0.030 | | 0.50 | J |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-2**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-1171.d | Sampled: 09/13/10 15:40

Initial/Final: 25mL / 25mL | Lab ID: 1009180-11 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 21:24

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.11 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 3.3 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

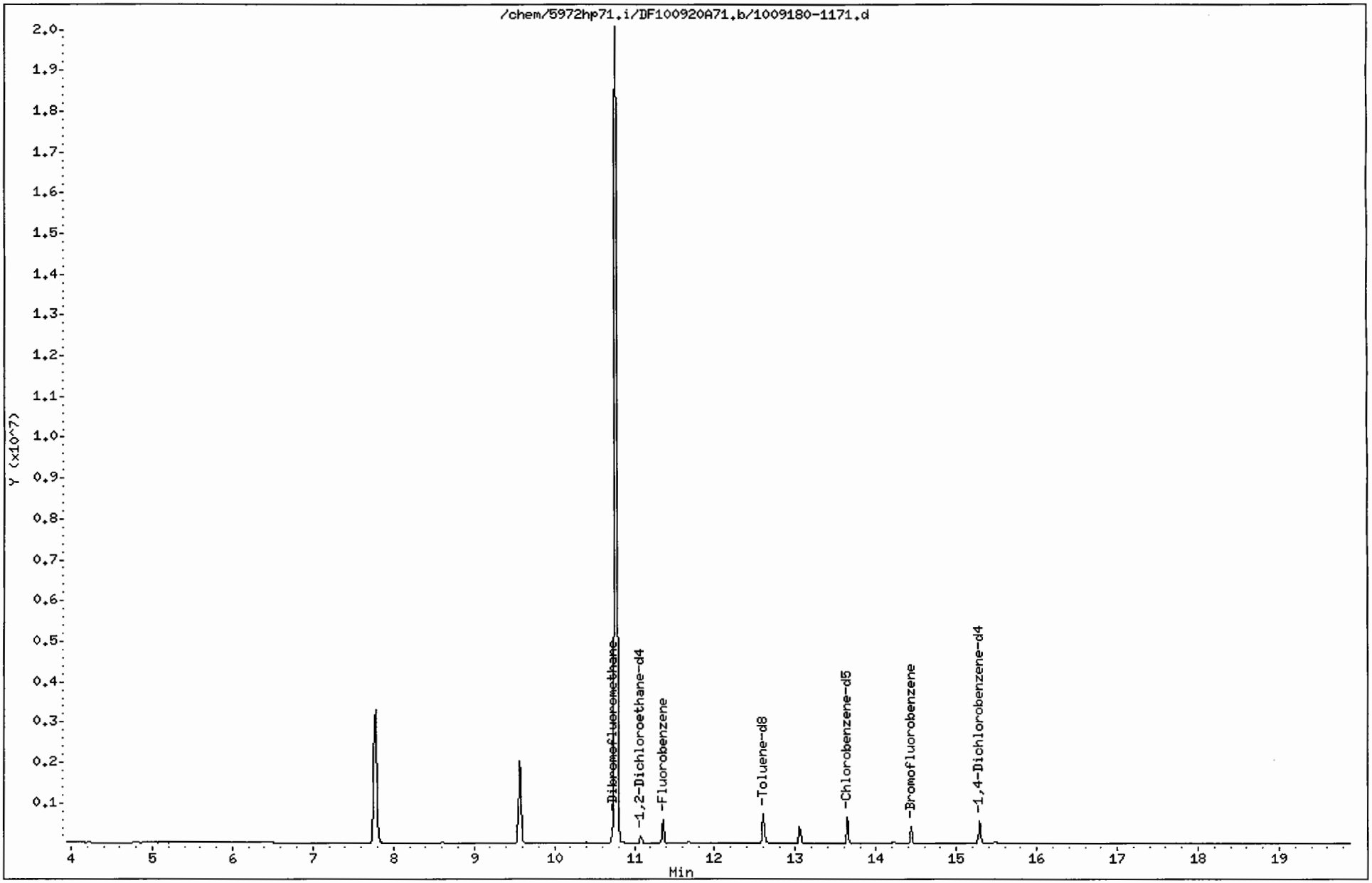
| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.987 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 5.166 | 103 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.569 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.880 | 98 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d
Date : 20-SEP-2010 21:24
Client ID: MW-2
Sample Info: 1009180-11:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-1171.d
Lab Smp Id: 1009180-11 Client Smp ID: MW-2
Inj Date : 20-SEP-2010 21:24
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-11:JAO
Misc Info : MW-2
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.360 | 11.362 | (1.000) | 444779 | 125.000 | |
| 2 Chlorobenzene-d5 | 117 | 13.643 | 13.646 | (1.000) | 301825 | 125.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 15.286 | 15.289 | (1.000) | 134463 | 125.000 | |
| 4 Dibromofluoromethane | 113 | 10.730 | 10.733 | (0.945) | 120266 | 124.663 | 5.0 |
| 5 1,2-Dichloroethane-d4 | 65 | 11.084 | 11.087 | (0.976) | 100722 | 129.152 | 5.2 |
| 6 Toluene-d8 | 98 | 12.609 | 12.602 | (0.924) | 410559 | 114.230 | 4.6 |
| 7 Bromofluorobenzene | 95 | 14.440 | 14.433 | (0.945) | 136895 | 121.988 | 4.9 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | 4.992 | 4.995 | (0.439) | 6506 | 9.37014 | 0.37(a) |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | 7.777 | 7.780 | (0.685) | 1559191 | 1773.78 | 71(A) |
| 18 Acetone | 43 | Compound Not Detected. | | | | | |

9.21.10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 9.568 | 9.571 | (0.842) | 2170742 | 1162.69 | 47(A) |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | 10.257 | 10.250 | (0.903) | 5205 | 5.03646 | 0.20(a) |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | 10.769 | 10.772 | (0.948) | 13426737 | 9253.58 | 370(A) |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 49 Trichloroethene | 130 | 11.684 | 11.677 | (1.029) | 9990 | 11.0628 | 0.44(a) |
| 51 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.659 | 12.652 | (0.928) | 6987 | 2.63036 | 0.11(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | 13.052 | 13.055 | (0.957) | 71016 | 82.8036 | 3.3 |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d

Date : 20-SEP-2010 21:24

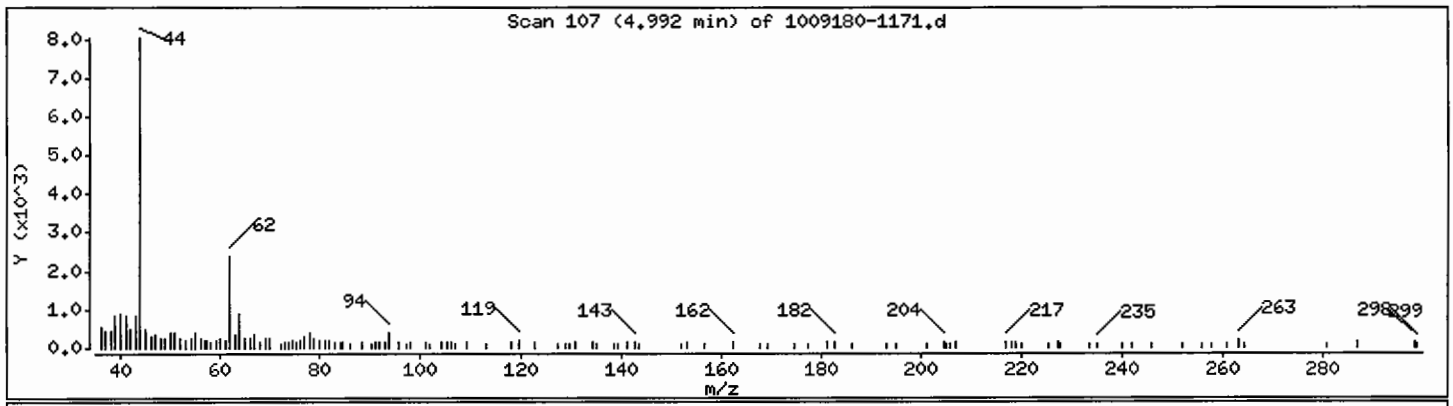
Client ID: MW-2 Instrument: 5972hp71.i

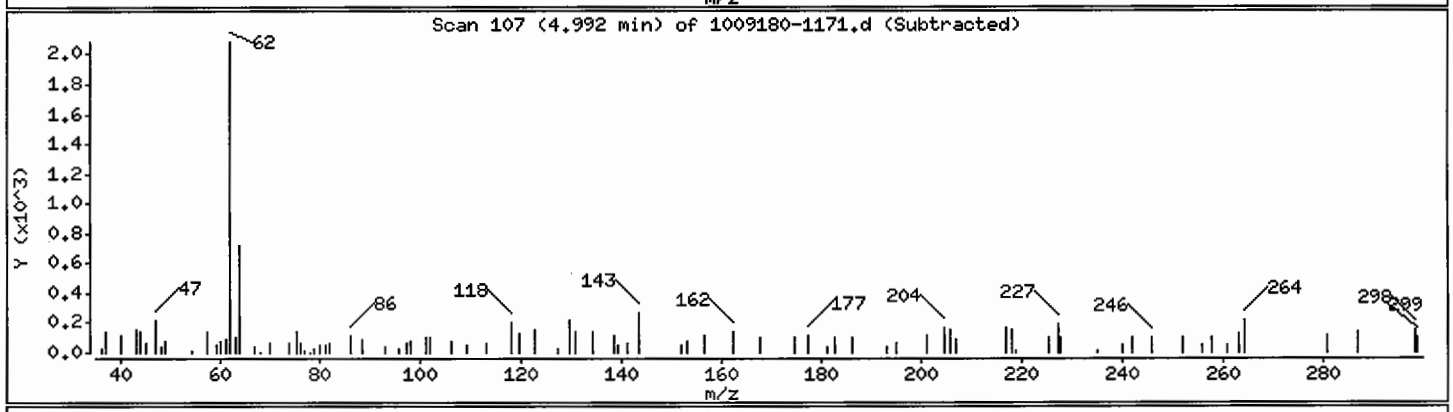
Sample Info: 1009180-11:JAO

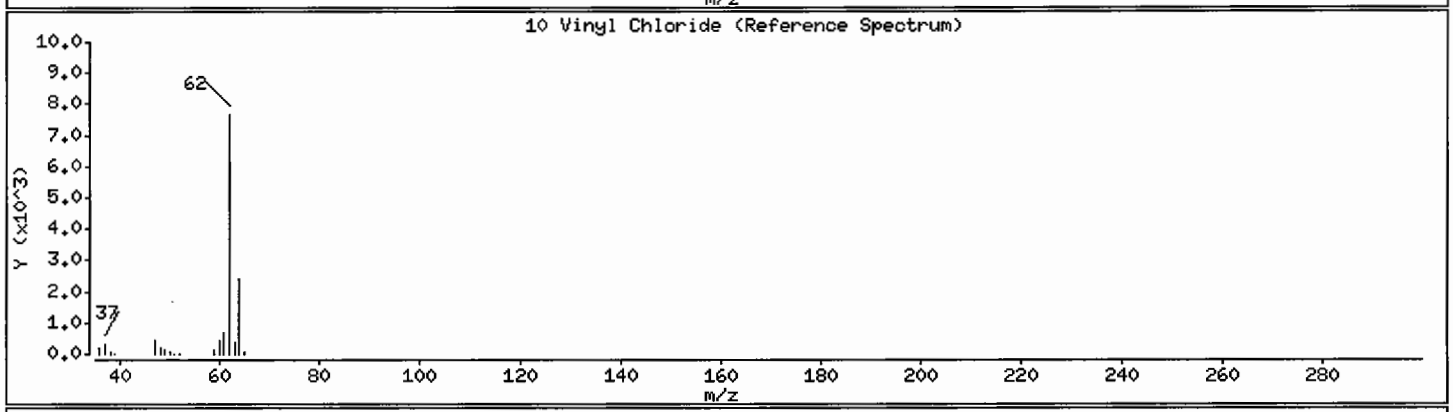
Purge Volume: 25.0 Operator: JAO

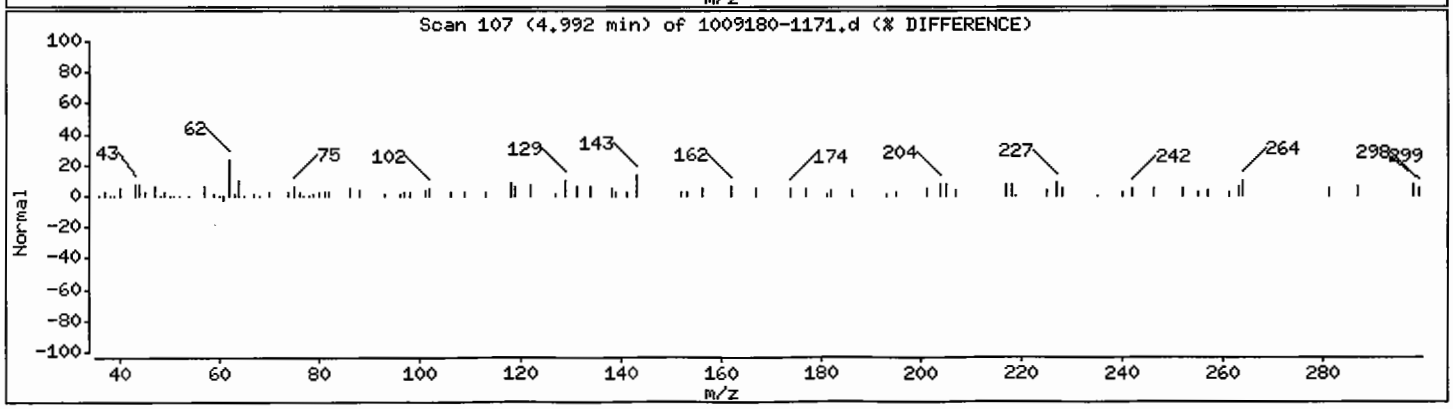
Column phase: SPB-624 Column diameter: 0.32

10 Vinyl Chloride Concentration: 0.37 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d

Date : 20-SEP-2010 21:24

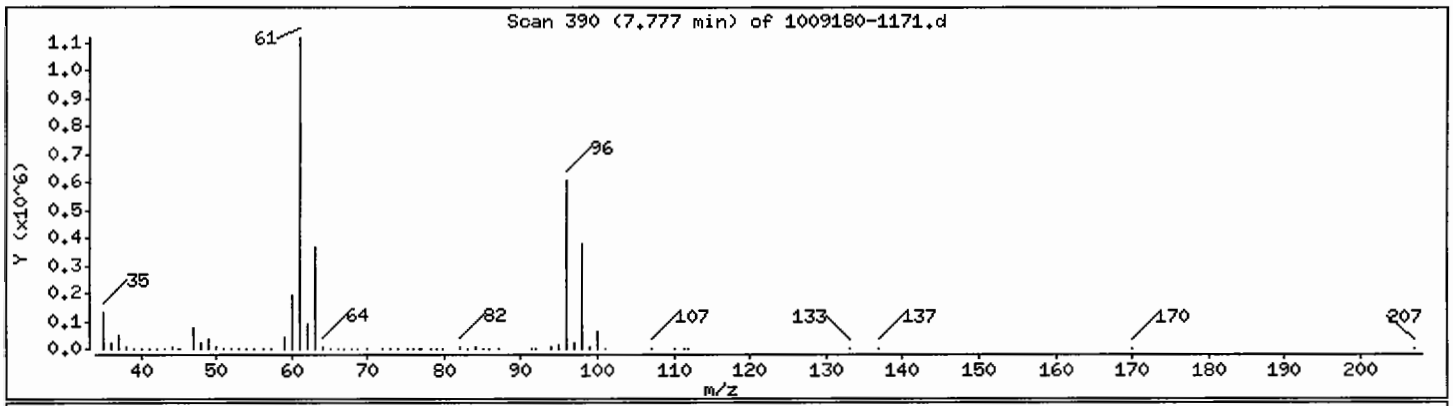
Client ID: MW-2 | Instrument: 5972hp71.i

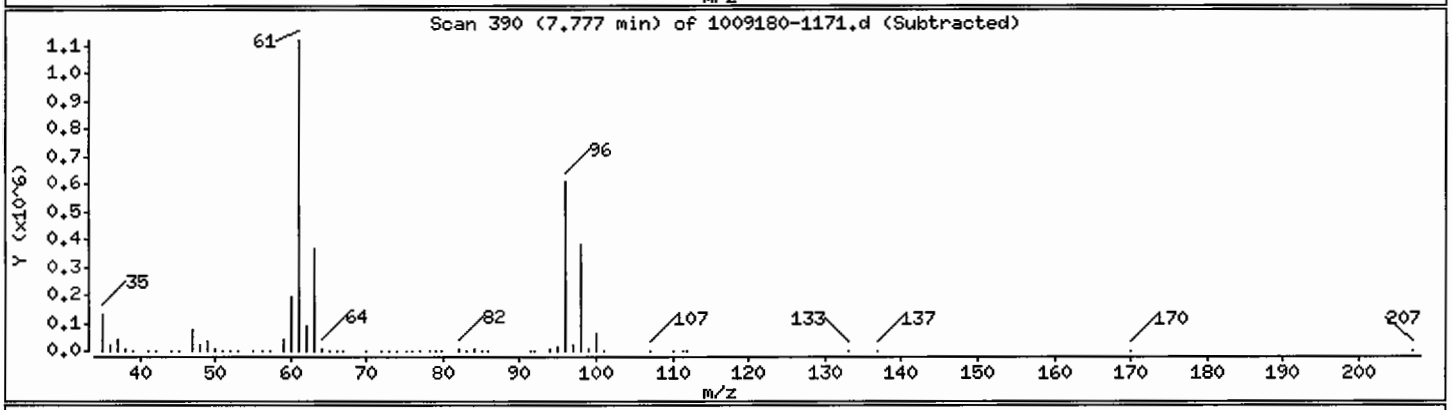
Sample Info: 1009180-11:JAO

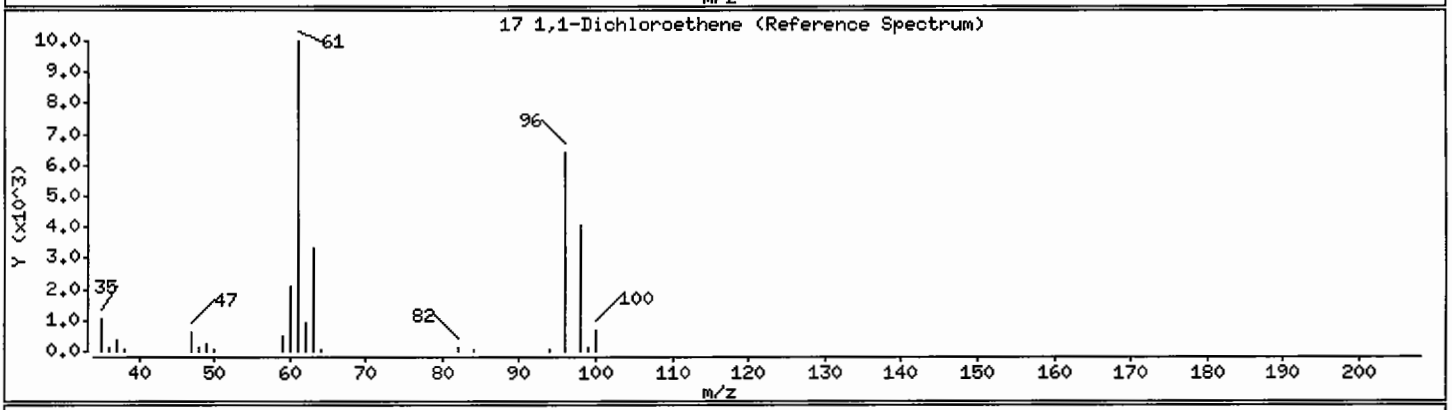
Purge Volume: 25.0 | Operator: JAO

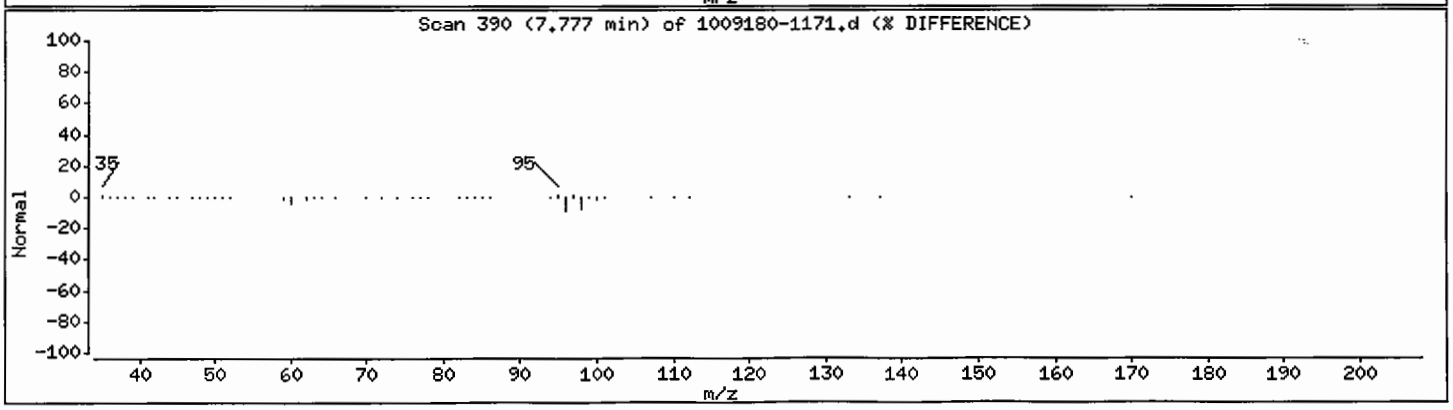
Column phase: SPB-624 | Column diameter: 0.32

17 1,1-Dichloroethene | Concentration: 71 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d

Date : 20-SEP-2010 21:24

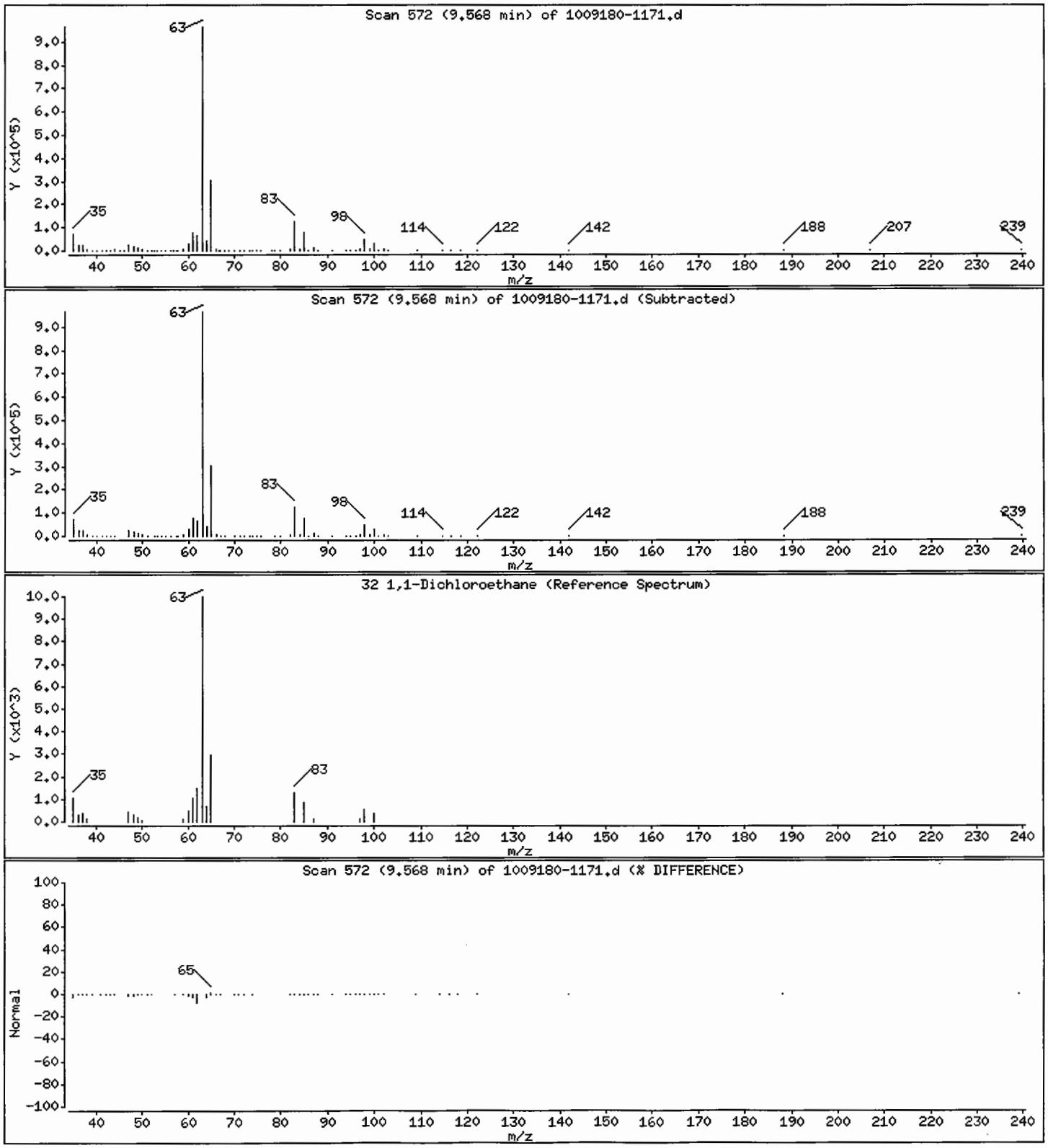
Client ID: MW-2 | Instrument: 5972hp71.i

Sample Info: 1009180-11:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 47 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d

Date : 20-SEP-2010 21:24

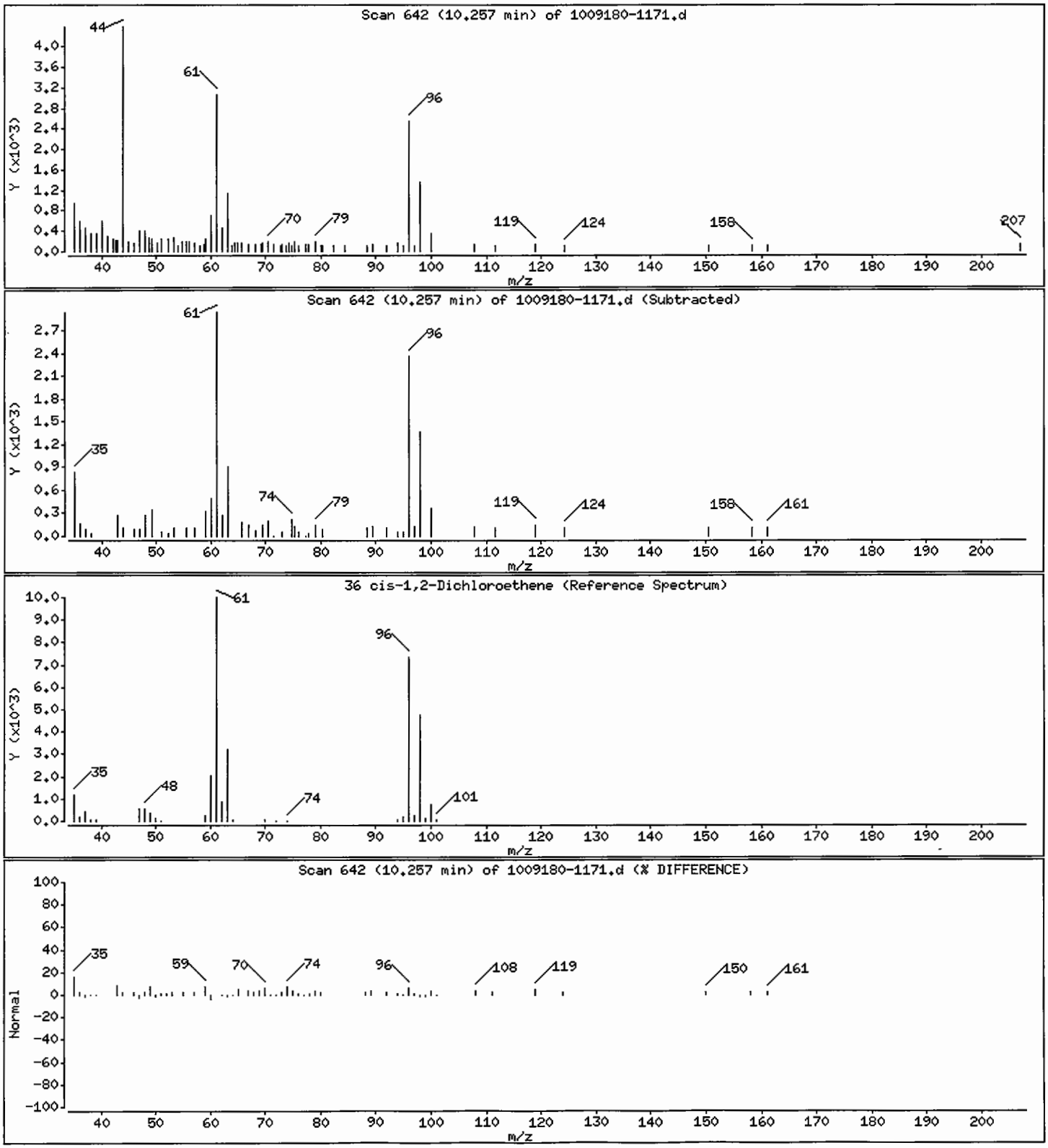
Client ID: MW-2 | Instrument: 5972hp71.i

Sample Info: 1009180-11:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

36 cis-1,2-Dichloroethene | Concentration: 0.20 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d

Date : 20-SEP-2010 21:24

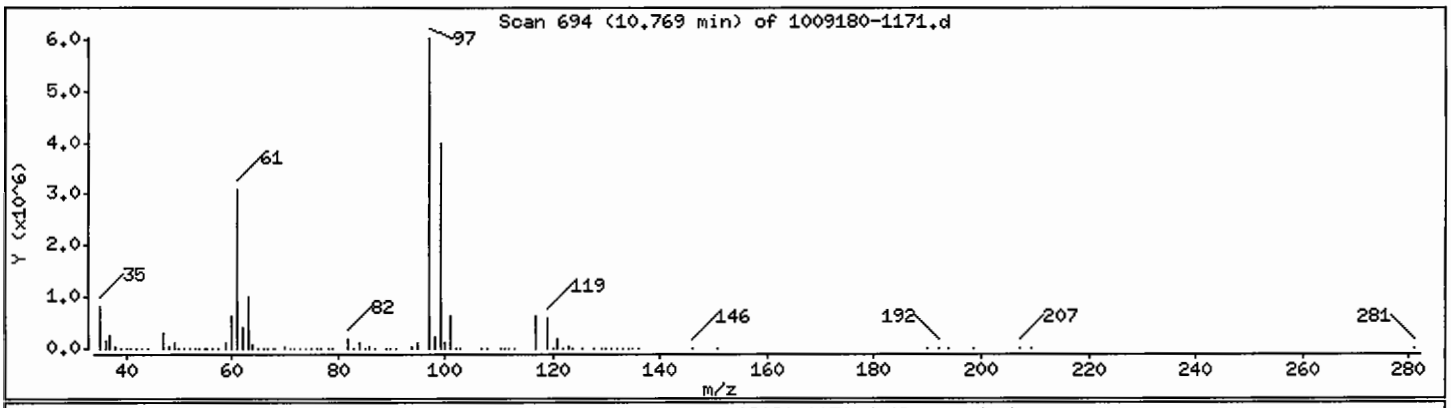
Client ID: MW-2 | Instrument: 5972hp71.i

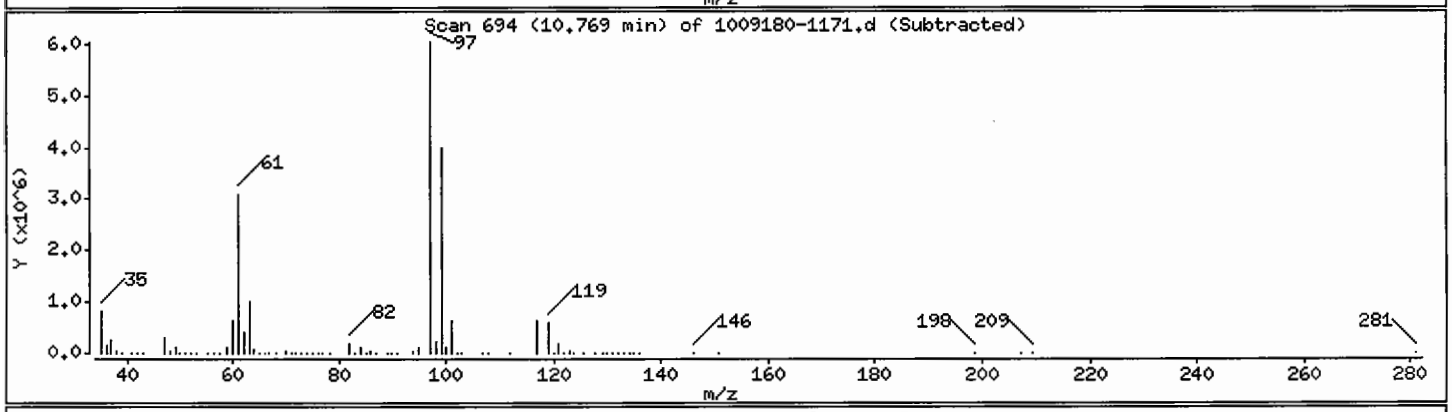
Sample Info: 1009180-11:JAO

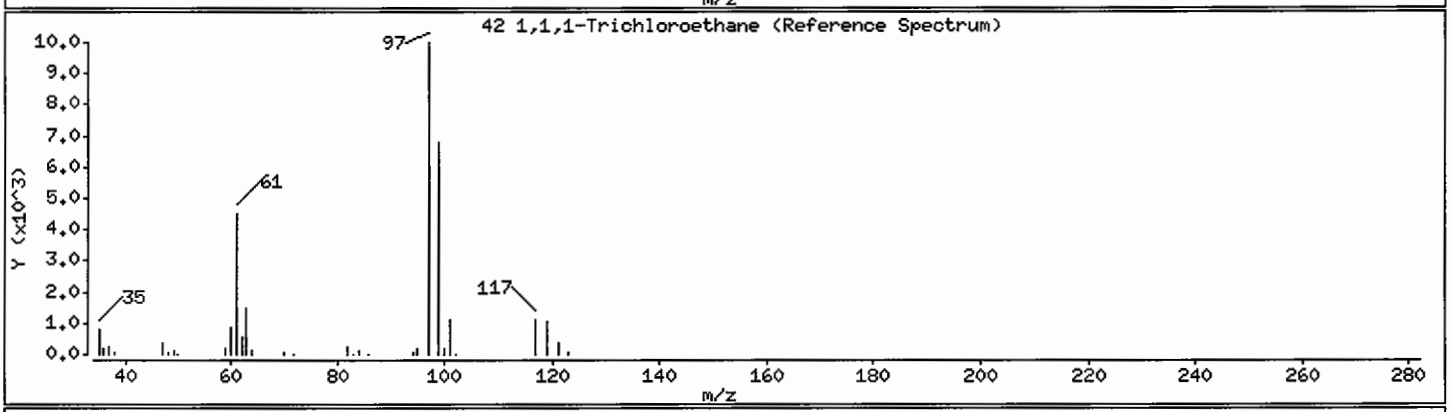
Purge Volume: 25.0 | Operator: JAO

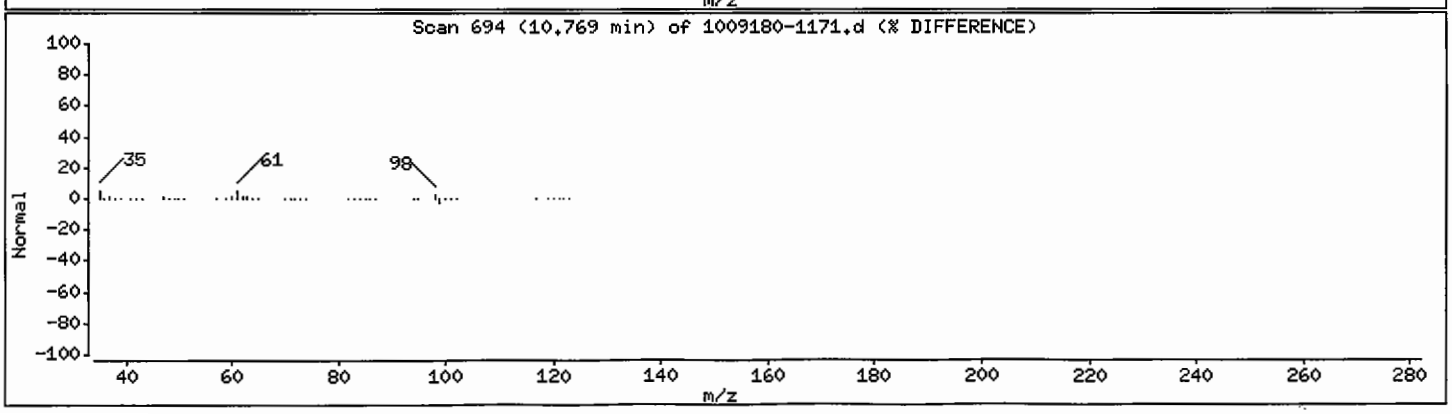
Column phase: SPB-624 | Column diameter: 0.32

42 1,1,1-Trichloroethane | Concentration: 370 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d

Date : 20-SEP-2010 21:24

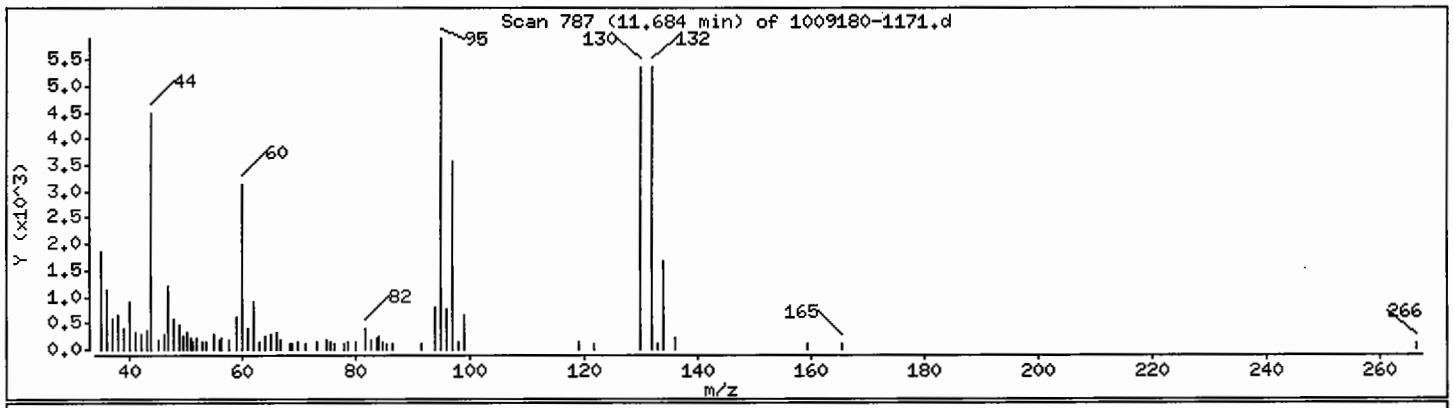
Client ID: MW-2 | Instrument: 5972hp71.i

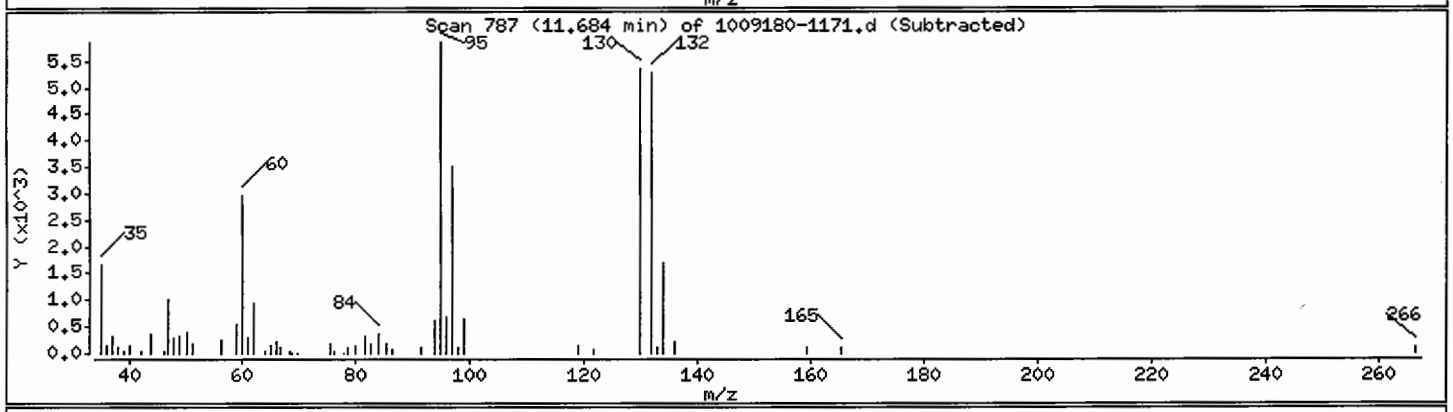
Sample Info: 1009180-11:JAO

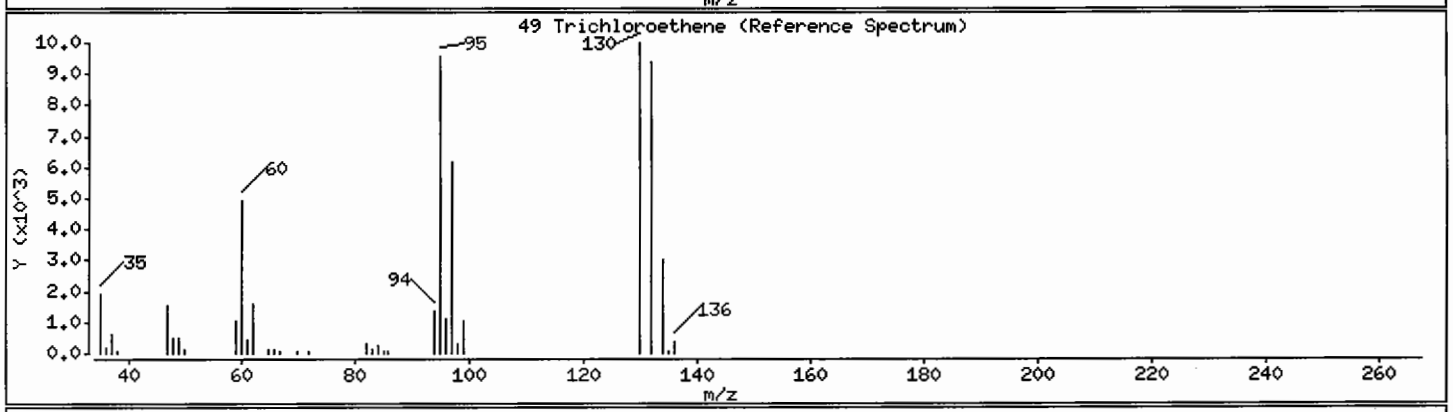
Purge Volume: 25.0 | Operator: JAO

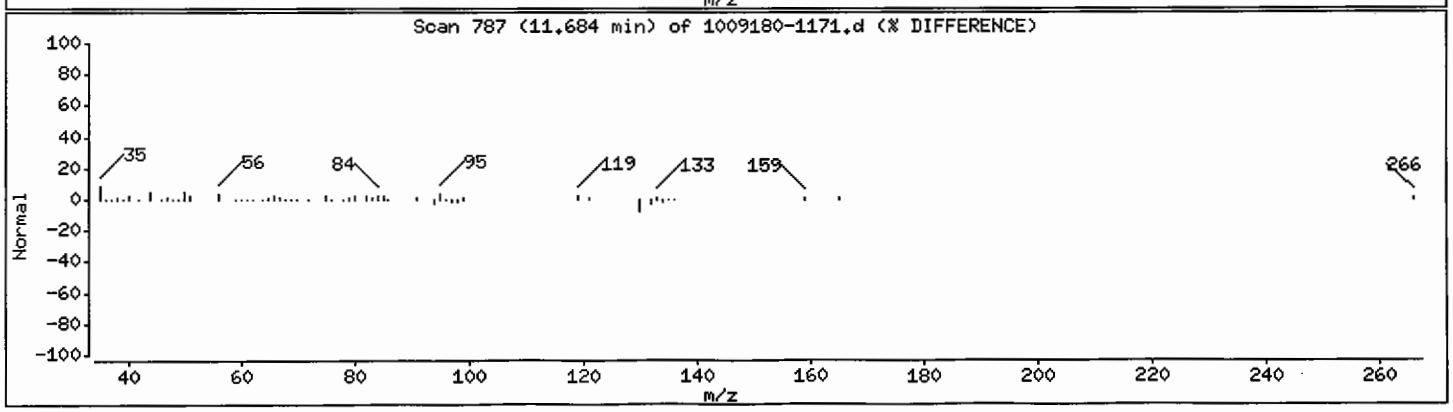
Column phase: SPB-624 | Column diameter: 0.32

49 Trichloroethene | Concentration: 0.44 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d

Date : 20-SEP-2010 21:24

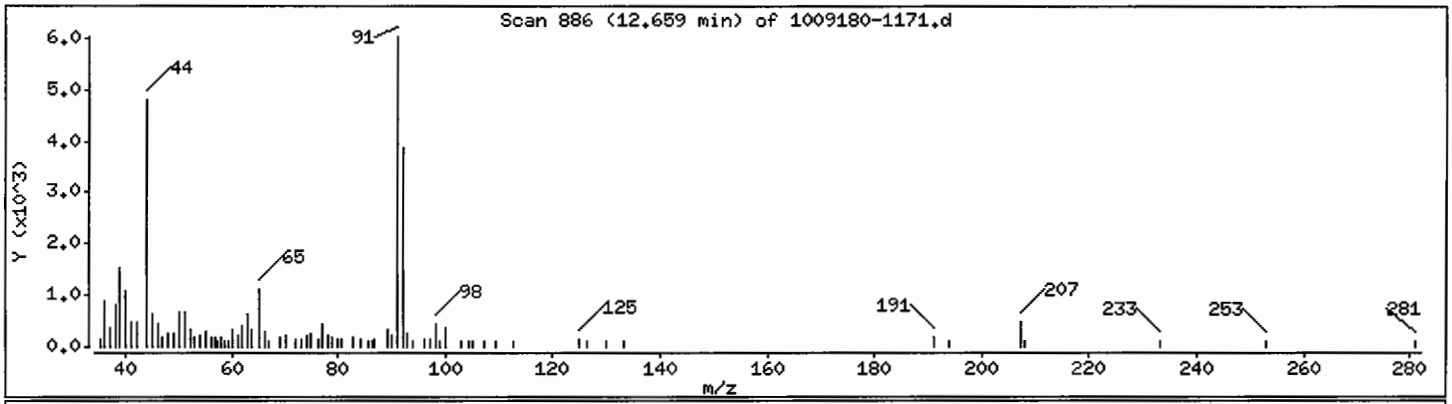
Client ID: MW-2 | Instrument: 5972hp71.i

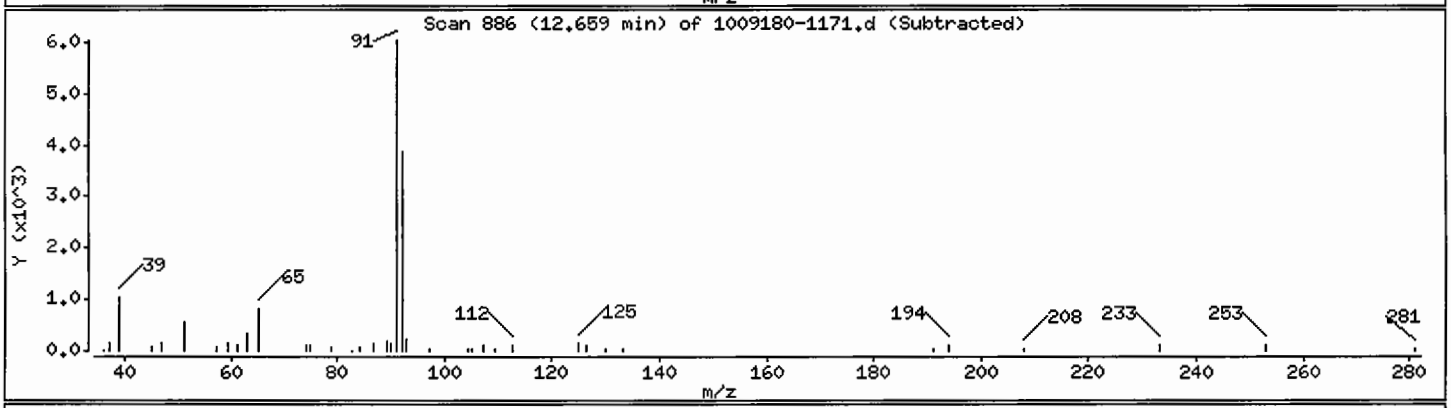
Sample Info: 1009180-11:JAO

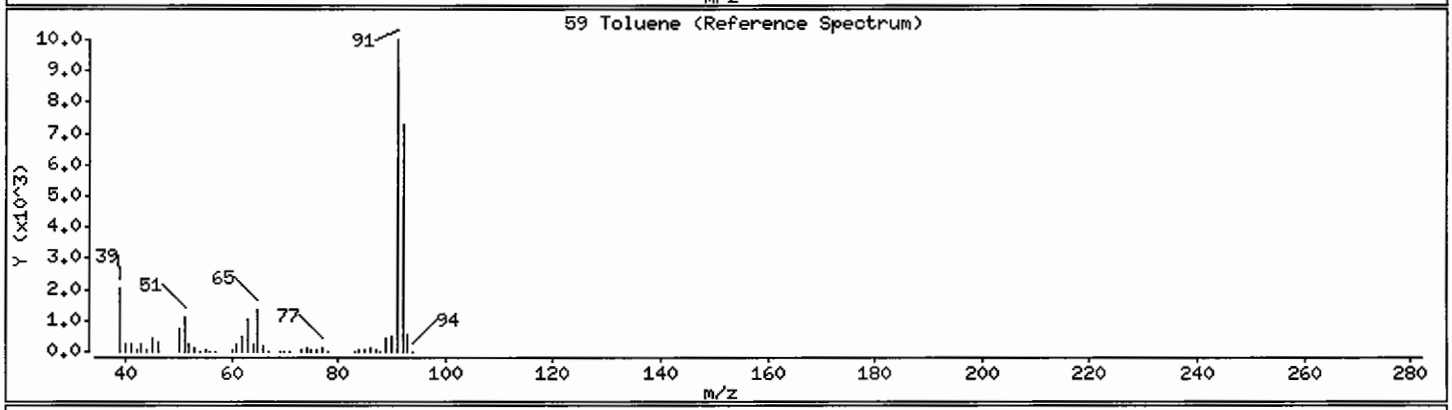
Purge Volume: 25.0 | Operator: JAO

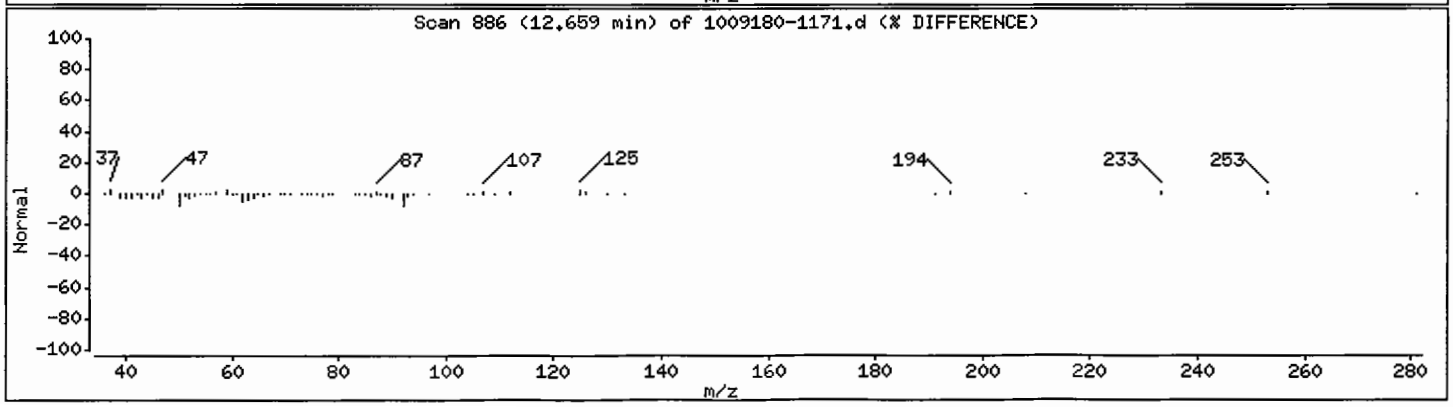
Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.11 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d

Date : 20-SEP-2010 21:24

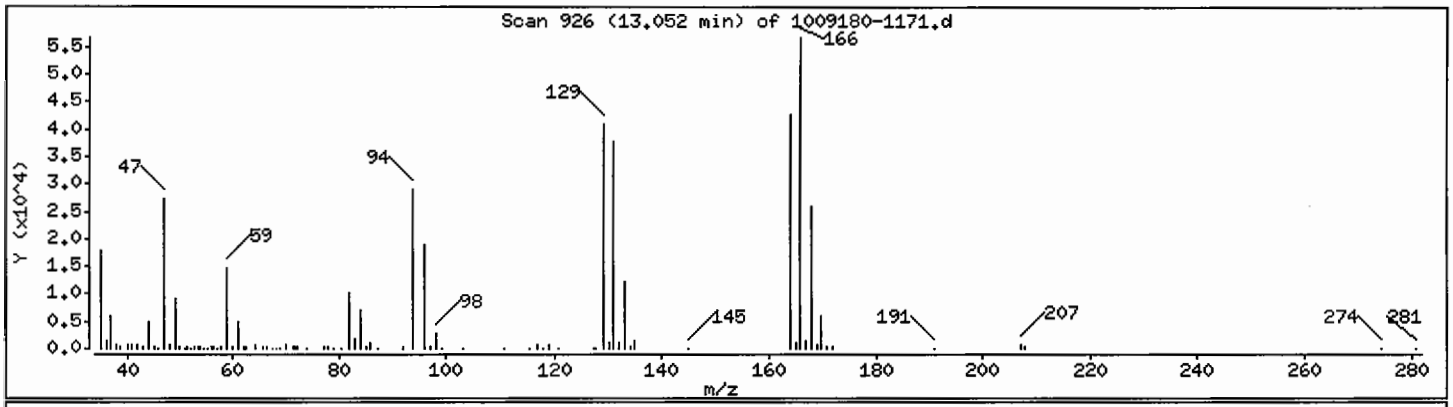
Client ID: MW-2 | Instrument: 5972hp71.i

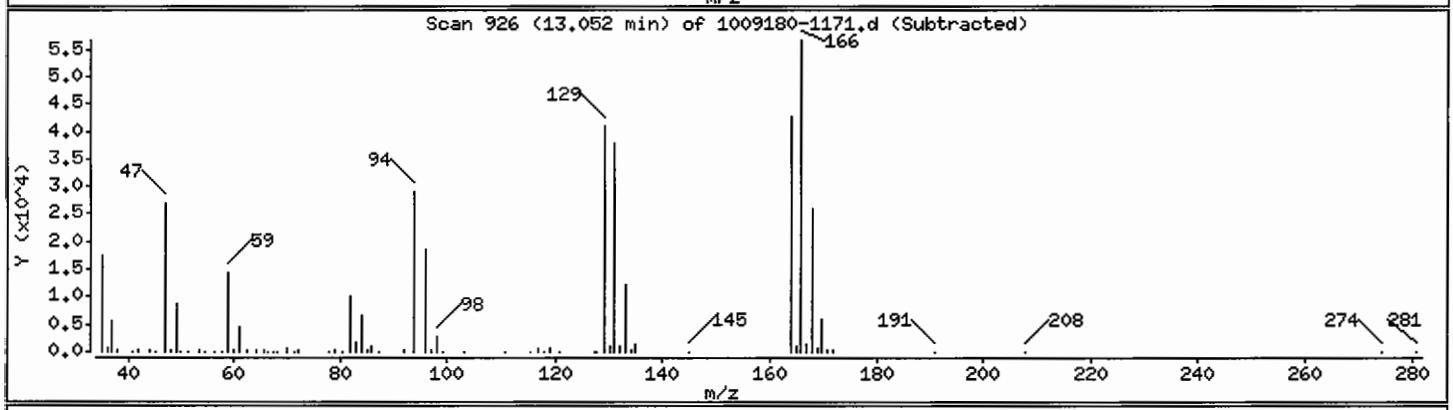
Sample Info: 1009180-11:JAO

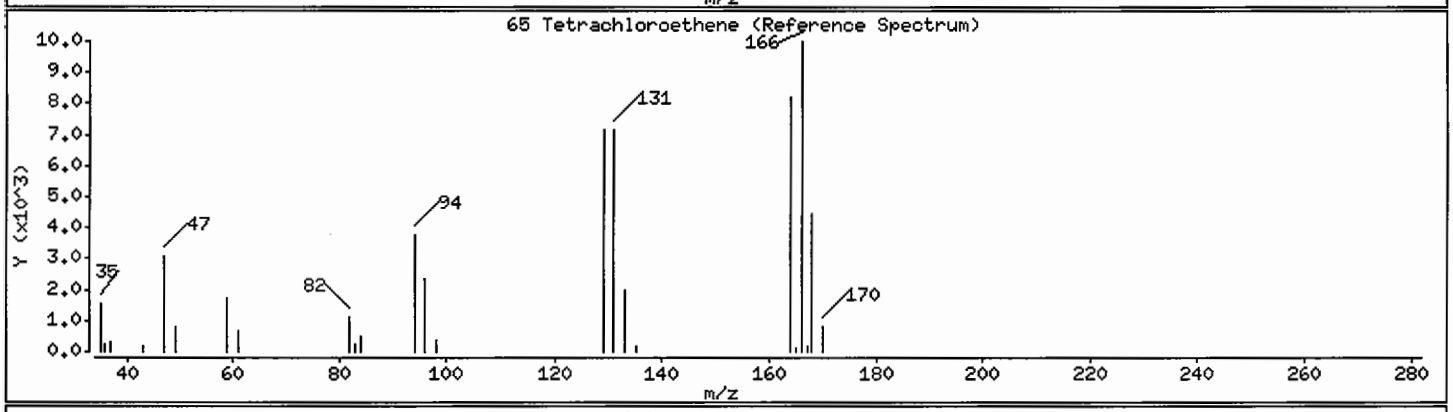
Purge Volume: 25.0 | Operator: JAO

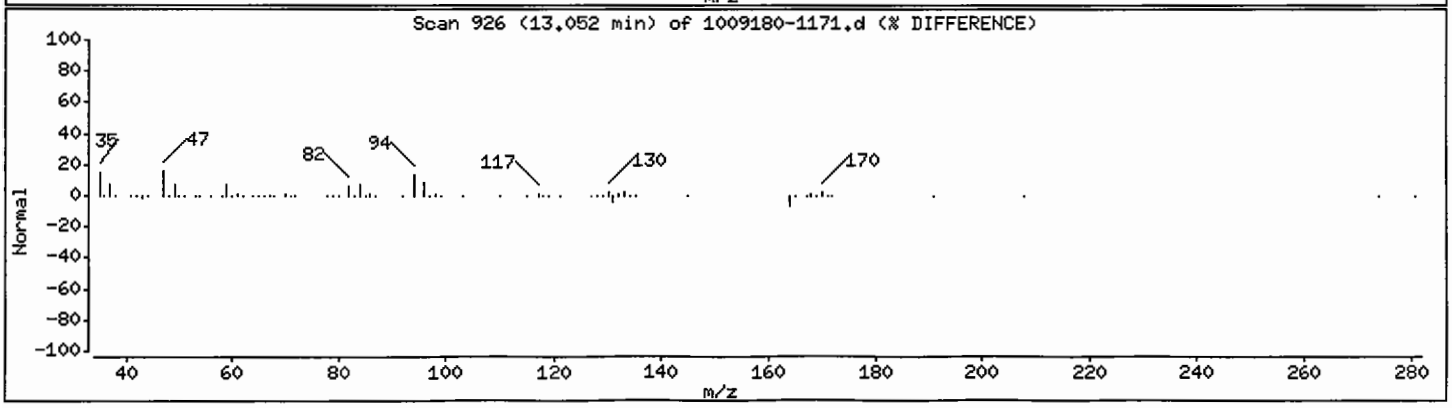
Column phase: SPB-624 | Column diameter: 0.32

65 Tetrachloroethene | Concentration: 3.3 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1171.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-1171.d
Lab Smp Id: 1009180-11 Client Smp ID: MW-2
Inj Date : 20-SEP-2010 21:24
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-11:JAO
Misc Info : MW-2
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-2DL**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-11D71.d | Sampled: 09/13/10 15:40

Initial/Final: 25mL / 25mL | Lab ID: 1009180-11RE1 | Received: 09/16/10 09:32

Dilution: 16.67 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 22:46

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.50 | | 8.3 | U |
| 74-87-3 | Chloromethane | | 1.8 | | 8.3 | U |
| 75-01-4 | Vinyl chloride | | 1.2 | | 8.3 | U |
| 74-83-9 | Bromomethane | | 1.8 | | 8.3 | U |
| 75-00-3 | Chloroethane | | 3.3 | | 8.3 | U |
| 75-69-4 | Trichlorofluoromethane | | 1.0 | | 8.3 | U |
| 107-02-8 | Acrolein | | 17 | | 83 | U |
| 75-35-4 | 1,1-Dichloroethene | 70 | 0.67 | | 8.3 | D |
| 67-64-1 | Acetone | 14 | 7.3 | | 42 | JBD |
| 74-88-4 | Iodomethane | | 0.50 | | 8.3 | U |
| 75-15-0 | Carbon disulfide | | 0.33 | | 8.3 | U |
| 107-05-1 | 3-Chloropropene | | 0.83 | | 8.3 | U |
| 75-05-8 | Acetonitrile | | 0.50 | | 8.3 | U |
| 75-09-2 | Methylene chloride | | 0.33 | | 8.3 | U |
| 107-13-1 | Acrylonitrile | | 6.0 | | 83 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.83 | | 8.3 | U |
| 75-34-3 | 1,1-Dichloroethane | 48 | 0.33 | | 8.3 | D |
| 126-99-8 | Chloroprene | | 0.33 | | 8.3 | U |
| 108-05-4 | Vinyl acetate | | 1.0 | | 17 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.50 | | 8.3 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.50 | | 8.3 | U |
| 107-12-0 | Propionitrile | | 23 | | 420 | U |
| 78-93-3 | 2-Butanone | | 4.7 | | 42 | U |
| 126-98-7 | Methacrylonitrile | | 6.5 | | 83 | U |
| 74-97-5 | Bromochloromethane | | 0.67 | | 8.3 | U |
| 67-66-3 | Chloroform | | 0.50 | | 8.3 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 330 | 0.33 | | 8.3 | D |
| 563-58-6 | 1,1-Dichloropropene | | 0.50 | | 8.3 | U |
| 56-23-5 | Carbon tetrachloride | | 0.50 | | 8.3 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.50 | | 8.3 | U |
| 78-83-1 | Isobutyl alcohol | | 98 | | 420 | U |
| 71-43-2 | Benzene | | 0.50 | | 8.3 | U |
| 79-01-6 | Trichloroethene | | 0.50 | | 8.3 | U |
| 78-87-5 | 1,2-Dichloropropane | | 2.0 | | 8.3 | U |
| 74-95-3 | Dibromomethane | | 0.50 | | 8.3 | U |
| 80-62-6 | Methyl Methacrylate | | 9.3 | | 83 | U |
| 75-27-4 | Bromodichloromethane | | 0.50 | | 8.3 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.67 | | 8.3 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 7.0 | | 42 | U |

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-2DL**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-11D71.d | Sampled: 09/13/10 15:40

Initial/Final: 25mL / 25mL | Lab ID: 1009180-11RE1 | Received: 09/16/10 09:32

Dilution: 16.67 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 22:46

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 1.2 | 0.50 | | 8.3 | JBD |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.83 | | 8.3 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.67 | | 8.3 | U |
| 97-63-2 | Ethyl Methacrylate | | 6.8 | | 83 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.50 | | 8.3 | U |
| 127-18-4 | Tetrachloroethene | 4.2 | 1.0 | | 8.3 | JD |
| 591-78-6 | 2-Hexanone | | 8.5 | | 42 | U |
| 124-48-1 | Dibromochloromethane | | 0.67 | | 8.3 | U |
| 108-90-7 | Chlorobenzene | | 0.33 | | 8.3 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.33 | | 8.3 | U |
| 100-41-4 | Ethylbenzene | | 0.67 | | 8.3 | U |
| 179601-23-1 | m,p-Xylene | | 1.3 | | 17 | U |
| 95-47-6 | o-Xylene | | 0.50 | | 8.3 | U |
| 100-42-5 | Styrene | | 0.33 | | 8.3 | U |
| 75-25-2 | Bromoform | | 0.50 | | 8.3 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.83 | | 8.3 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 1.5 | | 8.3 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 5.5 | | 33 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.67 | | 8.3 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.50 | | 8.3 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.50 | | 8.3 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 1.0 | | 8.3 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.50 | | 8.3 | U |
| 91-20-3 | Naphthalene | | 2.5 | | 8.3 | U |
| 1330-20-7 | Xylenes (total) | | 0.50 | | 8.3 | U |

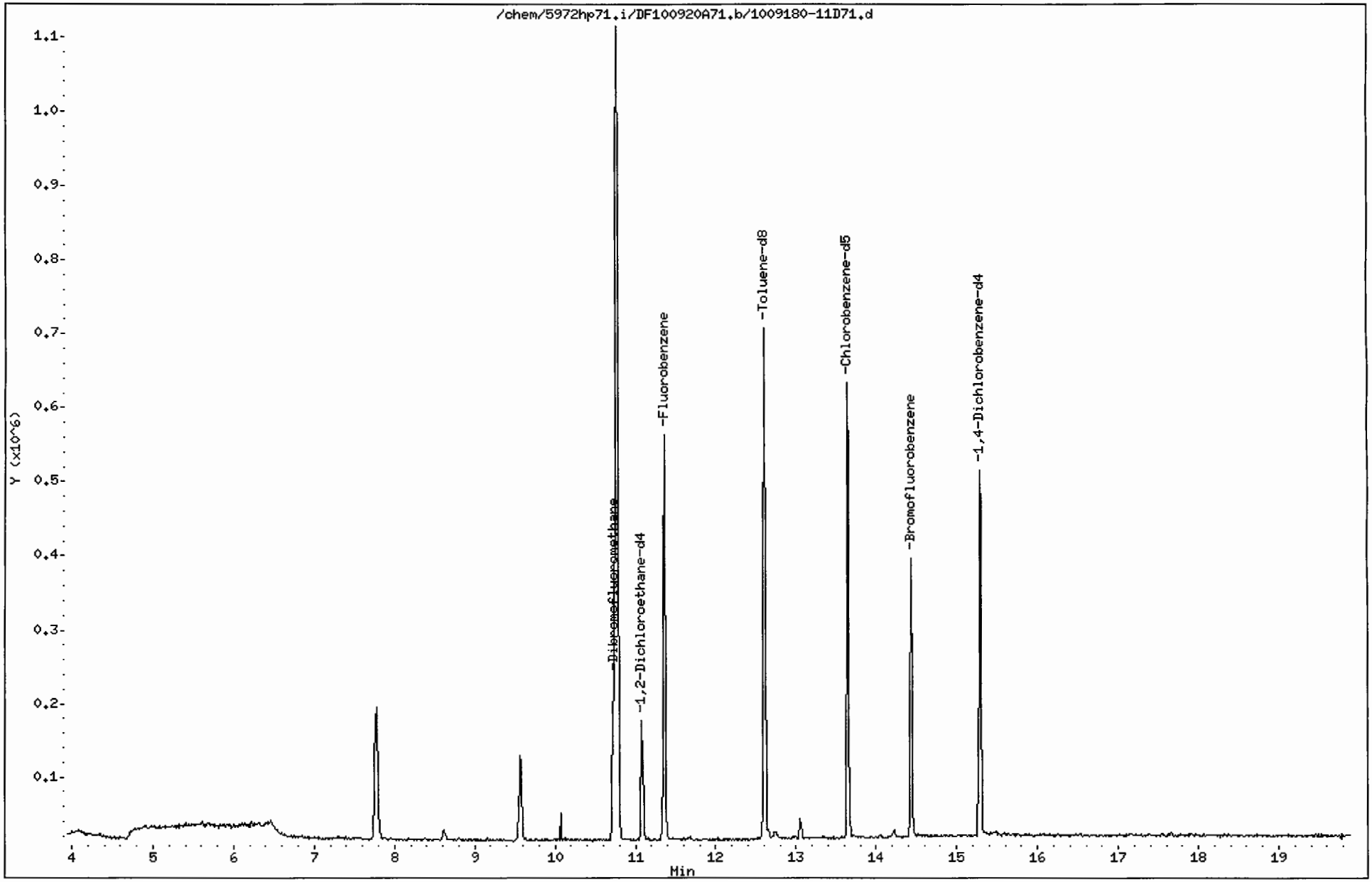
| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 5.012 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 5.008 | 100 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.756 | 95 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.711 | 94 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d
Date : 20-SEP-2010 22:46
Client ID: MW-2DL
Sample Info: 1009180-11RE1:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d
Lab Smp Id: 1009180-11RE1 Client Smp ID: MW-2DL
Inj Date : 20-SEP-2010 22:46
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-11RE1:JAO
Misc Info : MW-2DL
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 32
Dil Factor: 16.67000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 16.67000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 16.67000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.359 | 11.362 | (1.000) | 421706 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.643 | 13.646 | (1.000) | 282933 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.286 | 15.289 | (1.000) | 128782 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.730 | 10.733 | (0.945) | 114614 | 125.305 | 84 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.084 | 11.087 | (0.976) | 92570 | 125.193 | 83 |
| $ 6 Toluene-d8 | 98 | 12.609 | 12.602 | (0.924) | 400569 | 118.893 | 79 |
| $ 7 Bromofluorobenzene | 95 | 14.440 | 14.433 | (0.945) | 126582 | 117.774 | 79 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | Compound Not Detected. | | | | | |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | 7.777 | 7.780 | (0.685) | 87667 | 105.189 | 70 |
| 18 Acetone | 43 | 7.866 | 7.869 | (0.692) | 2744 | 20.8606 | 14(a) |
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |

MJH 9.21.10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 9.568 | 9.571 | (0.842) | 127326 | 71.9297 | 48 |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | 10.769 | 10.772 | (0.948) | 685328 | 498.164 | 330 |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 49 Trichloroethene | 130 | Compound Not Detected. | | | | | |
| 51 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.649 | 12.652 | (0.927) | 4600 | 1.84737 | 1.2(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | 13.052 | 13.055 | (0.957) | 5064 | 6.29881 | 4.2(a) |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d

Date : 20-SEP-2010 22:46

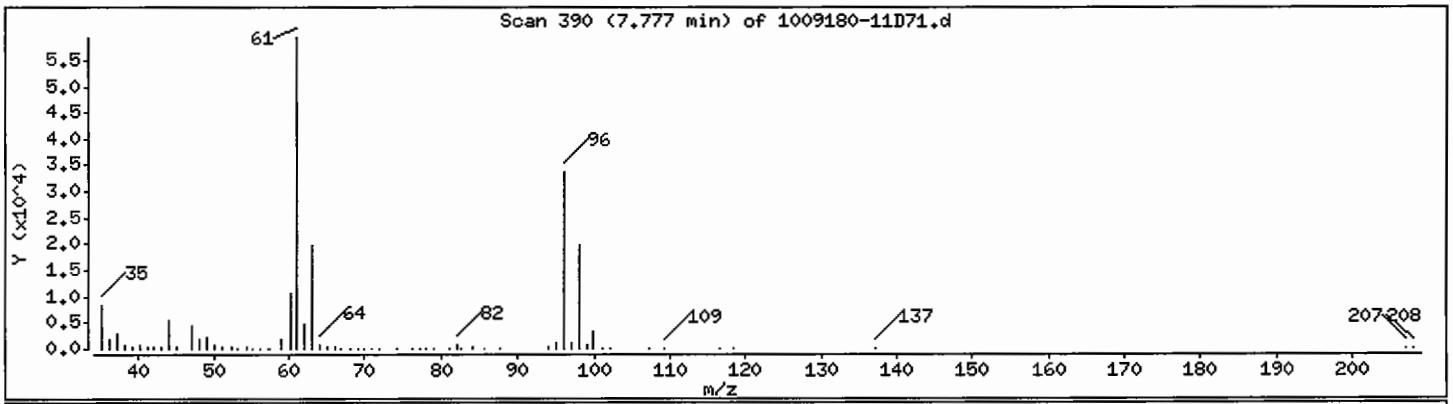
Client ID: MW-2DL | Instrument: 5972hp71.i

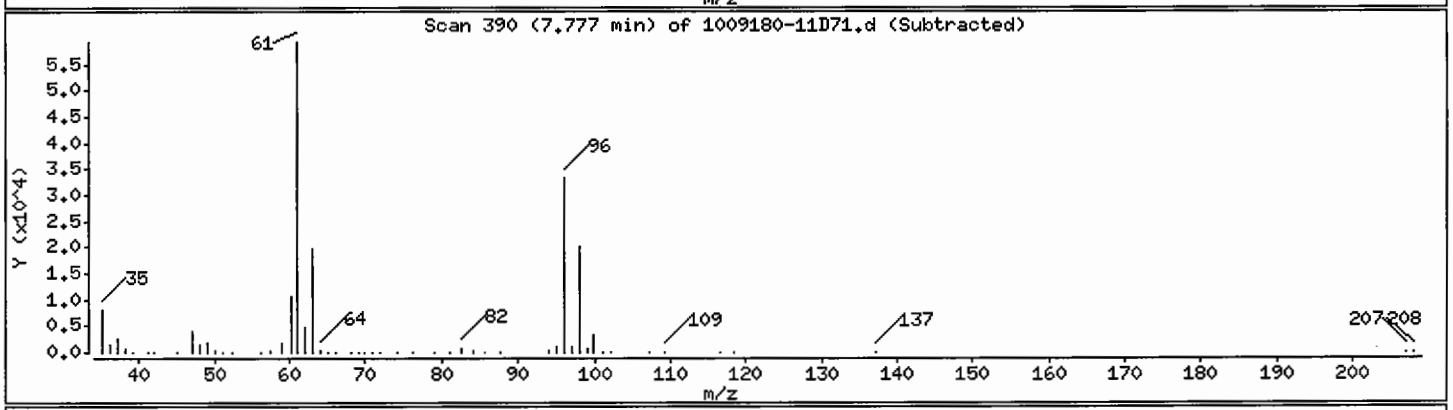
Sample Info: 1009180-11RE1:JAO

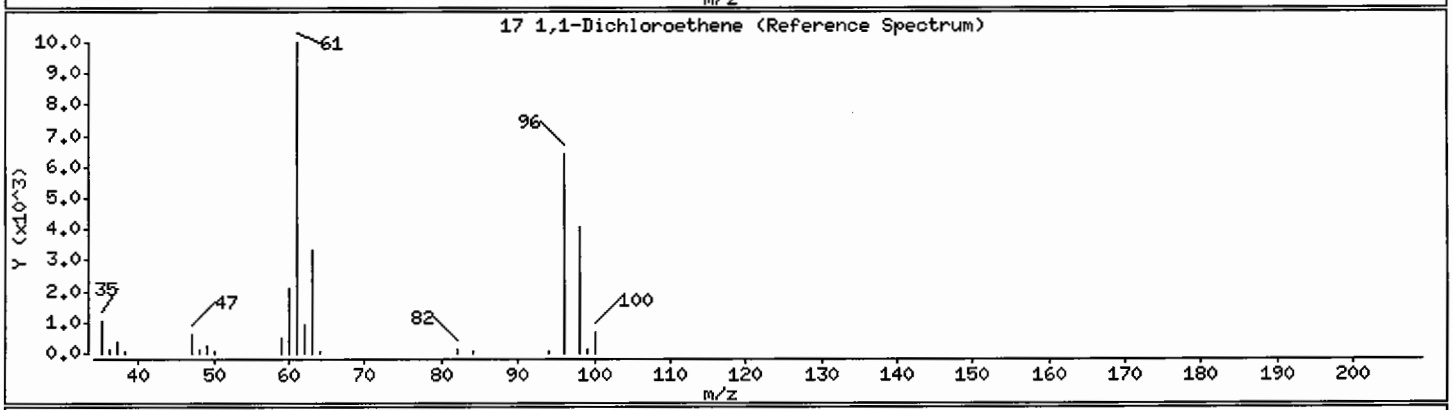
Purge Volume: 25.0 | Operator: JAO

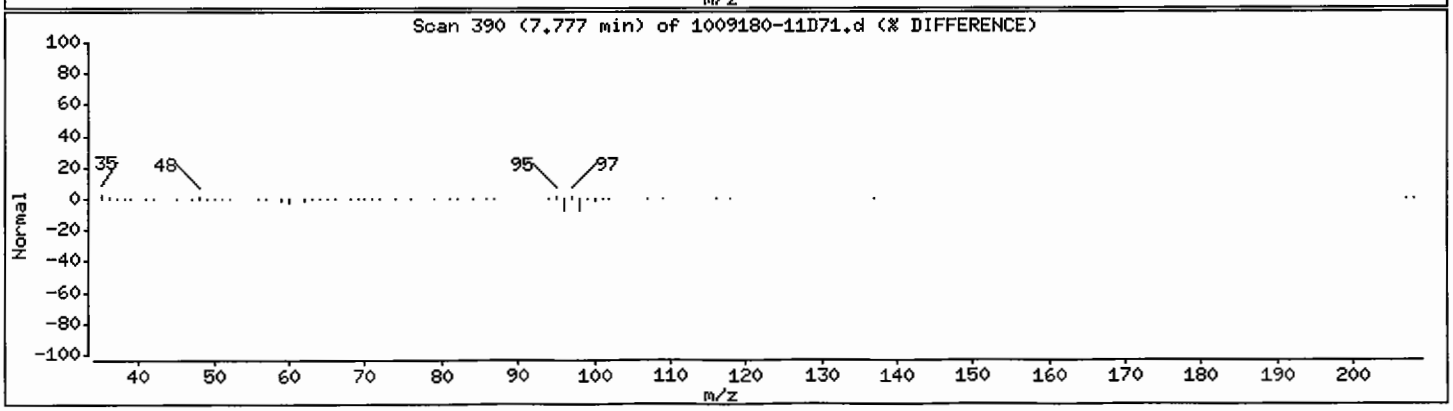
Column phase: SPB-624 | Column diameter: 0.32

17 1,1-Dichloroethene | Concentration: 70 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d

Date : 20-SEP-2010 22:46

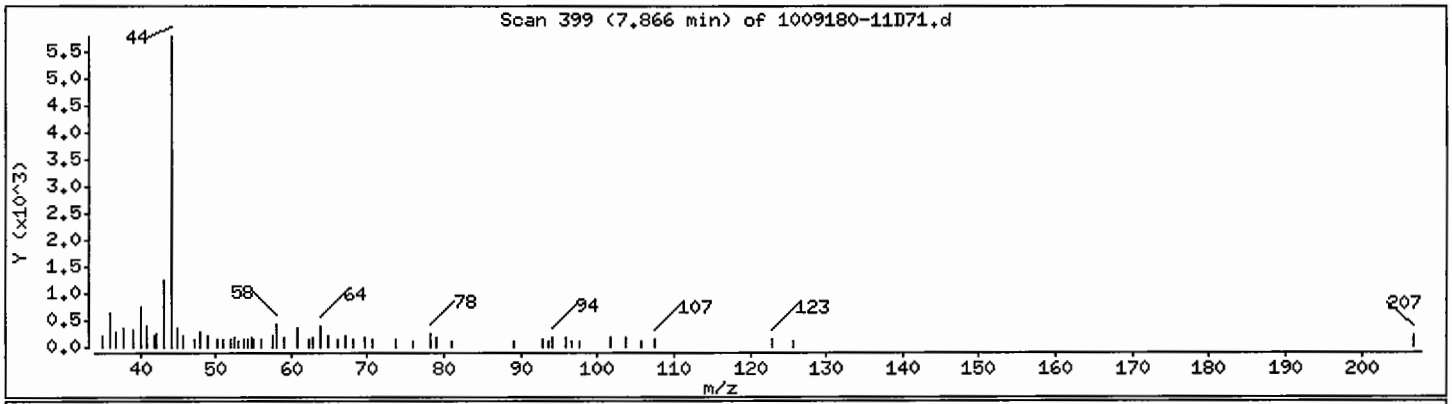
Client ID: MW-2DL | Instrument: 5972hp71.i

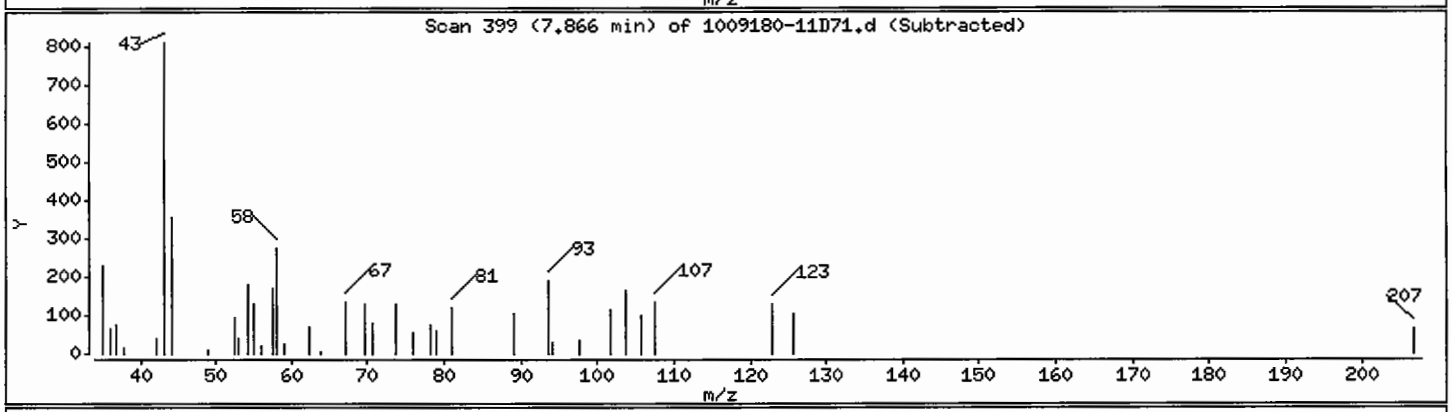
Sample Info: 1009180-11RE1:JAO

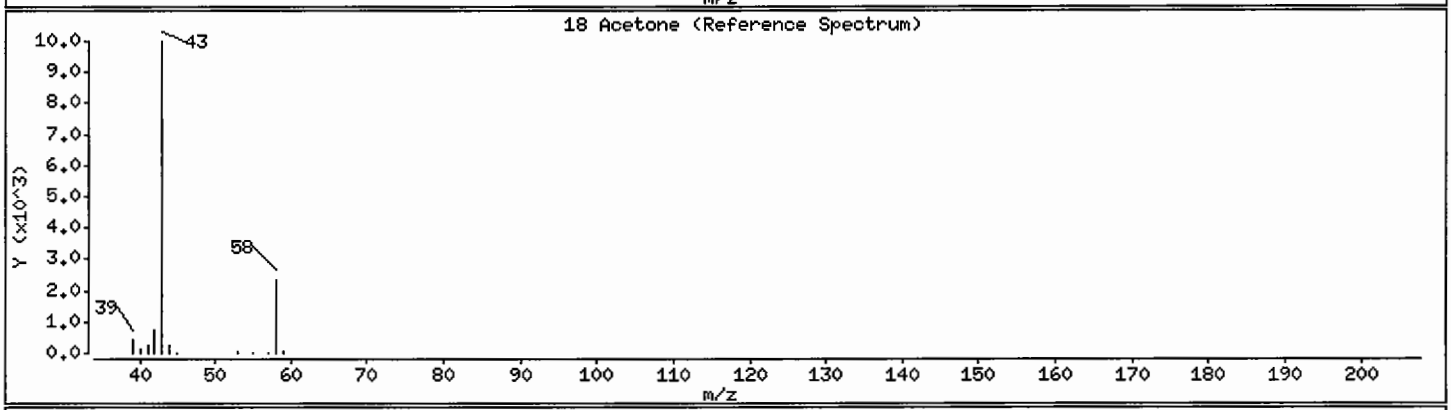
Purge Volume: 25.0 | Operator: JAO

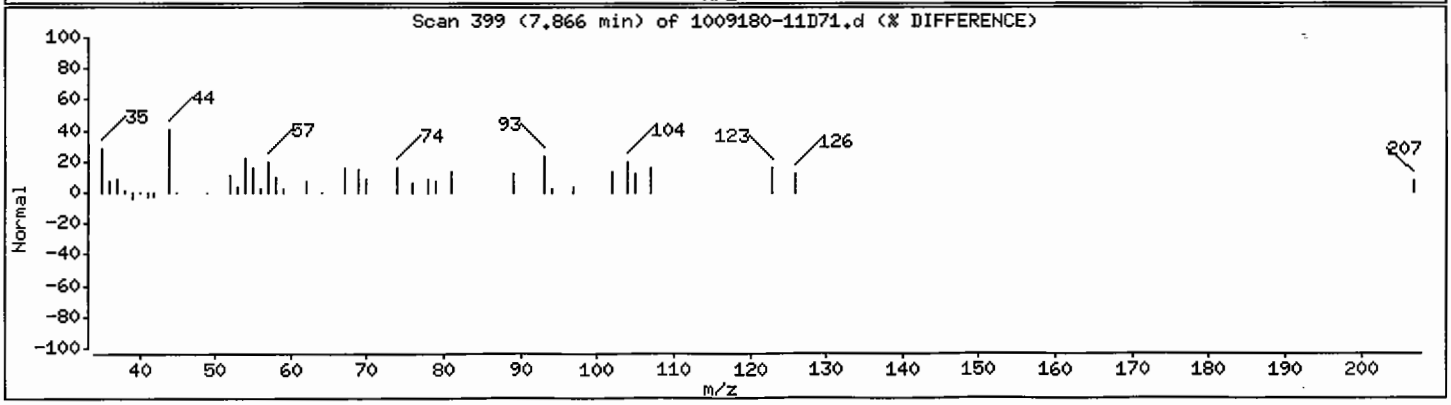
Column phase: SPB-624 | Column diameter: 0.32

18 Acetone | Concentration: 14 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d

Date : 20-SEP-2010 22:46

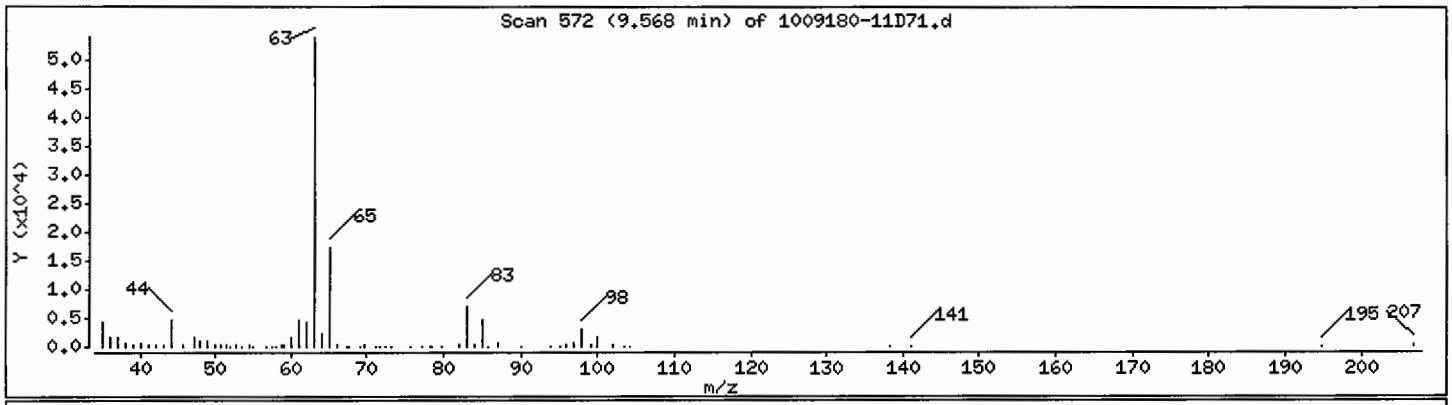
Client ID: MW-2DL | Instrument: 5972hp71.i

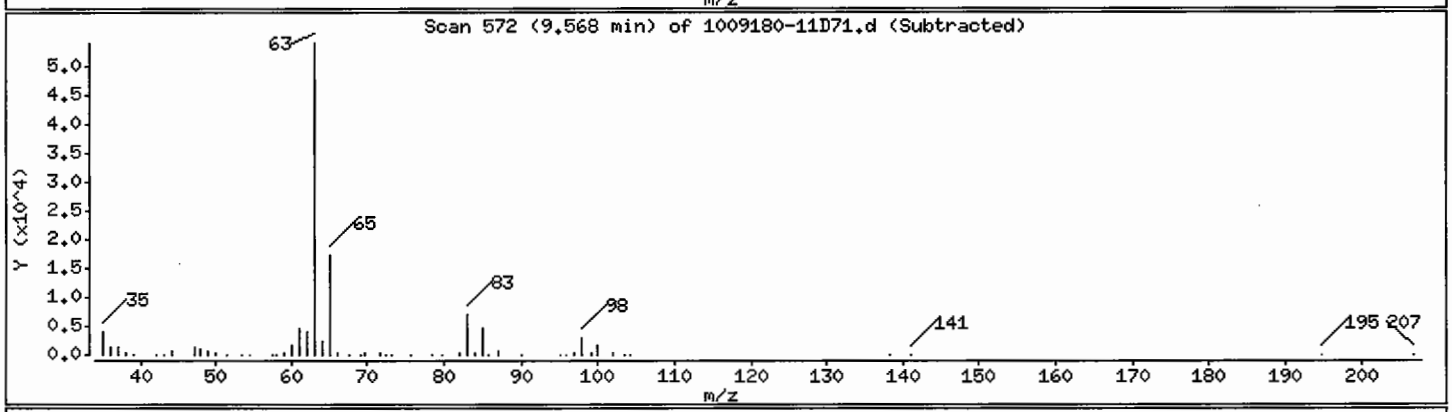
Sample Info: 1009180-11RE1:JAO

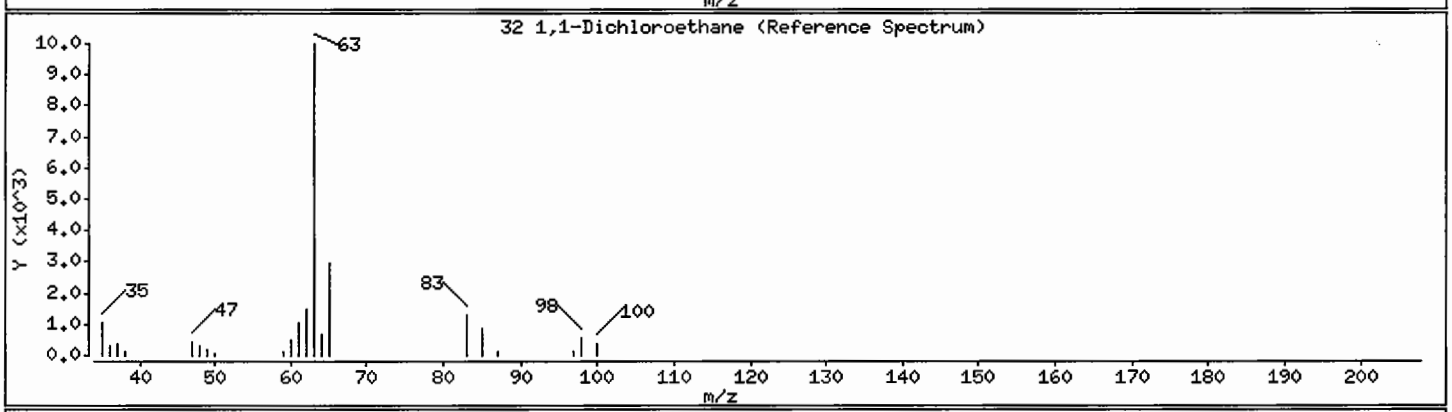
Purge Volume: 25.0 | Operator: JAO

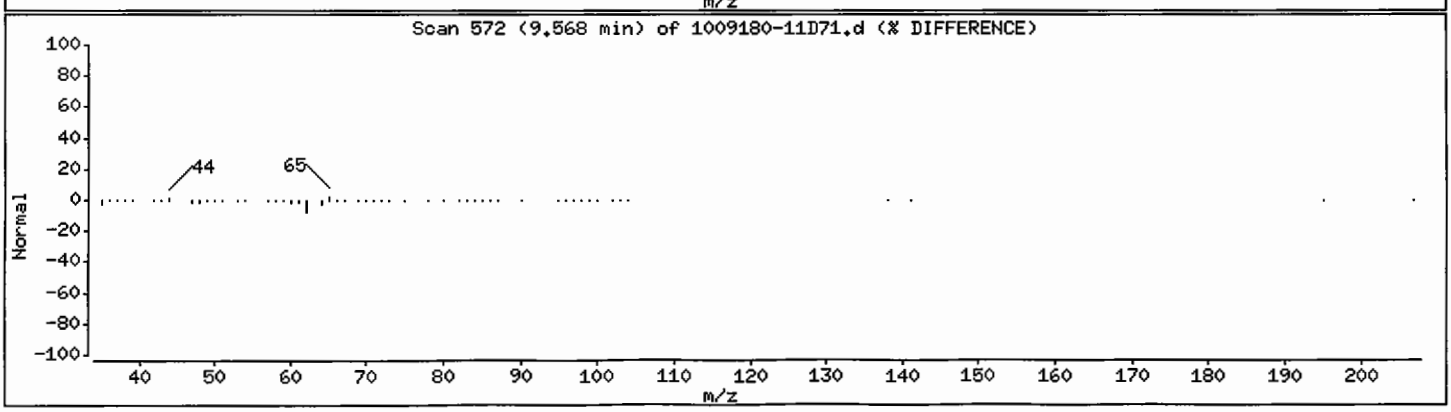
Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 48 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d

Date : 20-SEP-2010 22:46

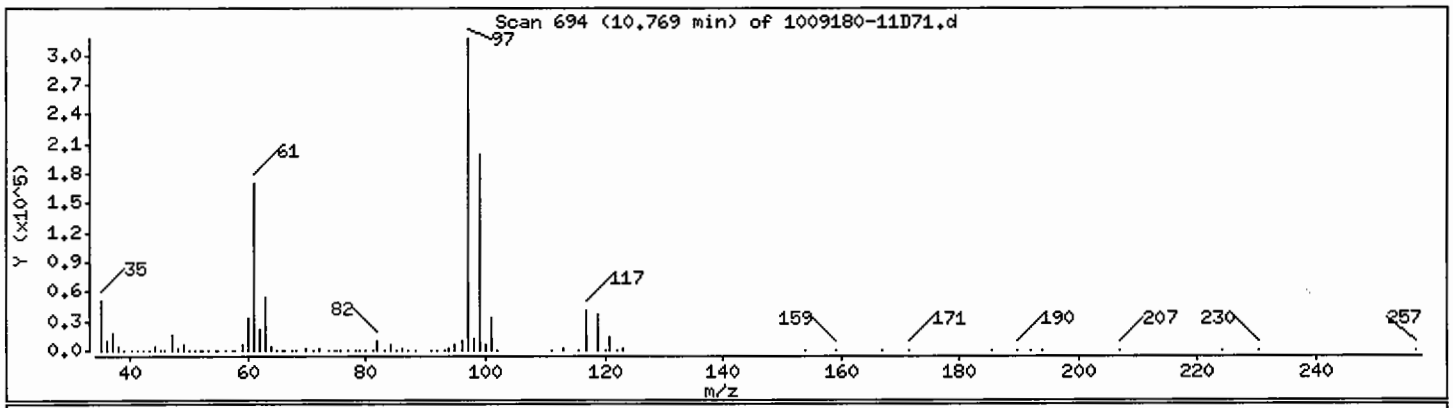
Client ID: MW-2DL | Instrument: 5972hp71.i

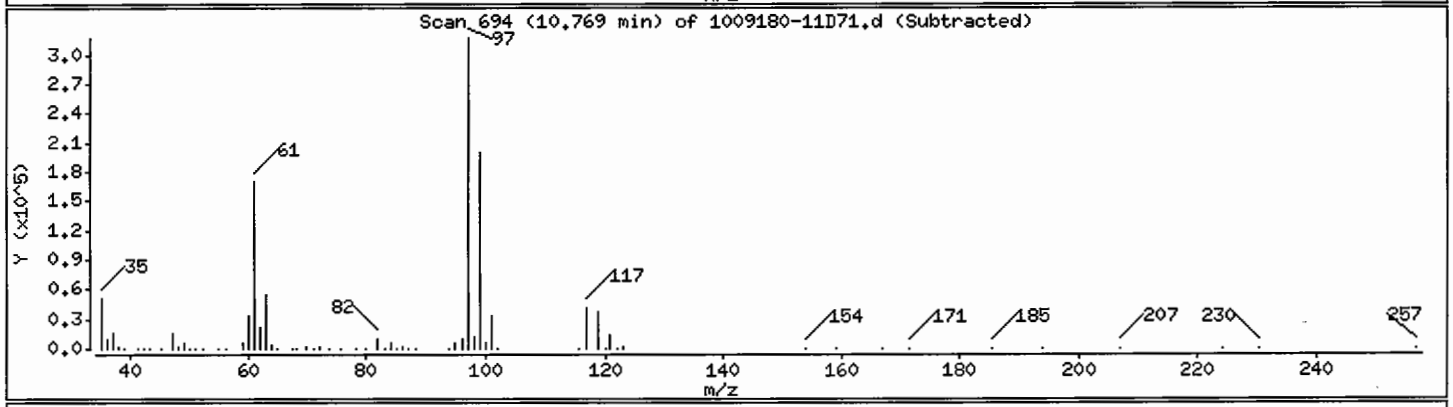
Sample Info: 1009180-11RE1:JAO

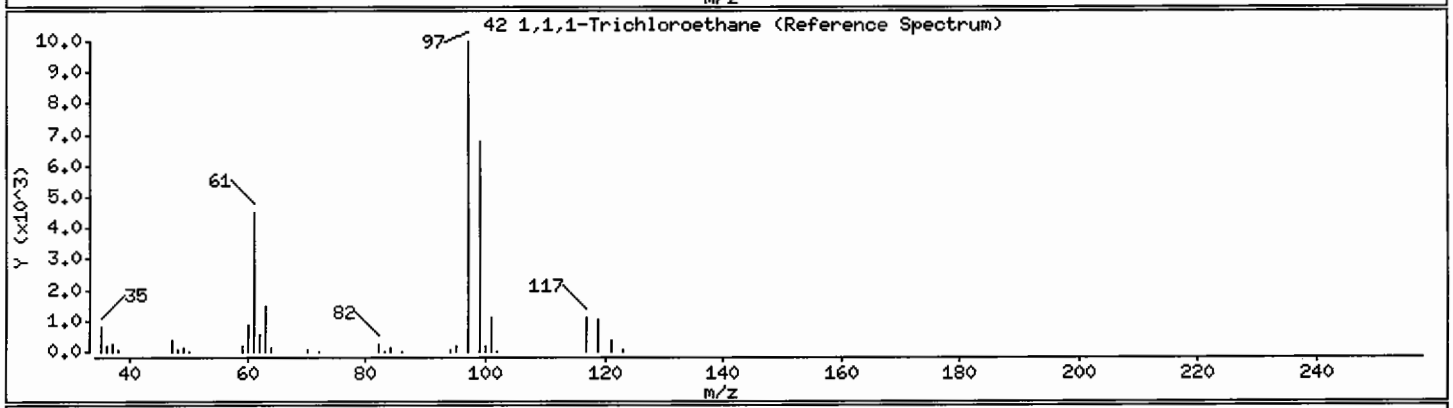
Purge Volume: 25.0 | Operator: JAO

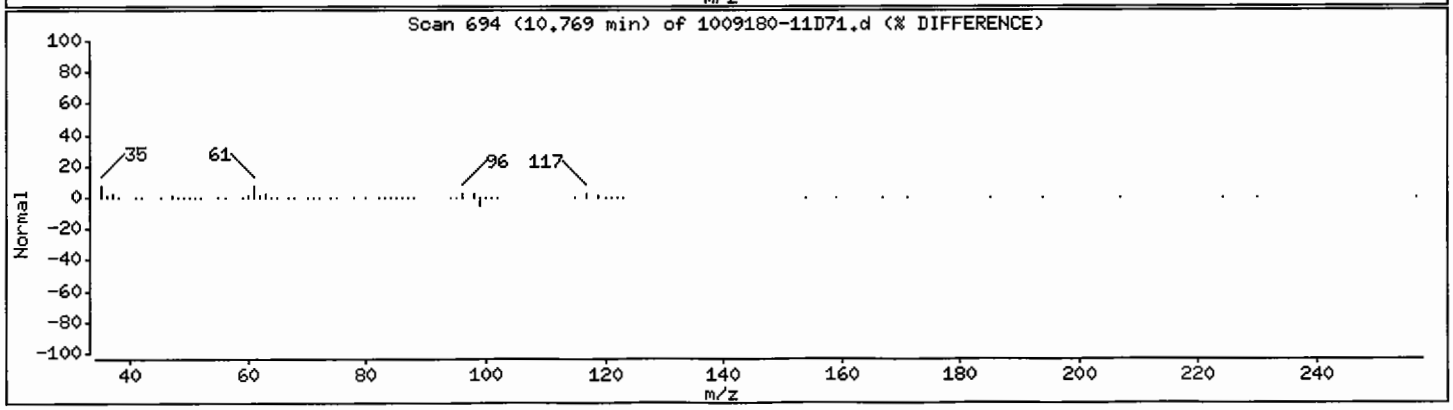
Column phase: SPB-624 | Column diameter: 0.32

42 1,1,1-Trichloroethane | Concentration: 330 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d

Date : 20-SEP-2010 22:46

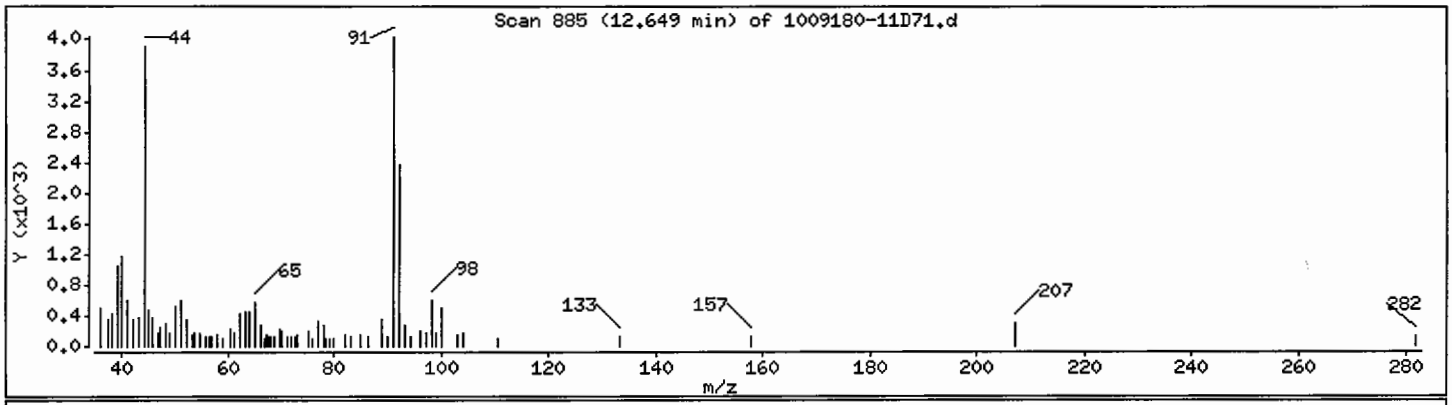
Client ID: MW-2DL | Instrument: 5972hp71.i

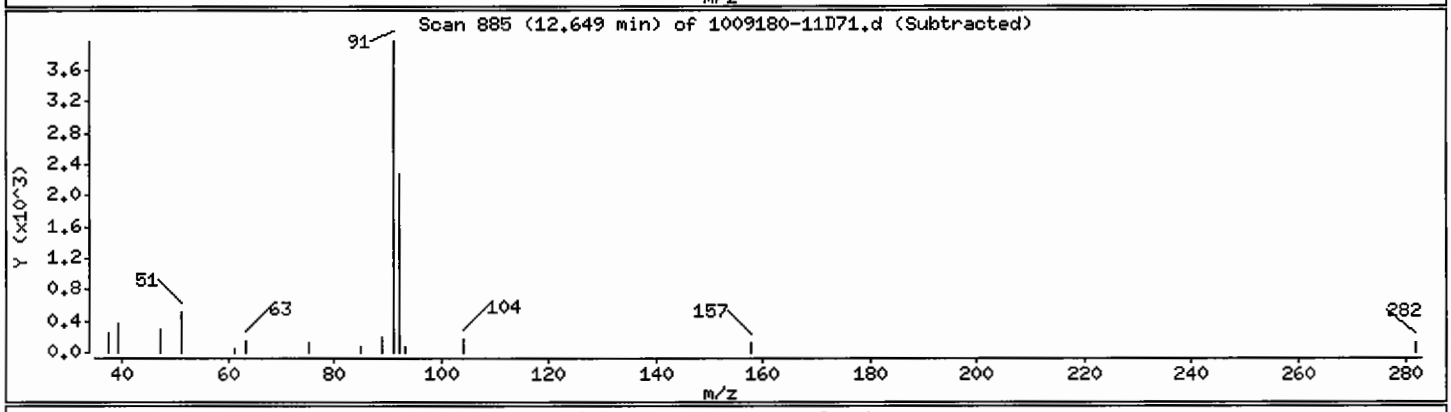
Sample Info: 1009180-11RE1:JAO

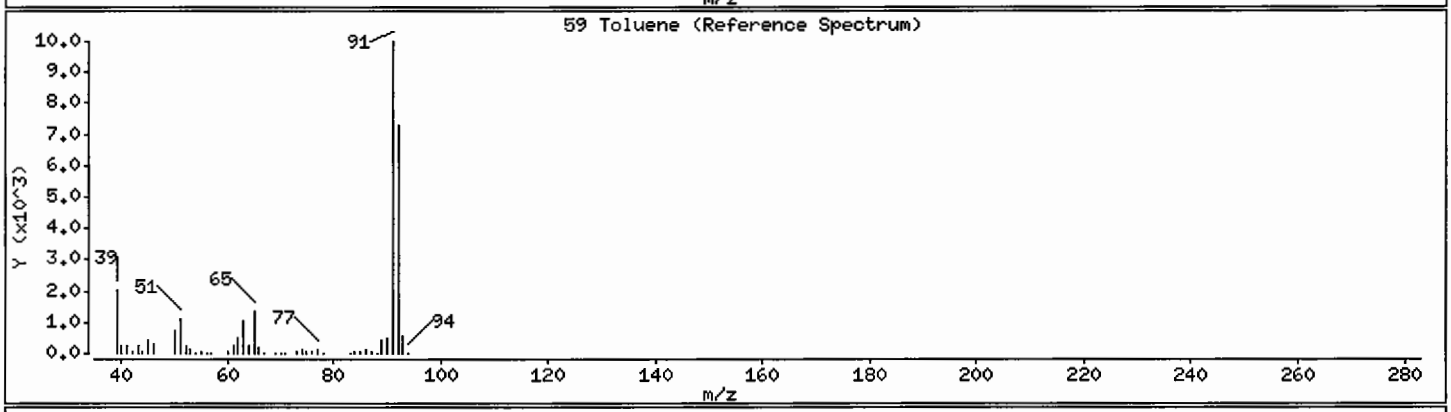
Purge Volume: 25.0 | Operator: JAO

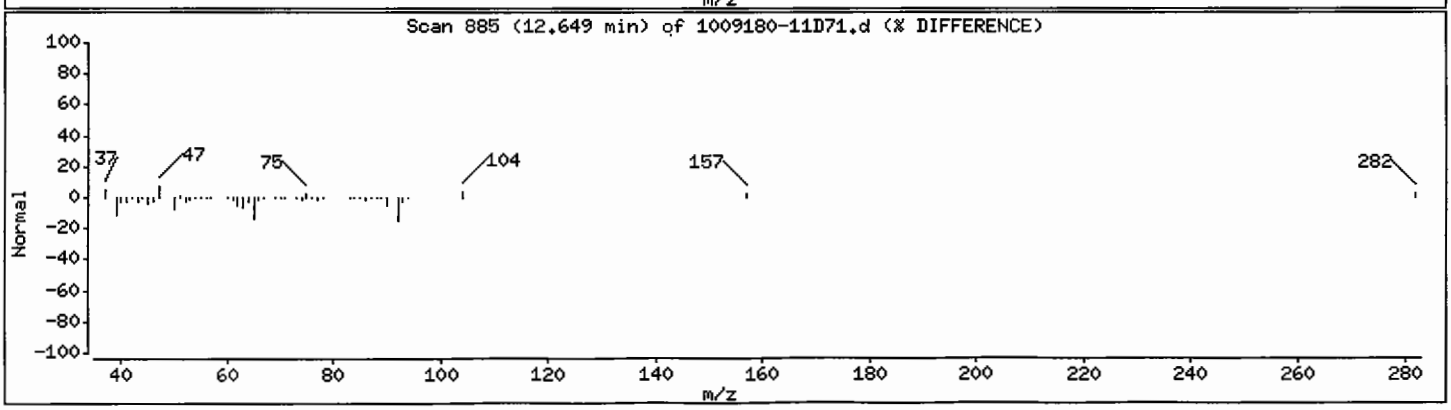
Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 1.2 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d

Date : 20-SEP-2010 22:46

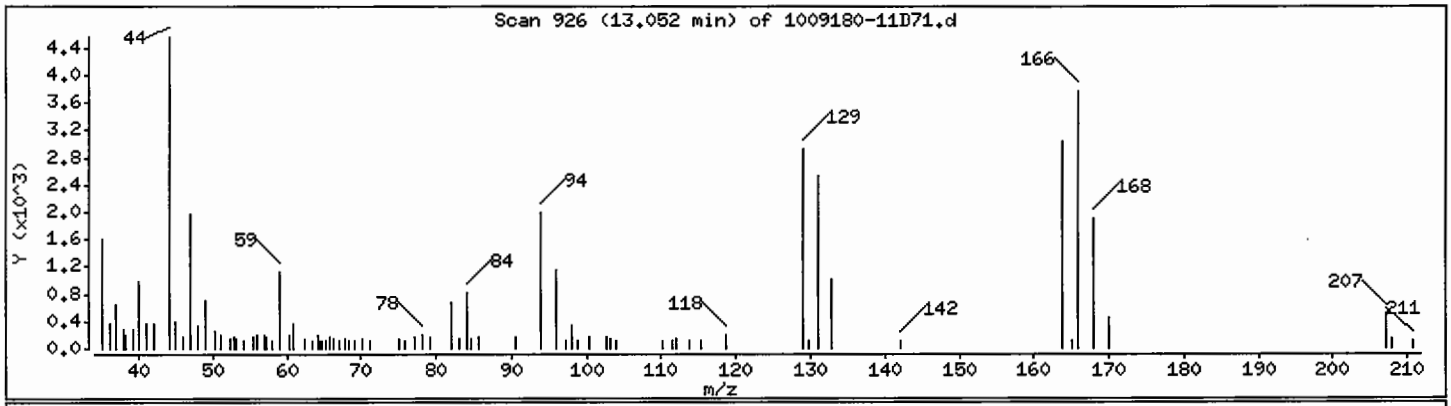
Client ID: MW-2DL | Instrument: 5972hp71.i

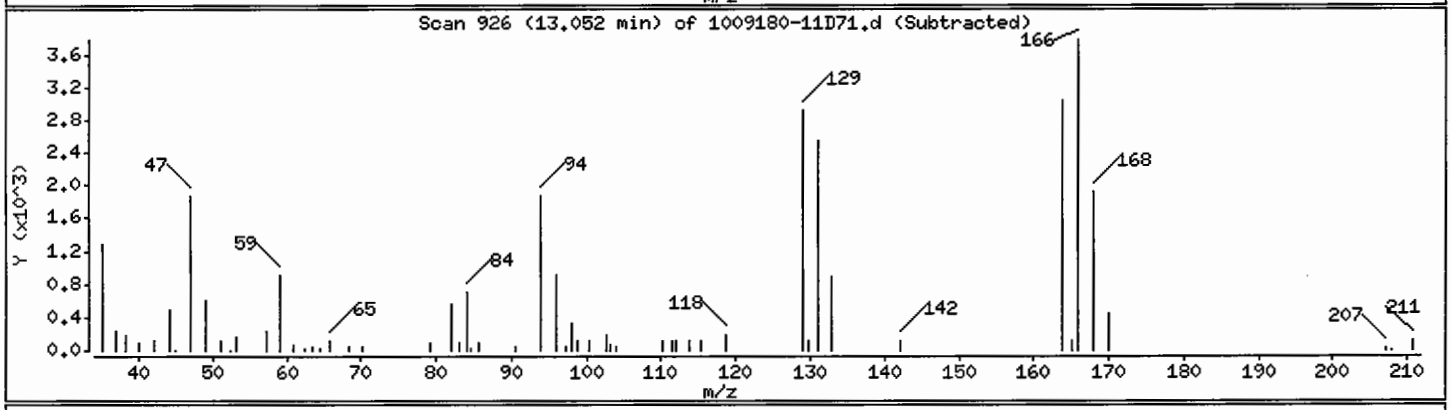
Sample Info: 1009180-11RE1:JAO

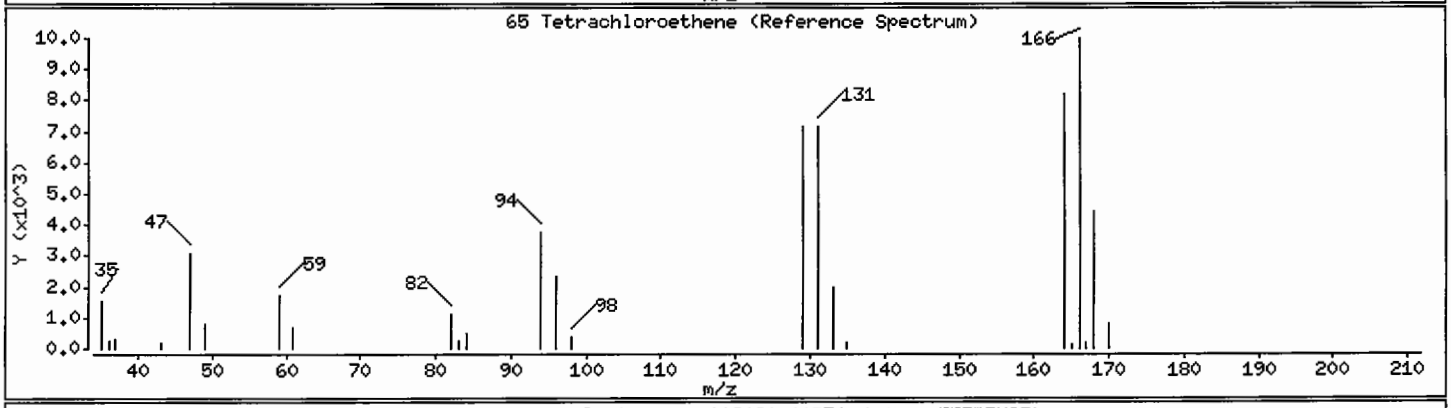
Purge Volume: 25.0 | Operator: JAO

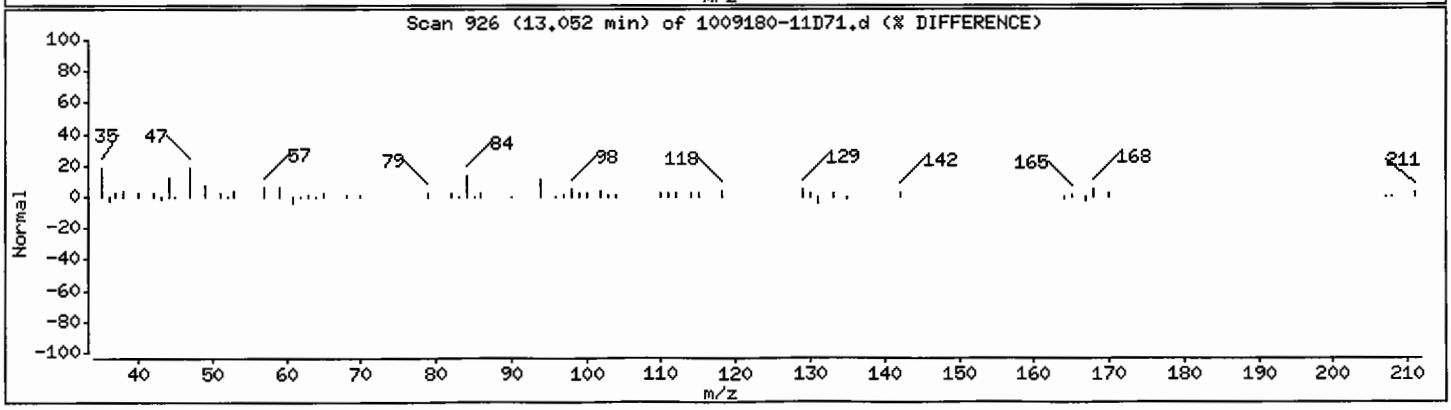
Column phase: SPB-624 | Column diameter: 0.32

65 Tetrachloroethene | Concentration: 4.2 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-11D71.d
Lab Smp Id: 1009180-11RE1 Client Smp ID: MW-2DL
Inj Date : 20-SEP-2010 22:46
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-11RE1:JAO
Misc Info : MW-2DL
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 32
Dil Factor: 16.67000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-3**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0171.d | Sampled: 09/14/10 14:15

Initial/Final: 25mL / 25mL | Lab ID: 1009180-01 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 15:45

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U J |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U J |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | 5.1 | 0.20 | | 0.50 | J |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | | 0.44 | | 2.5 | U |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.35 | 0.050 | | 0.50 | J |
| 75-34-3 | 1,1-Dichloroethane | 10 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 25 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | 0.18 | 0.030 | | 0.50 | J |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | 2.8 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 0.37 | 0.12 | | 0.50 | J |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-3**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0171.d | Sampled: 09/14/10 14:15

Initial/Final: 25mL / 25mL | Lab ID: 1009180-01 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 15:45

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.12 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | | 0.060 | | 0.50 | U |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.989 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.972 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.848 | 97 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.764 | 95 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Unknown 4.230 | 0.93 | 272690 | 4.23 | 0 | J |

Environmental Testing Laboratories

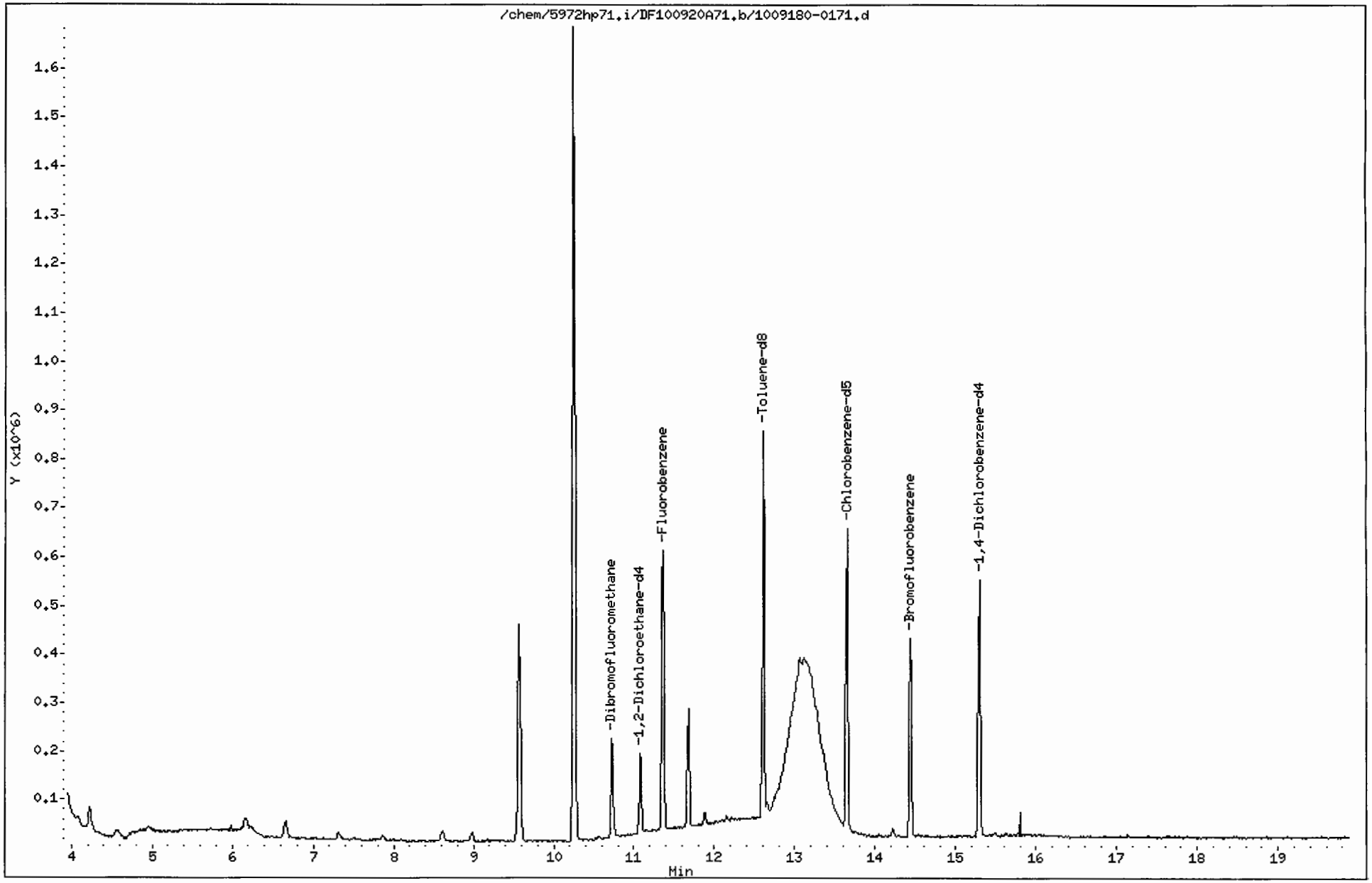
CompuChem

A Division Of

Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d
Date : 20-SEP-2010 15:45
Client ID: MW-3
Sample Info: 1009180-01:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d
Report Date: 21-Sep-2010 14:34

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0171.d
Lab Smp Id: 1009180-01 Client Smp ID: MW-3
Inj Date : 20-SEP-2010 15:45
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-01:JAO
Misc Info : MW-3
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.365 | 11.362 | (1.000) | 454973 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.648 | 13.646 | (1.000) | 283115 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.291 | 15.289 | (1.000) | 133106 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.725 | 10.733 | (0.944) | 123075 | 124.716 | 5.0 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.079 | 11.087 | (0.975) | 99154 | 124.292 | 5.0 |
| $ 6 Toluene-d8 | 98 | 12.605 | 12.602 | (0.924) | 408624 | 121.205 | 4.8 |
| $ 7 Bromofluorobenzene | 95 | 14.435 | 14.433 | (0.944) | 132295 | 119.091 | 4.8 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | Compound Not Detected. | | | | | |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | 6.178 | 6.176 | (0.544) | 33880 | 128.401 | 5.1 |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 18 Acetone | 43 | Compound Not Detected. | | | | | |

MK 9-21-10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d
Report Date: 21-Sep-2010 14:34

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | 8.983 | 8.981 | (0.790) | 8771 | 8.70574 | 0.35(a) |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 9.573 | 9.571 | (0.842) | 497847 | 260.682 | 10 |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | 10.253 | 10.250 | (0.902) | 660801 | 625.078 | 25 |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | 11.158 | 11.156 | (0.982) | 4424 | 4.60366 | 0.18(a) |
| 49 Trichloroethene | 130 | 11.680 | 11.677 | (1.028) | 64239 | 69.5439 | 2.8 |
| 51 1,2-Dichloropropane | 63 | 11.876 | 11.884 | (1.045) | 9102 | 9.34371 | 0.37(a) |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.654 | 12.652 | (0.927) | 7348 | 2.94908 | 0.12(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d
Report Date: 21-Sep-2010 14:34

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d

Date : 20-SEP-2010 15:45

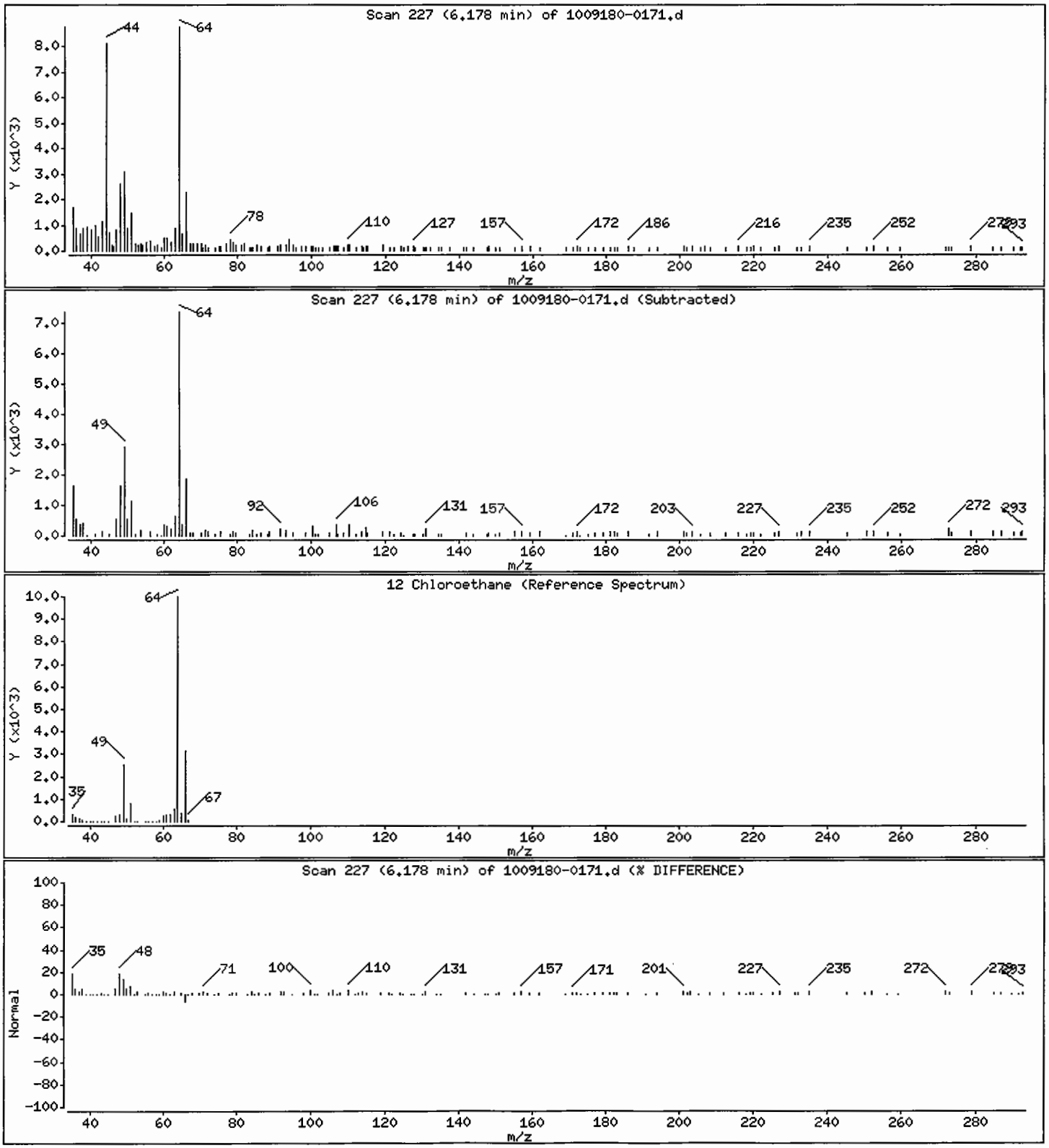
Client ID: MW-3 | Instrument: 5972hp71.i

Sample Info: 1009180-01:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

12 Chloroethane | Concentration: 5.1 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d

Date : 20-SEP-2010 15:45

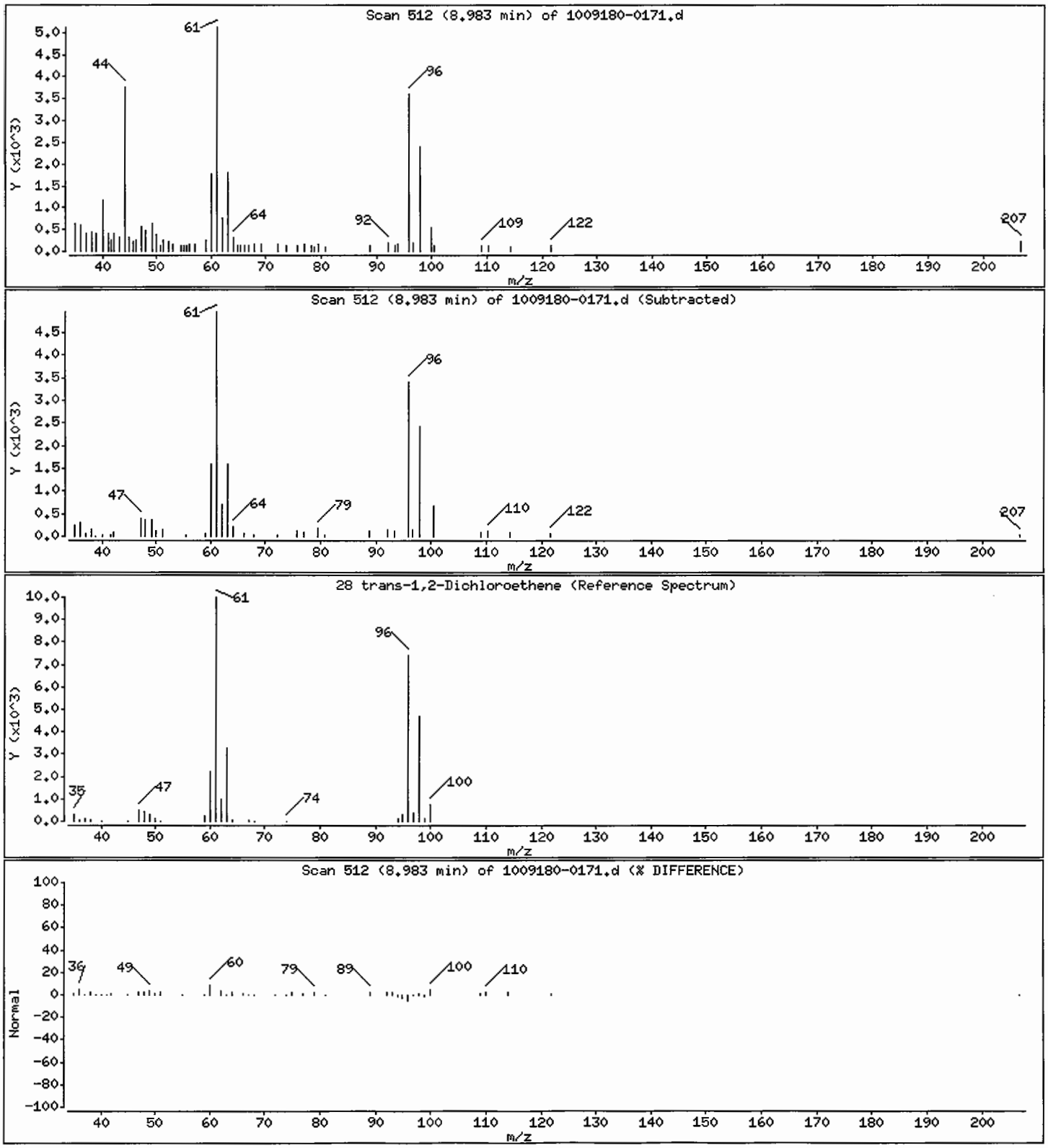
Client ID: MW-3 | Instrument: 5972hp71.i

Sample Info: 1009180-01:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

28 trans-1,2-Dichloroethene | Concentration: 0.35 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d

Date : 20-SEP-2010 15:45

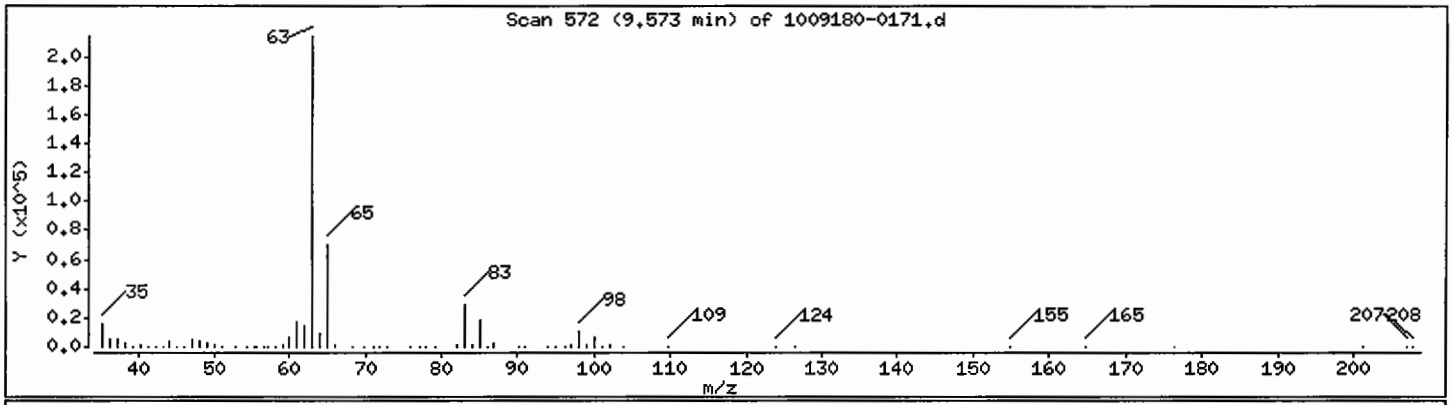
Client ID: MW-3 | Instrument: 5972hp71.i

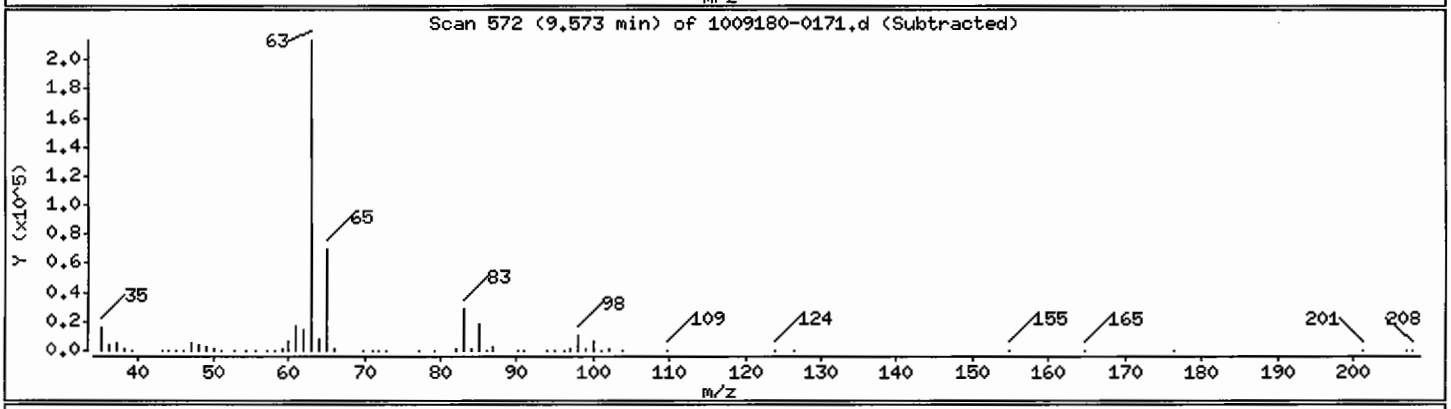
Sample Info: 1009180-01:JAO

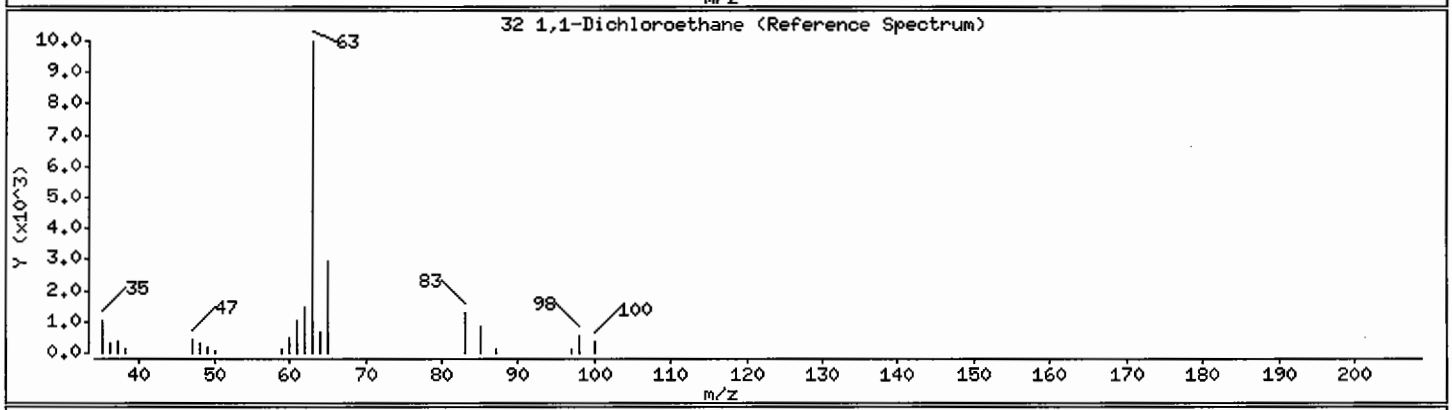
Purge Volume: 25.0 | Operator: JAO

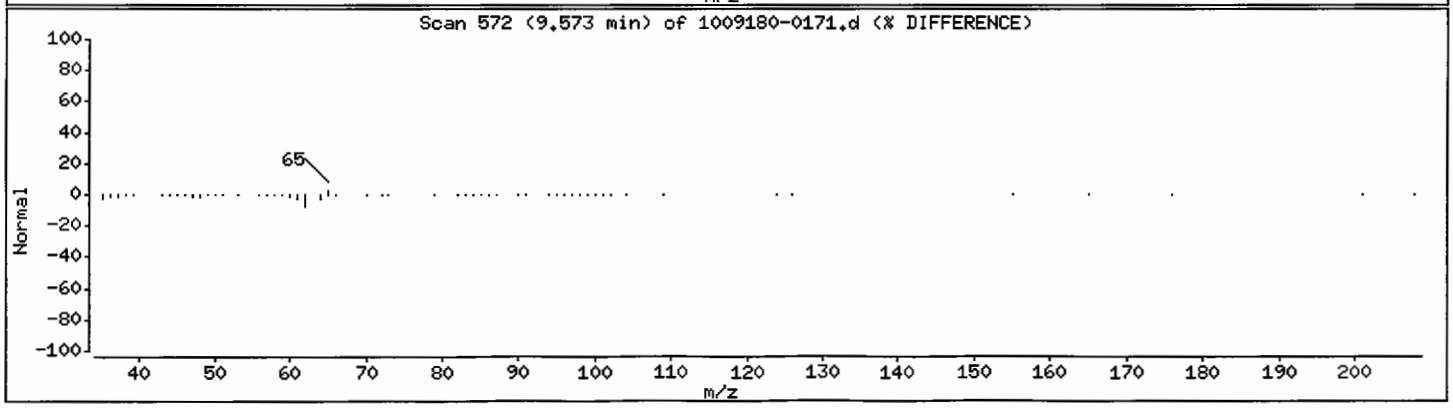
Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 10 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d

Date : 20-SEP-2010 15:45

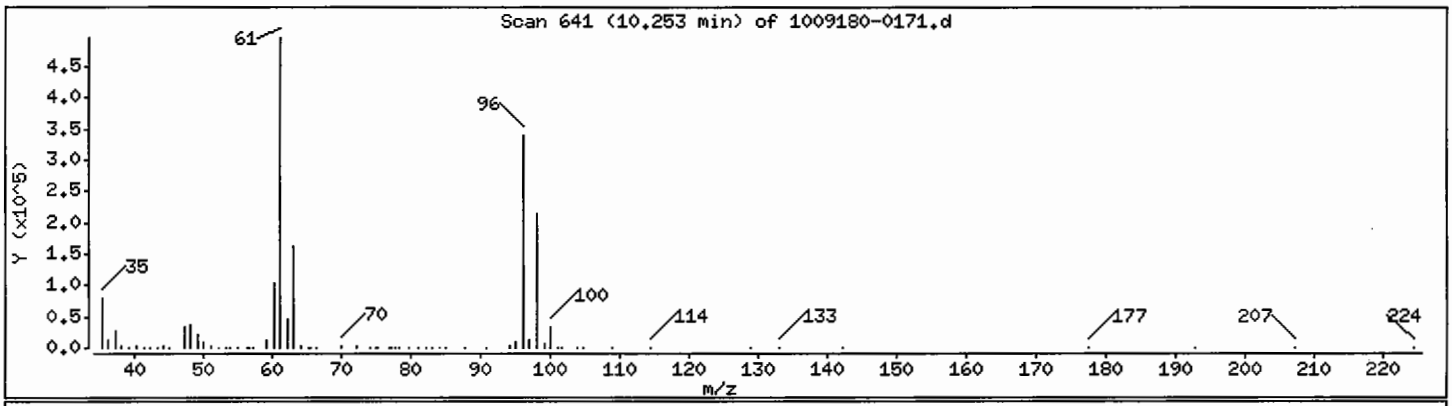
Client ID: MW-3 | Instrument: 5972hp71.i

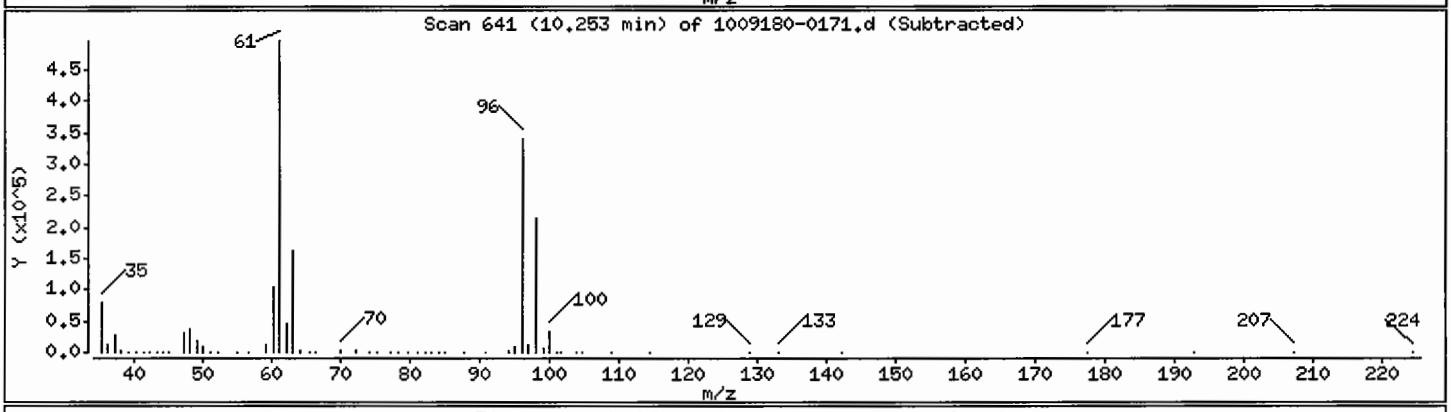
Sample Info: 1009180-01:JAO

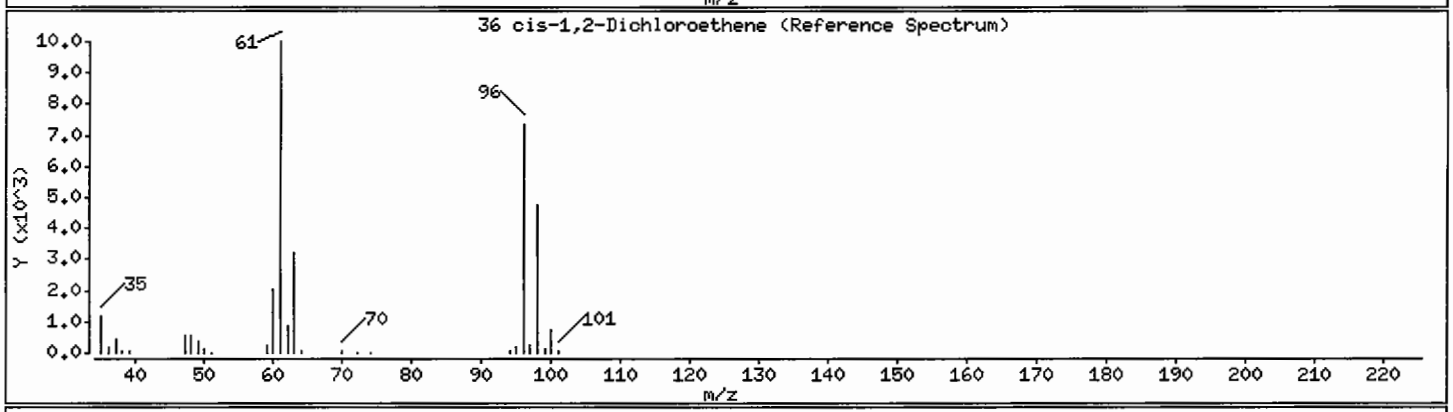
Purge Volume: 25.0 | Operator: JAO

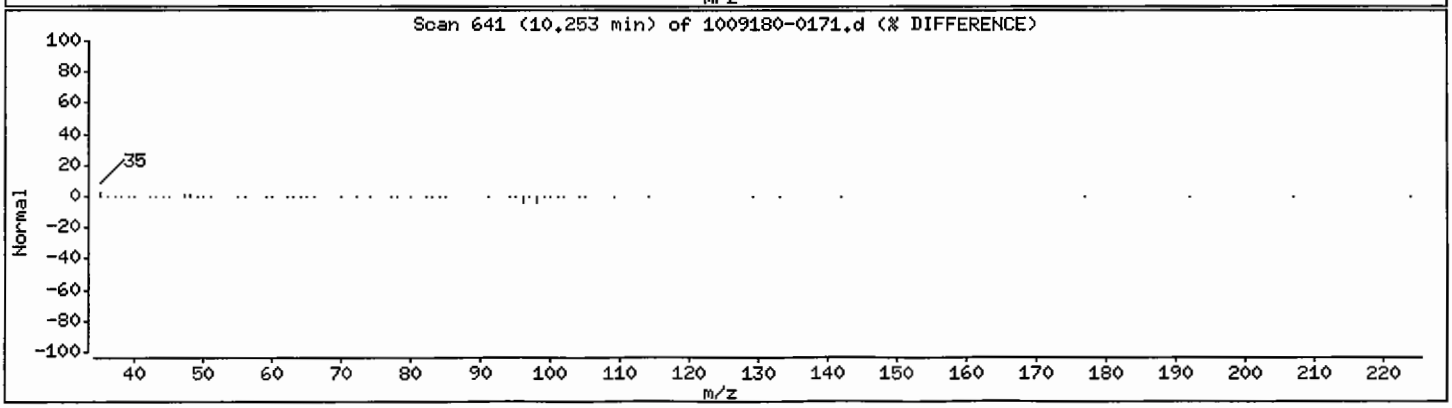
Column phase: SPB-624 | Column diameter: 0.32

36 cis-1,2-Dichloroethene | Concentration: 25 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d

Date : 20-SEP-2010 15:45

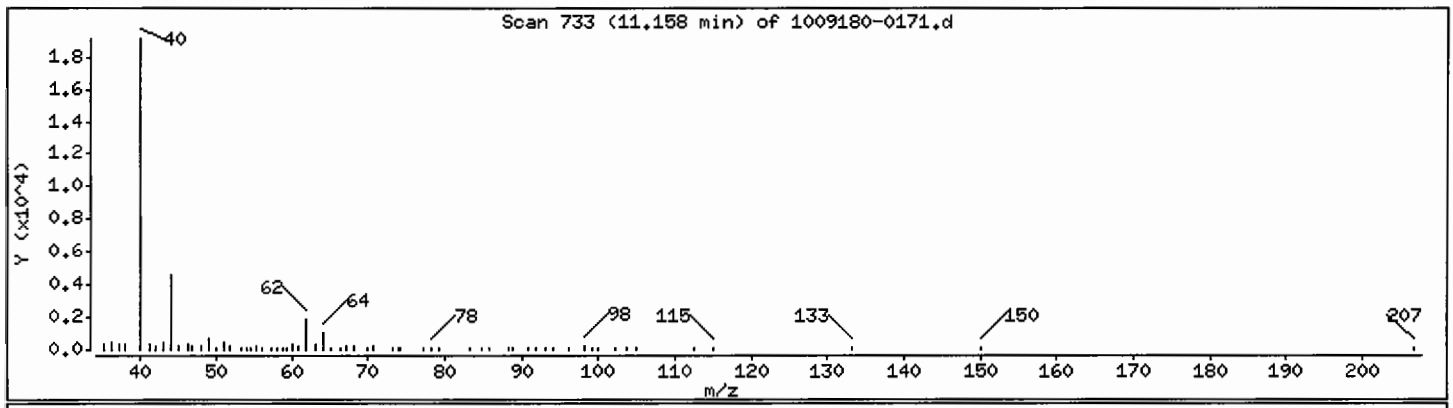
Client ID: MW-3 | Instrument: 5972hp71.i

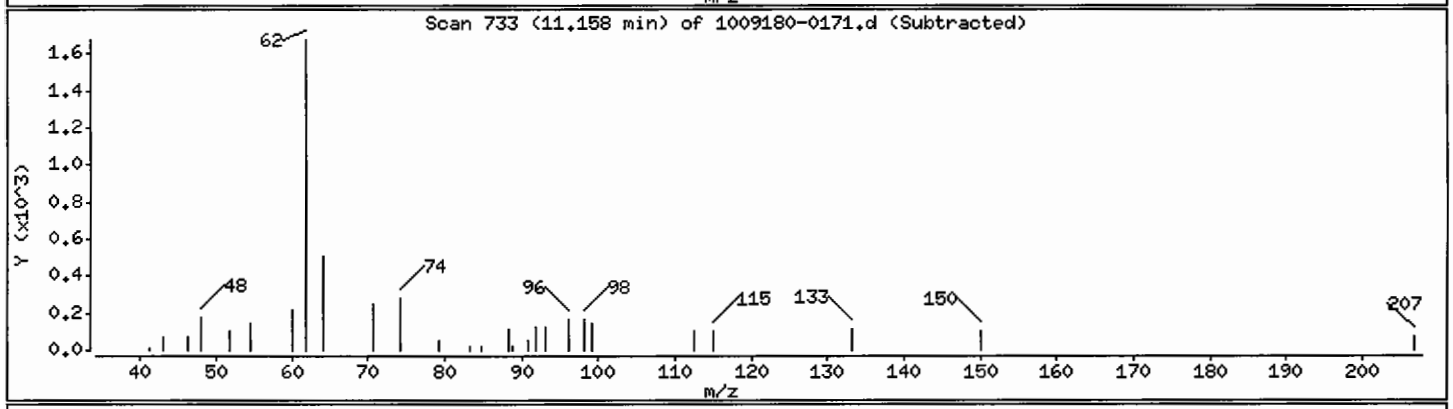
Sample Info: 1009180-01:JAO

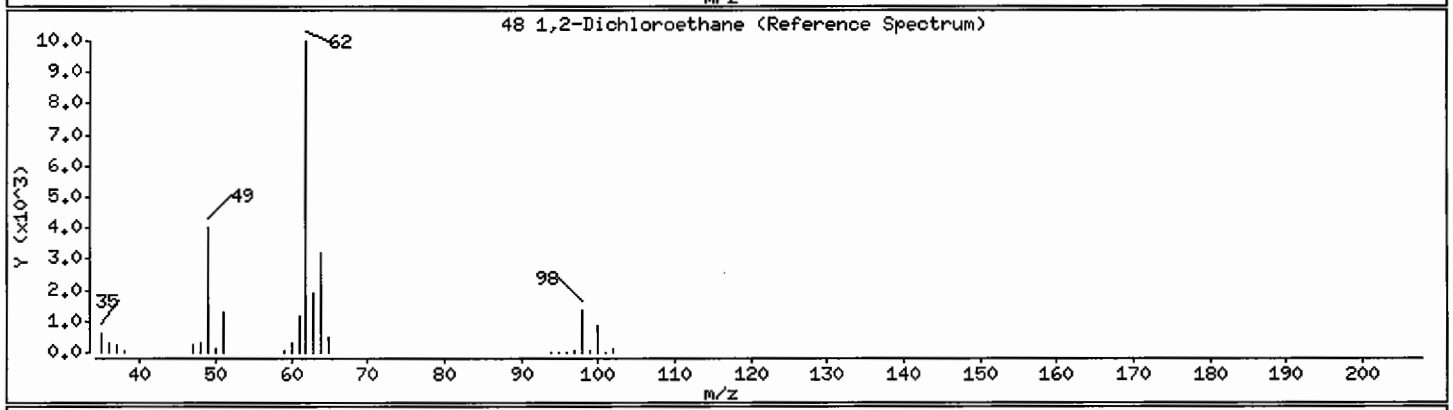
Purge Volume: 25.0 | Operator: JAO

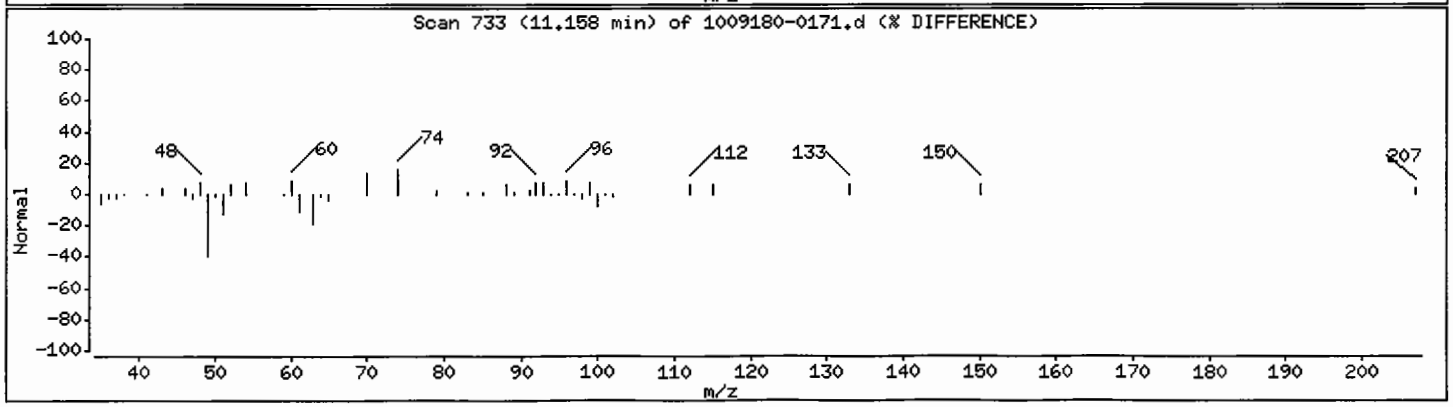
Column phase: SPB-624 | Column diameter: 0.32

48 1,2-Dichloroethane | Concentration: 0.18 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d

Date : 20-SEP-2010 15:45

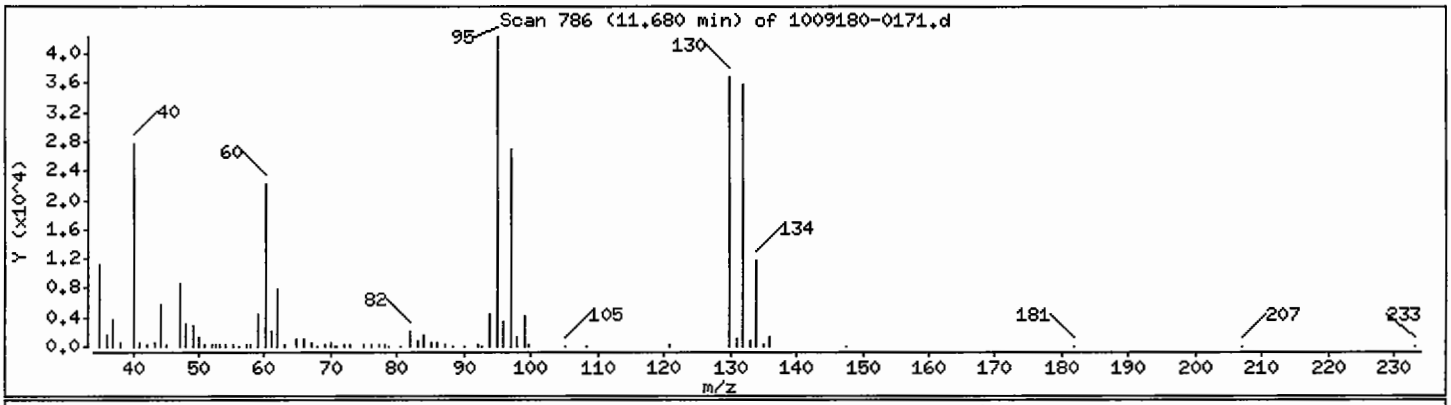
Client ID: MW-3 | Instrument: 5972hp71.i

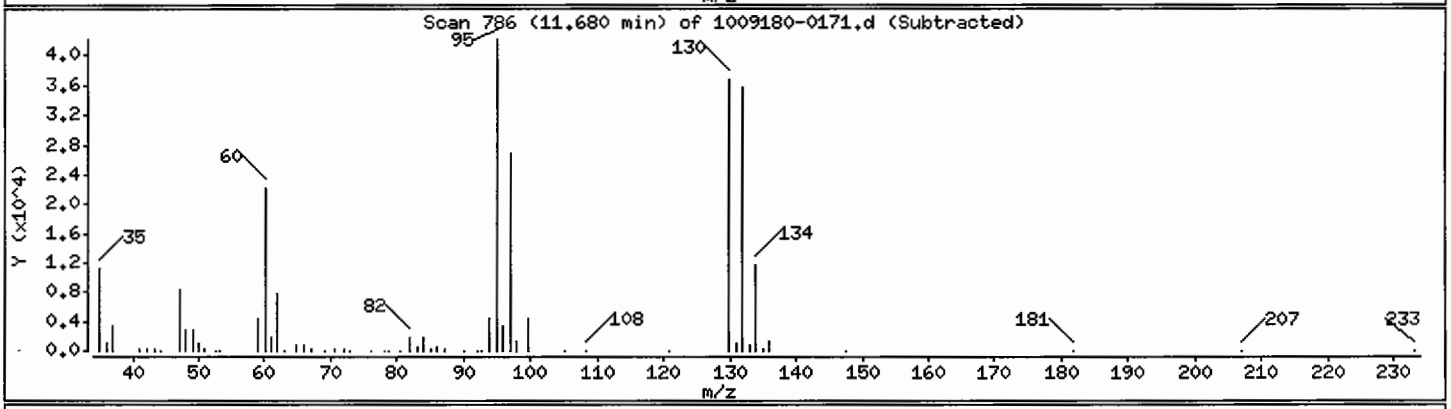
Sample Info: 1009180-01:JAO

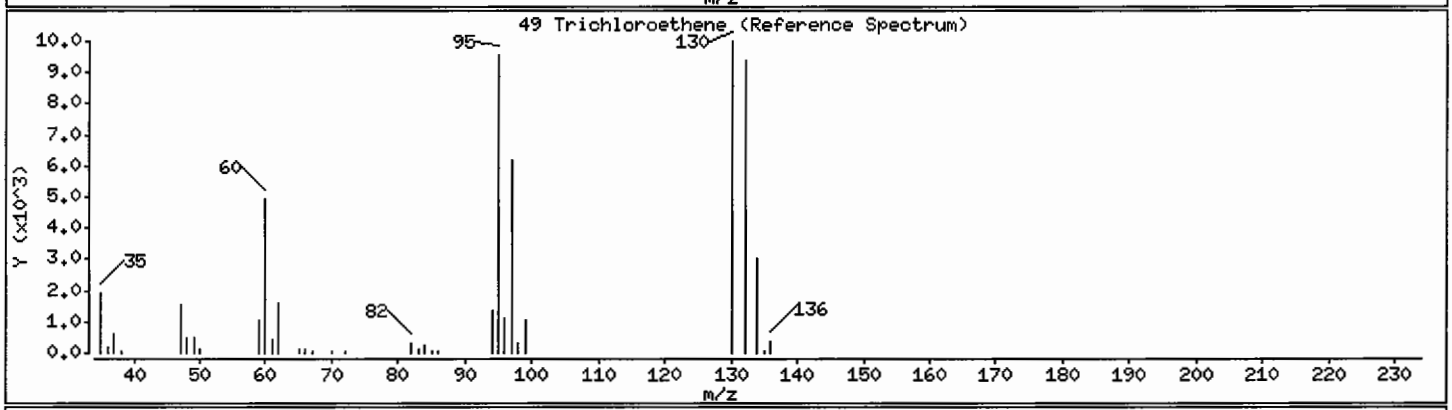
Purge Volume: 25.0 | Operator: JAO

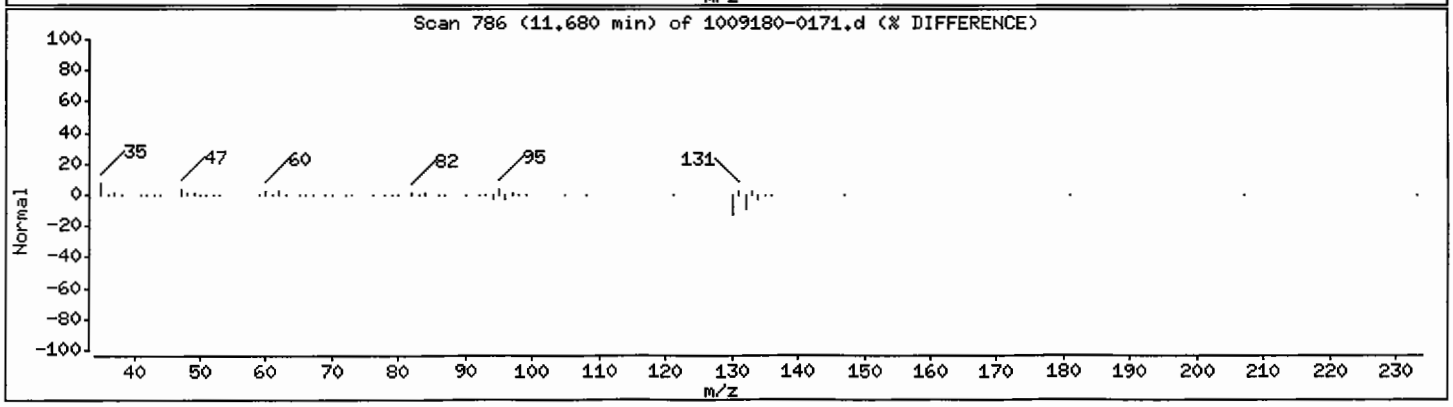
Column phase: SPB-624 | Column diameter: 0.32

49 Trichloroethene | Concentration: 2.8 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d

Date : 20-SEP-2010 15:45

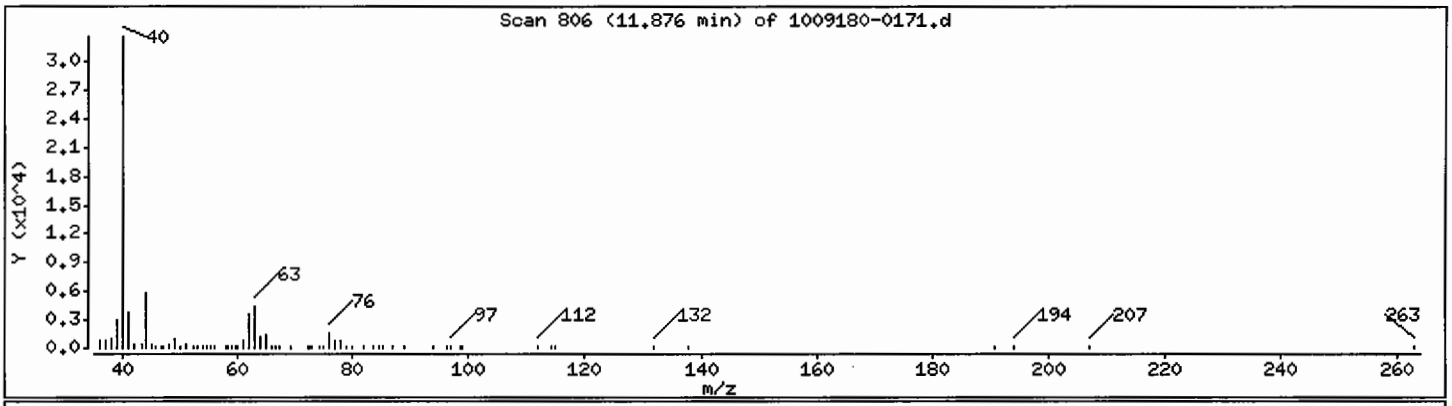
Client ID: MW-3 | Instrument: 5972hp71.i

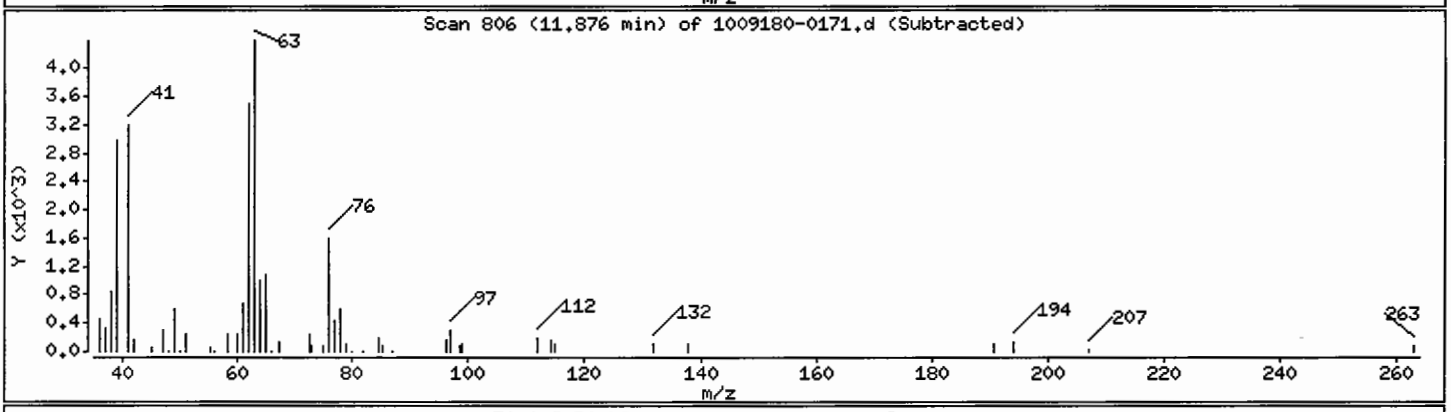
Sample Info: 1009180-01:JAO

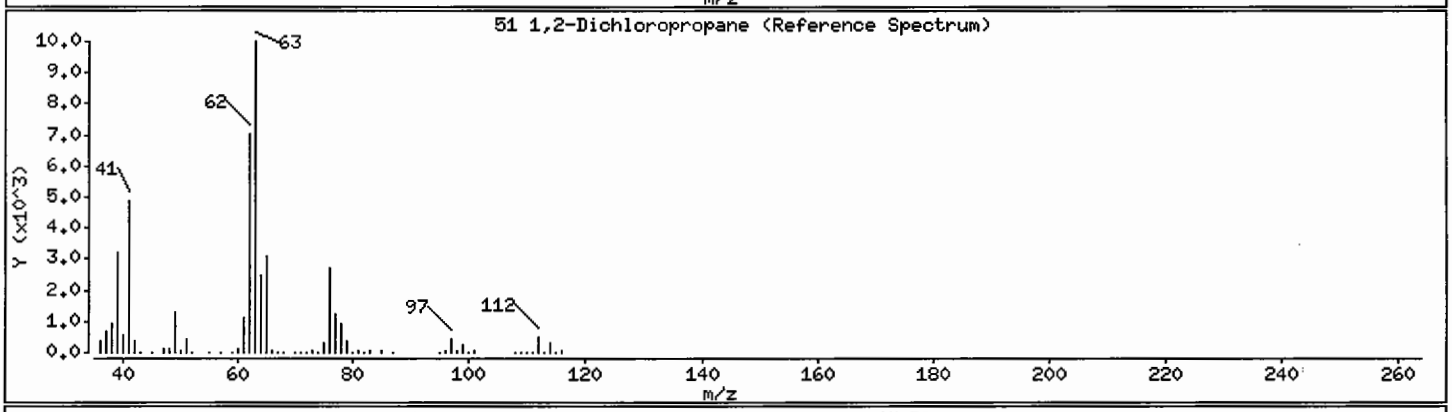
Purge Volume: 25.0 | Operator: JAO

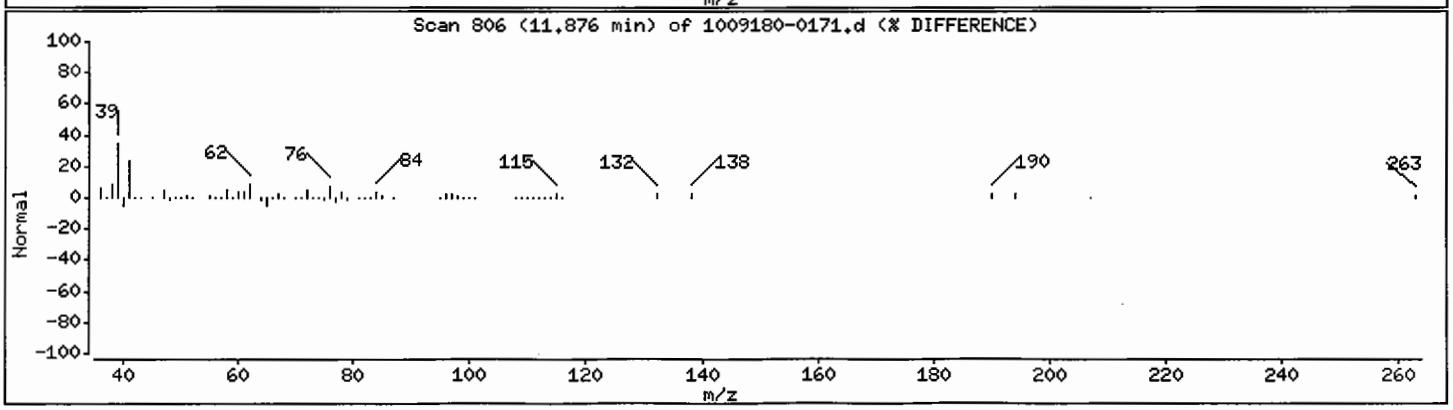
Column phase: SPB-624 | Column diameter: 0.32

51 1,2-Dichloropropane | Concentration: 0.37 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d

Date : 20-SEP-2010 15:45

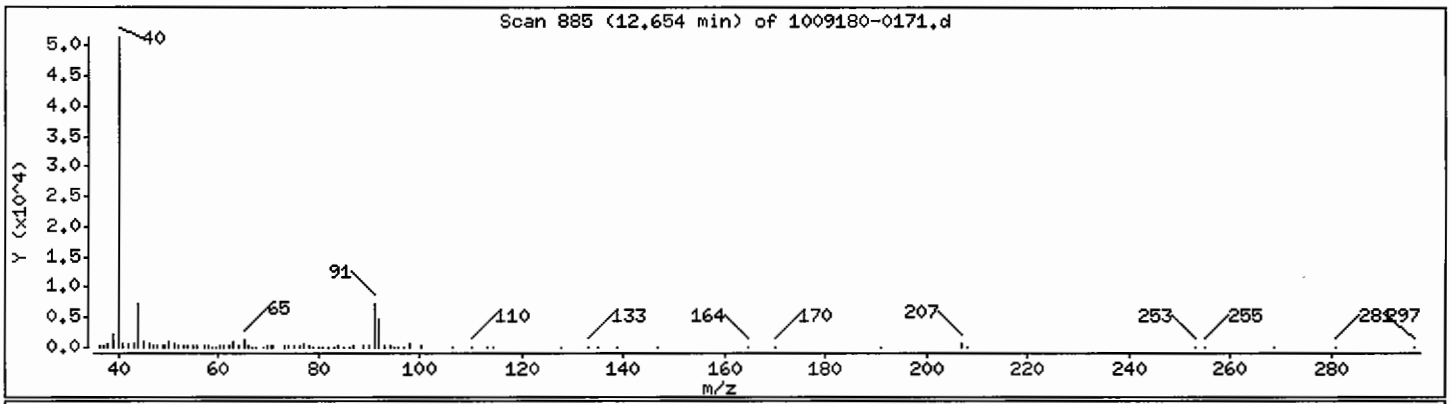
Client ID: MW-3 | Instrument: 5972hp71.i

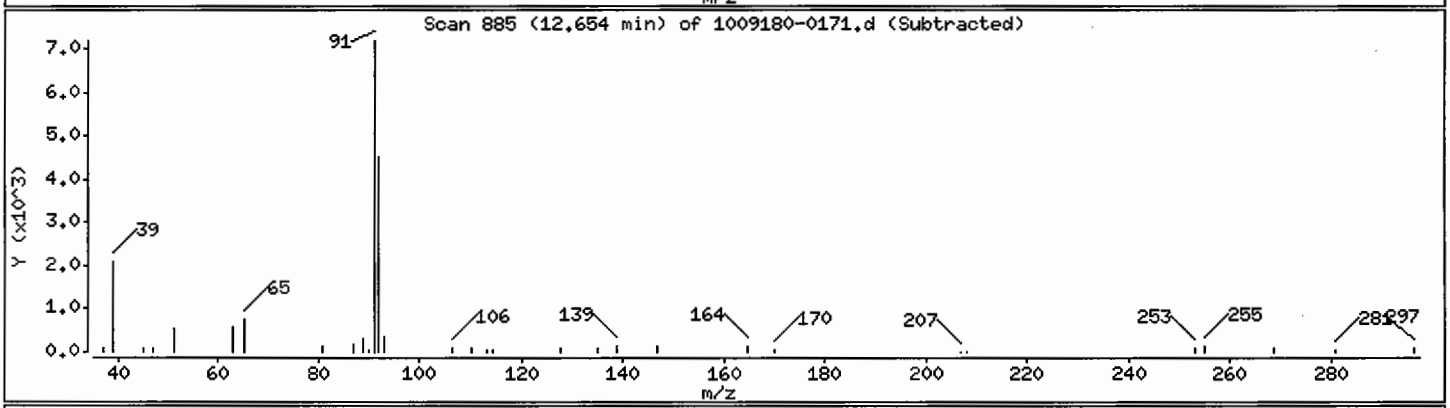
Sample Info: 1009180-01:JAO

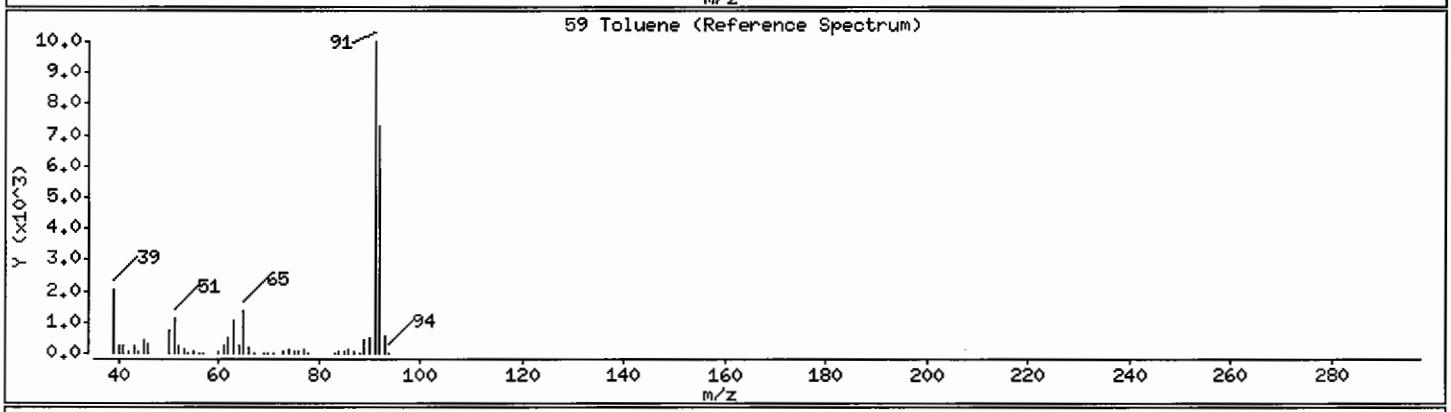
Purge Volume: 25.0 | Operator: JAO

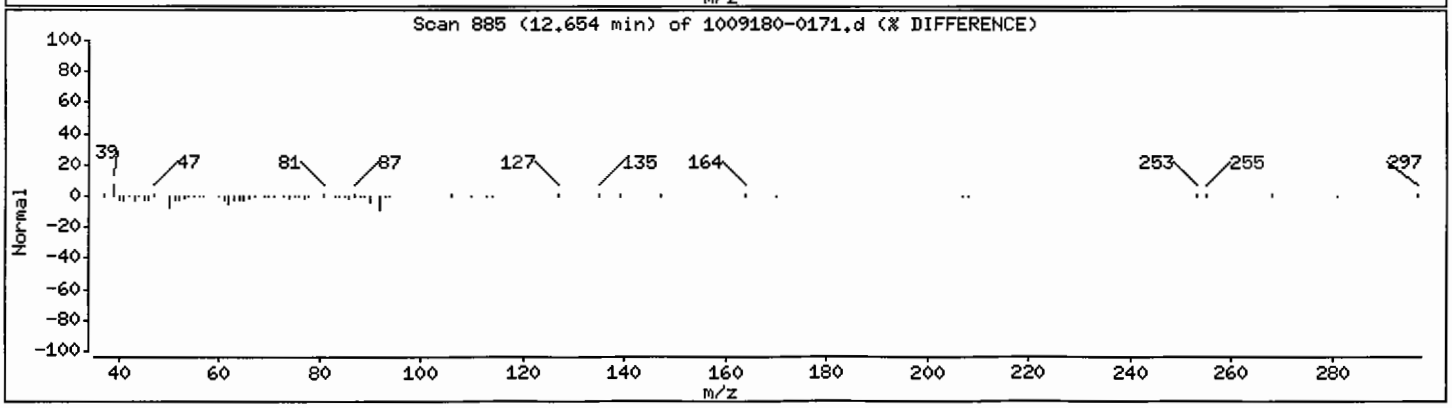
Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.12 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d
Report Date: 21-Sep-2010 14:34

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0171.d
Lab Smp Id: 1009180-01 Client Smp ID: MW-3
Inj Date : 20-SEP-2010 15:45
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-01:JAO
Misc Info : MW-3
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 1 Fluorobenzene | 11.365 | 1473273 | 125.000 |

| | CONCENTRATIONS | | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ng) | FINAL( ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 4.230 | 272690 | 23.1363711 | 0.93 | 0 | | 0 | 1 |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0171.d

Date : 20-SEP-2010 15:45

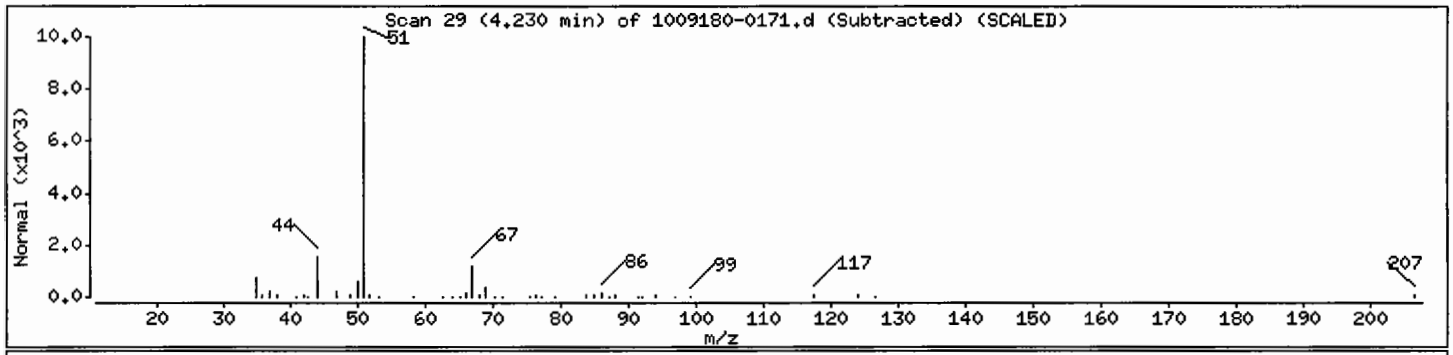
Client ID: MW-3 Instrument: 5972hp71.i

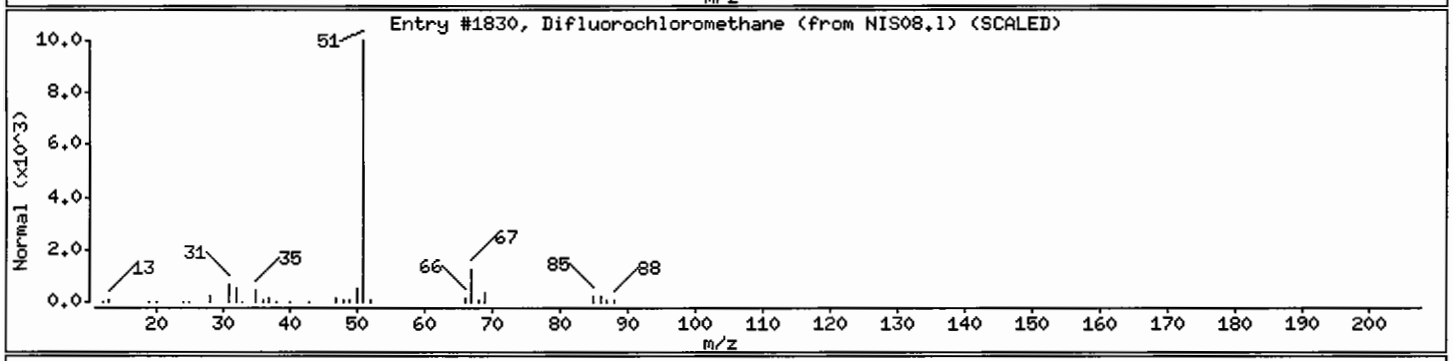
Sample Info: 1009180-01:JAO

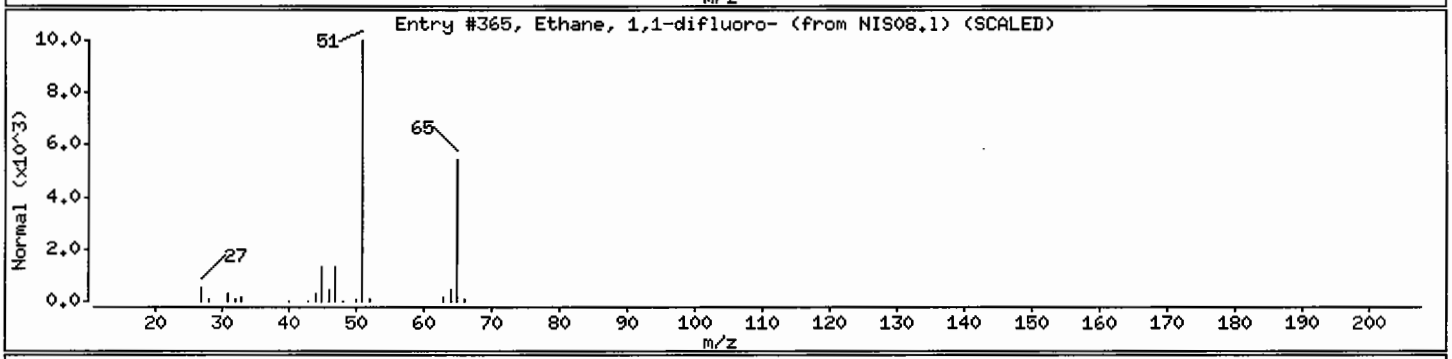
Purge Volume: 25.0 Operator: JAO

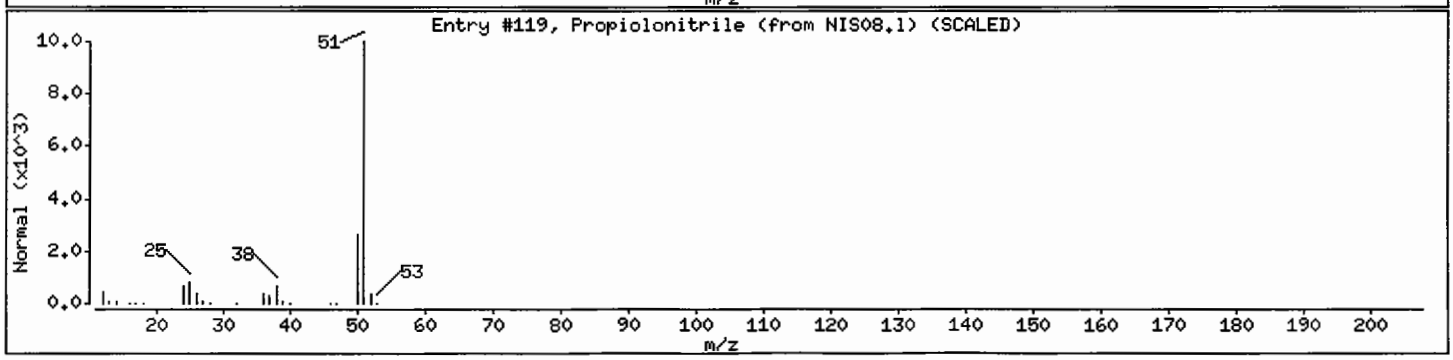
Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | | | | |
| Difluorochloromethane | 75-45-6 | NIS08.l | 1830 | 43 | CHClF2 | 86 |
| Ethane, 1,1-difluoro- | 75-37-6 | NIS08.l | 365 | 5 | C2H4F2 | 66 |
| Propiolonitrile | 1070-71-9 | NIS08.l | 119 | 4 | C3HN | 51 |



# ANALYSIS DATA SHEET

*SW 8260B*

**MW-8**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0371.d | Sampled: 09/14/10 13:10

Initial/Final: 25mL / 25mL | Lab ID: 1009180-03 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 16:12

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | 2.2 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | 2.8 | 0.44 | | 2.5 | B |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.71 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 0.51 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | 0.29 | 0.030 | | 0.50 | J |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-8**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0371.d | Sampled: 09/14/10 13:10

Initial/Final: 25mL / 25mL | Lab ID: 1009180-03 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 16:12

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.089 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | | 0.060 | | 0.50 | U |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

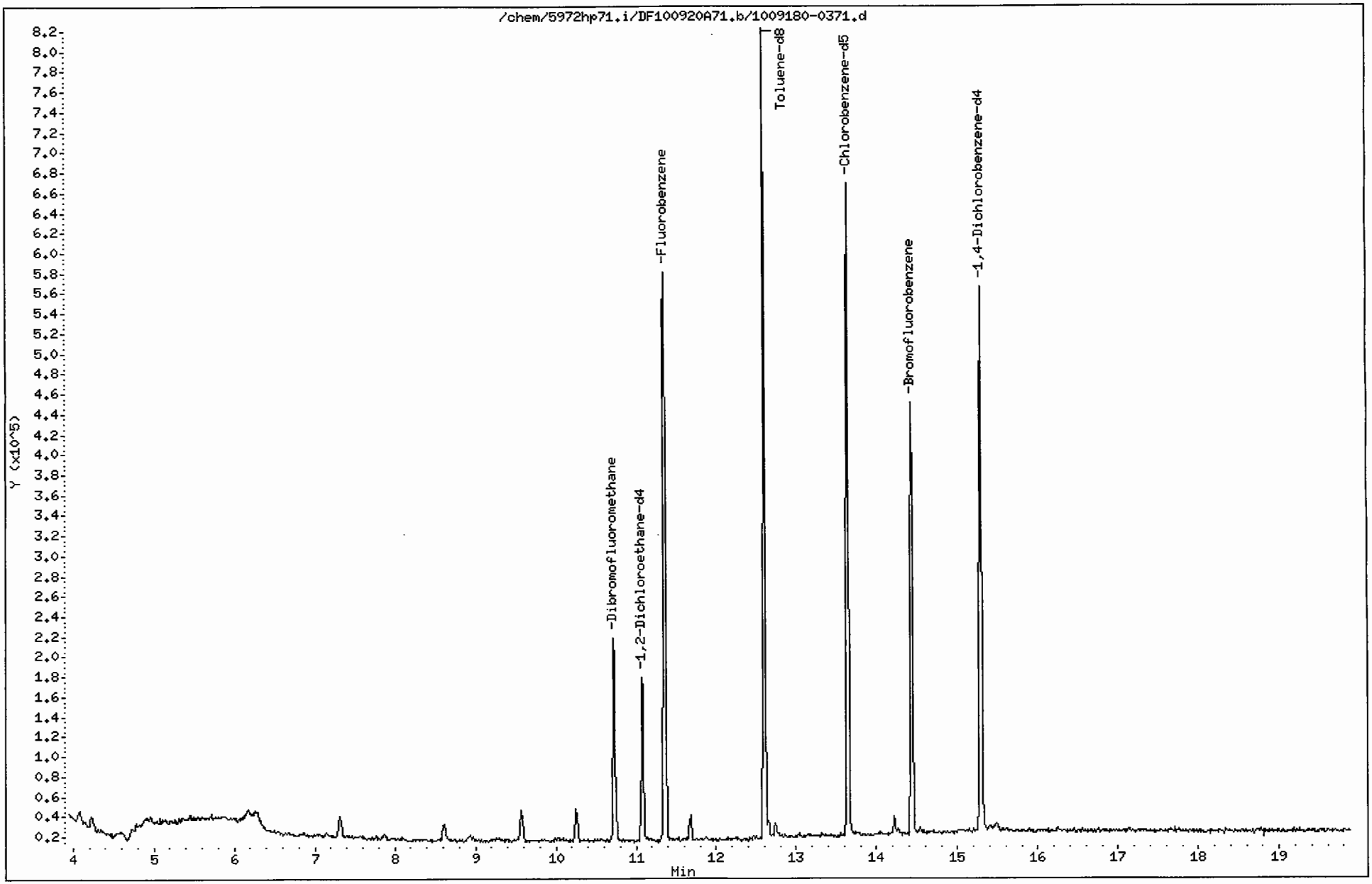
| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.862 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.940 | 99 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.636 | 93 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.929 | 99 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Unknown 7.320 | 0.57 | 119086 | 7.32 | 0 | J |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0371.d
Date : 20-SEP-2010 16:12
Client ID: MW-8
Sample Info: 1009180-03
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator:
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0371.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0371.d
Lab Smp Id: 1009180-03 Client Smp ID: MW-8
Inj Date : 20-SEP-2010 16:12
Operator : Inst ID: 5972hp71.i
Smp Info : 1009180-03
Misc Info : MW-8
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.364 | 11.362 | (1.000) | 454385 | 125.000 | |
| 2 Chlorobenzene-d5 | 117 | 13.648 | 13.646 | (1.000) | 302282 | 125.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 15.291 | 15.289 | (1.000) | 136275 | 125.000 | |
| 4 Dibromofluoromethane | 113 | 10.725 | 10.733 | (0.944) | 119799 | 121.554 | 4.9 |
| 5 1,2-Dichloroethane-d4 | 65 | 11.079 | 11.087 | (0.975) | 98403 | 123.511 | 4.9 |
| 6 Toluene-d8 | 98 | 12.604 | 12.602 | (0.924) | 417227 | 115.910 | 4.6 |
| 7 Bromofluorobenzene | 95 | 14.435 | 14.433 | (0.944) | 140144 | 123.223 | 4.9 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | Compound Not Detected. | | | | | |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | 6.168 | 6.176 | (0.543) | 14271 | 54.1552 | 2.2 |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 18 Acetone | 43 | 7.871 | 7.869 | (0.693) | 9862 | 69.5814 | 2.8 |
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |

JMB 9.21.10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0371.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 9.573 | 9.571 | (0.842) | 33809 | 17.7259 | 0.71 |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | 10.252 | 10.250 | (0.902) | 13587 | 12.8691 | 0.51 |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 49 Trichloroethene | 130 | 11.679 | 11.677 | (1.028) | 6790 | 7.36023 | 0.29(a) |
| 51 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.654 | 12.652 | (0.927) | 5889 | 2.21365 | 0.089(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0371.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0371.d

Date : 20-SEP-2010 16:12

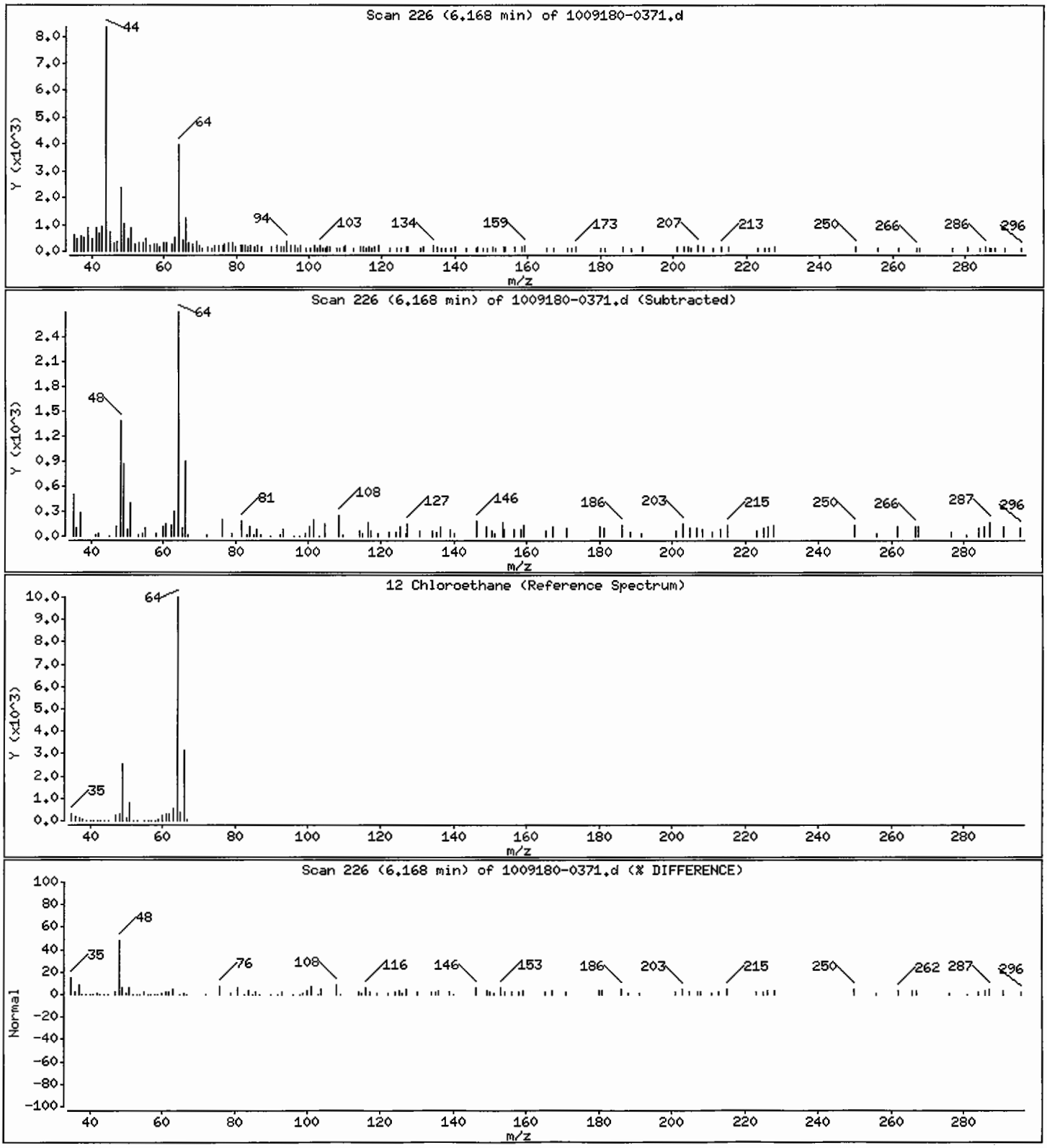
Client ID: MW-8 | Instrument: 5972hp71.i

Sample Info: 1009180-03

Purge Volume: 25.0 | Operator:

Column phase: SPB-624 | Column diameter: 0.32

12 Chloroethane | Concentration: 2.2 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0371.d

Date : 20-SEP-2010 16:12

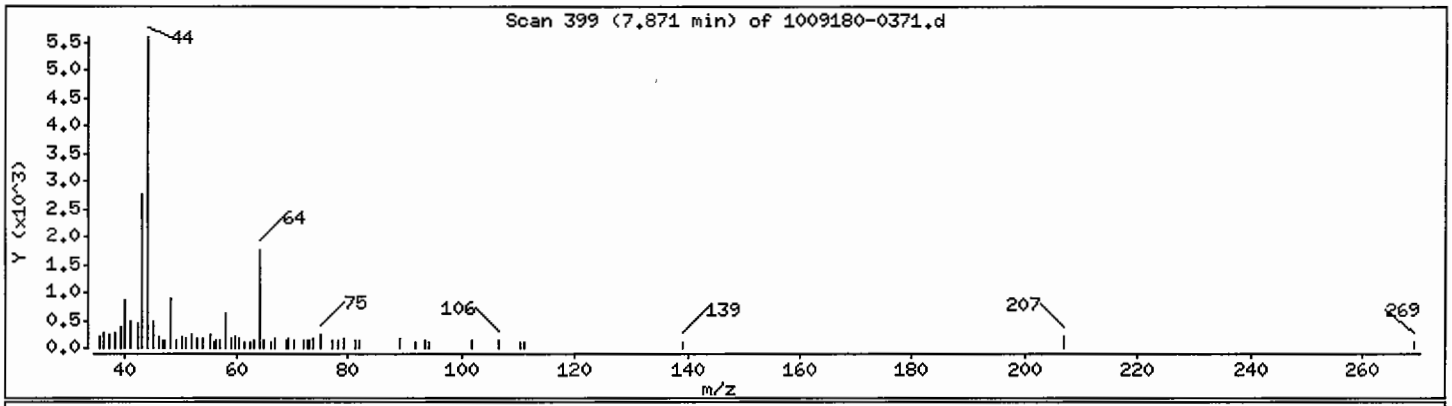
Client ID: MW-8 | Instrument: 5972hp71.i

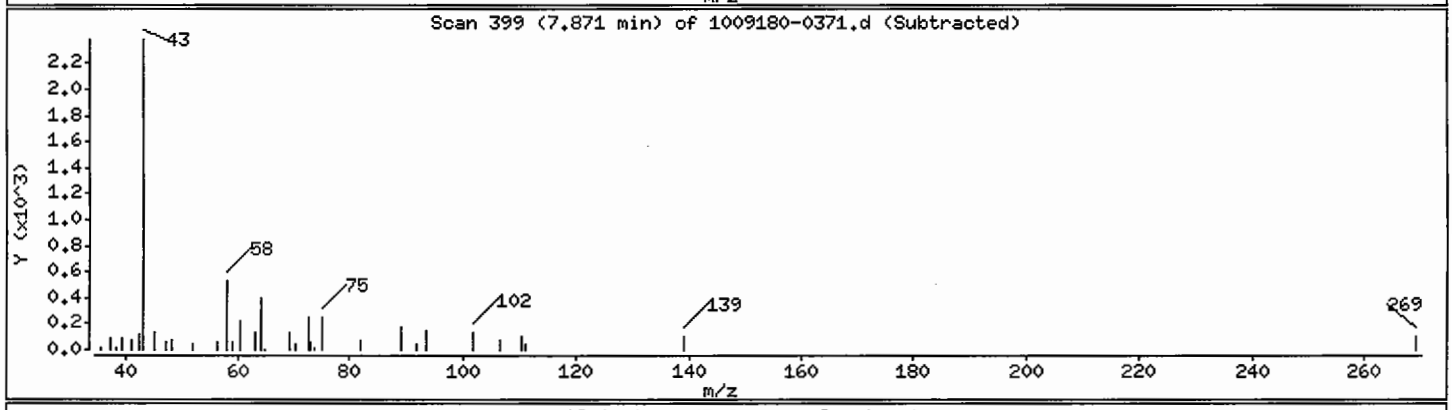
Sample Info: 1009180-03

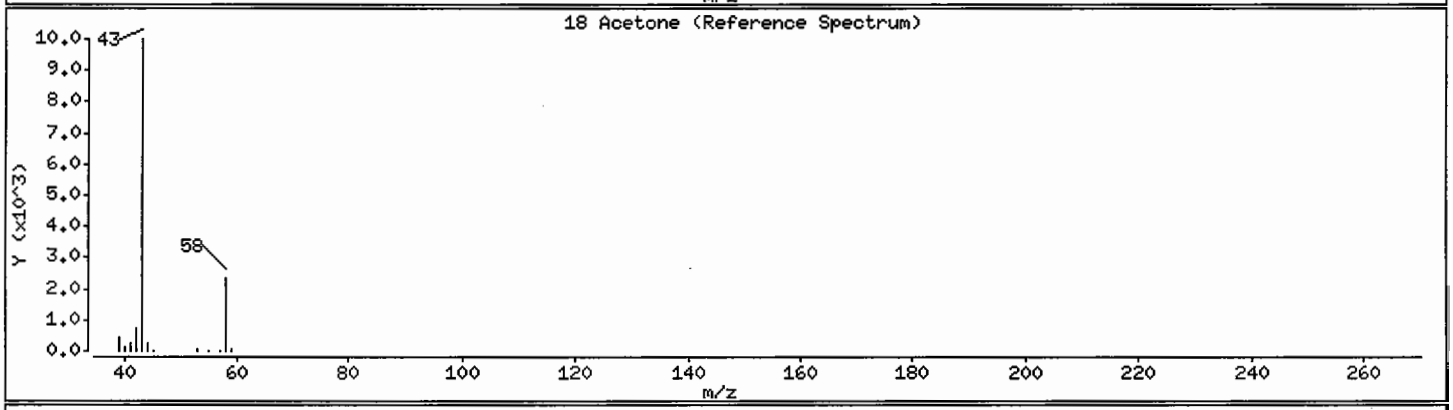
Purge Volume: 25.0 | Operator:

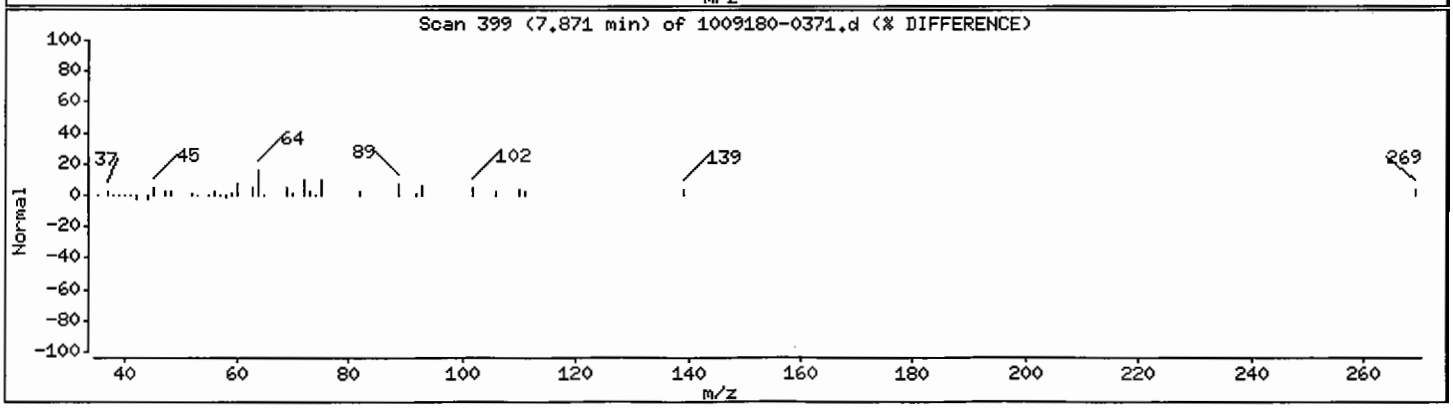
Column phase: SPB-624 | Column diameter: 0.32

18 Acetone | Concentration: 2.8 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0371.d

Date : 20-SEP-2010 16:12

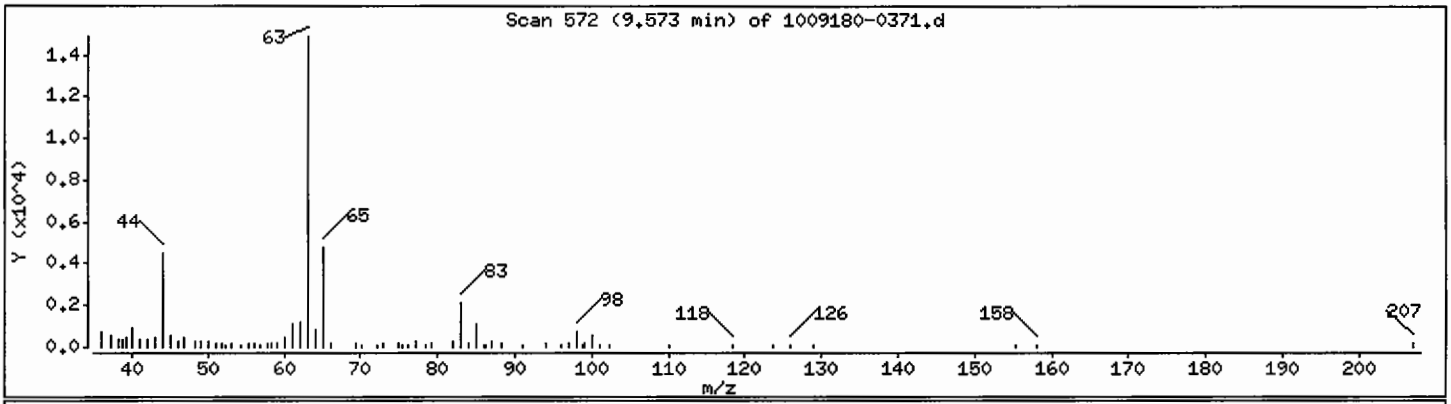
Client ID: MW-8 | Instrument: 5972hp71.i

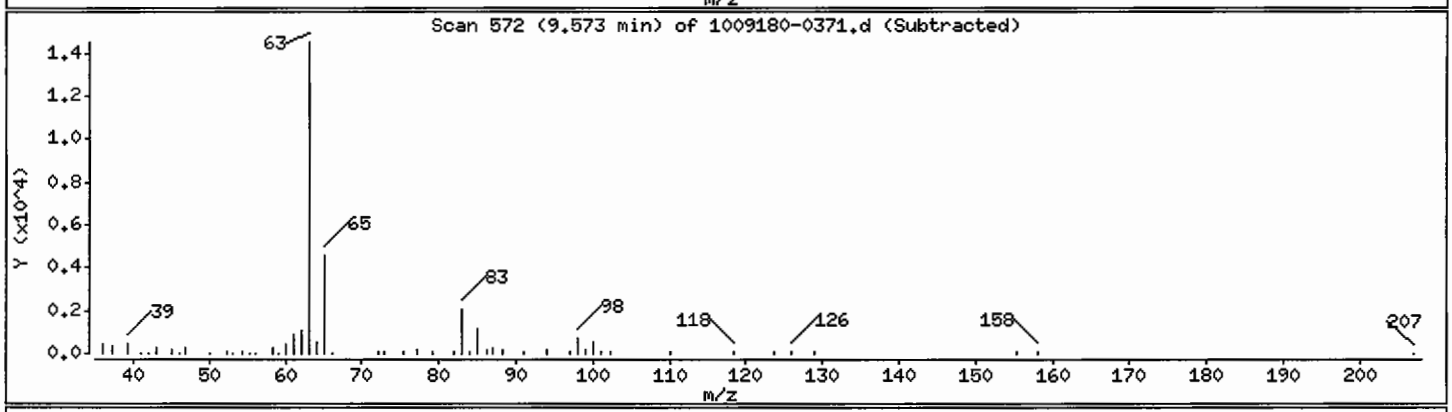
Sample Info: 1009180-03

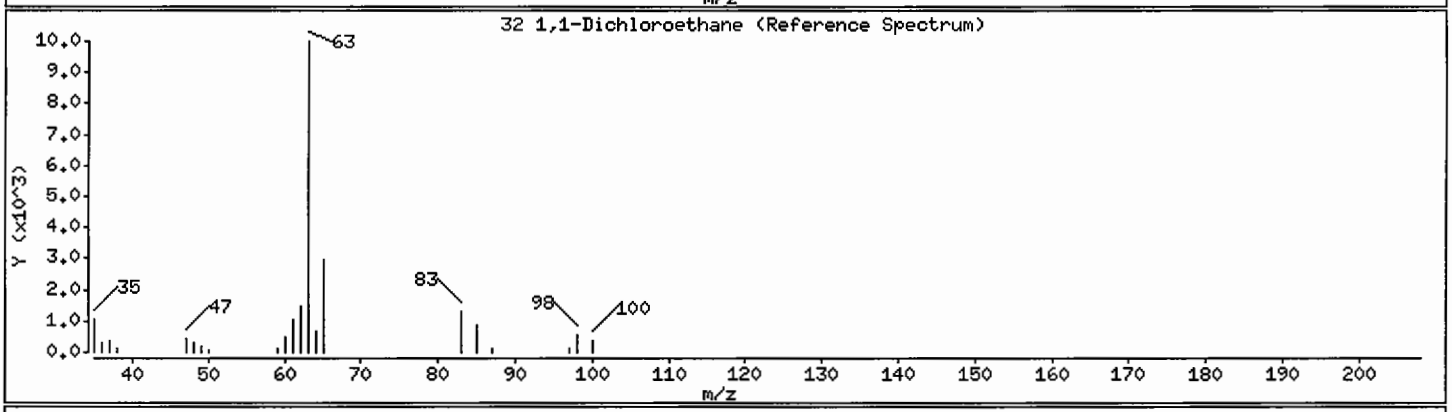
Purge Volume: 25.0 | Operator:

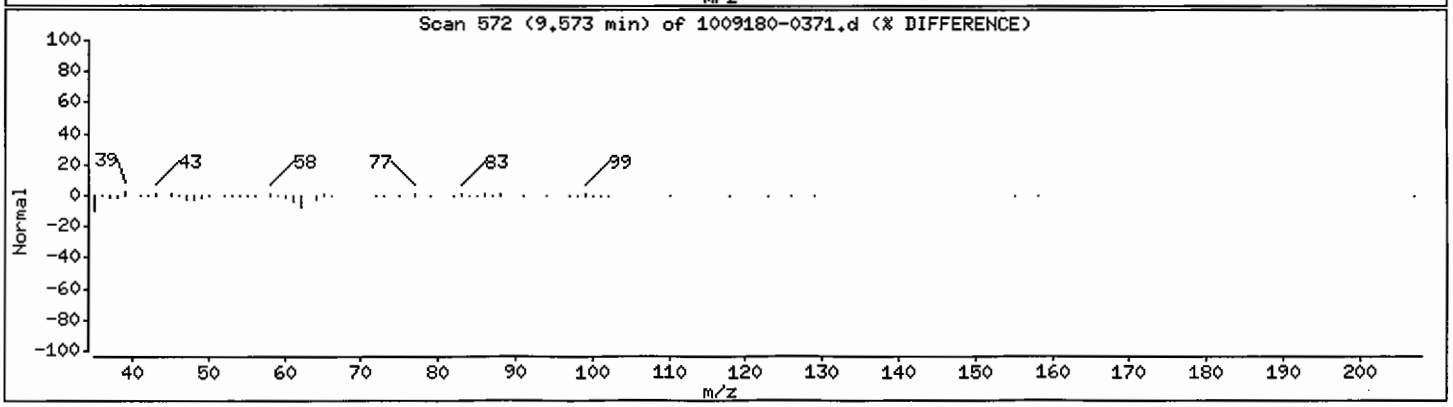
Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 0.71 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0371.d

Date : 20-SEP-2010 16:12

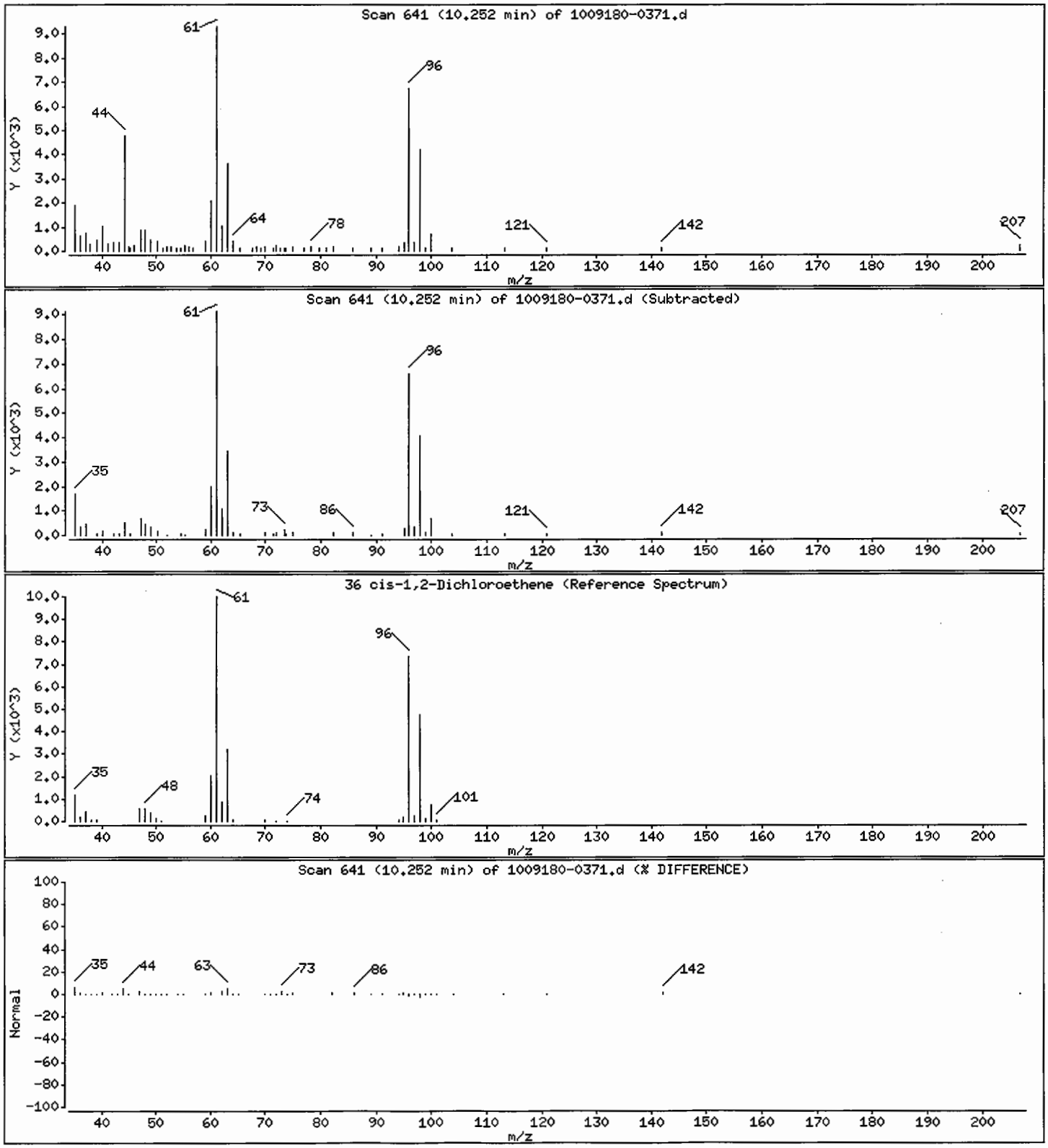
Client ID: MW-8 | Instrument: 5972hp71.i

Sample Info: 1009180-03

Purge Volume: 25.0 | Operator:

Column phase: SPB-624 | Column diameter: 0.32

36 cis-1,2-Dichloroethene | Concentration: 0.51 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0371.d

Date : 20-SEP-2010 16:12

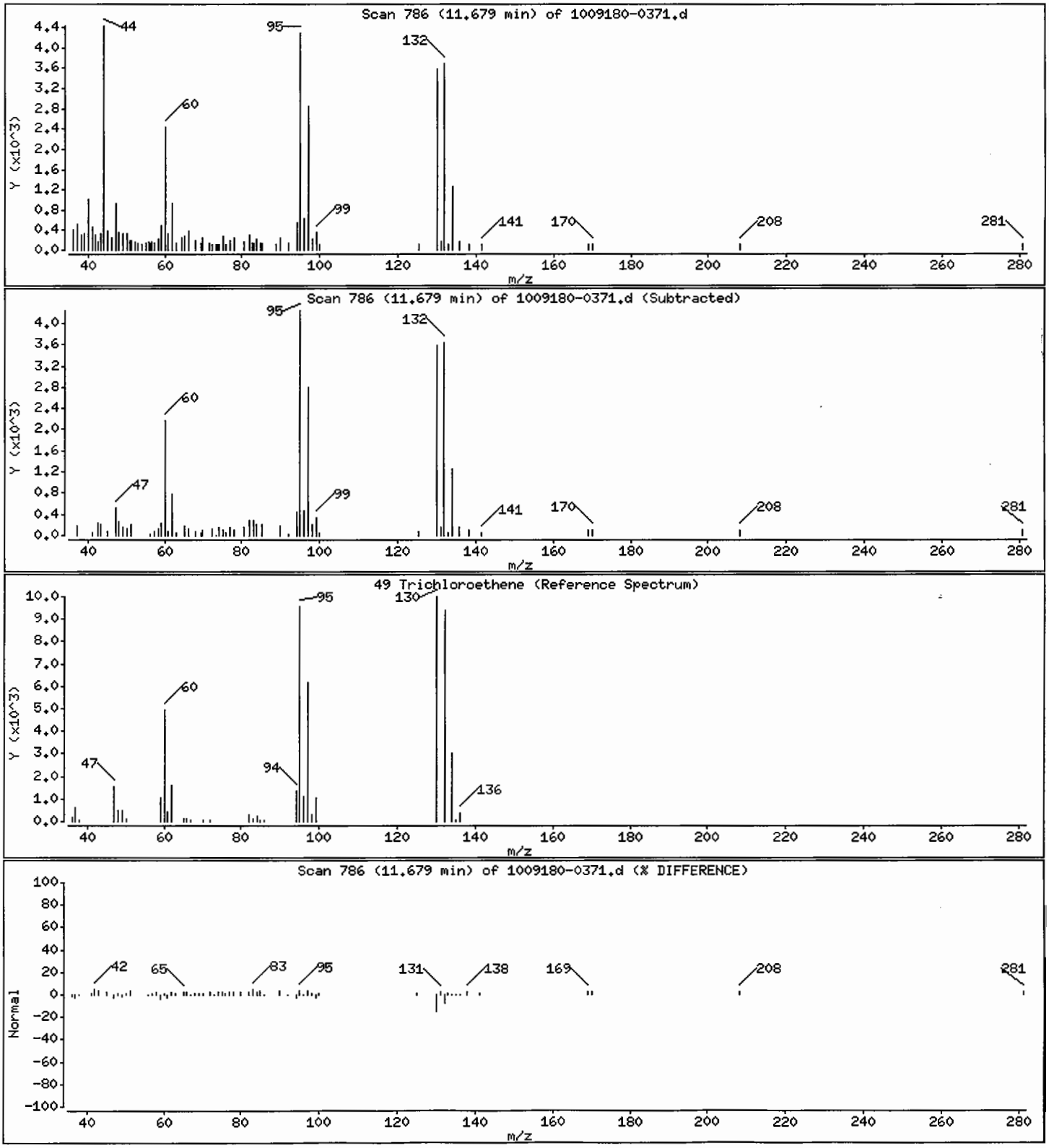
Client ID: MW-8 | Instrument: 5972hp71.i

Sample Info: 1009180-03

Purge Volume: 25.0 | Operator:

Column phase: SPB-624 | Column diameter: 0.32

49 Trichloroethene | Concentration: 0.29 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0371.d

Date : 20-SEP-2010 16:12

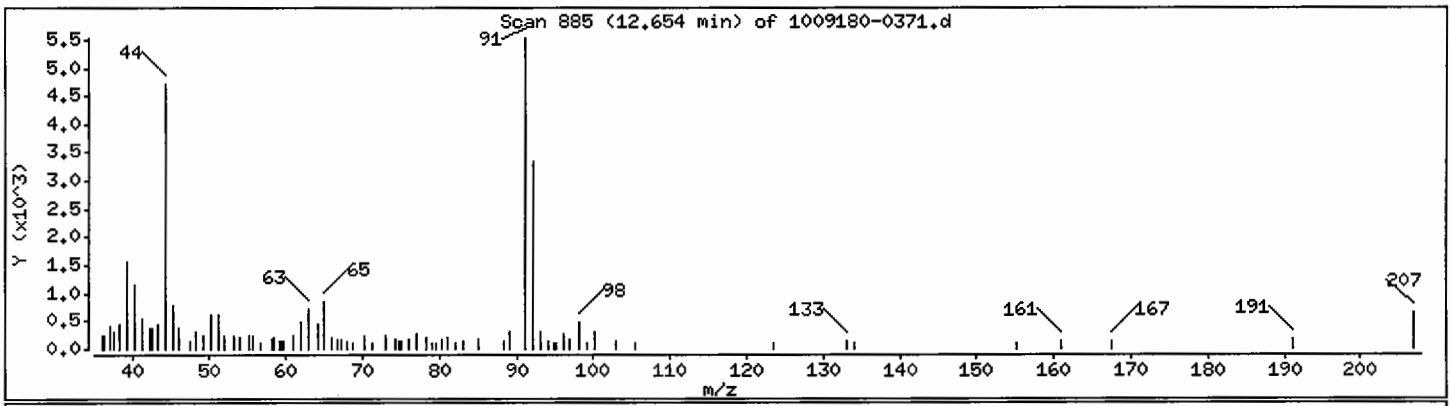
Client ID: MW-8 | Instrument: 5972hp71.i

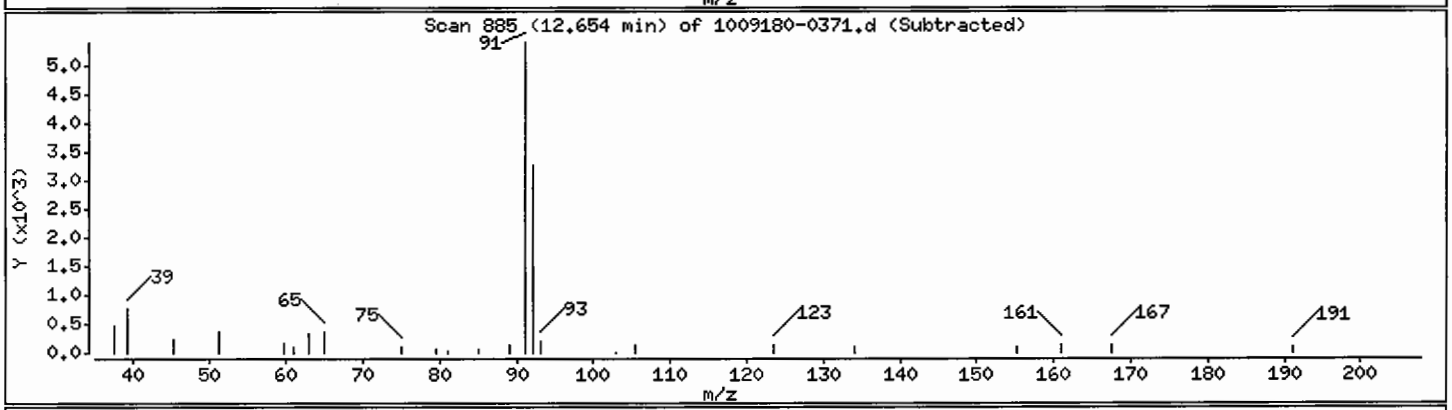
Sample Info: 1009180-03

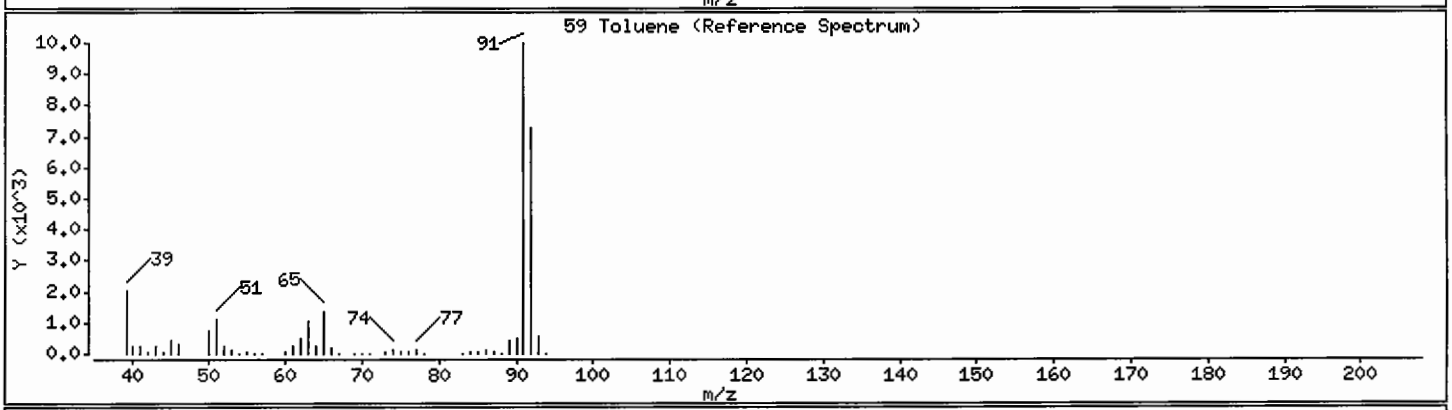
Purge Volume: 25.0 | Operator:

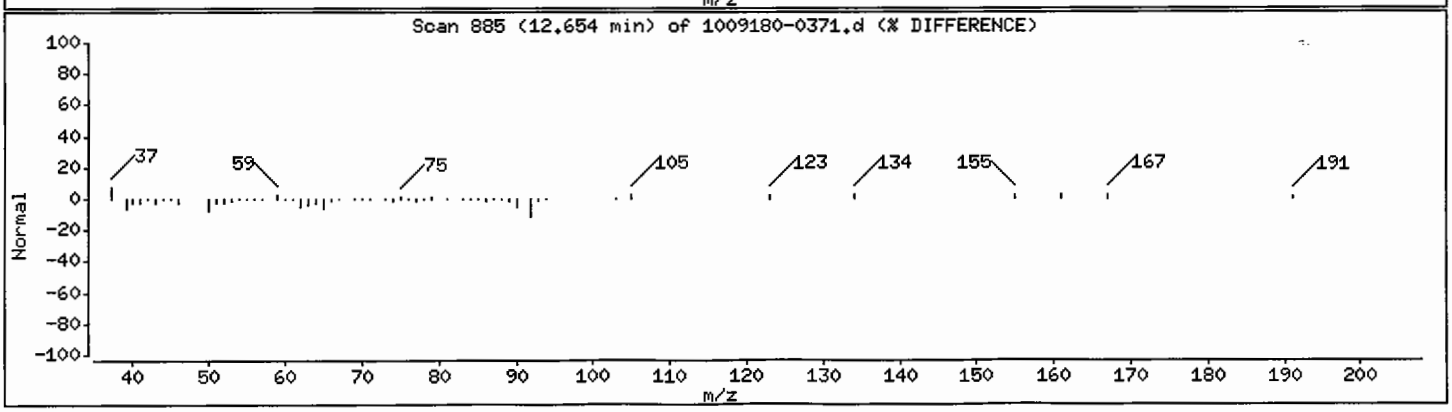
Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.089 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0371.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0371.d
Lab Smp Id: 1009180-03 Client Smp ID: MW-8
Inj Date : 20-SEP-2010 16:12
Operator : Inst ID: 5972hp71.i
Smp Info : 1009180-03
Misc Info : MW-8
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 1 Fluorobenzene | 11.364 | 1049447 | 125.000 |

| | CONCENTRATIONS | | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ng) | FINAL( ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Unknown | | | | | CAS #: | | |
| 7.320 | 119086 | 14.1843656 | 0.57 | 0 | | 0 | 1 |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0371.d

Date : 20-SEP-2010 16:12

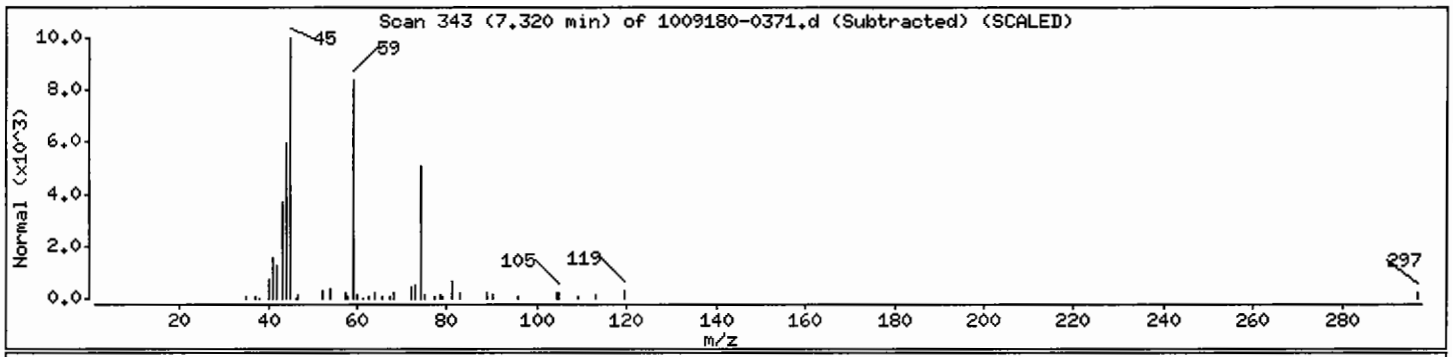
Client ID: MW-8 Instrument: 5972hp71.i

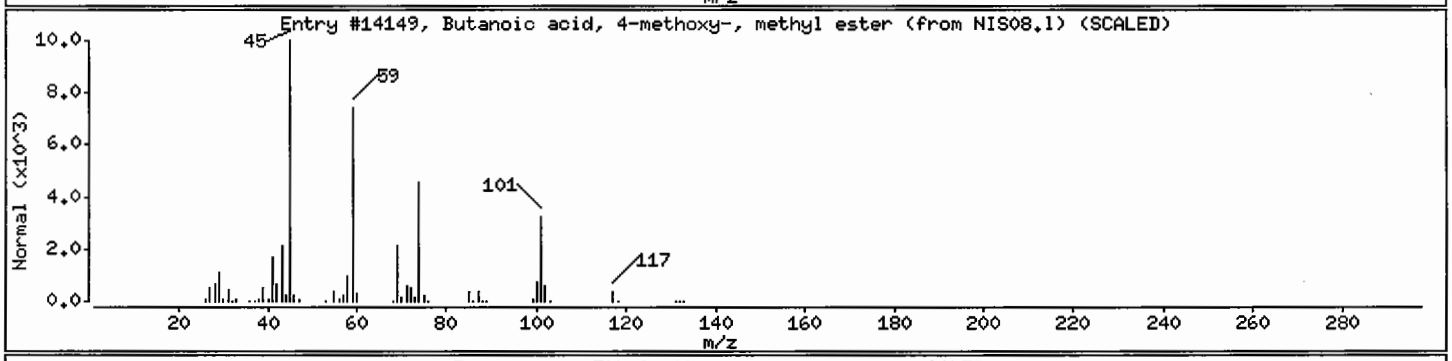
Sample Info: 1009180-03

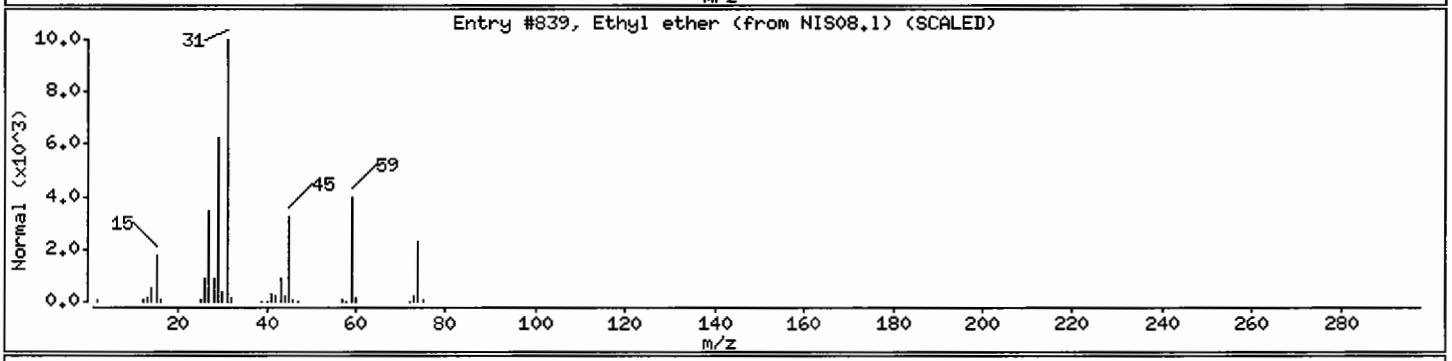
Purge Volume: 25.0 Operator:

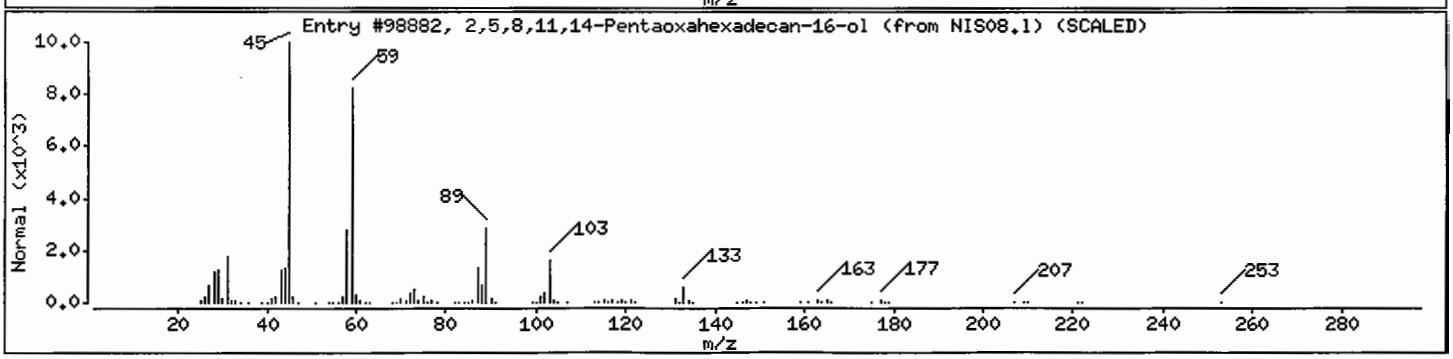
Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | | | | |
| Butanoic acid, 4-methoxy-, methyl ester | 29006-01-7 | NIS08.l | 14149 | 45 | C6H12O3 | 132 |
| Ethyl ether | 60-29-7 | NIS08.l | 839 | 45 | C4H10O | 74 |
| 2,5,8,11,14-Pentaoxahexadecan-16-ol | 23778-52-1 | NIS08.l | 98882 | 33 | C11H24O6 | 252 |



# ANALYSIS DATA SHEET

*SW 8260B*

**MW-9**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0471.d | Sampled: 09/13/10 13:15

Initial/Final: 25mL / 25mL | Lab ID: 1009180-04 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 16:40

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 0.55 | 0.030 | | 0.50 | |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | 2.0 | 0.070 | | 0.50 | |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | 4.2 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | 1.1 | 0.44 | | 2.5 | JB |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 0.32 | 0.050 | | 0.50 | J |
| 75-34-3 | 1,1-Dichloroethane | 10 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 6.9 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | 2.8 | 0.030 | | 0.50 | |
| 79-01-6 | Trichloroethene | 1.1 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 0.24 | 0.12 | | 0.50 | J |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-9**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-0471.d | Sampled: 09/13/10 13:15

Initial/Final: 25mL / 25mL | Lab ID: 1009180-04 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 16:40

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.11 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | 0.83 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | 0.42 | 0.020 | | 0.50 | J |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 1.6 | 0.030 | | 0.50 | |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

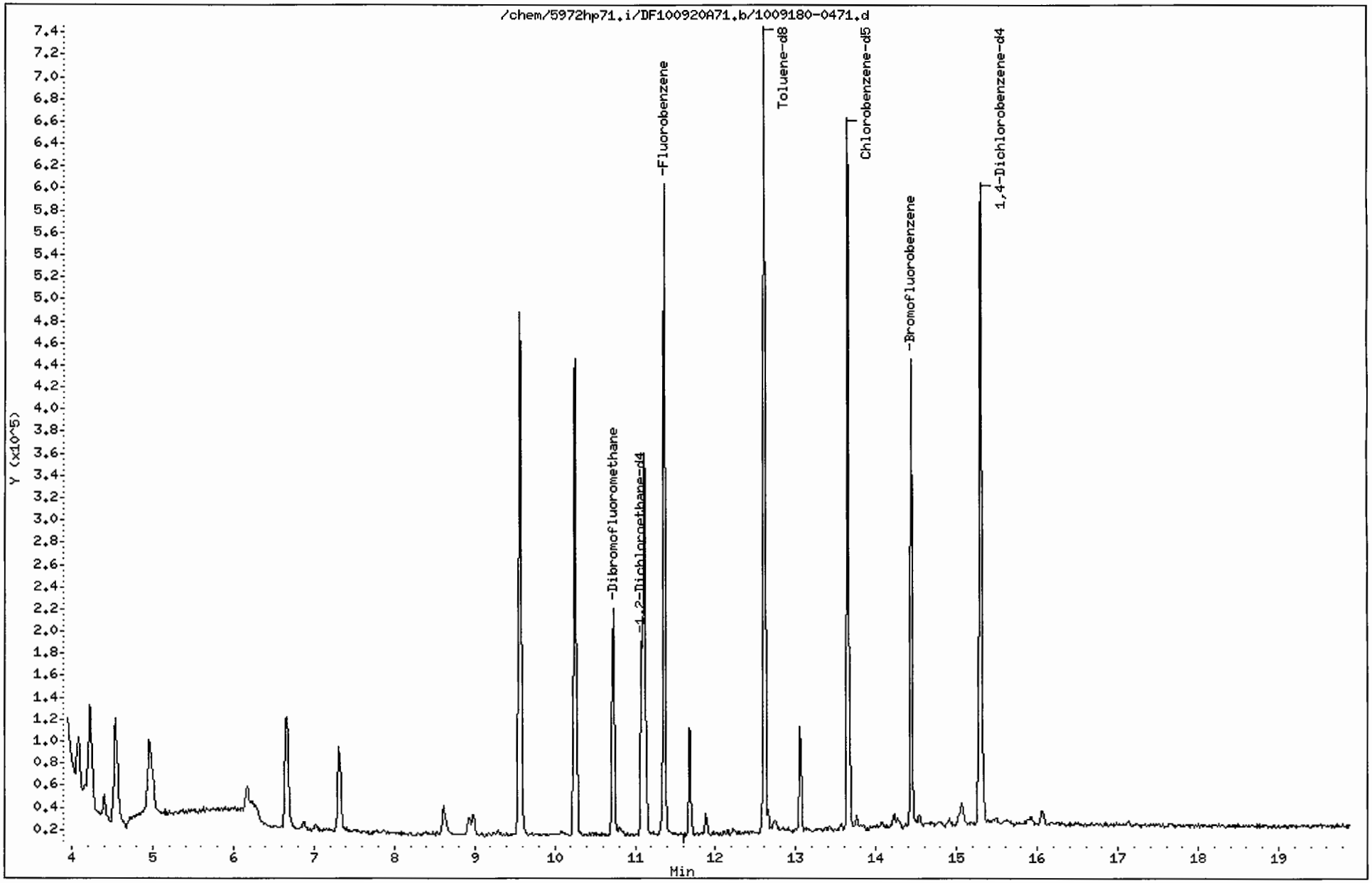
| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.874 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.875 | 97 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.688 | 94 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.744 | 95 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| 000075-45-6 | Difluorochloromethane | 1.4 | 334812 | 4.225 | 83 | J |
| 60-29-7 | Ethyl Ether | 1.4 | 345278 | 7.315 | 86 | JN |
| 000075-43-4 | Fluorodichloromethane | 2.0 | 471073 | 6.665 | 96 | JN |
| 000593-70-4 | Methane, chlorofluoro- | 7.1 | 1688833 | 4.953 | 90 | JN |
| NA | Unknown 4.539 | 1.7 | 405317 | 4.539 | 0 | J |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d
Date : 20-SEP-2010 16:40
Client ID: MW-9
Sample Info: 1009180-04:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0471.d
Lab Smp Id: 1009180-04 Client Smp ID: MW-9
Inj Date : 20-SEP-2010 16:40
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-04:JAO
Misc Info : MW-9
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.360 | 11.362 | (1.000) | 464040 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.643 | 13.646 | (1.000) | 303330 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.296 | 15.289 | (1.000) | 141244 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.730 | 10.733 | (0.945) | 122633 | 121.840 | 4.9 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.084 | 11.087 | (0.976) | 99159 | 121.870 | 4.9 |
| $ 6 Toluene-d8 | 98 | 12.609 | 12.602 | (0.924) | 423359 | 117.207 | 4.7 |
| $ 7 Bromofluorobenzene | 95 | 14.440 | 14.433 | (0.944) | 139805 | 118.600 | 4.7 |
| 8 Dichlorodifluoromethane | 85 | 4.165 | 4.168 | (0.367) | 22884 | 13.7730 | 0.55 |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | 5.002 | 4.995 | (0.440) | 35492 | 48.9949 | 2.0 |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | 6.173 | 6.176 | (0.543) | 28029 | 104.151 | 4.2 |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 18 Acetone | 43 | 7.866 | 7.869 | (0.692) | 3930 | 27.1512 | 1.1(a) |
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |

JMD 9-21-10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | 8.988 | 8.981 | (0.791) | 8290 | 8.06754 | 0.32(a) |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 9.568 | 9.571 | (0.842) | 508028 | 260.815 | 10 |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | 10.257 | 10.250 | (0.903) | 184958 | 171.541 | 6.9 |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | 11.113 | 11.116 | (0.978) | 275837 | 70.4933 | 2.8 |
| 48 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 49 Trichloroethene | 130 | 11.684 | 11.677 | (1.029) | 26592 | 28.2255 | 1.1 |
| 51 1,2-Dichloropropane | 63 | 11.881 | 11.884 | (1.046) | 6062 | 6.10139 | 0.24(a) |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.659 | 12.652 | (0.928) | 7151 | 2.67874 | 0.11(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | 13.052 | 13.055 | (0.957) | 17784 | 20.6330 | 0.83 |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | 13.672 | 13.665 | (1.002) | 26179 | 10.4545 | 0.42(a) |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | 15.316 | 15.309 | (1.001) | 70408 | 40.1496 | 1.6 |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

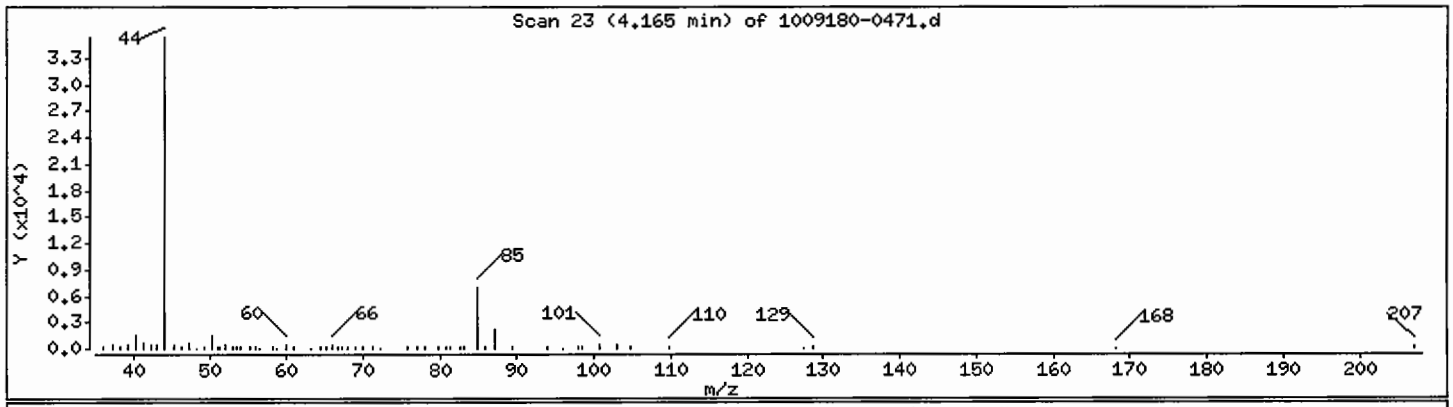
Client ID: MW-9 | Instrument: 5972hp71.i

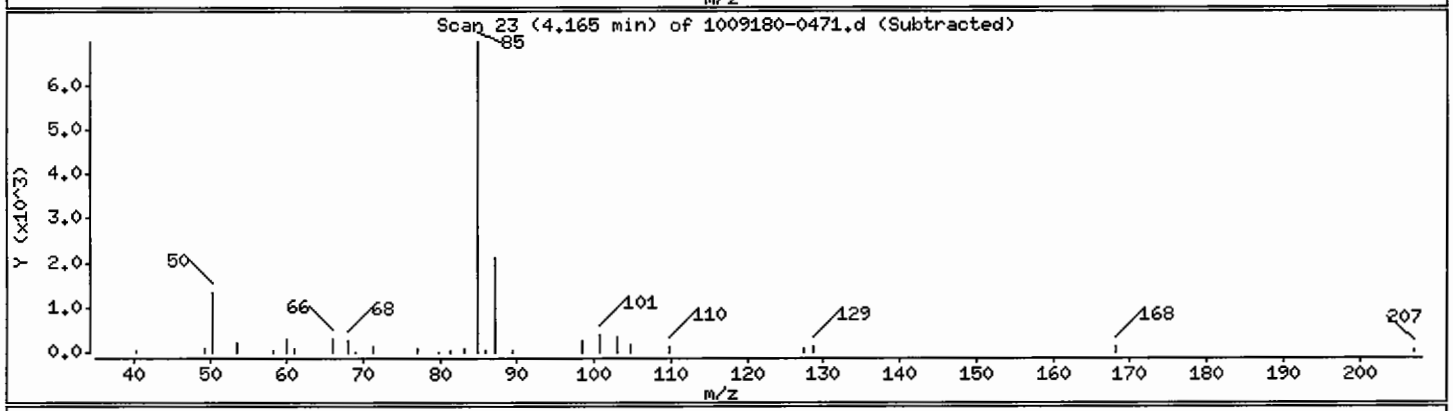
Sample Info: 1009180-04:JAO

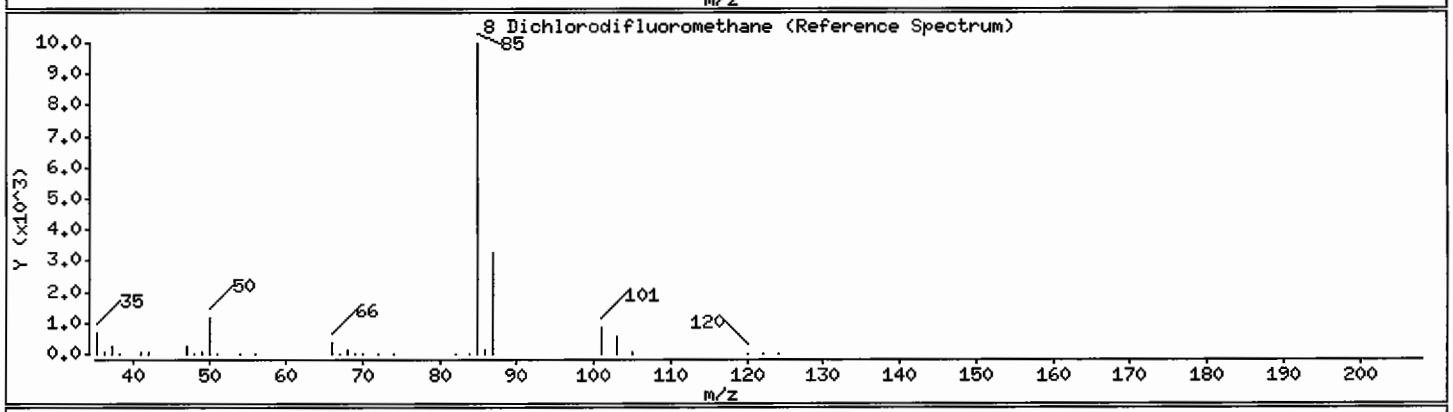
Purge Volume: 25.0 | Operator: JAO

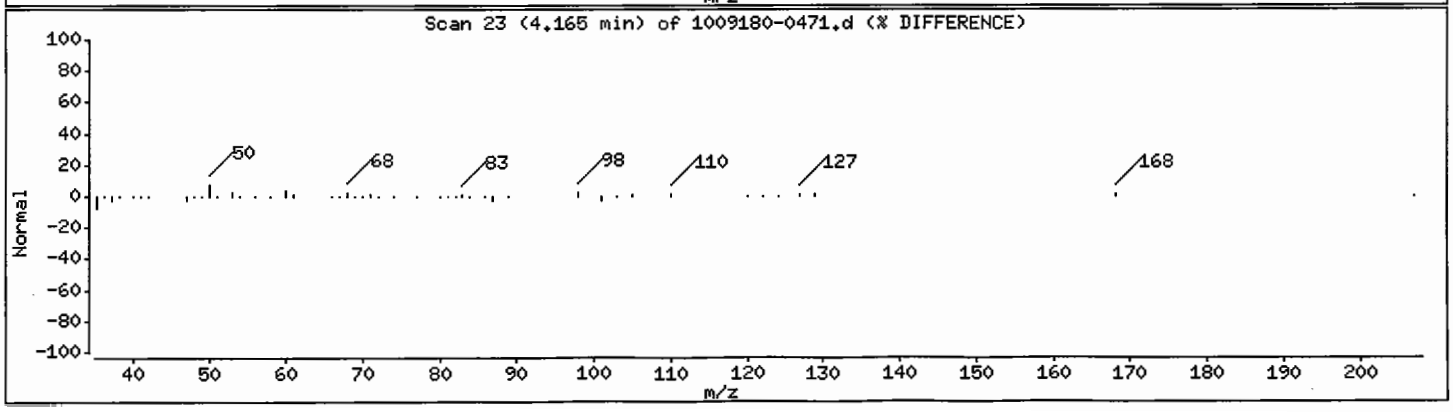
Column phase: SPB-624 | Column diameter: 0.32

8 Dichlorodifluoromethane | Concentration: 0.55 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

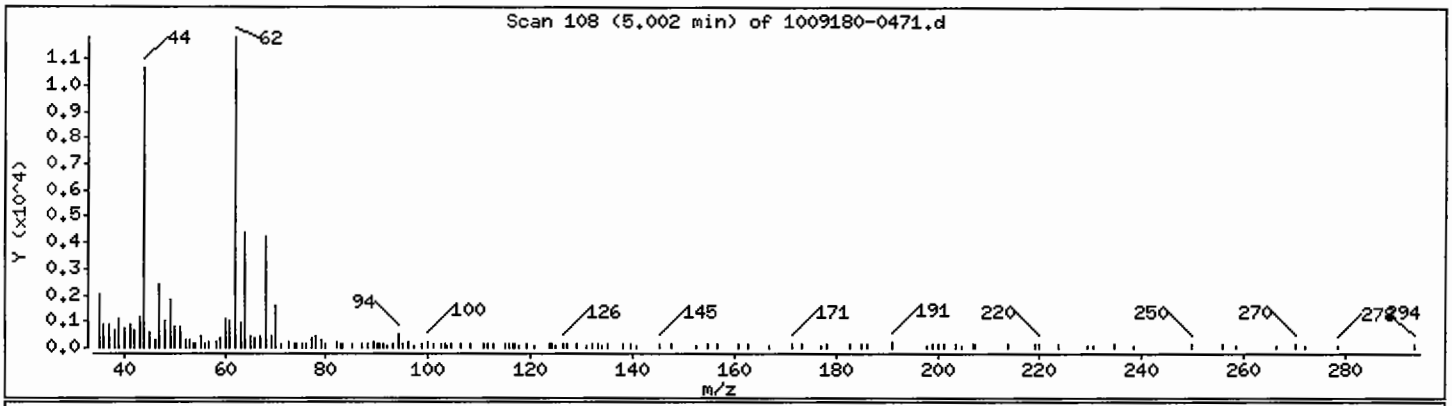
Client ID: MW-9 | Instrument: 5972hp71.i

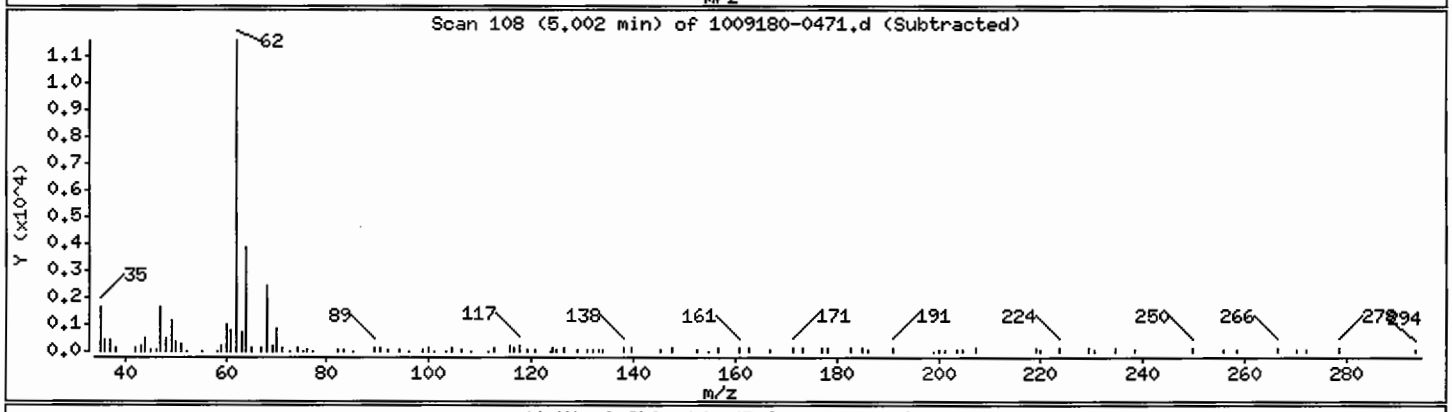
Sample Info: 1009180-04:JAO

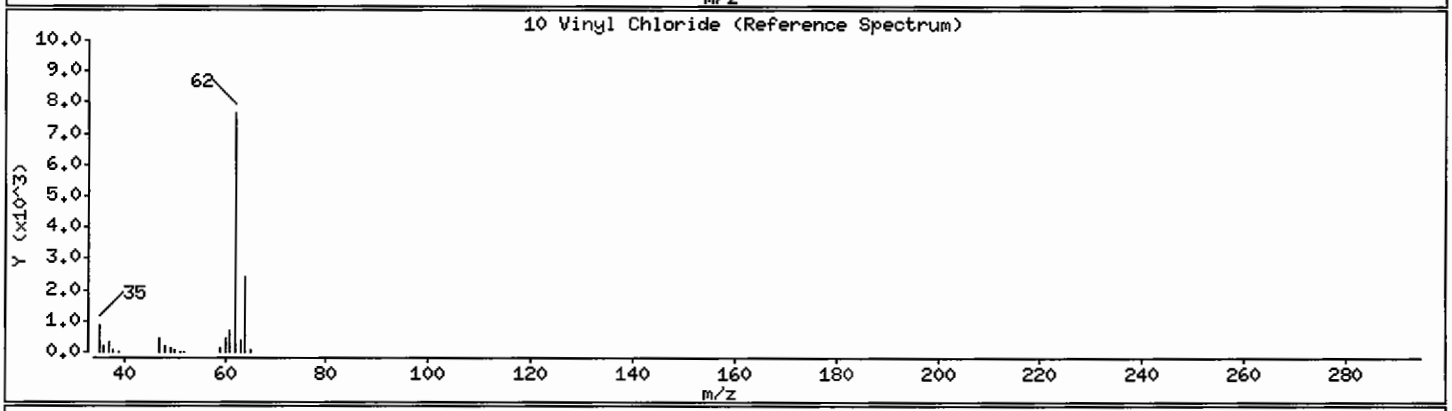
Purge Volume: 25.0 | Operator: JAO

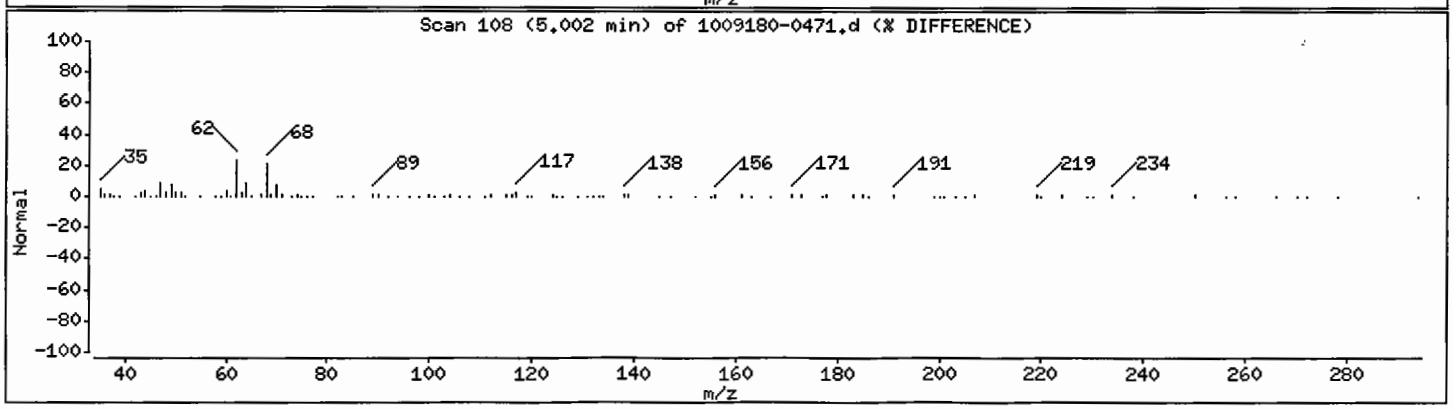
Column phase: SPB-624 | Column diameter: 0.32

10 Vinyl Chloride | Concentration: 2.0 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

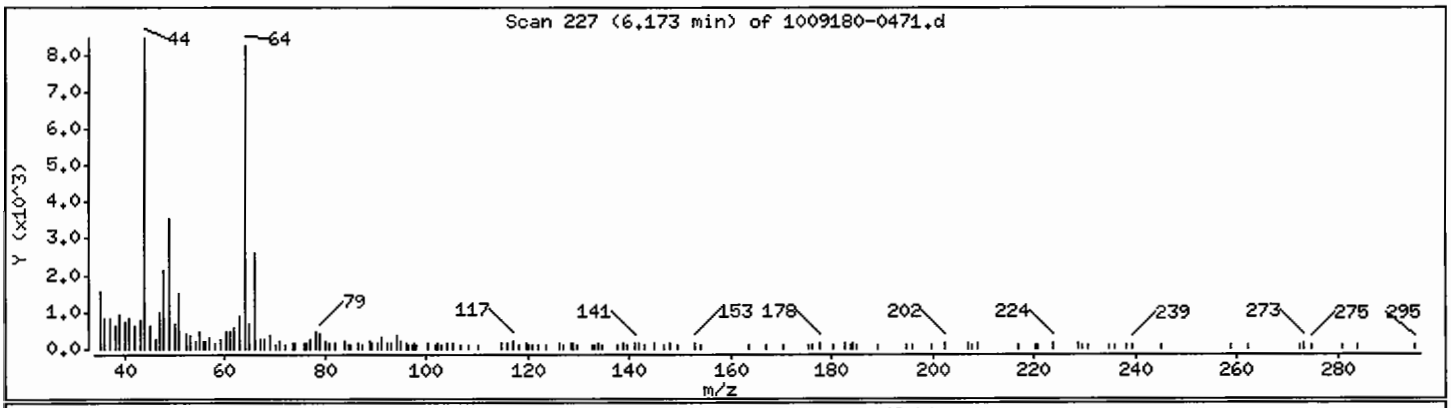
Client ID: MW-9 | Instrument: 5972hp71.i

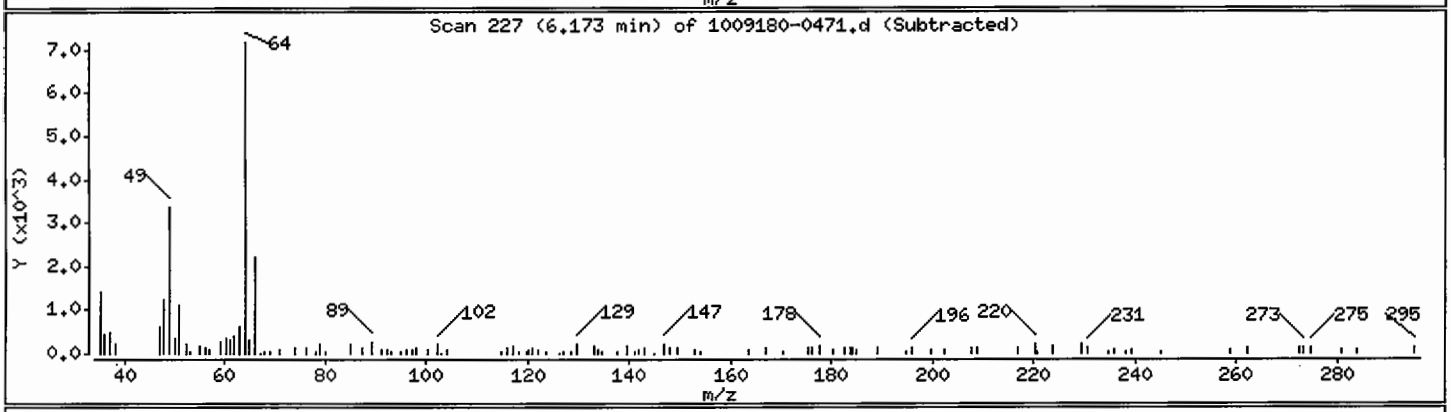
Sample Info: 1009180-04:JAO

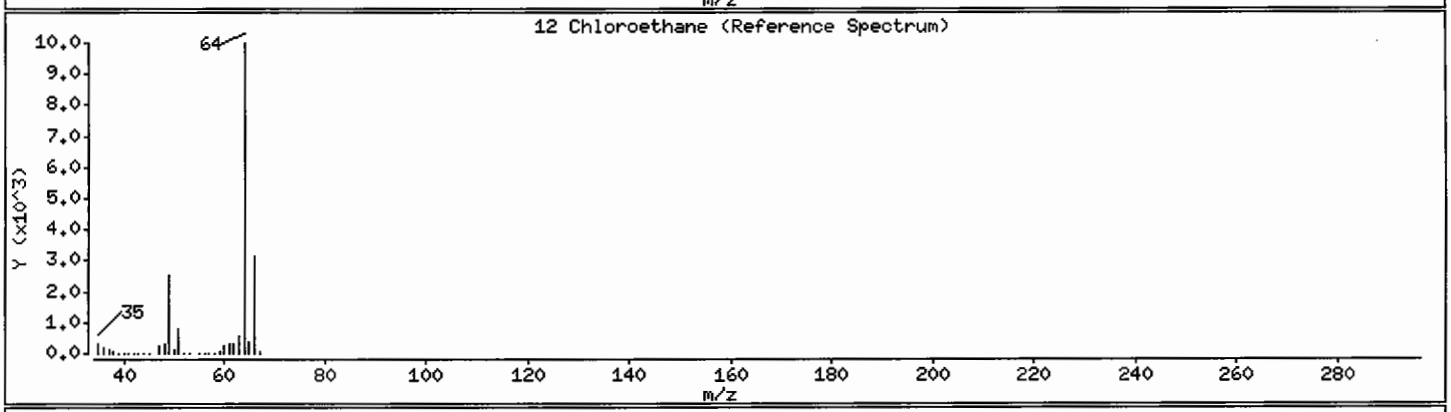
Purge Volume: 25.0 | Operator: JAO

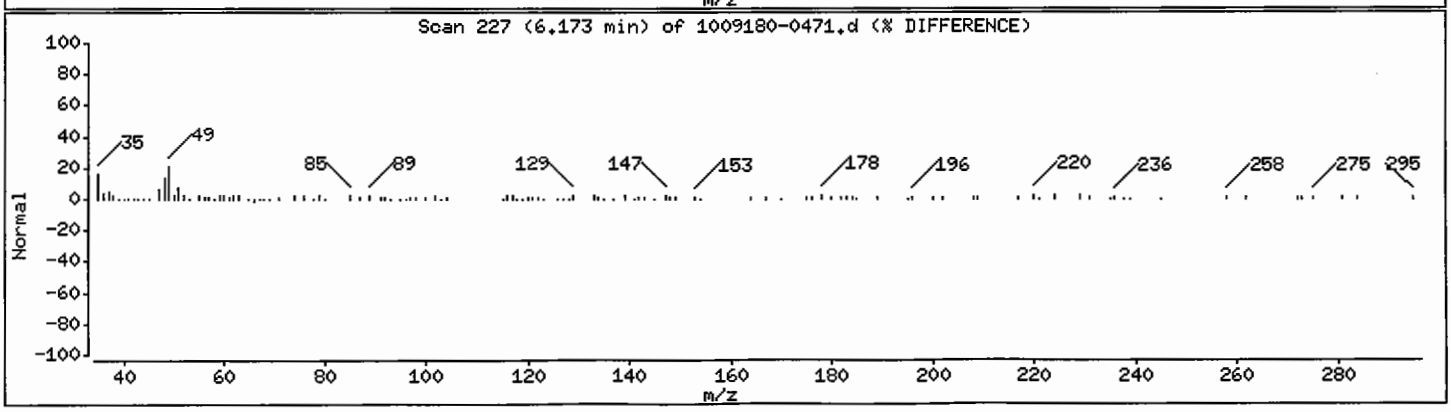
Column phase: SPB-624 | Column diameter: 0.32

12 Chloroethane | Concentration: 4.2 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

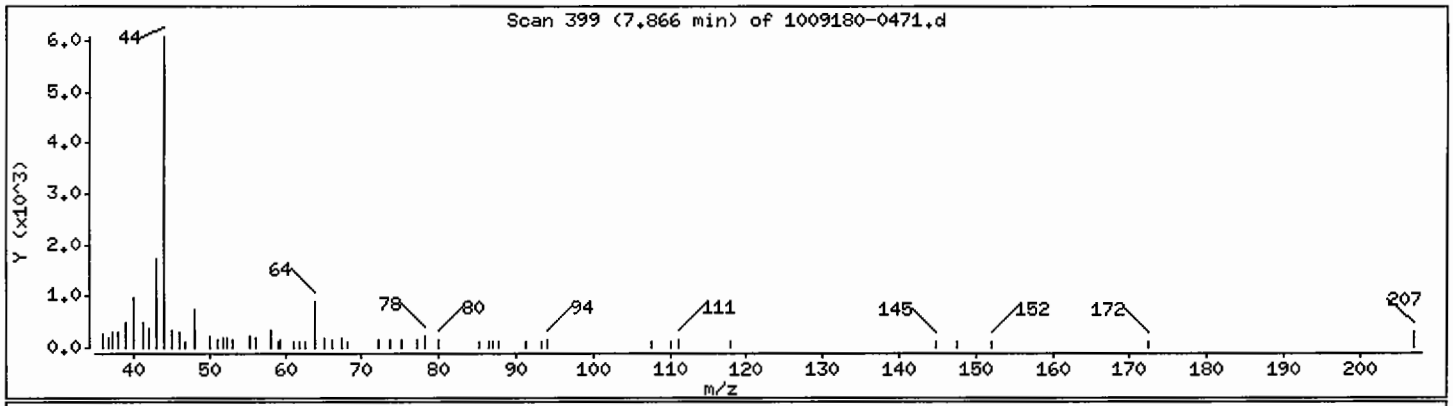
Client ID: MW-9 | Instrument: 5972hp71.i

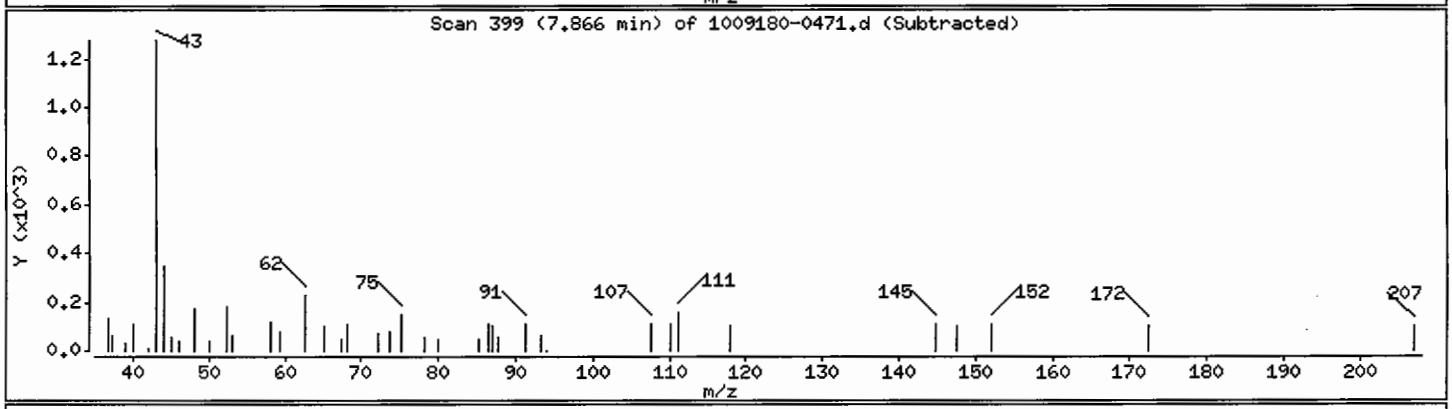
Sample Info: 1009180-04:JAO

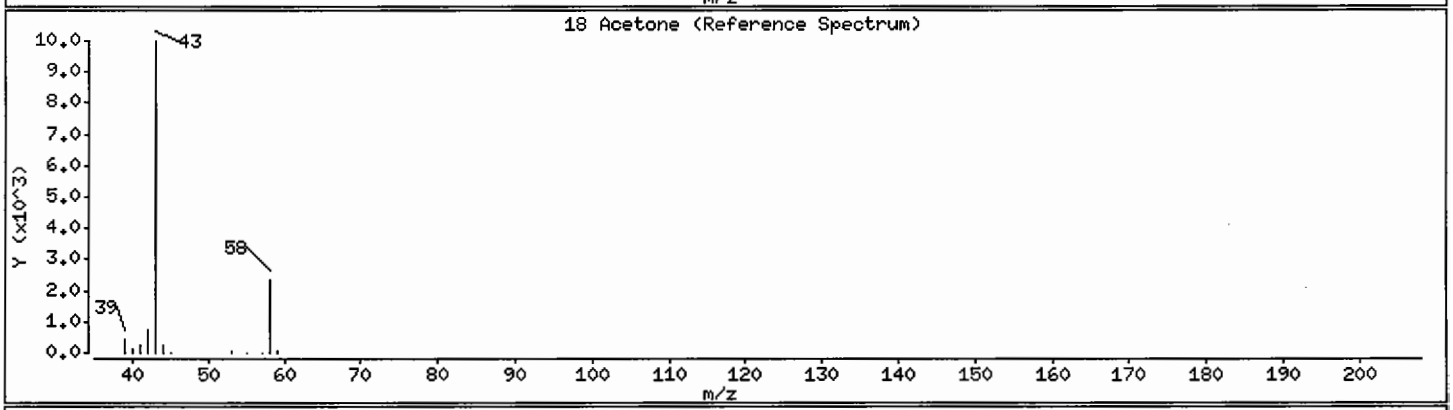
Purge Volume: 25.0 | Operator: JAO

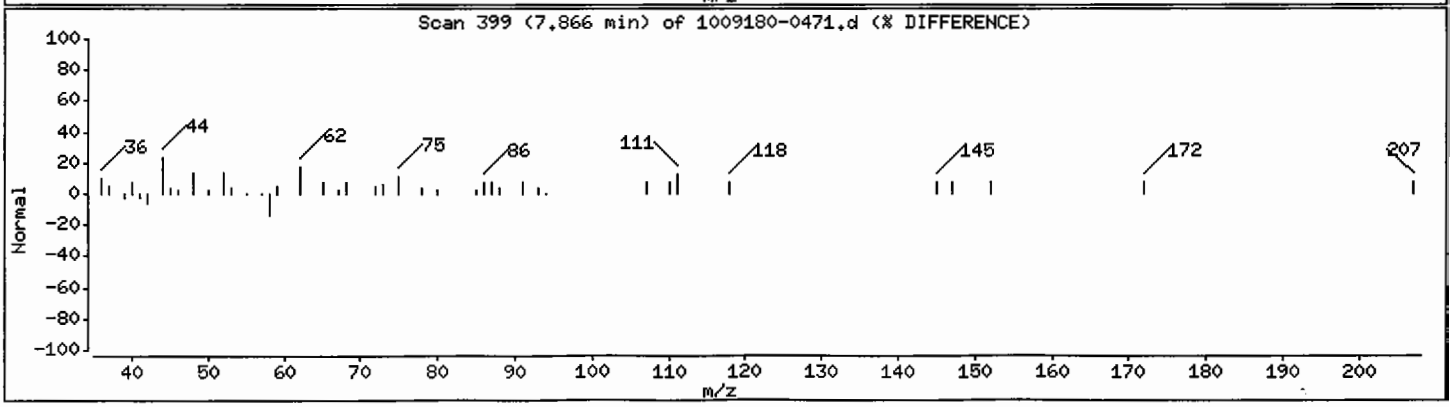
Column phase: SPB-624 | Column diameter: 0.32

18 Acetone | Concentration: 1.1 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

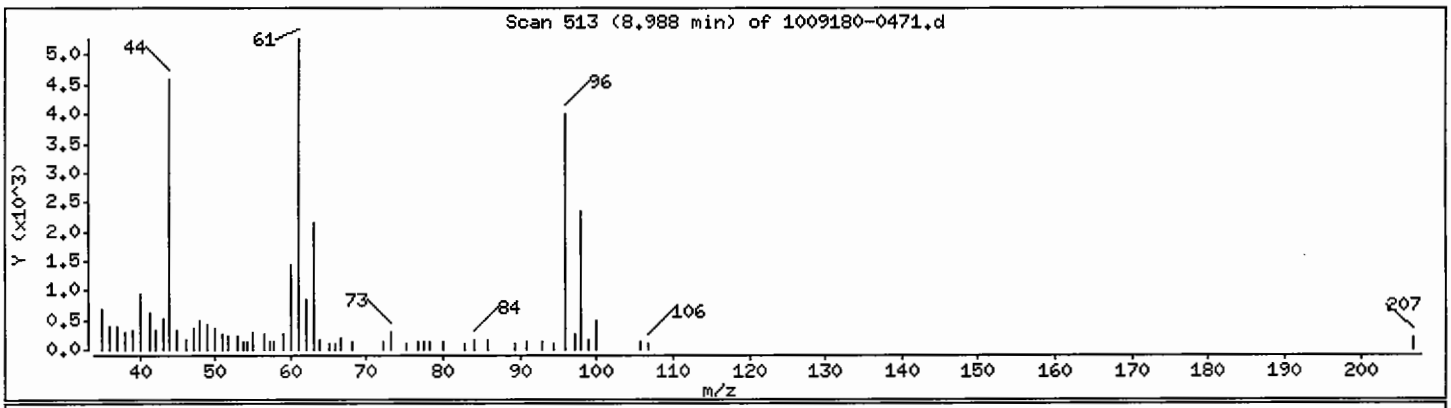
Client ID: MW-9 Instrument: 5972hp71.i

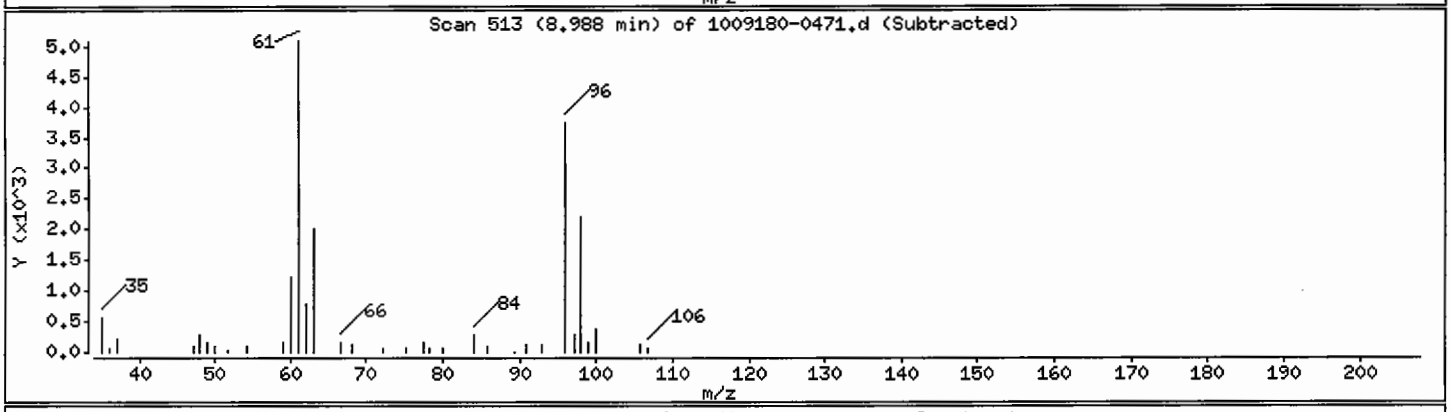
Sample Info: 1009180-04:JAO

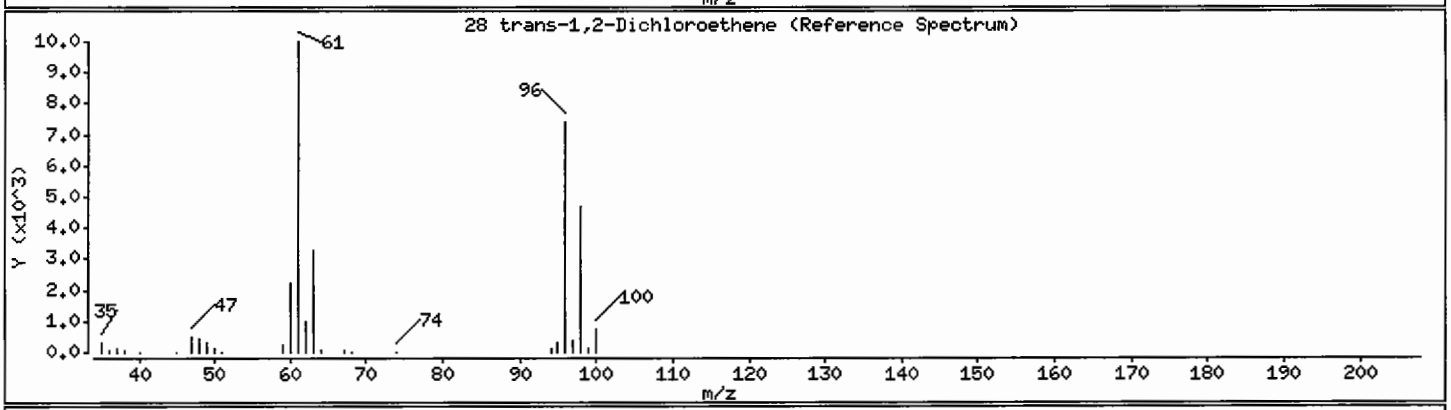
Purge Volume: 25.0 Operator: JAO

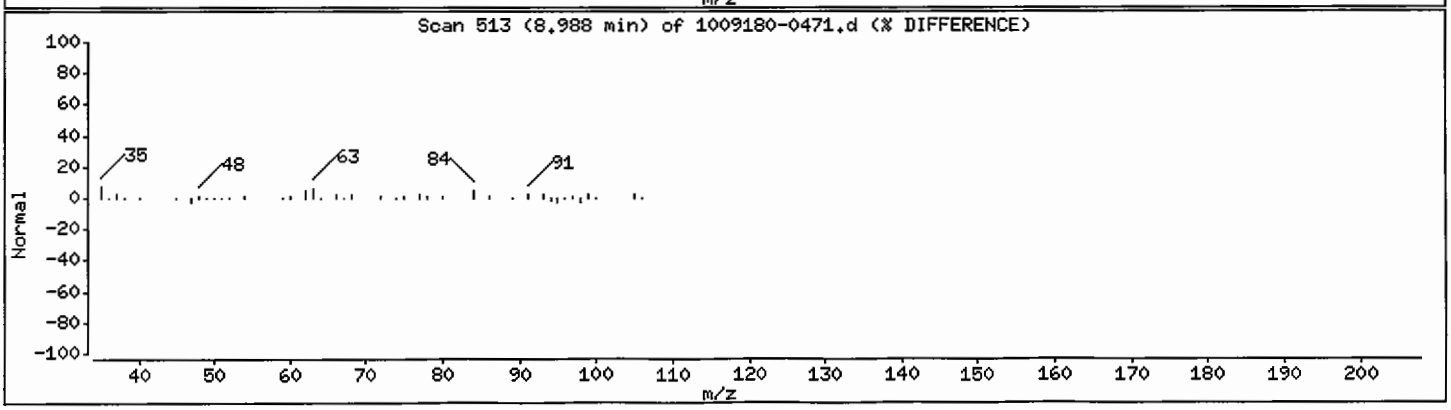
Column phase: SPB-624 Column diameter: 0.32

28 trans-1,2-Dichloroethene Concentration: 0.32 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

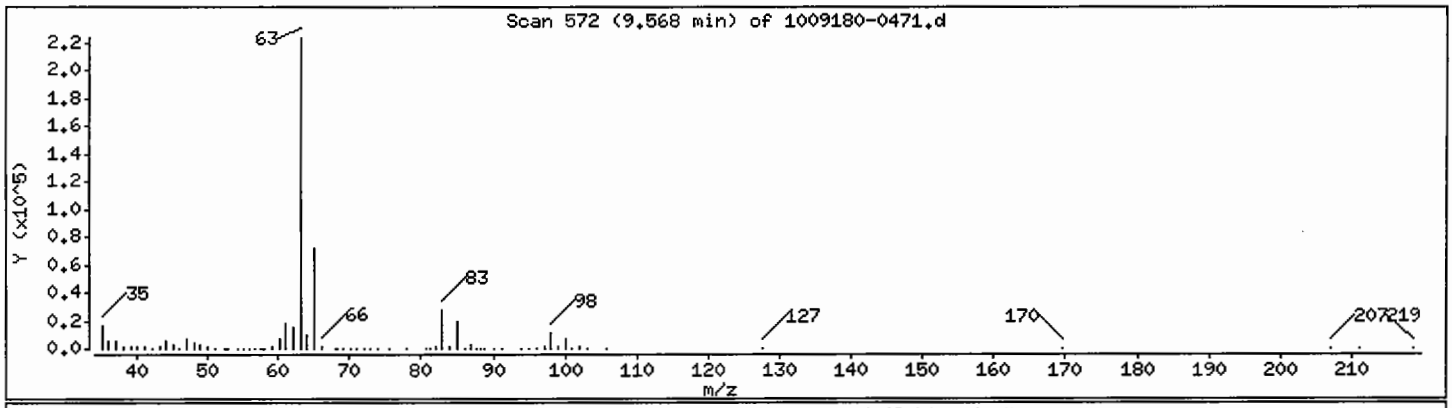
Client ID: MW-9 | Instrument: 5972hp71.i

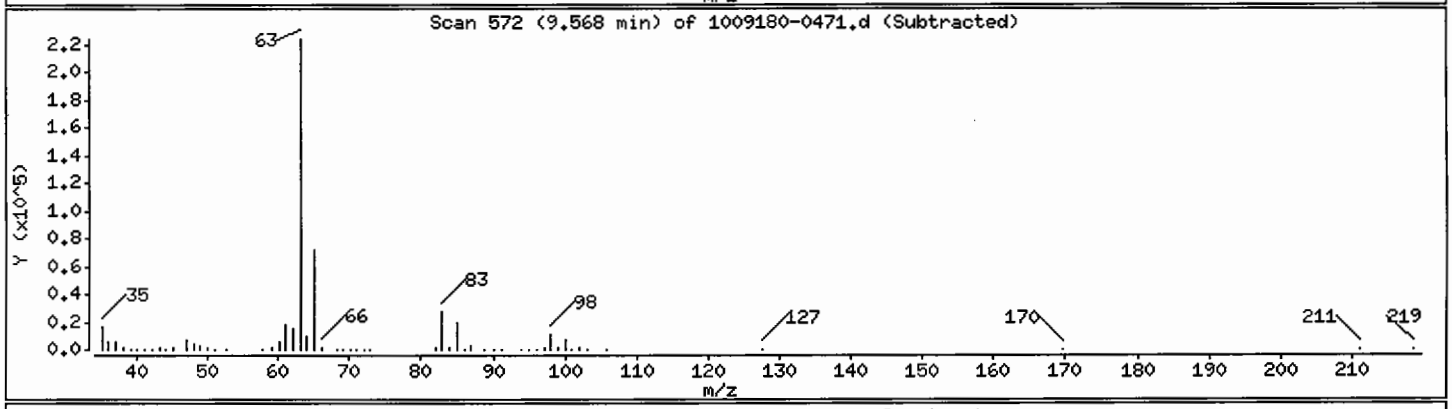
Sample Info: 1009180-04:JAO

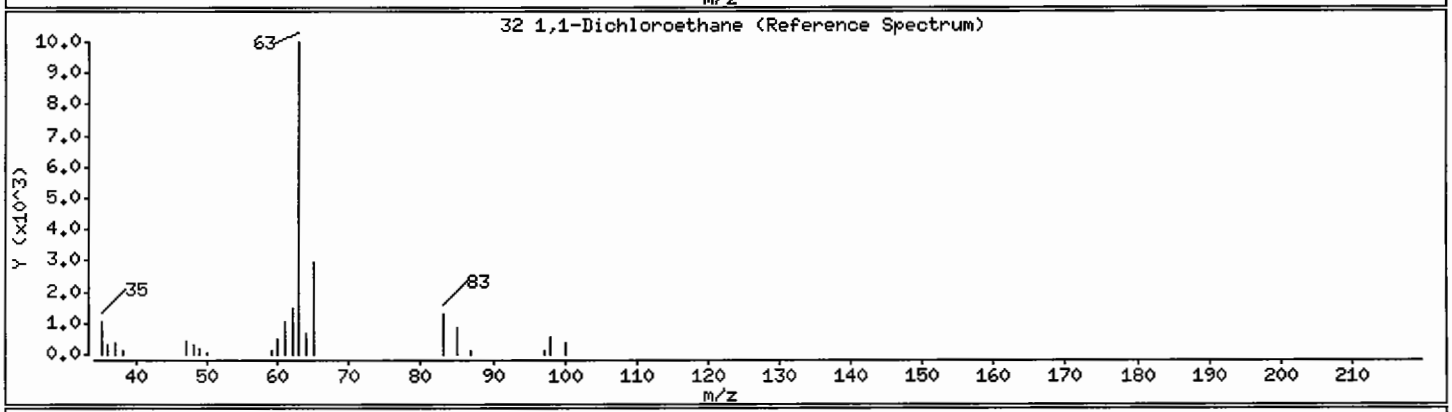
Purge Volume: 25.0 | Operator: JAO

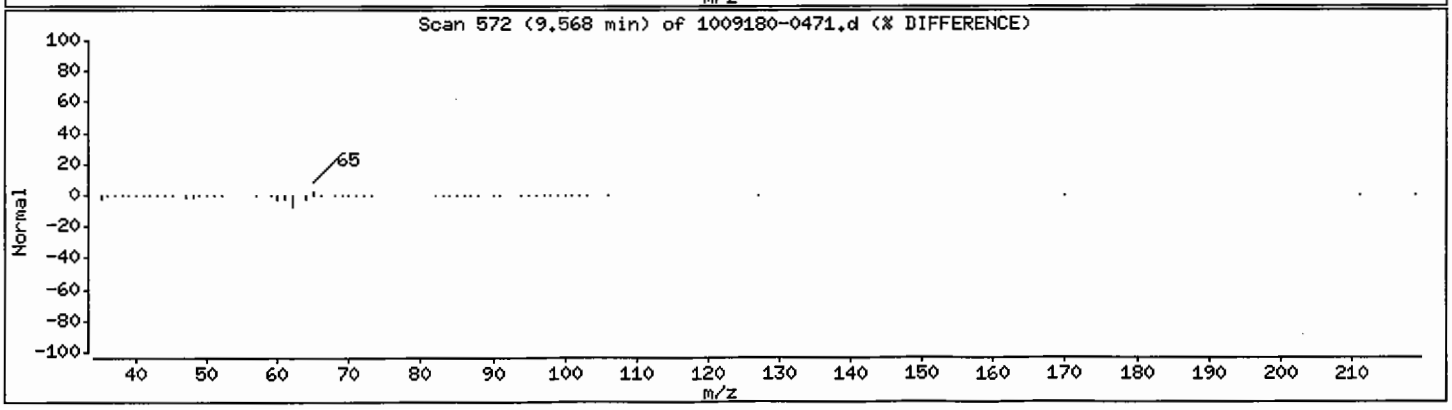
Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 10 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

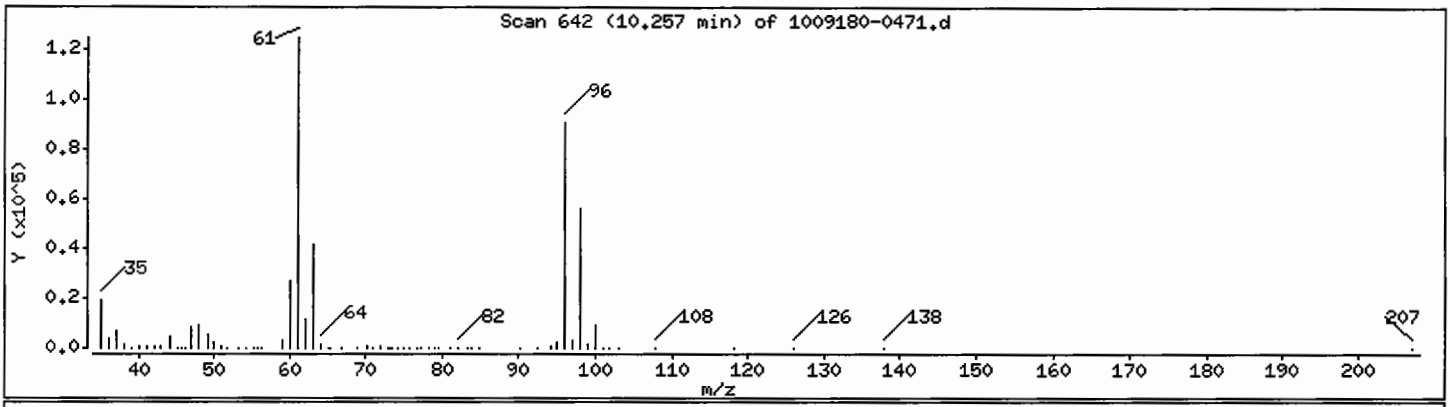
Client ID: MW-9 | Instrument: 5972hp71.i

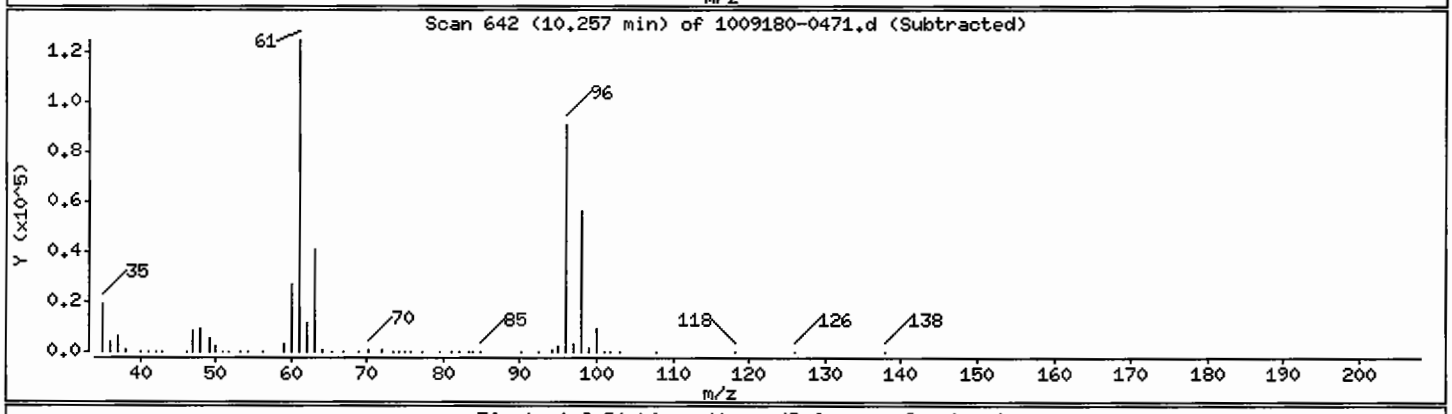
Sample Info: 1009180-04:JAO

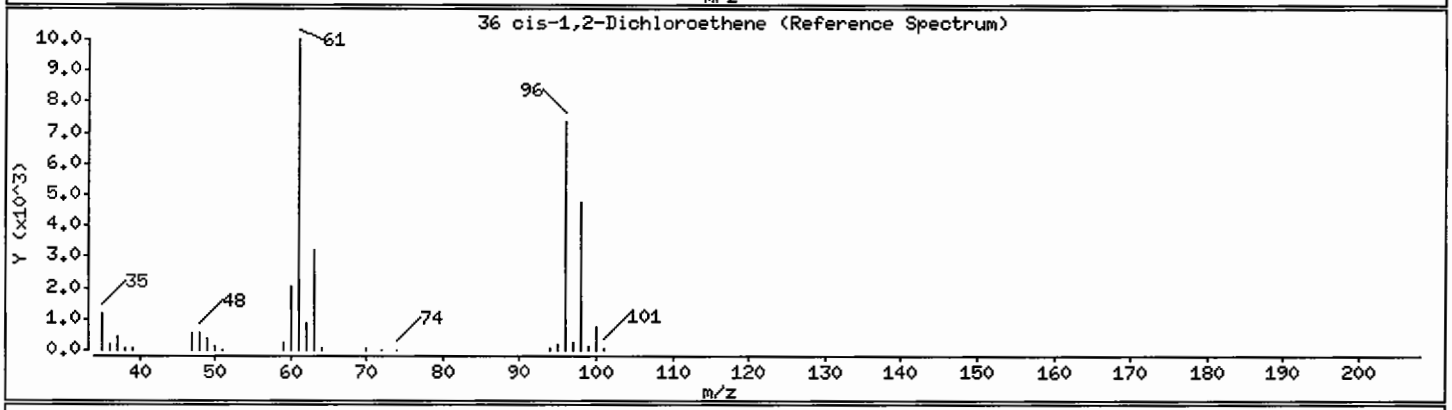
Purge Volume: 25.0 | Operator: JAO

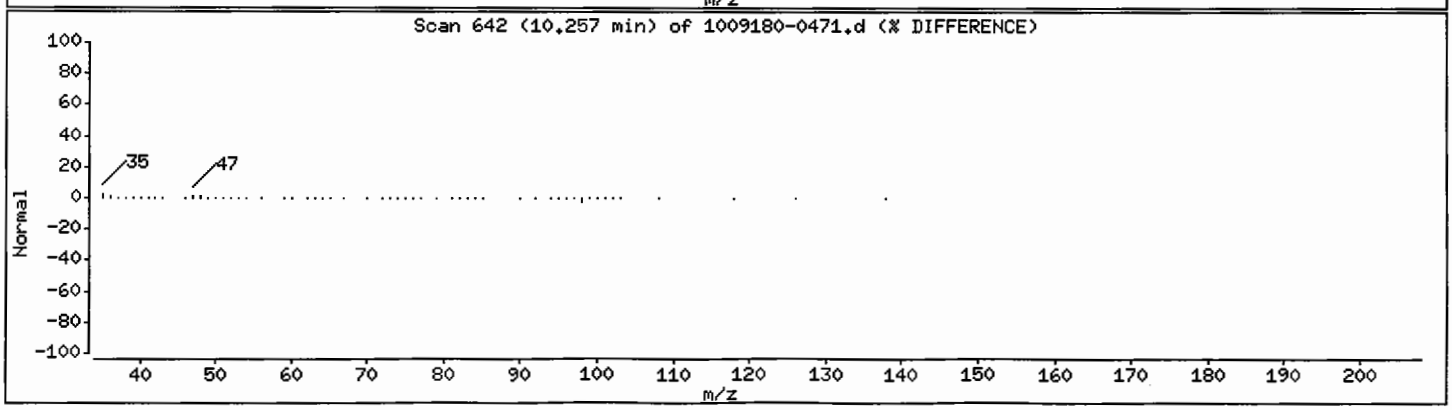
Column phase: SPB-624 | Column diameter: 0.32

36 cis-1,2-Dichloroethene | Concentration: 6.9 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

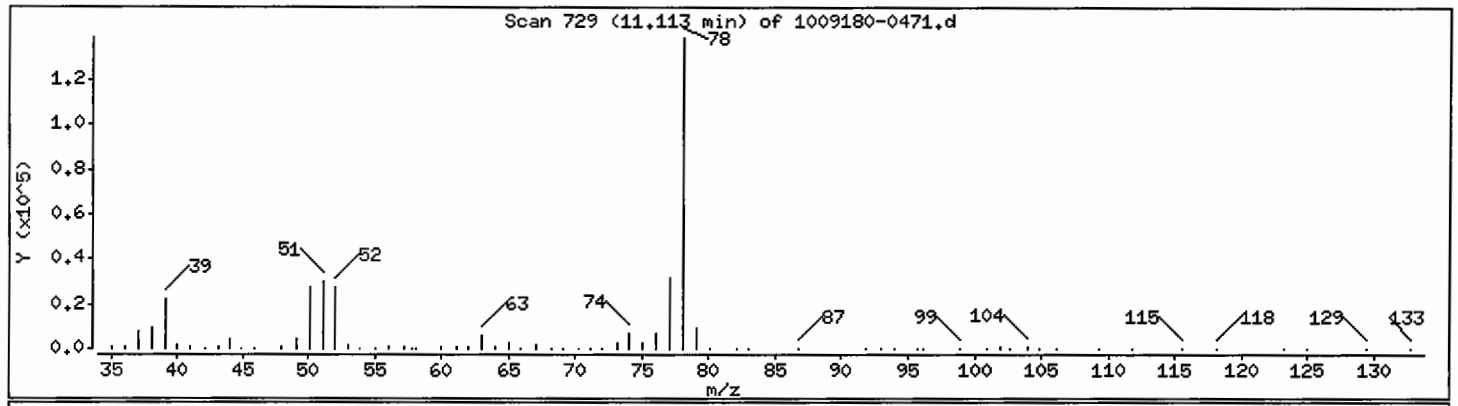
Client ID: MW-9 | Instrument: 5972hp71.i

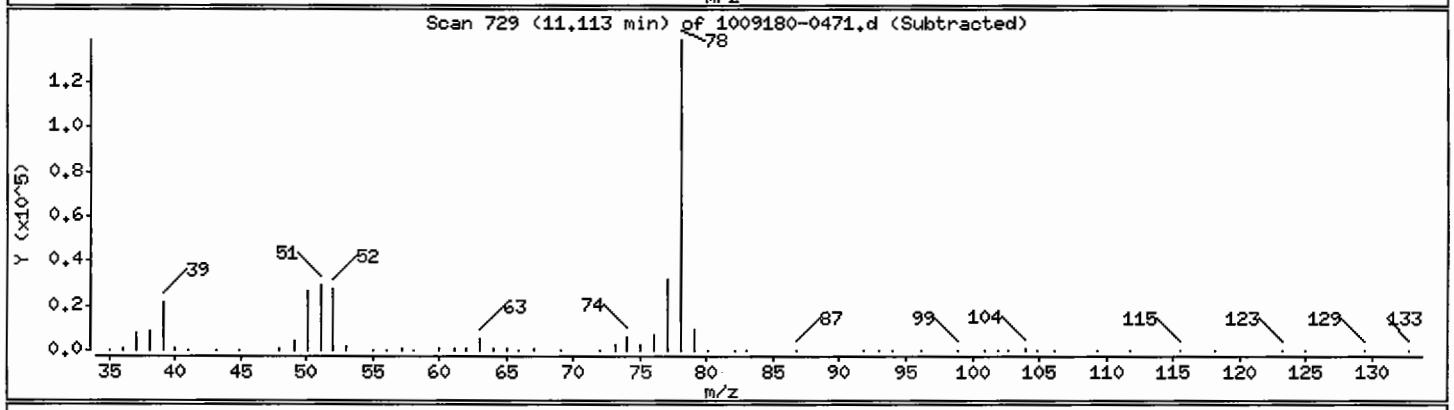
Sample Info: 1009180-04:JAO

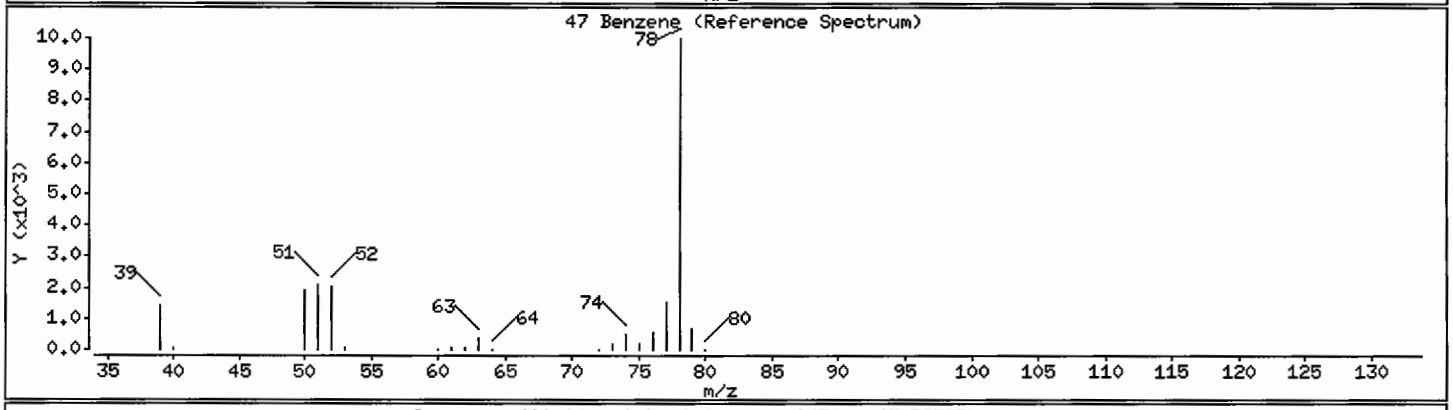
Purge Volume: 25.0 | Operator: JAO

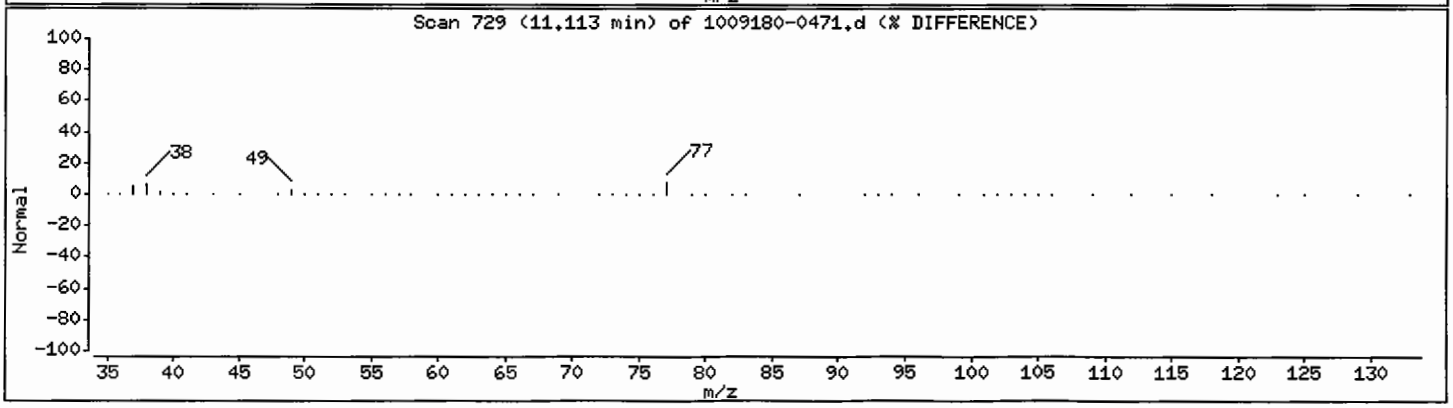
Column phase: SPB-624 | Column diameter: 0.32

47 Benzene | Concentration: 2.8 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

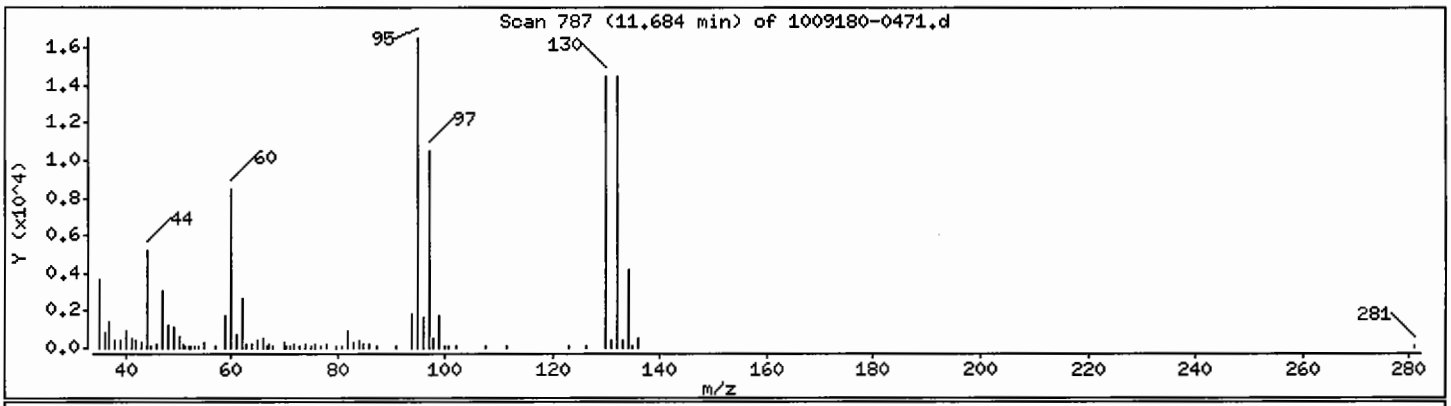
Client ID: MW-9 | Instrument: 5972hp71.i

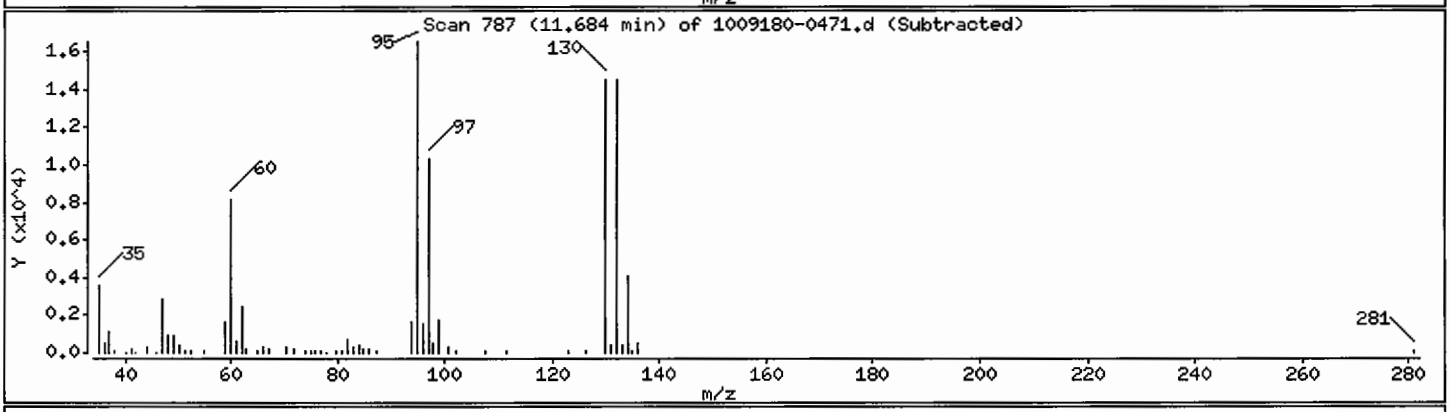
Sample Info: 1009180-04:JAO

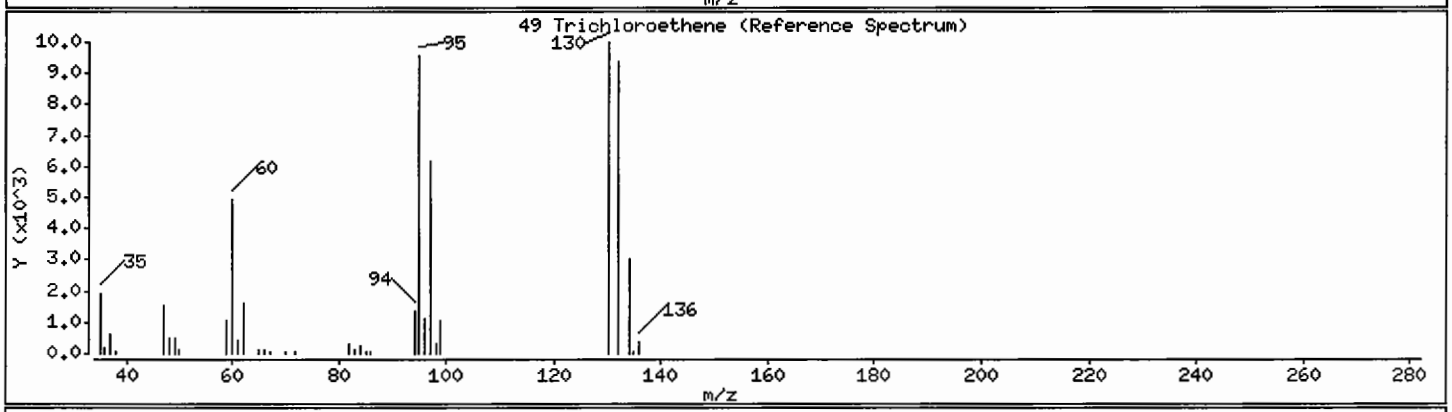
Purge Volume: 25.0 | Operator: JAO

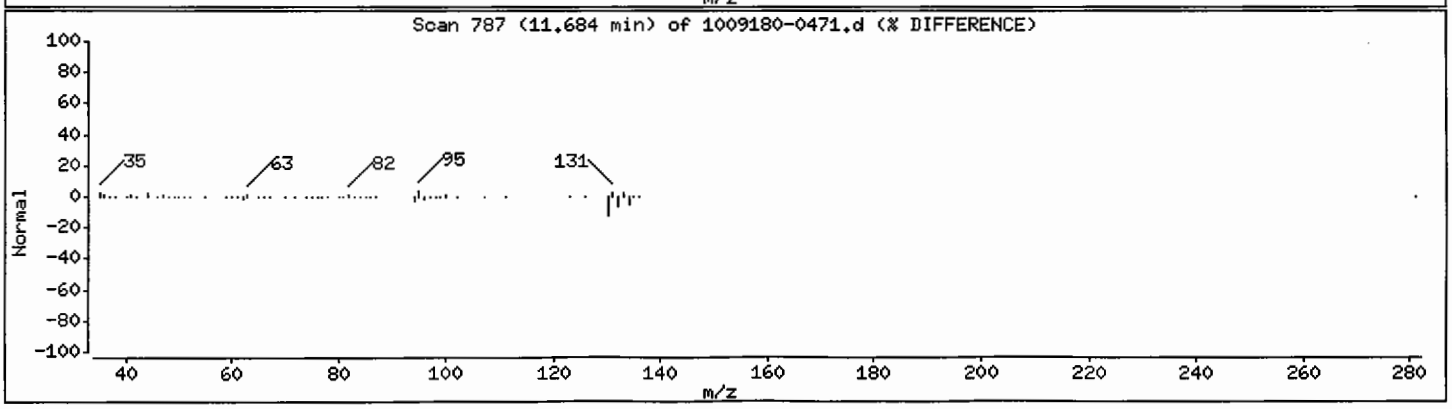
Column phase: SPB-624 | Column diameter: 0.32

49 Trichloroethene | Concentration: 1.1 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

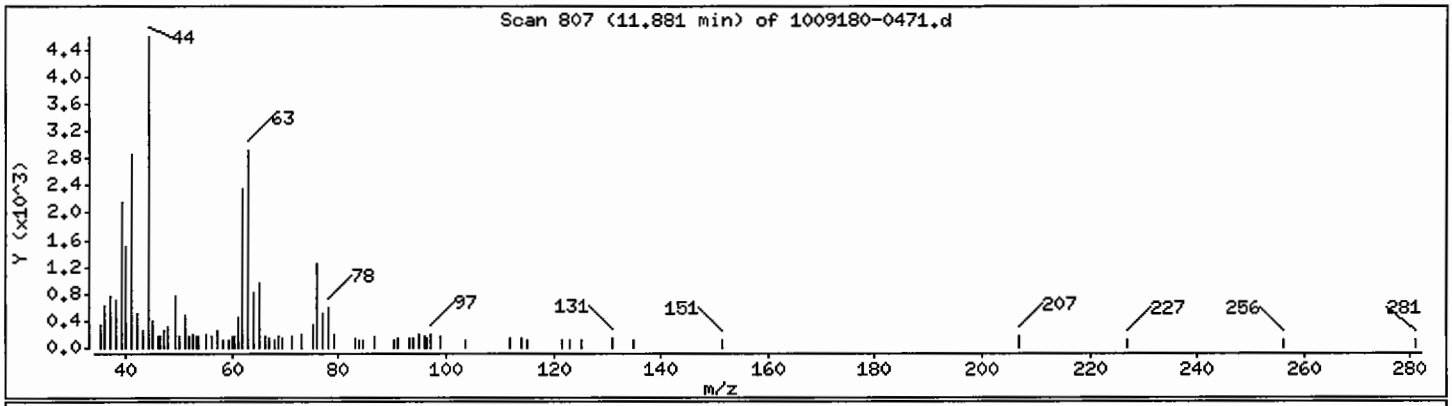
Client ID: MW-9 | Instrument: 5972hp71.i

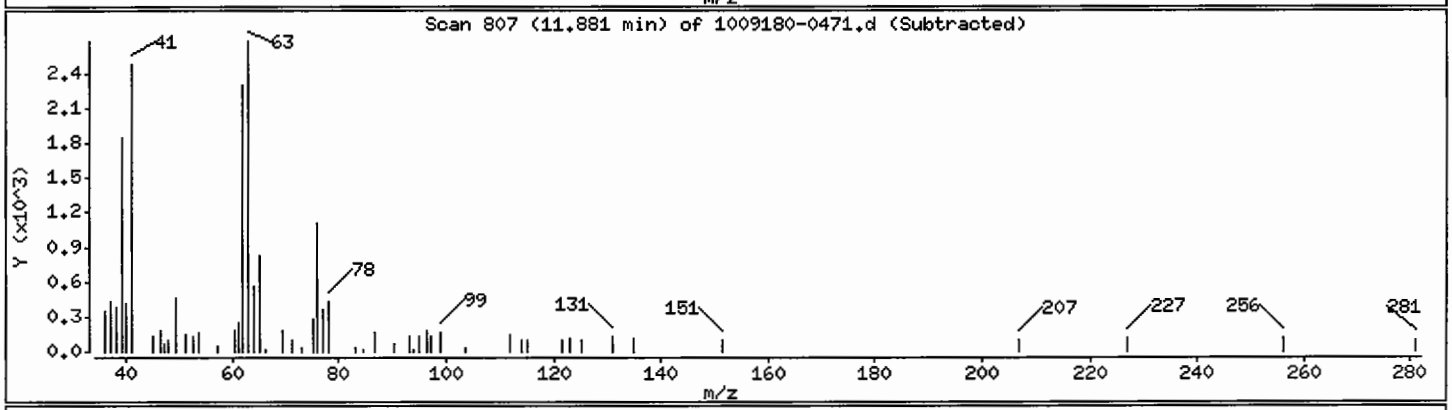
Sample Info: 1009180-04:JAO

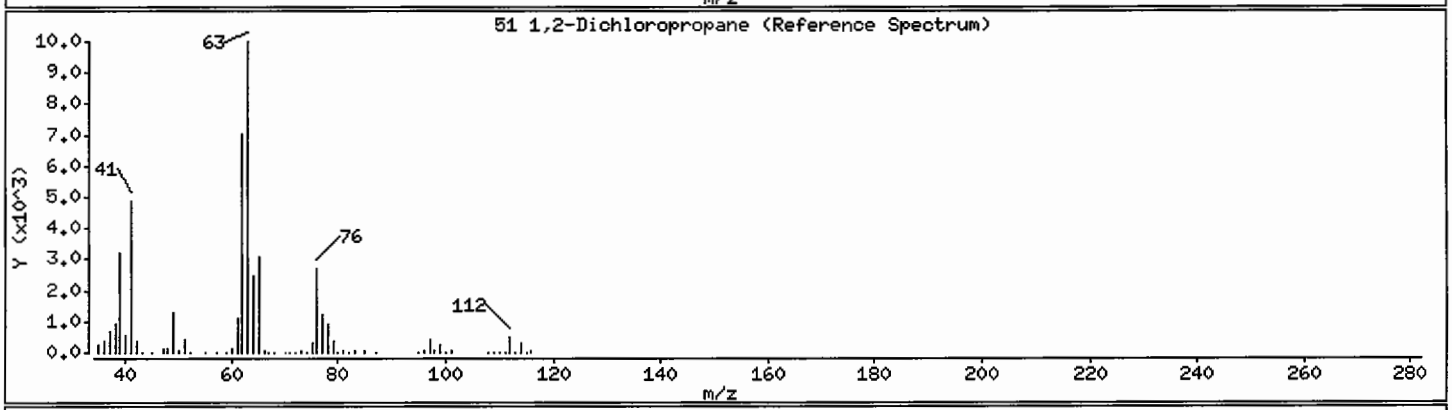
Purge Volume: 25.0 | Operator: JAO

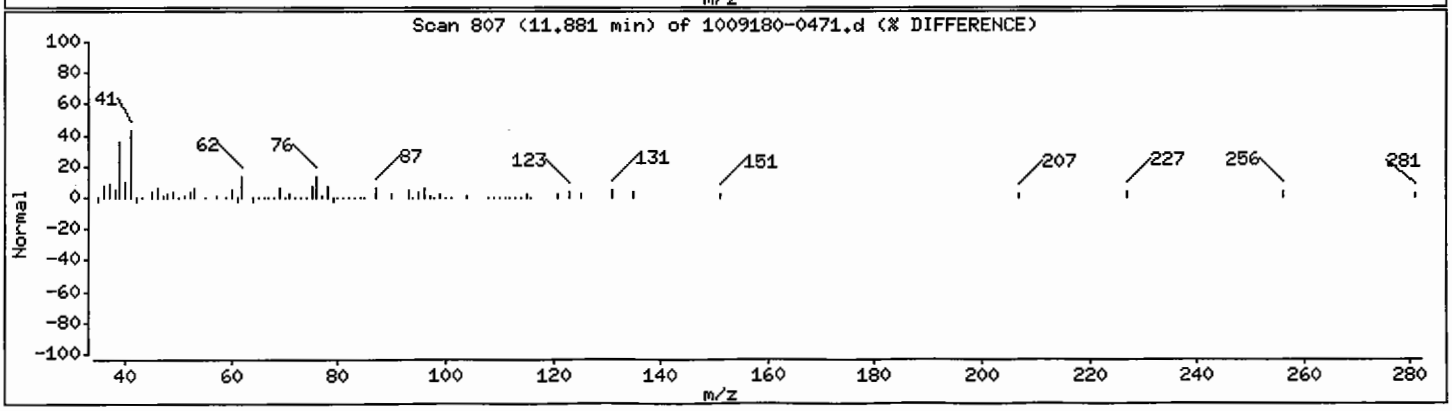
Column phase: SPB-624 | Column diameter: 0.32

51 1,2-Dichloropropane | Concentration: 0.24 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

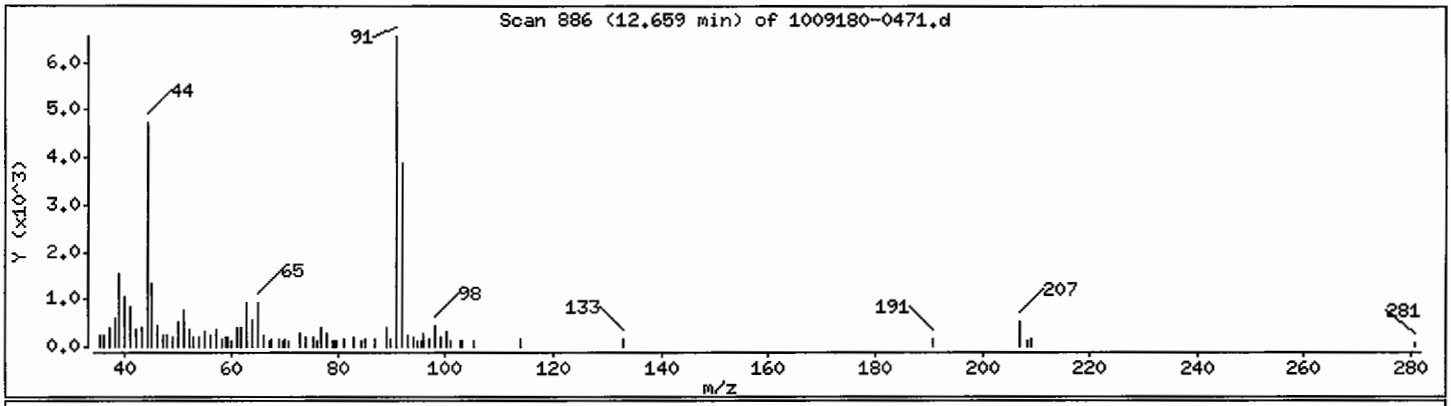
Client ID: MW-9 | Instrument: 5972hp71.i

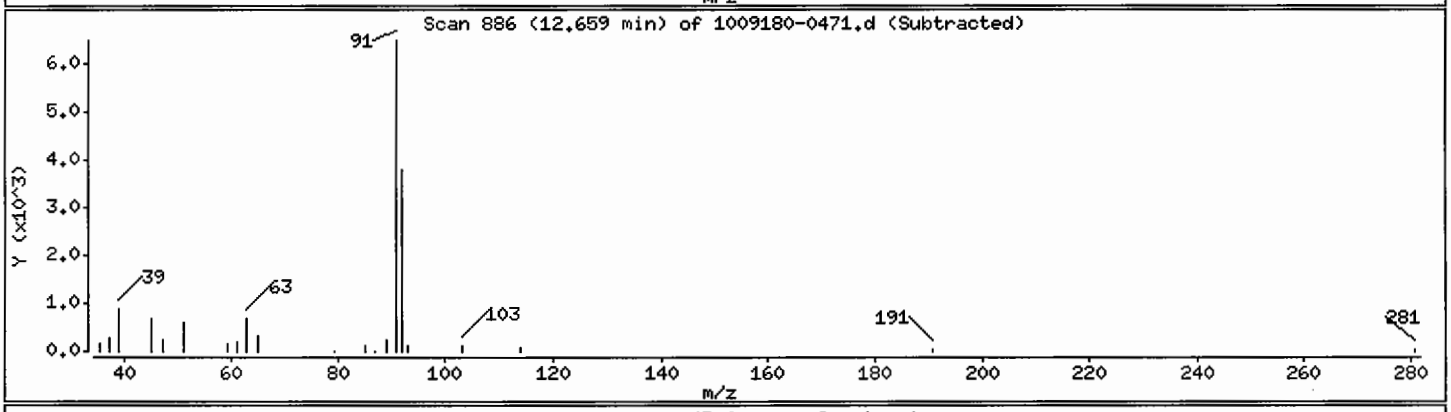
Sample Info: 1009180-04:JAO

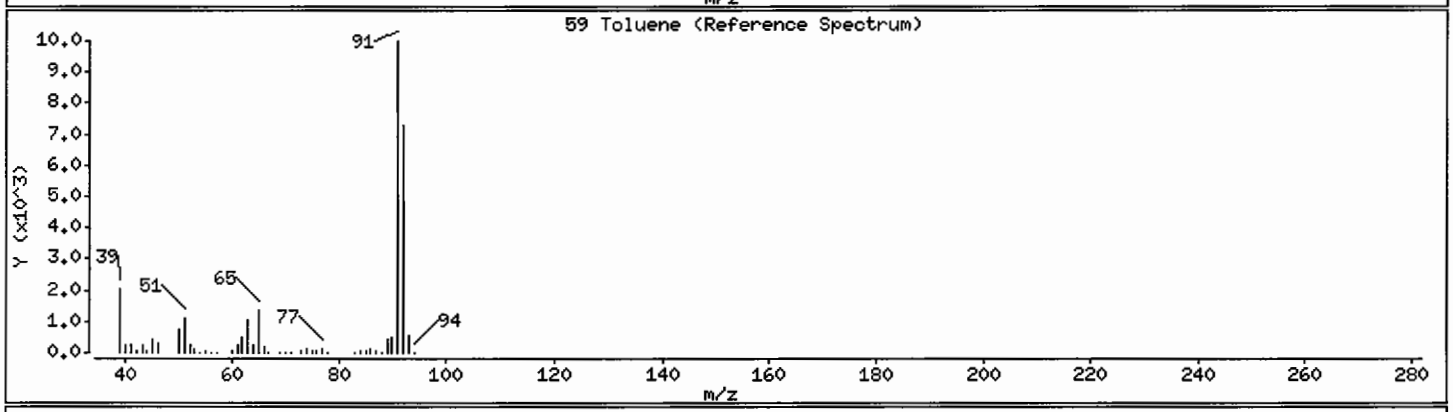
Purge Volume: 25.0 | Operator: JAO

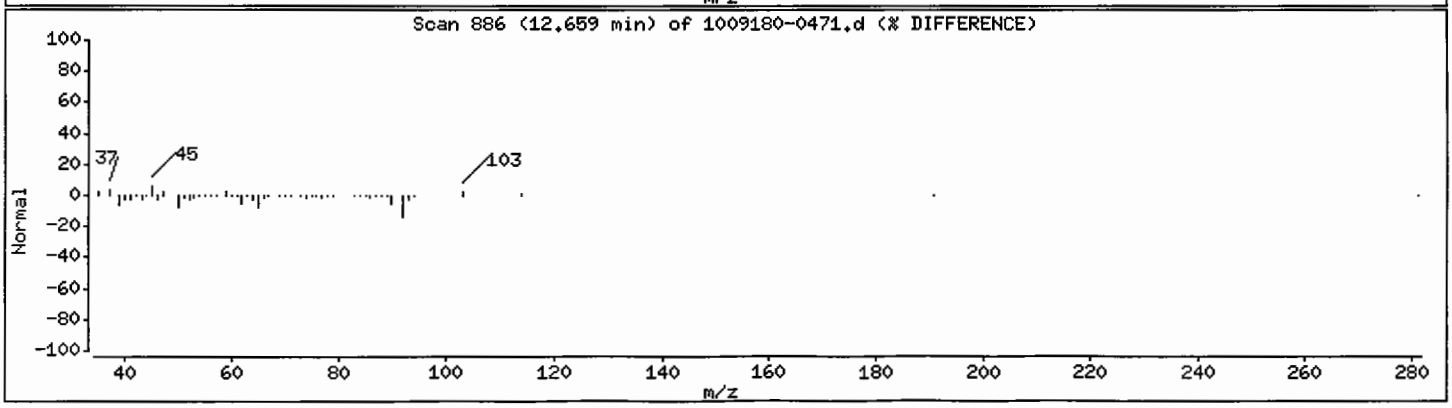
Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.11 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

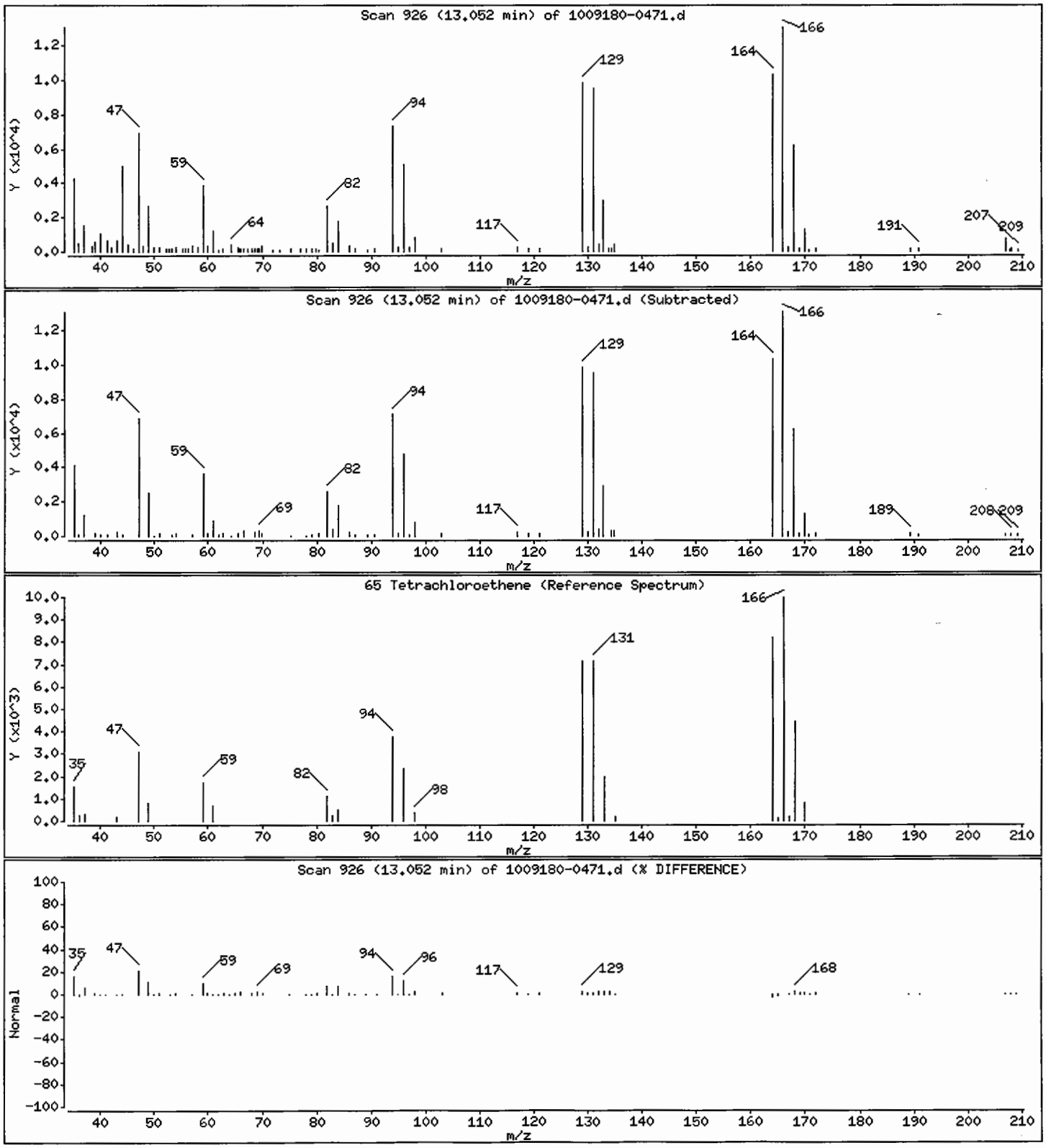
Client ID: MW-9 | Instrument: 5972hp71.i

Sample Info: 1009180-04:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

65 Tetrachloroethene | Concentration: 0.83 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

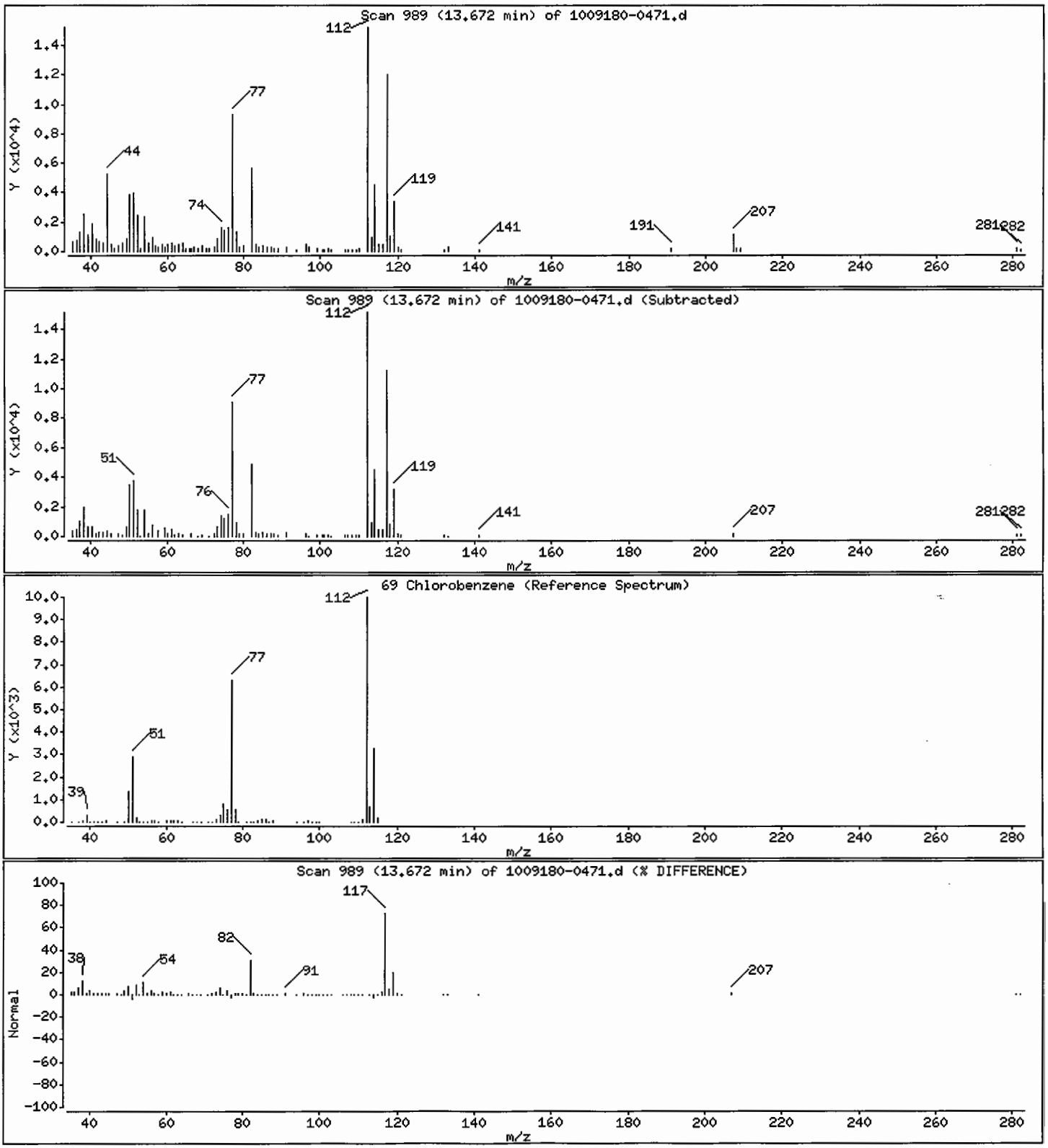
Client ID: MW-9 | Instrument: 5972hp71.i

Sample Info: 1009180-04:JAO

Purge Volume: 25.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

69 Chlorobenzene | Concentration: 0.42 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

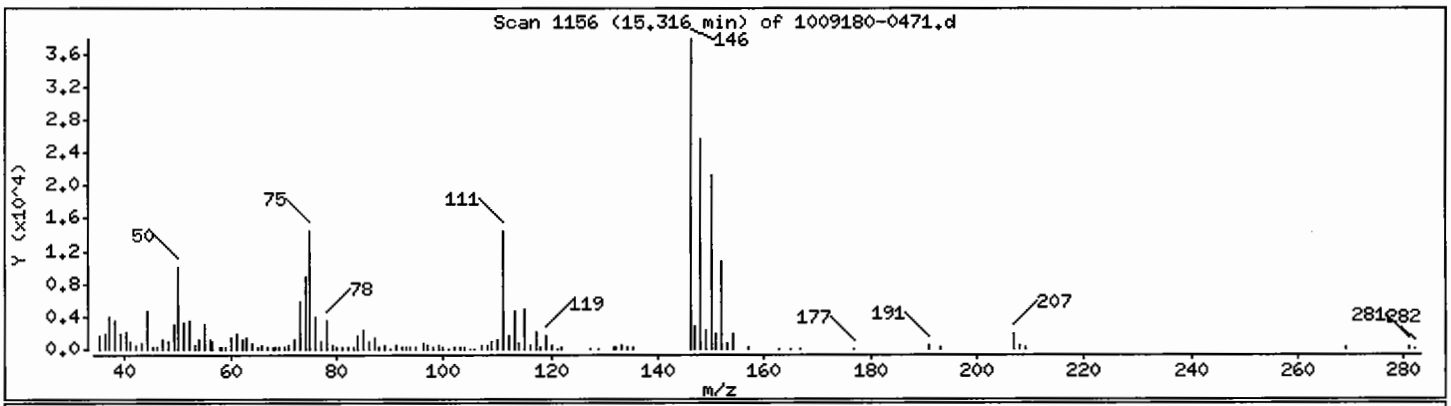
Client ID: MW-9 | Instrument: 5972hp71.i

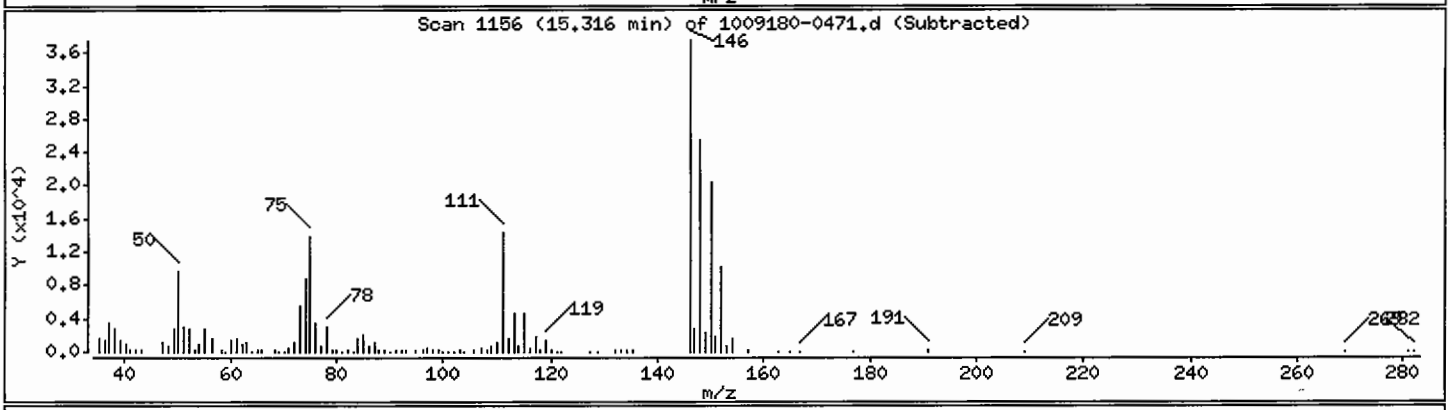
Sample Info: 1009180-04:JAO

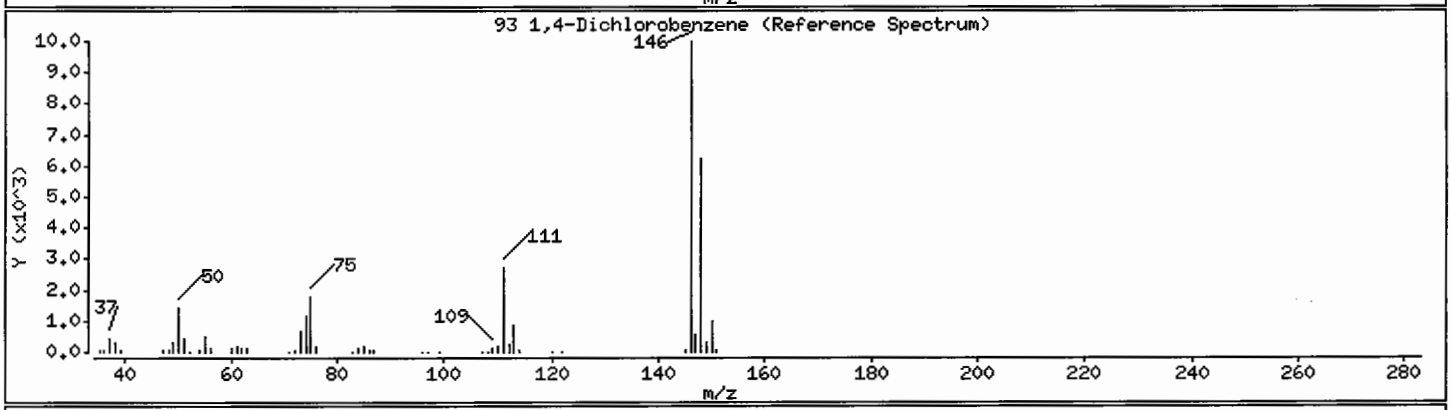
Purge Volume: 25.0 | Operator: JAO

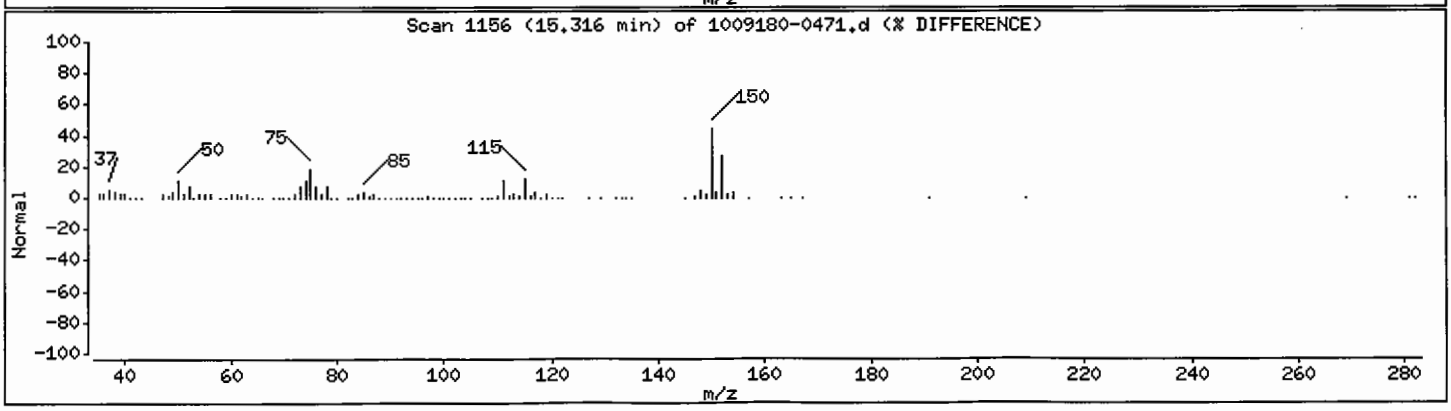
Column phase: SPB-624 | Column diameter: 0.32

93 1,4-Dichlorobenzene | Concentration: 1.6 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-0471.d
Lab Smp Id: 1009180-04 Client Smp ID: MW-9
Inj Date : 20-SEP-2010 16:40
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-04:JAO
Misc Info : MW-9
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 1 Fluorobenzene | 11.360 | 1194494 | 125.000 |

| | CONCENTRATIONS | | | | QUANT | | | |
|---|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ng) | FINAL( ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # | |
| Difluorochloromethane | | | | | CAS #: 75-45-6 | | | |
| 4.225 | 334812 | 35.0370594 | 1.4 | 83 | NIS08.l | 1830 | 1 | |
| Unknown | | | | | CAS #: | | | |
| 4.539 | 405317 | 42.4150843 | 1.7 | 0 | | 0 | 1 | |
| Methane, chlorofluoro- | | | | | CAS #: 593-70-4 | | | |
| 4.953 | 1688833 | 176.730960 | 7.1 | 90 | NIS08.l | 467 | 1 | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d
Report Date: 21-Sep-2010 14:35

| | | CONCENTRATIONS | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ng) | FINAL( ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| ==== | ==== | ========== | ========== | ==== | ======= | ========= | ====== |
| Fluorodichloromethane | | | | CAS #: 75-43-4 | | | |
| 6.665 | 471073 | 49.2962995 | 2.0 | 96 | NIS08.l | 4467 | 1 |
| Ethyl ether | | | | CAS #: 60-29-7 | | | |
| 7.315 | 345278 | 36.1322852 | 1.4 | 86 | NIS08.l | 838 | 1 |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

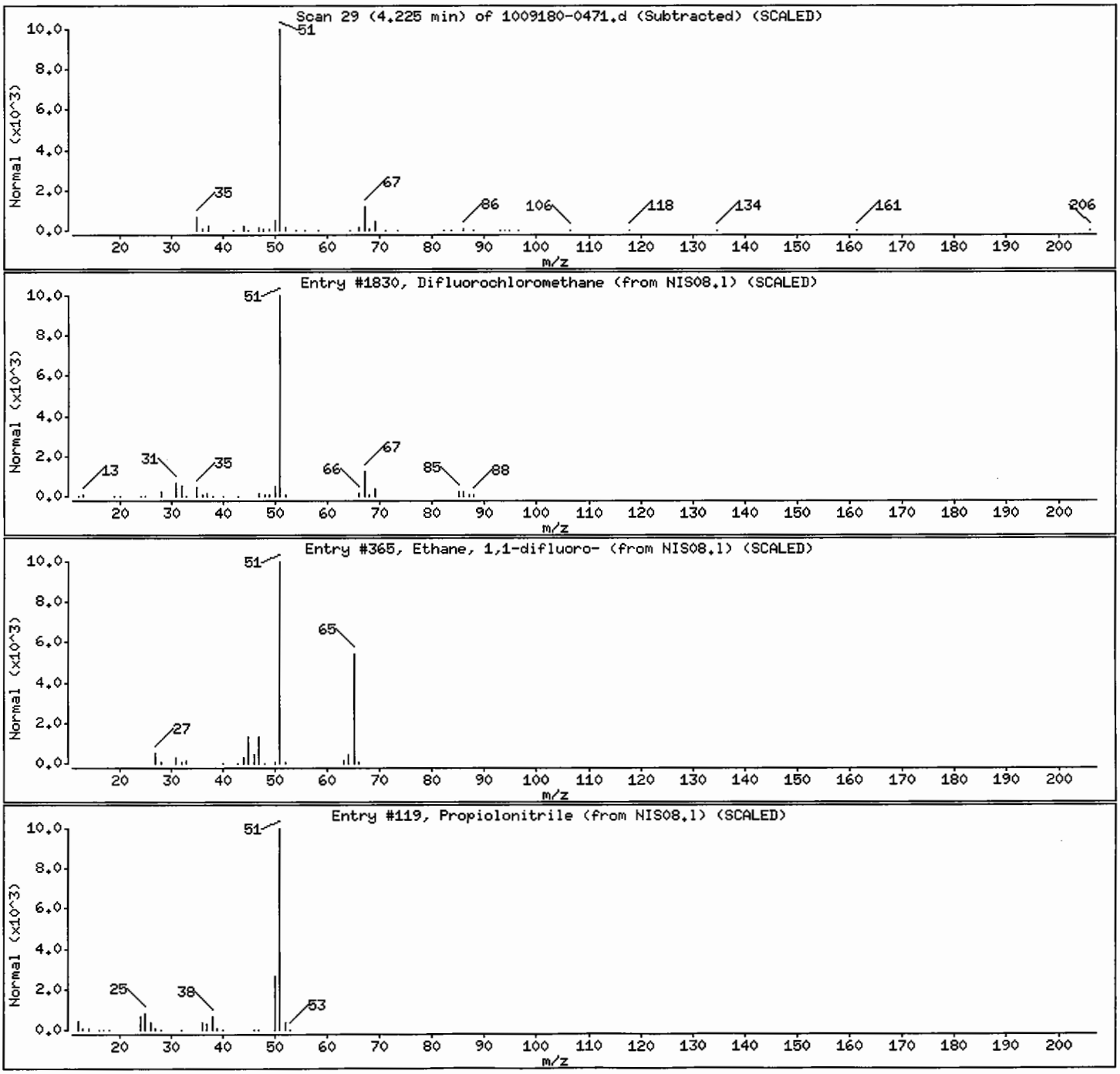
Client ID: MW-9 Instrument: 5972hp71.i

Sample Info: 1009180-04:JAO

Purge Volume: 25.0 Operator: JAO

Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Difluorochloromethane | 75-45-6 | NIS08.1 | 1830 | 83 | CHClF2 | 86 |
| Ethane, 1,1-difluoro- | 75-37-6 | NIS08.1 | 365 | 7 | C2H4F2 | 66 |
| Propiolonitrile | 1070-71-9 | NIS08.1 | 119 | 4 | C3HN | 51 |



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

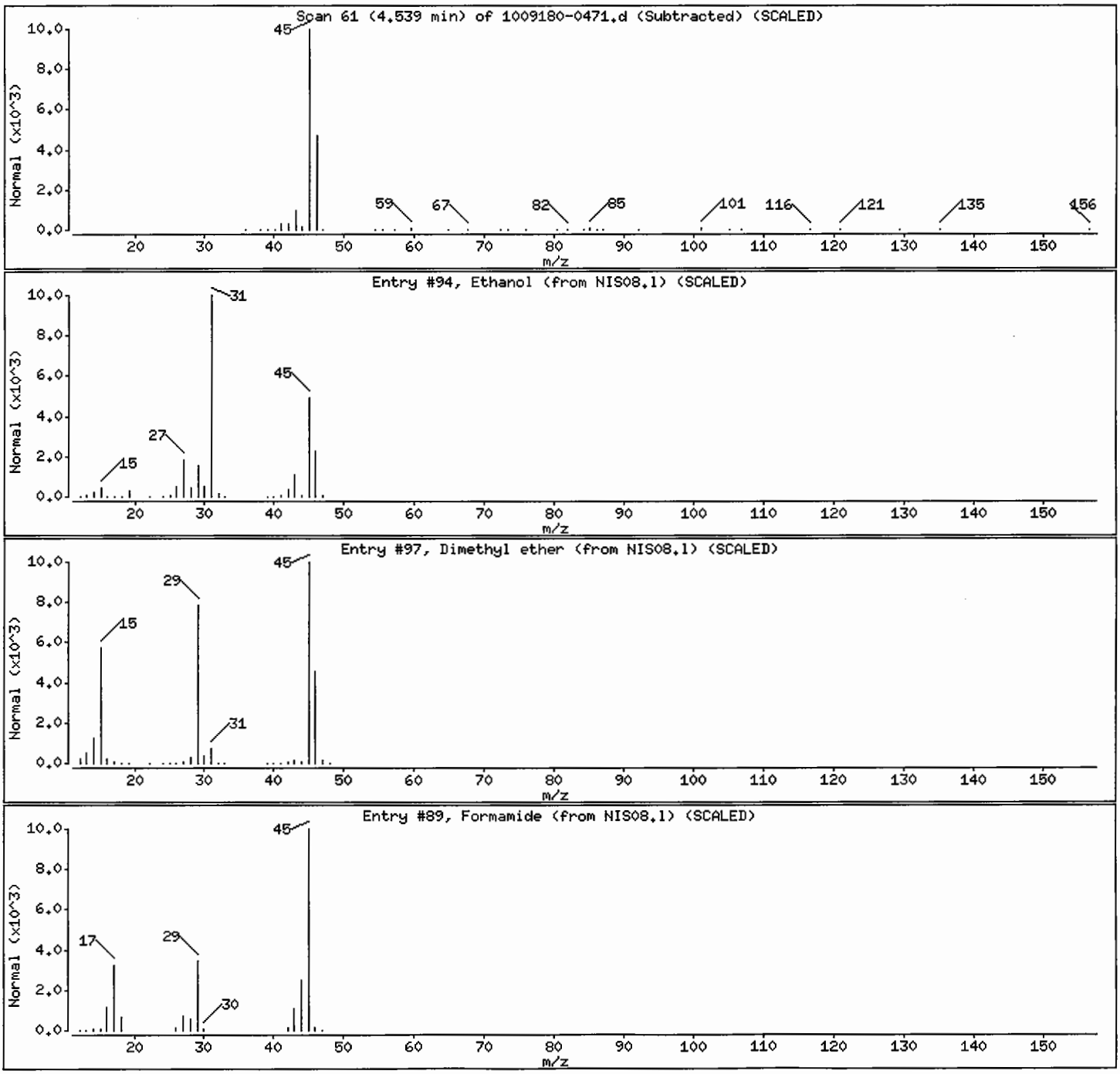
Client ID: MW-9 Instrument: 5972hp71.i

Sample Info: 1009180-04:JAO

Purge Volume: 25.0 Operator: JAO

Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | | | | |
| Ethanol | 64-17-5 | NIS08.1 | 94 | 9 | C2H6O | 46 |
| Dimethyl ether | 115-10-6 | NIS08.1 | 97 | 7 | C2H6O | 46 |
| Formamide | 75-12-7 | NIS08.1 | 89 | 4 | CH3NO | 45 |



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

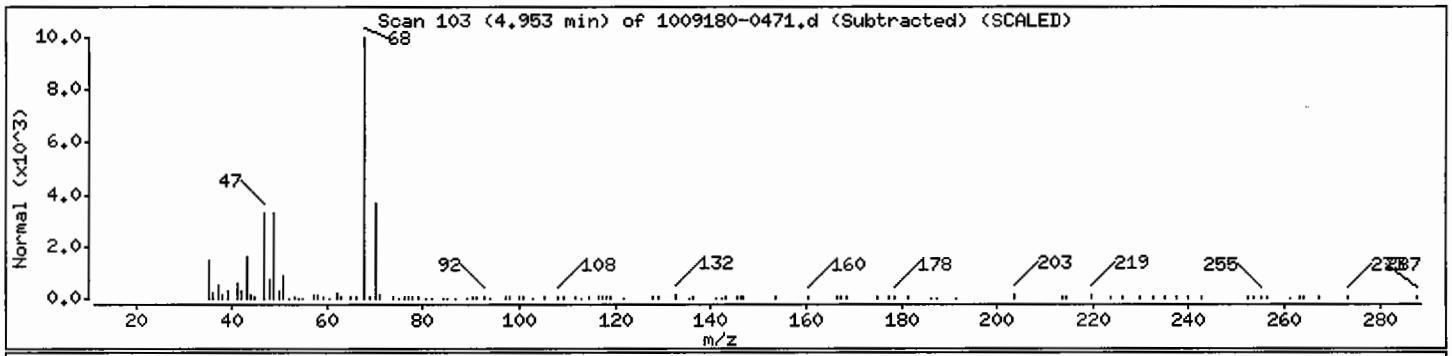
Client ID: MW-9 Instrument: 5972hp71.i

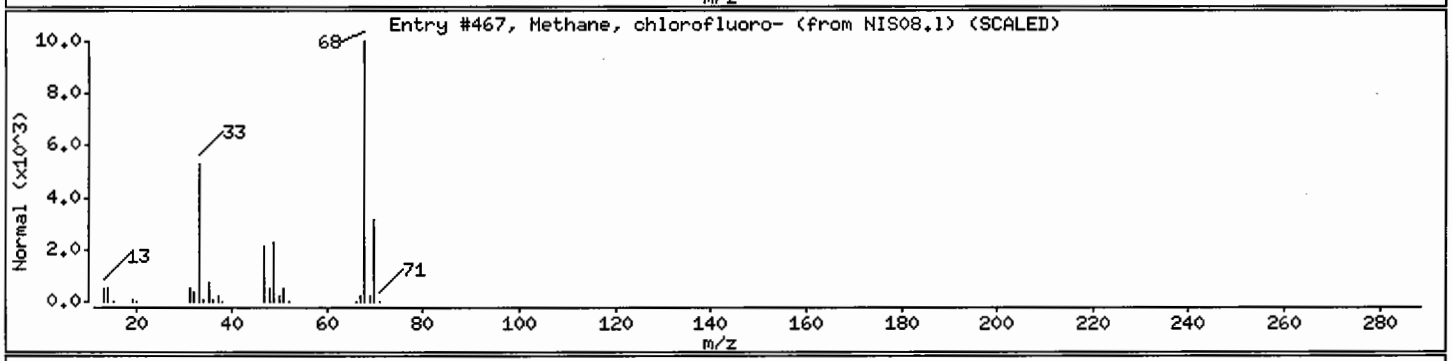
Sample Info: 1009180-04:JAO

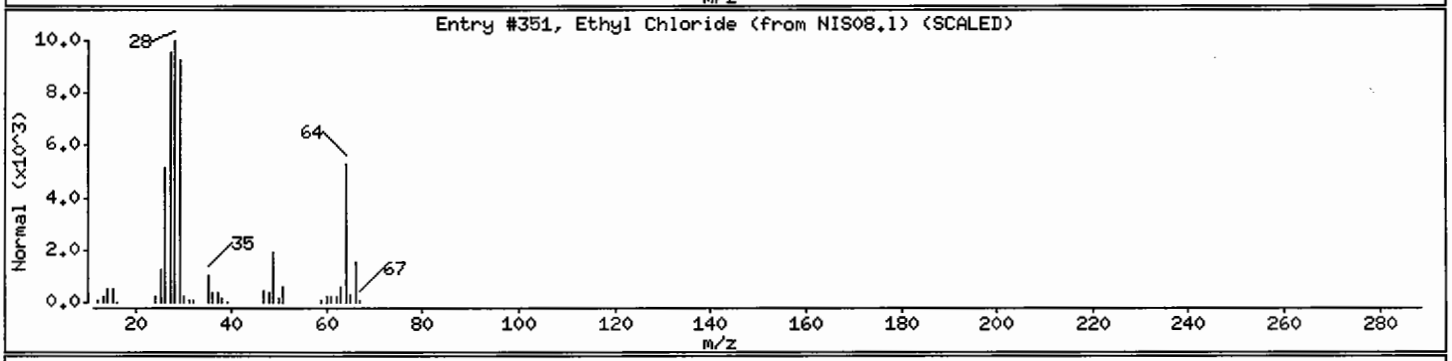
Purge Volume: 25.0 Operator: JAO

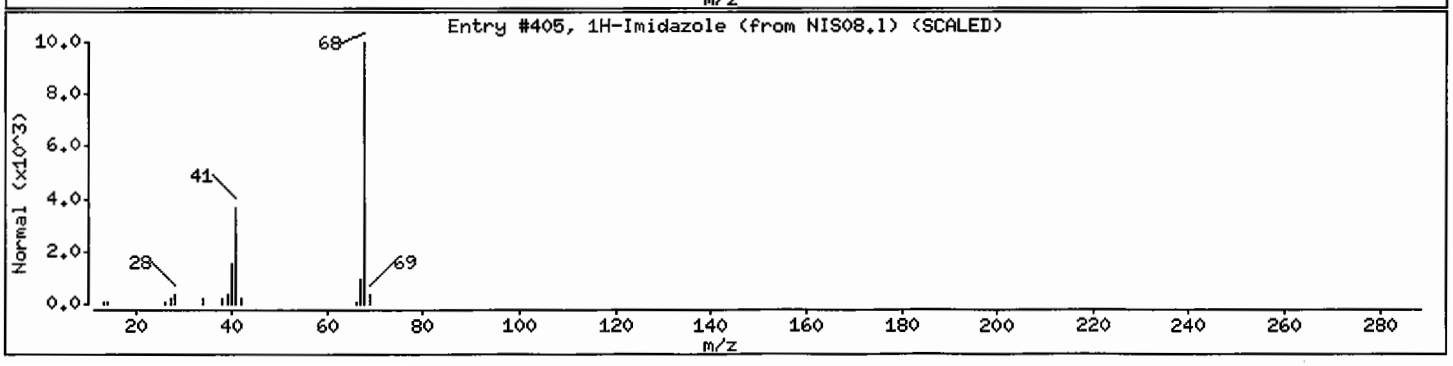
Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Methane, chlorofluoro- | 593-70-4 | NIS08.1 | 467 | 90 | CH2ClF | 68 |
| Ethyl Chloride | 75-00-3 | NIS08.1 | 351 | 25 | C2H5Cl | 64 |
| 1H-Imidazole | 288-32-4 | NIS08.1 | 405 | 9 | C3H4N2 | 68 |



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

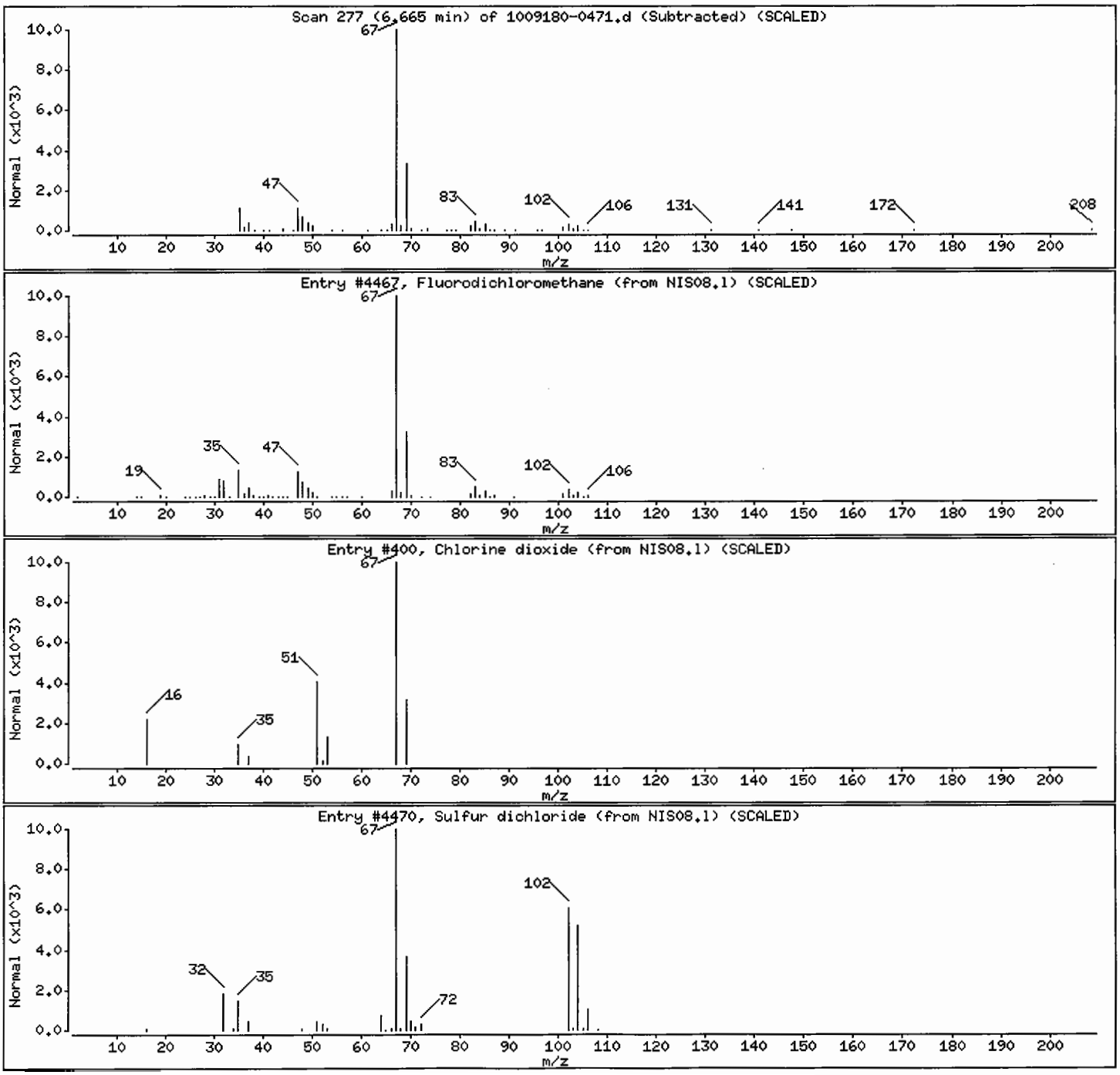
Client ID: MW-9 Instrument: 5972hp71.i

Sample Info: 1009180-04:JAO

Purge Volume: 25.0 Operator: JAO

Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Fluorodichloromethane | 75-43-4 | NIS08.1 | 4467 | 96 | CHCl2F | 102 |
| Chlorine dioxide | 10049-04-4 | NIS08.1 | 400 | 45 | ClO2 | 67 |
| Sulfur dichloride | 10545-99-0 | NIS08.1 | 4470 | 9 | Cl2S | 102 |



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-0471.d

Date : 20-SEP-2010 16:40

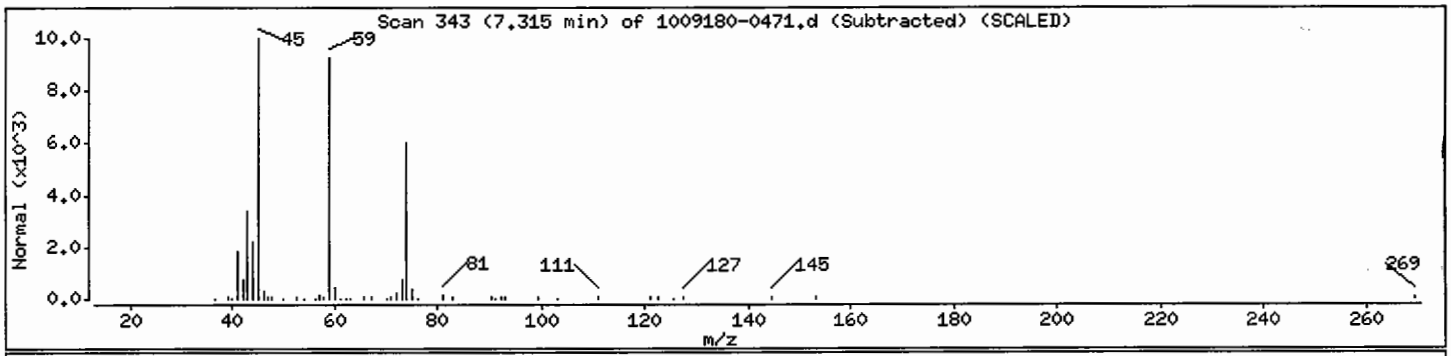
Client ID: MW-9 Instrument: 5972hp71.i

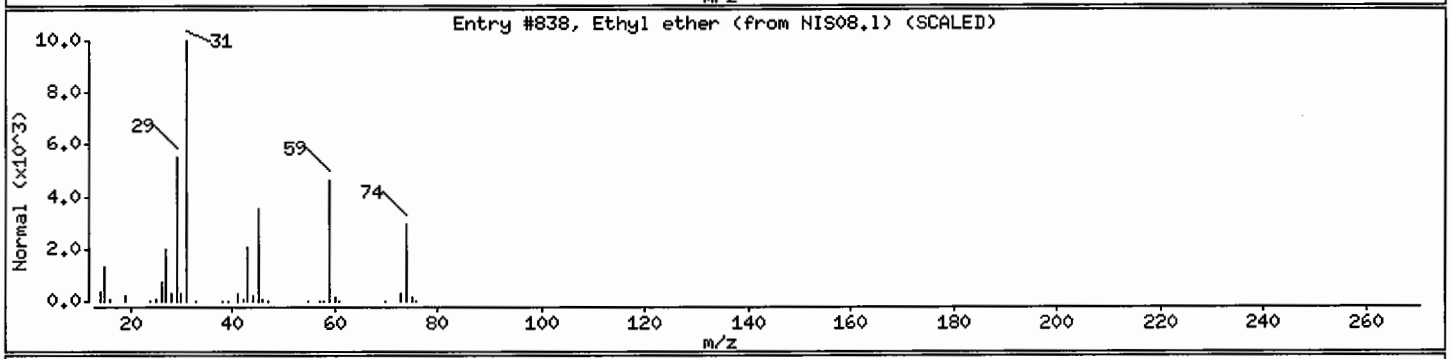
Sample Info: 1009180-04:JAO

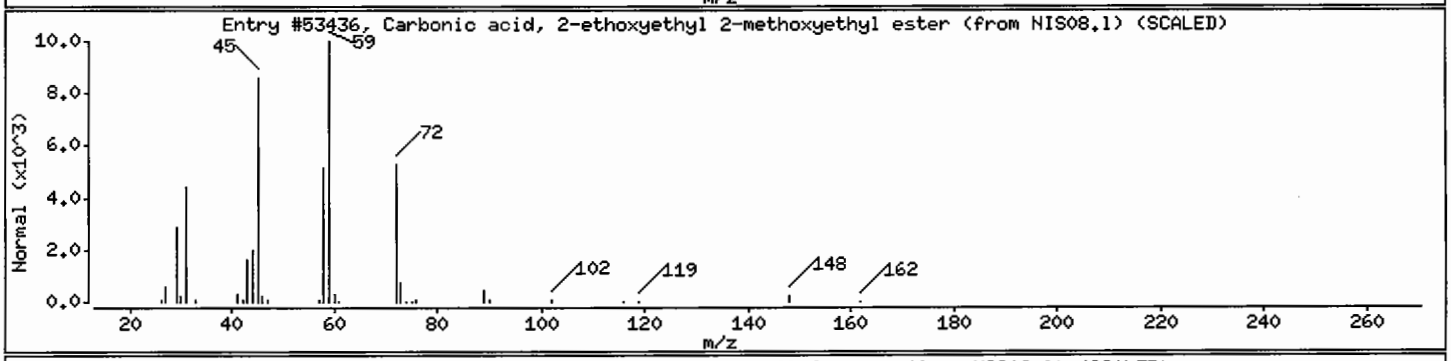
Purge Volume: 25.0 Operator: JAO

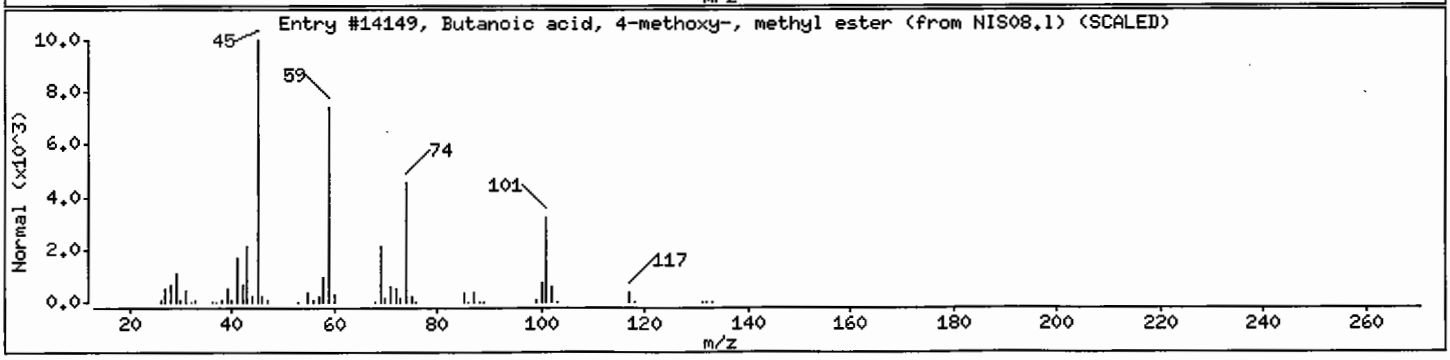
Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Ethyl ether | 60-29-7 | NIS08.l | 838 | 86 | C4H10O | 74 |
| Carbonic acid, 2-ethoxyethyl 2-methoxyet | 1000331-46-1 | NIS08.l | 53436 | 64 | C8H16O5 | 192 |
| Butanoic acid, 4-methoxy-, methyl ester | 29006-01-7 | NIS08.l | 14149 | 56 | C6H12O3 | 132 |



# ANALYSIS DATA SHEET

*SW 8260B*

**TRIP BLANK**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-1071.d | Sampled: 09/03/10 00:00

Initial/Final: 25mL / 25mL | Lab ID: 1009180-10 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 13:29

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | 1.5 | 0.44 | | 2.5 | JB |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.020 | | 0.50 | U |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.030 | | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | | 0.030 | | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**TRIP BLANK**

Client: DRAPER | SDG 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Preparation: SW 5030A/5030B | File ID: 1009180-1071.d | Sampled: 09/03/10 00:00

Initial/Final: 25mL / 25mL | Lab ID: 1009180-10 | Received: 09/16/10 09:32

Dilution: 1 | pH: 1 | Assoc Blank: 0092014-BLK1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 13:29

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 0.15 | 0.030 | | 0.50 | JB |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | | 0.060 | | 0.50 | U |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | 0.19 | 0.15 | | 0.50 | J |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

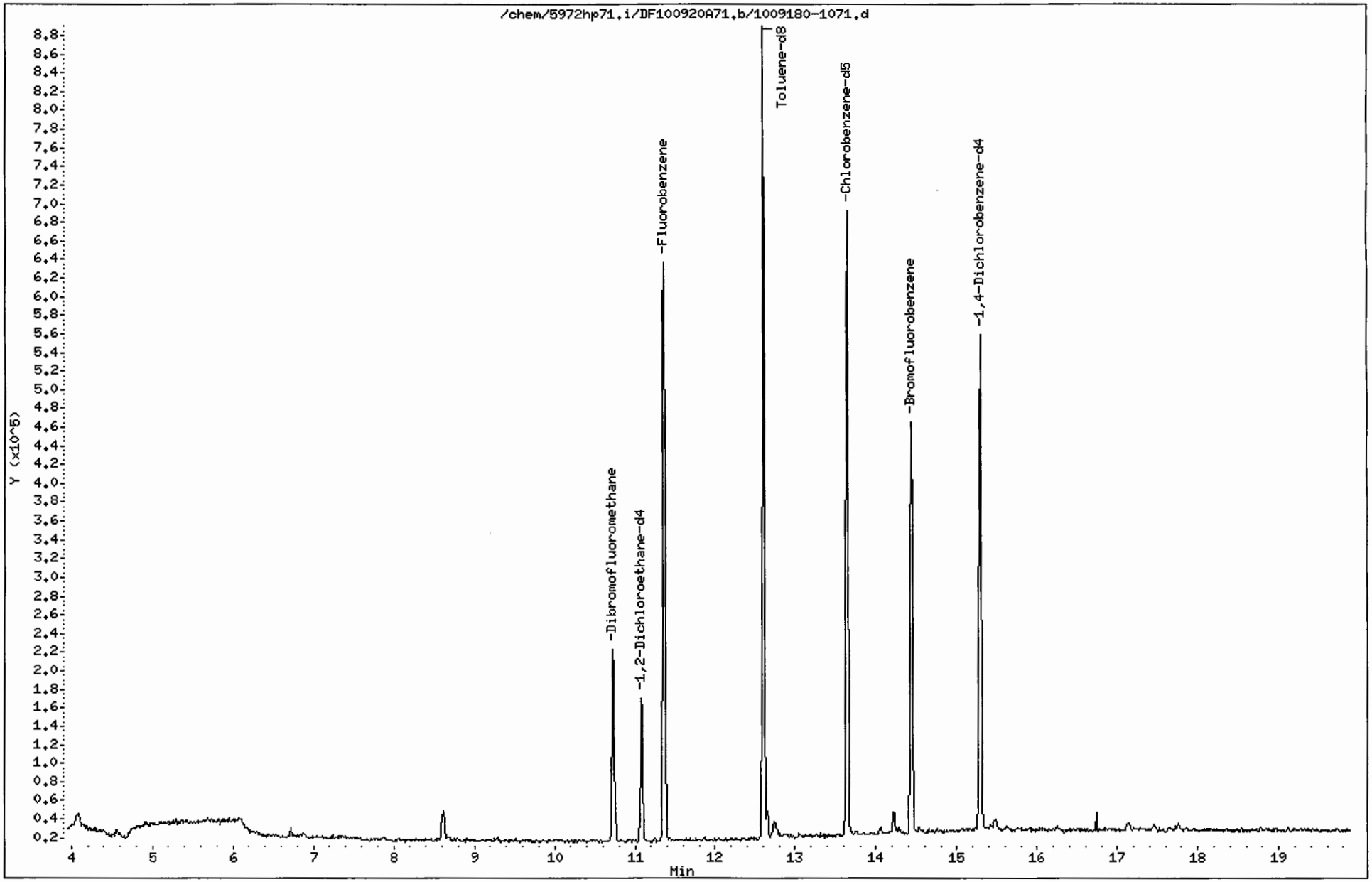
| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.583 | 92 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.148 | 83 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.874 | 97 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.957 | 99 | 63 - 143 | |

| CAS NO. | TICS | CONC. (ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1071.d
Date : 20-SEP-2010 13:29
Client ID: TRIP BLANK
Sample Info: 1009180-10:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1071.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-1071.d
Lab Smp Id: 1009180-10 Client Smp ID: TRIP BLANK
Inj Date : 20-SEP-2010 13:29
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-10:JAO
Misc Info : TRIP BLANK
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.365 | 11.362 | (1.000) | 511005 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.648 | 13.646 | (1.000) | 320165 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.291 | 15.289 | (1.000) | 139097 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.725 | 10.733 | (0.944) | 127002 | 114.584 | 4.6 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.079 | 11.087 | (0.975) | 92910 | 103.695 | 4.1 |
| $ 6 Toluene-d8 | 98 | 12.605 | 12.602 | (0.924) | 464510 | 121.838 | 4.9 |
| $ 7 Bromofluorobenzene | 95 | 14.435 | 14.433 | (0.944) | 143852 | 123.917 | 5.0 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | Compound Not Detected. | | | | | |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 18 Acetone | 43 | 7.871 | 7.869 | (0.693) | 5866 | 36.8018 | 1.5(a) |
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |

9.21.10

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1071.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 49 Trichloroethene | 130 | Compound Not Detected. | | | | | |
| 51 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.654 | 12.652 | (0.927) | 10315 | 3.66079 | 0.15(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1071.d
Report Date: 21-Sep-2010 14:35

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | 17.466 | 17.464 | (1.142) | 6554 | 4.72126 | 0.19(a) |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1071.d

Date : 20-SEP-2010 13:29

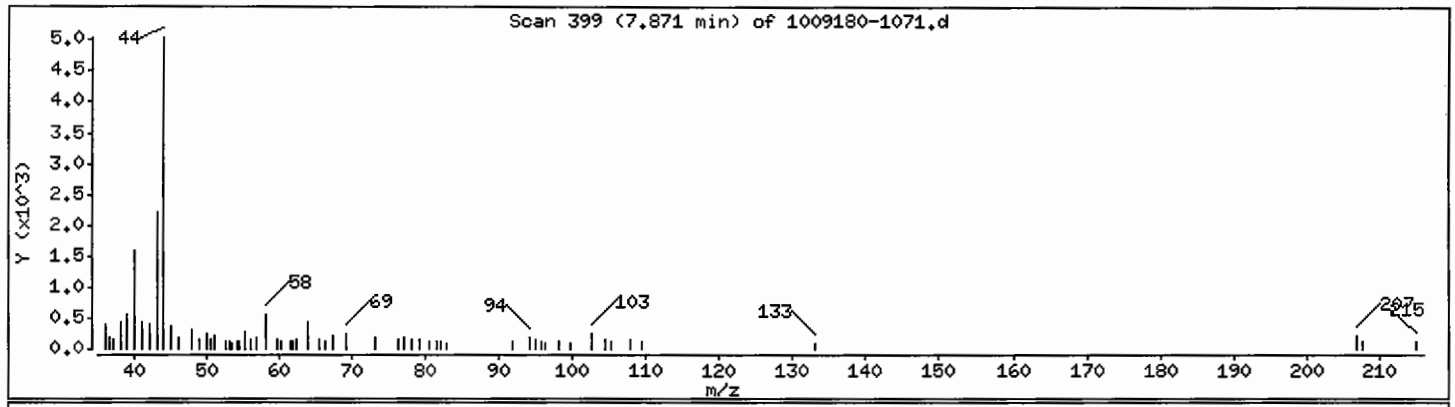
Client ID: TRIP BLANK | Instrument: 5972hp71.i

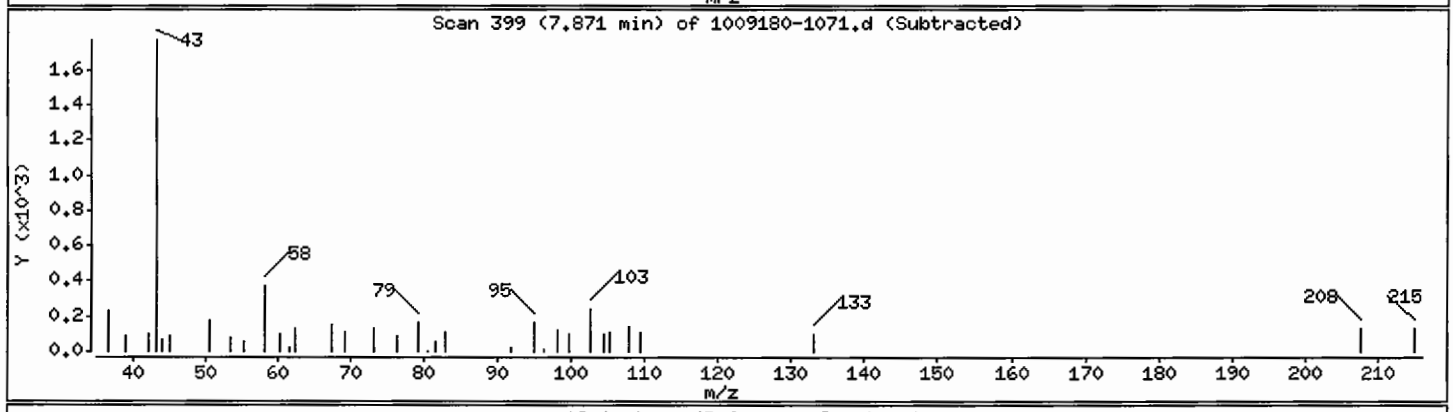
Sample Info: 1009180-10:JAO

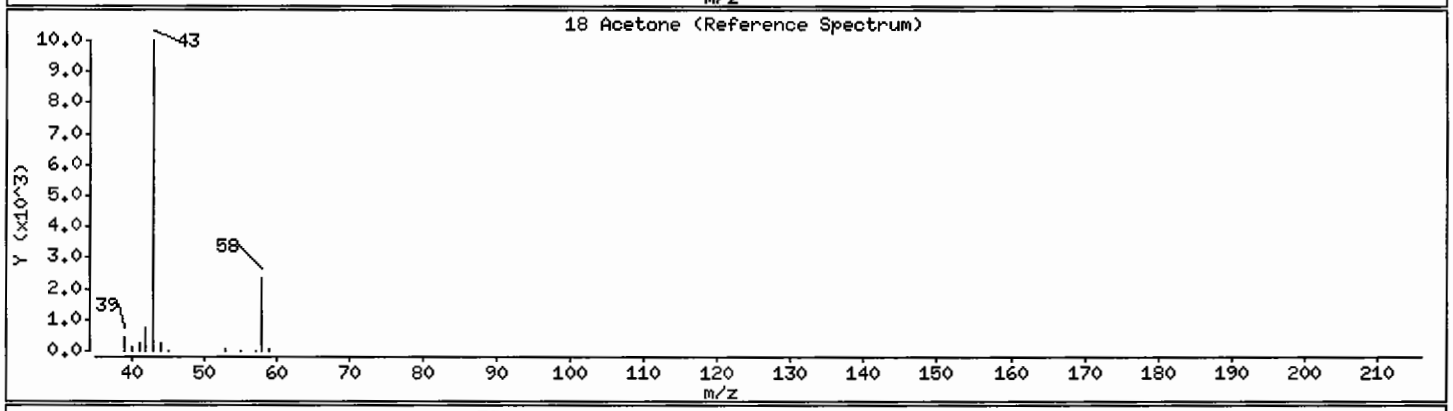
Purge Volume: 25.0 | Operator: JAO

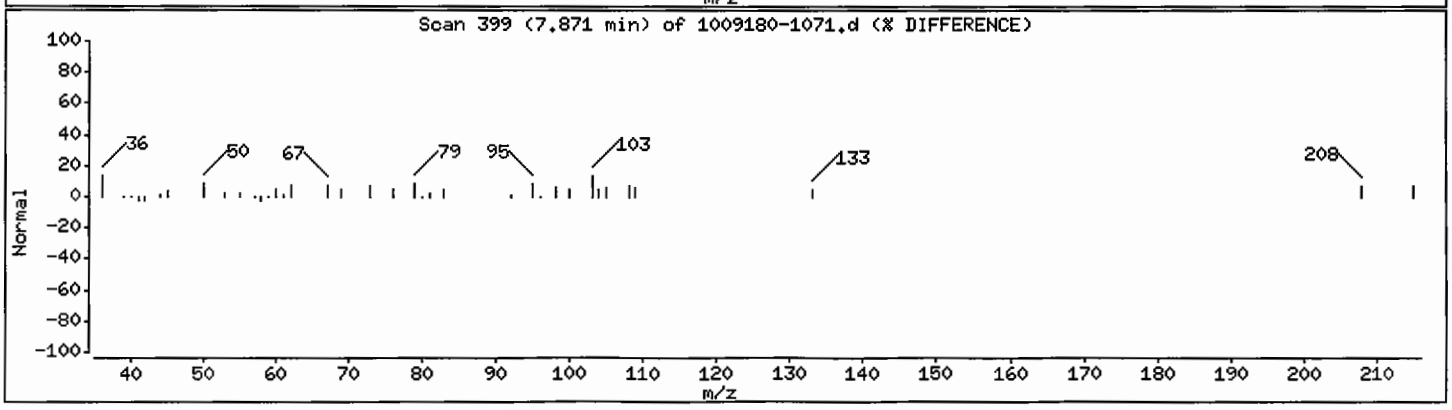
Column phase: SPB-624 | Column diameter: 0.32

18 Acetone | Concentration: 1.5 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1071.d

Date : 20-SEP-2010 13:29

Client ID: TRIP BLANK

Instrument: 5972hp71.i

Sample Info: 1009180-10:JAO

Purge Volume: 25.0

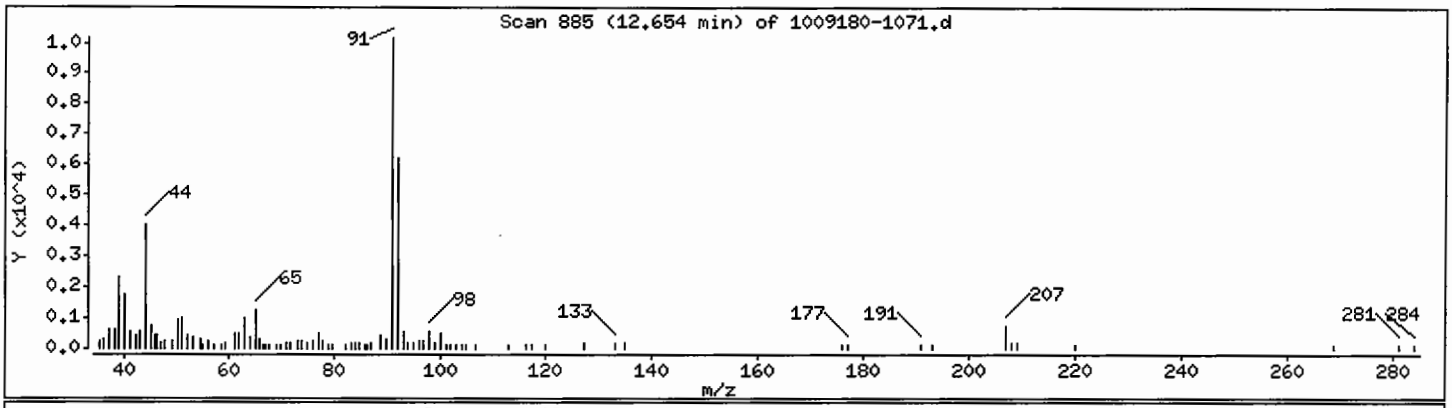
Operator: JAO

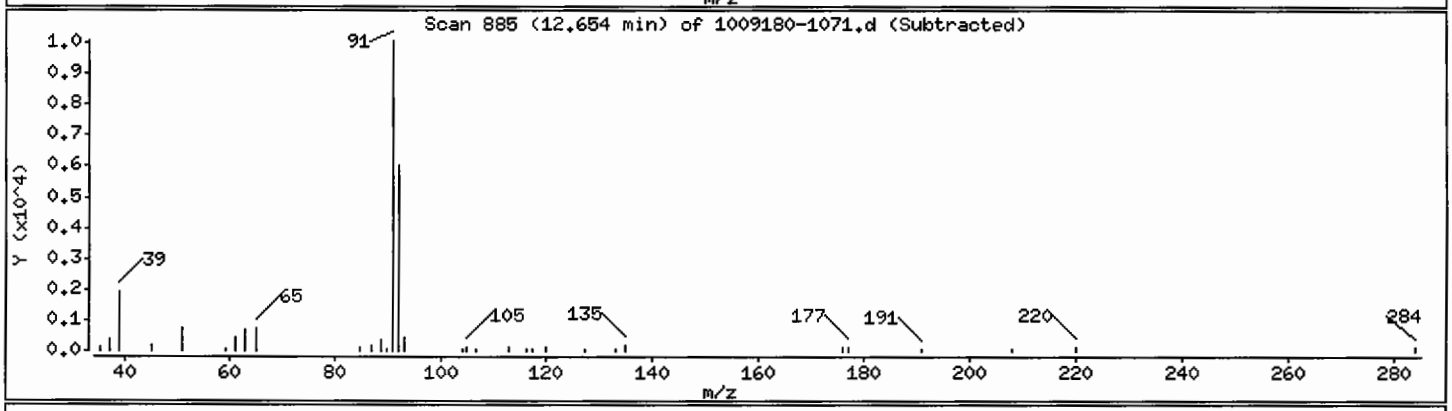
Column phase: SPB-624

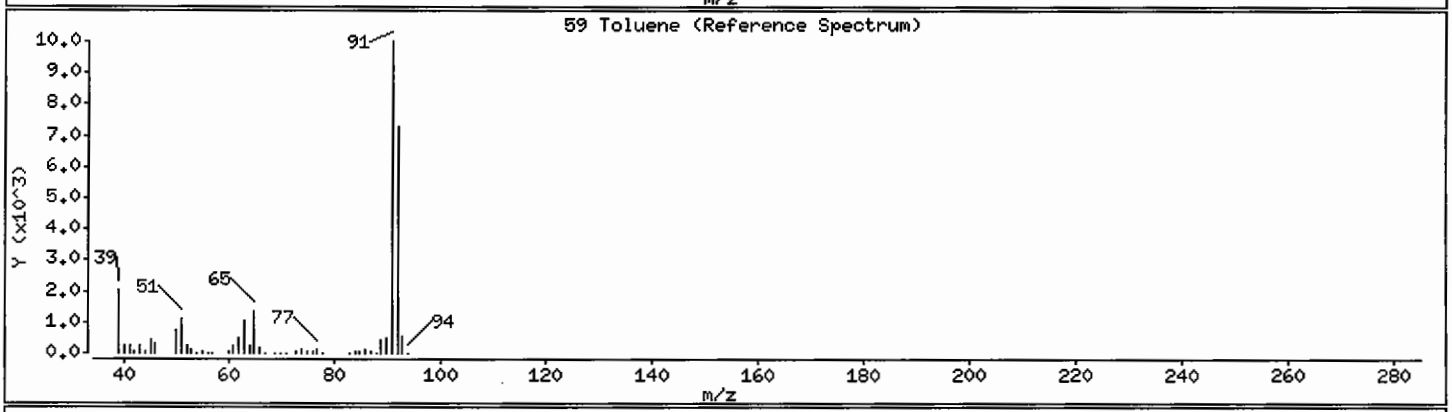
Column diameter: 0.32

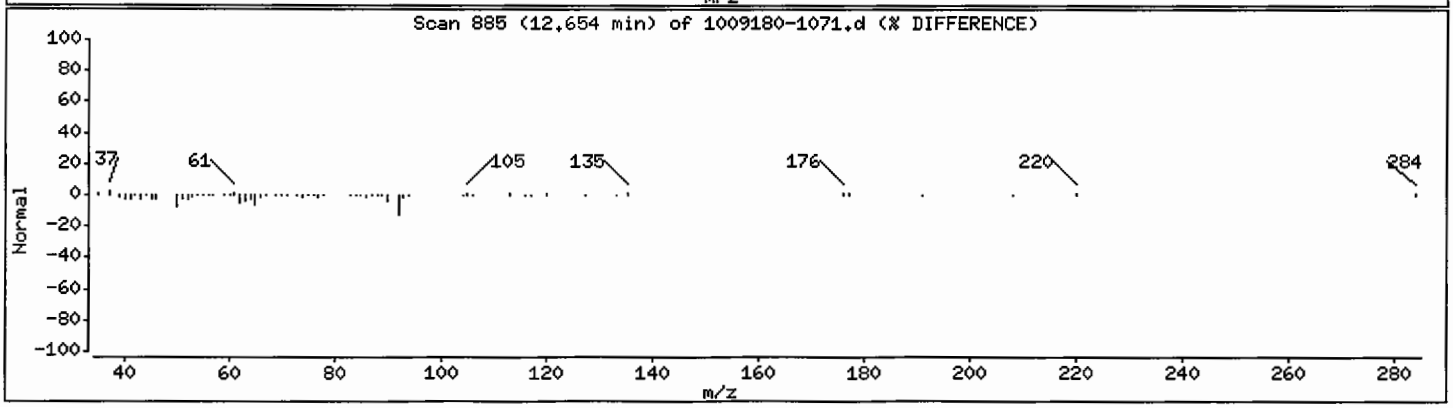
59 Toluene

Concentration: 0.15 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1071.d

Date : 20-SEP-2010 13:29

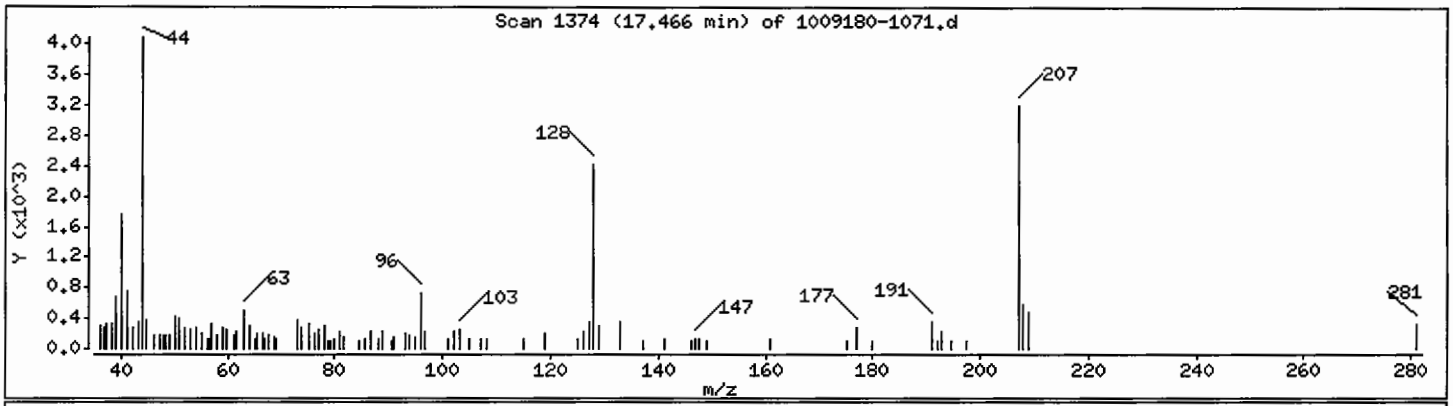
Client ID: TRIP BLANK | Instrument: 5972hp71.i

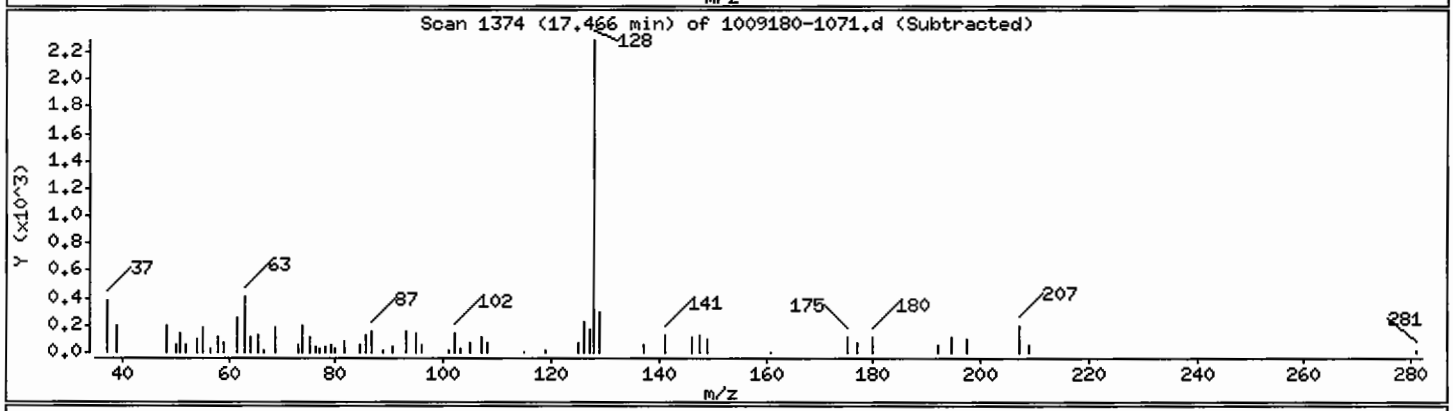
Sample Info: 1009180-10:JAO

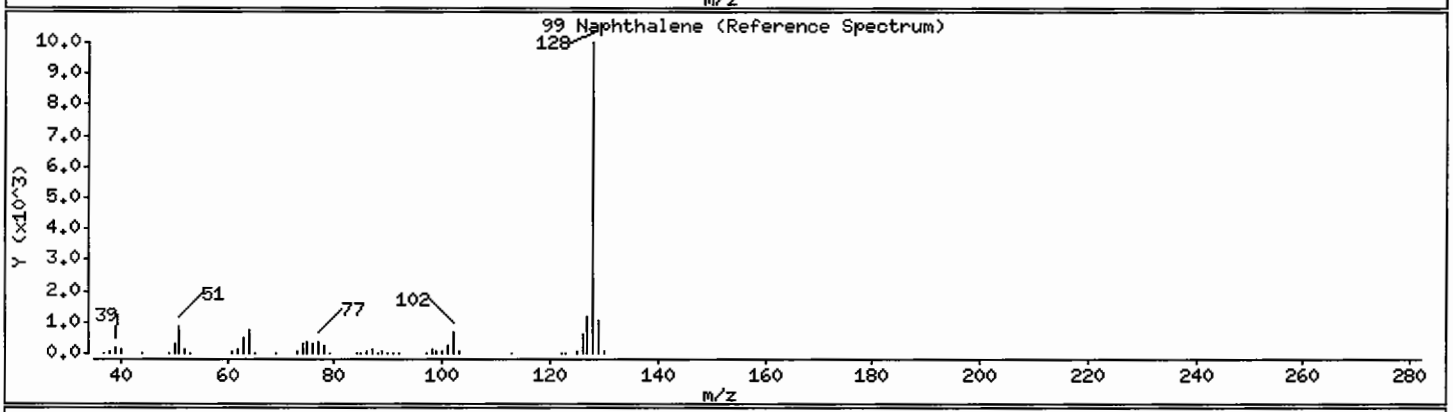
Purge Volume: 25.0 | Operator: JAO

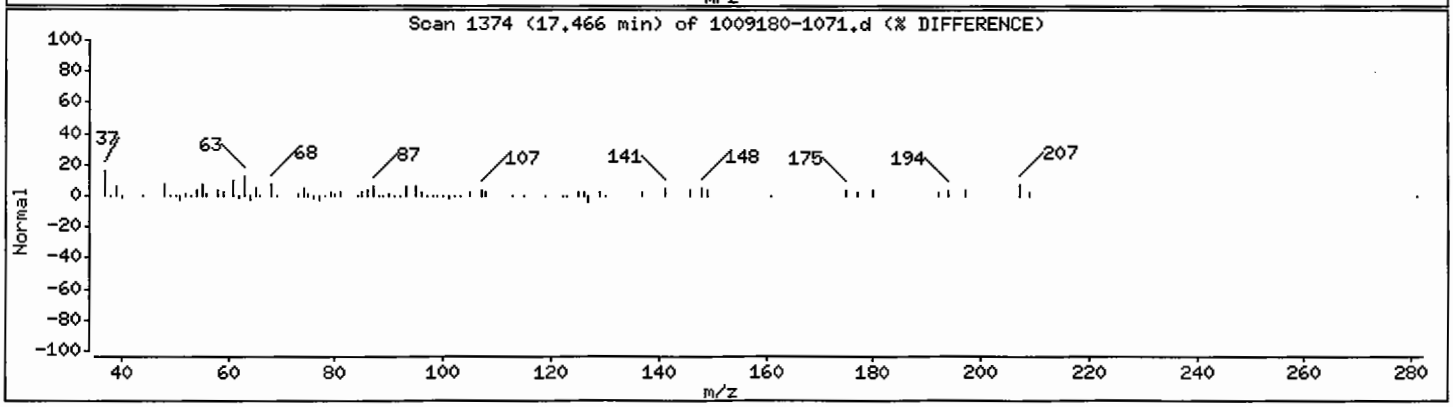
Column phase: SPB-624 | Column diameter: 0.32

99 Naphthalene | Concentration: 0.19 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/1009180-1071.d
Report Date: 21-Sep-2010 14:35

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/1009180-1071.d
Lab Smp Id: 1009180-10 Client Smp ID: TRIP BLANK
Inj Date : 20-SEP-2010 13:29
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 1009180-10:JAO
Misc Info : TRIP BLANK
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

# 3. Standards Data

## a. Initial Calibration Data

(INITIAL CALIBRATION DATA)

## b. Continuing Calibration Data

(CONTINUING CALIBRATION CHECK)

## a. Initial Calibration Data

(INITIAL CALIBRATION DATA)

If more than one instrument is used, forms shall be arranged in order by instrument. Multiple initial calibrations from the same instrument shall be in chronological order. Within each initial calibration, the standards are in order by level, from lowest to highest.

(1) RICs and Quantitation reports for the initial (six-point) calibration. Spectra not required.

(2) EICPs displaying each manual integration.

# INITIAL CALIBRATION DATA

*SW 8260B*

Client: DRAPER SDG: 1009180

Project: WATAUGA COUNTY LANDFILL 6520-39

Calibration: 0092207 Instrument: 5972hp71

Calibration Date: 9/15/2010 10:28:57AM

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | RF | | RF | | RF | | RF | | RF | | RF |
| Dichlorodifluoromethane | 0.5 | 0.5126336 | 1 | 0.4412269 | 5 | 0.4400033 | 10 | 0.4574047 | 20 | 0.4384467 | 40 | 0.3956813 |
| Chloromethane | 0.5 | 0.5076404 | 1 | 0.3687404 | 5 | 0.4907212 | 10 | 0.4892172 | 20 | 0.4613188 | 40 | 0.419864 |
| Vinyl chloride | 0.5 | 0.2160766 | 1 | 0.1820888 | 5 | 0.1981922 | 10 | 0.1958297 | 20 | 0.1983071 | 40 | 0.1803121 |
| Bromomethane | 0.5 | 6.428857E-02 | 1 | 7.565158E-02 | 5 | 9.212271E-02 | 10 | 0.1017401 | 20 | 0.1065598 | 40 | 0.1036414 |
| Chloroethane | 0.5 | 8.375062E-02 | 1 | 0.076221 | 5 | 7.401125E-02 | 10 | 7.189374E-02 | 20 | 6.756718E-02 | 40 | 6.151814E-02 |
| Trichlorofluoromethane | 0.5 | 0.4506741 | 1 | 0.4803395 | 5 | 0.4311501 | 10 | 0.4105523 | 20 | 0.4011022 | 40 | 0.3766971 |
| Acrolein | 5 | 1.587912E-02 | 10 | 0.0157197 | 50 | 0.015907 | 100 | 1.461674E-02 | 200 | 0.0158135 | 400 | 1.588195E-02 |
| 1,1-Dichloroethene | 0.5 | 0.2732982 | 1 | 0.2559952 | 5 | 0.2525449 | 10 | 0.2435569 | 20 | 0.235564 | 40 | 0.221271 |
| Acetone | 2.5 | 4.686844E-02 | 5 | 4.452129E-02 | 25 | 3.727302E-02 | 50 | 3.284184E-02 | 100 | 3.620079E-02 | 200 | 3.623701E-02 |
| Iodomethane | 0.5 | 0.2575531 | 1 | 0.2439042 | 5 | 0.2662785 | 10 | 0.2657068 | 20 | 0.2505552 | 40 | 0.2184641 |
| Carbon disulfide | 0.5 | 1.243529 | 1 | 1.144469 | 5 | 1.071531 | 10 | 1.037316 | 20 | 0.9999513 | 40 | 0.9200628 |
| 3-Chloropropene | 0.5 | 0.4366997 | 1 | 0.4031941 | 5 | 0.4036494 | 10 | 0.3932793 | 20 | 0.3740619 | 40 | 0.3358518 |
| Acetonitrile | 0.5 | 0.6852396 | 1 | 0.6339721 | 5 | 0.6580322 | 10 | 0.6375761 | 20 | 0.6082157 | 40 | 0.5384291 |
| Methylene chloride | 0.5 | | 1 | 0.3479677 | 5 | 0.2948481 | 10 | 0.2669879 | 20 | 0.2568927 | 40 | 0.2363992 |
| Acrylonitrile | 5 | 4.810157E-02 | 10 | 4.313249E-02 | 50 | 4.630484E-02 | 100 | 4.302074E-02 | 200 | 4.524427E-02 | 400 | 4.523411E-02 |
| trans-1,2-Dichloroethene | 0.5 | 0.2997315 | 1 | 0.2831795 | 5 | 0.2868202 | 10 | 0.2764518 | 20 | 0.2671746 | 40 | 0.2474493 |
| 1,1-Dichloroethane | 0.5 | 0.5722959 | 1 | 0.5423619 | 5 | 0.5371785 | 10 | 0.5233584 | 20 | 0.5028206 | 40 | 0.4701719 |
| Chloroprene | 0.5 | 0.4543751 | 1 | 0.4495316 | 5 | 0.4476261 | 10 | 0.4485079 | 20 | 0.4376918 | 40 | 0.410307 |
| Vinyl acetate | 1 | 0.6802385 | 2 | 0.6530218 | 10 | 0.6784994 | 20 | 0.6375891 | 40 | 0.6558458 | 80 | 0.643366 |
| cis-1,2-Dichloroethene | 0.5 | 0.3222884 | 1 | 0.2989679 | 5 | 0.2950445 | 10 | 0.2855524 | 20 | 0.2789441 | 40 | 0.2618597 |
| 2,2-Dichloropropane | 0.5 | 0.459767 | 1 | 0.4429574 | 5 | 0.413468 | 10 | 0.3992341 | 20 | 0.3888727 | 40 | 0.3652322 |
| Propionitrile | 25 | 1.642948E-02 | 50 | 1.591035E-02 | 250 | 1.608982E-02 | 500 | 1.456181E-02 | 1000 | 1.606318E-02 | 2000 | 1.656751E-02 |
| 2-Butanone | 2.5 | 8.304233E-02 | 5 | 7.521231E-02 | 25 | 7.204752E-02 | 50 | 6.403763E-02 | 100 | 7.095789E-02 | 200 | 7.311109E-02 |
| Methacrylonitrile | 5 | 0.1147942 | 10 | 0.1119917 | 50 | 0.1123325 | 100 | 0.103114 | 200 | 0.1112675 | 400 | 0.1135665 |
| Bromochloromethane | 0.5 | 0.1027181 | 1 | 0.1076648 | 5 | 9.748428E-02 | 10 | 9.270394E-02 | 20 | 8.994502E-02 | 40 | 8.520615E-02 |
| Chloroform | 0.5 | 0.5256987 | 1 | 0.5071096 | 5 | 0.4909405 | 10 | 0.4830755 | 20 | 0.4781952 | 40 | 0.4577978 |
| 1,1,1-Trichloroethane | 0.5 | 0.4420119 | 1 | 0.4281303 | 5 | 0.4003496 | 10 | 0.3961774 | 20 | 0.3967802 | 40 | 0.3832326 |
| 1,1-Dichloropropene | 0.5 | 0.4355352 | 1 | 0.4122161 | 5 | 0.4147837 | 10 | 0.4154529 | 20 | 0.4087596 | 40 | 0.386886 |
| Carbon tetrachloride | 0.5 | 0.3610051 | 1 | 0.3641333 | 5 | 0.3321278 | 10 | 0.3354965 | 20 | 0.3379011 | 40 | 0.3259573 |
| 1,2-Dichloroethane | 0.5 | 0.2940524 | 1 | 0.2792453 | 5 | 0.2546554 | 10 | 0.245406 | 20 | 0.2569271 | 40 | 0.253831 |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# INITIAL CALIBRATION DATA

*SW 8260B*

Client: DRAPER SDG: 1009180

Project: WATAUGA COUNTY LANDFILL 6520-39

Calibration: 0092207 Instrument: 5972hp71

Calibration Date: 9/15/2010 10:28:57AM

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | RF | | RF | | RF | | RF | | RF | | RF |
| Isobutyl alcohol | 25 | 5.947092E-03 | 50 | 5.227872E-03 | 250 | 5.58879E-03 | 500 | 5.135727E-03 | 1000 | 6.145875E-03 | 2000 | 6.530323E-03 |
| Benzene | 0.5 | 1.147958 | 1 | 1.043341 | 5 | 1.058744 | 10 | 1.04994 | 20 | 1.041859 | 40 | 0.9824313 |
| Trichloroethene | 0.5 | 0.2768875 | 1 | 0.2650172 | 5 | 0.2532027 | 10 | 0.2495051 | 20 | 0.2444153 | 40 | 0.2336769 |
| 1,2-Dichloropropane | 0.5 | 0.3102442 | 1 | 0.2628578 | 5 | 0.2710644 | 10 | 0.2643234 | 20 | 0.2649355 | 40 | 0.2323813 |
| Dibromomethane | 0.5 | 0.1086684 | 1 | 0.1235125 | 5 | 0.1064624 | 10 | 0.1006272 | 20 | 0.1083264 | 40 | 0.1090254 |
| Methyl Methacrylate | 5 | 8.767334E-02 | 10 | 9.230528E-02 | 50 | 9.388239E-02 | 100 | 8.861307E-02 | 200 | 9.564633E-02 | 400 | 8.887382E-02 |
| Bromodichloromethane | 0.5 | 0.3398202 | 1 | 0.3409128 | 5 | 0.330028 | 10 | 0.3234295 | 20 | 0.3298415 | 40 | 0.3226035 |
| cis-1,3-Dichloropropene | 0.5 | 0.3794302 | 1 | 0.3758249 | 5 | 0.3753904 | 10 | 0.3598387 | 20 | 0.3726432 | 40 | 0.3606012 |
| 4-Methyl-2-pentanone | 2.5 | 0.2845708 | 5 | 0.2858801 | 25 | 0.2847193 | 50 | 0.2595392 | 100 | 0.2909371 | 200 | 0.3059781 |
| Toluene | 0.5 | 1.310519 | 1 | 1.178664 | 5 | 1.073893 | 10 | 1.047216 | 20 | 1.021667 | 40 | 0.9686103 |
| trans-1,3-Dichloropropene | 0.5 | 0.5149076 | 1 | 0.5084916 | 5 | 0.501124 | 10 | 0.4746959 | 20 | 0.4968996 | 40 | 0.4834847 |
| 1,1,2-Trichloroethane | 0.5 | 0.2428875 | 1 | 0.2517157 | 5 | 0.2427585 | 10 | 0.2284132 | 20 | 0.2367883 | 40 | 0.233138 |
| Ethyl Methacrylate | 5 | 0.314402 | 10 | 0.3170343 | 50 | 0.3229326 | 100 | 0.3056294 | 200 | 0.3322682 | 400 | 0.2666863 |
| 1,3-Dichloropropane | 0.5 | 0.5016824 | 1 | 0.4635744 | 5 | 0.4549327 | 10 | 0.4326991 | 20 | 0.4495759 | 40 | 0.4391198 |
| Tetrachloroethene | 0.5 | 0.3797606 | 1 | 0.3877648 | 5 | 0.3510827 | 10 | 0.3459317 | 20 | 0.3445969 | 40 | 0.3220081 |
| 2-Hexanone | 2.5 | 0.2005986 | 5 | 0.2043096 | 25 | 0.1993478 | 50 | 0.1833604 | 100 | 0.2093966 | 200 | 0.2114104 |
| Dibromochloromethane | 0.5 | 0.3202471 | 1 | 0.3238804 | 5 | 0.3007662 | 10 | 0.2951068 | 20 | 0.3088859 | 40 | 0.304402 |
| Chlorobenzene | 0.5 | 1.102713 | 1 | 1.087591 | 5 | 1.02426 | 10 | 1.00305 | 20 | 1.015029 | 40 | 0.9588796 |
| 1,1,1,2-Tetrachloroethane | 0.5 | 0.3650217 | 1 | 0.3702367 | 5 | 0.3440138 | 10 | 0.3360937 | 20 | 0.3488566 | 40 | 0.3342305 |
| Ethylbenzene | 0.5 | 0.6148139 | 1 | 0.5859643 | 5 | 0.5629542 | 10 | 0.5599242 | 20 | 0.5651219 | 40 | 0.5239081 |
| m,p-Xylene | 1 | 0.7465217 | 2 | 0.7398128 | 10 | 0.7004164 | 20 | 0.7057586 | 40 | 0.7057565 | 80 | 0.641107 |
| o-Xylene | 0.5 | 0.7025571 | 1 | 0.6934212 | 5 | 0.6558983 | 10 | 0.6599663 | 20 | 0.6605703 | 40 | 0.6006857 |
| Styrene | 0.5 | 1.132483 | 1 | 1.103869 | 5 | 1.106218 | 10 | 1.11178 | 20 | 1.139961 | 40 | 1.041472 |
| Bromoform | 0.5 | 0.172406 | 1 | 0.2027762 | 5 | 0.18716 | 10 | 0.1795512 | 20 | 0.1964766 | 40 | 0.1999173 |
| 1,1,2,2-Tetrachloroethane | 0.5 | 0.6155232 | 1 | 0.6471429 | 5 | 0.6123518 | 10 | 0.5674574 | 20 | 0.5820505 | 40 | 0.5864455 |
| 1,2,3-Trichloropropane | 0.5 | 8.099789E-02 | 1 | 7.386333E-02 | 5 | 7.053433E-02 | 10 | 0.0633148 | 20 | 7.054406E-02 | 40 | 6.919229E-02 |
| trans-1,4-Dichloro-2-butene | 2 | 8.638226E-02 | 4 | 8.976659E-02 | 20 | 8.858104E-02 | 40 | 8.272591E-02 | 80 | 9.091147E-02 | 160 | 8.954777E-02 |
| 1,3-Dichlorobenzene | 0.5 | 1.620326 | 1 | 1.697694 | 5 | 1.519004 | 10 | 1.504597 | 20 | 1.502152 | 40 | 1.408318 |
| 1,4-Dichlorobenzene | 0.5 | 1.66361 | 1 | 1.684035 | 5 | 1.553493 | 10 | 1.503564 | 20 | 1.461399 | 40 | 1.445656 |
| 1,2-Dichlorobenzene | 0.5 | 1.395175 | 1 | 1.37688 | 5 | 1.280434 | 10 | 1.230822 | 20 | 1.22871 | 40 | 1.19691 |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# INITIAL CALIBRATION DATA

*SW 8260B*

Client: DRAPER SDG: 1009180

Project: WATAUGA COUNTY LANDFILL 6520-39

Calibration: 0092207 Instrument: 5972hp71

Calibration Date: 9/15/2010 10:28:57AM

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | RF | | RF | | RF | | RF | | RF | | RF |
| 1,2,4-Trichlorobenzene | 0.5 | 0.9757109 | 1 | 1.12789 | 5 | 0.978882 | 10 | 0.9340817 | 20 | 0.9689329 | 40 | 0.9369558 |
| Hexachlorobutadiene | 0.5 | 0.6173244 | 1 | 0.6742483 | 5 | 0.5962478 | 10 | 0.6096995 | 20 | 0.6077281 | 40 | 0.5946837 |
| Naphthalene | 0.5 | 1.304459 | 1 | 1.318361 | 5 | 1.231684 | 10 | 1.161188 | 20 | 1.228026 | 40 | 1.241284 |
| Xylenes (total) | 1.5 | 0.7318669 | 3 | 0.7243489 | 15 | 0.685577 | 30 | 0.6904945 | 60 | 0.6906944 | 120 | 0.6276332 |
| Dibromofluoromethane | 0.5 | 0.3125733 | 1 | 0.3263667 | 5 | 0.2470706 | 10 | 0.2457692 | 20 | 0.2473174 | 40 | 0.2476588 |
| 1,2-Diehloroethane-d4 | 0.5 | 0.2354589 | 1 | 0.271229 | 5 | 0.1987998 | 10 | 0.1974073 | 20 | 0.2042614 | 40 | 0.2078906 |
| Toluene-d8 | 0.5 | 1.703399 | 1 | 1.670724 | 5 | 1.413565 | 10 | 1.400546 | 20 | 1.378077 | 40 | 1.364698 |
| Bromofluorobenzene | 0.5 | 1.24693 | 1 | 1.166192 | 5 | 0.964135 | 10 | 0.9754782 | 20 | 0.9514895 | 40 | 0.9551075 |

# INITIAL CALIBRATION DATA (Continued)

*SW 8260B*

Client: DRAPER SDG: 1009180

Project: WATAUGA COUNTY LANDFILL 6520-39

Calibration: 0092207 Instrument: 5972hp71

Calibration Date: 9/15/2010 10:28:57AM

| Compound | Mean RF | % RSD | Mean RT | RT RSD | Linear r | Quad COD | RSD LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.4475661 | 8.480473 | 4.174333 | 5.038719E-02 | | | CCC (15) | |
| Chloromethane | 0.4562503 | 11.56614 | 4.694333 | 0.09973 | | | CCC (15) | |
| Vinyl chloride | 0.1951344 | 6.675331 | 4.9945 | 9.364487E-02 | | | CCC (30) | |
| Bromomethane | 9.066736E-02 | 18.89162 | 5.913167 | 0.113044 | 0.9995584 | | CCC (15) | |
| Chloroethane | 7.249365E-02 | 10.46929 | 6.168833 | 8.784623E-02 | | | CCC (15) | |
| Trichlorofluoromethane | 0.4250859 | 8.721543 | 6.716667 | 5.641958E-02 | | | CCC (15) | |
| Acrolein | 1.563634E-02 | 3.223718 | 7.622167 | 6.482293E-02 | | | CCC (15) | |
| 1,1-Dichloroethene | 0.2470384 | 7.258967 | 7.776333 | 2.891184E-02 | | | CCC (30) | |
| Acetone | 0.0389904 | 13.98998 | 7.874833 | 2.576025E-02 | | | CCC (15) | |
| Iodomethane | 0.2504103 | 7.143037 | 8.071667 | 2.058932E-02 | | | CCC (15) | |
| Carbon disulfide | 1.069477 | 10.58822 | 8.1815 | 0.034187 | | | CCC (15) | |
| 3-Chloropropene | 0.3911227 | 8.655614 | 8.388167 | 2.831195E-02 | | | CCC (15) | |
| Acetonitrile | 0.6269108 | 8.043262 | 8.388167 | 2.831195E-02 | | | CCC (15) | |
| Methylene chloride | 0.2806191 | 15.37131 | 8.6144 | 3.513423E-02 | 0.9982693 | | CCC (15) | |
| Acrylonitrile | 0.045173 | 4.276818 | 8.986834 | 1.123608E-02 | | | CCC (15) | |
| trans-1,2-Dichloroethene | 0.2768011 | 6.505249 | 8.983667 | 0.0513624 | | | CCC (15) | |
| 1,1-Dichloroethane | 0.5246979 | 6.704093 | 9.569 | 2.295848E-02 | | | CCC (15) | |
| Chloroprene | 0.4413399 | 3.659517 | 9.657667 | 2.826261E-02 | | | CCC (15) | |
| Vinyl acetate | 0.6580934 | 2.696838 | 9.554333 | 4.984285E-02 | | | CCC (15) | |
| cis-1,2-Dichloroethene | 0.2904428 | 7.024315 | 10.25633 | 1.737067E-02 | | | CCC (15) | |
| 2,2-Dichloropropane | 0.4115886 | 8.504515 | 10.23833 | 0.0267051 | | | CCC (15) | |
| Propionitrile | 1.593702E-02 | 4.499652 | 10.32367 | 4.030073E-02 | | | CCC (15) | |
| 2-Butanone | 7.306813E-02 | 8.461541 | 10.21217 | 4.915948E-02 | | | CCC (15) | |
| Methacrylonitrile | 0.1111777 | 3.726276 | 10.4745 | 2.428923E-02 | | | CCC (15) | |
| Bromochloromethane | 9.595372E-02 | 8.687288 | 10.51383 | 2.389198E-02 | | | CCC (15) | |
| Chloroform | 0.4904696 | 4.817061 | 10.563 | 2.155398E-02 | | | CCC (30) | |
| 1,1,1-Trichloroethane | 0.4077803 | 5.482807 | 10.76967 | 2.011453E-02 | | | CCC (15) | |
| 1,1-Dichloropropene | 0.4122722 | 3.780152 | 10.92567 | 0.0236125 | | | CCC (15) | |
| Carbon tetrachloride | 0.3427702 | 4.633902 | 10.92567 | 0.0236125 | | | CCC (15) | |
| 1,2-Dichloroethane | 0.2640195 | 7.029153 | 11.15367 | 1.488992E-02 | | | CCC (15) | |

# INITIAL CALIBRATION DATA (Continued)

*SW 8260B*

Client: DRAPER SDG: 1009180

Project: WATAUGA COUNTY LANDFILL 6520-39

Calibration: 0092207 Instrument: 5972hp71

Calibration Date: 9/15/2010 10:28:57AM

| Compound | Mean RF | % RSD | Mean RT | RT RSD | Linear r | Quad COD | RSD LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Isobutyl alcohol | 5.762613E-03 | 9.439423 | 10.92717 | 2.320402E-02 | | | CCC (15) | |
| Benzene | 1.054046 | 5.064838 | 11.12067 | 3.884794E-02 | | | CCC (15) | |
| Trichlorocthene | 0.2537841 | 6.029317 | 11.68333 | 6.503254E-03 | | | CCC (15) | |
| 1,2-Dichloropropane | 0.2676344 | 9.32046 | 11.88183 | 2.492455E-02 | | | CCC (30) | |
| Dibromomethane | 0.109437 | 6.917839 | 11.99667 | 3.888608E-02 | | | CCC (15) | |
| Methyl Methacrylate | 9.116571E-02 | 3.561827 | 11.872 | 2.352025E-02 | | | CCC (15) | |
| Bromodichloromethane | 0.3311059 | 2.363073 | 12.082 | 3.544469E-02 | | | CCC (15) | |
| eis-1,3-Dichloropropene | 0.3706214 | 2.251499 | 12.41333 | 2.113638E-02 | | | CCC (15) | |
| 4-Methyl-2-pentanone | 0.2852708 | 5.256221 | 12.47067 | 2.513282E-03 | | | CCC (15) | |
| Toluene | 1.100095 | 11.30785 | 12.65767 | 0.0103858 | | | CCC (30) | |
| trans-1,3-Dichloropropene | 0.4966006 | 3.052502 | 12.80533 | 2.223027E-02 | | | CCC (15) | |
| 1,1,2-Trichloroethane | 0.2392835 | 3.455237 | 12.94467 | 3.155642E-03 | | | CCC (15) | |
| Ethyl Methacrylate | 0.3098255 | 7.398205 | 12.77433 | 3.292804E-02 | | | CCC (15) | |
| 1,3-Dichloropropane | 0.4569307 | 5.369082 | 13.07267 | 1.173372E-02 | | | CCC (15) | |
| Tetrachloroethene | 0.3551908 | 6.873999 | 13.05617 | 3.178282E-02 | | | CCC (15) | |
| 2-Hexanone | 0.2014039 | 4.979511 | 13.04317 | 2.385607E-02 | | | CCC (15) | |
| Dibromochloromethane | 0.3088814 | 3.633555 | 13.24317 | 3.088894E-02 | | | CCC (15) | |
| Chlorobenzene | 1.03192 | 5.240713 | 13.67133 | 1.853199E-02 | | | CCC (15) | |
| 1,1,1,2-Tetrachloroethane | 0.3497422 | 4.267823 | 13.70733 | 0.0280112 | | | CCC (15) | |
| Ethylbenzene | 0.5687811 | 5.305804 | 13.68767 | 2.529026E-02 | | | CCC (30) | |
| m,p-Xylene | 0.7065622 | 5.305343 | 13.75983 | 5.808577E-03 | | | CCC (15) | |
| o-Xylene | 0.6621831 | 5.417576 | 14.047 | 9.982172E-03 | | | CCC (15) | |
| Styrene | 1.105964 | 3.146943 | 14.05517 | 1.779289E-02 | | | CCC (15) | |
| Bromoform | 0.1897145 | 6.36835 | 14.252 | 0.0237043 | | | CCC (15) | |
| 1,1,2,2-Tetrachloroethane | 0.6018285 | 4.793285 | 14.48983 | 2.188275E-02 | | | CCC (15) | |
| 1,2,3-Trichloropropane | 7.140778E-02 | 8.163637 | 14.557 | 8.972682E-03 | | | CCC (15) | |
| trans-1,4-Dichloro-2-butene | 8.798584E-02 | 3.40064 | 14.51767 | 1.014315E-02 | | | CCC (15) | |
| 1,3-Dichlorobenzene | 1.542015 | 6.598304 | 15.24767 | 1.495225E-02 | | | CCC (15) | |
| 1,4-Dichlorobenzene | 1.551959 | 6.555628 | 15.31483 | 6.612291E-03 | | | CCC (15) | |
| 1,2-Dichlorobenzene | 1.284822 | 6.461891 | 15.63317 | 0.0229347 | | | CCC (15) | |

# INITIAL CALIBRATION DATA (Continued)

*SW 8260B*

Client: DRAPER SDG: 1009180

Project: WATAUGA COUNTY LANDFILL 6520-39

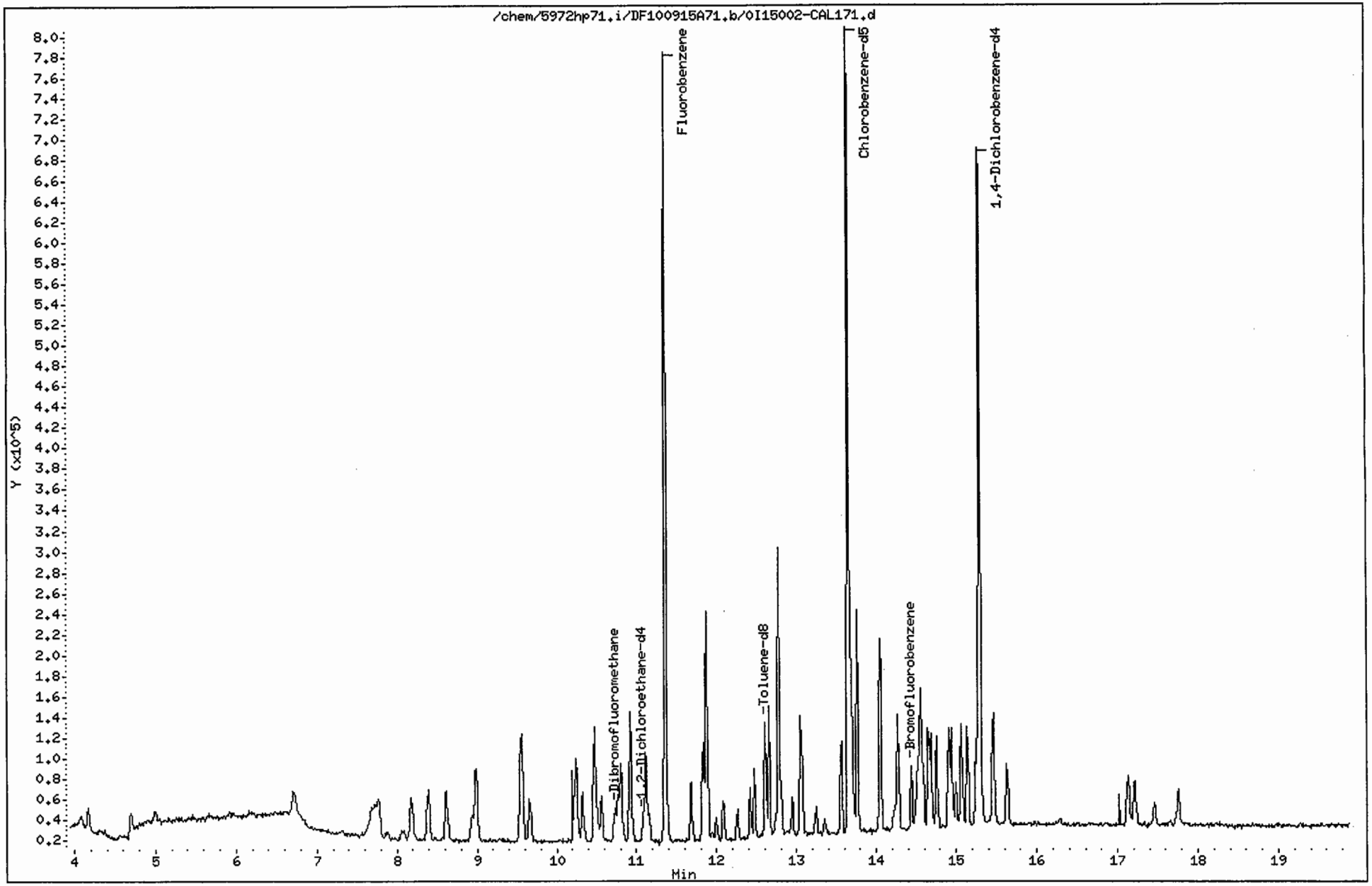
Calibration: 0092207 Instrument: 5972hp71

Calibration Date: 9/15/2010 10:28:57AM

| Compound | Mean RF | % RSD | Mean RT | RT RSD | Linear r | Quad COD | RSD LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 0.9870756 | 7.259652 | 17.13567 | 1.511914E-02 | | | CCC (15) | |
| Hexachlorobutadiene | 0.6166553 | 4.78026 | 17.21417 | 1.674919E-02 | | | CCC (15) | |
| Naphthalene | 1.2475 | 4.588554 | 17.46033 | 0.0147281 | | | CCC (15) | |
| Xylenes (total) | 0.6917691 | 5.340322 | 14.047 | 9.982172E-03 | | | CCC (15) | |
| Dibromofluoromethane | 0.271126 | 13.90709 | 10.7305 | 2.061294E-02 | | | CCC (15) | |
| 1,2-Dichloroethane-d4 | 0.2191745 | 13.24486 | 11.08467 | 2.157317E-02 | | | CCC (15) | |
| Toluene-d8 | 1.488502 | 10.41894 | 12.6085 | 2.201671E-02 | | | CCC (15) | |
| Bromofluorobenzene | 1.043222 | 12.39794 | 14.439 | 1.469123E-02 | | | CCC (15) | |

Data File: /chem/5972hp71.i/DF100915A71.b/OI15002-CAL171.d
Date : 15-SEP-2010 10:56
Client ID: VSTD0.5
Sample Info: OI15002-CAL1:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL171.d
Report Date: 16-Sep-2010 12:37

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100915A71.b/0I15002-CAL171.d
Lab Smp Id: OI15002-CAL1 Client Smp ID: VSTD0.5
Inj Date : 15-SEP-2010 10:56
Operator : JAO Inst ID: 5972hp71.i
Smp Info : OI15002-CAL1:JAO
Misc Info : VSTD0.5
Comment :
Method : /chem/5972hp71.i/DF100915A71.b/W8260-B-25MLv14.m
Meth Date : 16-Sep-2010 12:37 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 10:56 Cal File: 0I15002-CAL171.d
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.361 | 11.358 | (1.000) | 626861 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.644 | 13.642 | (1.000) | 376553 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.297 | 15.295 | (1.000) | 183210 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.731 | 10.729 | (0.945) | 19594 | 12.5000 | 14 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.085 | 11.083 | (0.976) | 14760 | 12.5000 | 13 |
| $ 6 Toluene-d8 | 98 | 12.611 | 12.608 | (0.924) | 64142 | 12.5000 | 14 |
| $ 7 Bromofluorobenzene | 95 | 14.441 | 14.439 | (0.944) | 22845 | 12.5000 | 15 |
| 8 Dichlorodifluoromethane | 85 | 4.176 | 4.174 | (0.368) | 32135 | 12.5000 | 14 |
| 9 Chloromethane | 50 | 4.698 | 4.696 | (0.414) | 31822 | 12.5000 | 14 |
| 10 Vinyl Chloride | 62 | 5.003 | 4.991 | (0.440) | 13545 | 12.5000 | 14 |
| 11 Bromomethane | 94 | 5.909 | 5.906 | (0.520) | 4030 | 12.5000 | 14 |
| 12 Chloroethane | 64 | 6.174 | 6.162 | (0.543) | 5250 | 12.5000 | 14 |
| 13 Trichlorofluoromethane | 101 | 6.715 | 6.723 | (0.591) | 28251 | 12.5000 | 13 |
| 14 Acrolein | 56 | 7.631 | 7.619 | (0.672) | 9954 | 125.000 | 130 |
| 15 1,1,1-trichloro-2,2,2-trifluo | 117 | 7.680 | 7.678 | (0.676) | 9881 | 12.5000 | 14 |
| 16 1,1,2-trichloro-1,2,2-trifluo | 85 | 7.729 | 7.727 | (0.680) | 12722 | 12.5000 | 15 |

JMB 9-16-10

Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL171.d
Report Date: 16-Sep-2010 12:37

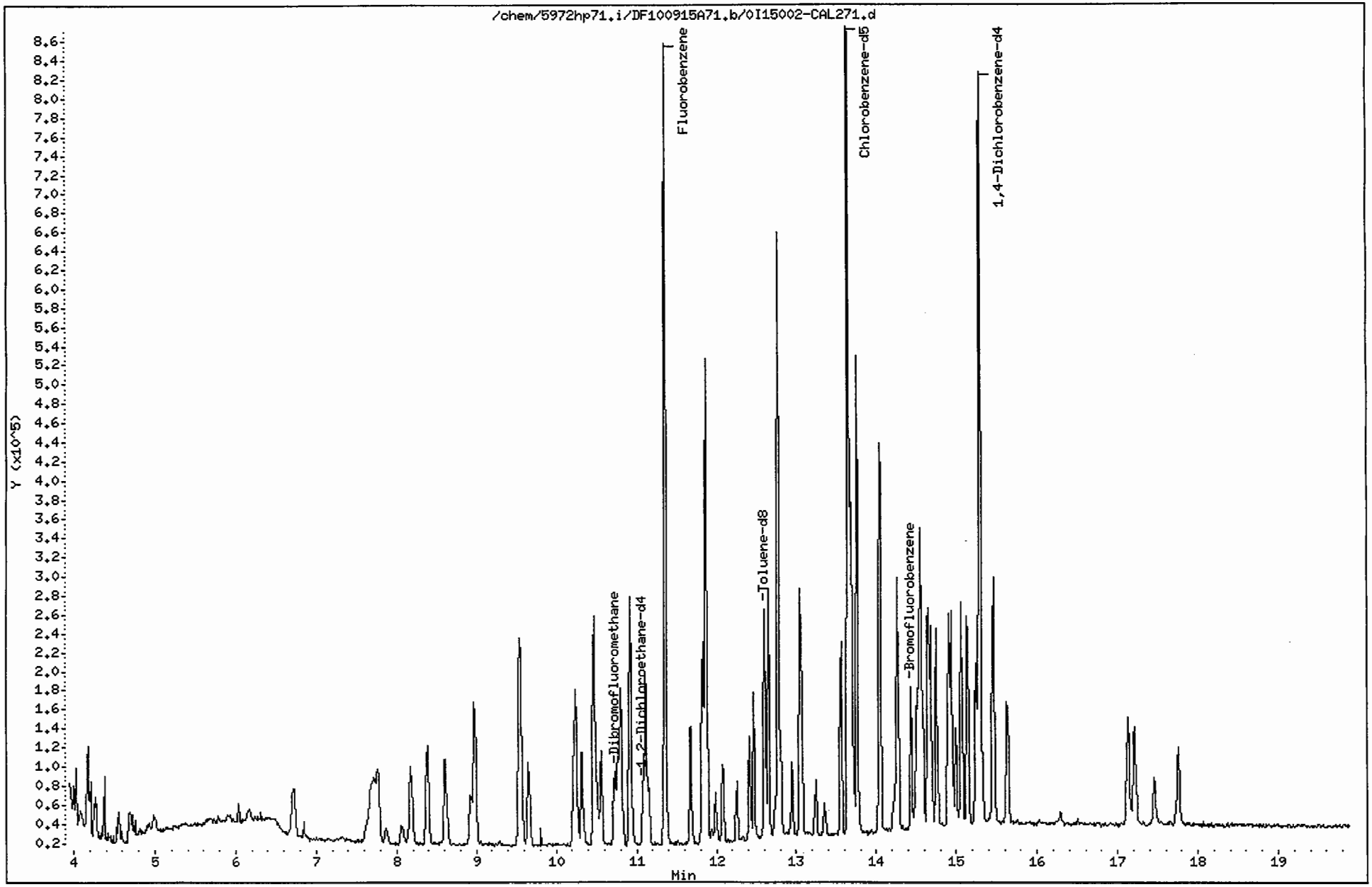
| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 17 1,1-Dichloroethene | 96 | 7.778 | 7.776 | (0.685) | 17132 | 12.5000 | 14 |
| 18 Acetone | 43 | 7.877 | 7.875 | (0.693) | 14690 | 62.5000 | 75 |
| 19 Iodomethane | 142 | 8.074 | 8.071 | (0.711) | 16145 | 12.5000 | 13 |
| 20 Carbon disulfide | 76 | 8.182 | 8.180 | (0.720) | 77952 | 12.5000 | 15 |
| 22 3-Chloropropene | 39 | 8.389 | 8.386 | (0.738) | 27375 | 12.5000 | 14 |
| 23 Acetonitrile | 41 | 8.389 | 8.386 | (0.738) | 42955 | 12.5000 | 14 |
| 24 Methyl acetate | 43 | 8.389 | 8.386 | (0.738) | 12564 | 12.5000 | 14 |
| 26 Acrylonitrile | 53 | 8.989 | 8.987 | (0.791) | 30153 | 125.000 | 130 |
| 28 trans-1,2-Dichloroethene | 96 | 8.989 | 8.987 | (0.791) | 18789 | 12.5000 | 14 |
| 27 Methyl-tert-butyl ether | 73 | 8.940 | 8.937 | (0.787) | 27219 | 12.5000 | 13 |
| 30 Isopropyl ether | 45 | 9.550 | 9.548 | (0.841) | 79834 | 12.5000 | 13 |
| 31 Vinyl acetate | 43 | 9.560 | 9.557 | (0.841) | 85283 | 25.0000 | 26 |
| 32 1,1-Dichloroethane | 63 | 9.569 | 9.567 | (0.842) | 35875 | 12.5000 | 14 |
| 33 Chloroprene | 53 | 9.658 | 9.656 | (0.850) | 28483 | 12.5000 | 13 |
| 34 2-butanone | 43 | 10.219 | 10.207 | (0.899) | 26028 | 62.5000 | 71 |
| 35 2,2-Dichloropropane | 77 | 10.239 | 10.236 | (0.901) | 28821 | 12.5000 | 14 |
| 36 cis-1,2-Dichloroethene | 96 | 10.258 | 10.256 | (0.903) | 20203 | 12.5000 | 14 |
| 37 Propionitrile | 54 | 10.327 | 10.325 | (0.909) | 51495 | 625.000 | 640 |
| 38 Methacrylonitrile | 41 | 10.475 | 10.473 | (0.922) | 71960 | 125.000 | 130 |
| 39 Bromochloromethane | 128 | 10.514 | 10.512 | (0.925) | 6439 | 12.5000 | 13 |
| 40 Chloroform | 83 | 10.563 | 10.561 | (0.930) | 32954 | 12.5000 | 13 |
| 42 1,1,1-Trichloroethane | 97 | 10.770 | 10.768 | (0.948) | 27708 | 12.5000 | 14 |
| 43 Cyclohexane | 84 | 10.810 | 10.807 | (0.951) | 28271 | 12.5000 | 14 |
| 44 1,1-dichloropropene | 75 | 10.928 | 10.925 | (0.962) | 27302 | 12.5000 | 13 |
| 45 Isobutyl alcohol | 43 | 10.928 | 10.925 | (0.962) | 18640 | 625.000 | 650 |
| 46 Carbon Tetrachloride | 117 | 10.928 | 10.925 | (0.962) | 22630 | 12.5000 | 13 |
| 47 Benzene | 78 | 11.124 | 11.122 | (0.979) | 71961 | 12.5000 | 14 |
| 48 1,2-Dichloroethane | 62 | 11.154 | 11.152 | (0.982) | 18433 | 12.5000 | 14 |
| 49 Trichloroethene | 130 | 11.685 | 11.683 | (1.029) | 17357 | 12.5000 | 14 |
| 50 Methylcyclohexane | 83 | 11.833 | 11.831 | (1.042) | 32551 | 12.5000 | 13 |
| 51 1,2-Dichloropropane | 63 | 11.882 | 11.880 | (1.046) | 19448 | 12.5000 | 14 |
| 52 Methylmethacrylate | 69 | 11.872 | 11.870 | (1.045) | 54959 | 125.000 | 120 |
| 53 1,4-dioxane | 88 | 11.941 | 11.939 | (1.051) | 3209 | 625.000 | 690 |
| 54 Dibromomethane | 174 | 12.000 | 11.998 | (1.056) | 6812 | 12.5000 | 12 |
| 55 Bromodichloromethane | 83 | 12.079 | 12.087 | (1.063) | 21302 | 12.5000 | 13 |
| 56 2-chloroethyl vinyl ether | 63 | 12.256 | 12.254 | (1.079) | 10259 | 25.0000 | 25 |
| 57 cis-1,3-Dichloropropene | 75 | 12.414 | 12.411 | (1.093) | 23785 | 12.5000 | 13 |
| 58 4-Methyl-2-pentanone | 43 | 12.473 | 12.470 | (0.914) | 53578 | 62.5000 | 62 |
| 59 Toluene | 92 | 12.660 | 12.657 | (0.928) | 49348 | 12.5000 | 15 |
| 60 Ethylmethacrylate | 69 | 12.778 | 12.776 | (0.937) | 118389 | 125.000 | 130 |
| 61 trans-1,3-Dichloropropene | 75 | 12.807 | 12.805 | (0.939) | 19389 | 12.5000 | 13 |
| 62 1,1,2-Trichloroethane | 97 | 12.945 | 12.943 | (0.949) | 9146 | 12.5000 | 13 |
| 63 2-hexanone | 43 | 13.044 | 13.041 | (0.956) | 37768 | 62.5000 | 62 |
| 64 1,3-Dichloropropane | 76 | 13.073 | 13.071 | (0.958) | 18891 | 12.5000 | 14 |
| 65 Tetrachloroethene | 164 | 13.053 | 13.061 | (0.957) | 14300 | 12.5000 | 13 |
| 66 Dibromochloromethane | 129 | 13.240 | 13.248 | (0.970) | 12059 | 12.5000 | 13 |
| 67 1,2-Dibromoethane | 107 | 13.358 | 13.356 | (0.979) | 9728 | 12.5000 | 13 |

Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL171.d
Report Date: 16-Sep-2010 12:37

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 68 1-Chlorohexane | 55 | 13.565 | 13.563 | (0.994) | 19869 | 12.5000 | 13 |
| 69 Chlorobenzene | 112 | 13.673 | 13.671 | (1.002) | 41523 | 12.5000 | 13 |
| 70 Ethylbenzene | 106 | 13.683 | 13.691 | (1.003) | 23151 | 12.5000 | 14 |
| 71 1,1,1,2-Tetrachloroethane | 131 | 13.703 | 13.710 | (1.004) | 13745 | 12.5000 | 13 |
| 72 m,p-Xylene | 106 | 13.762 | 13.760 | (1.009) | 56221 | 25.0000 | 26 |
| 73 m,p-Xylene (part of total) | 106 | 13.762 | 13.760 | (1.009) | 56221 | 25.0000 | 26 |
| 74 o-Xylene | 106 | 14.047 | 14.045 | (1.030) | 26455 | 12.5000 | 13 |
| 75 o-Xylene (part of total) | 106 | 14.047 | 14.045 | (1.030) | 26455 | 12.5000 | 13 |
| 76 Styrene | 104 | 14.057 | 14.055 | (1.030) | 42644 | 12.5000 | 13 |
| 77 Bromoform | 173 | 14.254 | 14.252 | (1.045) | 6492 | 12.5000 | 11 |
| 78 Isopropyl Benzene | 105 | 14.274 | 14.271 | (1.046) | 70330 | 12.5000 | 13 |
| 79 1,1,2,2-Tetrachloroethane | 83 | 14.490 | 14.488 | (0.947) | 11277 | 12.5000 | 13 |
| 81 1,2,3-Trichloropropane | 110 | 14.559 | 14.557 | (1.067) | 3050 | 12.5000 | 14 |
| 80 trans-1,4-dichloro-2-butene | 53 | 14.520 | 14.517 | (1.064) | 13011 | 50.0000 | 49 |
| 82 n-Propyl Benzene | 91 | 14.549 | 14.557 | (0.951) | 101337 | 12.5000 | 13 |
| 83 Bromobenzene | 156 | 14.589 | 14.586 | (1.069) | 15623 | 12.5000 | 13 |
| 84 1,3,5-Trimethyl Benzene | 105 | 14.648 | 14.655 | (0.958) | 54602 | 12.5000 | 13 |
| 85 2-Chlorotoluene | 126 | 14.687 | 14.685 | (0.960) | 15122 | 12.5000 | 13 |
| 86 4-Chlorotoluene | 126 | 14.756 | 14.754 | (0.965) | 15617 | 12.5000 | 14 |
| 87 tert-Butyl Benzene | 119 | 14.904 | 14.911 | (0.974) | 49811 | 12.5000 | 13 |
| 88 1,2,4-Trimethyl Benzene | 105 | 14.943 | 14.941 | (0.977) | 53445 | 12.5000 | 13 |
| 89 Pentachloroethane | 167 | 15.002 | 15.000 | (0.981) | 8520 | 12.5000 | 13 |
| 90 sec-Butyl Benzene | 105 | 15.071 | 15.069 | (0.985) | 78183 | 12.5000 | 13 |
| 91 p-Isopropyl Toluene | 119 | 15.140 | 15.137 | (0.990) | 56041 | 12.5000 | 13 |
| 92 1,3-Dichlorobenzene | 146 | 15.248 | 15.246 | (0.997) | 29686 | 12.5000 | 13 |
| 93 1,4-Dichlorobenzene | 146 | 15.317 | 15.315 | (1.001) | 30479 | 12.5000 | 13 |
| 94 n-Butyl Benzene | 91 | 15.464 | 15.462 | (1.011) | 66983 | 12.5000 | 13 |
| 95 1,2-Dichlorobenzene | 146 | 15.632 | 15.630 | (1.022) | 25561 | 12.5000 | 14 |
| 96 1,2-Dibromo-3-Chloropropane | 75 | 16.301 | 16.289 | (1.066) | 1534 | 12.5000 | 13 |
| 97 1,2,4-Trichlorobenzene | 180 | 17.138 | 17.135 | (1.120) | 17876 | 12.5000 | 12 |
| 98 Hexachlorobutadiene | 225 | 17.216 | 17.214 | (1.125) | 11310 | 12.5000 | 13 |
| 99 Naphthalene | 128 | 17.462 | 17.460 | (1.142) | 23899 | 12.5000 | 13 |
| 100 1,2,3-Trichlorobenzene | 180 | 17.758 | 17.755 | (1.161) | 15046 | 12.5000 | 13 |
| M 101 1,2-Dichloroethene (total) | 96 | | | | 38992 | 25.0000 | 27 |
| M 102 Xylene (total) | 106 | | | | 82676 | 12.5000 | 41 |

Data File: /chem/5972hp71.i/DF100915A71.b/OI15002-CAL271.d
Date : 15-SEP-2010 10:28
Client ID: VSTD001
Sample Info: OI15002-CAL2:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL271.d
Report Date: 16-Sep-2010 12:37

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100915A71.b/0I15002-CAL271.d
Lab Smp Id: OI15002-CAL2 Client Smp ID: VSTD001
Inj Date : 15-SEP-2010 10:28
Operator : JAO Inst ID: 5972hp71.i
Smp Info : OI15002-CAL2:JAO
Misc Info : VSTD001
Comment :
Method : /chem/5972hp71.i/DF100915A71.b/W8260-B-25MLv14.m
Meth Date : 16-Sep-2010 12:37 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 10:28 Cal File: 0I15002-CAL271.d
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.359 | 11.358 | (1.000) | 676126 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.652 | 13.642 | (1.000) | 423891 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.296 | 15.295 | (1.000) | 211213 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.729 | 10.729 | (0.945) | 44133 | 25.0000 | 30 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.083 | 11.083 | (0.976) | 36677 | 25.0000 | 31 |
| $ 6 Toluene-d8 | 98 | 12.609 | 12.608 | (0.924) | 141641 | 25.0000 | 28 |
| $ 7 Bromofluorobenzene | 95 | 14.439 | 14.439 | (0.944) | 49263 | 25.0000 | 28 |
| 8 Dichlorodifluoromethane | 85 | 4.175 | 4.174 | (0.368) | 59665 | 25.0000 | 25 |
| 9 Chloromethane | 50 | 4.686 | 4.696 | (0.413) | 49863 | 25.0000 | 20 |
| 10 Vinyl Chloride | 62 | 4.992 | 4.991 | (0.439) | 24623 | 25.0000 | 23 |
| 11 Bromomethane | 94 | 5.907 | 5.906 | (0.520) | 10230 | 25.0000 | 25 |
| 12 Chloroethane | 64 | 6.163 | 6.162 | (0.543) | 10307 | 25.0000 | 26 |
| 13 Trichlorofluoromethane | 101 | 6.714 | 6.723 | (0.591) | 64954 | 25.0000 | 28 |
| 14 Acrolein | 56 | 7.619 | 7.619 | (0.671) | 21257 | 250.000 | 250 |
| 15 1,1,1-trichloro-2,2,2-trifluo | 117 | 7.678 | 7.678 | (0.676) | 20685 | 25.0000 | 28 |
| 16 1,1,2-trichloro-1,2,2-trifluo | 85 | 7.727 | 7.727 | (0.680) | 25089 | 25.0000 | 28 |

9.16.10

Data File: '/chem/5972hp71.i/DF100915A71.b/0I15002-CAL271.d
Report Date: 16-Sep-2010 12:37

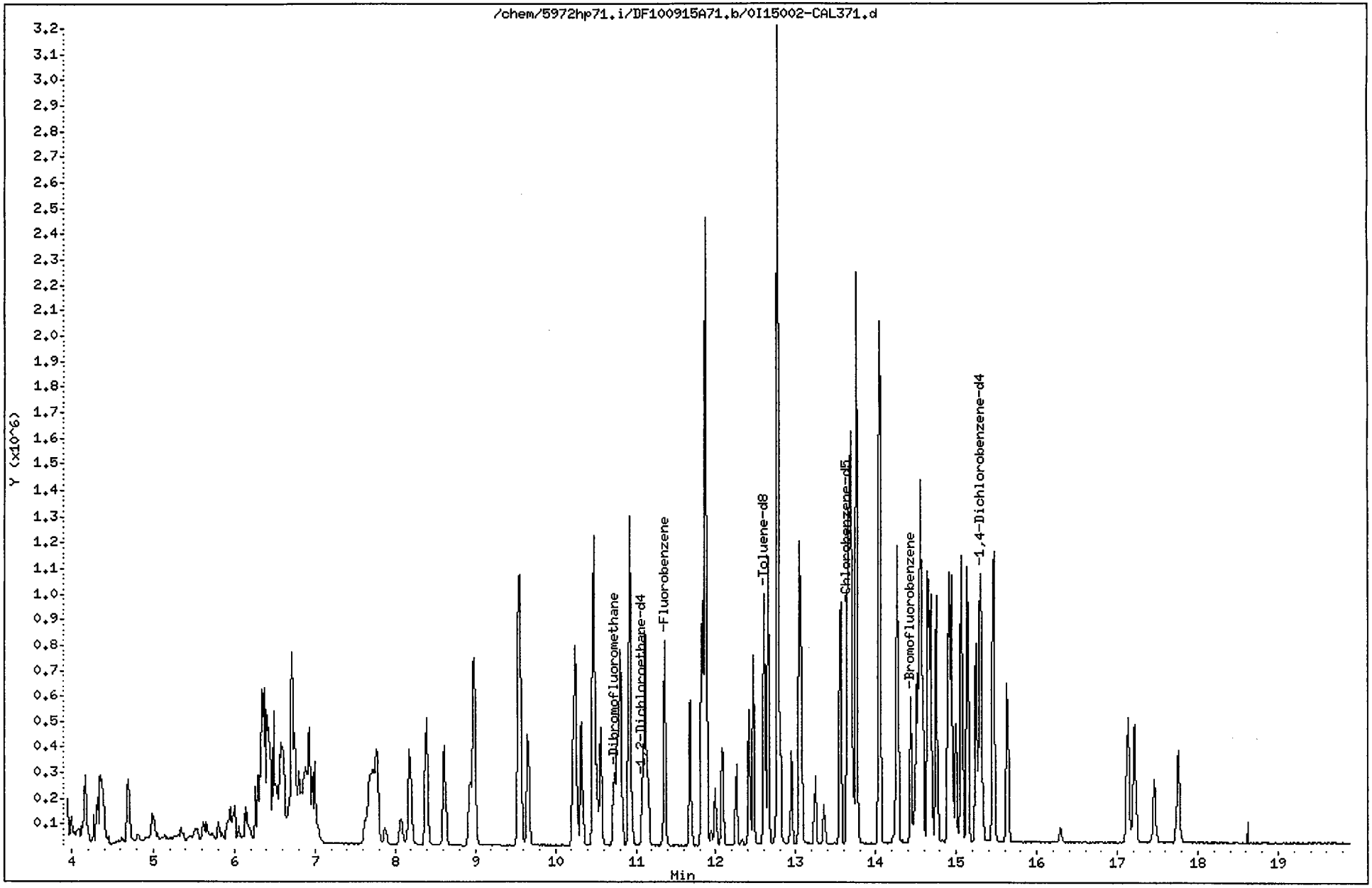
| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 17 1,1-Dichloroethene | 96 | 7.777 | 7.776 | (0.685) | 34617 | 25.0000 | 26 |
| 18 Acetone | 43 | 7.875 | 7.875 | (0.693) | 30102 | 125.000 | 140 |
| 19 Iodomethane | 142 | 8.072 | 8.071 | (0.711) | 32982 | 25.0000 | 24 |
| 20 Carbon disulfide | 76 | 8.180 | 8.180 | (0.720) | 154761 | 25.0000 | 27 |
| 22 3-Chloropropene | 39 | 8.387 | 8.386 | (0.738) | 54522 | 25.0000 | 26 |
| 23 Acetonitrile | 41 | 8.387 | 8.386 | (0.738) | 85729 | 25.0000 | 25 |
| 24 Methyl acetate | 43 | 8.377 | 8.386 | (0.737) | 23833 | 25.0000 | 29 |
| 25 Methylene Chloride | 84 | 8.613 | 8.613 | (0.758) | 47054 | 25.0000 | 13 |
| 26 Acrylonitrile | 53 | 8.987 | 8.987 | (0.791) | 58326 | 250.000 | 240 |
| 28 trans-1,2-Dichloroethene | 96 | 8.977 | 8.987 | (0.790) | 38293 | 25.0000 | 26 |
| 27 Methyl-tert-butyl ether | 73 | 8.928 | 8.937 | (0.786) | 61505 | 25.0000 | 27 |
| 30 Isopropyl ether | 45 | 9.538 | 9.548 | (0.840) | 166258 | 25.0000 | 25 |
| 31 Vinyl acetate | 43 | 9.548 | 9.557 | (0.841) | 176610 | 50.0000 | 50 |
| 32 1,1-Dichloroethane | 63 | 9.568 | 9.567 | (0.842) | 73341 | 25.0000 | 26 |
| 33 Chloroprene | 53 | 9.656 | 9.656 | (0.850) | 60788 | 25.0000 | 25 |
| 34 2-butanone | 43 | 10.208 | 10.207 | (0.899) | 50853 | 125.000 | 130 |
| 35 2,2-Dichloropropane | 77 | 10.237 | 10.236 | (0.901) | 59899 | 25.0000 | 27 |
| 36 cis-1,2-Dichloroethene | 96 | 10.257 | 10.256 | (0.903) | 40428 | 25.0000 | 26 |
| 37 Propionitrile | 54 | 10.316 | 10.325 | (0.908) | 107574 | 1250.00 | 1200 |
| 38 Methacrylonitrile | 41 | 10.473 | 10.473 | (0.922) | 151441 | 250.000 | 250 |
| 39 Bromochloromethane | 128 | 10.513 | 10.512 | (0.925) | 14559 | 25.0000 | 28 |
| 40 Chloroform | 83 | 10.562 | 10.561 | (0.930) | 68574 | 25.0000 | 26 |
| 42 1,1,1-Trichloroethane | 97 | 10.768 | 10.768 | (0.948) | 57894 | 25.0000 | 26 |
| 43 Cyclohexane | 84 | 10.808 | 10.807 | (0.951) | 58586 | 25.0000 | 27 |
| 44 1,1-dichloropropene | 75 | 10.926 | 10.925 | (0.962) | 55742 | 25.0000 | 25 |
| 45 Isobutyl alcohol | 43 | 10.926 | 10.925 | (0.962) | 35347 | 1250.00 | 1100 |
| 46 Carbon Tetrachloride | 117 | 10.926 | 10.925 | (0.962) | 49240 | 25.0000 | 27 |
| 47 Benzene | 78 | 11.113 | 11.122 | (0.978) | 141086 | 25.0000 | 25 |
| 48 1,2-Dichloroethane | 62 | 11.152 | 11.152 | (0.982) | 37761 | 25.0000 | 26 |
| 49 Trichloroethene | 130 | 11.684 | 11.683 | (1.029) | 35837 | 25.0000 | 26 |
| 50 Methylcyclohexane | 83 | 11.831 | 11.831 | (1.042) | 69061 | 25.0000 | 26 |
| 51 1,2-Dichloropropane | 63 | 11.881 | 11.880 | (1.046) | 35545 | 25.0000 | 25 |
| 52 Methylmethacrylate | 69 | 11.871 | 11.870 | (1.045) | 124820 | 250.000 | 250 |
| 53 1,4-dioxane | 88 | 11.940 | 11.939 | (1.051) | 6288 | 1250.00 | 1200 |
| 54 Dibromomethane | 174 | 11.989 | 11.998 | (1.055) | 16702 | 25.0000 | 28 |
| 55 Bromodichloromethane | 83 | 12.077 | 12.087 | (1.063) | 46100 | 25.0000 | 26 |
| 56 2-chloroethyl vinyl ether | 63 | 12.255 | 12.254 | (1.079) | 21073 | 50.0000 | 48 |
| 57 cis-1,3-Dichloropropene | 75 | 12.412 | 12.411 | (1.093) | 50821 | 25.0000 | 25 |
| 58 4-Methyl-2-pentanone | 43 | 12.471 | 12.470 | (0.913) | 121182 | 125.000 | 130 |
| 59 Toluene | 92 | 12.658 | 12.657 | (0.927) | 99925 | 25.0000 | 27 |
| 60 Ethylmethacrylate | 69 | 12.776 | 12.776 | (0.936) | 268776 | 250.000 | 260 |
| 61 trans-1,3-Dichloropropene | 75 | 12.806 | 12.805 | (0.938) | 43109 | 25.0000 | 26 |
| 62 1,1,2-Trichloroethane | 97 | 12.943 | 12.943 | (0.948) | 21340 | 25.0000 | 26 |
| 63 2-hexanone | 43 | 13.042 | 13.041 | (0.955) | 86605 | 125.000 | 130 |
| 64 1,3-Dichloropropane | 76 | 13.071 | 13.071 | (0.957) | 39301 | 25.0000 | 25 |
| 65 Tetrachloroethene | 164 | 13.052 | 13.061 | (0.956) | 32874 | 25.0000 | 27 |
| 66 Dibromochloromethane | 129 | 13.239 | 13.248 | (0.970) | 27458 | 25.0000 | 26 |

Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL271.d
Report Date: 16-Sep-2010 12:37

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 67 1,2-Dibromoethane | 107 | 13.357 | 13.356 | (0.978) | 21911 | 25.0000 | 26 |
| 68 1-Chlorohexane | 55 | 13.563 | 13.563 | (0.993) | 41473 | 25.0000 | 25 |
| 69 Chlorobenzene | 112 | 13.672 | 13.671 | (1.001) | 92204 | 25.0000 | 26 |
| 70 Ethylbenzene | 106 | 13.691 | 13.691 | (1.003) | 49677 | 25.0000 | 26 |
| 71 1,1,1,2-Tetrachloroethane | 131 | 13.711 | 13.710 | (1.004) | 31388 | 25.0000 | 26 |
| 72 m,p-Xylene | 106 | 13.760 | 13.760 | (1.008) | 125440 | 50.0000 | 52 |
| 73 m,p-Xylene (part of total) | 106 | 13.760 | 13.760 | (1.008) | 125440 | 50.0000 | 52 |
| 74 o-Xylene | 106 | 14.046 | 14.045 | (1.029) | 58787 | 25.0000 | 26 |
| 75 o-Xylene (part of total) | 106 | 14.046 | 14.045 | (1.029) | 58787 | 25.0000 | 26 |
| 76 Styrene | 104 | 14.056 | 14.055 | (1.030) | 93584 | 25.0000 | 25 |
| 77 Bromoform | 173 | 14.252 | 14.252 | (1.044) | 17191 | 25.0000 | 27 |
| 78 Isopropyl Benzene | 105 | 14.272 | 14.271 | (1.045) | 166570 | 25.0000 | 26 |
| 79 1,1,2,2-Tetrachloroethane | 83 | 14.489 | 14.488 | (0.947) | 27337 | 25.0000 | 27 |
| 81 1,2,3-Trichloropropane | 110 | 14.557 | 14.557 | (1.066) | 6262 | 25.0000 | 26 |
| 80 trans-1,4-dichloro-2-butene | 53 | 14.518 | 14.517 | (1.063) | 30441 | 100.000 | 100 |
| 82 n-Propyl Benzene | 91 | 14.557 | 14.557 | (0.952) | 232693 | 25.0000 | 27 |
| 83 Bromobenzene | 156 | 14.587 | 14.586 | (1.068) | 37000 | 25.0000 | 27 |
| 84 1,3,5-Trimethyl Benzene | 105 | 14.656 | 14.655 | (0.958) | 130034 | 25.0000 | 27 |
| 85 2-Chlorotoluene | 126 | 14.685 | 14.685 | (0.960) | 35749 | 25.0000 | 27 |
| 86 4-Chlorotoluene | 126 | 14.754 | 14.754 | (0.965) | 35619 | 25.0000 | 27 |
| 87 tert-Butyl Benzene | 119 | 14.912 | 14.911 | (0.975) | 120349 | 25.0000 | 27 |
| 88 1,2,4-Trimethyl Benzene | 105 | 14.941 | 14.941 | (0.977) | 126854 | 25.0000 | 27 |
| 89 Pentachloroethane | 167 | 15.000 | 15.000 | (0.981) | 19799 | 25.0000 | 26 |
| 90 sec-Butyl Benzene | 105 | 15.069 | 15.069 | (0.985) | 181989 | 25.0000 | 26 |
| 91 p-Isopropyl Toluene | 119 | 15.138 | 15.137 | (0.990) | 134735 | 25.0000 | 27 |
| 92 1,3-Dichlorobenzene | 146 | 15.246 | 15.246 | (0.997) | 71715 | 25.0000 | 28 |
| 93 1,4-Dichlorobenzene | 146 | 15.315 | 15.315 | (1.001) | 71138 | 25.0000 | 27 |
| 94 n-Butyl Benzene | 91 | 15.463 | 15.462 | (1.011) | 157496 | 25.0000 | 27 |
| 95 1,2-Dichlorobenzene | 146 | 15.640 | 15.630 | (1.023) | 58163 | 25.0000 | 27 |
| 96 1,2-Dibromo-3-Chloropropane | 75 | 16.290 | 16.289 | (1.065) | 4226 | 25.0000 | 30 |
| 97 1,2,4-Trichlorobenzene | 180 | 17.136 | 17.135 | (1.120) | 47645 | 25.0000 | 29 |
| 98 Hexachlorobutadiene | 225 | 17.215 | 17.214 | (1.125) | 28482 | 25.0000 | 27 |
| 99 Naphthalene | 128 | 17.461 | 17.460 | (1.142) | 55691 | 25.0000 | 26 |
| 100 1,2,3-Trichlorobenzene | 180 | 17.756 | 17.755 | (1.161) | 38290 | 25.0000 | 28 |
| M 101 1,2-Dichloroethene (total) | 96 | | | | 78721 | 50.0000 | 51 |
| M 102 Xylene (total) | 106 | | | | 184227 | 25.0000 | 82 |

Data File: /chem/5972hp71.i/DF100915A71.b/OI15002-CAL371.d
Date : 15-SEP-2010 11:23
Client ID: VSTD005
Sample Info: OI15002-CAL3:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL371.d
Report Date: 16-Sep-2010 12:37

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100915A71.b/0I15002-CAL371.d
Lab Smp Id: OI15002-CAL3 Client Smp ID: VSTD005
Inj Date : 15-SEP-2010 11:23
Operator : JAO Inst ID: 5972hp71.i
Smp Info : OI15002-CAL3:JAO
Misc Info : VSTD005
Comment :
Method : /chem/5972hp71.i/DF100915A71.b/W8260-B-25MLv14.m
Meth Date : 16-Sep-2010 12:37 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 11:23 Cal File: 0I15002-CAL371.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.360 | 11.358 | (1.000) | 656711 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.643 | 13.642 | (1.000) | 409687 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.297 | 15.295 | (1.000) | 210010 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.730 | 10.729 | (0.945) | 162254 | 125.000 | 110 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.085 | 11.083 | (0.976) | 130554 | 125.000 | 110 |
| $ 6 Toluene-d8 | 98 | 12.610 | 12.608 | (0.924) | 579119 | 125.000 | 120 |
| $ 7 Bromofluorobenzene | 95 | 14.441 | 14.439 | (0.944) | 202478 | 125.000 | 120 |
| 8 Dichlorodifluoromethane | 85 | 4.176 | 4.174 | (0.368) | 288955 | 125.000 | 120 |
| 9 Chloromethane | 50 | 4.698 | 4.696 | (0.413) | 322262 | 125.000 | 130 |
| 10 Vinyl Chloride | 62 | 4.993 | 4.991 | (0.439) | 130155 | 125.000 | 130 |
| 11 Bromomethane | 94 | 5.918 | 5.906 | (0.521) | 60498 | 125.000 | 120 |
| 12 Chloroethane | 64 | 6.174 | 6.162 | (0.543) | 48604 | 125.000 | 130 |
| 13 Trichlorofluoromethane | 101 | 6.715 | 6.723 | (0.591) | 283141 | 125.000 | 130 |
| 14 Acrolein | 56 | 7.620 | 7.619 | (0.671) | 104463 | 1250.00 | 1300 |
| 15 1,1,1-trichloro-2,2,2-trifluo | 117 | 7.680 | 7.678 | (0.676) | 89154 | 125.000 | 120 |
| 16 1,1,2-trichloro-1,2,2-trifluo | 85 | 7.729 | 7.727 | (0.680) | 108708 | 125.000 | 120 |

9/16/10

Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL371.d
Report Date: 16-Sep-2010 12:37

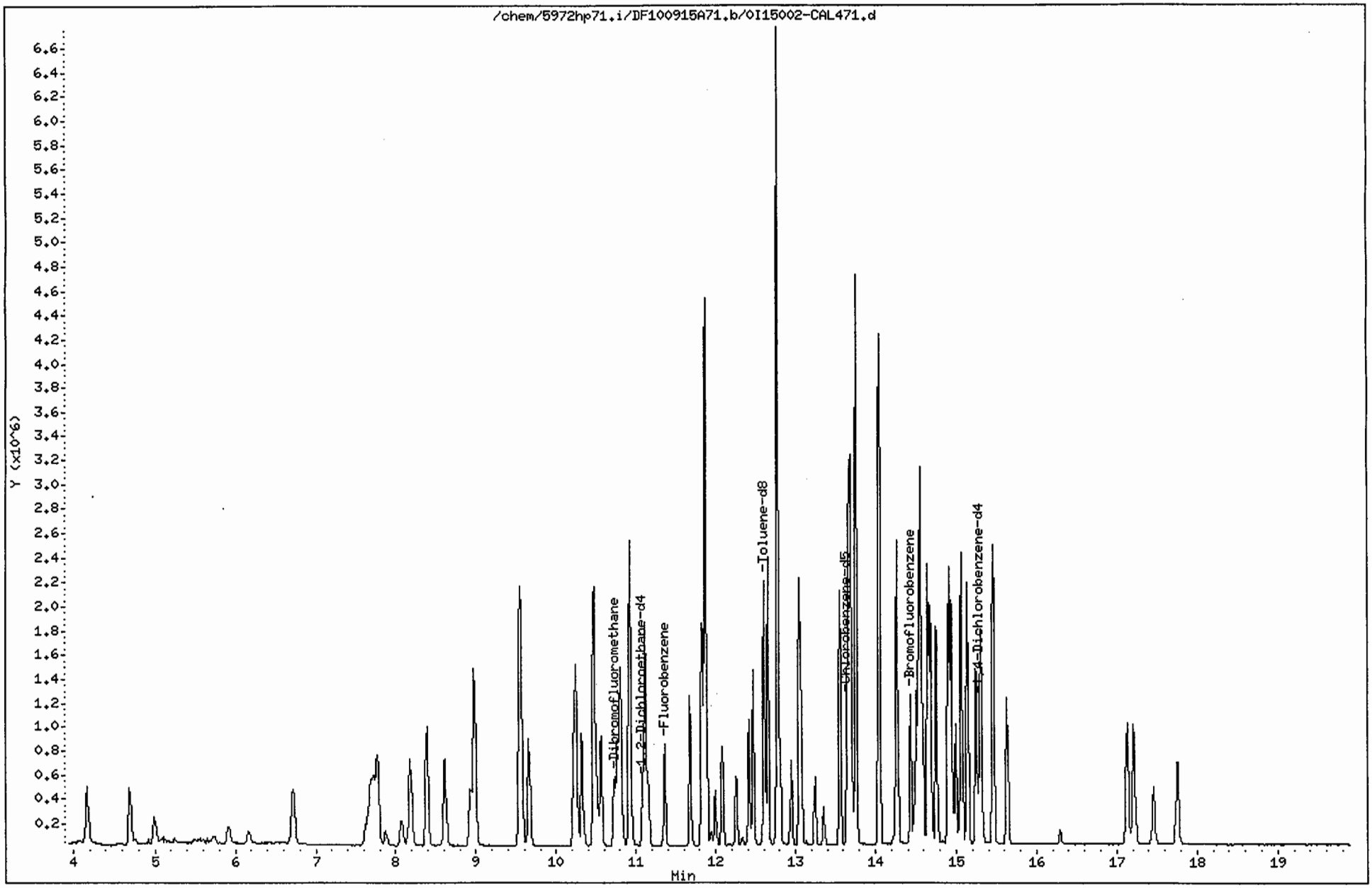
| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 17 1,1-Dichloroethene | 96 | 7.778 | 7.776 | (0.685) | 165849 | 125.000 | 130 |
| 18 Acetone | 43 | 7.876 | 7.875 | (0.693) | 122388 | 625.000 | 600 |
| 19 Iodomethane | 142 | 8.073 | 8.071 | (0.711) | 174868 | 125.000 | 130 |
| 20 Carbon disulfide | 76 | 8.181 | 8.180 | (0.720) | 703686 | 125.000 | 130 |
| 22 3-Chloropropene | 39 | 8.388 | 8.386 | (0.738) | 265081 | 125.000 | 130 |
| 23 Acetonitrile | 41 | 8.388 | 8.386 | (0.738) | 432137 | 125.000 | 130 |
| 24 Methyl acetate | 43 | 8.388 | 8.386 | (0.738) | 92404 | 125.000 | 130 |
| 25 Methylene Chloride | 84 | 8.614 | 8.613 | (0.758) | 193630 | 125.000 | 130 |
| 26 Acrylonitrile | 53 | 8.988 | 8.987 | (0.791) | 304089 | 1250.00 | 1300 |
| 28 trans-1,2-Dichloroethene | 96 | 8.979 | 8.987 | (0.790) | 188358 | 125.000 | 130 |
| 27 Methyl-tert-butyl ether | 73 | 8.939 | 8.937 | (0.787) | 288802 | 125.000 | 130 |
| 30 Isopropyl ether | 45 | 9.549 | 9.548 | (0.841) | 813799 | 125.000 | 130 |
| 31 Vinyl acetate | 43 | 9.549 | 9.557 | (0.841) | 891156 | 250.000 | 260 |
| 32 1,1-Dichloroethane | 63 | 9.569 | 9.567 | (0.842) | 352771 | 125.000 | 130 |
| 33 Chloroprene | 53 | 9.658 | 9.656 | (0.850) | 293961 | 125.000 | 130 |
| 34 2-butanone | 43 | 10.209 | 10.207 | (0.899) | 236572 | 625.000 | 620 |
| 35 2,2-Dichloropropane | 77 | 10.238 | 10.236 | (0.901) | 271529 | 125.000 | 130 |
| 36 cis-1,2-Dichloroethene | 96 | 10.258 | 10.256 | (0.903) | 193759 | 125.000 | 130 |
| 37 Propionitrile | 54 | 10.327 | 10.325 | (0.909) | 528318 | 6250.00 | 6300 |
| 38 Methacrylonitrile | 41 | 10.474 | 10.473 | (0.922) | 737700 | 1250.00 | 1300 |
| 39 Bromochloromethane | 128 | 10.514 | 10.512 | (0.925) | 64019 | 125.000 | 130 |
| 40 Chloroform | 83 | 10.563 | 10.561 | (0.930) | 322406 | 125.000 | 130 |
| 42 1,1,1-Trichloroethane | 97 | 10.770 | 10.768 | (0.948) | 262914 | 125.000 | 120 |
| 43 Cyclohexane | 84 | 10.809 | 10.807 | (0.951) | 264942 | 125.000 | 120 |
| 44 1,1-dichloropropene | 75 | 10.927 | 10.925 | (0.962) | 272393 | 125.000 | 130 |
| 45 Isobutyl alcohol | 43 | 10.927 | 10.925 | (0.962) | 183511 | 6250.00 | 6100 |
| 46 Carbon Tetrachloride | 117 | 10.927 | 10.925 | (0.962) | 218112 | 125.000 | 120 |
| 47 Benzene | 78 | 11.124 | 11.122 | (0.979) | 695289 | 125.000 | 130 |
| 48 1,2-Dichloroethane | 62 | 11.154 | 11.152 | (0.982) | 167235 | 125.000 | 120 |
| 49 Trichloroethene | 130 | 11.685 | 11.683 | (1.029) | 166281 | 125.000 | 120 |
| 50 Methylcyclohexane | 83 | 11.833 | 11.831 | (1.042) | 319375 | 125.000 | 130 |
| 51 1,2-Dichloropropane | 63 | 11.882 | 11.880 | (1.046) | 178011 | 125.000 | 130 |
| 52 Methylmethacrylate | 69 | 11.872 | 11.870 | (1.045) | 616536 | 1250.00 | 1300 |
| 53 1,4-dioxane | 88 | 11.941 | 11.939 | (1.051) | 28613 | 6250.00 | 5800 |
| 54 Dibromomethane | 174 | 12.000 | 11.998 | (1.056) | 69915 | 125.000 | 120 |
| 55 Bromodichloromethane | 83 | 12.079 | 12.087 | (1.063) | 216733 | 125.000 | 120 |
| 56 2-chloroethyl vinyl ether | 63 | 12.256 | 12.254 | (1.079) | 105800 | 250.000 | 250 |
| 57 cis-1,3-Dichloropropene | 75 | 12.413 | 12.411 | (1.093) | 246523 | 125.000 | 130 |
| 58 4-Methyl-2-pentanone | 43 | 12.472 | 12.470 | (0.914) | 583229 | 625.000 | 620 |
| 59 Toluene | 92 | 12.659 | 12.657 | (0.928) | 439960 | 125.000 | 120 |
| 60 Ethylmethacrylate | 69 | 12.768 | 12.776 | (0.936) | 1323013 | 1250.00 | 1300 |
| 61 trans-1,3-Dichloropropene | 75 | 12.807 | 12.805 | (0.939) | 205304 | 125.000 | 130 |
| 62 1,1,2-Trichloroethane | 97 | 12.945 | 12.943 | (0.949) | 99455 | 125.000 | 130 |
| 63 2-hexanone | 43 | 13.043 | 13.041 | (0.956) | 408351 | 625.000 | 620 |
| 64 1,3-Dichloropropane | 76 | 13.073 | 13.071 | (0.958) | 186380 | 125.000 | 120 |
| 65 Tetrachloroethene | 164 | 13.053 | 13.061 | (0.957) | 143834 | 125.000 | 120 |
| 66 Dibromochloromethane | 129 | 13.240 | 13.248 | (0.970) | 123220 | 125.000 | 120 |

Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL371.d
Report Date: 16-Sep-2010 12:37

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 67 1,2-Dibromoethane | 107 | 13.358 | 13.356 | (0.979) | 98731 | 125.000 | 120 |
| 68 1-Chlorohexane | 55 | 13.565 | 13.563 | (0.994) | 203669 | 125.000 | 130 |
| 69 Chlorobenzene | 112 | 13.673 | 13.671 | (1.002) | 419626 | 125.000 | 120 |
| 70 Ethylbenzene | 106 | 13.683 | 13.691 | (1.003) | 230635 | 125.000 | 120 |
| 71 1,1,1,2-Tetrachloroethane | 131 | 13.702 | 13.710 | (1.004) | 140938 | 125.000 | 120 |
| 72 m,p-Xylene | 106 | 13.761 | 13.760 | (1.009) | 573903 | 250.000 | 250 |
| 73 m,p-Xylene (part of total) | 106 | 13.761 | 13.760 | (1.009) | 573903 | 250.000 | 250 |
| 74 o-Xylene | 106 | 14.047 | 14.045 | (1.030) | 268713 | 125.000 | 120 |
| 75 o-Xylene (part of total) | 106 | 14.047 | 14.045 | (1.030) | 268713 | 125.000 | 120 |
| 76 Styrene | 104 | 14.057 | 14.055 | (1.030) | 453203 | 125.000 | 130 |
| 77 Bromoform | 173 | 14.254 | 14.252 | (1.045) | 76677 | 125.000 | 120 |
| 78 Isopropyl Benzene | 105 | 14.273 | 14.271 | (1.046) | 760627 | 125.000 | 130 |
| 79 1,1,2,2-Tetrachloroethane | 83 | 14.490 | 14.488 | (0.947) | 128600 | 125.000 | 130 |
| 81 1,2,3-Trichloropropane | 110 | 14.559 | 14.557 | (1.067) | 28897 | 125.000 | 120 |
| 80 trans-1,4-dichloro-2-butene | 53 | 14.519 | 14.517 | (1.064) | 145162 | 500.000 | 500 |
| 82 n-Propyl Benzene | 91 | 14.549 | 14.557 | (0.951) | 1079103 | 125.000 | 130 |
| 83 Bromobenzene | 156 | 14.588 | 14.586 | (1.069) | 166653 | 125.000 | 120 |
| 84 1,3,5-Trimethyl Benzene | 105 | 14.647 | 14.655 | (0.958) | 595972 | 125.000 | 120 |
| 85 2-Chlorotoluene | 126 | 14.687 | 14.685 | (0.960) | 164505 | 125.000 | 120 |
| 86 4-Chlorotoluene | 126 | 14.755 | 14.754 | (0.965) | 163513 | 125.000 | 120 |
| 87 tert-Butyl Benzene | 119 | 14.903 | 14.911 | (0.974) | 549200 | 125.000 | 120 |
| 88 1,2,4-Trimethyl Benzene | 105 | 14.942 | 14.941 | (0.977) | 586579 | 125.000 | 120 |
| 89 Pentachloroethane | 167 | 15.002 | 15.000 | (0.981) | 91103 | 125.000 | 120 |
| 90 sec-Butyl Benzene | 105 | 15.061 | 15.069 | (0.985) | 869194 | 125.000 | 130 |
| 91 p-Isopropyl Toluene | 119 | 15.139 | 15.137 | (0.990) | 619831 | 125.000 | 120 |
| 92 1,3-Dichlorobenzene | 146 | 15.248 | 15.246 | (0.997) | 319006 | 125.000 | 120 |
| 93 1,4-Dichlorobenzene | 146 | 15.316 | 15.315 | (1.001) | 326249 | 125.000 | 130 |
| 94 n-Butyl Benzene | 91 | 15.464 | 15.462 | (1.011) | 750814 | 125.000 | 130 |
| 95 1,2-Dichlorobenzene | 146 | 15.631 | 15.630 | (1.022) | 268904 | 125.000 | 120 |
| 96 1,2-Dibromo-3-Chloropropane | 75 | 16.291 | 16.289 | (1.065) | 16816 | 125.000 | 120 |
| 97 1,2,4-Trichlorobenzene | 180 | 17.137 | 17.135 | (1.120) | 205575 | 125.000 | 120 |
| 98 Hexachlorobutadiene | 225 | 17.216 | 17.214 | (1.125) | 125218 | 125.000 | 120 |
| 99 Naphthalene | 128 | 17.462 | 17.460 | (1.142) | 258666 | 125.000 | 120 |
| 100 1,2,3-Trichlorobenzene | 180 | 17.757 | 17.755 | (1.161) | 163062 | 125.000 | 120 |
| M 101 1,2-Dichloroethene (total) | 96 | | | | 382117 | 250.000 | 260 |
| M 102 Xylene (total) | 106 | | | | 842616 | 125.000 | 390 |

Data File: /chem/5972hp71.i/DF100915A71.b/OI15002-CAL471.d
Date : 15-SEP-2010 11:51
Client ID: VSTD010
Sample Info: OI15002-CAL4:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL471.d
Report Date: 16-Sep-2010 12:37

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100915A71.b/0I15002-CAL471.d
Lab Smp Id: OI15002-CAL4 Client Smp ID: VSTD010
Inj Date : 15-SEP-2010 11:51
Operator : JAO Inst ID: 5972hp71.i
Smp Info : OI15002-CAL4:JAO
Misc Info : VSTD010
Comment :
Method : /chem/5972hp71.i/DF100915A71.b/W8260-B-25MLv14.m
Meth Date : 16-Sep-2010 12:37 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 11:51 Cal File: 0I15002-CAL471.d
Als bottle: 12 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.364 | 11.358 | (1.000) | 674405 | 125.000 | |
| 2 Chlorobenzene-d5 | 117 | 13.648 | 13.642 | (1.000) | 422342 | 125.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 15.291 | 15.295 | (1.000) | 217011 | 125.000 | |
| 4 Dibromofluoromethane | 113 | 10.735 | 10.729 | (0.945) | 331496 | 250.000 | 230 |
| 5 1,2-Dichloroethane-d4 | 65 | 11.089 | 11.083 | (0.976) | 266265 | 250.000 | 230 |
| 6 Toluene-d8 | 98 | 12.604 | 12.608 | (0.924) | 1183019 | 250.000 | 240 |
| 7 Bromofluorobenzene | 95 | 14.435 | 14.439 | (0.944) | 423379 | 250.000 | 230 |
| 8 Dichlorodifluoromethane | 85 | 4.170 | 4.174 | (0.367) | 616952 | 250.000 | 260 |
| 9 Chloromethane | 50 | 4.692 | 4.696 | (0.413) | 659861 | 250.000 | 270 |
| 10 Vinyl Chloride | 62 | 4.997 | 4.991 | (0.440) | 264137 | 250.000 | 250 |
| 11 Bromomethane | 94 | 5.922 | 5.906 | (0.521) | 137228 | 250.000 | 250 |
| 12 Chloroethane | 64 | 6.168 | 6.162 | (0.543) | 96971 | 250.000 | 250 |
| 13 Trichlorofluoromethane | 101 | 6.719 | 6.723 | (0.591) | 553757 | 250.000 | 240 |
| 14 Acrolein | 56 | 7.625 | 7.619 | (0.671) | 197152 | 2500.00 | 2300 |
| 15 1,1,1-trichloro-2,2,2-trifluo | 117 | 7.684 | 7.678 | (0.676) | 173957 | 250.000 | 240 |
| 16 1,1,2-trichloro-1,2,2-trifluo | 85 | 7.723 | 7.727 | (0.680) | 215095 | 250.000 | 240 |

9-16-10

Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL471.d
Report Date: 16-Sep-2010 12:37

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 17 1,1-Dichloroethene | 96 | 7.772 | 7.776 | (0.684) | 328512 | 250.000 | 250 |
| 18 Acetone | 43 | 7.871 | 7.875 | (0.693) | 221487 | 1250.00 | 1100 |
| 19 Iodomethane | 142 | 8.068 | 8.071 | (0.710) | 358388 | 250.000 | 270 |
| 20 Carbon disulfide | 76 | 8.186 | 8.180 | (0.720) | 1399142 | 250.000 | 240 |
| 22 3-Chloropropene | 39 | 8.392 | 8.386 | (0.738) | 530459 | 250.000 | 250 |
| 23 Acetonitrile | 41 | 8.392 | 8.386 | (0.738) | 859969 | 250.000 | 250 |
| 24 Methyl acetate | 43 | 8.383 | 8.386 | (0.738) | 168345 | 250.000 | 240 |
| 25 Methylene Chloride | 84 | 8.619 | 8.613 | (0.758) | 360116 | 250.000 | 260 |
| 26 Acrylonitrile | 53 | 8.983 | 8.987 | (0.790) | 580268 | 2500.00 | 2400 |
| 28 trans-1,2-Dichloroethene | 96 | 8.983 | 8.987 | (0.790) | 372881 | 250.000 | 250 |
| 27 Methyl-tert-butyl ether | 73 | 8.934 | 8.937 | (0.786) | 541533 | 250.000 | 230 |
| 30 Isopropyl ether | 45 | 9.544 | 9.548 | (0.840) | 1614700 | 250.000 | 250 |
| 31 Vinyl acetate | 43 | 9.554 | 9.557 | (0.841) | 1719973 | 500.000 | 480 |
| 32 1,1-Dichloroethane | 63 | 9.573 | 9.567 | (0.842) | 705911 | 250.000 | 250 |
| 33 Chloroprene | 53 | 9.662 | 9.656 | (0.850) | 604952 | 250.000 | 250 |
| 34 2-butanone | 43 | 10.213 | 10.207 | (0.899) | 431873 | 1250.00 | 1100 |
| 35 2,2-Dichloropropane | 77 | 10.243 | 10.236 | (0.901) | 538491 | 250.000 | 240 |
| 36 cis-1,2-Dichloroethene | 96 | 10.252 | 10.256 | (0.902) | 385156 | 250.000 | 250 |
| 37 Propionitrile | 54 | 10.321 | 10.325 | (0.908) | 982056 | 12500.0 | 11000 |
| 38 Methacrylonitrile | 41 | 10.479 | 10.473 | (0.922) | 1390812 | 2500.00 | 2300 |
| 39 Bromochloromethane | 128 | 10.518 | 10.512 | (0.926) | 125040 | 250.000 | 240 |
| 40 Chloroform | 83 | 10.567 | 10.561 | (0.930) | 651577 | 250.000 | 250 |
| 42 1,1,1-Trichloroethane | 97 | 10.774 | 10.768 | (0.948) | 534368 | 250.000 | 240 |
| 43 Cyclohexane | 84 | 10.813 | 10.807 | (0.951) | 543263 | 250.000 | 250 |
| 44 1,1-dichloropropene | 75 | 10.922 | 10.925 | (0.961) | 560367 | 250.000 | 250 |
| 45 Isobutyl alcohol | 43 | 10.931 | 10.925 | (0.962) | 346356 | 12500.0 | 11000 |
| 46 Carbon Tetrachloride | 117 | 10.922 | 10.925 | (0.961) | 452521 | 250.000 | 240 |
| 47 Benzene | 78 | 11.118 | 11.122 | (0.978) | 1416169 | 250.000 | 250 |
| 48 1,2-Dichloroethane | 62 | 11.158 | 11.152 | (0.982) | 331006 | 250.000 | 230 |
| 49 Trichloroethene | 130 | 11.679 | 11.683 | (1.028) | 336535 | 250.000 | 250 |
| 50 Methylcyclohexane | 83 | 11.837 | 11.831 | (1.042) | 640416 | 250.000 | 250 |
| 51 1,2-Dichloropropane | 63 | 11.886 | 11.880 | (1.046) | 356522 | 250.000 | 250 |
| 52 Methylmethacrylate | 69 | 11.876 | 11.870 | (1.045) | 1195222 | 2500.00 | 2400 |
| 53 1,4-dioxane | 88 | 11.945 | 11.939 | (1.051) | 56444 | 12500.0 | 11000 |
| 54 Dibromomethane | 174 | 11.994 | 11.998 | (1.055) | 135727 | 250.000 | 230 |
| 55 Bromodichloromethane | 83 | 12.083 | 12.087 | (1.063) | 436245 | 250.000 | 240 |
| 56 2-chloroethyl vinyl ether | 63 | 12.250 | 12.254 | (1.078) | 210285 | 500.000 | 480 |
| 57 cis-1,3-Dichloropropene | 75 | 12.418 | 12.411 | (1.093) | 485354 | 250.000 | 240 |
| 58 4-Methyl-2-pentanone | 43 | 12.467 | 12.470 | (0.913) | 1096143 | 1250.00 | 1100 |
| 59 Toluene | 92 | 12.654 | 12.657 | (0.927) | 884567 | 250.000 | 240 |
| 60 Ethylmethacrylate | 69 | 12.772 | 12.776 | (0.936) | 2581603 | 2500.00 | 2500 |
| 61 trans-1,3-Dichloropropene | 75 | 12.801 | 12.805 | (0.938) | 400968 | 250.000 | 240 |
| 62 1,1,2-Trichloroethane | 97 | 12.949 | 12.943 | (0.949) | 192937 | 250.000 | 240 |
| 63 2-hexanone | 43 | 13.047 | 13.041 | (0.956) | 774408 | 1250.00 | 1100 |
| 64 1,3-Dichloropropane | 76 | 13.077 | 13.071 | (0.958) | 365494 | 250.000 | 240 |
| 65 Tetrachloroethene | 164 | 13.057 | 13.061 | (0.957) | 292203 | 250.000 | 240 |
| 66 Dibromochloromethane | 129 | 13.244 | 13.248 | (0.970) | 249272 | 250.000 | 240 |

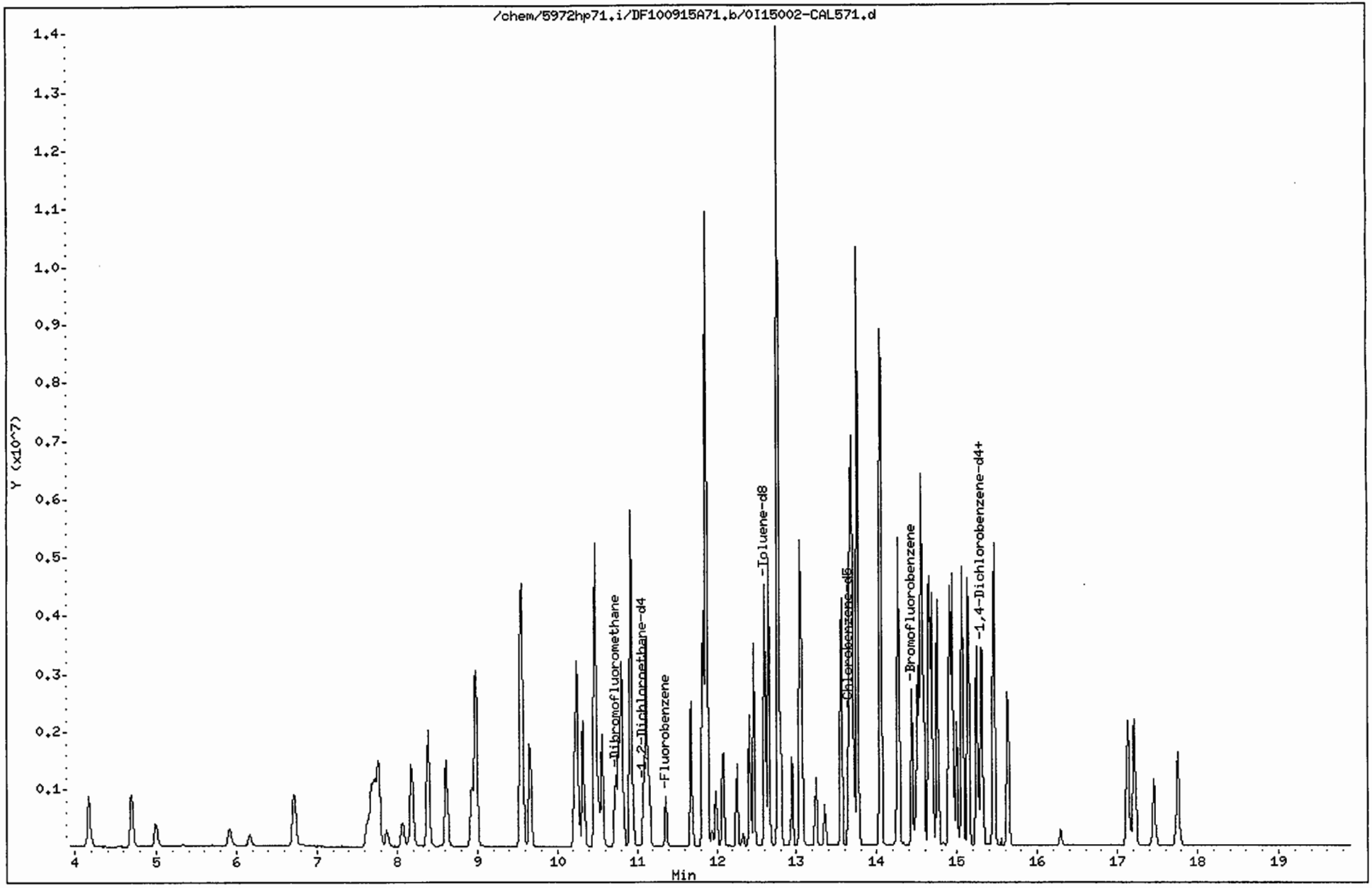
Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL471.d
Report Date: 16-Sep-2010 12:37

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 67 1,2-Dibromoethane | 107 | 13.352 | 13.356 | (0.978) | 193681 | 250.000 | 230 |
| 68 1-Chlorohexane | 55 | 13.559 | 13.563 | (0.993) | 419424 | 250.000 | 250 |
| 69 Chlorobenzene | 112 | 13.667 | 13.671 | (1.001) | 847260 | 250.000 | 240 |
| 70 Ethylbenzene | 106 | 13.687 | 13.691 | (1.003) | 472959 | 250.000 | 250 |
| 71 1,1,1,2-Tetrachloroethane | 131 | 13.707 | 13.710 | (1.004) | 283893 | 250.000 | 240 |
| 72 m,p-Xylene | 106 | 13.756 | 13.760 | (1.008) | 1192286 | 500.000 | 500 |
| 73 m,p-Xylene (part of total) | 106 | 13.756 | 13.760 | (1.008) | 1192286 | 500.000 | 500 |
| 74 o-Xylene | 106 | 14.051 | 14.045 | (1.030) | 557463 | 250.000 | 250 |
| 75 o-Xylene (part of total) | 106 | 14.051 | 14.045 | (1.030) | 557463 | 250.000 | 250 |
| 76 Styrene | 104 | 14.051 | 14.055 | (1.030) | 939103 | 250.000 | 250 |
| 77 Bromoform | 173 | 14.248 | 14.252 | (1.044) | 151664 | 250.000 | 240 |
| 78 Isopropyl Benzene | 105 | 14.268 | 14.271 | (1.045) | 1562769 | 250.000 | 250 |
| 79 1,1,2,2-Tetrachloroethane | 83 | 14.494 | 14.488 | (0.948) | 246289 | 250.000 | 240 |
| 81 1,2,3-Trichloropropane | 110 | 14.553 | 14.557 | (1.066) | 53481 | 250.000 | 220 |
| 80 trans-1,4-dichloro-2-butene | 53 | 14.514 | 14.517 | (1.063) | 279509 | 1000.00 | 940 |
| 82 n-Propyl Benzene | 91 | 14.553 | 14.557 | (0.952) | 2205613 | 250.000 | 250 |
| 83 Bromobenzene | 156 | 14.583 | 14.586 | (1.069) | 335560 | 250.000 | 240 |
| 84 1,3,5-Trimethyl Benzene | 105 | 14.652 | 14.655 | (0.958) | 1223564 | 250.000 | 250 |
| 85 2-Chlorotoluene | 126 | 14.681 | 14.685 | (0.960) | 335499 | 250.000 | 250 |
| 86 4-Chlorotoluene | 126 | 14.760 | 14.754 | (0.965) | 335909 | 250.000 | 250 |
| 87 tert-Butyl Benzene | 119 | 14.907 | 14.911 | (0.975) | 1136874 | 250.000 | 250 |
| 88 1,2,4-Trimethyl Benzene | 105 | 14.947 | 14.941 | (0.977) | 1214638 | 250.000 | 250 |
| 89 Pentachloroethane | 167 | 14.996 | 15.000 | (0.981) | 187785 | 250.000 | 240 |
| 90 sec-Butyl Benzene | 105 | 15.065 | 15.069 | (0.985) | 1786324 | 250.000 | 250 |
| 91 p-Isopropyl Toluene | 119 | 15.144 | 15.137 | (0.990) | 1298999 | 250.000 | 250 |
| 92 1,3-Dichlorobenzene | 146 | 15.252 | 15.246 | (0.997) | 653028 | 250.000 | 240 |
| 93 1,4-Dichlorobenzene | 146 | 15.311 | 15.315 | (1.001) | 652580 | 250.000 | 240 |
| 94 n-Butyl Benzene | 91 | 15.459 | 15.462 | (1.011) | 1543820 | 250.000 | 250 |
| 95 1,2-Dichlorobenzene | 146 | 15.636 | 15.630 | (1.023) | 534204 | 250.000 | 240 |
| 96 1,2-Dibromo-3-Chloropropane | 75 | 16.295 | 16.289 | (1.066) | 31208 | 250.000 | 220 |
| 97 1,2,4-Trichlorobenzene | 180 | 17.132 | 17.135 | (1.120) | 405412 | 250.000 | 240 |
| 98 Hexachlorobutadiene | 225 | 17.210 | 17.214 | (1.125) | 264623 | 250.000 | 250 |
| 99 Naphthalene | 128 | 17.456 | 17.460 | (1.142) | 503981 | 250.000 | 230 |
| 100 1,2,3-Trichlorobenzene | 180 | 17.761 | 17.755 | (1.162) | 323133 | 250.000 | 230 |
| M 101 1,2-Dichloroethene (total) | 96 | | | | 758037 | 500.000 | 500 |
| M 102 Xylene (total) | 106 | | | | 1749749 | 250.000 | 780 |

Data File: /chem/5972hp71.i/DF100915A71.b/OI15002-CAL571.d
Date : 15-SEP-2010 12:19
Client ID: VSTD020
Sample Info: OI15002-CAL5:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i

Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL571.d
Report Date: 16-Sep-2010 12:37

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100915A71.b/0I15002-CAL571.d
Lab Smp Id: OI15002-CAL5 Client Smp ID: VSTD020
Inj Date : 15-SEP-2010 12:19
Operator : JAO Inst ID: 5972hp71.i
Smp Info : OI15002-CAL5:JAO
Misc Info : VSTD020
Comment :
Method : /chem/5972hp71.i/DF100915A71.b/W8260-B-25MLv14.m
Meth Date : 16-Sep-2010 12:37 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:19 Cal File: 0I15002-CAL571.d
Als bottle: 13 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.359 | 11.358 | (1.000) | 713686 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.652 | 13.642 | (1.000) | 455903 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.295 | 15.295 | (1.000) | 242829 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.729 | 10.729 | (0.945) | 706028 | 500.000 | 460 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.083 | 11.083 | (0.976) | 583114 | 500.000 | 470 |
| $ 6 Toluene-d8 | 98 | 12.609 | 12.608 | (0.924) | 2513077 | 500.000 | 460 |
| $ 7 Bromofluorobenzene | 95 | 14.439 | 14.439 | (0.944) | 924197 | 500.000 | 460 |
| 8 Dichlorodifluoromethane | 85 | 4.175 | 4.174 | (0.368) | 1251653 | 500.000 | 490 |
| 9 Chloromethane | 50 | 4.696 | 4.696 | (0.413) | 1316947 | 500.000 | 510 |
| 10 Vinyl Chloride | 62 | 4.991 | 4.991 | (0.439) | 566116 | 500.000 | 510 |
| 11 Bromomethane | 94 | 5.917 | 5.906 | (0.521) | 304201 | 500.000 | 510 |
| 12 Chloroethane | 64 | 6.172 | 6.162 | (0.543) | 192887 | 500.000 | 470 |
| 13 Trichlorofluoromethane | 101 | 6.714 | 6.723 | (0.591) | 1145044 | 500.000 | 470 |
| 14 Acrolein | 56 | 7.619 | 7.619 | (0.671) | 451435 | 5000.00 | 5100 |
| 15 1,1,1-trichloro-2,2,2-trifluo | 117 | 7.678 | 7.678 | (0.676) | 357440 | 500.000 | 460 |
| 16 1,1,2-trichloro-1,2,2-trifluo | 85 | 7.727 | 7.727 | (0.680) | 434786 | 500.000 | 450 |

9-16-10

Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL571.d
Report Date: 16-Sep-2010 12:37

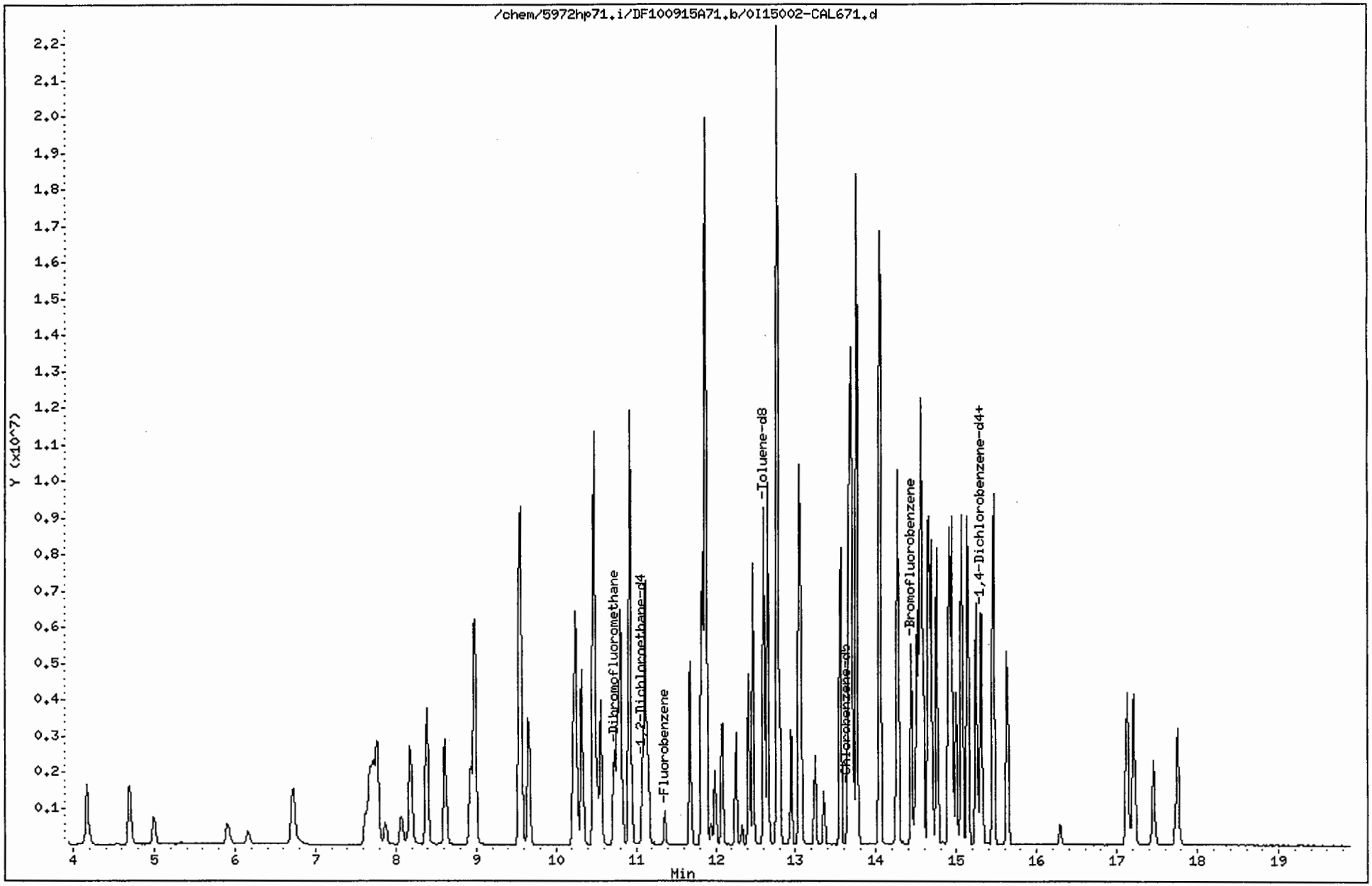
| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 17 1,1-Dichloroethene | 96 | 7.777 | 7.776 | (0.685) | 672475 | 500.000 | 480 |
| 18 Acetone | 43 | 7.875 | 7.875 | (0.693) | 516720 | 2500.00 | 2300 |
| 19 Iodomethane | 142 | 8.072 | 8.071 | (0.711) | 715271 | 500.000 | 500 |
| 20 Carbon disulfide | 76 | 8.180 | 8.180 | (0.720) | 2854605 | 500.000 | 470 |
| 22 3-Chloropropene | 39 | 8.387 | 8.386 | (0.738) | 1067851 | 500.000 | 480 |
| 23 Acetonitrile | 41 | 8.387 | 8.386 | (0.738) | 1736300 | 500.000 | 490 |
| 24 Methyl acetate | 43 | 8.387 | 8.386 | (0.738) | 373831 | 500.000 | 500 |
| 25 Methylene Chloride | 84 | 8.613 | 8.613 | (0.758) | 733363 | 500.000 | 520 |
| 26 Acrylonitrile | 53 | 8.987 | 8.987 | (0.791) | 1291608 | 5000.00 | 5000 |
| 28 trans-1,2-Dichloroethene | 96 | 8.987 | 8.987 | (0.791) | 762715 | 500.000 | 480 |
| 27 Methyl-tert-butyl ether | 73 | 8.938 | 8.937 | (0.787) | 1202074 | 500.000 | 490 |
| 30 Isopropyl ether | 45 | 9.548 | 9.548 | (0.841) | 3411908 | 500.000 | 490 |
| 31 Vinyl acetate | 43 | 9.558 | 9.557 | (0.841) | 3744544 | 1000.00 | 1000 |
| 32 1,1-Dichloroethane | 63 | 9.568 | 9.567 | (0.842) | 1435424 | 500.000 | 480 |
| 33 Chloroprene | 53 | 9.656 | 9.656 | (0.850) | 1249498 | 500.000 | 500 |
| 34 2-butanone | 43 | 10.217 | 10.207 | (0.899) | 1012833 | 2500.00 | 2400 |
| 35 2,2-Dichloropropane | 77 | 10.237 | 10.236 | (0.901) | 1110132 | 500.000 | 470 |
| 36 cis-1,2-Dichloroethene | 96 | 10.257 | 10.256 | (0.903) | 796314 | 500.000 | 480 |
| 37 Propionitrile | 54 | 10.326 | 10.325 | (0.909) | 2292814 | 25000.0 | 25000 |
| 38 Methacrylonitrile | 41 | 10.473 | 10.473 | (0.922) | 3176401 | 5000.00 | 5000 |
| 39 Bromochloromethane | 128 | 10.512 | 10.512 | (0.925) | 256770 | 500.000 | 470 |
| 40 Chloroform | 83 | 10.562 | 10.561 | (0.930) | 1365125 | 500.000 | 490 |
| 42 1,1,1-Trichloroethane | 97 | 10.768 | 10.768 | (0.948) | 1132706 | 500.000 | 490 |
| 43 Cyclohexane | 84 | 10.808 | 10.807 | (0.951) | 1122223 | 500.000 | 480 |
| 44 1,1-dichloropropene | 75 | 10.926 | 10.925 | (0.962) | 1166904 | 500.000 | 500 |
| 45 Isobutyl alcohol | 43 | 10.926 | 10.925 | (0.962) | 877245 | 25000.0 | 27000 |
| 46 Carbon Tetrachloride | 117 | 10.926 | 10.925 | (0.962) | 964621 | 500.000 | 490 |
| 47 Benzene | 78 | 11.123 | 11.122 | (0.979) | 2974241 | 500.000 | 490 |
| 48 1,2-Dichloroethane | 62 | 11.152 | 11.152 | (0.982) | 733461 | 500.000 | 490 |
| 49 Trichloroethene | 130 | 11.684 | 11.683 | (1.029) | 697743 | 500.000 | 480 |
| 50 Methylcyclohexane | 83 | 11.831 | 11.831 | (1.042) | 1331792 | 500.000 | 480 |
| 51 1,2-Dichloropropane | 63 | 11.880 | 11.880 | (1.046) | 756323 | 500.000 | 490 |
| 52 Methylmethacrylate | 69 | 11.871 | 11.870 | (1.045) | 2730458 | 5000.00 | 5200 |
| 53 1,4-dioxane | 88 | 11.940 | 11.939 | (1.051) | 135164 | 25000.0 | 25000 |
| 54 Dibromomethane | 174 | 11.999 | 11.998 | (1.056) | 309244 | 500.000 | 490 |
| 55 Bromodichloromethane | 83 | 12.087 | 12.087 | (1.064) | 941613 | 500.000 | 500 |
| 56 2-chloroethyl vinyl ether | 63 | 12.254 | 12.254 | (1.079) | 482339 | 1000.00 | 1000 |
| 57 cis-1,3-Dichloropropene | 75 | 12.412 | 12.411 | (1.093) | 1063801 | 500.000 | 500 |
| 58 4-Methyl-2-pentanone | 43 | 12.471 | 12.470 | (0.913) | 2652782 | 2500.00 | 2500 |
| 59 Toluene | 92 | 12.658 | 12.657 | (0.927) | 1863125 | 500.000 | 460 |
| 60 Ethylmethacrylate | 69 | 12.776 | 12.776 | (0.936) | 6059283 | 5000.00 | 5400 |
| 61 trans-1,3-Dichloropropene | 75 | 12.806 | 12.805 | (0.938) | 906152 | 500.000 | 500 |
| 62 1,1,2-Trichloroethane | 97 | 12.943 | 12.943 | (0.948) | 431810 | 500.000 | 490 |
| 63 2-hexanone | 43 | 13.042 | 13.041 | (0.955) | 1909291 | 2500.00 | 2600 |
| 64 1,3-Dichloropropane | 76 | 13.071 | 13.071 | (0.957) | 819852 | 500.000 | 490 |
| 65 Tetrachloroethene | 164 | 13.061 | 13.061 | (0.957) | 628411 | 500.000 | 490 |
| 66 Dibromochloromethane | 129 | 13.248 | 13.248 | (0.970) | 563288 | 500.000 | 500 |

Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL571.d
Report Date: 16-Sep-2010 12:37

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 67 1,2-Dibromoethane | 107 | 13.357 | 13.356 | (0.978) | 441092 | 500.000 | 490 |
| 68 1-Chlorohexane | 55 | 13.563 | 13.563 | (0.993) | 873936 | 500.000 | 490 |
| 69 Chlorobenzene | 112 | 13.672 | 13.671 | (1.001) | 1851019 | 500.000 | 490 |
| 70 Ethylbenzene | 106 | 13.691 | 13.691 | (1.003) | 1030563 | 500.000 | 500 |
| 71 1,1,1,2-Tetrachloroethane | 131 | 13.711 | 13.710 | (1.004) | 636179 | 500.000 | 500 |
| 72 m,p-Xylene | 106 | 13.760 | 13.760 | (1.008) | 2574052 | 1000.00 | 1000 |
| 73 m,p-Xylene (part of total) | 106 | 13.760 | 13.760 | (1.008) | 2574052 | 1000.00 | 1000 |
| 74 o-Xylene | 106 | 14.046 | 14.045 | (1.029) | 1204624 | 500.000 | 500 |
| 75 o-Xylene (part of total) | 106 | 14.046 | 14.045 | (1.029) | 1204624 | 500.000 | 500 |
| 76 Styrene | 104 | 14.055 | 14.055 | (1.030) | 2078847 | 500.000 | 520 |
| 77 Bromoform | 173 | 14.252 | 14.252 | (1.044) | 358297 | 500.000 | 520 |
| 78 Isopropyl Benzene | 105 | 14.272 | 14.271 | (1.045) | 3371798 | 500.000 | 500 |
| 79 1,1,2,2-Tetrachloroethane | 83 | 14.488 | 14.488 | (0.947) | 565355 | 500.000 | 480 |
| 81 1,2,3-Trichloropropane | 110 | 14.557 | 14.557 | (1.066) | 128645 | 500.000 | 490 |
| 80 trans-1,4-dichloro-2-butene | 53 | 14.518 | 14.517 | (1.063) | 663149 | 2000.00 | 2100 |
| 82 n-Propyl Benzene | 91 | 14.557 | 14.557 | (0.952) | 4745855 | 500.000 | 480 |
| 83 Bromobenzene | 156 | 14.587 | 14.586 | (1.068) | 750603 | 500.000 | 500 |
| 84 1,3,5-Trimethyl Benzene | 105 | 14.656 | 14.655 | (0.958) | 2658387 | 500.000 | 480 |
| 85 2-Chlorotoluene | 126 | 14.685 | 14.685 | (0.960) | 732999 | 500.000 | 480 |
| 86 4-Chlorotoluene | 126 | 14.754 | 14.754 | (0.965) | 732146 | 500.000 | 480 |
| 87 tert-Butyl Benzene | 119 | 14.912 | 14.911 | (0.975) | 2430664 | 500.000 | 480 |
| 88 1,2,4-Trimethyl Benzene | 105 | 14.941 | 14.941 | (0.977) | 2639746 | 500.000 | 480 |
| 89 Pentachloroethane | 167 | 15.000 | 15.000 | (0.981) | 417934 | 500.000 | 490 |
| 90 sec-Butyl Benzene | 105 | 15.069 | 15.069 | (0.985) | 3823998 | 500.000 | 480 |
| 91 p-Isopropyl Toluene | 119 | 15.138 | 15.137 | (0.990) | 2798407 | 500.000 | 490 |
| 92 1,3-Dichlorobenzene | 146 | 15.246 | 15.246 | (0.997) | 1459064 | 500.000 | 490 |
| 93 1,4-Dichlorobenzene | 146 | 15.315 | 15.315 | (1.001) | 1419480 | 500.000 | 470 |
| 94 n-Butyl Benzene | 91 | 15.463 | 15.462 | (1.011) | 3281531 | 500.000 | 480 |
| 95 1,2-Dichlorobenzene | 146 | 15.630 | 15.630 | (1.022) | 1193466 | 500.000 | 480 |
| 96 1,2-Dibromo-3-Chloropropane | 75 | 16.289 | 16.289 | (1.065) | 75584 | 500.000 | 470 |
| 97 1,2,4-Trichlorobenzene | 180 | 17.136 | 17.135 | (1.120) | 941140 | 500.000 | 490 |
| 98 Hexachlorobutadiene | 225 | 17.214 | 17.214 | (1.125) | 590296 | 500.000 | 490 |
| 99 Naphthalene | 128 | 17.461 | 17.460 | (1.142) | 1192801 | 500.000 | 490 |
| 100 1,2,3-Trichlorobenzene | 180 | 17.756 | 17.755 | (1.161) | 750610 | 500.000 | 490 |
| M 101 1,2-Dichloroethene (total) | 96 | | | | 1559029 | 1000.00 | 960 |
| M 102 Xylene (total) | 106 | | | | 3778676 | 500.000 | 1600 |

Data File: /chem/5972hp71.i/DF100915A71.b/OI15002-CAL671.d
Date : 15-SEP-2010 12:46
Client ID: VSTD040
Sample Info: OI15002-CAL6:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL671.d
Report Date: 16-Sep-2010 12:37

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100915A71.b/0I15002-CAL671.d
Lab Smp Id: OI15002-CAL6 Client Smp ID: VSTD040
Inj Date : 15-SEP-2010 12:46
Operator : JAO Inst ID: 5972hp71.i
Smp Info : OI15002-CAL6:JAO
Misc Info : VSTD040
Comment :
Method : /chem/5972hp71.i/DF100915A71.b/W8260-B-25MLv14.m
Meth Date : 16-Sep-2010 12:37 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 14 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.358 | 11.358 | (1.000) | 762200 | 125.000 | |
| 2 Chlorobenzene-d5 | 117 | 13.642 | 13.642 | (1.000) | 483121 | 125.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 15.295 | 15.295 | (1.000) | 249585 | 125.000 | |
| 4 Dibromofluoromethane | 113 | 10.729 | 10.729 | (0.945) | 1510124 | 1000.00 | 910 |
| 5 1,2-Dichloroethane-d4 | 65 | 11.083 | 11.083 | (0.976) | 1267634 | 1000.00 | 950 |
| 6 Toluene-d8 | 98 | 12.608 | 12.608 | (0.924) | 5274515 | 1000.00 | 920 |
| 7 Bromofluorobenzene | 95 | 14.439 | 14.439 | (0.944) | 1907044 | 1000.00 | 920 |
| 8 Dichlorodifluoromethane | 85 | 4.174 | 4.174 | (0.367) | 2412706 | 1000.00 | 880 |
| 9 Chloromethane | 50 | 4.696 | 4.696 | (0.413) | 2560163 | 1000.00 | 920 |
| 10 Vinyl Chloride | 62 | 4.991 | 4.991 | (0.439) | 1099471 | 1000.00 | 920 |
| 11 Bromomethane | 94 | 5.906 | 5.906 | (0.520) | 631964 | 1000.00 | 990 |
| 12 Chloroethane | 64 | 6.162 | 6.162 | (0.543) | 375113 | 1000.00 | 850 |
| 13 Trichlorofluoromethane | 101 | 6.723 | 6.723 | (0.592) | 2296948 | 1000.00 | 890 |
| 14 Acrolein | 56 | 7.619 | 7.619 | (0.671) | 968418 | 10000.0 | 10000(A) |
| 15 1,1,1-trichloro-2,2,2-trifluo | 117 | 7.678 | 7.678 | (0.676) | 706392 | 1000.00 | 850 |
| 16 1,1,2-trichloro-1,2,2-trifluo | 85 | 7.727 | 7.727 | (0.680) | 857356 | 1000.00 | 840 |

MK 9.16.10

Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL671.d
Report Date: 16-Sep-2010 12:37

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 17 1,1-Dichloroethene | 96 | 7.776 | 7.776 | (0.685) | 1349222 | 1000.00 | 900 |
| 18 Acetone | 43 | 7.875 | 7.875 | (0.693) | 1104794 | 5000.00 | 4600 |
| 19 Iodomethane | 142 | 8.071 | 8.071 | (0.711) | 1332107 | 1000.00 | 870 |
| 20 Carbon disulfide | 76 | 8.180 | 8.180 | (0.720) | 5610175 | 1000.00 | 860 |
| 22 3-Chloropropene | 39 | 8.386 | 8.386 | (0.738) | 2047890 | 1000.00 | 860 |
| 23 Acetonitrile | 41 | 8.386 | 8.386 | (0.738) | 3283125 | 1000.00 | 860 |
| 24 Methyl acetate | 43 | 8.386 | 8.386 | (0.738) | 795598 | 1000.00 | 1000(A) |
| 25 Methylene Chloride | 84 | 8.613 | 8.613 | (0.758) | 1441468 | 1000.00 | 980 |
| 26 Acrylonitrile | 53 | 8.987 | 8.987 | (0.791) | 2758195 | 10000.0 | 10000(A) |
| 28 trans-1,2-Dichloroethene | 96 | 8.987 | 8.987 | (0.791) | 1508847 | 1000.00 | 890 |
| 27 Methyl-tert-butyl ether | 73 | 8.937 | 8.937 | (0.787) | 2551734 | 1000.00 | 980 |
| 30 Isopropyl ether | 45 | 9.548 | 9.548 | (0.841) | 6919208 | 1000.00 | 940 |
| 31 Vinyl acetate | 43 | 9.557 | 9.557 | (0.841) | 7845977 | 2000.00 | 2000 |
| 32 1,1-Dichloroethane | 63 | 9.567 | 9.567 | (0.842) | 2866920 | 1000.00 | 900 |
| 33 Chloroprene | 53 | 9.656 | 9.656 | (0.850) | 2501888 | 1000.00 | 930 |
| 34 2-butanone | 43 | 10.207 | 10.207 | (0.899) | 2229011 | 5000.00 | 5000(A) |
| 35 2,2-Dichloropropane | 77 | 10.236 | 10.236 | (0.901) | 2227040 | 1000.00 | 890 |
| 36 cis-1,2-Dichloroethene | 96 | 10.256 | 10.256 | (0.903) | 1596716 | 1000.00 | 900 |
| 37 Propionitrile | 54 | 10.325 | 10.325 | (0.909) | 5051103 | 50000.0 | 52000(A) |
| 38 Methacrylonitrile | 41 | 10.473 | 10.473 | (0.922) | 6924831 | 10000.0 | 10000(A) |
| 39 Bromochloromethane | 128 | 10.512 | 10.512 | (0.925) | 519553 | 1000.00 | 890 |
| 40 Chloroform | 83 | 10.561 | 10.561 | (0.930) | 2791468 | 1000.00 | 930 |
| 42 1,1,1-Trichloroethane | 97 | 10.768 | 10.768 | (0.948) | 2336799 | 1000.00 | 940 |
| 43 Cyclohexane | 84 | 10.807 | 10.807 | (0.951) | 2245735 | 1000.00 | 900 |
| 44 1,1-dichloropropene | 75 | 10.925 | 10.925 | (0.962) | 2359076 | 1000.00 | 940 |
| 45 Isobutyl alcohol | 43 | 10.925 | 10.925 | (0.962) | 1990965 | 50000.0 | 57000(A) |
| 46 Carbon Tetrachloride | 117 | 10.925 | 10.925 | (0.962) | 1987557 | 1000.00 | 950 |
| 47 Benzene | 78 | 11.122 | 11.122 | (0.979) | 5990473 | 1000.00 | 930 |
| 48 1,2-Dichloroethane | 62 | 11.152 | 11.152 | (0.982) | 1547760 | 1000.00 | 960 |
| 49 Trichloroethene | 130 | 11.683 | 11.683 | (1.029) | 1424868 | 1000.00 | 920 |
| 50 Methylcyclohexane | 83 | 11.831 | 11.831 | (1.042) | 2646033 | 1000.00 | 900 |
| 51 1,2-Dichloropropane | 63 | 11.880 | 11.880 | (1.046) | 1416968 | 1000.00 | 870 |
| 52 Methylmethacrylate | 69 | 11.870 | 11.870 | (1.045) | 5419170 | 10000.0 | 9700 |
| 53 1,4-dioxane | 88 | 11.939 | 11.939 | (1.051) | 301421 | 50000.0 | 53000(A) |
| 54 Dibromomethane | 174 | 11.998 | 11.998 | (1.056) | 664793 | 1000.00 | 1000 |
| 55 Bromodichloromethane | 83 | 12.087 | 12.087 | (1.064) | 1967107 | 1000.00 | 970 |
| 56 2-chloroethyl vinyl ether | 63 | 12.254 | 12.254 | (1.079) | 1041886 | 2000.00 | 2100(A) |
| 57 cis-1,3-Dichloropropene | 75 | 12.411 | 12.411 | (1.093) | 2198802 | 1000.00 | 970 |
| 58 4-Methyl-2-pentanone | 43 | 12.470 | 12.470 | (0.914) | 5912978 | 5000.00 | 5400(A) |
| 59 Toluene | 92 | 12.657 | 12.657 | (0.928) | 3743648 | 1000.00 | 880 |
| 60 Ethylmethacrylate | 69 | 12.776 | 12.776 | (0.937) | 10307338 | 10000.0 | 8600 |
| 61 trans-1,3-Dichloropropene | 75 | 12.805 | 12.805 | (0.939) | 1868653 | 1000.00 | 970 |
| 62 1,1,2-Trichloroethane | 97 | 12.943 | 12.943 | (0.949) | 901071 | 1000.00 | 970 |
| 63 2-hexanone | 43 | 13.041 | 13.041 | (0.956) | 4085473 | 5000.00 | 5200(A) |
| 64 1,3-Dichloropropane | 76 | 13.071 | 13.071 | (0.958) | 1697184 | 1000.00 | 960 |
| 65 Tetrachloroethene | 164 | 13.061 | 13.061 | (0.957) | 1244551 | 1000.00 | 910 |
| 66 Dibromochloromethane | 129 | 13.248 | 13.248 | (0.971) | 1176504 | 1000.00 | 990 |

Data File: /chem/5972hp71.i/DF100915A71.b/0I15002-CAL671.d
Report Date: 16-Sep-2010 12:37

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 67 1,2-Dibromoethane | 107 | 13.356 | 13.356 | (0.979) | 932666 | 1000.00 | 980 |
| 68 1-Chlorohexane | 55 | 13.563 | 13.563 | (0.994) | 1712933 | 1000.00 | 910 |
| 69 Chlorobenzene | 112 | 13.671 | 13.671 | (1.002) | 3706039 | 1000.00 | 930 |
| 70 Ethylbenzene | 106 | 13.691 | 13.691 | (1.004) | 2024888 | 1000.00 | 920 |
| 71 1,1,1,2-Tetrachloroethane | 131 | 13.710 | 13.710 | (1.005) | 1291790 | 1000.00 | 960 |
| 72 m,p-Xylene | 106 | 13.760 | 13.760 | (1.009) | 4955716 | 2000.00 | 1800 |
| 73 m,p-Xylene (part of total) | 106 | 13.760 | 13.760 | (1.009) | 4955716 | 2000.00 | 1800 |
| 74 o-Xylene | 106 | 14.045 | 14.045 | (1.030) | 2321631 | 1000.00 | 910 |
| 75 o-Xylene (part of total) | 106 | 14.045 | 14.045 | (1.030) | 2321631 | 1000.00 | 910 |
| 76 Styrene | 104 | 14.055 | 14.055 | (1.030) | 4025257 | 1000.00 | 940 |
| 77 Bromoform | 173 | 14.252 | 14.252 | (1.045) | 772674 | 1000.00 | 1100(A) |
| 78 Isopropyl Benzene | 105 | 14.271 | 14.271 | (1.046) | 6729788 | 1000.00 | 940 |
| 79 1,1,2,2-Tetrachloroethane | 83 | 14.488 | 14.488 | (0.947) | 1170944 | 1000.00 | 970 |
| 81 1,2,3-Trichloropropane | 110 | 14.557 | 14.557 | (1.067) | 267426 | 1000.00 | 970 |
| 80 trans-1,4-dichloro-2-butene | 53 | 14.517 | 14.517 | (1.064) | 1384397 | 4000.00 | 4100(A) |
| 82 n-Propyl Benzene | 91 | 14.557 | 14.557 | (0.952) | 9239972 | 1000.00 | 900 |
| 83 Bromobenzene | 156 | 14.586 | 14.586 | (1.069) | 1528873 | 1000.00 | 960 |
| 84 1,3,5-Trimethyl Benzene | 105 | 14.655 | 14.655 | (0.958) | 5263718 | 1000.00 | 930 |
| 85 2-Chlorotoluene | 126 | 14.685 | 14.685 | (0.960) | 1432685 | 1000.00 | 920 |
| 86 4-Chlorotoluene | 126 | 14.754 | 14.754 | (0.965) | 1441364 | 1000.00 | 920 |
| 87 tert-Butyl Benzene | 119 | 14.911 | 14.911 | (0.975) | 4800638 | 1000.00 | 920 |
| 88 1,2,4-Trimethyl Benzene | 105 | 14.941 | 14.941 | (0.977) | 5186644 | 1000.00 | 930 |
| 89 Pentachloroethane | 167 | 15.000 | 15.000 | (0.981) | 853819 | 1000.00 | 970 |
| 90 sec-Butyl Benzene | 105 | 15.069 | 15.069 | (0.985) | 7503503 | 1000.00 | 920 |
| 91 p-Isopropyl Toluene | 119 | 15.137 | 15.137 | (0.990) | 5424292 | 1000.00 | 920 |
| 92 1,3-Dichlorobenzene | 146 | 15.246 | 15.246 | (0.997) | 2811960 | 1000.00 | 910 |
| 93 1,4-Dichlorobenzene | 146 | 15.315 | 15.315 | (1.001) | 2886512 | 1000.00 | 930 |
| 94 n-Butyl Benzene | 91 | 15.462 | 15.462 | (1.011) | 6236367 | 1000.00 | 890 |
| 95 1,2-Dichlorobenzene | 146 | 15.630 | 15.630 | (1.022) | 2389846 | 1000.00 | 930 |
| 96 1,2-Dibromo-3-Chloropropane | 75 | 16.289 | 16.289 | (1.065) | 159103 | 1000.00 | 970 |
| 97 1,2,4-Trichlorobenzene | 180 | 17.135 | 17.135 | (1.120) | 1870801 | 1000.00 | 950 |
| 98 Hexachlorobutadiene | 225 | 17.214 | 17.214 | (1.125) | 1187393 | 1000.00 | 960 |
| 99 Naphthalene | 128 | 17.460 | 17.460 | (1.142) | 2478446 | 1000.00 | 1000 |
| 100 1,2,3-Trichlorobenzene | 180 | 17.755 | 17.755 | (1.161) | 1509765 | 1000.00 | 950 |
| M 101 1,2-Dichloroethene (total) | 96 | | | | 3105563 | 2000.00 | 1800 |
| M 102 Xylene (total) | 106 | | | | 7277347 | 1000.00 | 2800 |

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

**COMPUCHEM** a Division of Liberty Analytical Corp DATE 9/15/10 INITIAL TIME OF TUNE 1005 SHIFT/S(A) ✓ (B)____ (C)____

**GC/MS VOLATILE RUN LOG** TIME TUNE EXPIRES 2205

COMPUCHEM LOGBOOK 11 WWW 30 (5972hp71) METHOD: (8260B) SOM01.2 (Circle one) or Other: 25mL

MAINTENANCE retuned

| | | FILE NAME | | pH | Vial | DATE | TIME | Client ID | SDG# | INJ VOL * | DF+ | CHEMIST | COMMENTS(ETC.)/ DISPOSITION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 0I15002-TUN1 | | — | — | 9/15/10 | 1005 | BFB | — | 2uL | — | JAO | LCD=SCD |
| 2 | | -CAL2 | | — | — | / / | 1028 | VSTD001 | — | 25mL | — | | |
| 3 | | -CAL1 | | — | — | / / | 1056 | VSTD0.5 | — | | — | | |
| 4 | | -CAL3 | | — | — | / / | 1123 | VSTD005 | — | | — | | |
| 5 | | -CAL4 | | — | — | / / | 1151 | VSTD010 | — | | — | | |
| 6 | | -CAL5 | | — | — | / / | 1219 | VSTD020 | — | | — | | |
| 7 | | -CAL6 | | — | — | / / | 1246 | VSTD040 | — | | — | | |
| 8 | | -IBL1 | CS | — | — | / / | 1314 | VIBLKAB | — | | — | | |
| 9 | | 0091514-BLK1 | | — | — | / / | 1341 | VBLKGZ | VARIOUS | 25mL | — | | |
| 10 | | -BS1 | | — | — | / / | 1418 | VGZLCS | | | — | | DC 553 |
| 11 | | -BS1R | | — | — | / / | 1446 | VGZLCS | | | — | | JAO 9-15-10 |
| 12 | | -BSD1 | | — | — | / / | 1514 | VGZLCSD | | | — | | |
| 13 | | 0I15002-IBL2 | | — | — | / / | ~~160~~ 1542 | VIBLKAB | — | | — | | |
| 14 | | 1009107-01 | | 1 | A | / / | 1609 | 21TB09131001 | 1009107 | 25mL | — | | |
| 15 | | 1009054-01 | | 6 | A | / / | 1637 | WSPN-01-090910 | 1009054 | | — | | |
| 16 | | -02 | | 6 | A | / / | 1705 | -01INF-090910 | | | — | | |
| 17 | | -03 | | 6 | A | / / | 1732 | -03INF-090910 | | | — | | |
| 18 | | -04 | | 6 | A | / / | 1801 | -02-090910 | | | — | | |
| 19 | | | | | | / / | | | | | | | |
| 20 | | | | | | / / | | | | | | | |
| 21 | | | | | | / / | | | | | | | |
| 22 | | | | | | / / | | | | | | | |
| 23 | | | | | | / / | | | | | | B | 9-15-10 |
| 24 | | | | | | / / | | | | | | | |

*On-column sample aliquot +Not applicable to soil matrix

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

Tune (ID #7008) Lot No.: 67586 Calibration Group Code / Lot No.: DC554

Internal Standard Lot No.: 67616 IS/Surrogate Lot No.: 67617

REVIEWED BY: B Date 9-15-10 4461

3/18/10: jad

## b. Continuing Calibration Data

(CONTINUING CALIBRATION CHECK)

If more than one instrument is used, forms shall be arranged in order by instrument. If multiple continuing calibrations from the same instrument are used, they shall be in chronological order.

(1) RICs and Quantitation reports for all continuing (12-hour) calibrations. Spectra not required.

(2) EICPs displaying each manual integration.

# CONTINUING CALIBRATION CHECK

*SW 8260B*

Client: DRAPER SDG: 1009180

Project: WATAUGA COUNTY LANDFILL 6520-39

Instrument ID: 5972hp71 Calibration: 0092207

Lab File ID: 0I20003-CCV171.d Calibration Date: 09/15/10 10:28

Sequence: 0I20003 Injection Date: 09/20/10

Lab Sample ID: 0I20003-CCV1 Injection Time: 11:17

| COMPOUND | TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT |
| Dichlorodifluoromethane | Avg | 5.000 | 4.800 | 0.4475661 | 0.441669 | 0.001 | -1.3 | 90 |
| Chloromethane | Avg | 5.000 | 4.000 | 0.4562503 | 0.3781079 | 0.1 | -17.1 | 90 |
| Vinyl chloride | Avg | 5.000 | 4.800 | 0.1951344 | 0.1939301 | 0.001 | -0.6 | 20 |
| Bromomethane | Lin | 5.000 | 4.800 | 9.066736E-02 | 9.145586E-02 | 0.001 | -4.0 | 90 |
| Chloroethane | Avg | 5.000 | 5.600 | 7.249365E-02 | 8.117397E-02 | 0.001 | 12.0 | 90 |
| Trichlorofluoromethane | Avg | 5.000 | 5.600 | 0.4250859 | 0.4908623 | 0.001 | 15.5 | 90 |
| Acrolein | Avg | 50.00 | 44.00 | 1.563634E-02 | 1.329752E-02 | 0.001 | -15.0 | 90 |
| 1,1-Dichloroethene | Avg | 5.000 | 5.200 | 0.2470384 | 0.2581402 | 0.001 | 4.5 | 20 |
| Acetone | Avg | 25.00 | 23.20 | 0.0389904 | 0.0364791 | 0.001 | -6.4 | 90 |
| Iodomethane | Avg | 5.000 | 4.400 | 0.2504103 | 0.2268203 | 0.001 | -9.4 | 90 |
| Carbon disulfide | Avg | 5.000 | 4.800 | 1.069477 | 1.02794 | 0.001 | -3.9 | 90 |
| 3-Chloropropene | Avg | 5.000 | 5.200 | 0.3911227 | 0.3957157 | 0.001 | 1.2 | 90 |
| Acetonitrile | Avg | 5.000 | 4.800 | 0.6269108 | 0.5871792 | 0.001 | -6.3 | 90 |
| Methylene chloride | Lin | 5.000 | 5.600 | 0.2806191 | 0.3004885 | 0.001 | 12.0 | 90 |
| Acrylonitrile | Avg | 50.00 | 48.00 | 0.045173 | 4.439339E-02 | 0.001 | -1.7 | 90 |
| trans-1,2-Dichloroethene | Avg | 5.000 | 5.200 | 0.2768011 | 0.2961907 | 0.001 | 7.0 | 90 |
| 1,1-Dichloroethane | Avg | 5.000 | 5.200 | 0.5246979 | 0.5478944 | 0.1 | 4.4 | 90 |
| Chloroprene | Avg | 5.000 | 5.200 | 0.4413399 | 0.4482332 | 0.001 | 1.6 | 90 |
| Vinyl acetate | Avg | 10.00 | 9.600 | 0.6580934 | 0.6397202 | 0.001 | -2.8 | 90 |
| cis-1,2-Dichloroethene | Avg | 5.000 | 5.200 | 0.2904428 | 0.3107569 | 0.001 | 7.0 | 90 |
| 2,2-Dichloropropane | Avg | 5.000 | 5.600 | 0.4115886 | 0.4563747 | 0.001 | 10.9 | 90 |
| Propionitrile | Avg | 250.0 | 244.0 | 1.593702E-02 | 1.551787E-02 | 0.001 | -2.6 | 90 |
| 2-Butanone | Avg | 25.00 | 24.00 | 7.306813E-02 | 7.034024E-02 | 0.001 | -3.7 | 90 |
| Methacrylonitrile | Avg | 50.00 | 52.00 | 0.1111777 | 0.1132277 | 0.001 | 1.8 | 90 |
| Bromochloromethane | Avg | 5.000 | 5.600 | 9.595372E-02 | 0.1079203 | 0.001 | 12.5 | 90 |
| Chloroform | Avg | 5.000 | 5.200 | 0.4904696 | 0.5258039 | 0.001 | 7.2 | 20 |
| 1,1,1-Trichloroethane | Avg | 5.000 | 5.600 | 0.4077803 | 0.4553726 | 0.001 | 11.7 | 90 |

# CONTINUING CALIBRATION CHECK

*SW 8260B*

Client: DRAPER SDG: 1009180

Project: WATAUGA COUNTY LANDFILL 6520-39

Instrument ID: 5972hp71 Calibration: 0092207

Lab File ID: 0I20003-CCV171.d Calibration Date: 09/15/10 10:28

Sequence: 0I20003 Injection Date: 09/20/10

Lab Sample ID: 0I20003-CCV1 Injection Time: 11:17

| COMPOUND | TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT |
| 1,1-Dichloropropene | Avg | 5.000 | 5.600 | 0.4122722 | 0.4485292 | 0.001 | 8.8 | 90 |
| Carbon tetrachloride | Avg | 5.000 | 5.600 | 0.3427702 | 0.3912331 | 0.001 | 14.1 | 90 |
| 1,2-Dichloroethane | Avg | 5.000 | 5.600 | 0.2640195 | 0.2937729 | 0.001 | 11.3 | 90 |
| Isobutyl alcohol | Avg | 250.0 | 224.0 | 5.762613E-03 | 5.160147E-03 | 0.001 | -10.5 | 90 |
| Benzene | Avg | 5.000 | 5.200 | 1.054046 | 1.093872 | 0.001 | 3.8 | 90 |
| Trichloroethene | Avg | 5.000 | 5.200 | 0.2537841 | 0.2723902 | 0.001 | 7.3 | 90 |
| 1,2-Dichloropropane | Avg | 5.000 | 5.200 | 0.2676344 | 0.2735908 | 0.001 | 2.2 | 20 |
| Dibromomethane | Avg | 5.000 | 6.000 | 0.109437 | 0.1281899 | 0.001 | 17.1 | 90 |
| Methyl Methacrylate | Avg | 50.00 | 52.00 | 9.116571E-02 | 9.623294E-02 | 0.001 | 5.6 | 90 |
| Bromodichloromethane | Avg | 5.000 | 5.600 | 0.3311059 | 0.3598174 | 0.001 | 8.7 | 90 |
| cis-1,3-Dichloropropene | Avg | 5.000 | 5.200 | 0.3706214 | 0.3945791 | 0.001 | 6.5 | 90 |
| 4-Methyl-2-pentanone | Avg | 25.00 | 23.60 | 0.2852708 | 0.2688953 | 0.001 | -5.7 | 90 |
| Toluene | Avg | 5.000 | 4.400 | 1.100095 | 0.9813008 | 0.001 | -10.8 | 20 |
| trans-1,3-Dichloropropene | Avg | 5.000 | 4.800 | 0.4966006 | 0.4705619 | 0.001 | -5.2 | 90 |
| 1,1,2-Trichloroethane | Avg | 5.000 | 4.800 | 0.2392835 | 0.2256552 | 0.001 | -5.7 | 90 |
| Ethyl Methacrylate | Avg | 50.00 | 48.00 | 0.3098255 | 0.2886933 | 0.001 | -6.8 | 90 |
| 1,3-Dichloropropane | Avg | 5.000 | 4.800 | 0.4569307 | 0.4279565 | 0.001 | -6.3 | 90 |
| Tetrachloroethene | Avg | 5.000 | 5.200 | 0.3551908 | 0.355888 | 0.001 | 0.2 | 90 |
| 2-Hexanone | Avg | 25.00 | 22.40 | 0.2014039 | 0.1812722 | 0.001 | -10.0 | 90 |
| Dibromochloromethane | Avg | 5.000 | 4.800 | 0.3088814 | 0.292612 | 0.001 | -5.3 | 90 |
| Chlorobenzene | Avg | 5.000 | 4.800 | 1.03192 | 0.9652205 | 0.3 | -6.5 | 90 |
| 1,1,1,2-Tetrachloroethane | Avg | 5.000 | 4.800 | 0.3497422 | 0.329001 | 0.001 | -5.9 | 90 |
| Ethylbenzene | Avg | 5.000 | 4.400 | 0.5687811 | 0.5199171 | 0.001 | -8.6 | 20 |
| m,p-Xylene | Avg | 10.00 | 9.200 | 0.7065622 | 0.643837 | 0.001 | -8.9 | 90 |
| o-Xylene | Avg | 5.000 | 4.400 | 0.6621831 | 0.6030946 | 0.001 | -8.9 | 90 |
| Styrene | Avg | 5.000 | 4.400 | 1.105964 | 0.9964763 | 0.001 | -9.9 | 90 |
| Bromoform | Avg | 5.000 | 4.800 | 0.1897145 | 0.187521 | 0.1 | -1.2 | 90 |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# CONTINUING CALIBRATION CHECK

*SW 8260B*

Client: DRAPER SDG: 1009180

Project: WATAUGA COUNTY LANDFILL 6520-39

Instrument ID: 5972hp71 Calibration: 0092207

Lab File ID: 0I20003-CCV171.d Calibration Date: 09/15/10 10:28

Sequence: 0I20003 Injection Date: 09/20/10

Lab Sample ID: 0I20003-CCV1 Injection Time: 11:17

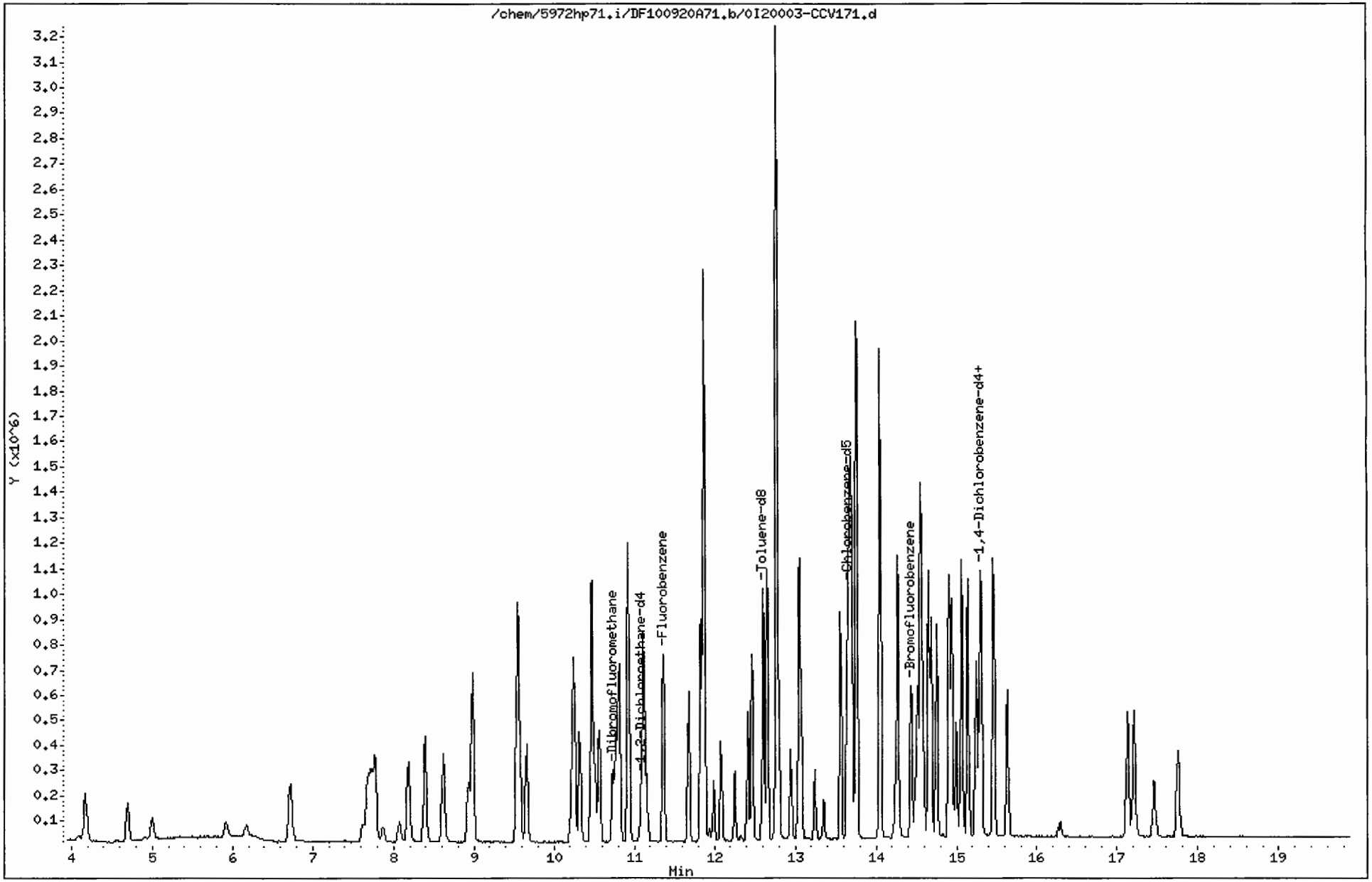
| COMPOUND | TYPE | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT |
| 1,1,2,2-Tetrachloroethane | Avg | 5.000 | 4.800 | 0.6018285 | 0.5738395 | 0.3 | -4.7 | 90 |
| 1,2,3-Trichloropropane | Avg | 5.000 | 4.800 | 7.140778E-02 | 6.734251E-02 | 0.001 | -5.7 | 90 |
| trans-1,4-Dichloro-2-butene | Avg | 20.00 | 18.80 | 8.798584E-02 | 8.283831E-02 | 0.001 | -5.9 | 90 |
| 1,3-Dichlorobenzene | Avg | 5.000 | 4.800 | 1.542015 | 1.426966 | 0.001 | -7.5 | 90 |
| 1,4-Dichlorobenzene | Avg | 5.000 | 4.800 | 1.551959 | 1.444802 | 0.001 | -6.9 | 90 |
| 1,2-Dichlorobenzene | Avg | 5.000 | 4.800 | 1.284822 | 1.18634 | 0.001 | -7.7 | 90 |
| 1,2,4-Trichlorobenzene | Avg | 5.000 | 4.800 | 0.9870756 | 0.9854367 | 0.001 | -0.2 | 90 |
| Hexachlorobutadiene | Avg | 5.000 | 5.200 | 0.6166553 | 0.6494046 | 0.001 | 5.3 | 90 |
| Naphthalene | Avg | 5.000 | 4.400 | 1.2475 | 1.121479 | 0.001 | -10.1 | 90 |
| Xylenes (total) | Avg | 15.00 | 13.60 | 0.6917691 | 0.6302562 | 0.001 | -8.9 | 90 |
| Dibromofluoromethane | Avg | 5.000 | 4.800 | 0.271126 | 0.2701926 | 0.001 | -0.3 | 90 |
| 1,2-Dichloroethane-d4 | Avg | 5.000 | 5.200 | 0.2191745 | 0.2331324 | 0.001 | 6.4 | 90 |
| Toluene-d8 | Avg | 5.000 | 4.400 | 1.488502 | 1.33497 | 0.001 | -10.3 | 90 |
| Bromofluorobenzene | Avg | 5.000 | 4.800 | 1.043222 | 0.9738049 | 0.001 | -6.7 | 90 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

Data File: /chem/5972hp71.i/DF100920A71.b/0I20003-CCV171.d
Date : 20-SEP-2010 11:17
Client ID: VSTD005
Sample Info: 0I20003-CCV1:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/0I20003-CCV171.d
Report Date: 21-Sep-2010 14:32

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/0I20003-CCV171.d
Lab Smp Id: OI20003-CCV1 Client Smp ID: VSTD005
Inj Date : 20-SEP-2010 11:17
Operator : JAO Inst ID: 5972hp71.i
Smp Info : OI20003-CCV1:JAO
Misc Info : VSTD005
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.362 | 11.362 | (1.000) | 594735 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.646 | 13.646 | (1.000) | 420017 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.289 | 15.289 | (1.000) | 213551 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.733 | 10.733 | (0.945) | 160693 | 125.000 | 120 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.087 | 11.087 | (0.976) | 138652 | 125.000 | 130 |
| $ 6 Toluene-d8 | 98 | 12.602 | 12.602 | (0.924) | 560710 | 125.000 | 110 |
| $ 7 Bromofluorobenzene | 95 | 14.433 | 14.433 | (0.944) | 207957 | 125.000 | 120 |
| 8 Dichlorodifluoromethane | 85 | 4.168 | 4.168 | (0.367) | 262676 | 125.000 | 120 |
| 9 Chloromethane | 50 | 4.690 | 4.690 | (0.413) | 224874 | 125.000 | 100 |
| 10 Vinyl Chloride | 62 | 4.995 | 4.995 | (0.440) | 115337 | 125.000 | 120 |
| 11 Bromomethane | 94 | 5.920 | 5.920 | (0.521) | 54392 | 125.000 | 120 |
| 12 Chloroethane | 64 | 6.176 | 6.176 | (0.544) | 48277 | 125.000 | 140 |
| 13 Trichlorofluoromethane | 101 | 6.727 | 6.727 | (0.592) | 291933 | 125.000 | 140 |
| 14 Acrolein | 56 | 7.623 | 7.623 | (0.671) | 79085 | 1250.00 | 1100 |
| 15 1,1,1-trichloro-2,2,2-trifluo | 117 | 7.692 | 7.692 | (0.677) | 87304 | 125.000 | 130 |
| 16 1,1,2-trichloro-1,2,2-trifluo | 85 | 7.731 | 7.731 | (0.680) | 106242 | 125.000 | 130 |

9.21.10

Data File: /chem/5972hp71.i/DF100920A71.b/0I20003-CCV171.d
Report Date: 21-Sep-2010 14:32

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 17 1,1-Dichloroethene | 96 | 7.780 | 7.780 | (0.685) | 153525 | 125.000 | 130 |
| 18 Acetone | 43 | 7.869 | 7.869 | (0.693) | 108477 | 625.000 | 580 |
| 19 Iodomethane | 142 | 8.066 | 8.066 | (0.710) | 134898 | 125.000 | 110 |
| 20 Carbon disulfide | 76 | 8.184 | 8.184 | (0.720) | 611352 | 125.000 | 120 |
| 22 3-Chloropropene | 39 | 8.390 | 8.390 | (0.738) | 235346 | 125.000 | 130 |
| 23 Acetonitrile | 41 | 8.390 | 8.390 | (0.738) | 349216 | 125.000 | 120 |
| 24 Methyl acetate | 43 | 8.381 | 8.381 | (0.738) | 89740 | 125.000 | 140 |
| 25 Methylene Chloride | 84 | 8.617 | 8.617 | (0.758) | 178711 | 125.000 | 140 |
| 26 Acrylonitrile | 53 | 8.981 | 8.981 | (0.790) | 264023 | 1250.00 | 1200 |
| 28 trans-1,2-Dichloroethene | 96 | 8.981 | 8.981 | (0.790) | 176155 | 125.000 | 130 |
| 27 Methyl-tert-butyl ether | 73 | 8.932 | 8.932 | (0.786) | 279004 | 125.000 | 140 |
| 30 Isopropyl ether | 45 | 9.542 | 9.542 | (0.840) | 736868 | 125.000 | 130 |
| 31 Vinyl acetate | 43 | 9.552 | 9.552 | (0.841) | 760928 | 250.000 | 240 |
| 32 1,1-Dichloroethane | 63 | 9.571 | 9.571 | (0.842) | 325852 | 125.000 | 130 |
| 33 Chloroprene | 53 | 9.660 | 9.660 | (0.850) | 266580 | 125.000 | 130 |
| 34 2-butanone | 43 | 10.211 | 10.211 | (0.899) | 209169 | 625.000 | 600 |
| 35 2,2-Dichloropropane | 77 | 10.241 | 10.241 | (0.901) | 271422 | 125.000 | 140 |
| 36 cis-1,2-Dichloroethene | 96 | 10.250 | 10.250 | (0.902) | 184818 | 125.000 | 130 |
| 37 Propionitrile | 54 | 10.319 | 10.319 | (0.908) | 461451 | 6250.00 | 6100 |
| 38 Methacrylonitrile | 41 | 10.477 | 10.477 | (0.922) | 673405 | 1250.00 | 1300 |
| 39 Bromochloromethane | 128 | 10.516 | 10.516 | (0.925) | 64184 | 125.000 | 140 |
| 40 Chloroform | 83 | 10.565 | 10.565 | (0.930) | 312714 | 125.000 | 130 |
| 42 1,1,1-Trichloroethane | 97 | 10.772 | 10.772 | (0.948) | 270826 | 125.000 | 140 |
| 43 Cyclohexane | 84 | 10.811 | 10.811 | (0.951) | 248113 | 125.000 | 130 |
| 44 1,1-dichloropropene | 75 | 10.929 | 10.929 | (0.962) | 266756 | 125.000 | 140 |
| 45 Isobutyl alcohol | 43 | 10.920 | 10.920 | (0.961) | 153446 | 6250.00 | 5600 |
| 46 Carbon Tetrachloride | 117 | 10.929 | 10.929 | (0.962) | 232680 | 125.000 | 140 |
| 47 Benzene | 78 | 11.116 | 11.116 | (0.978) | 650564 | 125.000 | 130 |
| 48 1,2-Dichloroethane | 62 | 11.156 | 11.156 | (0.982) | 174717 | 125.000 | 140 |
| 49 Trichloroethene | 130 | 11.677 | 11.677 | (1.028) | 162000 | 125.000 | 130 |
| 50 Methylcyclohexane | 83 | 11.835 | 11.835 | (1.042) | 300646 | 125.000 | 130 |
| 51 1,2-Dichloropropane | 63 | 11.884 | 11.884 | (1.046) | 162714 | 125.000 | 130 |
| 52 Methylmethacrylate | 69 | 11.874 | 11.874 | (1.045) | 572331 | 1250.00 | 1300 |
| 53 1,4-dioxane | 88 | 11.943 | 11.943 | (1.051) | 25964 | 6250.00 | 5800 |
| 54 Dibromomethane | 174 | 11.992 | 11.992 | (1.055) | 76239 | 125.000 | 150 |
| 55 Bromodichloromethane | 83 | 12.081 | 12.081 | (1.063) | 213996 | 125.000 | 140 |
| 56 2-chloroethyl vinyl ether | 63 | 12.258 | 12.258 | (1.079) | 98285 | 250.000 | 250 |
| 57 cis-1,3-Dichloropropene | 75 | 12.415 | 12.415 | (1.093) | 234670 | 125.000 | 130 |
| 58 4-Methyl-2-pentanone | 43 | 12.465 | 12.465 | (0.913) | 564703 | 625.000 | 590 |
| 59 Toluene | 92 | 12.652 | 12.652 | (0.927) | 412163 | 125.000 | 110 |
| 60 Ethylmethacrylate | 69 | 12.770 | 12.770 | (0.936) | 1212561 | 1250.00 | 1200 |
| 61 trans-1,3-Dichloropropene | 75 | 12.799 | 12.799 | (0.938) | 197644 | 125.000 | 120 |
| 62 1,1,2-Trichloroethane | 97 | 12.947 | 12.947 | (0.949) | 94779 | 125.000 | 120 |
| 63 2-hexanone | 43 | 13.045 | 13.045 | (0.956) | 380687 | 625.000 | 560 |
| 64 1,3-Dichloropropane | 76 | 13.075 | 13.075 | (0.958) | 179749 | 125.000 | 120 |
| 65 Tetrachloroethene | 164 | 13.055 | 13.055 | (0.957) | 149479 | 125.000 | 130 |
| 66 Dibromochloromethane | 129 | 13.242 | 13.242 | (0.970) | 122902 | 125.000 | 120 |

Data File: /chem/5972hp71.i/DF100920A71.b/0I20003-CCV171.d
Report Date: 21-Sep-2010 14:32

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 67 1,2-Dibromoethane | 107 | 13.350 | 13.350 | (0.978) | 100569 | 125.000 | 120 |
| 68 1-Chlorohexane | 55 | 13.557 | 13.557 | (0.993) | 185536 | 125.000 | 110 |
| 69 Chlorobenzene | 112 | 13.665 | 13.665 | (1.001) | 405409 | 125.000 | 120 |
| 70 Ethylbenzene | 106 | 13.685 | 13.685 | (1.003) | 218374 | 125.000 | 110 |
| 71 1,1,1,2-Tetrachloroethane | 131 | 13.705 | 13.705 | (1.004) | 138186 | 125.000 | 120 |
| 72 m,p-Xylene | 106 | 13.764 | 13.764 | (1.009) | 540845 | 250.000 | 230 |
| 73 m,p-Xylene (part of total) | 106 | 13.764 | 13.764 | (1.009) | 540845 | 250.000 | 230 |
| 74 o-Xylene | 106 | 14.049 | 14.049 | (1.030) | 253310 | 125.000 | 110 |
| 75 o-Xylene (part of total) | 106 | 14.049 | 14.049 | (1.030) | 253310 | 125.000 | 110 |
| 76 Styrene | 104 | 14.049 | 14.049 | (1.030) | 418537 | 125.000 | 110 |
| 77 Bromoform | 173 | 14.246 | 14.246 | (1.044) | 78762 | 125.000 | 120 |
| 78 Isopropyl Benzene | 105 | 14.266 | 14.266 | (1.045) | 713407 | 125.000 | 110 |
| 79 1,1,2,2-Tetrachloroethane | 83 | 14.492 | 14.492 | (0.948) | 122544 | 125.000 | 120 |
| 81 1,2,3-Trichloropropane | 110 | 14.551 | 14.551 | (1.066) | 28285 | 125.000 | 120 |
| 80 trans-1,4-dichloro-2-butene | 53 | 14.512 | 14.512 | (1.063) | 139174 | 500.000 | 470 |
| 82 n-Propyl Benzene | 91 | 14.551 | 14.551 | (0.952) | 999469 | 125.000 | 110 |
| 83 Bromobenzene | 156 | 14.581 | 14.581 | (1.069) | 161047 | 125.000 | 120 |
| 84 1,3,5-Trimethyl Benzene | 105 | 14.649 | 14.649 | (0.958) | 557539 | 125.000 | 110 |
| 85 2-Chlorotoluene | 126 | 14.689 | 14.689 | (0.961) | 152808 | 125.000 | 110 |
| 86 4-Chlorotoluene | 126 | 14.758 | 14.758 | (0.965) | 154962 | 125.000 | 120 |
| 87 tert-Butyl Benzene | 119 | 14.905 | 14.905 | (0.975) | 523930 | 125.000 | 120 |
| 88 1,2,4-Trimethyl Benzene | 105 | 14.945 | 14.945 | (0.977) | 554539 | 125.000 | 120 |
| 89 Pentachloroethane | 167 | 14.994 | 14.994 | (0.981) | 89027 | 125.000 | 120 |
| 90 sec-Butyl Benzene | 105 | 15.063 | 15.063 | (0.985) | 807202 | 125.000 | 120 |
| 91 p-Isopropyl Toluene | 119 | 15.142 | 15.142 | (0.990) | 605884 | 125.000 | 120 |
| 92 1,3-Dichlorobenzene | 146 | 15.250 | 15.250 | (0.997) | 304730 | 125.000 | 120 |
| 93 1,4-Dichlorobenzene | 146 | 15.309 | 15.309 | (1.001) | 308539 | 125.000 | 120 |
| 94 n-Butyl Benzene | 91 | 15.457 | 15.457 | (1.011) | 710803 | 125.000 | 120 |
| 95 1,2-Dichlorobenzene | 146 | 15.634 | 15.634 | (1.023) | 253344 | 125.000 | 120 |
| 96 1,2-Dibromo-3-Chloropropane | 75 | 16.293 | 16.293 | (1.066) | 16793 | 125.000 | 120 |
| 97 1,2,4-Trichlorobenzene | 180 | 17.130 | 17.130 | (1.120) | 210441 | 125.000 | 120 |
| 98 Hexachlorobutadiene | 225 | 17.218 | 17.218 | (1.126) | 138681 | 125.000 | 130 |
| 99 Naphthalene | 128 | 17.464 | 17.464 | (1.142) | 239493 | 125.000 | 110 |
| 100 1,2,3-Trichlorobenzene | 180 | 17.759 | 17.759 | (1.162) | 167295 | 125.000 | 120 |
| M 101 1,2-Dichloroethene (total) | 96 | | | | 360973 | 250.000 | 270 |
| M 102 Xylene (total) | 106 | | | | 794155 | 125.000 | 360 |

**COMPUCHEM** a Division of Liberty Analytical Corp DATE 9/20/10 INITIAL TIME OF TUNE 1053 SHIFT/S(A) ✓ (B)____ (C)____

**GC/MS VOLATILE RUN LOG** TIME TUNE EXPIRES 2253

COMPUCHEM LOGBOOK 11 WWW 30 (5972hp71) METHOD: (8260B) SOM01.2 (Circle one) or Other: 25mL

MAINTENANCE none

| | VOA-1 | FILE NAME | DATE REVIEWED | pH | Vial | DATE | TIME | Client ID | SDG# | INJ VOL * | DF+ | CHEMIST | COMMENTS(ETC.)/ DISPOSITION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 0I20003-TUN1 | | — | — | 9/20/10 | 1053 | BFB | — | 2uL | — | JAO | LCD=SCD |
| 2 | | -CCV1 | | — | — | / / | 1117 | VSTD005 | — | 25mL | — | | |
| 3 | | 0092014-BLK1 | | — | — | / / | 1154 | VBLKHF | VARIOUS | | — | | |
| 4 | | -BS1 | | — | — | / / | 1229 | VHFLCS | | | — | | ~~DC552~~ JAO 9-20-10 |
| 5 | | -BSD1 | | — | — | / / | 1257 | VHFLCSD | | | — | | |
| 6 | | 1009180-10 | | 1 | A | / / | 1329 | TRIP BLANK | 1009180 | 25mL | — | | |
| 7 | | -02 | | 1 | A | / / | 1359 | MW-1 | | | — | | |
| 8 | | -05 | | 1 | A | / / | 1423 | MW-11 | | | — | | |
| 9 | | -07 | | 1 | A | / / | 1450 | MW-15 | | | — | | |
| 10 | | -09 | | 1 | A | / / | 1518 | MW-19 | | | — | | |
| 11 | | -01 | | 1 | A | / / | 1548 | MW-3 | | | — | | |
| 12 | | -03 | | 1 | A | / / | 1612 | MW-8 | | | — | | |
| 13 | | -04 | | 1 | A | / / | 1640 | MW-9 | | | — | | |
| 14 | | -08 | | 1 | A | / / | 1707 | MW-17 | | | — | | |
| 15 | | 1009208-03 | | 1 | A | / / | 1734 | TRIP BLANK | 1009208 | 25mL | — | | |
| 16 | | -01 | DI | 1 | A | / / | 1801 | IR88-GW54IW | | | — | | Tetrachloroethene 29,000ng |
| 17 | | -02 | DI CS | 1 | A | / / | 1829 | IR88-GW53IW | | | — | | 9,762ng |
| 18 | | 0I20003-IBL1 | | — | ~~A~~ JAO 9-20-10 | / / | 1859 | VIBLKAA | — | 25mL | — | | |
| 19 | | 0092014-MS1 | | 1 | B | / / | 1935 | MW-3 MS | 1009180 | 25mL | — | | |
| 20 | | -MSD1 | | 1 | C | / / | 2002 | MW-3 MSD | | | — | | |
| 21 | | 1009180-06 | | 1 | B | / / | 2029 | MW-12 | | 15mL | 1.67 | | JAO 9-20-10 |
| 22 | | -12 | DI | 1 | A | / / | 2057 | MW-10 | | 25mL | — | | ~~Cis~~ 1,1,1-TCEthane 1502ng |
| 23 | | -11 | DI | 1 | A | / / | 2124 | MW-2 | | | — | | 9254ng 1,1,1-TCEthane |
| 24 | | ~~SBL~~ 0I20003-IBL2 | | — | — | / / | 2151 | VIBLKAB | — | 25mL | — | ✓ | |

*On-column sample aliquot +Not applicable to soil matrix

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

Tune (ID #7008) Lot No.: 67586 Calibration Group Code / Lot No.: DC554

Internal Standard Lot No.: — Surrogate Lot No.: 67617

REVIEWED BY: B Date 9-20-10 4463

3/18/10: jad

**COMPUCHEM** a Division of Liberty Analytical Corp DATE 9/20/10 INITIAL TIME OF TUNE 1053 SHIFT/S(A) ✓ (B)____ (C)____

**GC/MS VOLATILE RUN LOG** TIME TUNE EXPIRES 2253

COMPUCHEM LOGBOOK 11 WWW 30 (5972hp71) METHOD: 8260B SOM01.2 (Circle one) or Other: 25 mL

MAINTENANCE

| | CALIB STD | FILE NAME | REPORTED | pH | Vial | DATE | TIME | Client ID | SDG# | INJ. VOL.* | DF+ | CHEMIST | COMMENTS(ETC.)/ DISPOSITION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 1009180-12D | | 1 | B | 9/20/10 | 2219 | MW-10 | 1009180 | 12.5mL | 2 | JAO | |
| 2 | | ↓ -11D | | 1 | B | / / | 2246 | MW-2 | | 1.5mL | ~~1.4~~ 1.67 | | |
| 3 | | | | | | / / | | | | | | | |
| 4 | | | | | | / / | | | | | | | |
| 5 | | | | | | / / | | | | | | | |
| 6 | | | | | | / / | | | | | | | |
| 7 | | | | | | / / | | | | | | | |
| 8 | | | | | | / / | | | | | | | |
| 9 | | | | | | / / | | | | | | | |
| 10 | | | | | | / / | | | | | | | |
| 11 | | | | | | / / | | | | | | | |
| 12 | | | | | | / / | | | | | | | |
| 13 | | | | | | / / | | | | | | | |
| 14 | | | | | | / / | | | | | | | |
| 15 | | | | | | / / | | | | | | | |
| 16 | | | | | | / / | | | | | | | |
| 17 | | | | | | / / | | | | | | | |
| 18 | | | | | | / / | | | | | | | |
| 19 | | | | | | / / | | | | | | | |
| 20 | | | | | | / / | | | | | | | |
| 21 | | | | | | / / | | | | | | | |
| 22 | | | | | | / / | | | | | | | |
| 23 | | | | | | / / | | | | | | | B 9-20-10 |
| 24 | | | | | | / / | | | | | | | |

*On-column sample aliquot +Not applicable to soil matrix

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

Tune (ID #7008) Lot No.: 67586 Calibration Group Code / Lot No.: DC554

Internal Standard Lot No.: — Surrogate Lot No.: 67617

REVIEWED BY: B Date 9-20-10 4464

3/18/10: jad

# 4. Raw QC Data

## a. BFB Data

## b. Blank Data

## c. Laboratory Control Sample Data

## d. Matrix Spike Data

# a. BFB Data

For each 12 hour period, per instrument utilized, include:

- Bar Graph Spectrum and Tabulated Relative Abundances

- Mass Listing

- RIC

Data File: /chem/5972hp71.i/DF100915A71.b/OI15002-TUN171.d

Date : 15-SEP-2010 10:05

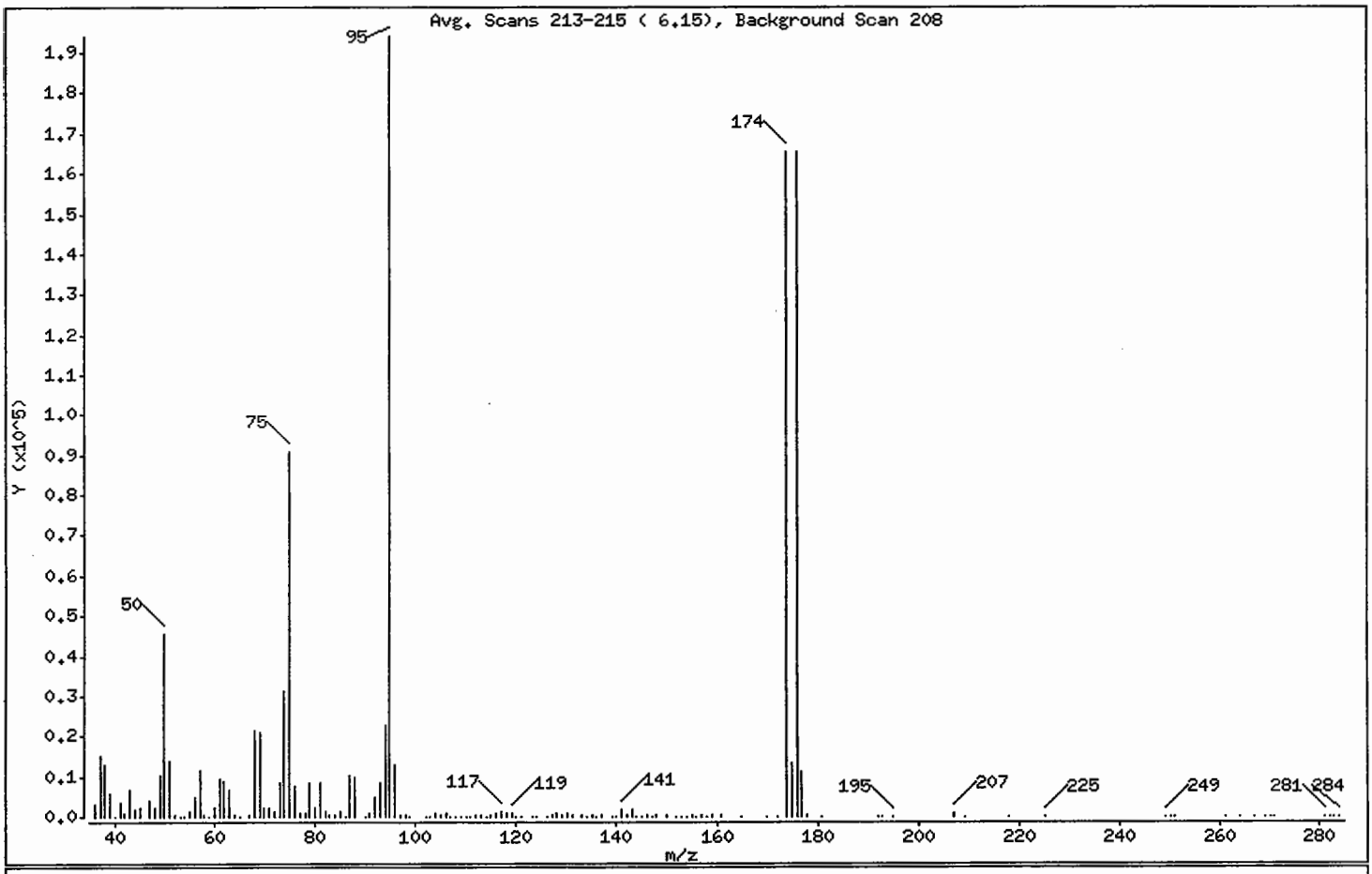
Client ID: BFB | Instrument: 5972hp71.i

Sample Info: OI15002-TUN1:JAO

Volume Injected (uL): 2.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

1 bromofluorobenzene




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 15.00 - 40.00% of mass 95 | 23.49 |
| 75 | 30.00 - 60.00% of mass 95 | 46.75 |
| 96 | 5.00 - 9.00% of mass 95 | 6.73 |
| 173 | Less than 2.00% of mass 174 | 0.00 ( 0.00) |
| 174 | Greater than 50.00% of mass 95 | 85.36 |
| 175 | 5.00 - 9.00% of mass 174 | 6.83 ( 8.01) |
| 176 | 95.00 - 101.00% of mass 174 | 85.23 ( 99.85) |
| 177 | 5.00 - 9.00% of mass 176 | 5.80 ( 6.81) |

Data File: /chem/5972hp71.i/DF100915A71.b/OI15002-TUN171.d

Date : 15-SEP-2010 10:05

Client ID: BFB | Instrument: 5972hp71.i

Sample Info: OI15002-TUN1:JAO

Volume Injected (uL): 2.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

Data File: OI15002-TUN171.d
Spectrum: Avg. Scans 213-215 ( 6.15), Background Scan 208
Location of Maximum: 95.00
Number of points: 143

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 3148 | 74.00 | 31080 | 113.00 | 261 | 155.00 | 440 |
| 37.00 | 14996 | 75.00 | 90712 | 114.00 | 39 | 156.00 | 83 |
| 38.00 | 13019 | 76.00 | 7595 | 115.00 | 285 | 157.00 | 401 |
| 39.00 | 5717 | 77.00 | 1100 | 116.00 | 762 | 158.00 | 56 |
| 40.00 | 88 | 78.00 | 799 | 117.00 | 1302 | 159.00 | 293 |
| 41.00 | 3435 | 79.00 | 8620 | 118.00 | 810 | 161.00 | 265 |
| 42.00 | 1077 | 80.00 | 2320 | 119.00 | 952 | 165.00 | 1 |
| 43.00 | 6498 | 81.00 | 8361 | 120.00 | 163 | 170.00 | 71 |
| 44.00 | 1798 | 82.00 | 1525 | 121.00 | 175 | 172.00 | 105 |
| 45.00 | 2378 | 83.00 | 359 | 123.00 | 139 | 174.00 | 165632 |
| 47.00 | 3883 | 84.00 | 608 | 124.00 | 87 | 175.00 | 13262 |
| 48.00 | 2138 | 85.00 | 1311 | 126.00 | 88 | 176.00 | 165376 |
| 49.00 | 10441 | 86.00 | 129 | 127.00 | 229 | 177.00 | 11260 |
| 50.00 | 45576 | 87.00 | 10491 | 128.00 | 723 | 178.00 | 271 |
| 51.00 | 13648 | 88.00 | 9634 | 129.00 | 325 | 181.00 | 52 |
| 52.00 | 572 | 90.00 | 97 | 130.00 | 696 | 192.00 | 42 |
| 53.00 | 204 | 91.00 | 912 | 131.00 | 250 | 193.00 | 5 |
| 54.00 | 105 | 92.00 | 5133 | 133.00 | 280 | 195.00 | 152 |
| 55.00 | 1553 | 93.00 | 8435 | 134.00 | 56 | 207.00 | 855 |
| 56.00 | 4819 | 94.00 | 22864 | 135.00 | 262 | 209.00 | 66 |
| 57.00 | 11818 | 95.00 | 194048 | 136.00 | 86 | 218.00 | 35 |
| 58.00 | 439 | 96.00 | 13059 | 137.00 | 439 | 225.00 | 39 |
| 59.00 | 89 | 97.00 | 655 | 139.00 | 145 | 249.00 | 119 |
| 60.00 | 2153 | 98.00 | 266 | 140.00 | 35 | 250.00 | 36 |
| 61.00 | 9378 | 99.00 | 210 | 141.00 | 1949 | 251.00 | 42 |
| 62.00 | 9105 | 102.00 | 108 | 142.00 | 545 | 261.00 | 44 |
| 63.00 | 6568 | 103.00 | 109 | 143.00 | 1847 | 264.00 | 34 |
| 64.00 | 553 | 104.00 | 985 | 144.00 | 189 | 267.00 | 6 |
| 65.00 | 59 | 105.00 | 297 | 145.00 | 200 | 269.00 | 62 |
| 67.00 | 603 | 106.00 | 1008 | 146.00 | 318 | 270.00 | 52 |
| 68.00 | 21320 | 107.00 | 187 | 147.00 | 184 | 271.00 | 71 |
| 69.00 | 20848 | 108.00 | 12 | 148.00 | 570 | 281.00 | 107 |
| 70.00 | 2431 | 109.00 | 76 | 150.00 | 259 | 282.00 | 52 |
| 71.00 | 2136 | 110.00 | 223 | 152.00 | 123 | 283.00 | 80 |
| 72.00 | 1174 | 111.00 | 132 | 153.00 | 177 | 284.00 | 36 |

Data File: /chem/5972hp71.i/DF100915A71.b/OI15002-TUN171.d

Date : 15-SEP-2010 10:05

Client ID: BFB | Instrument: 5972hp71.i

Sample Info: OI15002-TUN1:JAO

Volume Injected (uL): 2.0 | Operator: JAO

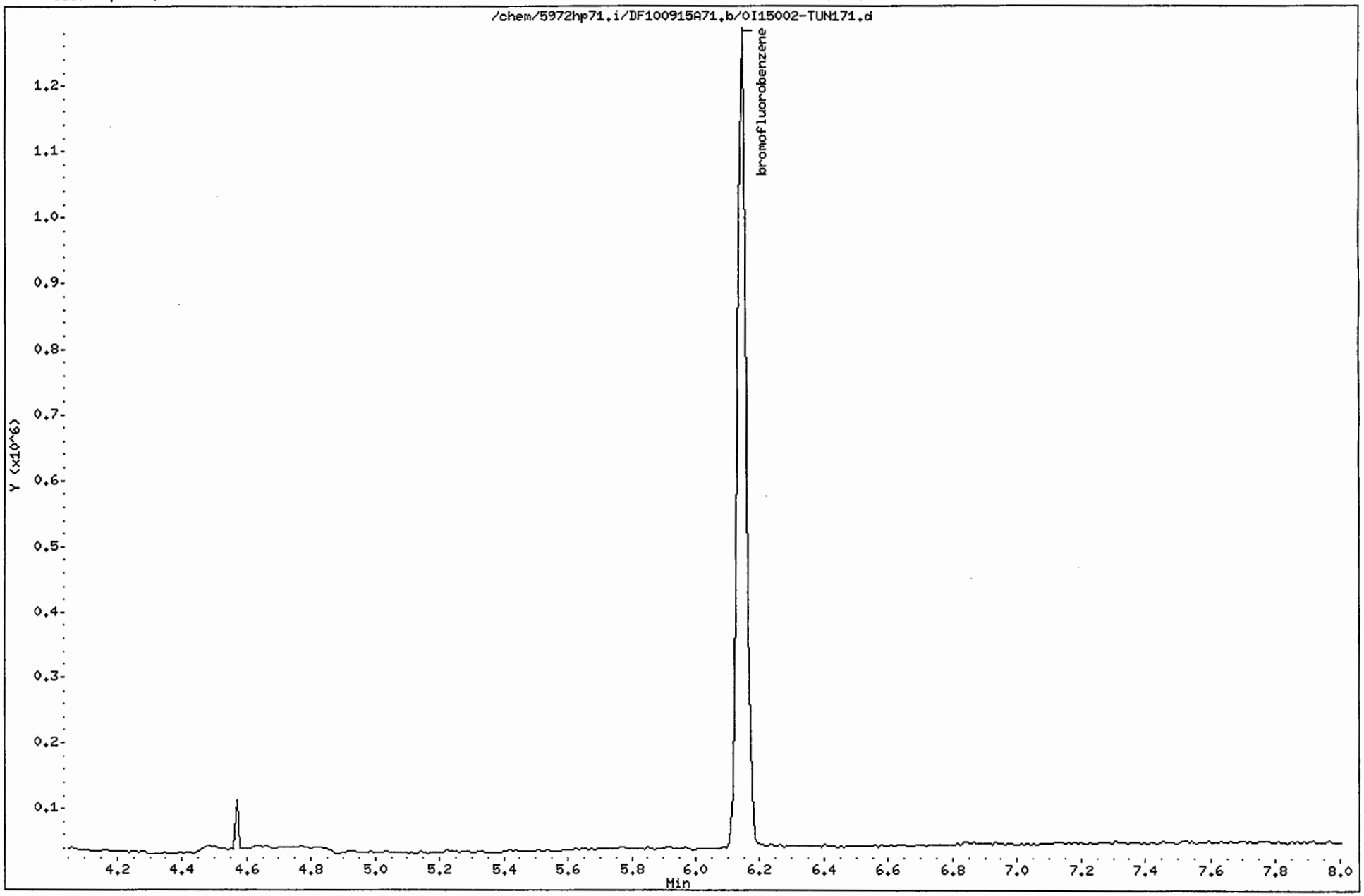
Column phase: SPB-624 | Column diameter: 0.32

Data File: OI15002-TUN171.d
Spectrum: Avg. Scans 213-215 ( 6.15), Background Scan 208
Location of Maximum: 95.00
Number of points: 143

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 73.00 | 8365 | 112.00 | 379 | 154.00 | 127 | | |

Data File: /chem/5972hp71.i/DF100915A71.b/OI15002-TUN171.d
Date : 15-SEP-2010 10:05
Client ID: BFB
Sample Info: OI15002-TUN1:JAO
Volume Injected (uL): 2.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/OI20003-TUN171.d

Date : 20-SEP-2010 10:53

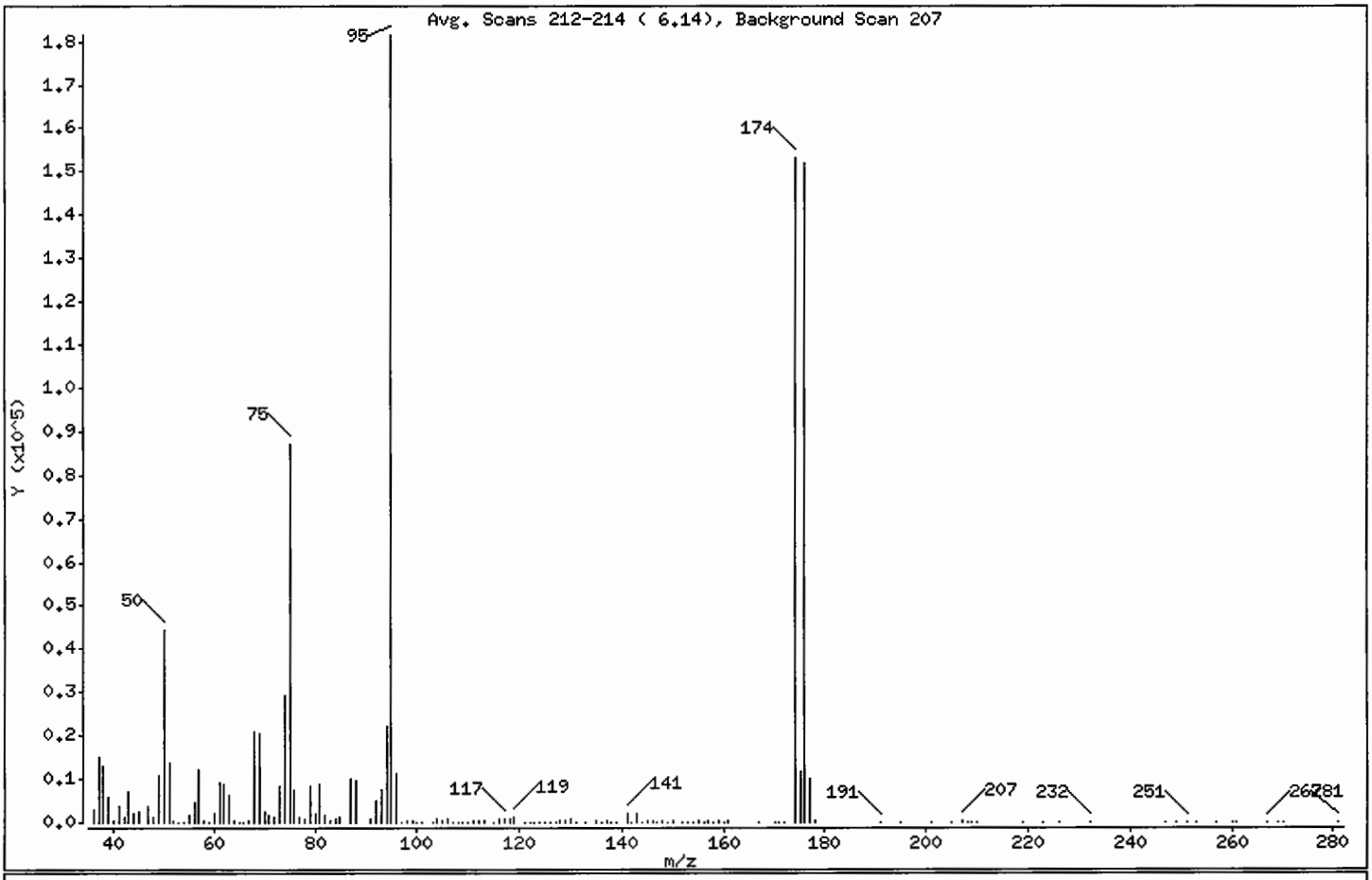
Client ID: BFB | Instrument: 5972hp71.i

Sample Info: OI20003-TUN1:JAO

Volume Injected (uL): 2.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

1 bromofluorobenzene




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 15.00 - 40.00% of mass 95 | 24.45 |
| 75 | 30.00 - 60.00% of mass 95 | 47.92 |
| 96 | 5.00 - 9.00% of mass 95 | 6.17 |
| 173 | Less than 2.00% of mass 174 | 0.00 ( 0.00) |
| 174 | Greater than 50.00% of mass 95 | 84.35 |
| 175 | 5.00 - 9.00% of mass 174 | 6.53 ( 7.74) |
| 176 | 95.00 - 101.00% of mass 174 | 83.63 ( 99.15) |
| 177 | 5.00 - 9.00% of mass 176 | 5.59 ( 6.69) |

Data File: /chem/5972hp71.i/DF100920A71.b/OI20003-TUN171.d

Date : 20-SEP-2010 10:53

Client ID: BFB | Instrument: 5972hp71.i

Sample Info: OI20003-TUN1:JAO

Volume Injected (uL): 2.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

Data File: OI20003-TUN171.d
Spectrum: Avg. Scans 212-214 ( 6.14), Background Scan 207
Location of Maximum: 95.00
Number of points: 147

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 3112 | 74.00 | 29312 | 116.00 | 675 | 158.00 | 37 |
| 37.00 | 15170 | 75.00 | 87000 | 117.00 | 982 | 159.00 | 281 |
| 38.00 | 12823 | 76.00 | 7503 | 118.00 | 849 | 160.00 | 41 |
| 39.00 | 5716 | 77.00 | 1288 | 119.00 | 1109 | 161.00 | 234 |
| 40.00 | 213 | 78.00 | 640 | 121.00 | 34 | 167.00 | 43 |
| 41.00 | 3580 | 79.00 | 8320 | 122.00 | 84 | 170.00 | 41 |
| 42.00 | 1221 | 80.00 | 2038 | 123.00 | 47 | 171.00 | 37 |
| 43.00 | 7060 | 81.00 | 8685 | 124.00 | 163 | 172.00 | 153 |
| 44.00 | 2264 | 82.00 | 1841 | 125.00 | 143 | 174.00 | 153088 |
| 45.00 | 2361 | 83.00 | 289 | 126.00 | 45 | 175.00 | 11853 |
| 47.00 | 3715 | 84.00 | 746 | 127.00 | 49 | 176.00 | 151808 |
| 48.00 | 1349 | 85.00 | 1401 | 128.00 | 580 | 177.00 | 10154 |
| 49.00 | 10757 | 87.00 | 9975 | 129.00 | 258 | 178.00 | 263 |
| 50.00 | 44376 | 88.00 | 9613 | 130.00 | 635 | 191.00 | 177 |
| 51.00 | 13637 | 91.00 | 948 | 131.00 | 207 | 195.00 | 9 |
| 52.00 | 422 | 92.00 | 4965 | 133.00 | 176 | 201.00 | 33 |
| 53.00 | 11 | 93.00 | 7567 | 135.00 | 348 | 205.00 | 36 |
| 54.00 | 86 | 94.00 | 22048 | 136.00 | 70 | 207.00 | 476 |
| 55.00 | 1599 | 95.00 | 181504 | 137.00 | 420 | 208.00 | 82 |
| 56.00 | 4800 | 96.00 | 11200 | 138.00 | 38 | 209.00 | 110 |
| 57.00 | 11939 | 97.00 | 39 | 139.00 | 98 | 210.00 | 32 |
| 58.00 | 377 | 98.00 | 389 | 141.00 | 1917 | 219.00 | 37 |
| 59.00 | 5 | 99.00 | 392 | 142.00 | 180 | 223.00 | 33 |
| 60.00 | 2153 | 100.00 | 31 | 143.00 | 1906 | 226.00 | 34 |
| 61.00 | 9381 | 101.00 | 74 | 144.00 | 191 | 232.00 | 133 |
| 62.00 | 8775 | 103.00 | 80 | 145.00 | 260 | 247.00 | 35 |
| 63.00 | 6156 | 104.00 | 870 | 146.00 | 292 | 249.00 | 42 |
| 64.00 | 559 | 105.00 | 272 | 147.00 | 80 | 251.00 | 104 |
| 65.00 | 39 | 106.00 | 954 | 148.00 | 495 | 253.00 | 8 |
| 66.00 | 21 | 107.00 | 162 | 149.00 | 69 | 257.00 | 40 |
| 67.00 | 375 | 108.00 | 87 | 150.00 | 310 | 260.00 | 8 |
| 68.00 | 20792 | 109.00 | 88 | 152.00 | 93 | 261.00 | 34 |
| 69.00 | 20320 | 110.00 | 172 | 153.00 | 182 | 267.00 | 162 |
| 70.00 | 2348 | 111.00 | 245 | 154.00 | 179 | 269.00 | 71 |
| 71.00 | 1847 | 112.00 | 317 | 155.00 | 319 | 270.00 | 60 |

Data File: /chem/5972hp71.i/DF100920A71.b/OI20003-TUN171.d

Date : 20-SEP-2010 10:53

Client ID: BFB | Instrument: 5972hp71.i

Sample Info: OI20003-TUN1:JAO

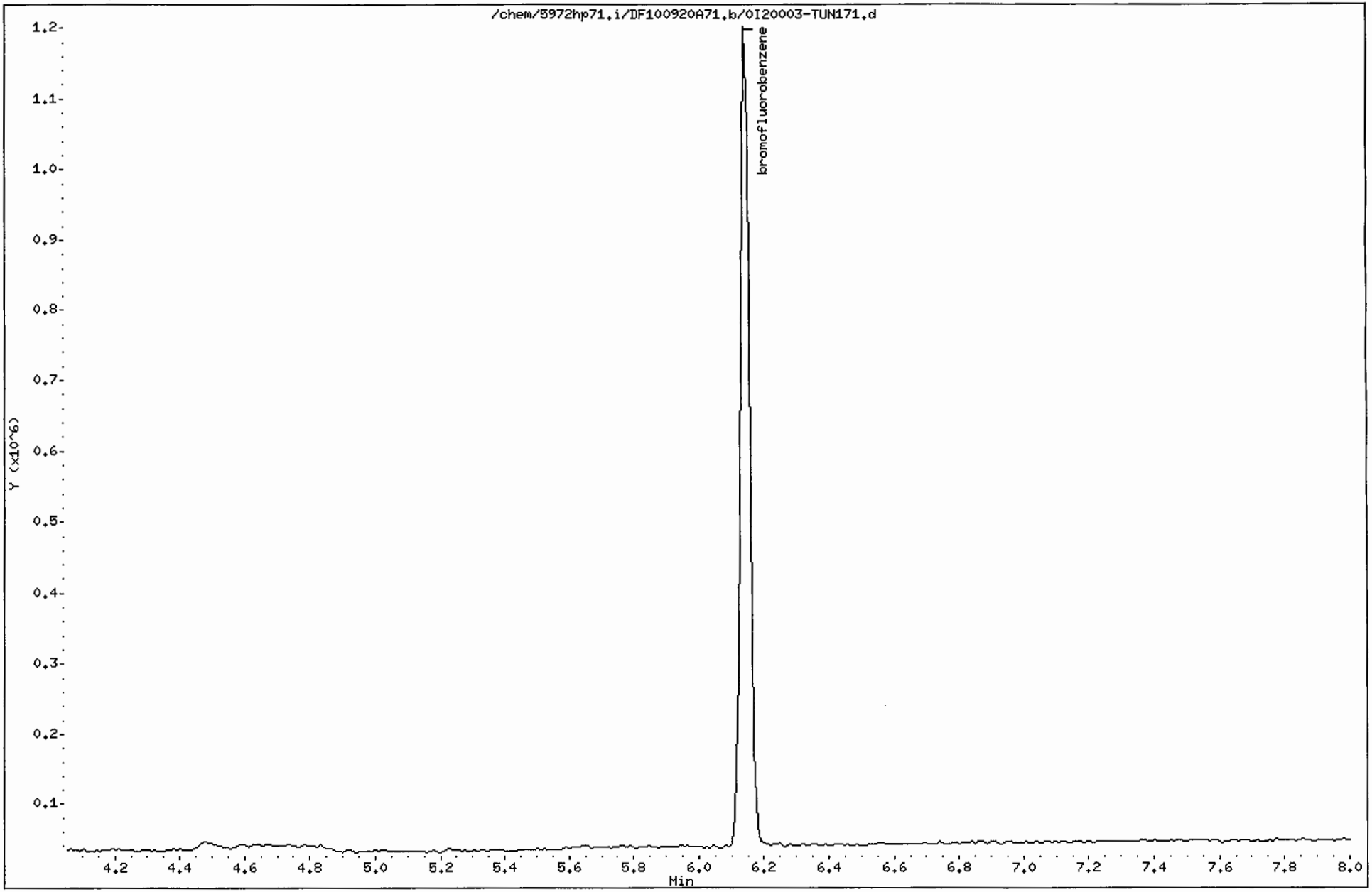
Volume Injected (uL): 2.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

Data File: OI20003-TUN171.d
Spectrum: Avg. Scans 212-214 ( 6.14), Background Scan 207
Location of Maximum: 95.00
Number of points: 147

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 72.00 | 1280 | 113.00 | 361 | 156.00 | 11 | 281.00 | 177 |
| 73.00 | 8263 | 115.00 | 205 | 157.00 | 253 | | |

Data File: /chem/5972hp71.i/DF100920A71.b/OI20003-TUN171.d
Date : 20-SEP-2010 10:53
Client ID: BFB
Instrument: 5972hp71.i
Sample Info: OI20003-TUN1:JAO
Volume Injected (uL): 2.0
Operator: JAO
Column phase: SPB-624
Column diameter: 0.32



## b. Blank Data

Arranged by type of blank (method, storage, instrument) in chronological order, by instrument. Shall include:

- Tabulated Results (ANALYSIS DATA SHEET)
- RIC and Quantitation report.
- Target compound spectra with lab-generated standard spectra.
- Quantitation/Calculation of TIC concentrations.
- GC/MS library search spectra for TICs.

# ANALYSIS DATA SHEET

*SW 8260B*

**VBLKHF**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-BLK171.d | QC Type: Blank

Initial/Final: 25mL / 25mL | Lab ID: 0092014-BLK1 | Column ID: SPB-624

Dilution: 1 | pH: | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 11:54

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.030 | | 0.50 | U |
| 74-87-3 | Chloromethane | | 0.11 | | 0.50 | U |
| 75-01-4 | Vinyl chloride | | 0.070 | | 0.50 | U |
| 74-83-9 | Bromomethane | | 0.11 | | 0.50 | U |
| 75-00-3 | Chloroethane | | 0.20 | | 0.50 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.060 | | 0.50 | U |
| 107-02-8 | Acrolein | | 1.0 | | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.040 | | 0.50 | U |
| 67-64-1 | Acetone | 1.6 | 0.44 | | 2.5 | J |
| 74-88-4 | Iodomethane | | 0.030 | | 0.50 | U |
| 75-15-0 | Carbon disulfide | | 0.020 | | 0.50 | U |
| 107-05-1 | 3-Chloropropene | | 0.050 | | 0.50 | U |
| 75-05-8 | Acetonitrile | | 0.030 | | 0.50 | U |
| 75-09-2 | Methylene chloride | | 0.020 | | 0.50 | U |
| 107-13-1 | Acrylonitrile | | 0.36 | | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.050 | | 0.50 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.020 | | 0.50 | U |
| 126-99-8 | Chloroprene | | 0.020 | | 0.50 | U |
| 108-05-4 | Vinyl acetate | | 0.060 | | 1.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.030 | | 0.50 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.030 | | 0.50 | U |
| 107-12-0 | Propionitrile | | 1.4 | | 25 | U |
| 78-93-3 | 2-Butanone | | 0.28 | | 2.5 | U |
| 126-98-7 | Methacrylonitrile | | 0.39 | | 5.0 | U |
| 74-97-5 | Bromochloromethane | | 0.040 | | 0.50 | U |
| 67-66-3 | Chloroform | | 0.030 | | 0.50 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.020 | | 0.50 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.030 | | 0.50 | U |
| 56-23-5 | Carbon tetrachloride | | 0.030 | | 0.50 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.030 | | 0.50 | U |
| 78-83-1 | Isobutyl alcohol | | 5.9 | | 25 | U |
| 71-43-2 | Benzene | | 0.030 | | 0.50 | U |
| 79-01-6 | Trichloroethene | | 0.030 | | 0.50 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.12 | | 0.50 | U |
| 74-95-3 | Dibromomethane | | 0.030 | | 0.50 | U |
| 80-62-6 | Methyl Methacrylate | | 0.56 | | 5.0 | U |
| 75-27-4 | Bromodichloromethane | | 0.030 | | 0.50 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.040 | | 0.50 | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**VBLKHF**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-BLK171.d | QC Type: Blank

Initial/Final: 25mL / 25mL | Lab ID: 0092014-BLK1 | Column ID: SPB-624

Dilution: 1 | pH: | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 11:54

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-10-1 | 4-Methyl-2-pentanone | | 0.42 | | 2.5 | U |
| 108-88-3 | Toluene | 0.12 | 0.030 | | 0.50 | J |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.050 | | 0.50 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.040 | | 0.50 | U |
| 97-63-2 | Ethyl Methacrylate | | 0.41 | | 5.0 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.030 | | 0.50 | U |
| 127-18-4 | Tetrachloroethene | | 0.060 | | 0.50 | U |
| 591-78-6 | 2-Hexanone | | 0.51 | | 2.5 | U |
| 124-48-1 | Dibromochloromethane | | 0.040 | | 0.50 | U |
| 108-90-7 | Chlorobenzene | | 0.020 | | 0.50 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.020 | | 0.50 | U |
| 100-41-4 | Ethylbenzene | | 0.040 | | 0.50 | U |
| 179601-23-1 | m,p-Xylene | | 0.080 | | 1.0 | U |
| 95-47-6 | o-Xylene | | 0.030 | | 0.50 | U |
| 100-42-5 | Styrene | | 0.020 | | 0.50 | U |
| 75-25-2 | Bromoform | | 0.030 | | 0.50 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.050 | | 0.50 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.090 | | 0.50 | U |
| 110-57-6 | trans-1,4-Dichloro-2-butene | | 0.33 | | 2.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.040 | | 0.50 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.030 | | 0.50 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.060 | | 0.50 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.030 | | 0.50 | U |
| 91-20-3 | Naphthalene | | 0.15 | | 0.50 | U |
| 1330-20-7 | Xylenes (total) | | 0.030 | | 0.50 | U |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 5.009 | 100 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 5.116 | 102 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.540 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.901 | 98 | 63 - 143 | |

| CAS NO. | TICS | CONC.(ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.0 | | | | U |

Environmental Testing Laboratories

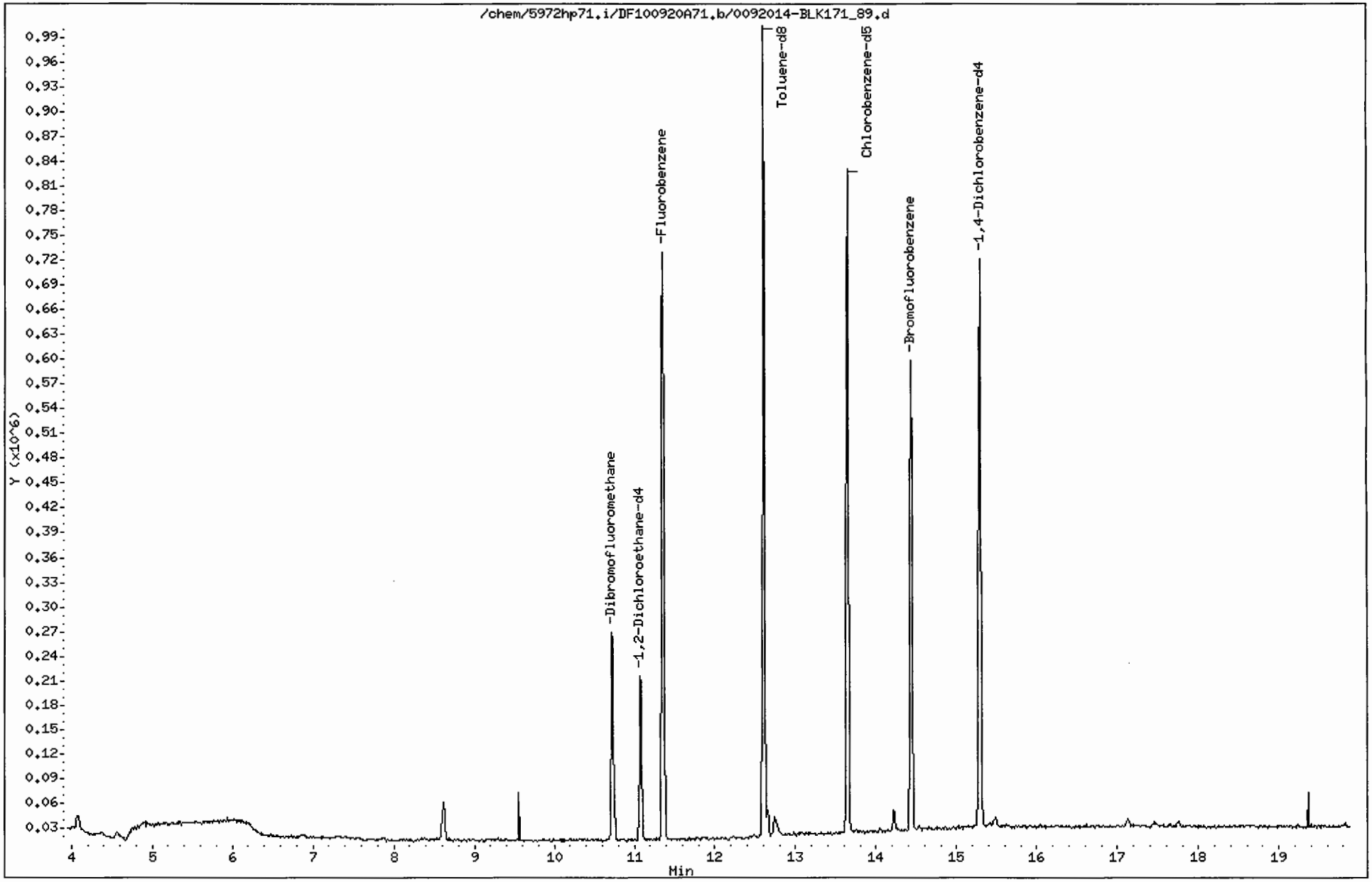
CompuChem

A Division Of

Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BLK171_89.d
Date : 20-SEP-2010 11:54
Client ID: VBLKHF
Sample Info: 0092014-BLK1:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BLK171_89.d
Report Date: 21-Sep-2010 14:33

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/0092014-BLK171_89.d
Lab Smp Id: 0092014-BLK1 Client Smp ID: VBLKHF
Inj Date : 20-SEP-2010 11:54
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 0092014-BLK1:JAO
Misc Info : VBLKHF
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 10 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.364 | 11.362 | (1.000) | 579775 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.648 | 13.646 | (1.000) | 396418 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.291 | 15.289 | (1.000) | 186513 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.725 | 10.733 | (0.944) | 157469 | 125.220 | 5.0 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.079 | 11.087 | (0.975) | 130025 | 127.905 | 5.1 |
| $ 6 Toluene-d8 | 98 | 12.604 | 12.602 | (0.924) | 535825 | 113.509 | 4.5 |
| $ 7 Bromofluorobenzene | 95 | 14.435 | 14.433 | (0.944) | 190707 | 122.515 | 4.9 |
| 8 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 9 Chloromethane | 50 | Compound Not Detected. | | | | | |
| 10 Vinyl Chloride | 62 | Compound Not Detected. | | | | | |
| 11 Bromomethane | 94 | Compound Not Detected. | | | | | |
| 12 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 13 Trichlorofluoromethane | 101 | Compound Not Detected. | | | | | |
| 14 Acrolein | 56 | Compound Not Detected. | | | | | |
| 17 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 18 Acetone | 43 | 7.871 | 7.869 | (0.693) | 7148 | 39.5255 | 1.6(a) |
| 19 Iodomethane | 142 | Compound Not Detected. | | | | | |

MH 9.21.10

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BLK171_89.d
Report Date: 21-Sep-2010 14:33

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 20 Carbon disulfide | 76 | Compound Not Detected. | | | | | |
| 22 3-Chloropropene | 39 | Compound Not Detected. | | | | | |
| 23 Acetonitrile | 41 | Compound Not Detected. | | | | | |
| 25 Methylene Chloride | 84 | Compound Not Detected. | | | | | |
| 26 Acrylonitrile | 53 | Compound Not Detected. | | | | | |
| 28 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 31 Vinyl acetate | 43 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 33 Chloroprene | 53 | Compound Not Detected. | | | | | |
| 34 2-butanone | 43 | Compound Not Detected. | | | | | |
| 35 2,2-Dichloropropane | 77 | Compound Not Detected. | | | | | |
| 36 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 Propionitrile | 54 | Compound Not Detected. | | | | | |
| 38 Methacrylonitrile | 41 | Compound Not Detected. | | | | | |
| 39 Bromochloromethane | 128 | Compound Not Detected. | | | | | |
| 40 Chloroform | 83 | Compound Not Detected. | | | | | |
| 42 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 44 1,1-dichloropropene | 75 | Compound Not Detected. | | | | | |
| 45 Isobutyl alcohol | 43 | Compound Not Detected. | | | | | |
| 46 Carbon Tetrachloride | 117 | Compound Not Detected. | | | | | |
| 47 Benzene | 78 | Compound Not Detected. | | | | | |
| 48 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 49 Trichloroethene | 130 | Compound Not Detected. | | | | | |
| 51 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Methylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 54 Dibromomethane | 174 | Compound Not Detected. | | | | | |
| 55 Bromodichloromethane | 83 | Compound Not Detected. | | | | | |
| 57 cis-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 58 4-Methyl-2-pentanone | 43 | Compound Not Detected. | | | | | |
| 59 Toluene | 92 | 12.654 | 12.652 | (0.927) | 10054 | 2.88181 | 0.12(a) |
| 60 Ethylmethacrylate | 69 | Compound Not Detected. | | | | | |
| 61 trans-1,3-Dichloropropene | 75 | Compound Not Detected. | | | | | |
| 62 1,1,2-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 63 2-hexanone | 43 | Compound Not Detected. | | | | | |
| 64 1,3-Dichloropropane | 76 | Compound Not Detected. | | | | | |
| 65 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 66 Dibromochloromethane | 129 | Compound Not Detected. | | | | | |
| 69 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 70 Ethylbenzene | 106 | Compound Not Detected. | | | | | |
| 71 1,1,1,2-Tetrachloroethane | 131 | Compound Not Detected. | | | | | |
| 72 m,p-Xylene | 106 | Compound Not Detected. | | | | | |
| 73 m,p-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 74 o-Xylene | 106 | Compound Not Detected. | | | | | |
| 75 o-Xylene (part of total) | 106 | Compound Not Detected. | | | | | |
| 76 Styrene | 104 | Compound Not Detected. | | | | | |
| 77 Bromoform | 173 | Compound Not Detected. | | | | | |
| 79 1,1,2,2-Tetrachloroethane | 83 | Compound Not Detected. | | | | | |

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BLK171_89.d
Report Date: 21-Sep-2010 14:33

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 81 1,2,3-Trichloropropane | 110 | Compound Not Detected. | | | | | |
| 80 trans-1,4-dichloro-2-butene | 53 | Compound Not Detected. | | | | | |
| 92 1,3-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 93 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 95 1,2-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |
| 97 1,2,4-Trichlorobenzene | 180 | Compound Not Detected. | | | | | |
| 98 Hexachlorobutadiene | 225 | Compound Not Detected. | | | | | |
| 99 Naphthalene | 128 | Compound Not Detected. | | | | | |
| M 102 Xylene (total) | 106 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BLK171_89.d

Date : 20-SEP-2010 11:54

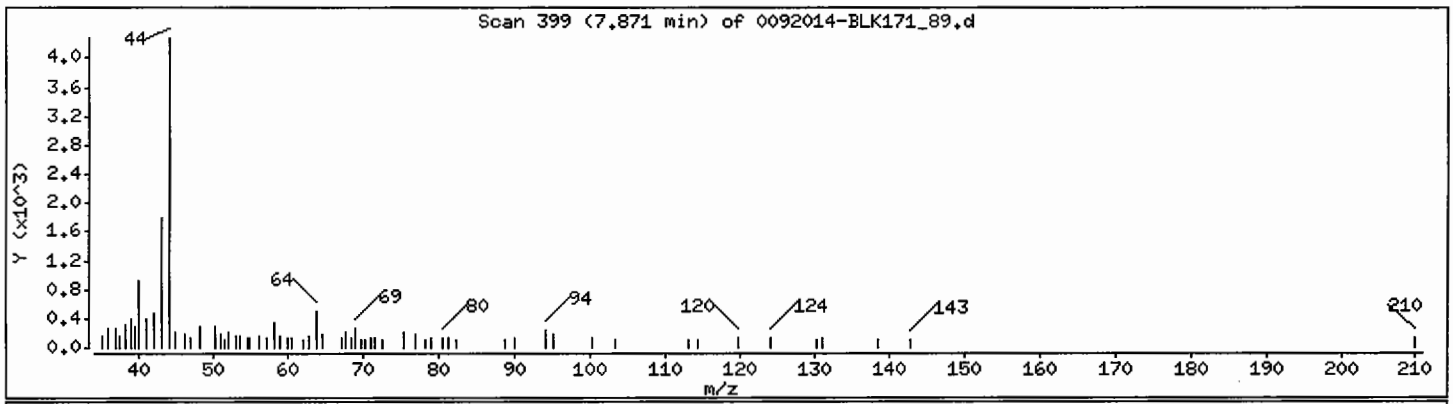
Client ID: VBLKHF | Instrument: 5972hp71.i

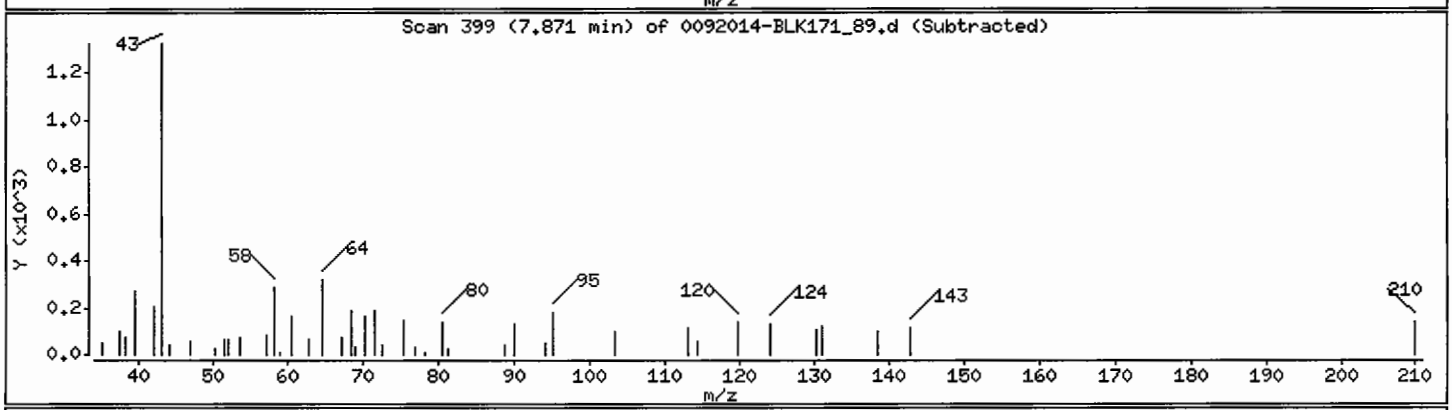
Sample Info: 0092014-BLK1:JAO

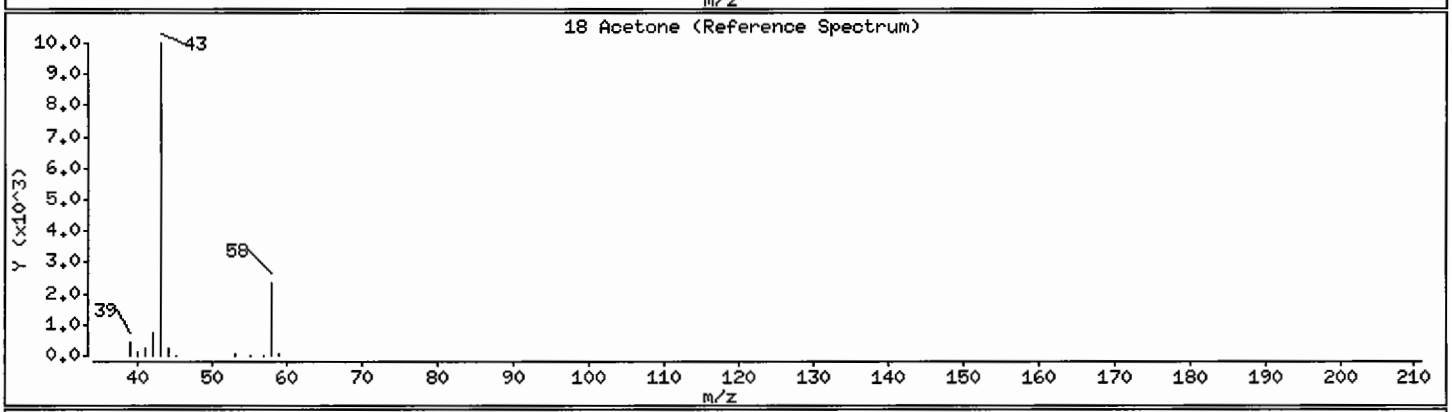
Purge Volume: 25.0 | Operator: JAO

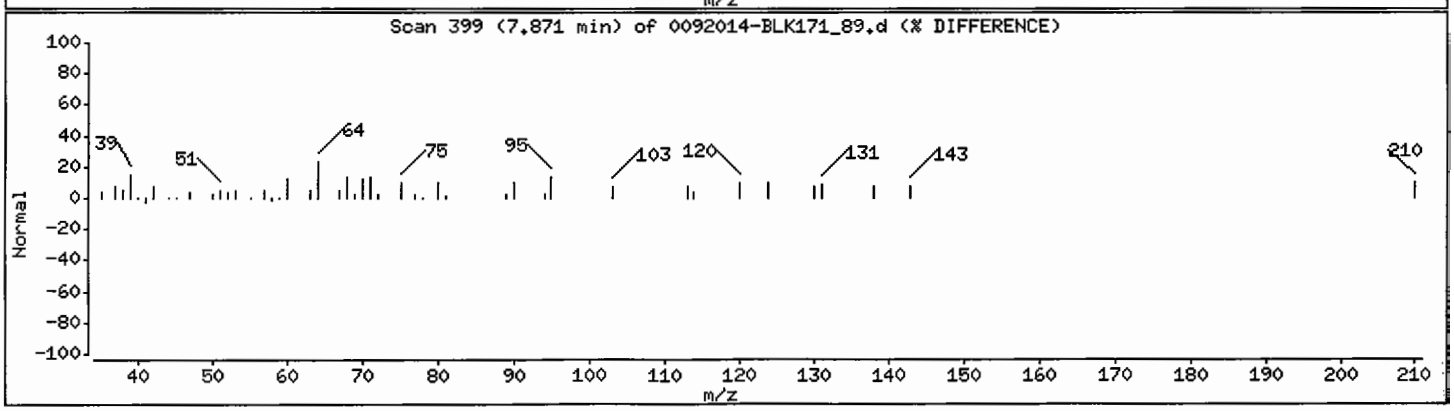
Column phase: SPB-624 | Column diameter: 0.32

18 Acetone | Concentration: 1.6 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BLK171_89.d

Date : 20-SEP-2010 11:54

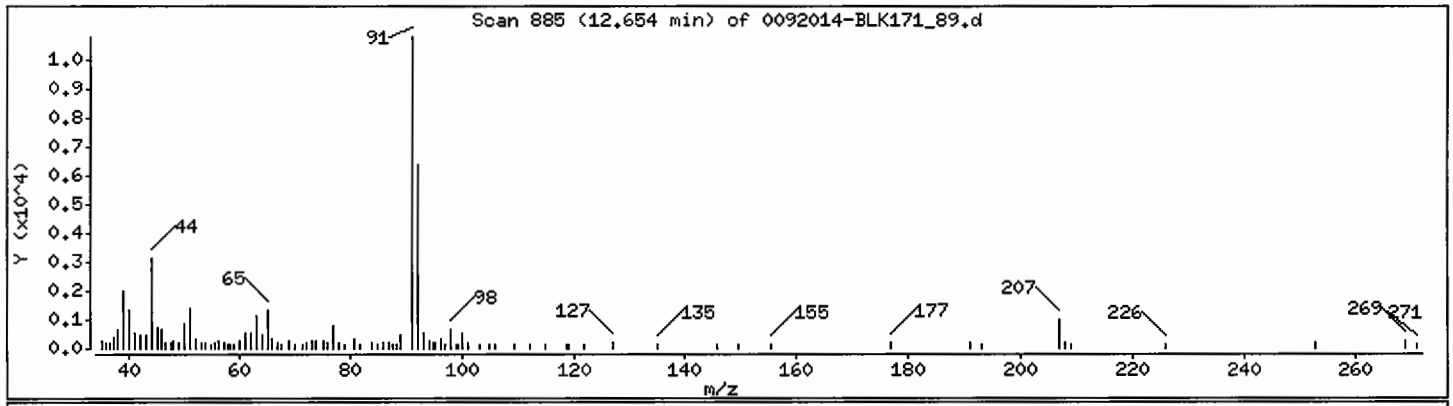
Client ID: VBLKHF | Instrument: 5972hp71.i

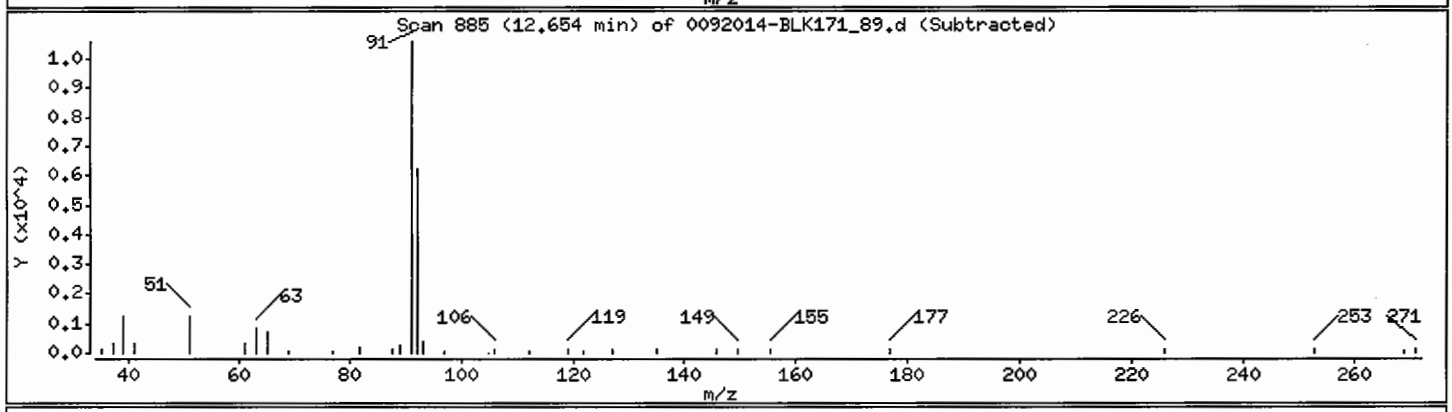
Sample Info: 0092014-BLK1:JAO

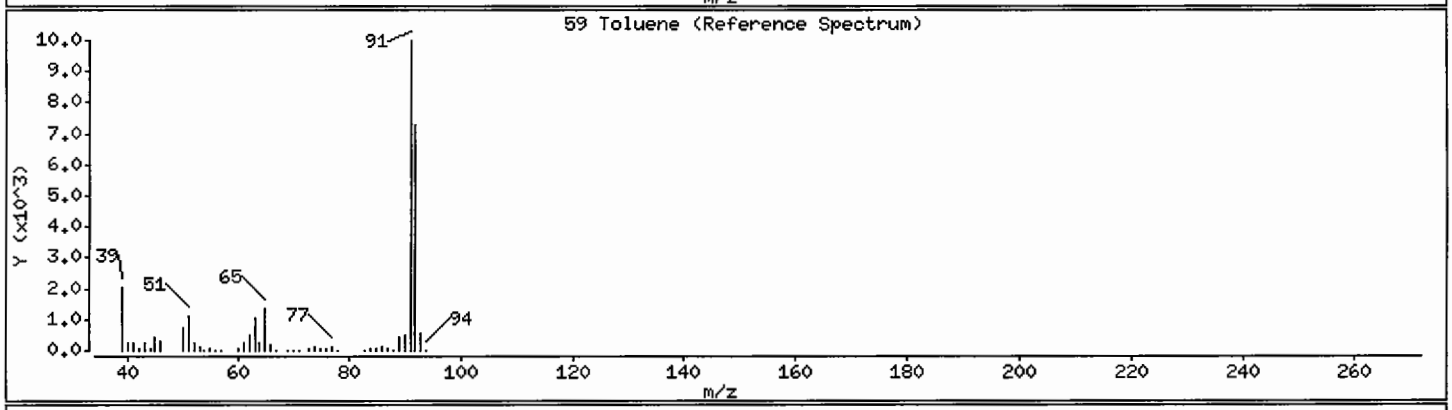
Purge Volume: 25.0 | Operator: JAO

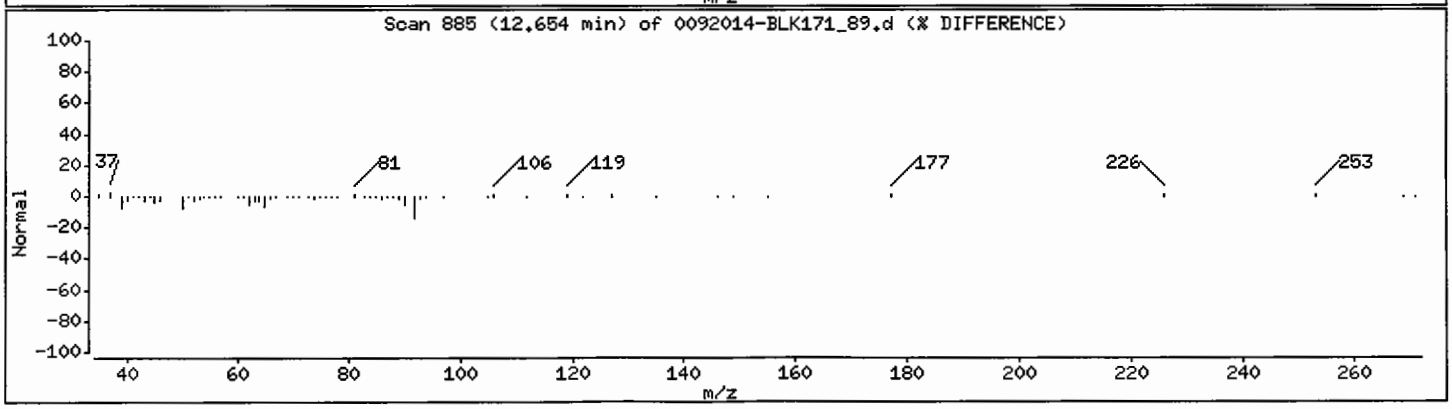
Column phase: SPB-624 | Column diameter: 0.32

59 Toluene | Concentration: 0.12 ug/L



Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BLK171_89.d
Report Date: 21-Sep-2010 14:33

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/0092014-BLK171_89.d
Lab Smp Id: 0092014-BLK1 Client Smp ID: VBLKHF
Inj Date : 20-SEP-2010 11:54
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 0092014-BLK1:JAO
Misc Info : VBLKHF
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 10 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

# c. Laboratory Control Sample Data

- Tabulated Results (ANALYSIS DATA SHEET)
- RIC and Quantitation report

# ANALYSIS DATA SHEET

*SW 8260B*

**VHFLCS**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-BS171.d | QC Type: LCS

Initial/Final: 25mL / 25mL | Lab ID: 0092014-BS1 | Column ID: SPB-624

Dilution: 1 | pH: | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 12:29

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 6.008 | 0.030 | | 0.50 | |
| 74-87-3 | Chloromethane | 5.887 | 0.11 | | 0.50 | |
| 75-01-4 | Vinyl chloride | 5.702 | 0.070 | | 0.50 | |
| 74-83-9 | Bromomethane | 4.802 | 0.11 | | 0.50 | |
| 75-00-3 | Chloroethane | 5.492 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 6.006 | 0.060 | | 0.50 | |
| 107-02-8 | Acrolein | 46.31 | 1.0 | | 5.0 | |
| 75-35-4 | 1,1-Dichloroethene | 5.752 | 0.040 | | 0.50 | |
| 67-64-1 | Acetone | 24.43 | 0.44 | | 2.5 | B |
| 74-88-4 | Iodomethane | 4.855 | 0.030 | | 0.50 | |
| 75-15-0 | Carbon disulfide | 5.452 | 0.020 | | 0.50 | |
| 107-05-1 | 3-Chloropropene | 4.948 | 0.050 | | 0.50 | |
| 75-05-8 | Acetonitrile | 4.863 | 0.030 | | 0.50 | |
| 75-09-2 | Methylene chloride | 5.895 | 0.020 | | 0.50 | |
| 107-13-1 | Acrylonitrile | 52.99 | 0.36 | | 5.0 | |
| 156-60-5 | trans-1,2-Dichloroethene | 5.658 | 0.050 | | 0.50 | |
| 75-34-3 | 1,1-Dichloroethane | 5.469 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | 5.208 | 0.020 | | 0.50 | |
| 108-05-4 | Vinyl acetate | 10.07 | 0.060 | | 1.0 | |
| 156-59-2 | cis-1,2-Dichloroethene | 5.423 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | 5.276 | 0.030 | | 0.50 | |
| 107-12-0 | Propionitrile | 254.0 | 1.4 | | 25 | |
| 78-93-3 | 2-Butanone | 24.87 | 0.28 | | 2.5 | |
| 126-98-7 | Methacrylonitrile | 52.40 | 0.39 | | 5.0 | |
| 74-97-5 | Bromochloromethane | 5.644 | 0.040 | | 0.50 | |
| 67-66-3 | Chloroform | 5.483 | 0.030 | | 0.50 | |
| 71-55-6 | 1,1,1-Trichloroethane | 5.418 | 0.020 | | 0.50 | |
| 563-58-6 | 1,1-Dichloropropene | 5.751 | 0.030 | | 0.50 | |
| 56-23-5 | Carbon tetrachloride | 5.653 | 0.030 | | 0.50 | |
| 107-06-2 | 1,2-Dichloroethane | 5.429 | 0.030 | | 0.50 | |
| 78-83-1 | Isobutyl alcohol | 225.0 | 5.9 | | 25 | |
| 71-43-2 | Benzene | 5.440 | 0.030 | | 0.50 | |
| 79-01-6 | Trichloroethene | 5.626 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 5.412 | 0.12 | | 0.50 | |
| 74-95-3 | Dibromomethane | 5.428 | 0.030 | | 0.50 | |
| 80-62-6 | Methyl Methacrylate | 53.93 | 0.56 | | 5.0 | |
| 75-27-4 | Bromodichloromethane | 5.515 | 0.030 | | 0.50 | |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.513 | 0.040 | | 0.50 | |
| 108-10-1 | 4-Methyl-2-pentanone | 23.99 | 0.42 | | 2.5 | |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**VHFLCS**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-BS171.d | QC Type: LCS

Initial/Final: 25mL / 25mL | Lab ID: 0092014-BS1 | Column ID: SPB-624

Dilution: 1 | pH: | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 12:29

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

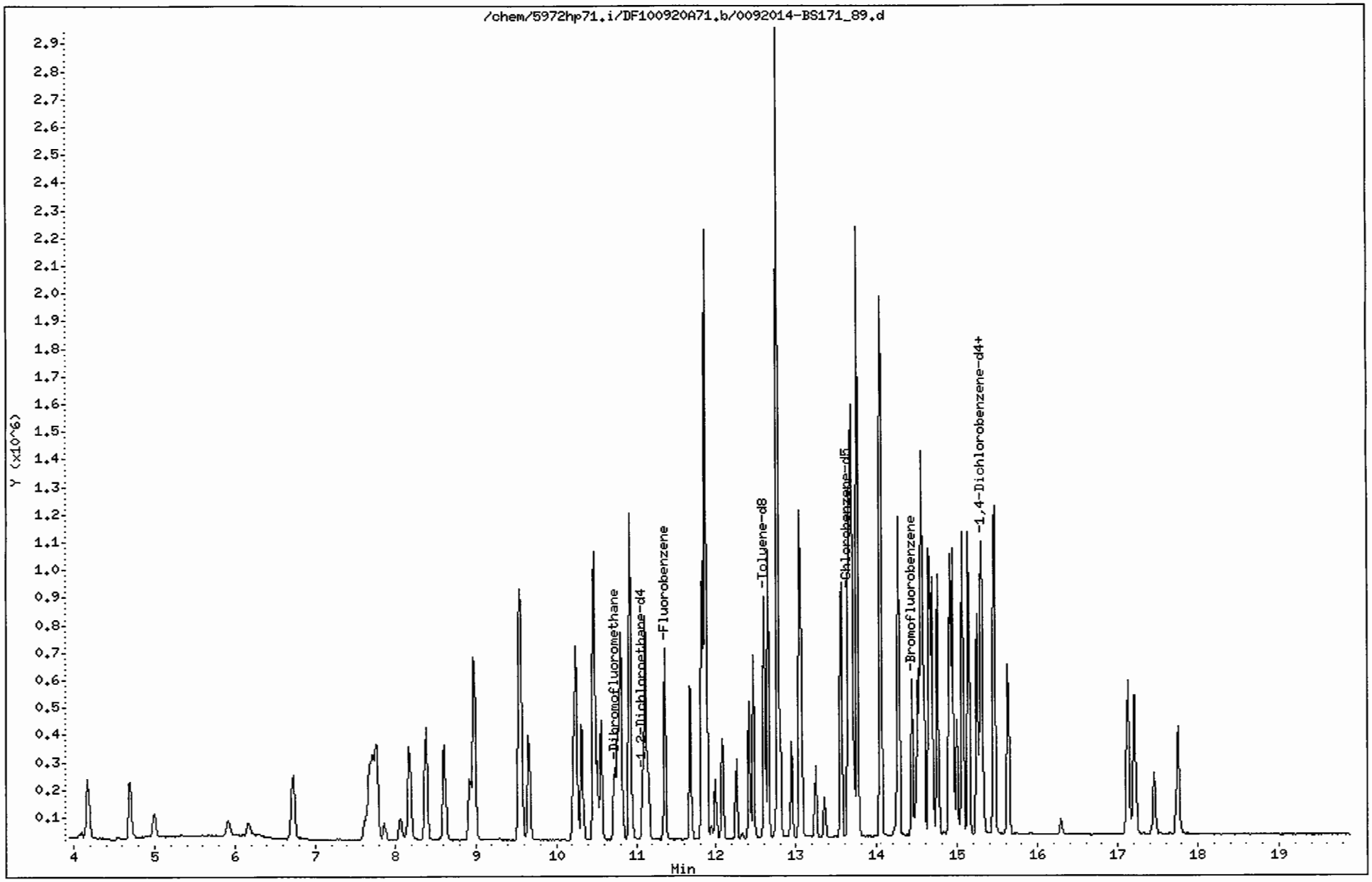
| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 4.735 | 0.030 | | 0.50 | B |
| 10061-02-6 | trans-1,3-Dichloropropene | 4.821 | 0.050 | | 0.50 | |
| 79-00-5 | 1,1,2-Trichloroethane | 4.834 | 0.040 | | 0.50 | |
| 97-63-2 | Ethyl Methacrylate | 48.37 | 0.41 | | 5.0 | |
| 142-28-9 | 1,3-Dichloropropane | 4.792 | 0.030 | | 0.50 | |
| 127-18-4 | Tetrachloroethene | 5.393 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | 23.57 | 0.51 | | 2.5 | |
| 124-48-1 | Dibromochloromethane | 4.690 | 0.040 | | 0.50 | |
| 108-90-7 | Chlorobenzene | 4.938 | 0.020 | | 0.50 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 4.687 | 0.020 | | 0.50 | |
| 100-41-4 | Ethylbenzene | 4.912 | 0.040 | | 0.50 | |
| 179601-23-1 | m,p-Xylene | 9.954 | 0.080 | | 1.0 | |
| 95-47-6 | o-Xylene | 4.890 | 0.030 | | 0.50 | |
| 100-42-5 | Styrene | 4.852 | 0.020 | | 0.50 | |
| 75-25-2 | Bromoform | 4.763 | 0.030 | | 0.50 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.053 | 0.050 | | 0.50 | |
| 96-18-4 | 1,2,3-Trichloropropane | 4.703 | 0.090 | | 0.50 | |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 18.68 | 0.33 | | 2.0 | |
| 541-73-1 | 1,3-Dichlorobenzene | 5.318 | 0.040 | | 0.50 | |
| 106-46-7 | 1,4-Dichlorobenzene | 5.377 | 0.030 | | 0.50 | |
| 95-50-1 | 1,2-Dichlorobenzene | 5.167 | 0.030 | | 0.50 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.972 | 0.060 | | 0.50 | |
| 87-68-3 | Hexachlorobutadiene | 5.566 | 0.030 | | 0.50 | |
| 91-20-3 | Naphthalene | 4.783 | 0.15 | | 0.50 | |
| 1330-20-7 | Xylenes (total) | 14.84 | 0.030 | | 0.50 | |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.904 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.879 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.436 | 89 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.759 | 95 | 63 - 143 | |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BS171_89.d
Date : 20-SEP-2010 12:29
Client ID: VHFLCS
Sample Info: 0092014-BS1:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BS171_89.d
Report Date: 21-Sep-2010 14:23

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/0092014-BS171_89.d
Lab Smp Id: 0092014-BS1 Client Smp ID: VHFLCS
Inj Date : 20-SEP-2010 12:29
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 0092014-BS1:JAO
Misc Info : VHFLCS
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 11 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.359 | 11.362 | (1.000) | 560088 | 125.000 | |
| 2 Chlorobenzene-d5 | 117 | 13.642 | 13.646 | (1.000) | 398242 | 125.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 15.296 | 15.289 | (1.000) | 200765 | 125.000 | |
| 4 Dibromofluoromethane | 113 | 10.729 | 10.733 | (0.945) | 148929 | 122.592 | 4.9 |
| 5 1,2-Dichloroethane-d4 | 65 | 11.084 | 11.087 | (0.976) | 119795 | 121.984 | 4.9 |
| 6 Toluene-d8 | 98 | 12.609 | 12.602 | (0.924) | 525928 | 110.902 | 4.4 |
| 7 Bromofluorobenzene | 95 | 14.440 | 14.433 | (0.944) | 199368 | 118.987 | 4.8 |
| 8 Dichlorodifluoromethane | 85 | 4.175 | 4.168 | (0.368) | 301229 | 150.208 | 6.0 |
| 9 Chloromethane | 50 | 4.697 | 4.690 | (0.413) | 300852 | 147.165 | 5.9 |
| 10 Vinyl Chloride | 62 | 4.992 | 4.995 | (0.439) | 124641 | 142.554 | 5.7 |
| 11 Bromomethane | 94 | 5.917 | 5.920 | (0.521) | 53326 | 120.054 | 4.8 |
| 12 Chloroethane | 64 | 6.163 | 6.176 | (0.543) | 44595 | 137.290 | 5.5 |
| 13 Trichlorofluoromethane | 101 | 6.724 | 6.727 | (0.592) | 285976 | 150.144 | 6.0 |
| 14 Acrolein | 56 | 7.619 | 7.623 | (0.671) | 81121 | 1157.85 | 46 |
| 17 1,1-Dichloroethene | 96 | 7.777 | 7.780 | (0.685) | 159161 | 143.789 | 5.8 |

pub 9-21-10

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BS171_89.d
Report Date: 21-Sep-2010 14:23

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 18 Acetone | 43 | 7.866 | 7.869 | (0.692) | 106696 | 610.723 | 24 |
| 19 Iodomethane | 142 | 8.072 | 8.066 | (0.711) | 136182 | 121.373 | 4.9 |
| 20 Carbon disulfide | 76 | 8.180 | 8.184 | (0.720) | 653180 | 136.306 | 5.5 |
| 22 3-Chloropropene | 39 | 8.387 | 8.390 | (0.738) | 216767 | 123.690 | 4.9 |
| 23 Acetonitrile | 41 | 8.387 | 8.390 | (0.738) | 341537 | 121.587 | 4.9 |
| 25 Methylene Chloride | 84 | 8.613 | 8.617 | (0.758) | 180088 | 147.364 | 5.9 |
| 26 Acrylonitrile | 53 | 8.987 | 8.981 | (0.791) | 268116 | 1324.64 | 53 |
| 28 trans-1,2-Dichloroethene | 96 | 8.978 | 8.981 | (0.790) | 175446 | 141.459 | 5.7 |
| 31 Vinyl acetate | 43 | 9.548 | 9.552 | (0.841) | 742090 | 251.665 | 10 |
| 32 1,1-Dichloroethane | 63 | 9.568 | 9.571 | (0.842) | 321429 | 136.719 | 5.5 |
| 33 Chloroprene | 53 | 9.657 | 9.660 | (0.850) | 257475 | 130.201 | 5.2 |
| 34 2-butanone | 43 | 10.208 | 10.211 | (0.899) | 203546 | 621.711 | 25 |
| 35 2,2-Dichloropropane | 77 | 10.237 | 10.241 | (0.901) | 243254 | 131.902 | 5.3 |
| 36 cis-1,2-Dichloroethene | 96 | 10.257 | 10.250 | (0.903) | 176433 | 135.573 | 5.4 |
| 37 Propionitrile | 54 | 10.316 | 10.319 | (0.908) | 453499 | 6350.72 | 250 |
| 38 Methacrylonitrile | 41 | 10.473 | 10.477 | (0.922) | 652583 | 1310.00 | 52 |
| 39 Bromochloromethane | 128 | 10.513 | 10.516 | (0.925) | 60663 | 141.096 | 5.6 |
| 40 Chloroform | 83 | 10.562 | 10.565 | (0.930) | 301224 | 137.066 | 5.5 |
| 42 1,1,1-Trichloroethane | 97 | 10.769 | 10.772 | (0.948) | 247489 | 135.451 | 5.4 |
| 44 1,1-dichloropropene | 75 | 10.926 | 10.929 | (0.962) | 265592 | 143.775 | 5.8 |
| 45 Isobutyl alcohol | 43 | 10.926 | 10.920 | (0.962) | 145266 | 5625.98 | 230 |
| 46 Carbon Tetrachloride | 117 | 10.926 | 10.929 | (0.962) | 217063 | 141.331 | 5.7 |
| 47 Benzene | 78 | 11.113 | 11.116 | (0.978) | 642273 | 135.992 | 5.4 |
| 48 1,2-Dichloroethane | 62 | 11.153 | 11.156 | (0.982) | 160559 | 135.723 | 5.4 |
| 49 Trichloroethene | 130 | 11.684 | 11.677 | (1.029) | 159949 | 140.660 | 5.6 |
| 51 1,2-Dichloropropane | 63 | 11.881 | 11.884 | (1.046) | 162256 | 135.305 | 5.4 |
| 52 Methylmethacrylate | 69 | 11.871 | 11.874 | (1.045) | 550715 | 1348.18 | 54 |
| 54 Dibromomethane | 174 | 11.989 | 11.992 | (1.055) | 66538 | 135.694 | 5.4 |
| 55 Bromodichloromethane | 83 | 12.078 | 12.081 | (1.063) | 204563 | 137.884 | 5.5 |
| 57 cis-1,3-Dichloropropene | 75 | 12.412 | 12.415 | (1.093) | 228882 | 137.827 | 5.5 |
| 58 4-Methyl-2-pentanone | 43 | 12.471 | 12.465 | (0.914) | 545154 | 599.825 | 24 |
| 59 Toluene | 92 | 12.658 | 12.652 | (0.928) | 414927 | 118.387 | 4.7 |
| 60 Ethylmethacrylate | 69 | 12.767 | 12.770 | (0.936) | 1193651 | 1209.27 | 48 |
| 61 trans-1,3-Dichloropropene | 75 | 12.806 | 12.799 | (0.939) | 190676 | 120.518 | 4.8 |
| 62 1,1,2-Trichloroethane | 97 | 12.944 | 12.947 | (0.949) | 92133 | 120.855 | 4.8 |
| 63 2-hexanone | 43 | 13.042 | 13.045 | (0.956) | 378090 | 589.237 | 24 |
| 64 1,3-Dichloropropane | 76 | 13.072 | 13.075 | (0.958) | 174386 | 119.791 | 4.8 |
| 65 Tetrachloroethene | 164 | 13.052 | 13.055 | (0.957) | 152580 | 134.834 | 5.4 |
| 66 Dibromochloromethane | 129 | 13.239 | 13.242 | (0.970) | 115382 | 117.249 | 4.7 |
| 69 Chlorobenzene | 112 | 13.672 | 13.665 | (1.002) | 405888 | 123.459 | 4.9 |
| 70 Ethylbenzene | 106 | 13.682 | 13.685 | (1.003) | 222518 | 122.796 | 4.9 |
| 71 1,1,1,2-Tetrachloroethane | 131 | 13.701 | 13.705 | (1.004) | 130566 | 117.178 | 4.7 |
| 72 m,p-Xylene | 106 | 13.761 | 13.764 | (1.009) | 560185 | 248.854 | 10 |
| 73 m,p-Xylene (part of total) | 106 | 13.761 | 13.764 | (1.009) | 560185 | 248.854 | 10 |
| 74 o-Xylene | 106 | 14.046 | 14.049 | (1.030) | 257883 | 122.238 | 4.9 |
| 75 o-Xylene (part of total) | 106 | 14.046 | 14.049 | (1.030) | 257883 | 122.238 | 4.9 |
| 76 Styrene | 104 | 14.056 | 14.049 | (1.030) | 427386 | 121.295 | 4.9 |

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BS171_89.d
Report Date: 21-Sep-2010 14:23

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 77 Bromoform | 173 | 14.253 | 14.246 | (1.045) | 71966 | 119.067 | 4.8 |
| 79 1,1,2,2-Tetrachloroethane | 83 | 14.489 | 14.492 | (0.947) | 122102 | 126.320 | 5.1 |
| 81 1,2,3-Trichloropropane | 110 | 14.558 | 14.551 | (1.067) | 26747 | 117.569 | 4.7 |
| 80 trans-1,4-dichloro-2-butene | 53 | 14.518 | 14.512 | (1.064) | 130934 | 467.092 | 19 |
| 92 1,3-Dichlorobenzene | 146 | 15.247 | 15.250 | (0.997) | 329256 | 132.943 | 5.3 |
| 93 1,4-Dichlorobenzene | 146 | 15.315 | 15.309 | (1.001) | 335087 | 134.431 | 5.4 |
| 95 1,2-Dichlorobenzene | 146 | 15.630 | 15.634 | (1.022) | 266570 | 129.179 | 5.2 |
| 97 1,2,4-Trichlorobenzene | 180 | 17.126 | 17.130 | (1.120) | 236707 | 149.308 | 6.0 |
| 98 Hexachlorobutadiene | 225 | 17.215 | 17.218 | (1.125) | 137821 | 139.154 | 5.6 |
| 99 Naphthalene | 128 | 17.461 | 17.464 | (1.142) | 239567 | 119.566 | 4.8 |
| M 102 Xylene (total) | 106 | | | | 818068 | 387.770 | 16 |

# ANALYSIS DATA SHEET

*SW 8260B*

**VHFLCSD**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-BSD171.d | QC Type: LCS Dup

Initial/Final: 25mL / 25mL | Lab ID: 0092014-BSD1 | Column ID: SPB-624

Dilution: 1 | pH: | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 12:57

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.918 | 0.030 | | 0.50 | |
| 74-87-3 | Chloromethane | 6.190 | 0.11 | | 0.50 | |
| 75-01-4 | Vinyl chloride | 5.717 | 0.070 | | 0.50 | |
| 74-83-9 | Bromomethane | 5.334 | 0.11 | | 0.50 | |
| 75-00-3 | Chloroethane | 5.558 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 5.562 | 0.060 | | 0.50 | |
| 107-02-8 | Acrolein | 47.00 | 1.0 | | 5.0 | |
| 75-35-4 | 1,1-Dichloroethene | 5.482 | 0.040 | | 0.50 | |
| 67-64-1 | Acetone | 24.75 | 0.44 | | 2.5 | B |
| 74-88-4 | Iodomethane | 5.525 | 0.030 | | 0.50 | |
| 75-15-0 | Carbon disulfide | 5.461 | 0.020 | | 0.50 | |
| 107-05-1 | 3-Chloropropene | 5.422 | 0.050 | | 0.50 | |
| 75-05-8 | Acetonitrile | 5.336 | 0.030 | | 0.50 | |
| 75-09-2 | Methylene chloride | 5.839 | 0.020 | | 0.50 | |
| 107-13-1 | Acrylonitrile | 55.02 | 0.36 | | 5.0 | |
| 156-60-5 | trans-1,2-Dichloroethene | 5.653 | 0.050 | | 0.50 | |
| 75-34-3 | 1,1-Dichloroethane | 5.773 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | 5.455 | 0.020 | | 0.50 | |
| 108-05-4 | Vinyl acetate | 10.83 | 0.060 | | 1.0 | |
| 156-59-2 | cis-1,2-Dichloroethene | 5.391 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | 5.479 | 0.030 | | 0.50 | |
| 107-12-0 | Propionitrile | 268.1 | 1.4 | | 25 | |
| 78-93-3 | 2-Butanone | 27.12 | 0.28 | | 2.5 | |
| 126-98-7 | Methacrylonitrile | 55.73 | 0.39 | | 5.0 | |
| 74-97-5 | Bromochloromethane | 5.687 | 0.040 | | 0.50 | |
| 67-66-3 | Chloroform | 5.572 | 0.030 | | 0.50 | |
| 71-55-6 | 1,1,1-Trichloroethane | 5.323 | 0.020 | | 0.50 | |
| 563-58-6 | 1,1-Dichloropropene | 5.668 | 0.030 | | 0.50 | |
| 56-23-5 | Carbon tetrachloride | 5.357 | 0.030 | | 0.50 | |
| 107-06-2 | 1,2-Dichloroethane | 5.372 | 0.030 | | 0.50 | |
| 78-83-1 | Isobutyl alcohol | 263.2 | 5.9 | | 25 | |
| 71-43-2 | Benzene | 5.564 | 0.030 | | 0.50 | |
| 79-01-6 | Trichloroethene | 5.263 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 5.689 | 0.12 | | 0.50 | |
| 74-95-3 | Dibromomethane | 5.225 | 0.030 | | 0.50 | |
| 80-62-6 | Methyl Methacrylate | 53.88 | 0.56 | | 5.0 | |
| 75-27-4 | Bromodichloromethane | 5.512 | 0.030 | | 0.50 | |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.438 | 0.040 | | 0.50 | |
| 108-10-1 | 4-Methyl-2-pentanone | 24.26 | 0.42 | | 2.5 | |

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**VHFLCSD**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-BSD171.d | QC Type: LCS Dup

Initial/Final: 25mL / 25mL | Lab ID: 0092014-BSD1 | Column ID: SPB-624

Dilution: 1 | pH: | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 12:57

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 4.651 | 0.030 | | 0.50 | B |
| 10061-02-6 | trans-1,3-Dichloropropene | 4.935 | 0.050 | | 0.50 | |
| 79-00-5 | 1,1,2-Trichloroethane | 4.884 | 0.040 | | 0.50 | |
| 97-63-2 | Ethyl Methacrylate | 48.08 | 0.41 | | 5.0 | |
| 142-28-9 | 1,3-Dichloropropane | 4.895 | 0.030 | | 0.50 | |
| 127-18-4 | Tetrachloroethene | 4.721 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | 23.79 | 0.51 | | 2.5 | |
| 124-48-1 | Dibromochloromethane | 4.725 | 0.040 | | 0.50 | |
| 108-90-7 | Chlorobenzene | 4.746 | 0.020 | | 0.50 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 4.688 | 0.020 | | 0.50 | |
| 100-41-4 | Ethylbenzene | 4.655 | 0.040 | | 0.50 | |
| 179601-23-1 | m,p-Xylene | 9.335 | 0.080 | | 1.0 | |
| 95-47-6 | o-Xylene | 4.674 | 0.030 | | 0.50 | |
| 100-42-5 | Styrene | 4.758 | 0.020 | | 0.50 | |
| 75-25-2 | Bromoform | 4.618 | 0.030 | | 0.50 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.064 | 0.050 | | 0.50 | |
| 96-18-4 | 1,2,3-Trichloropropane | 4.485 | 0.090 | | 0.50 | |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 18.22 | 0.33 | | 2.0 | |
| 541-73-1 | 1,3-Dichlorobenzene | 4.690 | 0.040 | | 0.50 | |
| 106-46-7 | 1,4-Dichlorobenzene | 4.729 | 0.030 | | 0.50 | |
| 95-50-1 | 1,2-Dichlorobenzene | 4.664 | 0.030 | | 0.50 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4.750 | 0.060 | | 0.50 | |
| 87-68-3 | Hexachlorobutadiene | 4.833 | 0.030 | | 0.50 | |
| 91-20-3 | Naphthalene | 4.506 | 0.15 | | 0.50 | |
| 1330-20-7 | Xylenes (total) | 14.01 | 0.030 | | 0.50 | |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.841 | 97 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.847 | 97 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.488 | 90 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.578 | 92 | 63 - 143 | |

Environmental Testing Laboratories

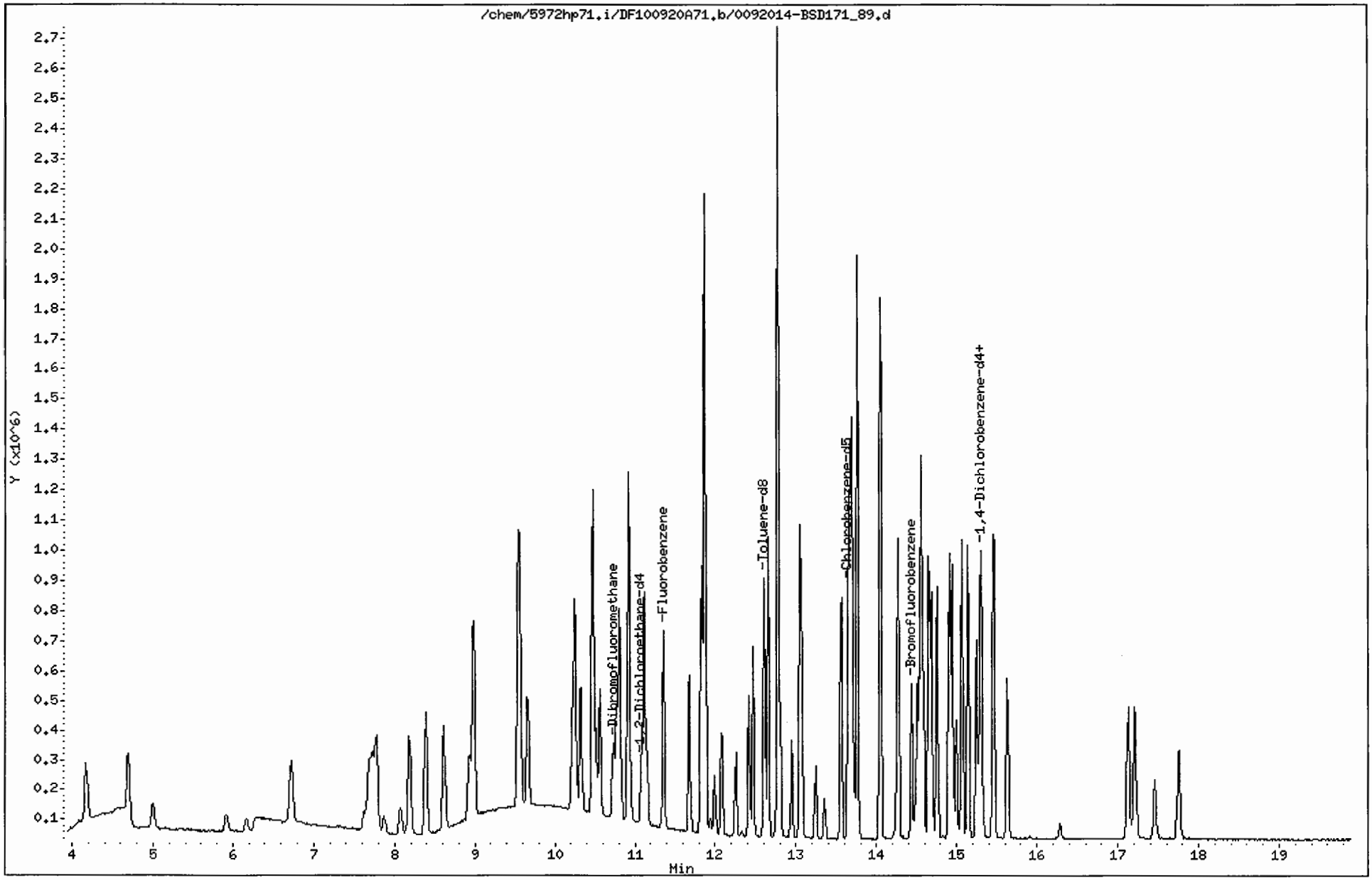
CompuChem

A Division Of

Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BSD171_89.d
Date : 20-SEP-2010 12:57
Client ID: VHFLCSD
Sample Info: 0092014-BSD1:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BSD171_89.d
Report Date: 21-Sep-2010 14:23

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/0092014-BSD171_89.d
Lab Smp Id: 0092014-BSD1 Client Smp ID: VHFLCSD
Inj Date : 20-SEP-2010 12:57
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 0092014-BSD1:JAO
Misc Info : VHFLCSD
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 12 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.360 | 11.362 | (1.000) | 540773 | 125.000 | |
| 2 Chlorobenzene-d5 | 117 | 13.643 | 13.646 | (1.000) | 375350 | 125.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 15.286 | 15.289 | (1.000) | 191028 | 125.000 | |
| 4 Dibromofluoromethane | 113 | 10.730 | 10.733 | (0.945) | 141968 | 121.036 | 4.8 |
| 5 1,2-Dichloroethane-d4 | 65 | 11.084 | 11.087 | (0.976) | 114893 | 121.171 | 4.8 |
| 6 Toluene-d8 | 98 | 12.609 | 12.602 | (0.924) | 501499 | 112.200 | 4.5 |
| 7 Bromofluorobenzene | 95 | 14.440 | 14.433 | (0.945) | 182466 | 114.451 | 4.6 |
| 8 Dichlorodifluoromethane | 85 | 4.175 | 4.168 | (0.368) | 286462 | 147.947 | 5.9 |
| 9 Chloromethane | 50 | 4.697 | 4.690 | (0.413) | 305464 | 154.758 | 6.2 |
| 10 Vinyl Chloride | 62 | 5.002 | 4.995 | (0.440) | 120656 | 142.926 | 5.7 |
| 11 Bromomethane | 94 | 5.917 | 5.920 | (0.521) | 57528 | 133.355 | 5.3 |
| 12 Chloroethane | 64 | 6.173 | 6.176 | (0.543) | 43580 | 138.958 | 5.6 |
| 13 Trichlorofluoromethane | 101 | 6.724 | 6.727 | (0.592) | 255701 | 139.044 | 5.6 |
| 14 Acrolein | 56 | 7.620 | 7.623 | (0.671) | 79487 | 1175.05 | 47 |
| 17 1,1-Dichloroethene | 96 | 7.777 | 7.780 | (0.685) | 146462 | 137.043 | 5.5 |

9-21-10

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BSD171_89.d
Report Date: 21-Sep-2010 14:23

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 18 Acetone | 43 | 7.876 | 7.869 | (0.693) | 104376 | 618.782 | 25 |
| 19 Iodomethane | 142 | 8.072 | 8.066 | (0.711) | 149629 | 138.121 | 5.5 |
| 20 Carbon disulfide | 76 | 8.181 | 8.184 | (0.720) | 631657 | 136.523 | 5.5 |
| 22 3-Chloropropene | 39 | 8.387 | 8.390 | (0.738) | 229369 | 135.555 | 5.4 |
| 23 Acetonitrile | 41 | 8.387 | 8.390 | (0.738) | 361795 | 133.399 | 5.3 |
| 25 Methylene Chloride | 84 | 8.614 | 8.617 | (0.758) | 172480 | 145.987 | 5.8 |
| 26 Acrylonitrile | 53 | 8.988 | 8.981 | (0.791) | 268807 | 1375.49 | 55 |
| 28 trans-1,2-Dichloroethene | 96 | 8.988 | 8.981 | (0.791) | 169242 | 141.330 | 5.7 |
| 31 Vinyl acetate | 43 | 9.549 | 9.552 | (0.841) | 770720 | 270.710 | 11 |
| 32 1,1-Dichloroethane | 63 | 9.568 | 9.571 | (0.842) | 327598 | 144.320 | 5.8 |
| 33 Chloroprene | 53 | 9.657 | 9.660 | (0.850) | 260391 | 136.379 | 5.5 |
| 34 2-butanone | 43 | 10.208 | 10.211 | (0.899) | 214289 | 677.902 | 27 |
| 35 2,2-Dichloropropane | 77 | 10.238 | 10.241 | (0.901) | 243898 | 136.975 | 5.5 |
| 36 cis-1,2-Dichloroethene | 96 | 10.257 | 10.250 | (0.903) | 169337 | 134.768 | 5.4 |
| 37 Propionitrile | 54 | 10.326 | 10.319 | (0.909) | 462151 | 6703.04 | 270 |
| 38 Methacrylonitrile | 41 | 10.474 | 10.477 | (0.922) | 670149 | 1393.31 | 56 |
| 39 Bromochloromethane | 128 | 10.513 | 10.516 | (0.925) | 59018 | 142.173 | 5.7 |
| 40 Chloroform | 83 | 10.562 | 10.565 | (0.930) | 295567 | 139.296 | 5.6 |
| 42 1,1,1-Trichloroethane | 97 | 10.769 | 10.772 | (0.948) | 234751 | 133.069 | 5.3 |
| 44 1,1-dichloropropene | 75 | 10.927 | 10.929 | (0.962) | 252742 | 141.706 | 5.7 |
| 45 Isobutyl alcohol | 43 | 10.927 | 10.920 | (0.962) | 164012 | 6578.87 | 260 |
| 46 Carbon Tetrachloride | 117 | 10.927 | 10.929 | (0.962) | 198614 | 133.937 | 5.4 |
| 47 Benzene | 78 | 11.123 | 11.116 | (0.979) | 634339 | 139.110 | 5.6 |
| 48 1,2-Dichloroethane | 62 | 11.153 | 11.156 | (0.982) | 153384 | 134.289 | 5.4 |
| 49 Trichloroethene | 130 | 11.684 | 11.677 | (1.029) | 144455 | 131.572 | 5.3 |
| 51 1,2-Dichloropropane | 63 | 11.881 | 11.884 | (1.046) | 164668 | 142.221 | 5.7 |
| 52 Methylmethacrylate | 69 | 11.871 | 11.874 | (1.045) | 531252 | 1346.99 | 54 |
| 54 Dibromomethane | 174 | 11.999 | 11.992 | (1.056) | 61843 | 130.623 | 5.2 |
| 55 Bromodichloromethane | 83 | 12.078 | 12.081 | (1.063) | 197393 | 137.803 | 5.5 |
| 57 cis-1,3-Dichloropropene | 75 | 12.413 | 12.415 | (1.093) | 217969 | 135.944 | 5.4 |
| 58 4-Methyl-2-pentanone | 43 | 12.472 | 12.465 | (0.914) | 519601 | 606.577 | 24 |
| 59 Toluene | 92 | 12.659 | 12.652 | (0.928) | 384079 | 116.269 | 4.7 |
| 60 Ethylmethacrylate | 69 | 12.767 | 12.770 | (0.936) | 1118383 | 1202.12 | 48 |
| 61 trans-1,3-Dichloropropene | 75 | 12.806 | 12.799 | (0.939) | 183970 | 123.371 | 4.9 |
| 62 1,1,2-Trichloroethane | 97 | 12.944 | 12.947 | (0.949) | 87733 | 122.102 | 4.9 |
| 63 2-hexanone | 43 | 13.042 | 13.045 | (0.956) | 359685 | 594.741 | 24 |
| 64 1,3-Dichloropropane | 76 | 13.072 | 13.075 | (0.958) | 167896 | 122.367 | 4.9 |
| 65 Tetrachloroethene | 164 | 13.052 | 13.055 | (0.957) | 125875 | 118.019 | 4.7 |
| 66 Dibromochloromethane | 129 | 13.239 | 13.242 | (0.970) | 109567 | 118.130 | 4.7 |
| 69 Chlorobenzene | 112 | 13.672 | 13.665 | (1.002) | 367651 | 118.649 | 4.7 |
| 70 Ethylbenzene | 106 | 13.682 | 13.685 | (1.003) | 198773 | 116.382 | 4.7 |
| 71 1,1,1,2-Tetrachloroethane | 131 | 13.702 | 13.705 | (1.004) | 123075 | 117.191 | 4.7 |
| 72 m,p-Xylene | 106 | 13.761 | 13.764 | (1.009) | 495165 | 233.385 | 9.3 |
| 73 m,p-Xylene (part of total) | 106 | 13.761 | 13.764 | (1.009) | 495165 | 233.385 | 9.3 |
| 74 o-Xylene | 106 | 14.046 | 14.049 | (1.030) | 232336 | 116.845 | 4.7 |
| 75 o-Xylene (part of total) | 106 | 14.046 | 14.049 | (1.030) | 232336 | 116.845 | 4.7 |
| 76 Styrene | 104 | 14.056 | 14.049 | (1.030) | 394998 | 118.940 | 4.8 |

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-BSD171_89.d
Report Date: 21-Sep-2010 14:23

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 77 Bromoform | 173 | 14.253 | 14.246 | (1.045) | 65763 | 115.440 | 4.6 |
| 79 1,1,2,2-Tetrachloroethane | 83 | 14.489 | 14.492 | (0.948) | 116444 | 126.607 | 5.1 |
| 81 1,2,3-Trichloropropane | 110 | 14.548 | 14.551 | (1.066) | 24044 | 112.133 | 4.5 |
| 80 trans-1,4-dichloro-2-butene | 53 | 14.519 | 14.512 | (1.064) | 120371 | 455.599 | 18 |
| 92 1,3-Dichlorobenzene | 146 | 15.247 | 15.250 | (0.997) | 276333 | 117.262 | 4.7 |
| 93 1,4-Dichlorobenzene | 146 | 15.306 | 15.309 | (1.001) | 280421 | 118.234 | 4.7 |
| 95 1,2-Dichlorobenzene | 146 | 15.631 | 15.634 | (1.023) | 228964 | 116.610 | 4.7 |
| 97 1,2,4-Trichlorobenzene | 180 | 17.127 | 17.130 | (1.120) | 179113 | 118.738 | 4.7 |
| 98 Hexachlorobutadiene | 225 | 17.215 | 17.218 | (1.126) | 113863 | 120.824 | 4.8 |
| 99 Naphthalene | 128 | 17.461 | 17.464 | (1.142) | 214776 | 112.657 | 4.5 |
| M 102 Xylene (total) | 106 | | | | 727501 | 365.872 | 15 |

# d. Matrix Spike Data

- Tabulated Results (ANALYSIS DATA SHEET)
- RIC and Quantitation report

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-3MS**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-MS171.d | QC Type: Matrix Spike

Initial/Final: 25mL / 25mL | Lab ID: 0092014-MS1 | Column ID: SPB-624

Dilution: 1 | pH: 1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 19:35

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 6.195 | 0.030 | | 0.50 | |
| 74-87-3 | Chloromethane | 7.309 | 0.11 | | 0.50 | |
| 75-01-4 | Vinyl chloride | 9.342 | 0.070 | | 0.50 | |
| 74-83-9 | Bromomethane | 5.299 | 0.11 | | 0.50 | |
| 75-00-3 | Chloroethane | 16.75 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 5.929 | 0.060 | | 0.50 | |
| 107-02-8 | Acrolein | 67.54 | 1.0 | | 5.0 | |
| 75-35-4 | 1,1-Dichloroethene | 5.728 | 0.040 | | 0.50 | |
| 67-64-1 | Acetone | 25.09 | 0.44 | | 2.5 | B |
| 74-88-4 | Iodomethane | 4.476 | 0.030 | | 0.50 | |
| 75-15-0 | Carbon disulfide | 5.730 | 0.020 | | 0.50 | |
| 107-05-1 | 3-Chloropropene | 6.540 | 0.050 | | 0.50 | |
| 75-05-8 | Acetonitrile | 6.541 | 0.030 | | 0.50 | |
| 75-09-2 | Methylene chloride | 6.179 | 0.020 | | 0.50 | |
| 107-13-1 | Acrylonitrile | 58.89 | 0.36 | | 5.0 | |
| 156-60-5 | trans-1,2-Dichloroethene | 6.428 | 0.050 | | 0.50 | |
| 75-34-3 | 1,1-Dichloroethane | 16.39 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | 6.477 | 0.020 | | 0.50 | |
| 108-05-4 | Vinyl acetate | 9.441 | 0.060 | | 1.0 | |
| 156-59-2 | cis-1,2-Dichloroethene | 30.75 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | 6.119 | 0.030 | | 0.50 | |
| 107-12-0 | Propionitrile | 297.8 | 1.4 | | 25 | |
| 78-93-3 | 2-Butanone | 24.84 | 0.28 | | 2.5 | |
| 126-98-7 | Methacrylonitrile | 58.52 | 0.39 | | 5.0 | |
| 74-97-5 | Bromochloromethane | 5.955 | 0.040 | | 0.50 | |
| 67-66-3 | Chloroform | 6.162 | 0.030 | | 0.50 | |
| 71-55-6 | 1,1,1-Trichloroethane | 5.632 | 0.020 | | 0.50 | |
| 563-58-6 | 1,1-Dichloropropene | 5.906 | 0.030 | | 0.50 | |
| 56-23-5 | Carbon tetrachloride | 5.493 | 0.030 | | 0.50 | |
| 107-06-2 | 1,2-Dichloroethane | 5.627 | 0.030 | | 0.50 | |
| 78-83-1 | Isobutyl alcohol | 268.7 | 5.9 | | 25 | |
| 71-43-2 | Benzene | 6.026 | 0.030 | | 0.50 | |
| 79-01-6 | Trichloroethene | 8.464 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 6.594 | 0.12 | | 0.50 | |
| 74-95-3 | Dibromomethane | 5.201 | 0.030 | | 0.50 | |
| 80-62-6 | Methyl Methacrylate | 58.80 | 0.56 | | 5.0 | |
| 75-27-4 | Bromodichloromethane | 5.711 | 0.030 | | 0.50 | |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.508 | 0.040 | | 0.50 | |
| 108-10-1 | 4-Methyl-2-pentanone | 23.61 | 0.42 | | 2.5 | |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-3MS**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-MS171.d | QC Type: Matrix Spike

Initial/Final: 25mL / 25mL | Lab ID: 0092014-MS1 | Column ID: SPB-624

Dilution: 1 | pH: 1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 19:35

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 4.907 | 0.030 | | 0.50 | B |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.188 | 0.050 | | 0.50 | |
| 79-00-5 | 1,1,2-Trichloroethane | 5.238 | 0.040 | | 0.50 | |
| 97-63-2 | Ethyl Methacrylate | 53.85 | 0.41 | | 5.0 | |
| 142-28-9 | 1,3-Dichloropropane | 5.303 | 0.030 | | 0.50 | |
| 127-18-4 | Tetrachloroethene | 5.225 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | 22.99 | 0.51 | | 2.5 | |
| 124-48-1 | Dibromochloromethane | 4.724 | 0.040 | | 0.50 | |
| 108-90-7 | Chlorobenzene | 5.038 | 0.020 | | 0.50 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 4.916 | 0.020 | | 0.50 | |
| 100-41-4 | Ethylbenzene | 4.782 | 0.040 | | 0.50 | |
| 179601-23-1 | m,p-Xylene | 9.662 | 0.080 | | 1.0 | |
| 95-47-6 | o-Xylene | 4.873 | 0.030 | | 0.50 | |
| 100-42-5 | Styrene | 4.798 | 0.020 | | 0.50 | |
| 75-25-2 | Bromoform | 4.538 | 0.030 | | 0.50 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.302 | 0.050 | | 0.50 | |
| 96-18-4 | 1,2,3-Trichloropropane | 4.734 | 0.090 | | 0.50 | |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 20.38 | 0.33 | | 2.0 | |
| 541-73-1 | 1,3-Dichlorobenzene | 4.803 | 0.040 | | 0.50 | |
| 106-46-7 | 1,4-Dichlorobenzene | 4.763 | 0.030 | | 0.50 | |
| 95-50-1 | 1,2-Dichlorobenzene | 4.771 | 0.030 | | 0.50 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4.438 | 0.060 | | 0.50 | |
| 87-68-3 | Hexachlorobutadiene | 4.212 | 0.030 | | 0.50 | |
| 91-20-3 | Naphthalene | 4.121 | 0.15 | | 0.50 | |
| 1330-20-7 | Xylenes (total) | 14.54 | 0.030 | | 0.50 | |

| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.918 | 98 | 65 - 150 | |
| 1,2-Dichloroethane-d4 | 5.000 | 4.738 | 95 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.546 | 91 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.686 | 94 | 63 - 143 | |

| CAS NO. | TICS | CONC.(ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.000 | | | | U |

Environmental Testing Laboratories

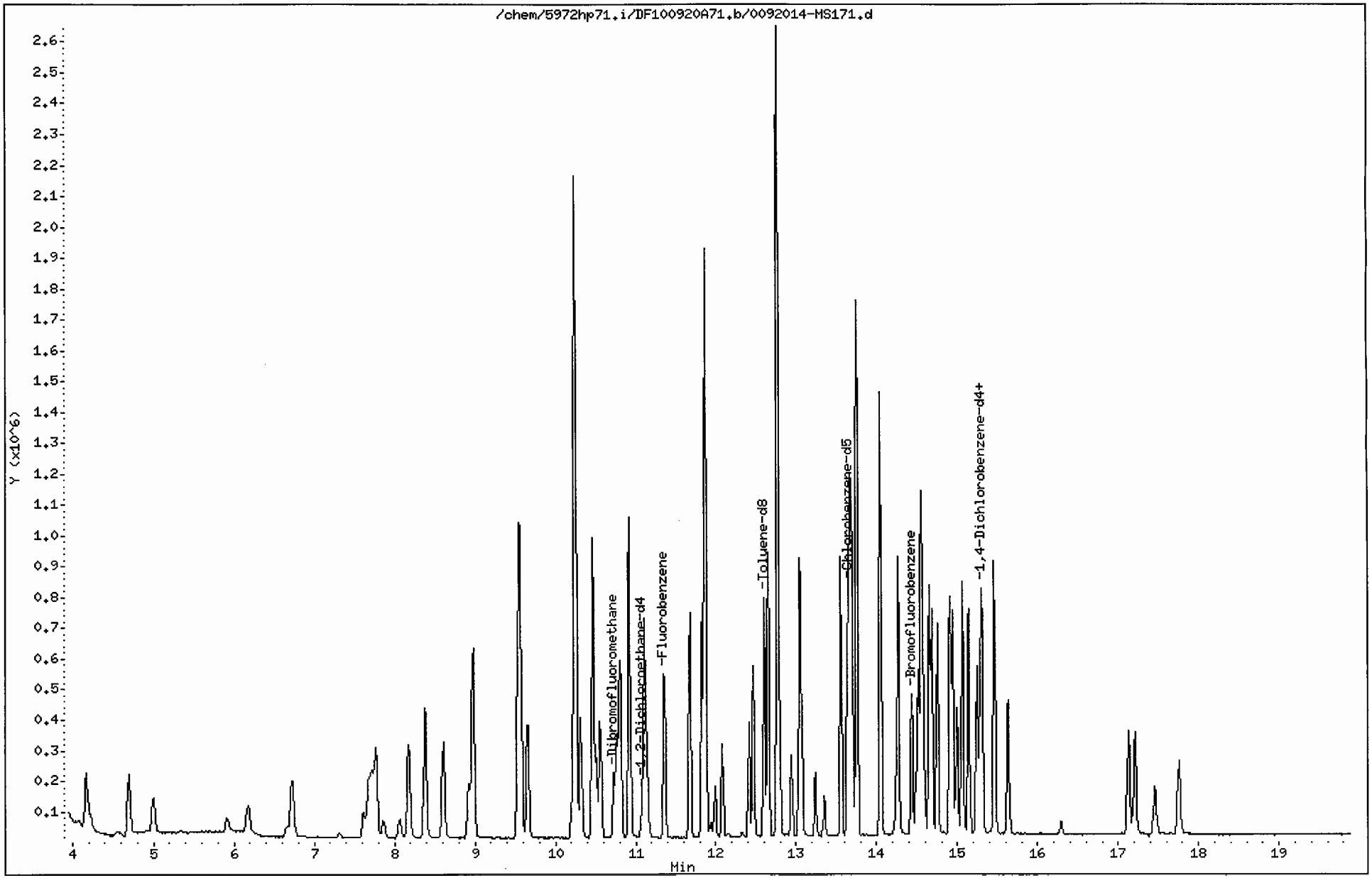
CompuChem

A Division Of

Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-MS171.d
Date : 20-SEP-2010 19:35
Client ID: MW-3MS
Sample Info: 0092014-MS1:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/0092014-MS171.d
Report Date: 21-Sep-2010 14:23

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/0092014-MS171.d
Lab Smp Id: 0092014-MS1 Client Smp ID: MW-3MS
Inj Date : 20-SEP-2010 19:35
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 0092014-MS1:JAO
Misc Info : MW-3MS
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 25 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.365 | 11.362 | (1.000) | 454578 | 125.000 | |
| 2 Chlorobenzene-d5 | 117 | 13.648 | 13.646 | (1.000) | 312271 | 125.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 15.291 | 15.289 | (1.000) | 157325 | 125.000 | |
| 4 Dibromofluoromethane | 113 | 10.725 | 10.733 | (0.944) | 121228 | 122.951 | 4.9 |
| 5 1,2-Dichloroethane-d4 | 65 | 11.079 | 11.087 | (0.975) | 94416 | 118.456 | 4.7 |
| 6 Toluene-d8 | 98 | 12.605 | 12.602 | (0.924) | 422565 | 113.638 | 4.5 |
| 7 Bromofluorobenzene | 95 | 14.435 | 14.433 | (0.944) | 153834 | 117.162 | 4.7 |
| 8 Dichlorodifluoromethane | 85 | 4.170 | 4.168 | (0.367) | 252096 | 154.885 | 6.2 |
| 9 Chloromethane | 50 | 4.692 | 4.690 | (0.413) | 303168 | 182.718 | 7.3 |
| 10 Vinyl Chloride | 62 | 4.997 | 4.995 | (0.440) | 165733 | 233.548 | 9.3(R) |
| 11 Bromomethane | 94 | 5.912 | 5.920 | (0.520) | 48020 | 132.469 | 5.3 |
| 12 Chloroethane | 64 | 6.178 | 6.176 | (0.544) | 110377 | 418.678 | 17(R) |
| 13 Trichlorofluoromethane | 101 | 6.719 | 6.727 | (0.591) | 229139 | 148.226 | 5.9 |
| 14 Acrolein | 56 | 7.615 | 7.623 | (0.670) | 96015 | 1688.52 | 68 |
| 17 1,1-Dichloroethene | 96 | 7.772 | 7.780 | (0.684) | 128653 | 143.205 | 5.7 |

MK 9.21-10

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-MS171.d
Report Date: 21-Sep-2010 14:23

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 18 Acetone | 43 | 7.861 | 7.869 | (0.692) | 88944 | 627.279 | 25 |
| 19 Iodomethane | 142 | 8.068 | 8.066 | (0.710) | 101892 | 111.890 | 4.5 |
| 20 Carbon disulfide | 76 | 8.176 | 8.184 | (0.719) | 557160 | 143.255 | 5.7 |
| 22 3-Chloropropene | 39 | 8.383 | 8.390 | (0.738) | 232559 | 163.501 | 6.5 |
| 23 Acetonitrile | 41 | 8.383 | 8.390 | (0.738) | 372822 | 163.530 | 6.5 |
| 25 Methylene Chloride | 84 | 8.609 | 8.617 | (0.758) | 152239 | 154.486 | 6.2 |
| 26 Acrylonitrile | 53 | 8.983 | 8.981 | (0.790) | 241845 | 1472.18 | 59 |
| 28 trans-1,2-Dichloroethene | 96 | 8.983 | 8.981 | (0.790) | 161770 | 160.706 | 6.4 |
| 31 Vinyl acetate | 43 | 9.544 | 9.552 | (0.840) | 564851 | 236.020 | 9.4 |
| 32 1,1-Dichloroethane | 63 | 9.564 | 9.571 | (0.842) | 781782 | 409.711 | 16(R) |
| 33 Chloroprene | 53 | 9.652 | 9.660 | (0.849) | 259884 | 161.923 | 6.5 |
| 34 2-butanone | 43 | 10.203 | 10.211 | (0.898) | 165040 | 621.102 | 25 |
| 35 2,2-Dichloropropane | 77 | 10.233 | 10.241 | (0.900) | 228965 | 152.970 | 6.1 |
| 36 cis-1,2-Dichloroethene | 96 | 10.252 | 10.250 | (0.902) | 811889 | 768.666 | 31(R) |
| 37 Propionitrile | 54 | 10.312 | 10.319 | (0.907) | 431539 | 7445.85 | 300 |
| 38 Methacrylonitrile | 41 | 10.469 | 10.477 | (0.921) | 591540 | 1463.08 | 59 |
| 39 Bromochloromethane | 128 | 10.508 | 10.516 | (0.925) | 51947 | 148.868 | 6.0 |
| 40 Chloroform | 83 | 10.558 | 10.565 | (0.929) | 274783 | 154.056 | 6.2 |
| 42 1,1,1-Trichloroethane | 97 | 10.764 | 10.772 | (0.947) | 208794 | 140.797 | 5.6 |
| 44 1,1-dichloropropene | 75 | 10.922 | 10.929 | (0.961) | 221371 | 147.652 | 5.9 |
| 45 Isobutyl alcohol | 43 | 10.922 | 10.920 | (0.961) | 140781 | 6717.79 | 270 |
| 46 Carbon Tetrachloride | 117 | 10.922 | 10.929 | (0.961) | 171178 | 137.324 | 5.5 |
| 47 Benzene | 78 | 11.119 | 11.116 | (0.978) | 577424 | 150.639 | 6.0 |
| 48 1,2-Dichloroethane | 62 | 11.148 | 11.156 | (0.981) | 135077 | 140.685 | 5.6 |
| 49 Trichloroethene | 130 | 11.679 | 11.677 | (1.028) | 195296 | 211.607 | 8.5(R) |
| 51 1,2-Dichloropropane | 63 | 11.876 | 11.884 | (1.045) | 160455 | 164.859 | 6.6 |
| 52 Methylmethacrylate | 69 | 11.866 | 11.874 | (1.044) | 487380 | 1470.07 | 59 |
| 54 Dibromomethane | 174 | 11.994 | 11.992 | (1.055) | 51744 | 130.016 | 5.2 |
| 55 Bromodichloromethane | 83 | 12.083 | 12.081 | (1.063) | 171906 | 142.766 | 5.7 |
| 57 cis-1,3-Dichloropropene | 75 | 12.418 | 12.415 | (1.093) | 185597 | 137.703 | 5.5 |
| 58 4-Methyl-2-pentanone | 43 | 12.467 | 12.465 | (0.913) | 420607 | 590.198 | 24 |
| 59 Toluene | 92 | 12.654 | 12.652 | (0.927) | 337163 | 122.684 | 4.9 |
| 60 Ethylmethacrylate | 69 | 12.772 | 12.770 | (0.936) | 1042062 | 1346.34 | 54 |
| 61 trans-1,3-Dichloropropene | 75 | 12.801 | 12.799 | (0.938) | 160905 | 129.700 | 5.2 |
| 62 1,1,2-Trichloroethane | 97 | 12.949 | 12.947 | (0.949) | 78275 | 130.945 | 5.2 |
| 63 2-hexanone | 43 | 13.047 | 13.045 | (0.956) | 289235 | 574.859 | 23 |
| 64 1,3-Dichloropropane | 76 | 13.077 | 13.075 | (0.958) | 151340 | 132.581 | 5.3 |
| 65 Tetrachloroethene | 164 | 13.057 | 13.055 | (0.957) | 115912 | 130.631 | 5.2 |
| 66 Dibromochloromethane | 129 | 13.244 | 13.242 | (0.970) | 91140 | 118.112 | 4.7 |
| 69 Chlorobenzene | 112 | 13.667 | 13.665 | (1.001) | 324687 | 125.950 | 5.0 |
| 70 Ethylbenzene | 106 | 13.687 | 13.685 | (1.003) | 169873 | 119.552 | 4.8 |
| 71 1,1,1,2-Tetrachloroethane | 131 | 13.707 | 13.705 | (1.004) | 107388 | 122.910 | 4.9 |
| 72 m,p-Xylene | 106 | 13.756 | 13.764 | (1.008) | 426357 | 241.547 | 9.7 |
| 73 m,p-Xylene (part of total) | 106 | 13.756 | 13.764 | (1.008) | 426357 | 241.547 | 9.7 |
| 74 o-Xylene | 106 | 14.041 | 14.049 | (1.029) | 201535 | 121.829 | 4.9 |
| 75 o-Xylene (part of total) | 106 | 14.041 | 14.049 | (1.029) | 201535 | 121.829 | 4.9 |
| 76 Styrene | 104 | 14.051 | 14.049 | (1.030) | 331423 | 119.955 | 4.8 |

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-MS171.d
Report Date: 21-Sep-2010 14:23

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 77 Bromoform | 173 | 14.248 | 14.246 | (1.044) | 53765 | 113.443 | 4.5 |
| 79 1,1,2,2-Tetrachloroethane | 83 | 14.484 | 14.492 | (0.947) | 100406 | 132.556 | 5.3 |
| 81 1,2,3-Trichloropropane | 110 | 14.553 | 14.551 | (1.066) | 21114 | 118.360 | 4.7 |
| 80 trans-1,4-dichloro-2-butene | 53 | 14.514 | 14.512 | (1.063) | 111985 | 509.478 | 20 |
| 92 1,3-Dichlorobenzene | 146 | 15.242 | 15.250 | (0.997) | 233052 | 120.082 | 4.8 |
| 93 1,4-Dichlorobenzene | 146 | 15.311 | 15.309 | (1.001) | 232610 | 119.086 | 4.8 |
| 95 1,2-Dichlorobenzene | 146 | 15.636 | 15.634 | (1.023) | 192862 | 119.266 | 4.8 |
| 97 1,2,4-Trichlorobenzene | 180 | 17.132 | 17.130 | (1.120) | 137832 | 110.946 | 4.4 |
| 98 Hexachlorobutadiene | 225 | 17.210 | 17.218 | (1.125) | 81735 | 105.312 | 4.2 |
| 99 Naphthalene | 128 | 17.456 | 17.464 | (1.142) | 161758 | 103.024 | 4.1 |
| M 102 Xylene (total) | 106 | | | | 627892 | 379.564 | 15 |

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-3MSD**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-MSD171.d | QC Type: Matrix Spike Dup

Initial/Final: 25mL / 25mL | Lab ID: 0092014-MSD1 | Column ID: SPB-624

Dilution: 1 | pH: 1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 20:02

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 6.602 | 0.030 | | 0.50 | |
| 74-87-3 | Chloromethane | 7.625 | 0.11 | | 0.50 | |
| 75-01-4 | Vinyl chloride | 8.247 | 0.070 | | 0.50 | |
| 74-83-9 | Bromomethane | 5.216 | 0.11 | | 0.50 | |
| 75-00-3 | Chloroethane | 10.59 | 0.20 | | 0.50 | |
| 75-69-4 | Trichlorofluoromethane | 5.880 | 0.060 | | 0.50 | |
| 107-02-8 | Acrolein | 71.50 | 1.0 | | 5.0 | |
| 75-35-4 | 1,1-Dichloroethene | 5.679 | 0.040 | | 0.50 | |
| 67-64-1 | Acetone | 25.42 | 0.44 | | 2.5 | B |
| 74-88-4 | Iodomethane | 5.252 | 0.030 | | 0.50 | |
| 75-15-0 | Carbon disulfide | 5.653 | 0.020 | | 0.50 | |
| 107-05-1 | 3-Chloropropene | 6.523 | 0.050 | | 0.50 | |
| 75-05-8 | Acetonitrile | 6.479 | 0.030 | | 0.50 | |
| 75-09-2 | Methylene chloride | 6.020 | 0.020 | | 0.50 | |
| 107-13-1 | Acrylonitrile | 60.77 | 0.36 | | 5.0 | |
| 156-60-5 | trans-1,2-Dichloroethene | 6.279 | 0.050 | | 0.50 | |
| 75-34-3 | 1,1-Dichloroethane | 15.78 | 0.020 | | 0.50 | |
| 126-99-8 | Chloroprene | 6.224 | 0.020 | | 0.50 | |
| 108-05-4 | Vinyl acetate | 9.607 | 0.060 | | 1.0 | |
| 156-59-2 | cis-1,2-Dichloroethene | 29.89 | 0.030 | | 0.50 | |
| 594-20-7 | 2,2-Dichloropropane | 5.946 | 0.030 | | 0.50 | |
| 107-12-0 | Propionitrile | 312.3 | 1.4 | | 25 | |
| 78-93-3 | 2-Butanone | 27.26 | 0.28 | | 2.5 | |
| 126-98-7 | Methacrylonitrile | 61.28 | 0.39 | | 5.0 | |
| 74-97-5 | Bromochloromethane | 5.928 | 0.040 | | 0.50 | |
| 67-66-3 | Chloroform | 6.019 | 0.030 | | 0.50 | |
| 71-55-6 | 1,1,1-Trichloroethane | 5.582 | 0.020 | | 0.50 | |
| 563-58-6 | 1,1-Dichloropropene | 5.876 | 0.030 | | 0.50 | |
| 56-23-5 | Carbon tetrachloride | 5.587 | 0.030 | | 0.50 | |
| 107-06-2 | 1,2-Dichloroethane | 5.603 | 0.030 | | 0.50 | |
| 78-83-1 | Isobutyl alcohol | 300.6 | 5.9 | | 25 | |
| 71-43-2 | Benzene | 6.005 | 0.030 | | 0.50 | |
| 79-01-6 | Trichloroethene | 8.396 | 0.030 | | 0.50 | |
| 78-87-5 | 1,2-Dichloropropane | 6.467 | 0.12 | | 0.50 | |
| 74-95-3 | Dibromomethane | 5.402 | 0.030 | | 0.50 | |
| 80-62-6 | Methyl Methacrylate | 62.32 | 0.56 | | 5.0 | |
| 75-27-4 | Bromodichloromethane | 5.758 | 0.030 | | 0.50 | |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.642 | 0.040 | | 0.50 | |
| 108-10-1 | 4-Methyl-2-pentanone | 24.50 | 0.42 | | 2.5 | |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

# ANALYSIS DATA SHEET

*SW 8260B*

**MW-3MSD**

Client: DRAPER | SDG: 1009180 | Project: WATAUGA COUNTY LANDFILL 6520-39

Matrix: Water | Extraction: SW 5030A/5030B | File ID: 0092014-MSD171.d | QC Type: Matrix Spike Dup

Initial/Final: 25mL / 25mL | Lab ID: 0092014-MSD1 | Column ID: SPB-624

Dilution: 1 | pH: 1 | Prepared: 09/20/10 11:54

% Moisture: NA | Analyzed: 09/20/10 20:02

Batch: 0092014 | Sequence: 0I20003 | Calibration: 0092207 | Instrument: 5972hp71

| CAS NO. | COMPOUND | CONC.(ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | 4.813 | 0.030 | | 0.50 | B |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.159 | 0.050 | | 0.50 | |
| 79-00-5 | 1,1,2-Trichloroethane | 5.248 | 0.040 | | 0.50 | |
| 97-63-2 | Ethyl Methacrylate | 55.37 | 0.41 | | 5.0 | |
| 142-28-9 | 1,3-Dichloropropane | 5.181 | 0.030 | | 0.50 | |
| 127-18-4 | Tetrachloroethene | 5.104 | 0.060 | | 0.50 | |
| 591-78-6 | 2-Hexanone | 24.10 | 0.51 | | 2.5 | |
| 124-48-1 | Dibromochloromethane | 4.794 | 0.040 | | 0.50 | |
| 108-90-7 | Chlorobenzene | 4.958 | 0.020 | | 0.50 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 4.964 | 0.020 | | 0.50 | |
| 100-41-4 | Ethylbenzene | 4.824 | 0.040 | | 0.50 | |
| 179601-23-1 | m,p-Xylene | 9.799 | 0.080 | | 1.0 | |
| 95-47-6 | o-Xylene | 4.920 | 0.030 | | 0.50 | |
| 100-42-5 | Styrene | 4.910 | 0.020 | | 0.50 | |
| 75-25-2 | Bromoform | 4.630 | 0.030 | | 0.50 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.337 | 0.050 | | 0.50 | |
| 96-18-4 | 1,2,3-Trichloropropane | 4.903 | 0.090 | | 0.50 | |
| 110-57-6 | trans-1,4-Dichloro-2-butene | 21.25 | 0.33 | | 2.0 | |
| 541-73-1 | 1,3-Dichlorobenzene | 4.938 | 0.040 | | 0.50 | |
| 106-46-7 | 1,4-Dichlorobenzene | 4.864 | 0.030 | | 0.50 | |
| 95-50-1 | 1,2-Dichlorobenzene | 4.868 | 0.030 | | 0.50 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 4.761 | 0.060 | | 0.50 | |
| 87-68-3 | Hexachlorobutadiene | 4.419 | 0.030 | | 0.50 | |
| 91-20-3 | Naphthalene | 4.559 | 0.15 | | 0.50 | |
| 1330-20-7 | Xylenes (total) | 14.72 | 0.030 | | 0.50 | |

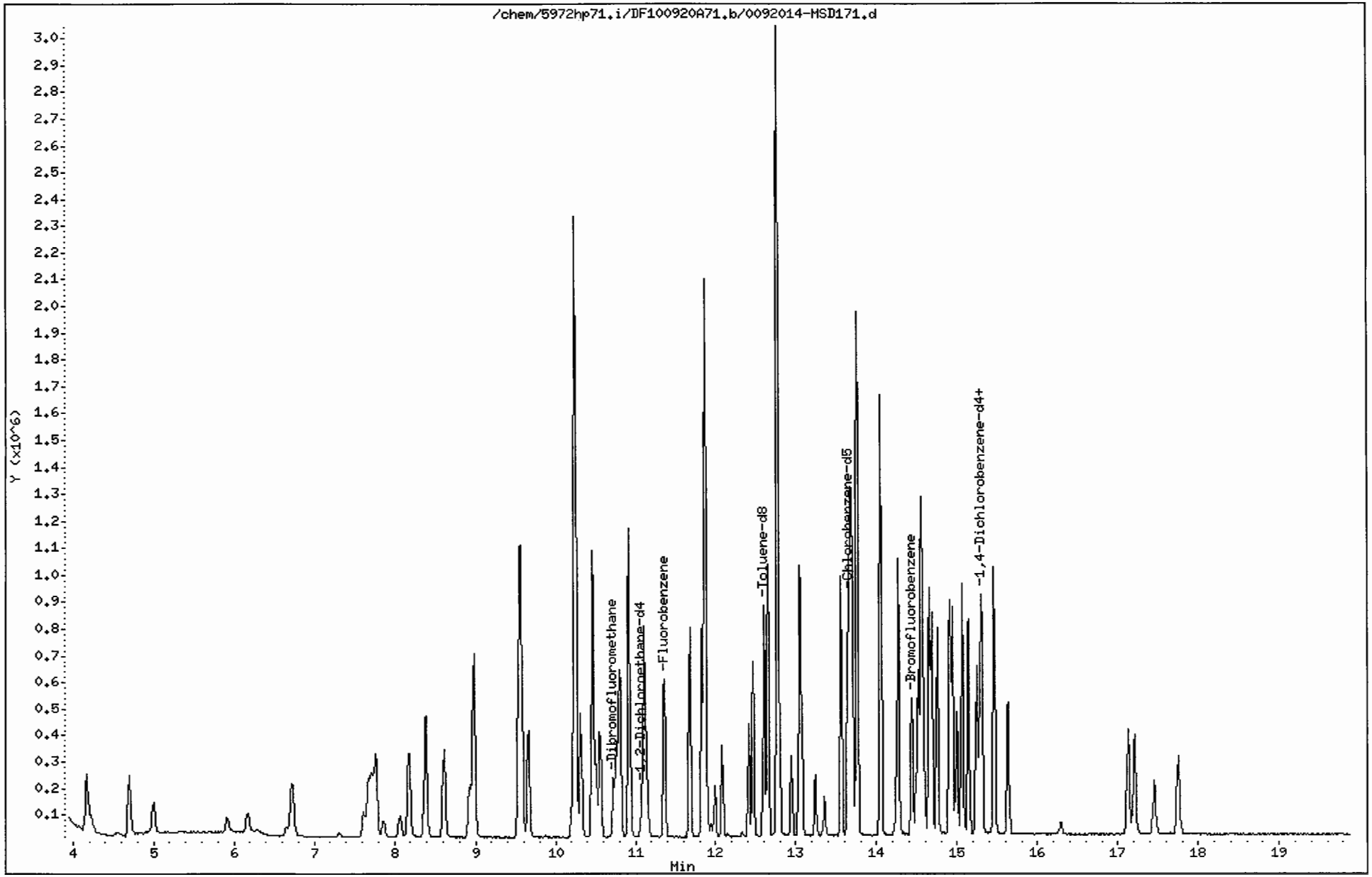
| SURROGATE RECOVERY RESULTS | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Dibromofluoromethane | 5.000 | 4.888 | 98 | 65 - 150 | |
| 1.2-Dichloroethane-d4 | 5.000 | 4.915 | 98 | 59 - 150 | |
| Toluene-d8 | 5.000 | 4.428 | 89 | 61 - 145 | |
| Bromofluorobenzene | 5.000 | 4.677 | 94 | 63 - 143 | |

| CAS NO. | TICS | CONC.(ug/L) | Response | R.T. | % Match | Q |
|---|---|---|---|---|---|---|
| NA | Tentatively Identified Compounds | 0.000 | | | | U |

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-MSD171.d
Date : 20-SEP-2010 20:02
Client ID: MW-3MSD
Sample Info: 0092014-MSD1:JAO
Purge Volume: 25.0
Column phase: SPB-624

Instrument: 5972hp71.i
Operator: JAO
Column diameter: 0.32



Data File: /chem/5972hp71.i/DF100920A71.b/0092014-MSD171.d
Report Date: 21-Sep-2010 14:23

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp71.i/DF100920A71.b/0092014-MSD171.d
Lab Smp Id: 0092014-MSD1 Client Smp ID: MW-3MSD
Inj Date : 20-SEP-2010 20:02
Operator : JAO Inst ID: 5972hp71.i
Smp Info : 0092014-MSD1:JAO
Misc Info : MW-3MSD
Comment :
Method : /chem/5972hp71.i/DF100920A71.b/W8260-B-25MLv14.m
Meth Date : 21-Sep-2010 14:23 ron Quant Type: ISTD
Cal Date : 15-SEP-2010 12:46 Cal File: 0I15002-CAL671.d
Als bottle: 26 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPS8970.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * 1/( Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 25.00000 | volume of water |
| DF | 1.00000 | dilution factor |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 11.364 | 11.362 | (1.000) | 491445 | 125.000 | |
| * 2 Chlorobenzene-d5 | 117 | 13.648 | 13.646 | (1.000) | 346994 | 125.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 15.291 | 15.289 | (1.000) | 175029 | 125.000 | |
| $ 4 Dibromofluoromethane | 113 | 10.725 | 10.733 | (0.944) | 130246 | 122.188 | 4.9 |
| $ 5 1,2-Dichloroethane-d4 | 65 | 11.079 | 11.087 | (0.975) | 105883 | 122.877 | 4.9 |
| $ 6 Toluene-d8 | 98 | 12.604 | 12.602 | (0.924) | 457461 | 110.712 | 4.4 |
| $ 7 Bromofluorobenzene | 95 | 14.435 | 14.433 | (0.944) | 170797 | 116.924 | 4.7 |
| 8 Dichlorodifluoromethane | 85 | 4.170 | 4.168 | (0.367) | 290426 | 165.049 | 6.6 |
| 9 Chloromethane | 50 | 4.692 | 4.690 | (0.413) | 341919 | 190.614 | 7.6(R) |
| 10 Vinyl Chloride | 62 | 4.997 | 4.995 | (0.440) | 158177 | 206.179 | 8.2(R) |
| 11 Bromomethane | 94 | 5.912 | 5.920 | (0.520) | 51061 | 130.401 | 5.2 |
| 12 Chloroethane | 64 | 6.168 | 6.176 | (0.543) | 75442 | 264.697 | 11(R) |
| 13 Trichlorofluoromethane | 101 | 6.719 | 6.727 | (0.591) | 245668 | 146.997 | 5.9 |
| 14 Acrolein | 56 | 7.615 | 7.623 | (0.670) | 109889 | 1787.53 | 72 |
| 17 1,1-Dichloroethene | 96 | 7.772 | 7.780 | (0.684) | 137893 | 141.975 | 5.7 |

9-21-10

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-MSD171.d
Report Date: 21-Sep-2010 14:23

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 18 Acetone | 43 | 7.871 | 7.869 | (0.693) | 97435 | 635.612 | 25 |
| 19 Iodomethane | 142 | 8.068 | 8.066 | (0.710) | 129260 | 131.295 | 5.3 |
| 20 Carbon disulfide | 76 | 8.186 | 8.184 | (0.720) | 594278 | 141.336 | 5.7 |
| 22 3-Chloropropene | 39 | 8.392 | 8.390 | (0.738) | 250776 | 163.083 | 6.5 |
| 23 Acetonitrile | 41 | 8.392 | 8.390 | (0.738) | 399227 | 161.975 | 6.5 |
| 25 Methylene Chloride | 84 | 8.609 | 8.617 | (0.758) | 160914 | 150.505 | 6.0 |
| 26 Acrylonitrile | 53 | 8.983 | 8.981 | (0.790) | 269798 | 1519.13 | 61 |
| 28 trans-1,2-Dichloroethene | 96 | 8.983 | 8.981 | (0.790) | 170827 | 156.973 | 6.3 |
| 31 Vinyl acetate | 43 | 9.554 | 9.552 | (0.841) | 621429 | 240.181 | 9.6 |
| 32 1,1-Dichloroethane | 63 | 9.573 | 9.571 | (0.842) | 813798 | 394.496 | 16(R) |
| 33 Chloroprene | 53 | 9.662 | 9.660 | (0.850) | 269985 | 155.597 | 6.2 |
| 34 2-butanone | 43 | 10.213 | 10.211 | (0.899) | 195795 | 681.567 | 27 |
| 35 2,2-Dichloropropane | 77 | 10.242 | 10.241 | (0.901) | 240558 | 148.659 | 5.9 |
| 36 cis-1,2-Dichloroethene | 96 | 10.252 | 10.250 | (0.902) | 853344 | 747.306 | 30(R) |
| 37 Propionitrile | 54 | 10.321 | 10.319 | (0.908) | 489210 | 7807.70 | 310 |
| 38 Methacrylonitrile | 41 | 10.469 | 10.477 | (0.921) | 669667 | 1532.06 | 61 |
| 39 Bromochloromethane | 128 | 10.508 | 10.516 | (0.925) | 55912 | 148.210 | 5.9 |
| 40 Chloroform | 83 | 10.557 | 10.565 | (0.929) | 290158 | 150.473 | 6.0 |
| 42 1,1,1-Trichloroethane | 97 | 10.764 | 10.772 | (0.947) | 223745 | 139.560 | 5.6 |
| 44 1,1-dichloropropene | 75 | 10.922 | 10.929 | (0.961) | 238112 | 146.904 | 5.9 |
| 45 Isobutyl alcohol | 43 | 10.922 | 10.920 | (0.961) | 170268 | 7515.34 | 300 |
| 46 Carbon Tetrachloride | 117 | 10.922 | 10.929 | (0.961) | 188237 | 139.681 | 5.6 |
| 47 Benzene | 78 | 11.118 | 11.116 | (0.978) | 622107 | 150.121 | 6.0 |
| 48 1,2-Dichloroethane | 62 | 11.148 | 11.156 | (0.981) | 145388 | 140.064 | 5.6 |
| 49 Trichloroethene | 130 | 11.679 | 11.677 | (1.028) | 209423 | 209.892 | 8.4(R) |
| 51 1,2-Dichloropropane | 63 | 11.876 | 11.884 | (1.045) | 170119 | 161.676 | 6.5 |
| 52 Methylmethacrylate | 69 | 11.866 | 11.874 | (1.044) | 558388 | 1557.90 | 62 |
| 54 Dibromomethane | 174 | 11.994 | 11.992 | (1.055) | 58110 | 135.058 | 5.4 |
| 55 Bromodichloromethane | 83 | 12.083 | 12.081 | (1.063) | 187395 | 143.955 | 5.8 |
| 57 cis-1,3-Dichloropropene | 75 | 12.417 | 12.415 | (1.093) | 205510 | 141.038 | 5.6 |
| 58 4-Methyl-2-pentanone | 43 | 12.467 | 12.465 | (0.913) | 485051 | 612.517 | 25 |
| 59 Toluene | 92 | 12.654 | 12.652 | (0.927) | 367441 | 120.322 | 4.8 |
| 60 Ethylmethacrylate | 69 | 12.772 | 12.770 | (0.936) | 1190473 | 1384.17 | 55 |
| 61 trans-1,3-Dichloropropene | 75 | 12.801 | 12.799 | (0.938) | 177787 | 128.968 | 5.2 |
| 62 1,1,2-Trichloroethane | 97 | 12.949 | 12.947 | (0.949) | 87154 | 131.209 | 5.2 |
| 63 2-hexanone | 43 | 13.047 | 13.045 | (0.956) | 336915 | 602.616 | 24 |
| 64 1,3-Dichloropropane | 76 | 13.077 | 13.075 | (0.958) | 164276 | 129.513 | 5.2 |
| 65 Tetrachloroethene | 164 | 13.057 | 13.055 | (0.957) | 125820 | 127.607 | 5.1 |
| 66 Dibromochloromethane | 129 | 13.244 | 13.242 | (0.970) | 102755 | 119.839 | 4.8 |
| 69 Chlorobenzene | 112 | 13.667 | 13.665 | (1.001) | 355058 | 123.948 | 5.0 |
| 70 Ethylbenzene | 106 | 13.687 | 13.685 | (1.003) | 190397 | 120.588 | 4.8 |
| 71 1,1,1,2-Tetrachloroethane | 131 | 13.707 | 13.705 | (1.004) | 120474 | 124.089 | 5.0 |
| 72 m,p-Xylene | 106 | 13.756 | 13.764 | (1.008) | 480487 | 244.974 | 9.8 |
| 73 m,p-Xylene (part of total) | 106 | 13.756 | 13.764 | (1.008) | 480487 | 244.974 | 9.8 |
| 74 o-Xylene | 106 | 14.041 | 14.049 | (1.029) | 226093 | 122.998 | 4.9 |
| 75 o-Xylene (part of total) | 106 | 14.041 | 14.049 | (1.029) | 226093 | 122.998 | 4.9 |
| 76 Styrene | 104 | 14.051 | 14.049 | (1.030) | 376871 | 122.755 | 4.9 |

Data File: /chem/5972hp71.i/DF100920A71.b/0092014-MSD171.d
Report Date: 21-Sep-2010 14:23

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| 77 Bromoform | 173 | 14.248 | 14.246 | (1.044) | 60958 | 115.749 | 4.6 |
| 79 1,1,2,2-Tetrachloroethane | 83 | 14.484 | 14.492 | (0.947) | 112445 | 133.434 | 5.3 |
| 81 1,2,3-Trichloropropane | 110 | 14.553 | 14.551 | (1.066) | 24298 | 122.578 | 4.9 |
| 80 trans-1,4-dichloro-2-butene | 53 | 14.514 | 14.512 | (1.063) | 129774 | 531.328 | 21 |
| 92 1,3-Dichlorobenzene | 146 | 15.242 | 15.250 | (0.997) | 266560 | 123.454 | 4.9 |
| 93 1,4-Dichlorobenzene | 146 | 15.311 | 15.309 | (1.001) | 264245 | 121.598 | 4.9 |
| 95 1,2-Dichlorobenzene | 146 | 15.636 | 15.634 | (1.023) | 218923 | 121.688 | 4.9 |
| 97 1,2,4-Trichlorobenzene | 180 | 17.131 | 17.130 | (1.120) | 164501 | 119.020 | 4.8 |
| 98 Hexachlorobutadiene | 225 | 17.210 | 17.218 | (1.125) | 95386 | 110.469 | 4.4 |
| 99 Naphthalene | 128 | 17.456 | 17.464 | (1.142) | 199083 | 113.971 | 4.6 |
| M 102 Xylene (total) | 106 | | | | 706580 | 384.389 | 15 |

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

# Type I Data Package

**Prepared for:**

**Draper Aden Associates, Inc.**
2206 South Main Street
Blacksburg VA 24060

Project: Watauga County, NC
Water Samples
Collected on 09/14/10

## SDG# WAT12

| GROUP | SAMPLE NUMBERS |
|---|---|
| 1212160 | 6087280-6087286 |

PA Cert. # 36-00037
NY Cert. # 10670
NJ Cert. # PA011
NC Cert. # 521
TX Cert. # T104704194-08A-TX

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client.

**Authorized by:** Luz C Torres

Luz C Torres
Group Leader

**Date** 10/08/10

Any questions or concerns you might have regarding this data package should be directed to your client representative, Barbara Weyandt at Ext. 1576.

Total Number of Pages 208

Lancaster Laboratories
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

# Table of Contents for SDG# WAT12

1. Sample Reference List ..... 1

2. Analysis Request, Field Chain-of-Custody Record ..... 2

3. Methodology Summary/Reference ..... 6

4. Analysis Reports ..... 7

5. Volatiles by GC/MS Data ..... 23

   a. Case Narrative-Conformance/Nonconform. Summary ..... 24

   b. QC Summary ..... 27

   c. Sample Data ..... 38

   d. Standards Data ..... 118

   e. Raw QC Data ..... 188

Lancaster Laboratories
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

# Sample Reference List for SDG Number WAT12
## with a Data Package Type of I
**11200 - Draper Aden Associates, Inc.**
Project: Watauga County, NC

| Lab Sample Number | Lab Sample Code | Client Sample Description |
|---|---|---|
| 6087280 | WTGR1 | RES-1 Grab Water Sample September 2010 Semiannual Assess. Monitoring Event |
| 6087281 | WTGHG | H&G Produce Grab Water Sample September 2010 Semiannual Assess. Monitoring Event |
| 6087282 | WTG15 | RES-15 Grab Water Sample September 2010 Semiannual Assess. Monitoring Event |
| 6087283 | WTG16 | RES-16 Grab Water Sample September 2010 Semiannual Assess. Monitoring Event |
| 6087284 | WTGBR | Bremco Grab Water Sample September 2010 Semiannual Assess. Monitoring Event |
| 6087285 | WTGR2 | RES-2 Grab Water Sample September 2010 Semiannual Assess. Monitoring Event |
| 6087286 | WTGTB | Trip Blank Water Sample September 2010 Semiannual Assess. Monitoring Event |

acct#11200 Cap# 1212160 Sample# 6087250-86

# CHAIN OF CUSTODY RECORD

TLC 8-26-10

**Laboratory:** Lancaster Laboratories, 2425 New Holland Pike, Lancaster, PA, 17605-2425/ Barbara Weyandt, Manager/ (717) 656-2300

| | | | | | |
|---|---|---|---|---|---|
| **Client:** Watauga County, NC<br>**Attn:** Mr. J.V. Potter<br>**Address:** 842 West King Street?/Courthouse, Suite 1<br>Boone, NC 28607<br>**Phone:** (828) 264-5305<br>**Fax:** 0<br>**Fax:** 0 | **Consultant:** Draper Aden Associates<br>**Attn:** Janet C. Frazier<br>**Address:** 2206 South Main Street<br>Blacksburg, Virginia 24060<br>**Phone:** (540) 552-0444<br>**Fax:** (540) 552-0291 | **Sample Site:** Watauga County Landfill<br>**Location:** Watauga County, NC<br>**Event:** September 2010 Semiannual Assess. Monitoring Event<br>**DAA JN:** 6520-39<br>**Lab JN:** | **Project Specific (PS) or Batch (B) QC:** YES<br>**Sample Collection for Project Complete?** YES<br>**Carrier:**<br>**Tracking Number:** | | |

**Box 1: Matrix**
SW Surface Water; GW Groundwater; L Leachate; S Soil; T Trip Blank; E Equipment Blank; P Product; O Other

**Box 2: Preservative**
A HCL; B $HNO_3$; C $H_2SO_4$; D $Na_2S_2O_3$; E NaOH; F ZnAc; G Other (Specify); H None

**Box 3: Filtered/Unfiltered**
F Filtered; U Unfiltered

**Box 4: Sample Type**
G Grab; C Composite

**Box 5: Sample Container Type**
P Plastic; V VOA; AG Amber Glass; CG Clear Glass

**Invoice**
Copy to Consultant: YES
Bill: CLIENT OTHER
Preserved and shipped on ice: YES

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Box 4 - Sample Type | | | | | G | | | | | | | | |
| Box 3 - Filtered/Unfiltered | | | | | U | | | | | | | | |
| Required pH of Sample | | | | | <2 | | | | | | | | |
| Box 2 - Preservative | | | | | A | | | | | | | | |
| Box 5 - Sample Container Type | | | | | 3-40ml V | | | | | | | | |
| **Sample ID** | **Date: 2010** | **Time** | **Box 1: Matrix** | **Number of Bottles** | **Volatiles - 624.2** | | | | | | | | |
| RES-1 | 9/14 | 0815 | GW | 3 | X | | | | 2239 Hwy 421 S. (Bolick) | | | Well reference # 1 | |
| H & G Produce | | 0935 | GW | 3 | X | | | | 230 Cabbage Row (Holler & Greene) | | | Well reference # 6 | |
| RES-15 | | 0900 | GW | 3 | X | | | | 2711 Hwy 421 S (Greer) | | | Well reference # 15 | |
| RES-16 | | 0915 | GW | 3 | X | | | | 2737 Hwy 421 S (Williamson) | | | Well reference # 16 | |
| BREMCO | | 1000 | GW | 3 | X | | | | 2491 Hwy 421 S. (Bremco) | | | Well reference # 5. (Use Hydrasleeve for collection) | |
| RES-2 | 9/14 | 0835 | GW | 3 | X | | | | 2347 Hwy. 421 S. (Bolick Rental) | | | Well Reference # 2 | |
| TRIP BLANK | 8/31 | | T | 12 | X | | | | | | | | |

**GENERAL NOTES:**
1. Level 1 Deliverables.
2. Report quantitation limit, and estimated results "J" flag.
3. NC Drinking Water certification okay through 7/31/2011.
4. Note NC Certification (DW) on lab results.

**Clients Special Instructions:** See General Notes.

Received by lab in Good Condition ____ Yes ____ No Custody Seal intact ____ Yes ____ No Temperature upon arrival ____ Received on Ice ____ Yes ____ No
Describe problems, if any:

| | | | | | | |
|---|---|---|---|---|---|---|
| Sampler Name (Print): Dale Slaughter | Date: 9/13/10 | #1 Relinquished by (Signature): Dale Slaughter | Date: 9/15/10 | #2 Relinquished by (Signature): | Date: | Sample Storage Time Requested: |
| Sampler Signature: Dale Slaughter | Time: 0730 | Company Name: DAA | Time: 1700 | Company Name: | Time: | |
| Sampler Name (Print): Chris Branscome | Date: 9/13/10 | #1 Received by (Signature): | Date: | #2 Received by (Signature): Mary Blk | Date: 9/16/10 | 30 DYS ORG/6 MTHS INORG |
| Sampler Signature: Chris Branscome | Time: 0730 | Company Name: | Time: | Company Name: LL | Time: 940 | |

\\draperaden.net\DAAV\Projects\ADMINOIV\SIONS\ENVIR\Templates\BBURG ETEAM TEMP\Field Events\Watauga\2005-CompuChemCOC - CoreMW's Surf & Res.XLS

TLC 8-26-10

1/2

acct#11300 Grp# 12121160
sample# 6087280-86

| TEST METHOD | PARAMETER/TEST DESCRIPTION | SAMPLE RESULT | REPORTING LIMIT | UNITS | DATE | TECH |
|---|---|---|---|---|---|---|
| 524.2 | Volatile Organics | | | | | |
| | Dichlorodifluoromethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Chloromethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Vinyl chloride | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Bromomethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Chloroethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Trichlorofluoromethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,1-Dichloroethene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Methylene chloride | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | trans-1,2-Dichloroethene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,1-Dichloroethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 2,2-Dichloropropane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | cis-1,2-Dichloroethene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Bromochloromethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Chloroform | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,1,1-Trichloroethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,1-Dichloropropene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Carbon tetrachloride | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Benzene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,2-Dichloroethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Trichloroethene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,2-Dichloropropane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Dibromomethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Bromodichloromethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | cis-1,3-Dichloropropene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Toluene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | trans-1,3-Dichloropropene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,1,2-Trichloroethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Tetrachloroethene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,3-Dichloropropane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Dibromochloromethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,2-Dibromoethane (EDB) | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Chlorobenzene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,1,1,2-Tetrachloroethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Ethylbenzene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | m&p-Xylenes | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Xylenes (total) | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | o-Xylene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Styrene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Bromoform | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Isopropylbenzene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,1,2,2-Tetrachloroethane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | Bromobenzene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,2,3-Trichloropropane | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | n-Propylbenzene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 2-Chlorotoluene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 1,3,5-Trimethylbenzene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | 4-Chlorotoluene | ND | 0.5 | ug/L | 08/16/01 | jdn |
| | tert-Butylbenzene | ND | 0.5 | ug/L | 08/16/01 | jdn |

Description = Dry Wgt.



To JLR 8/30/01
Restaurant Lancaster
Sample: 524.2
DCP 3-15-05
JLR 8-30-2013

2/3

WAT12 0003

acct#11200 Cup#1212160
sample#6087280-86

| TEST/METHOD | PARAMETER/TEST DESCRIPTION | SAMPLE RESULT | REPORTING LIMIT | UNITS | DATE | TECH |
|---|---|---|---|---|---|---|
| | 1,2,4-Trimethylbenzene | ND | 0.5 | ug/L | 08/16/01 | jdh |
| | sec-Butylbenzene | ND | 0.5 | ug/L | 08/16/01 | jdh |
| | 1,3-Dichlorobenzene | ND | 0.5 | ug/L | 08/16/01 | jdh |
| | p-Isopropyltoluene | ND | 0.5 | ug/L | 08/16/01 | jdh |
| | 1,4-Dichlorobenzene | ND | 0.5 | ug/L | 08/16/01 | jdh |
| | n-Butylbenzene | ND | 0.5 | ug/L | 08/16/01 | jdh |
| | 1,2-Dichlorobenzene | ND | 0.5 | ug/L | 08/16/01 | jdh |
| | 1,2-Dibromo-3-chloropropane | ND | 0.5 | ug/L | 08/16/01 | jdh |
| | 1,2,4-Trichlorobenzene | ND | 0.5 | ug/L | 08/16/01 | jdh |
| | Hexachlorobutadiene | ND | 0.5 | ug/L | 08/16/01 | jdh |
| | Naphthalene | ND | 0.5 | ug/L | 08/16/01 | jdh |
| | 1,2,3-Trichlorobenzene | ND | 0.5 | ug/L | 08/16/01 | jdh |

1 Description = Dry Wgt.



WAT12 8884

Lancaster Laboratories

# Environmental Sample Administration
# Receipt Documentation Log

**Client/Project:** Draper Aden

**Date of Receipt:** 9/16/10

**Time of Receipt:** 910

**Source Code:** 601

**Unpacker Emp. No.:** 2336

**Shipping Container Sealed:** YES NO

**Custody Seal Present * :** YES NO

* Custody seal was intact unless otherwise noted in the discrepancy section

**Package:** Chilled Not Chilled

| Temperature of Shipping Containers | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cooler # | Thermometer ID | Temperature (°C) | Temp Bottle (TB) or Surface Temp (ST) | Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP) | Ice Present? Y/N | Loose (L) Bagged Ice (B) or NA | Comments |
| 1 | 9493 | 5.6°C | TB | WI | Y | B | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |

**Number of Trip Blanks received NOT listed on chain of custody:** 0

**Paperwork Discrepancy/Unpacking Problems:**

| Sample Administration Internal Chain of Custody | | | |
|---|---|---|---|
| Name | Date | Time | Reason for Transfer |
| [illegible] | 9/16/10 | 1445 | Unpacking to storage |
| Tammy Helal | 9/16/10 | 1530 | Place in Storage or Entry |
| | | | Entry |
| | | | Entry |

Issued by Dept. 6042 Management
2174.05

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 · 717-656-2300 Fax: 717-656-2681 · www.lancasterlabs.com

## 03648 EPA 524.2 Master

The water sample is purged and the volatile compounds are collected on a sorbent trap that is subsequently desorbed onto the GC/MS system for chromatographic and mass spectral analysis.

Reference: USEPA Method 524.2, Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry

# Analysis Report

Lancaster Laboratories

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

September 28, 2010

Project: Watauga County, NC

Submittal Date: 09/16/2010
Group Number: 1212160
SDG: WAT12
State of Sample Origin: NC

| Client Sample Description | Lancaster Labs (LLI) # |
|---|---|
| RES-1 Grab Water Sample | 6087280 |
| H&G Produce Grab Water Sample | 6087281 |
| RES-15 Grab Water Sample | 6087282 |
| RES-16 Grab Water Sample | 6087283 |
| Bremco Grab Water Sample | 6087284 |
| RES-2 Grab Water Sample | 6087285 |
| Trip Blank Water Sample | 6087286 |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

| | | |
|---|---|---|
| ELECTRONIC COPY TO | Draper Aden Associates, Inc. | Attn: Janet Frazier |
| 1 COPY TO | Data Package Group | |

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300 Ext. 1576

Respectfully Submitted,

Robin C. Runkle
Senior Specialist

WAT12 0887

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories

# Explanation of Symbols and Abbreviations

*The following defines common symbols and abbreviations used in reporting technical data:*

| | | | |
|---|---|---|---|
| **RL** | Reporting Limit | **BMQL** | Below Minimum Quantitation Level |
| **N.D.** | none detected | **MPN** | Most Probable Number |
| **TNTC** | Too Numerous To Count | **CP Units** | cobalt-chloroplatinate units |
| **IU** | International Units | **NTU** | nephelometric turbidity units |
| **umhos/cm** | micromhos/cm | **ng** | nanogram(s) |
| **C** | degrees Celsius | **F** | degrees Fahrenheit |
| **meq** | milliequivalents | **lb.** | pound(s) |
| **g** | gram(s) | **kg** | kilogram(s) |
| **ug** | microgram(s) | **mg** | milligram(s) |
| **ml** | milliliter(s) | **l** | liter(s) |
| **m3** | cubic meter(s) | **ul** | microliter(s) |

**<** less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

**>** greater than

**J** estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

**ppm** parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

**ppb** parts per billion

**Dry weight basis** Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

*U.S. EPA CLP Data Qualifiers:*

**Organic Qualifiers**

| | |
|---|---|
| **A** | TIC is a possible aldol-condensation product |
| **B** | Analyte was also detected in the blank |
| **C** | Pesticide result confirmed by GC/MS |
| **D** | Compound quantitated on a diluted sample |
| **E** | Concentration exceeds the calibration range of the instrument |
| **N** | Presumptive evidence of a compound (TICs only) |
| **P** | Concentration difference between primary and confirmation columns >25% |
| **U** | Compound was not detected |
| **X,Y,Z** | Defined in case narrative |

**Inorganic Qualifiers**

| | |
|---|---|
| **B** | Value is <CRDL, but ≥IDL |
| **E** | Estimated due to interference |
| **M** | Duplicate injection precision not met |
| **N** | Spike sample not within control limits |
| **S** | Method of standard additions (MSA) used for calculation |
| **U** | Compound was not detected |
| **W** | Post digestion spike out of control limits |
| ***** | Duplicate analysis not within control limits |
| **+** | Correlation coefficient for MSA <0.995 |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

WAT12 0088

# Analysis Report

Lancaster Laboratories



**Sample Description:** RES-1 Grab Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

**LLI Sample #** PW 6087280
**LLI Group #** 1212160
**Account #** 11200

**Project Name:** Watauga County, NC

Collected: 09/14/2010 08:15 by DS

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTGR1 SDG#: WAT12-01

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|
| **GC/MS Volatiles** | **EPA 524.2** | | ug/l | ug/l | ug/l | |
| 03648 | Benzene | 71-43-2 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Bromobenzene | 108-86-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Bromochloromethane | 74-97-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Bromodichloromethane | 75-27-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Bromoform | 75-25-2 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | Bromomethane | 74-83-9 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | n-Butylbenzene | 104-51-8 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | sec-Butylbenzene | 135-98-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | tert-Butylbenzene | 98-06-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Chlorobenzene | 108-90-7 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Chloroethane | 75-00-3 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | Chloroform | 67-66-3 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Chloromethane | 74-87-3 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 2-Chlorotoluene | 95-49-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 4-Chlorotoluene | 106-43-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2-Dibromo-3-chloropropane | 96-12-8 | N.D. | 0.4 | 0.5 | 1 |
| 03648 | Dibromochloromethane | 124-48-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dibromoethane | 106-93-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Dibromomethane | 74-95-3 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Dichlorodifluoromethane | 75-71-8 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichloropropane | 142-28-9 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 2,2-Dichloropropane | 594-20-7 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloropropene | 563-58-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Ethylbenzene | 100-41-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Hexachlorobutadiene | 87-68-3 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | Isopropylbenzene | 98-82-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | p-Isopropyltoluene | 99-87-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Methylene Chloride | 75-09-2 | N.D. | 0.3 | 0.5 | 1 |
| 03648 | Naphthalene | 91-20-3 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | n-Propylbenzene | 103-65-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Styrene | 100-42-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1,1,2-Tetrachloroethane | 630-20-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Tetrachloroethene | 127-18-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Toluene | 108-88-3 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2,3-Trichlorobenzene | 87-61-6 | N.D. | 0.2 | 0.5 | 1 |

WAT12 2089

*=This limit was used in the evaluation of the final result

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



Sample Description: RES-1 Grab Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

LLI Sample # PW 6087280
LLI Group # 1212160
Account # 11200

Project Name: Watauga County, NC

Collected: 09/14/2010 08:15 by DS

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTGR1 SDG#: WAT12-01

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|
| GC/MS Volatiles | EPA 524.2 | | ug/l | ug/l | ug/l | |
| 03648 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Trichloroethene | 79-01-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Trichlorofluoromethane | 75-69-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2,3-Trichloropropane | 96-18-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2,4-Trimethylbenzene | 95-63-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,3,5-Trimethylbenzene | 108-67-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Vinyl Chloride | 75-01-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | m+p-Xylene | 179601-23-1 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | o-Xylene | 95-47-6 | N.D. | 0.1 | 0.5 | 1 |

## General Sample Comments

The laboratory is NC DHHS certified for all SDWA regulated compounds reported (Lab ID 42705). North Carolina Department of Health and Human Services does not offer certification for unregulated compounds.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 03648 | EPA 524.2 Master | EPA 524.2 | 1 | S102702AA | 09/27/2010 08:39 | Anita M Dale | 1 |

WAT12 0818

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

*=This limit was used in the evaluation of the final result

# Analysis Report

Lancaster Laboratories



**Sample Description:** H&G Produce Grab Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

LLI Sample # PW 6087281
LLI Group # 1212160
Account # 11200

**Project Name: Watauga County, NC**

Collected: 09/14/2010 09:35 by DS

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTGHG SDG#: WAT12-02

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|
| **GC/MS Volatiles** | **EPA 524.2** | | ug/l | ug/l | ug/l | |
| 03648 | Benzene | 71-43-2 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Bromobenzene | 108-86-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Bromochloromethane | 74-97-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Bromodichloromethane | 75-27-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Bromoform | 75-25-2 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | Bromomethane | 74-83-9 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | n-Butylbenzene | 104-51-8 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | sec-Butylbenzene | 135-98-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | tert-Butylbenzene | 98-06-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Chlorobenzene | 108-90-7 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Chloroethane | 75-00-3 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | Chloroform | 67-66-3 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Chloromethane | 74-87-3 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 2-Chlorotoluene | 95-49-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 4-Chlorotoluene | 106-43-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2-Dibromo-3-chloropropane | 96-12-8 | N.D. | 0.4 | 0.5 | 1 |
| 03648 | Dibromochloromethane | 124-48-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dibromoethane | 106-93-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Dibromomethane | 74-95-3 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Dichlorodifluoromethane | 75-71-8 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichloropropane | 142-28-9 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 2,2-Dichloropropane | 594-20-7 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloropropene | 563-58-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Ethylbenzene | 100-41-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Hexachlorobutadiene | 87-68-3 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | Isopropylbenzene | 98-82-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | p-Isopropyltoluene | 99-87-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Methylene Chloride | 75-09-2 | N.D. | 0.3 | 0.5 | 1 |
| 03648 | Naphthalene | 91-20-3 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | n-Propylbenzene | 103-65-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Styrene | 100-42-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1,1,2-Tetrachloroethane | 630-20-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Tetrachloroethene | 127-18-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Toluene | 108-88-3 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2,3-Trichlorobenzene | 87-61-6 | N.D. | 0.2 | 0.5 | 1 |

WAT12 0011

*=This limit was used in the evaluation of the final result

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Sample Description:** H&G Produce Grab Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

**LLI Sample #** PW 6087281
**LLI Group #** 1212160
**Account #** 11200

**Project Name:** Watauga County, NC

Collected: 09/14/2010 09:35 by DS

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTGHG SDG#: WAT12-02

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|
| **GC/MS Volatiles** | **EPA 524.2** | | ug/l | ug/l | ug/l | |
| 03648 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Trichloroethene | 79-01-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Trichlorofluoromethane | 75-69-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2,3-Trichloropropane | 96-18-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2,4-Trimethylbenzene | 95-63-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,3,5-Trimethylbenzene | 108-67-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Vinyl Chloride | 75-01-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | m+p-Xylene | 179601-23-1 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | o-Xylene | 95-47-6 | N.D. | 0.1 | 0.5 | 1 |

## General Sample Comments

The laboratory is NC DHHS certified for all SDWA regulated compounds reported (Lab ID 42705). North Carolina Department of Health and Human Services does not offer certification for unregulated compounds.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 03648 | EPA 524.2 Master | EPA 524.2 | 1 | S102702AA | 09/27/2010 09:06 | Anita M Dale | 1 |

WAT12 0812

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

*=This limit was used in the evaluation of the final result

# Analysis Report

Lancaster Laboratories



**Sample Description:** RES-15 Grab Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

LLI Sample # PW 6087282
LLI Group # 1212160
Account # 11200

**Project Name: Watauga County, NC**

Collected: 09/14/2010 09:00 by DS

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTG15 SDG#: WAT12-03

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|---|
| **GC/MS Volatiles** | **EPA 524.2** | | ug/l | | ug/l | ug/l | |
| 03648 | Benzene | 71-43-2 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromobenzene | 108-86-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromochloromethane | 74-97-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromodichloromethane | 75-27-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromoform | 75-25-2 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | Bromomethane | 74-83-9 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | n-Butylbenzene | 104-51-8 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | sec-Butylbenzene | 135-98-8 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | tert-Butylbenzene | 98-06-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Carbon Tetrachloride | 56-23-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Chlorobenzene | 108-90-7 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Chloroethane | 75-00-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | Chloroform | 67-66-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Chloromethane | 74-87-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 2-Chlorotoluene | 95-49-8 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 4-Chlorotoluene | 106-43-4 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,2-Dibromo-3-chloropropane | 96-12-8 | N.D. | | 0.4 | 0.5 | 1 |
| 03648 | Dibromochloromethane | 124-48-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dibromoethane | 106-93-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Dibromomethane | 74-95-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Dichlorodifluoromethane | 75-71-8 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethane | 75-34-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloroethane | 107-06-2 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethene | 75-35-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | cis-1,2-Dichloroethene | 156-59-2 | 0.2 | J | 0.1 | 0.5 | 1 |
| 03648 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloropropane | 78-87-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichloropropane | 142-28-9 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 2,2-Dichloropropane | 594-20-7 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloropropene | 563-58-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Ethylbenzene | 100-41-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Hexachlorobutadiene | 87-68-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | Isopropylbenzene | 98-82-8 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | p-Isopropyltoluene | 99-87-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Methylene Chloride | 75-09-2 | N.D. | | 0.3 | 0.5 | 1 |
| 03648 | Naphthalene | 91-20-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | n-Propylbenzene | 103-65-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Styrene | 100-42-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,1,1,2-Tetrachloroethane | 630-20-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Tetrachloroethene | 127-18-4 | 0.3 | J | 0.1 | 0.5 | 1 |
| 03648 | Toluene | 108-88-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2,3-Trichlorobenzene | 87-61-6 | N.D. | | 0.2 | 0.5 | 1 |

WAT12 0013

*=This limit was used in the evaluation of the final result

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Sample Description:** RES-15 Grab Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

LLI Sample # PW 6087282
LLI Group # 1212160
Account # 11200

**Project Name: Watauga County, NC**

Collected: 09/14/2010 09:00 by DS

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTG15 SDG#: WAT12-03

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|
| **GC/MS Volatiles** | **EPA 524.2** | | ug/l | ug/l | ug/l | |
| 03648 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Trichloroethene | 79-01-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Trichlorofluoromethane | 75-69-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2,3-Trichloropropane | 96-18-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2,4-Trimethylbenzene | 95-63-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,3,5-Trimethylbenzene | 108-67-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Vinyl Chloride | 75-01-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | m+p-Xylene | 179601-23-1 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | o-Xylene | 95-47-6 | N.D. | 0.1 | 0.5 | 1 |

## General Sample Comments

The laboratory is NC DHHS certified for all SDWA regulated compounds reported (Lab ID 42705). North Carolina Department of Health and Human Services does not offer certification for unregulated compounds.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 03648 | EPA 524.2 Master | EPA 524.2 | 1 | S102702AA | 09/27/2010 09:32 | Anita M Dale | 1 |

WaT12 6814

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

*=This limit was used in the evaluation of the final result

# Analysis Report

Lancaster Laboratories



**Sample Description:** RES-16 Grab Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

**LLI Sample #** PW 6087283
**LLI Group #** 1212160
**Account #** 11200

**Project Name:** Watauga County, NC

Collected: 09/14/2010 09:15 by DS

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTG16 SDG#: WAT12-04

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|---|
| **GC/MS Volatiles** | **EPA 524.2** | | ug/l | | ug/l | ug/l | |
| 03648 | Benzene | 71-43-2 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromobenzene | 108-86-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromochloromethane | 74-97-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromodichloromethane | 75-27-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromoform | 75-25-2 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | Bromomethane | 74-83-9 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | n-Butylbenzene | 104-51-8 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | sec-Butylbenzene | 135-98-8 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | tert-Butylbenzene | 98-06-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Carbon Tetrachloride | 56-23-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Chlorobenzene | 108-90-7 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Chloroethane | 75-00-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | Chloroform | 67-66-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Chloromethane | 74-87-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 2-Chlorotoluene | 95-49-8 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 4-Chlorotoluene | 106-43-4 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,2-Dibromo-3-chloropropane | 96-12-8 | N.D. | | 0.4 | 0.5 | 1 |
| 03648 | Dibromochloromethane | 124-48-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dibromoethane | 106-93-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Dibromomethane | 74-95-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Dichlorodifluoromethane | 75-71-8 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethane | 75-34-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloroethane | 107-06-2 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethene | 75-35-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | cis-1,2-Dichloroethene | 156-59-2 | 0.4 | J | 0.1 | 0.5 | 1 |
| 03648 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloropropane | 78-87-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichloropropane | 142-28-9 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 2,2-Dichloropropane | 594-20-7 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloropropene | 563-58-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Ethylbenzene | 100-41-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Hexachlorobutadiene | 87-68-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | Isopropylbenzene | 98-82-8 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | p-Isopropyltoluene | 99-87-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Methylene Chloride | 75-09-2 | N.D. | | 0.3 | 0.5 | 1 |
| 03648 | Naphthalene | 91-20-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | n-Propylbenzene | 103-65-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Styrene | 100-42-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,1,1,2-Tetrachloroethane | 630-20-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Tetrachloroethene | 127-18-4 | 0.2 | J | 0.1 | 0.5 | 1 |
| 03648 | Toluene | 108-88-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2,3-Trichlorobenzene | 87-61-6 | N.D. | | 0.2 | 0.5 | 1 |

WAT12 0015

*=This limit was used in the evaluation of the final result

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



Sample Description: RES-16 Grab Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

LLI Sample # PW 6087283
LLI Group # 1212160
Account # 11200

Project Name: Watauga County, NC

Collected: 09/14/2010 09:15 by DS

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTG16 SDG#: WAT12-04

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|
| GC/MS Volatiles | EPA 524.2 | | ug/l | ug/l | ug/l | |
| 03648 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Trichloroethene | 79-01-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Trichlorofluoromethane | 75-69-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2,3-Trichloropropane | 96-18-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2,4-Trimethylbenzene | 95-63-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,3,5-Trimethylbenzene | 108-67-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Vinyl Chloride | 75-01-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | m+p-Xylene | 179601-23-1 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | o-Xylene | 95-47-6 | N.D. | 0.1 | 0.5 | 1 |

## General Sample Comments

The laboratory is NC DHHS certified for all SDWA regulated compounds reported (Lab ID 42705). North Carolina Department of Health and Human Services does not offer certification for unregulated compounds.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 03648 | EPA 524.2 Master | EPA 524.2 | 1 | S102702AA | 09/27/2010 09:59 | Anita M Dale | 1 |

WAT12 0016

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

*=This limit was used in the evaluation of the final result

# Analysis Report

Lancaster Laboratories



**Sample Description:** Bremco Grab Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

LLI Sample # PW 6087284
LLI Group # 1212160
Account # 11200

**Project Name:** Watauga County, NC

Collected: 09/14/2010 10:00 by DS

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

WTGBR SDG#: WAT12-05

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|---|
| GC/MS Volatiles | EPA 524.2 | | ug/l | | ug/l | ug/l | |
| 03648 | Benzene | 71-43-2 | 0.5 | | 0.1 | 0.5 | 1 |
| 03648 | Bromobenzene | 108-86-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromochloromethane | 74-97-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromodichloromethane | 75-27-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromoform | 75-25-2 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | Bromomethane | 74-83-9 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | n-Butylbenzene | 104-51-8 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | sec-Butylbenzene | 135-98-8 | 0.1 | J | 0.1 | 0.5 | 1 |
| 03648 | tert-Butylbenzene | 98-06-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Carbon Tetrachloride | 56-23-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Chlorobenzene | 108-90-7 | 0.3 | J | 0.1 | 0.5 | 1 |
| 03648 | Chloroethane | 75-00-3 | 11 | | 0.2 | 0.5 | 1 |
| 03648 | Chloroform | 67-66-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Chloromethane | 74-87-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 2-Chlorotoluene | 95-49-8 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 4-Chlorotoluene | 106-43-4 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,2-Dibromo-3-chloropropane | 96-12-8 | N.D. | | 0.4 | 0.5 | 1 |
| 03648 | Dibromochloromethane | 124-48-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dibromoethane | 106-93-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Dibromomethane | 74-95-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,4-Dichlorobenzene | 106-46-7 | 1.9 | | 0.1 | 0.5 | 1 |
| 03648 | Dichlorodifluoromethane | 75-71-8 | 1.1 | | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethane | 75-34-3 | 30 | | 1.0 | 5.0 | 10 |
| 03648 | 1,2-Dichloroethane | 107-06-2 | 0.2 | J | 0.1 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethene | 75-35-4 | 1.3 | | 0.1 | 0.5 | 1 |
| 03648 | cis-1,2-Dichloroethene | 156-59-2 | 6.1 | | 0.1 | 0.5 | 1 |
| 03648 | trans-1,2-Dichloroethene | 156-60-5 | 0.2 | J | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloropropane | 78-87-5 | 0.2 | J | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichloropropane | 142-28-9 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 2,2-Dichloropropane | 594-20-7 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloropropene | 563-58-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Ethylbenzene | 100-41-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Hexachlorobutadiene | 87-68-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | Isopropylbenzene | 98-82-8 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | p-Isopropyltoluene | 99-87-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Methylene Chloride | 75-09-2 | 1.3 | | 0.3 | 0.5 | 1 |
| 03648 | Naphthalene | 91-20-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | n-Propylbenzene | 103-65-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Styrene | 100-42-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,1,1,2-Tetrachloroethane | 630-20-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Tetrachloroethene | 127-18-4 | 0.3 | J | 0.1 | 0.5 | 1 |
| 03648 | Toluene | 108-88-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2,3-Trichlorobenzene | 87-61-6 | N.D. | | 0.2 | 0.5 | 1 |

WAT12 BB17

*=This limit was used in the evaluation of the final result

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



**Sample Description:** Bremco Grab Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

**LLI Sample #** PW 6087284
**LLI Group #** 1212160
**Account #** 11200

**Project Name:** Watauga County, NC

Collected: 09/14/2010 10:00 by DS

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTGBR SDG#: WAT12-05

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|---|
| **GC/MS Volatiles** | **EPA 524.2** | | ug/l | | ug/l | ug/l | |
| 03648 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Trichloroethene | 79-01-6 | 0.9 | | 0.1 | 0.5 | 1 |
| 03648 | Trichlorofluoromethane | 75-69-4 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,2,3-Trichloropropane | 96-18-4 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,2,4-Trimethylbenzene | 95-63-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,3,5-Trimethylbenzene | 108-67-8 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Vinyl Chloride | 75-01-4 | 0.4 | J | 0.1 | 0.5 | 1 |
| 03648 | m+p-Xylene | 179601-23-1 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | o-Xylene | 95-47-6 | N.D. | | 0.1 | 0.5 | 1 |

## General Sample Comments

The laboratory is NC DHHS certified for all SDWA regulated compounds reported (Lab ID 42705). North Carolina Department of Health and Human Services does not offer certification for unregulated compounds.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 03648 | EPA 524.2 Master | EPA 524.2 | 1 | S102702AA | 09/27/2010 10:25 | Anita M Dale | 1 |
| 03648 | EPA 524.2 Master | EPA 524.2 | 1 | S102702AA | 09/27/2010 12:37 | Anita M Dale | 10 |

WAT12 0818

*=This limit was used in the evaluation of the final result

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



Sample Description: RES-2 Grab Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

LLI Sample # PW 6087285
LLI Group # 1212160
Account # 11200

Project Name: Watauga County, NC

Collected: 09/14/2010 08:35 by DS

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTGR2 SDG#: WAT12-06

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|---|
| GC/MS Volatiles | EPA 524.2 | | ug/l | | ug/l | ug/l | |
| 03648 | Benzene | 71-43-2 | 0.1 | J | 0.1 | 0.5 | 1 |
| 03648 | Bromobenzene | 108-86-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromochloromethane | 74-97-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromodichloromethane | 75-27-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Bromoform | 75-25-2 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | Bromomethane | 74-83-9 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | n-Butylbenzene | 104-51-8 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | sec-Butylbenzene | 135-98-8 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | tert-Butylbenzene | 98-06-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Carbon Tetrachloride | 56-23-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Chlorobenzene | 108-90-7 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Chloroethane | 75-00-3 | 1 | | 0.2 | 0.5 | 1 |
| 03648 | Chloroform | 67-66-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Chloromethane | 74-87-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 2-Chlorotoluene | 95-49-8 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 4-Chlorotoluene | 106-43-4 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,2-Dibromo-3-chloropropane | 96-12-8 | N.D. | | 0.4 | 0.5 | 1 |
| 03648 | Dibromochloromethane | 124-48-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dibromoethane | 106-93-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Dibromomethane | 74-95-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,4-Dichlorobenzene | 106-46-7 | 0.1 | J | 0.1 | 0.5 | 1 |
| 03648 | Dichlorodifluoromethane | 75-71-8 | 0.5 | | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethane | 75-34-3 | 7.1 | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloroethane | 107-06-2 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethene | 75-35-4 | 0.3 | J | 0.1 | 0.5 | 1 |
| 03648 | cis-1,2-Dichloroethene | 156-59-2 | 1.0 | | 0.1 | 0.5 | 1 |
| 03648 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloropropane | 78-87-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichloropropane | 142-28-9 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 2,2-Dichloropropane | 594-20-7 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloropropene | 563-58-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Ethylbenzene | 100-41-4 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Hexachlorobutadiene | 87-68-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | Isopropylbenzene | 98-82-8 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | p-Isopropyltoluene | 99-87-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Methylene Chloride | 75-09-2 | N.D. | | 0.3 | 0.5 | 1 |
| 03648 | Naphthalene | 91-20-3 | N.D. | | 0.2 | 0.5 | 1 |
| 03648 | n-Propylbenzene | 103-65-1 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Styrene | 100-42-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,1,1,2-Tetrachloroethane | 630-20-6 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | Tetrachloroethene | 127-18-4 | 0.1 | J | 0.1 | 0.5 | 1 |
| 03648 | Toluene | 108-88-3 | N.D. | | 0.1 | 0.5 | 1 |
| 03648 | 1,2,3-Trichlorobenzene | 87-61-6 | N.D. | | 0.2 | 0.5 | 1 |

WAT12 0819

*=This limit was used in the evaluation of the final result

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Sample Description:** RES-2 Grab Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

**LLI Sample #** PW 6087285
**LLI Group #** 1212160
**Account #** 11200

**Project Name: Watauga County, NC**

Collected: 09/14/2010 08:35 by DS

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTGR2 SDG#: WAT12-06

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|
| **GC/MS Volatiles** | **EPA 524.2** | | ug/l | ug/l | ug/l | |
| 03648 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Trichloroethene | 79-01-6 | 0.2 J | 0.1 | 0.5 | 1 |
| 03648 | Trichlorofluoromethane | 75-69-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2,3-Trichloropropane | 96-18-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2,4-Trimethylbenzene | 95-63-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,3,5-Trimethylbenzene | 108-67-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Vinyl Chloride | 75-01-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | m+p-Xylene | 179601-23-1 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | o-Xylene | 95-47-6 | N.D. | 0.1 | 0.5 | 1 |

## General Sample Comments

The laboratory is NC DHHS certified for all SDWA regulated compounds reported (Lab ID 42705). North Carolina Department of Health and Human Services does not offer certification for unregulated compounds.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 03648 | EPA 524.2 Master | EPA 524.2 | 1 | S102702AA | 09/27/2010 10:52 | Anita M Dale | 1 |

WAT12 0028

*=This limit was used in the evaluation of the final result

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# Analysis Report

Lancaster Laboratories



**Sample Description:** Trip Blank Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

LLI Sample # PW 6087286
LLI Group # 1212160
Account # 11200

**Project Name:** Watauga County, NC

Collected: 08/31/2010

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTGTB SDG#: WAT12-07TB*

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|
| GC/MS Volatiles | EPA 524.2 | | ug/l | ug/l | ug/l | |
| 03648 | Benzene | 71-43-2 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Bromobenzene | 108-86-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Bromochloromethane | 74-97-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Bromodichloromethane | 75-27-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Bromoform | 75-25-2 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | Bromomethane | 74-83-9 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | n-Butylbenzene | 104-51-8 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | sec-Butylbenzene | 135-98-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | tert-Butylbenzene | 98-06-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Chlorobenzene | 108-90-7 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Chloroethane | 75-00-3 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | Chloroform | 67-66-3 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Chloromethane | 74-87-3 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 2-Chlorotoluene | 95-49-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 4-Chlorotoluene | 106-43-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2-Dibromo-3-chloropropane | 96-12-8 | N.D. | 0.4 | 0.5 | 1 |
| 03648 | Dibromochloromethane | 124-48-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dibromoethane | 106-93-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Dibromomethane | 74-95-3 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Dichlorodifluoromethane | 75-71-8 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,3-Dichloropropane | 142-28-9 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 2,2-Dichloropropane | 594-20-7 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,1-Dichloropropene | 563-58-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Ethylbenzene | 100-41-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Hexachlorobutadiene | 87-68-3 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | Isopropylbenzene | 98-82-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | p-Isopropyltoluene | 99-87-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Methylene Chloride | 75-09-2 | N.D. | 0.3 | 0.5 | 1 |
| 03648 | Naphthalene | 91-20-3 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | n-Propylbenzene | 103-65-1 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Styrene | 100-42-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1,1,2-Tetrachloroethane | 630-20-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Tetrachloroethene | 127-18-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Toluene | 108-88-3 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,2,3-Trichlorobenzene | 87-61-6 | N.D. | 0.2 | 0.5 | 1 |

WAT12 0821

*=This limit was used in the evaluation of the final result

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories



Sample Description: Trip Blank Water Sample
September 2010 Semiannual Assess. Monitoring Event
Watauga County, NC

LLI Sample # PW 6087286
LLI Group # 1212160
Account # 11200

Project Name: Watauga County, NC

Collected: 08/31/2010

Submitted: 09/16/2010 09:40
Reported: 09/28/2010 15:38
Discard: 10/29/2010

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

WTGTB SDG#: WAT12-07TB*

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---|---|---|---|---|---|---|
| GC/MS Volatiles | EPA 524.2 | | ug/l | ug/l | ug/l | |
| 03648 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Trichloroethene | 79-01-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Trichlorofluoromethane | 75-69-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2,3-Trichloropropane | 96-18-4 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | 1,2,4-Trimethylbenzene | 95-63-6 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | 1,3,5-Trimethylbenzene | 108-67-8 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | Vinyl Chloride | 75-01-4 | N.D. | 0.1 | 0.5 | 1 |
| 03648 | m+p-Xylene | 179601-23-1 | N.D. | 0.2 | 0.5 | 1 |
| 03648 | o-Xylene | 95-47-6 | N.D. | 0.1 | 0.5 | 1 |

## General Sample Comments

The laboratory is NC DHHS certified for all SDWA regulated compounds reported (Lab ID 42705). North Carolina Department of Health and Human Services does not offer certification for unregulated compounds.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 03648 | EPA 524.2 Master | EPA 524.2 | 1 | S102702AA | 09/27/2010 11:18 | Anita M Dale | 1 |

WAT12 0022

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

*=This limit was used in the evaluation of the final result

# Volatiles by GC/MS Data

# Case Narrative Conformance/Nonconformance Summary

Lancaster Laboratories
*Where quality is a science.*



## CASE NARRATIVE

**Client: Draper Aden Associates, Inc.**
**SDG#: WAT12**

LANCASTER LABORATORIES
VOLATILES BY GC/MS

### SAMPLE NUMBERS:

| LL #'s | Sample Code | Matrix Water | Comments |
|---|---|---|---|
| 6087280 | WTGR1 | X | |
| 6087281 | WTGHG | X | |
| 6087282 | WTG15 | X | |
| 6087283 | WTG16 | X | |
| 6087284 | WTGBR | X | |
| 6087284 | WTGBRDL | X | 10 X Dilution |
| 6087285 | WTGR2 | X | |
| 6087286 | WTGTB | X | Client Blank |

### LABORATORY SUBMITTED QC:

| | | | |
|---|---|---|---|
| VBLKS26 | VBLKS26 | X | Method Blank |
| LFBS26 | LFBS26 | X | Lab Fortified Blank |

### SAMPLE PREPARATION:

No sample preparation was necessary for the VOA fraction.

### ANALYSIS:

No problems were encountered during the analysis of these samples.

### QUALITY CONTROL and NONCONFORMANCE SUMMARY:

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCD was performed, unless otherwise specified in the method or by the client.

All QC is within specifications.

WAT12 0025

## DATA INTERPRETATION:

No further interpretation is necessary for the data submitted.

Case Narrative reviewed and approved by:

Date 10/2/10

Dana M. Kauffman
Manager, Data Deliverables

WAT12 8826

# QC Summary

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKS26

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: VBLKS26

Sample wt/vol: 25.00(g/mL) mL Lab File ID: SH08359.i/10sep27a.b/ss27b02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 09/27/10

Column: (pack/cap) CAP Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) | MDL ug/L | Q |
|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 0.2 | U |
| 74-87-3 | Chloromethane | | 0.2 | U |
| 75-01-4 | Vinyl Chloride | | 0.1 | U |
| 74-83-9 | Bromomethane | | 0.1 | U |
| 75-00-3 | Chloroethane | | 0.2 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.2 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.1 | U |
| 75-09-2 | Methylene Chloride | | 0.3 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.1 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.1 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.1 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.2 | U |
| 74-97-5 | Bromochloromethane | | 0.1 | U |
| 67-66-3 | Chloroform | | 0.1 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.1 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.1 | U |
| 56-23-5 | Carbon Tetrachloride | | 0.1 | U |
| 71-43-2 | Benzene | | 0.1 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.1 | U |
| 79-01-6 | Trichloroethene | | 0.1 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.1 | U |
| 74-95-3 | Dibromomethane | | 0.1 | U |
| 75-27-4 | Bromodichloromethane | | 0.1 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.1 | U |
| 108-88-3 | Toluene | | 0.1 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.1 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.1 | U |
| 127-18-4 | Tetrachloroethene | | 0.1 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.1 | U |
| 124-48-1 | Dibromochloromethane | | 0.1 | U |

WAT12 8828



FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKS26

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: VBLKS26

Sample wt/vol: 25.00(g/mL) mL Lab File ID: SH08359.i/10sep27a.b/ss27b02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 09/27/10

Column: (pack/cap) CAP Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) MDL ug/L | Q |
|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane | 0.1 | U |
| 108-90-7 | Chlorobenzene | 0.1 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.1 | U |
| 100-41-4 | Ethylbenzene | 0.1 | U |
| 179601-23-1 | m+p-Xylene | 0.2 | U |
| 95-47-6 | o-Xylene | 0.1 | U |
| 100-42-5 | Styrene | 0.1 | U |
| 75-25-2 | Bromoform | 0.2 | U |
| 98-82-8 | Isopropylbenzene | 0.1 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.1 | U |
| 108-86-1 | Bromobenzene | 0.1 | U |
| 96-18-4 | 1,2,3-Trichloropropane | 0.2 | U |
| 103-65-1 | n-Propylbenzene | 0.1 | U |
| 95-49-8 | 2-Chlorotoluene | 0.1 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | 0.1 | U |
| 106-43-4 | 4-Chlorotoluene | 0.2 | U |
| 98-06-6 | tert-Butylbenzene | 0.1 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.1 | U |
| 135-98-8 | sec-Butylbenzene | 0.1 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 0.1 | U |
| 99-87-6 | p-Isopropyltoluene | 0.1 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 0.1 | U |
| 104-51-8 | n-Butylbenzene | 0.2 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 0.1 | U |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.4 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.2 | U |
| 87-68-3 | Hexachlorobutadiene | 0.2 | U |
| 91-20-3 | Naphthalene | 0.2 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.2 | U |

WAT12 0029



FORM I VOA

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Lancaster Laboratories Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: WAT12

| | LAB SAMPLE ID | S1 (BFB) # | S2 (DCB) # | TOT OUT |
|---|---|---|---|---|
| 01 | 6087280 | 92 | 86 | 0 |
| 02 | 6087281 | 90 | 84 | 0 |
| 03 | 6087282 | 93 | 89 | 0 |
| 04 | 6087283 | 92 | 83 | 0 |
| 05 | 6087284 | 94 | 87 | 0 |
| 06 | 6087284DL | 92 | 85 | 0 |
| 07 | 6087285 | 92 | 86 | 0 |
| 08 | 6087286 | 93 | 85 | 0 |
| 09 | VBLKS26 | 92 | 83 | 0 |
| 10 | LFBS26 | 95 | 95 | 0 |

| | QC LIMITS |
|---|---|
| S1 (BFB) = 4-Bromofluorobenzene | (80-120) |
| S2 (DCB) = 1,2-Dichlorobenzene-d4 | (80-120) |

# Column to be used to flag recovery values
* values outside of QC limits
D sample diluted, values outside of QC limits

Lancaster Laboratories, Inc.
GC/MS Volatiles Method 524.2 LFB Sample Summary

File: ss27s02.d
Inst: SH08359
Dilution Factor: 1.0

Injected: 09/27/10 at 07:46
Sample: LFBS26

Method: EPA 524.2 REV 4
Matrix/Level: WL
Batch: S102702AA

| COMPOUND NAME | SPIKE LEVEL | LFB CONC UG/L | LFB REC % | Range LOWER-UPPER | INSPEC |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 2.00 | 1.90 | 95 | 70-130 | YES |
| Chloromethane | 2.00 | 2.17 | 108 | 70-130 | YES |
| Vinyl Chloride | 2.00 | 2.09 | 104 | 70-130 | YES |
| Bromomethane | 2.00 | 2.14 | 107 | 70-130 | YES |
| Chloroethane | 2.00 | 2.22 | 111 | 70-130 | YES |
| Trichlorofluoromethane | 2.00 | 1.99 | 100 | 70-130 | YES |
| 1,1-Dichloroethene | 5.00 | 4.82 | 96 | 70-130 | YES |
| Methylene Chloride | 5.00 | 4.76 | 95 | 70-130 | YES |
| trans-1,2-Dichloroethene | 5.00 | 4.70 | 94 | 70-130 | YES |
| 1,1-Dichloroethane | 5.00 | 4.84 | 97 | 70-130 | YES |
| cis-1,2-Dichloroethene | 5.00 | 4.67 | 93 | 70-130 | YES |
| 2,2-Dichloropropane | 5.00 | 4.77 | 95 | 70-130 | YES |
| Bromochloromethane | 5.00 | 4.59 | 92 | 70-130 | YES |
| Chloroform | 5.00 | 4.99 | 100 | 70-130 | YES |
| 1,1,1-Trichloroethane | 5.00 | 4.81 | 96 | 70-130 | YES |
| Carbon Tetrachloride | 5.00 | 4.88 | 98 | 70-130 | YES |
| 1,1-Dichloropropene | 5.00 | 4.70 | 94 | 70-130 | YES |
| Benzene | 5.00 | 4.81 | 96 | 70-130 | YES |
| 1,2-Dichloroethane | 5.00 | 5.31 | 106 | 70-130 | YES |
| Trichloroethene | 5.00 | 4.79 | 96 | 70-130 | YES |
| 1,2-Dichloropropane | 5.00 | 4.92 | 98 | 70-130 | YES |
| Dibromomethane | 5.00 | 5.10 | 102 | 70-130 | YES |
| Bromodichloromethane | 5.00 | 5.11 | 102 | 70-130 | YES |
| cis-1,3-Dichloropropene | 5.00 | 4.85 | 97 | 70-130 | YES |
| Toluene | 5.00 | 4.87 | 97 | 70-130 | YES |
| trans-1,3-Dichloropropene | 5.00 | 4.99 | 100 | 70-130 | YES |
| 1,1,2-Trichloroethane | 5.00 | 5.21 | 104 | 70-130 | YES |
| Tetrachloroethene | 5.00 | 4.71 | 94 | 70-130 | YES |
| 1,3-Dichloropropane | 5.00 | 4.91 | 98 | 70-130 | YES |
| Dibromochloromethane | 5.00 | 5.02 | 100 | 70-130 | YES |
| 1,2-Dibromoethane | 5.00 | 4.67 | 93 | 70-130 | YES |
| Chlorobenzene | 5.00 | 4.67 | 93 | 70-130 | YES |
| 1,1,1,2-Tetrachloroethane | 5.00 | 4.85 | 97 | 70-130 | YES |
| Ethylbenzene | 5.00 | 4.36 | 87 | 70-130 | YES |
| m+p-Xylene | 10.00 | 9.02 | 90 | 70-130 | YES |
| o-Xylene | 5.00 | 4.30 | 86 | 70-130 | YES |
| Styrene | 5.00 | 4.54 | 91 | 70-130 | YES |
| Bromoform | 5.00 | 5.00 | 100 | 70-130 | YES |
| Isopropylbenzene | 5.00 | 4.67 | 93 | 70-130 | YES |
| 1,1,2,2-Tetrachloroethane | 5.00 | 5.04 | 101 | 70-130 | YES |
| Bromobenzene | 5.00 | 4.45 | 89 | 70-130 | YES |
| 1,2,3-Trichloropropane | 5.00 | 4.45 | 89 | 70-130 | YES |
| n-Propylbenzene | 5.00 | 4.63 | 93 | 70-130 | YES |
| 2-Chlorotoluene | 5.00 | 4.68 | 94 | 70-130 | YES |
| 1,3,5-Trimethylbenzene | 5.00 | 4.48 | 90 | 70-130 | YES |
| 4-Chlorotoluene | 5.00 | 4.72 | 94 | 70-130 | YES |
| tert-Butylbenzene | 5.00 | 4.56 | 91 | 70-130 | YES |
| 1,2,4-Trimethylbenzene | 5.00 | 4.51 | 90 | 70-130 | YES |
| sec-Butylbenzene | 5.00 | 4.55 | 91 | 70-130 | YES |
| p-Isopropyltoluene | 5.00 | 4.55 | 91 | 70-130 | YES |
| 1,3-Dichlorobenzene | 5.00 | 4.54 | 91 | 70-130 | YES |
| 1,4-Dichlorobenzene | 5.00 | 4.54 | 91 | 70-130 | YES |
| n-Butylbenzene | 5.00 | 4.58 | 92 | 70-130 | YES |
| 1,2-Dichlorobenzene | 5.00 | 4.59 | 92 | 70-130 | YES |
| 1,2-Dibromo-3-Chloropropane | 5.00 | 4.42 | 88 | 70-130 | YES |
| 1,2,4-Trichlorobenzene | 5.00 | 4.04 | 81 | 70-130 | YES |
| Hexachlorobutadiene | 5.00 | 3.82 | 76 | 70-130 | YES |
| Naphthalene | 5.00 | 4.06 | 81 | 70-130 | YES |

N/C = Could not calculat

NAT12 0831

Lab Chronicle: _____ Ent. by _____

_____ Ver. by _____

Lancaster Laboratories, Inc.
GC/MS Volatiles Method 524.2 LFB Sample Summary

File: ss27s02.d
Inst: SH08359
Dilution Factor: 1.0

Injected: 09/27/10 at 07:46
Sample: LFBS26

Method: EPA 524.2 REV 4
Matrix/Level: WL
Batch: S102702AA

| COMPOUND NAME | SPIKE LEVEL | LFB CONC UG/L | LFB REC % | Range LOWER-UPPER | INSPEC |
|---|---|---|---|---|---|
| 1,2,3-Trichlorobenzene | 5.00 | 3.78 | 76 | 70-130 | YES |

WAT-2 0032

N/C = Could not calculate

Lab Chronicle: _____ Ent. by _____

_____ Ver. by _____

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_WAT12____

Lab File ID: ss27b02.d Lab Sample ID: VBLKS26

Date Analyzed: 09/27/10 Time Analyzed: 06:53

Matrix (soil/water) WATER Level: (low/med) LOW

Instrument ID: SH08359

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

| | LAB SAMPLE ID | LAB FILE ID | TIME ANALYZED |
|---|---|---|---|
| 01 | LFBS25 | ss27s01.d | 07:20 |
| 02 | LFBS26 | ss27s02.d | 07:46 |
| 03 | 6087280 | ss27s04.d | 08:39 |
| 04 | 6087281 | ss27s05.d | 09:06 |
| 05 | 6087282 | ss27s06.d | 09:32 |
| 06 | 6087283 | ss27s07.d | 09:59 |
| 07 | 6087284 | ss27s08.d | 10:25 |
| 08 | 6087285 | ss27s09.d | 10:52 |
| 09 | 6087286 | ss27s10.d | 11:18 |
| 10 | 6087284DL | ss27s13.d | 12:37 |

COMMENTS: S102702AA

WAT12 8833



FORM IV VOA

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_WAT12___

Lab File ID: ss24t01.d BFB Injection Date: 09/24/10

Instrument ID: SH08359 BFB Injection Time: 10:56

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 25.46 |
| 75 | 30.0 - 80.0% of mass 95 | 37.08 |
| 95 | Base peak, 100% relative abundance | 100.00 |
| 96 | 5.0 - 9.0% of mass 95 | 7.18 |
| 173 | Less than 2.0% of mass 174 | 0.31 ( 0.43)1 |
| 174 | Greater than 50.0% of mass 95 | 72.86 |
| 175 | 5.0 - 9.0% of mass 174 | 5.31 ( 7.29)1 |
| 176 | Greater than 95.0%, but less than 101.0% of mass 174 | 70.44 (96.68)1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.71 ( 6.69)2 |

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

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

| | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| 01 | VSTD25 | ss24i01.d | 09/24/10 | 11:23 |
| 02 | VSTD10 | ss24i02.d | 09/24/10 | 11:50 |
| 03 | VSTD5 | ss24i03.d | 09/24/10 | 12:16 |
| 04 | VSTD.5 | ss24i05.d | 09/24/10 | 13:10 |
| 05 | VBLKS22 | ss24b01.d | 09/24/10 | 13:36 |
| 06 | LFBS22 | ss24s01.d | 09/24/10 | 14:03 |
| 07 | 6085940 | ss24s03.d | 09/24/10 | 14:56 |
| 08 | 6085941 | ss24s04.d | 09/24/10 | 15:23 |
| 09 | 6085942 | ss24s05.d | 09/24/10 | 15:50 |
| 10 | 6085943 | ss24s06.d | 09/24/10 | 16:16 |
| 11 | 6085944 | ss24s07.d | 09/24/10 | 16:43 |
| 12 | 6085945 | ss24s08.d | 09/24/10 | 17:10 |
| 13 | 6085946MS | ss24s09.d | 09/24/10 | 17:36 |
| 14 | 6085947MSD | ss24s10.d | 09/24/10 | 18:03 |
| 15 | 6085948 | ss24s11.d | 09/24/10 | 18:30 |
| 16 | 6085949 | ss24s12.d | 09/24/10 | 18:56 |
| 17 | 6088925 | ss24s13.d | 09/24/10 | 19:23 |
| 18 | 6088926 | ss24s14.d | 09/24/10 | 19:50 |
| 19 | 6088927 | ss24s15.d | 09/24/10 | 20:16 |
| 20 | 6088928 | ss24s16.d | 09/24/10 | 20:43 |
| 21 | 6088929 | ss24s17.d | 09/24/10 | 21:10 |
| 22 | 6088930 | ss24s18.d | 09/24/10 | 21:36 |

WAT12 0834



FORM V VOA

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_WAT12___

Lab File ID: ss24t01.d BFB Injection Date: 09/24/10

Instrument ID: SH08359 BFB Injection Time: 10:56

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 25.46 |
| 75 | 30.0 - 80.0% of mass 95 | 37.08 |
| 95 | Base peak, 100% relative abundance | 100.00 |
| 96 | 5.0 - 9.0% of mass 95 | 7.18 |
| 173 | Less than 2.0% of mass 174 | 0.31 ( 0.43)1 |
| 174 | Greater than 50.0% of mass 95 | 72.86 |
| 175 | 5.0 - 9.0% of mass 174 | 5.31 ( 7.29)1 |
| 176 | Greater than 95.0%, but less than 101.0% of mass 174 | 70.44 (96.68)1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.71 ( 6.69)2 |

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

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

| | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| 23 | 6088931 | ss24s19.d | 09/24/10 | 22:03 |
| 24 | 6088932 | ss24s20.d | 09/24/10 | 22:30 |

WAT12 0035



FORM V VOA

5A

# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_WAT12___

Lab File ID: ss27t01.d BFB Injection Date: 09/27/10

Instrument ID: SH08359 BFB Injection Time: 05:19

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 26.67 |
| 75 | 30.0 - 80.0% of mass 95 | 37.68 |
| 95 | Base peak, 100% relative abundance | 100.00 |
| 96 | 5.0 - 9.0% of mass 95 | 6.91 |
| 173 | Less than 2.0% of mass 174 | 0.25 ( 0.34)1 |
| 174 | Greater than 50.0% of mass 95 | 72.42 |
| 175 | 5.0 - 9.0% of mass 174 | 5.41 ( 7.47)1 |
| 176 | Greater than 95.0%, but less than 101.0% of mass 174 | 71.54 (98.79)1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.67 ( 6.53)2 |

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

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

| | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| 01 | VSTD10 | ss27c01.d | 09/27/10 | 05:33 |
| 02 | VBLKS25 | ss27b01.d | 09/27/10 | 06:26 |
| 03 | VBLKS26 | ss27b02.d | 09/27/10 | 06:53 |
| 04 | LFBS25 | ss27s01.d | 09/27/10 | 07:20 |
| 05 | LFBS26 | ss27s02.d | 09/27/10 | 07:46 |
| 06 | 6089186DL | ss27s03.d | 09/27/10 | 08:13 |
| 07 | 6087280 | ss27s04.d | 09/27/10 | 08:39 |
| 08 | 6087281 | ss27s05.d | 09/27/10 | 09:06 |
| 09 | 6087282 | ss27s06.d | 09/27/10 | 09:32 |
| 10 | 6087283 | ss27s07.d | 09/27/10 | 09:59 |
| 11 | 6087284 | ss27s08.d | 09/27/10 | 10:25 |
| 12 | 6087285 | ss27s09.d | 09/27/10 | 10:52 |
| 13 | 6087286 | ss27s10.d | 09/27/10 | 11:18 |
| 14 | 6085898 | ss27s11.d | 09/27/10 | 11:45 |
| 15 | 6085900 | ss27s12.d | 09/27/10 | 12:11 |
| 16 | 6087284DL | ss27s13.d | 09/27/10 | 12:37 |
| 17 | 6089188 | ss27s14.d | 09/27/10 | 13:04 |
| 18 | 6089189 | ss27s15.d | 09/27/10 | 13:31 |
| 19 | 6089190 | ss27s16.d | 09/27/10 | 13:57 |
| 20 | 6089191 | ss27s17.d | 09/27/10 | 14:24 |
| 21 | 6089192 | ss27s18.d | 09/27/10 | 14:51 |
| 22 | 6089194 | ss27s20.d | 09/27/10 | 15:44 |

WAT12 0836



FORM V VOA

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_WAT12___

Lab File ID (Standard): ss27c01.d Date Analyzed: 09/27/10

Instrument ID: SH08359 Time Analyzed: 05:33

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

| | | IS1(FBZ) AREA # | RT # |
|---|---|---|---|
| | 12 HOUR STD | 1092798 | 7.337 |
| | UPPER LIMIT | 2185596 | 7.837 |
| | LOWER LIMIT | 546399 | 6.837 |
| | LAB SAMPLE ID | | |
| 01 | VBLKS25 | 1051645 | 7.337 |
| 02 | VBLKS26 | 1038912 | 7.337 |
| 03 | LFBS25 | 1078105 | 7.337 |
| 04 | LFBS26 | 1131115 | 7.337 |
| 05 | 6089186DL | 990859 | 7.337 |
| 06 | 6087280 | 1050601 | 7.337 |
| 07 | 6087281 | 1030667 | 7.337 |
| 08 | 6087282 | 1002720 | 7.337 |
| 09 | 6087283 | 1001584 | 7.344 |
| 10 | 6087284 | 973977 | 7.344 |
| 11 | 6087285 | 970001 | 7.344 |
| 12 | 6087286 | 960160 | 7.344 |
| 13 | 6085898 | 961566 | 7.344 |
| 14 | 6085900 | 956643 | 7.337 |
| 15 | 6087284DL | 922568 | 7.344 |
| 16 | 6089188 | 922200 | 7.344 |
| 17 | 6089189 | 936107 | 7.344 |
| 18 | 6089190 | 919714 | 7.344 |
| 19 | 6089191 | 905218 | 7.351 |
| 20 | 6089192 | 859860 | 7.344 |
| 21 | 6089194 | 828683 | 7.344 |

IS1 (FBZ)=Fluorobenzene

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

WAT12 0037

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



FORM VIII VOA

# Sample Data

Lancaster Laboratories

# LOQ and MDL by Analysis Number

| COMPONENT NAME | MDL | LOQ | DEFAULT UNITS |
|---|---|---|---|
| **03648: EPA 524.2 Master** | | | |
| 1,1,1,2-Tetrachloroethane | 0.1 | 0.5 | ug/l |
| Dichlorodifluoromethane | 0.2 | 0.5 | ug/l |
| 2,2-Dichloropropane | 0.2 | 0.5 | ug/l |
| di-Isopropyl Ether | 0.1 | 0.5 | ug/l |
| Ethyl t-Butyl Ether | 0.1 | 0.5 | ug/l |
| t-Amyl Methyl Ether | 0.1 | 0.5 | ug/l |
| cis-1,2-Dichloroethene | 0.1 | 0.5 | ug/l |
| Bromochloromethane | 0.1 | 0.5 | ug/l |
| 1,1-Dichloropropene | 0.1 | 0.5 | ug/l |
| Dibromomethane | 0.1 | 0.5 | ug/l |
| 1,3-Dichloropropane | 0.1 | 0.5 | ug/l |
| 1,2-Dibromoethane | 0.1 | 0.5 | ug/l |
| m+p-Xylene | 0.2 | 0.5 | ug/l |
| o-Xylene | 0.1 | 0.5 | ug/l |
| Isopropylbenzene | 0.1 | 0.5 | ug/l |
| Bromobenzene | 0.1 | 0.5 | ug/l |
| 1,2,3-Trichloropropane | 0.2 | 0.5 | ug/l |
| n-Propylbenzene | 0.1 | 0.5 | ug/l |
| 2-Chlorotoluene | 0.1 | 0.5 | ug/l |
| 1,3,5-Trimethylbenzene | 0.1 | 0.5 | ug/l |
| 4-Chlorotoluene | 0.2 | 0.5 | ug/l |
| tert-Butylbenzene | 0.1 | 0.5 | ug/l |
| 1,2,4-Trimethylbenzene | 0.1 | 0.5 | ug/l |
| sec-Butylbenzene | 0.1 | 0.5 | ug/l |
| p-Isopropyltoluene | 0.1 | 0.5 | ug/l |
| 1,3-Dichlorobenzene | 0.1 | 0.5 | ug/l |
| 1,4-Dichlorobenzene | 0.1 | 0.5 | ug/l |
| n-Butylbenzene | 0.2 | 0.5 | ug/l |
| 1,2-Dichlorobenzene | 0.1 | 0.5 | ug/l |
| 1,2-Dibromo-3-chloropropane | 0.4 | 1.0 | ug/l |
| 1,2,4-Trichlorobenzene | 0.2 | 0.5 | ug/l |
| Hexachlorobutadiene | 0.2 | 0.5 | ug/l |
| Naphthalene | 0.2 | 0.5 | ug/l |
| 1,2,3-Trichlorobenzene | 0.2 | 0.5 | ug/l |
| trans-1,3-Dichloropropene | 0.1 | 0.5 | ug/l |
| cis-1,3-Dichloropropene | 0.1 | 0.5 | ug/l |
| Chloromethane | 0.2 | 0.5 | ug/l |
| Bromomethane | 0.1 | 0.5 | ug/l |
| Vinyl Chloride | 0.1 | 0.5 | ug/l |
| Chloroethane | 0.2 | 0.5 | ug/l |
| Trichlorofluoromethane | 0.2 | 0.5 | ug/l |
| 1,1-Dichloroethene | 0.1 | 0.5 | ug/l |
| Methylene Chloride | 0.3 | 0.5 | ug/l |
| trans-1,2-Dichloroethene | 0.1 | 0.5 | ug/l |
| 1,1-Dichloroethane | 0.1 | 0.5 | ug/l |
| Chloroform | 0.1 | 0.5 | ug/l |
| 1,1,1-Trichloroethane | 0.1 | 0.5 | ug/l |
| Carbon Tetrachloride | 0.1 | 0.5 | ug/l |
| Benzene | 0.1 | 0.5 | ug/l |
| 1,2-Dichloroethane | 0.1 | 0.5 | ug/l |
| Trichloroethene | 0.1 | 0.5 | ug/l |
| 1,2-Dichloropropane | 0.1 | 0.5 | ug/l |
| Bromodichloromethane | 0.1 | 0.5 | ug/l |
| Toluene | 0.1 | 0.5 | ug/l |
| 1,1,2-Trichloroethane | 0.1 | 0.5 | ug/l |
| Tetrachloroethene | 0.1 | 0.5 | ug/l |
| Dibromochloromethane | 0.1 | 0.5 | ug/l |
| Chlorobenzene | 0.1 | 0.5 | ug/l |
| Ethylbenzene | 0.1 | 0.5 | ug/l |

WAT12 8839

| COMPONENT NAME | MDL | LOQ | DEFAULT UNITS |
|---|---|---|---|
| **03648: EPA 524.2 Master** | | | |
| Styrene | 0.1 | 0.5 | ug/l |
| Bromoform | 0.2 | 0.5 | ug/l |
| 1,1,2,2-Tetrachloroethane | 0.1 | 0.5 | ug/l |
| Ethyl Ether | 0.2 | 0.5 | ug/l |
| Acetone | 3.0 | 5.0 | ug/l |
| Methyl Iodide | 0.1 | 0.5 | ug/l |
| Carbon Disulfide | 0.4 | 2.0 | ug/l |
| Allyl Chloride | 0.1 | 0.5 | ug/l |
| Acrylonitrile | 2.0 | 10 | ug/l |
| Methyl Tertiary Butyl Ether | 0.1 | 0.5 | ug/l |
| 2-Butanone | 2.0 | 5.0 | ug/l |
| Propionitrile | 3.0 | 10 | ug/l |
| Methyl Acrylate | 0.5 | 5.0 | ug/l |
| Methacrylonitrile | 1.0 | 5.0 | ug/l |
| Tetrahydrofuran | 2.0 | 5.0 | ug/l |
| 1-Chlorobutane | 0.2 | 0.5 | ug/l |
| Methyl Methacrylate | 0.2 | 0.5 | ug/l |
| 2-Nitropropane | 9.0 | 50 | ug/l |
| Chloroacetonitrile | 7.0 | 50 | ug/l |
| 1,1-Dichloropropanone | 9.0 | 50 | ug/l |
| 4-Methyl-2-pentanone | 0.6 | 5.0 | ug/l |
| Ethyl Methacrylate | 0.1 | 0.5 | ug/l |
| 2-Hexanone | 0.6 | 5.0 | ug/l |
| trans-1,4-Dichloro-2-butene | 1.0 | 5.0 | ug/l |
| Pentachloroethane | 0.1 | 0.5 | ug/l |
| Hexachloroethane | 0.1 | 0.5 | ug/l |
| Nitrobenzene | 5.0 | 50 | ug/l |
| Dichlorofluoromethane | 0.2 | 0.5 | ug/l |
| Xylene (Total) | 0.2 | 0.5 | ug/l |
| Freon 113 | 0.2 | 0.5 | ug/l |
| t-Butyl Alcohol | 5.0 | 25 | ug/l |
| Acrolein | 15 | 50 | ug/l |

WAT12 0848

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087280

Data file: /chem/SH08359.i/10sep27a.b/ss27s04.d
Data file Sample Info. Line: XXXXX;6087280;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 08:57 Automation

Injection date and time: **27-SEP-2010 08:39**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Internal Standards | RT (+/-RT) | Scan | QIon | Area(+/- %Change) | Conc. (on-column) | QC Flag |
|---|---|---|---|---|---|---|
| 43) Fluorobenzene | 7.337( 0.000) | 756 | 96 | 1050601 ( -4) | 5.00 | |

| Surrogate Standards | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | %Rec. | QC flags | QC Limits |
|---|---|---|---|---|---|---|---|---|
| 74) 4-Bromofluorobenzene | (1) | 11.678( 0.001) | 174 | 182341 | 4.598 | 92% | | 80 - 120 |
| 91) 1,2-Dichlorobenzene-d4 | (1) | 12.969( 0.000) | 152 | 156710 | 4.325 | 87% | | 80 - 120 |

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 2) Chloromethane | (1) | | | Not Detected | | | | | 0.2 |
| 3) Vinyl Chloride | (1) | | | Not Detected | | | | | 0.1 |
| 4) Bromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 5) Chloroethane | (1) | | | Not Detected | | | | | 0.2 |
| 7) Trichlorofluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 10) 1,1-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 17) Methylene Chloride | (1) | | | Not Detected | | | | | 0.3 |
| 21) trans-1,2-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 23) 1,1-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 27) cis-1,2-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 28) 2,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.2 |
| 33) Bromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 35) Chloroform | (1) | | | Not Detected | | | | | 0.1 |
| 36) 1,1,1-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 39) Carbon Tetrachloride | (1) | | | Not Detected | | | | | 0.1 |
| 38) 1,1-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 40) Benzene | (1) | | | Not Detected | | | | | 0.1 |
| 41) 1,2-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 44) Trichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 45) 1,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 46) Dibromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 48) Bromodichloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 51) cis-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 54) Toluene | (1) | | | Not Detected | | | | | 0.1 |
| 55) trans-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 57) 1,1,2-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 59) Tetrachloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 60) 1,3-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 62) Dibromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 63) 1,2-Dibromoethane | (1) | | | Not Detected | | | | | 0.1 |
| 64) Chlorobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 66) Ethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 68) m+p-Xylene | (1) | | | Not Detected | | | | | 0.2 |
| 69) o-Xylene | (1) | | | Not Detected | | | | | 0.1 |
| 70) Styrene | (1) | | | Not Detected | | | | | 0.1 |
| 71) Bromoform | (1) | | | Not Detected | | | | | 0.2 |
| 73) Isopropylbenzene | (1) | | | Not Detected | | | | | 0.1 |

WAT12 BF41

Digitally signed by Anita M. Dale on 09/27/2010 at 11:00. Target 3.5 esignature user ID: amd00492

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087280

Data file: /chem/SH08359.i/10sep27a.b/ss27s04.d
Injection date and time: **27-SEP-2010 08:39**
Data file Sample Info. Line: XXXXX;6087280;1;0;;;DRAPER;
Instrument ID: **SH08359.i** Batch: **S102702AA**
Date, time and analyst ID of latest file update: 27-Sep-2010 08:57 Automation

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Target Compounds | I.S. Ref. | RT | (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|---|
| 75) 1,1,2,2-Tetrachloroethane | (1) | | | | Not Detected | | | | | 0.1 |
| 76) Bromobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 77) 1,2,3-Trichloropropane | (1) | | | | Not Detected | | | | | 0.1 |
| 79) n-Propylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 80) 2-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 81) 1,3,5-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 82) 4-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.2 |
| 83) tert-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 85) 1,2,4-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 86) sec-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 88) p-Isopropyltoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 87) 1,3-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 89) 1,4-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 90) n-Butylbenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 92) 1,2-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | | | | Not Detected | | | | | 0.4 |
| 96) 1,2,4-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 97) Hexachlorobutadiene | (1) | | | | Not Detected | | | | | 0.2 |
| 98) Naphthalene | (1) | | | | Not Detected | | | | | 0.2 |
| 99) 1,2,3-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |

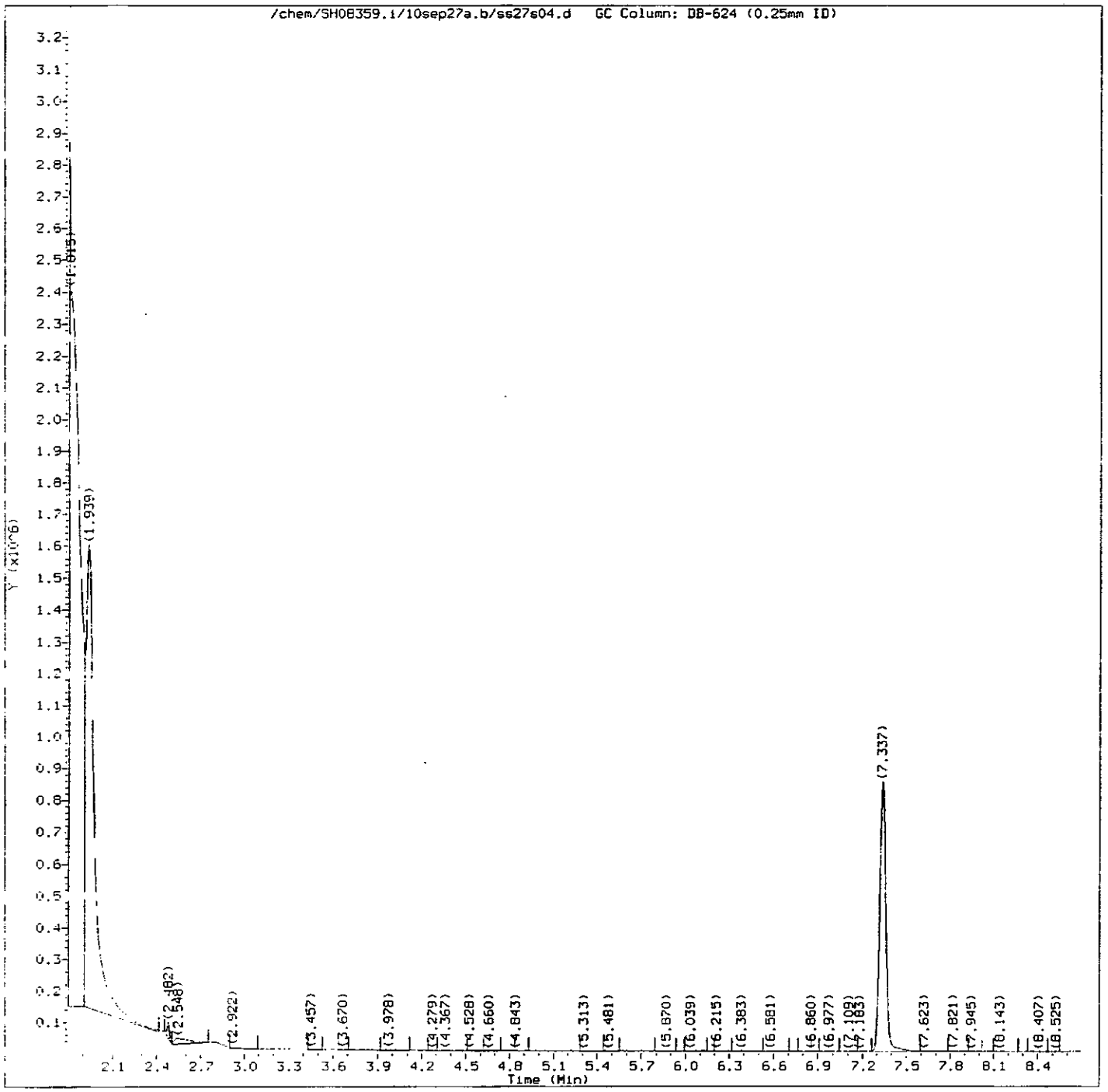
Total number of targets = 59

Comments:

WAT12 8842

Digitally signed by Anita M. Dale on 09/27/2010 at 11:00. Target 3.5 esignature user ID: amd00492

Auditor: Date:




Total Ion Chromatogram (TIC)

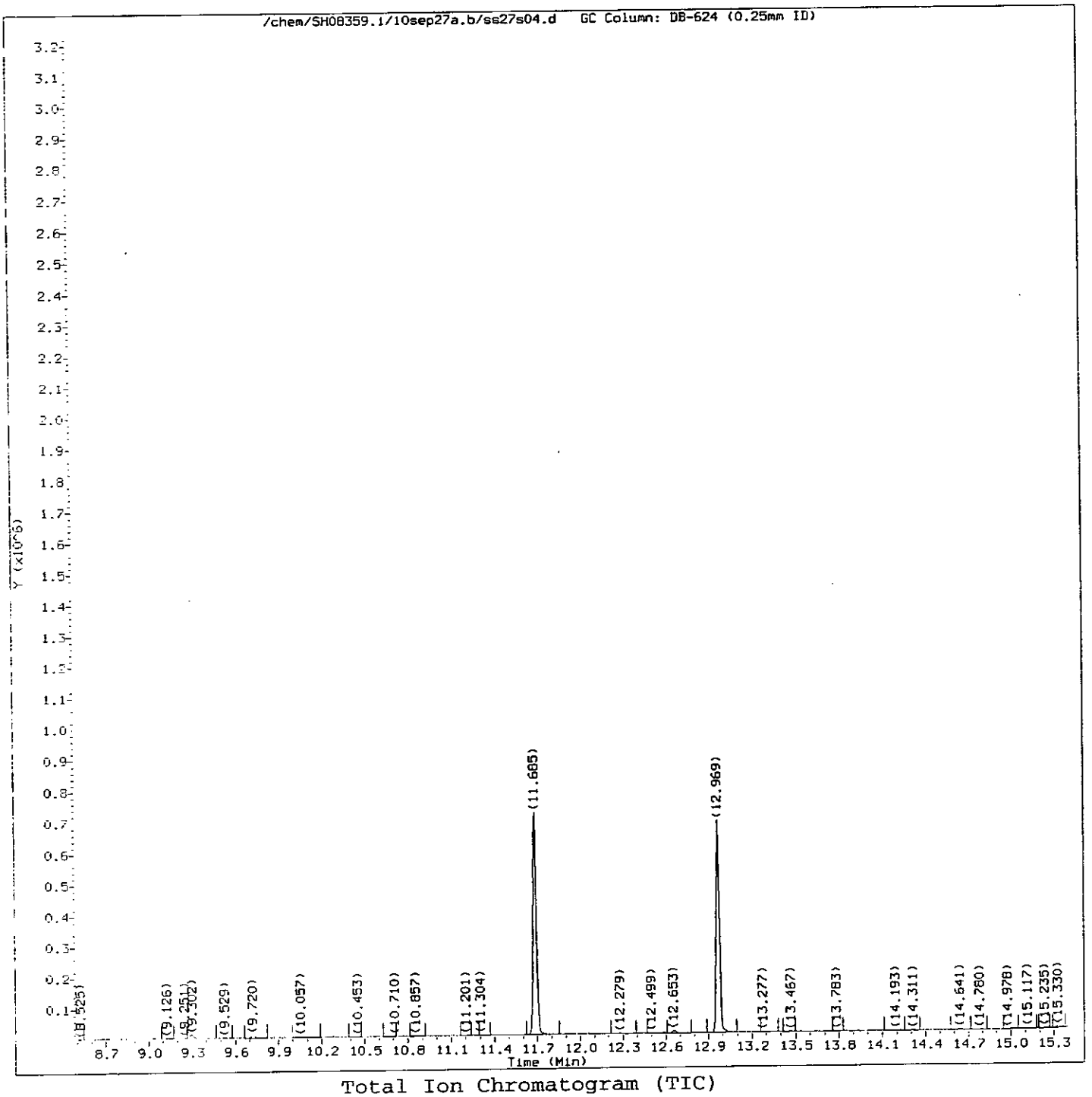
Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s04.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 08:39 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 08:57 Automation

Sample Name: XXXXX Lab Sample ID: 6087280 WaT12 8843

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s04.d
Injection date and time: 27-SEP-2010 08:39

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 08:57 Automation

WAT12 0044

Sample Name: XXXXX

Lab Sample ID: 6087280

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s04.d
Injection date and time: 27-SEP-2010 08:39

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 08:57 Automation

Sample Name: XXXXX

Lab Sample ID: 6087280

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 43)*Fluorobenzene | (1) | 7.337 | 96 | 1050601 | 5.000 |
| 74)$4-Bromofluorobenzene | (1) | 11.678 | 174 | 182341 | 4.598 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.969 | 152 | 156710 | 4.325 |

* = Compound is an internal standard.
$ = Compound is a surrogate standard.



WAT12 0045

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087281

Data file: /chem/SH08359.i/10sep27a.b/ss27s05.d
Injection date and time: **27-SEP-2010 09:06**
Data file Sample Info. Line: XXXXX;6087281;1;0;;;DRAPER;
Instrument ID: **SH08359.i** Batch: **S102702AA**
Date, time and analyst ID of latest file update: 27-Sep-2010 10:49 Automation

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Internal Standards | RT (+/-RT) | Scan | QIon | Area(+/- %Change) | Conc. (on-column) | QC Flag |
|---|---|---|---|---|---|---|
| 43) Fluorobenzene | 7.337( 0.000) | 756 | 96 | 1030667 ( -6) | 5.00 | |

| Surrogate Standards | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | %Rec. | QC flags | QC Limits |
|---|---|---|---|---|---|---|---|---|
| 74) 4-Bromofluorobenzene | (1) | 11.678( 0.001) | 174 | 175960 | 4.523 | 90% | | 80 - 120 |
| 91) 1,2-Dichlorobenzene-d4 | (1) | 12.961( 0.001) | 152 | 149541 | 4.207 | 84% | | 80 - 120 |

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 2) Chloromethane | (1) | | | Not Detected | | | | | 0.2 |
| 3) Vinyl Chloride | (1) | | | Not Detected | | | | | 0.1 |
| 4) Bromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 5) Chloroethane | (1) | | | Not Detected | | | | | 0.2 |
| 7) Trichlorofluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 10) 1,1-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 17) Methylene Chloride | (1) | | | Not Detected | | | | | 0.3 |
| 21) trans-1,2-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 23) 1,1-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 27) cis-1,2-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 28) 2,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.2 |
| 33) Bromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 35) Chloroform | (1) | | | Not Detected | | | | | 0.1 |
| 36) 1,1,1-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 39) Carbon Tetrachloride | (1) | | | Not Detected | | | | | 0.1 |
| 38) 1,1-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 40) Benzene | (1) | | | Not Detected | | | | | 0.1 |
| 41) 1,2-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 44) Trichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 45) 1,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 46) Dibromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 48) Bromodichloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 51) cis-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 54) Toluene | (1) | | | Not Detected | | | | | 0.1 |
| 55) trans-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 57) 1,1,2-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 59) Tetrachloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 60) 1,3-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 62) Dibromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 63) 1,2-Dibromoethane | (1) | | | Not Detected | | | | | 0.1 |
| 64) Chlorobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 66) Ethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 68) m+p-Xylene | (1) | | | Not Detected | | | | | 0.2 |
| 69) o-Xylene | (1) | | | Not Detected | | | | | 0.1 |
| 70) Styrene | (1) | | | Not Detected | | | | | 0.1 |
| 71) Bromoform | (1) | | | Not Detected | | | | | 0.2 |
| 73) Isopropylbenzene | (1) | | | Not Detected | | | | | 0.1 |

WAT12 6846

Digitally signed by Anita M. Dale on 09/27/2010 at 11:00. Target 3.5 esignature user ID: amd00492

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087281

Data file: /chem/SH08359.i/10sep27a.b/ss27s05.d
Data file Sample Info. Line: XXXXX;6087281;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 10:49 Automation

Injection date and time: **27-SEP-2010 09:06**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Target Compounds | I.S. Ref. | RT | (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|---|
| 75) 1,1,2,2-Tetrachloroethane | (1) | | | | Not Detected | | | | | 0.1 |
| 76) Bromobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 77) 1,2,3-Trichloropropane | (1) | | | | Not Detected | | | | | 0.1 |
| 79) n-Propylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 80) 2-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 81) 1,3,5-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 82) 4-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.2 |
| 83) tert-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 85) 1,2,4-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 86) sec-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 88) p-Isopropyltoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 87) 1,3-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 89) 1,4-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 90) n-Butylbenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 92) 1,2-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | | | | Not Detected | | | | | 0.4 |
| 96) 1,2,4-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 97) Hexachlorobutadiene | (1) | | | | Not Detected | | | | | 0.2 |
| 98) Naphthalene | (1) | | | | Not Detected | | | | | 0.2 |
| 99) 1,2,3-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |

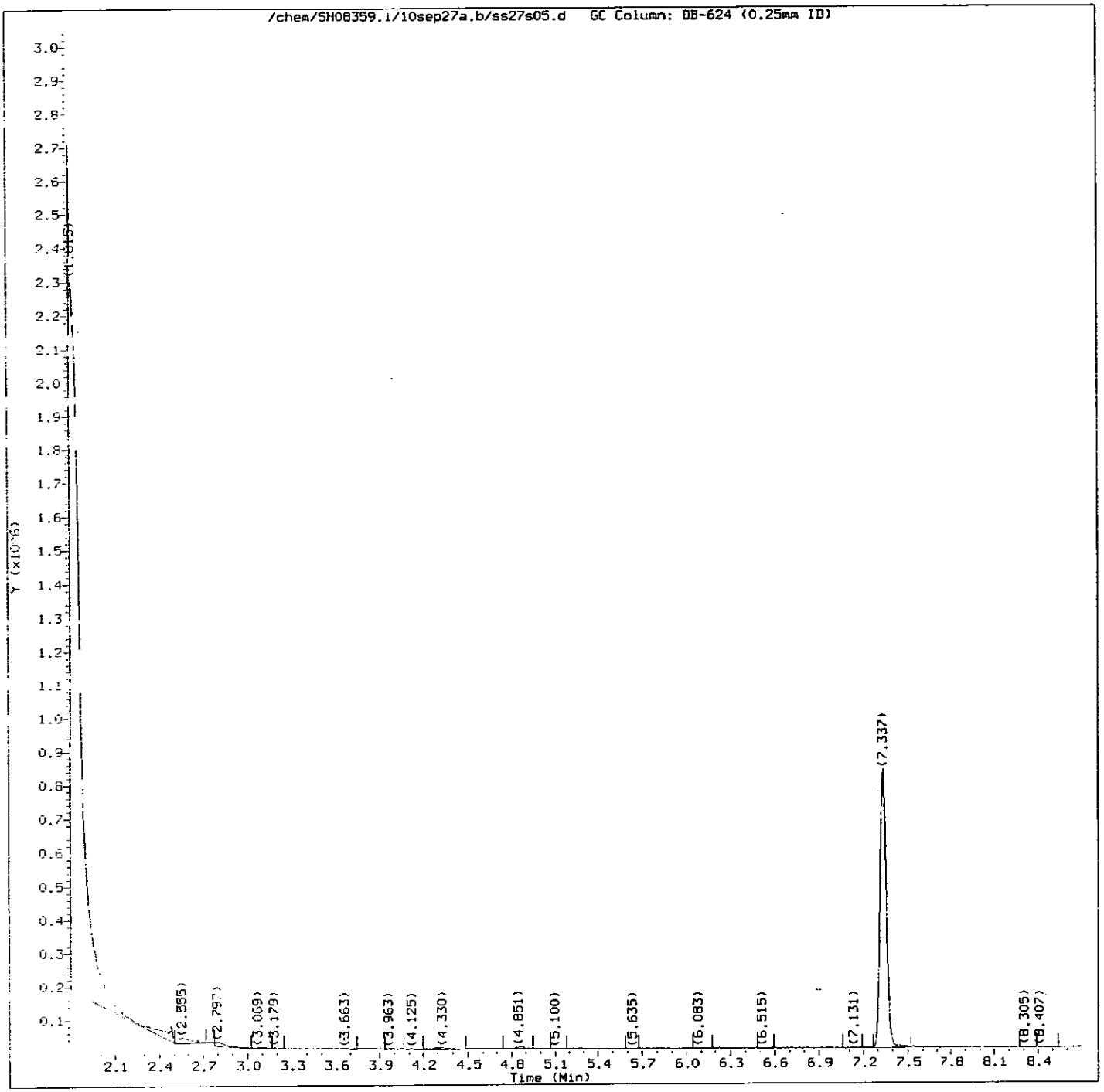
Total number of targets = 59

Comments:

WAT12 0847

Digitally signed by Anita M. Dale on 09/27/2010 at 11:00. Target 3.5 esignature user ID: amd00492

Auditor: Date: 9/28/10




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s05.d
Injection date and time: 27-SEP-2010 09:06

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

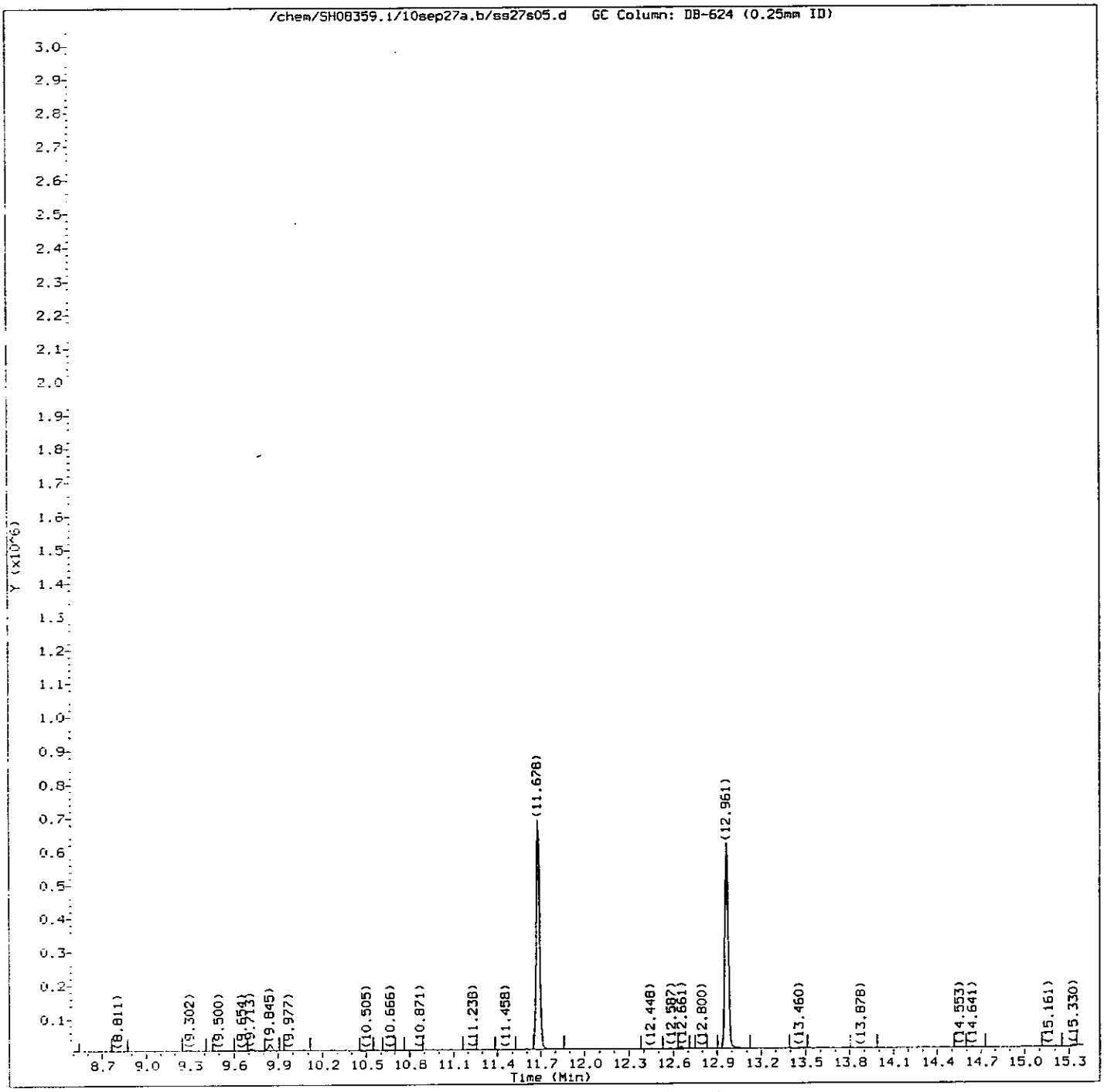
Date, time and analyst ID of latest file update: 27-Sep-2010 10:49 Automation

WAT12 8848

Sample Name: XXXXX

Lab Sample ID: 6087281

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s05.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 09:06 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 10:49 Automation

WAT12 8849

Sample Name: XXXXX Lab Sample ID: 6087281

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s05.d
Injection date and time: 27-SEP-2010 09:06

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 10:49 Automation

Sample Name: XXXXX

Lab Sample ID: 6087281

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 43)*Fluorobenzene | (1) | 7.337 | 96 | 1030667 | 5.000 |
| 74)$4-Bromofluorobenzene | (1) | 11.678 | 174 | 175960 | 4.523 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.961 | 152 | 149541 | 4.207 |

* = Compound is an internal standard.
$ = Compound is a surrogate standard.



WAT12 0850

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087282

Data file: /chem/SH08359.i/10sep27a.b/ss27s06.d
Data file Sample Info. Line: XXXXX;6087282;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 10:49 Automation

Injection date and time: **27-SEP-2010 09:32**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Internal Standards | RT (+/-RT) | Scan | QIon | Area(+/- %Change) | Conc. (on-column) | QC Flag |
|---|---|---|---|---|---|---|
| 43) Fluorobenzene | 7.337( 0.000) | 756 | 96 | 1002720 ( -8) | 5.00 | |

| Surrogate Standards | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | %Rec. | QC flags | QC Limits |
|---|---|---|---|---|---|---|---|---|
| 74) 4-Bromofluorobenzene | (1) | 11.685( 0.000) | 174 | 175838 | 4.646 | 93% | | 80 - 120 |
| 91) 1,2-Dichlorobenzene-d4 | (1) | 12.969( 0.000) | 152 | 153784 | 4.447 | 89% | | 80 - 120 |

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 2) Chloromethane | (1) | | | Not Detected | | | | | 0.2 |
| 3) Vinyl Chloride | (1) | | | Not Detected | | | | | 0.1 |
| 4) Bromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 5) Chloroethane | (1) | | | Not Detected | | | | | 0.2 |
| 7) Trichlorofluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 10) 1,1-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 17) Methylene Chloride | (1) | | | Not Detected | | | | | 0.3 |
| 21) trans-1,2-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 23) 1,1-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 27) cis-1,2-Dichloroethene | (1) | 5.665(-0.000) | 96 | 10577 | 0.152 | 0.15 | | | 0.1 |
| 28) 2,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.2 |
| 33) Bromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 35) Chloroform | (1) | | | Not Detected | | | | | 0.1 |
| 36) 1,1,1-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 39) Carbon Tetrachloride | (1) | | | Not Detected | | | | | 0.1 |
| 38) 1,1-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 40) Benzene | (1) | | | Not Detected | | | | | 0.1 |
| 41) 1,2-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 44) Trichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 45) 1,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 46) Dibromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 48) Bromodichloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 51) cis-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 54) Toluene | (1) | | | Not Detected | | | | | 0.1 |
| 55) trans-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 57) 1,1,2-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 59) Tetrachloroethene | (1) | 9.852( 0.000) | 166 | 18268 | 0.298 | 0.30 | | | 0.1 |
| 60) 1,3-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 62) Dibromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 63) 1,2-Dibromoethane | (1) | | | Not Detected | | | | | 0.1 |
| 64) Chlorobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 66) Ethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 68) m+p-Xylene | (1) | | | Not Detected | | | | | 0.2 |
| 69) o-Xylene | (1) | | | Not Detected | | | | | 0.1 |
| 70) Styrene | (1) | | | Not Detected | | | | | 0.1 |
| 71) Bromoform | (1) | | | Not Detected | | | | | 0.2 |
| 73) Isopropylbenzene | (1) | | | Not Detected | | | | | 0.1 |

WAT12-0851

Digitally signed by Anita M. Dale on 09/27/2010 at 11:00. Target 3.5 esignature user ID: amd00492

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles 6087282

Data file: /chem/SH08359.i/10sep27a.b/ss27s06.d
Data file Sample Info. Line: XXXXX;6087282;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 10:49 Automation

Injection date and time: **27-SEP-2010 09:32**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Target Compounds | I.S. Ref. | RT | (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|---|
| 75) 1,1,2,2-Tetrachloroethane | (1) | | | | Not Detected | | | | | 0.1 |
| 76) Bromobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 77) 1,2,3-Trichloropropane | (1) | | | | Not Detected | | | | | 0.1 |
| 79) n-Propylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 80) 2-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 81) 1,3,5-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 82) 4-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.2 |
| 83) tert-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 85) 1,2,4-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 86) sec-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 88) p-Isopropyltoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 87) 1,3-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 89) 1,4-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 90) n-Butylbenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 92) 1,2-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | | | | Not Detected | | | | | 0.4 |
| 96) 1,2,4-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 97) Hexachlorobutadiene | (1) | | | | Not Detected | | | | | 0.2 |
| 98) Naphthalene | (1) | | | | Not Detected | | | | | 0.2 |
| 99) 1,2,3-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |

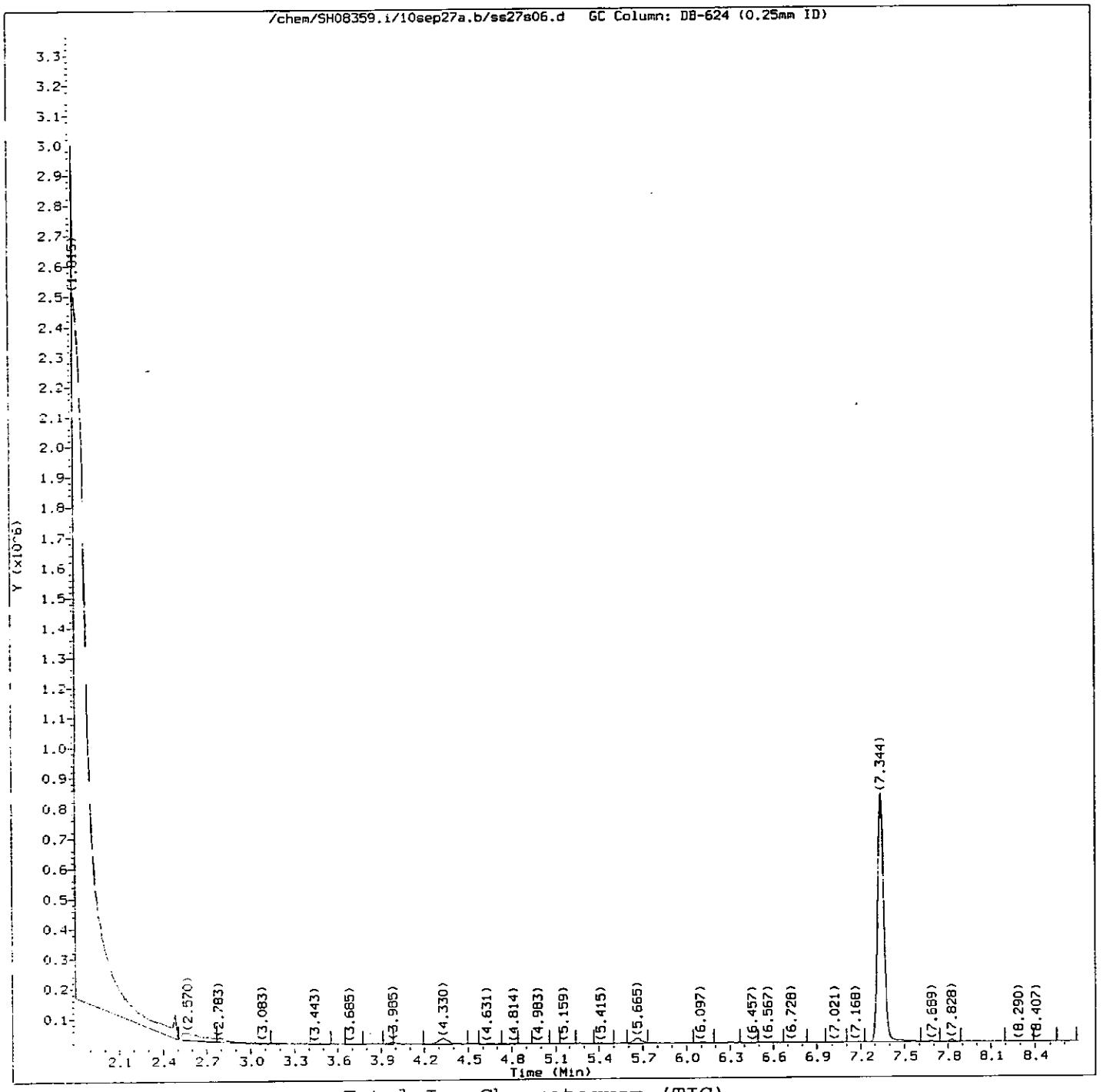
Total number of targets = 59

Comments:

WAT12 0852

Digitally signed by Anita M. Dale on 09/27/2010 at 11:00. Target 3.5 esignature user ID: amd00492

Auditor: Date: 09/28/10




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s06.d
Injection date and time: 27-SEP-2010 09:32

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

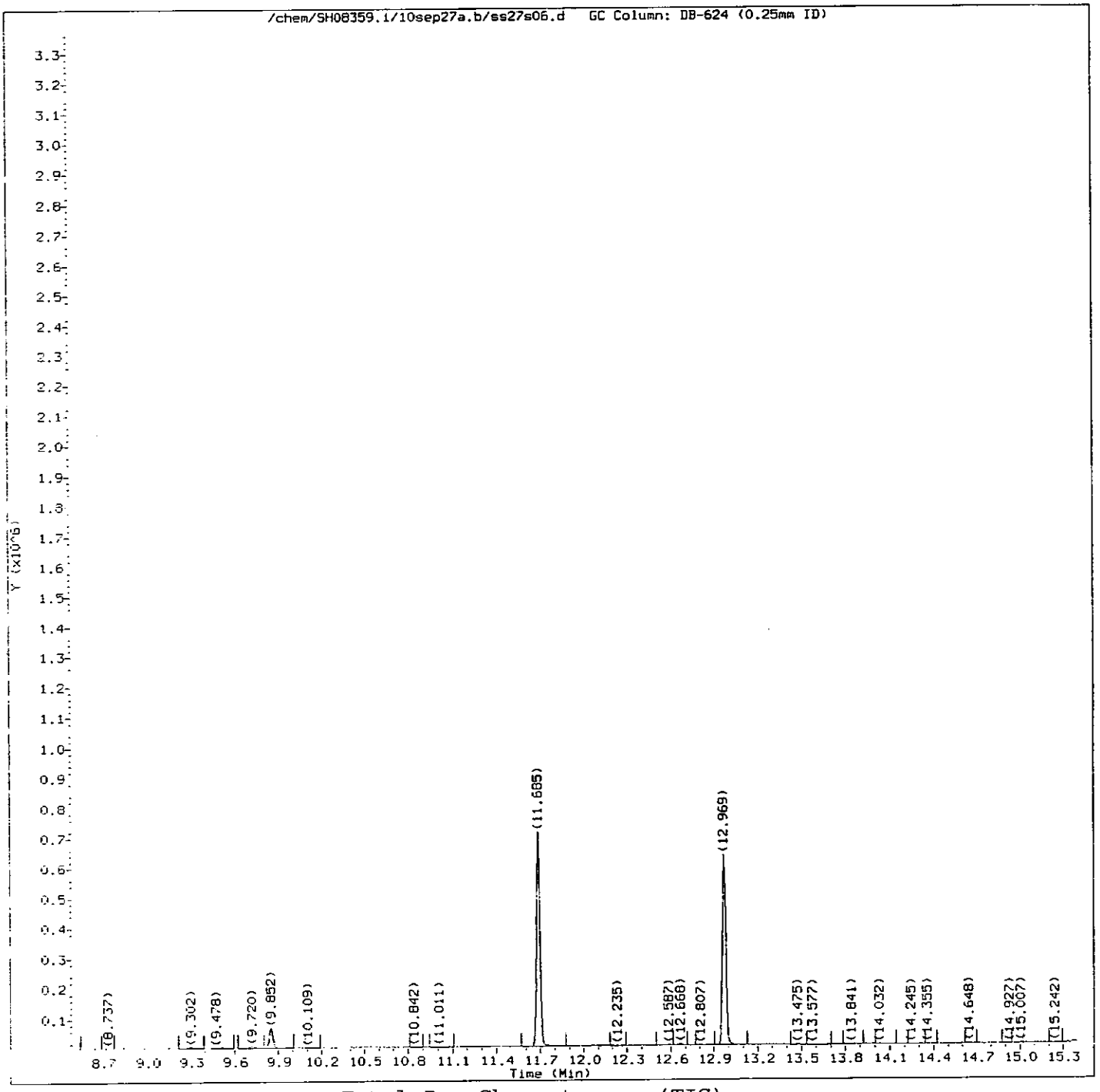
Date, time and analyst ID of latest file update: 27-Sep-2010 10:49 Automation

WAT12 0853

Sample Name: XXXXX

Lab Sample ID: 6087282

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s06.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 09:32 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 10:49 Automation
WAT12 8654

Sample Name: XXXXX Lab Sample ID: 6087282

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s06.d
Injection date and time: 27-SEP-2010 09:32

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 10:49 Automation

Sublist used: DRAPERREV3

Sample Name: XXXXX

Lab Sample ID: 6087282

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 27) cis-1,2-Dichloroethene | (1) | 5.665 | 96 | 10577 | 0.152 |
| 43)*Fluorobenzene | (1) | 7.337 | 96 | 1002720 | 5.000 |
| 59) Tetrachloroethene | (1) | 9.852 | 166 | 18268 | 0.298 |
| 74)$4-Bromofluorobenzene | (1) | 11.685 | 174 | 175838 | 4.646 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.969 | 152 | 153784 | 4.447 |

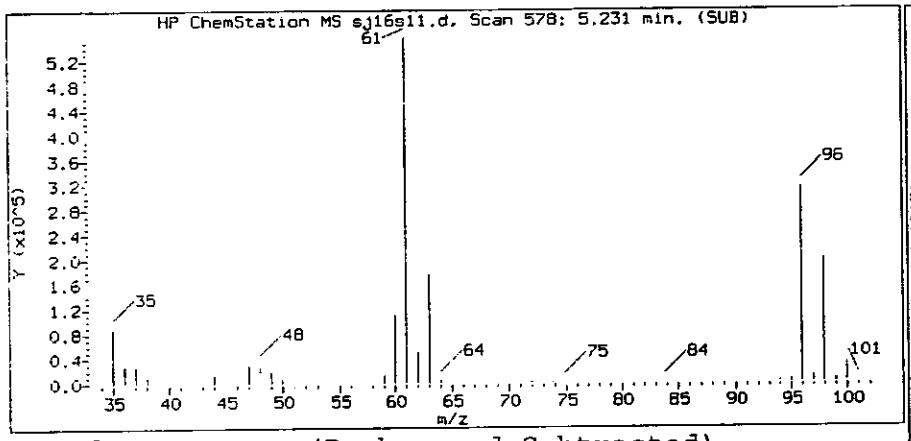
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

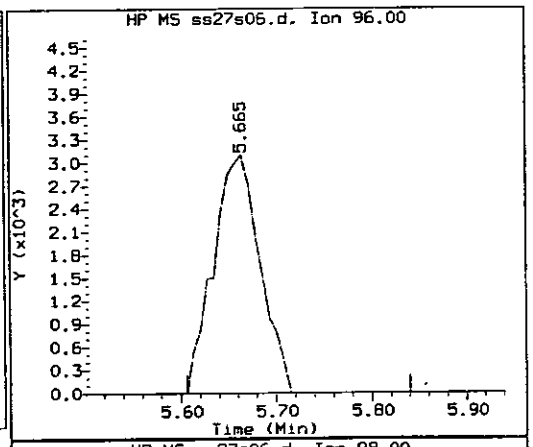


WAT12 0855

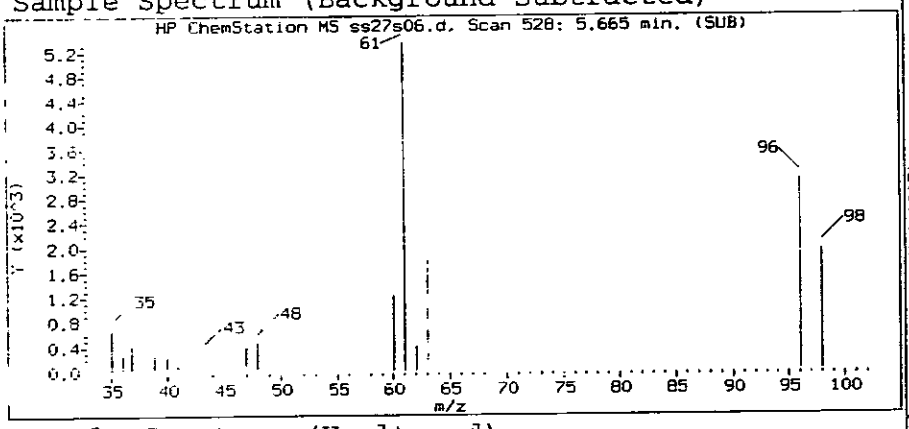
Digitally signed by Anita M. Dale
on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492

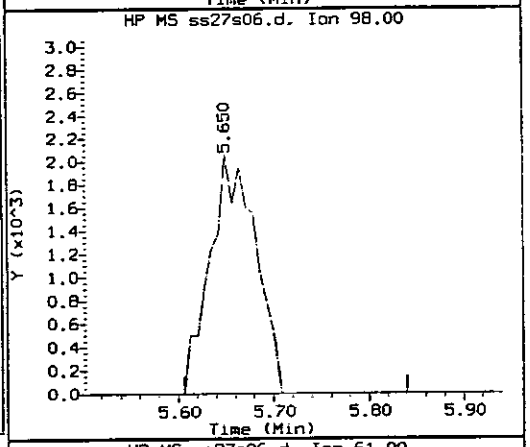
Reference Standard Spectrum for cis-1,2-Dichloroethene



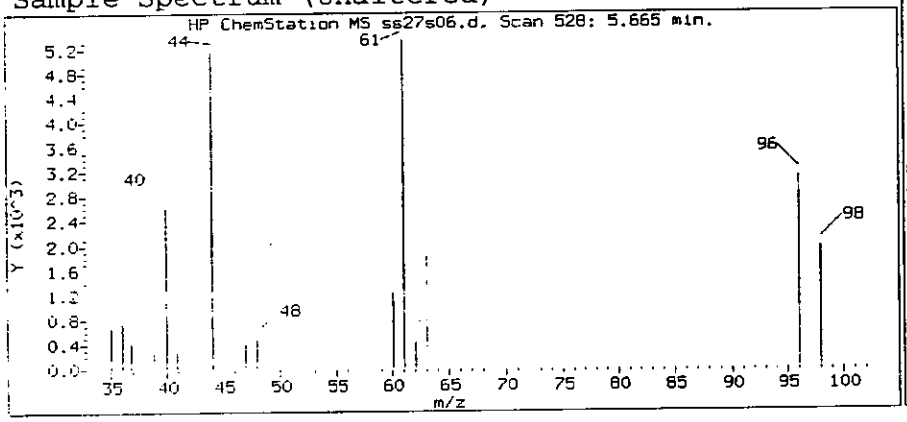



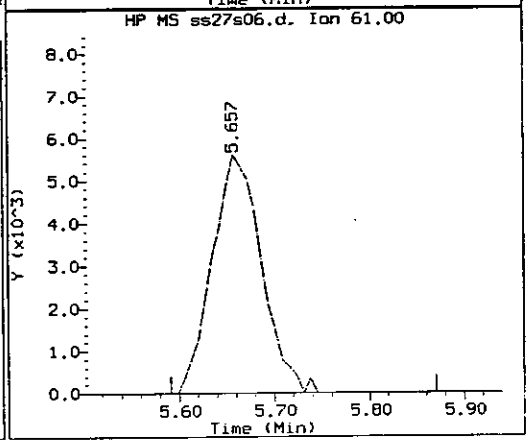

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s06.d
Injection date and time: 27-SEP-2010 09:32

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 10:49 Automation

Sample Name: XXXXX

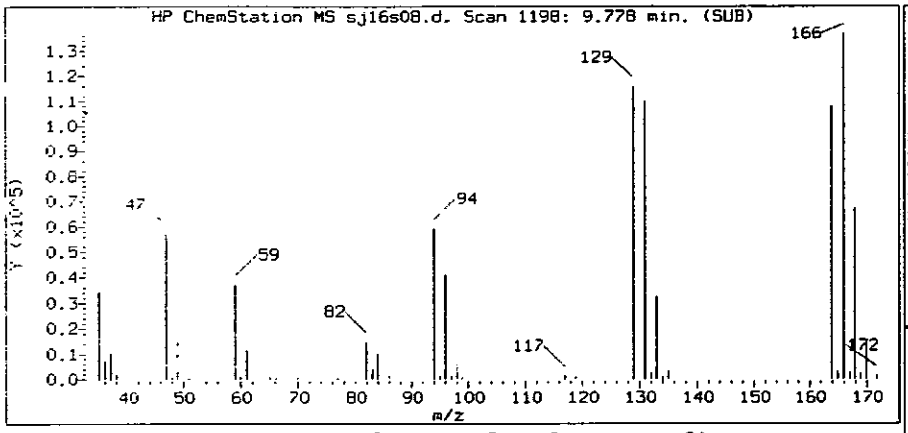
Lab Sample ID: 6087282

| | |
|---|---|
| Compound Number | : 27 |
| Compound Name | : cis-1,2-Dichloroethene |
| Scan Number | : 528 |
| Retention Time (minutes) | : 5.665 |
| Relative Retention Time | : -0.000 |
| Quant Ion | : 96.00 |
| Area (flag) | : 10577 |
| On-Column Amount (ng) | : 0.1524 |

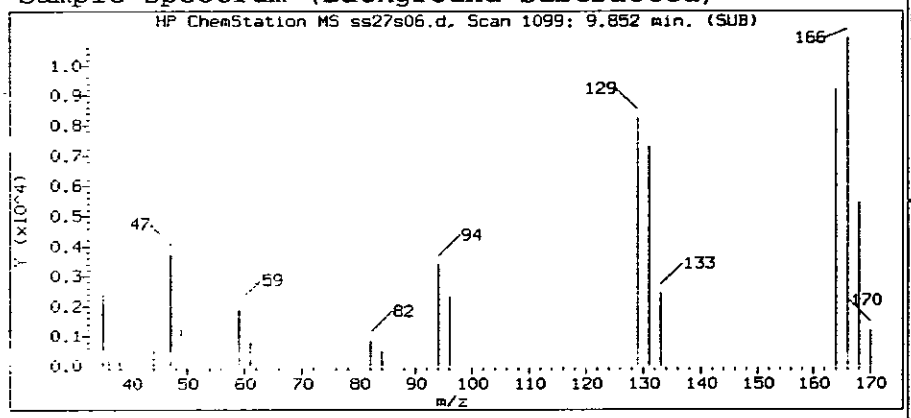
WAT12 0056

Digitally signed by Anita M. Dale on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492

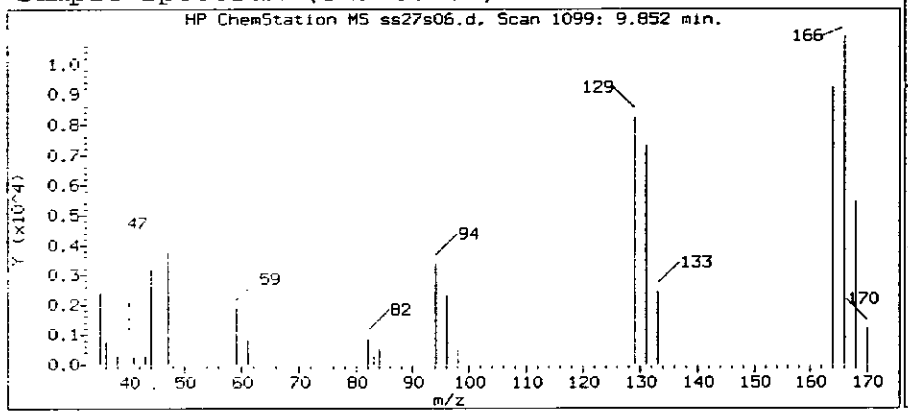
Reference Standard Spectrum for Tetrachloroethene

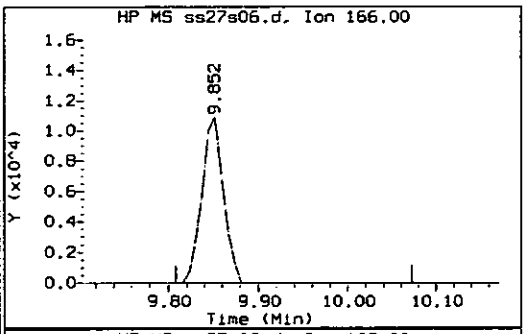


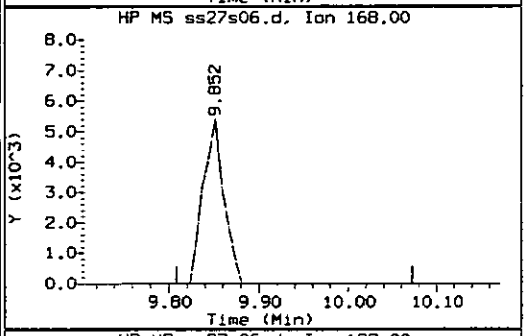

Sample Spectrum (Background Subtracted)

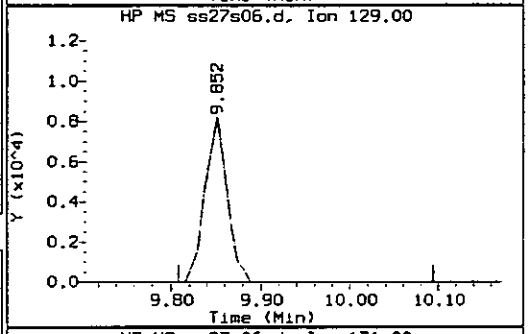


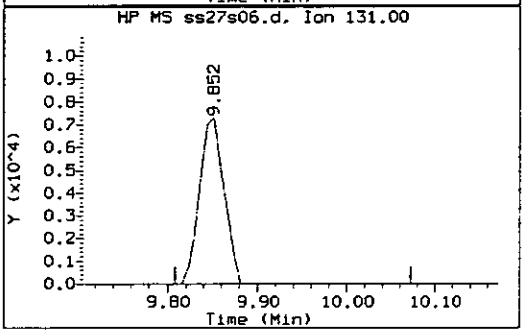

Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s06.d
Injection date and time: 27-SEP-2010 09:32

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 10:49 Automation

Sample Name: XXXXX

Lab Sample ID: 6087282

Compound Number : 59
Compound Name : Tetrachloroethene
Scan Number : 1099
Retention Time (minutes): 9.852
Relative Retention Time : 0.000
Quant Ion : 166.00
Area (flag) : 18268
On-Column Amount (ng) : 0.2975

WAT12 8057

Digitally signed by Anita M. Dale on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087283

Data file: /chem/SH08359.i/10sep27a.b/ss27s07.d
Data file Sample Info. Line: XXXXX;6087283;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 10:50 Automation

Injection date and time: **27-SEP-2010 09:59**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Internal Standards | RT (+/-RT) | Scan | QIon | Area(+/- %Change) | Conc. (on-column) | QC Flag |
|---|---|---|---|---|---|---|
| 43) Fluorobenzene | 7.344(-0.007) | 757 | 96 | 1001584 ( -8) | 5.00 | |

| Surrogate Standards | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | %Rec. | QC flags | QC Limits |
|---|---|---|---|---|---|---|---|---|
| 74) 4-Bromofluorobenzene | (1) | 11.685( 0.002) | 174 | 174057 | 4.604 | 92% | | 80 - 120 |
| 91) 1,2-Dichlorobenzene-d4 | (1) | 12.969( 0.002) | 152 | 144163 | 4.173 | 83% | | 80 - 120 |

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 2) Chloromethane | (1) | | | Not Detected | | | | | 0.2 |
| 3) Vinyl Chloride | (1) | | | Not Detected | | | | | 0.1 |
| 4) Bromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 5) Chloroethane | (1) | | | Not Detected | | | | | 0.2 |
| 7) Trichlorofluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 10) 1,1-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 17) Methylene Chloride | (1) | | | Not Detected | | | | | 0.3 |
| 21) trans-1,2-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 23) 1,1-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 27) cis-1,2-Dichloroethene | (1) | 5.657( 0.000) | 96 | 24846 | 0.358 | 0.36 | | | 0.1 |
| 28) 2,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.2 |
| 33) Bromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 35) Chloroform | (1) | | | Not Detected | | | | | 0.1 |
| 36) 1,1,1-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 39) Carbon Tetrachloride | (1) | | | Not Detected | | | | | 0.1 |
| 38) 1,1-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 40) Benzene | (1) | | | Not Detected | | | | | 0.1 |
| 41) 1,2-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 44) Trichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 45) 1,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 46) Dibromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 48) Bromodichloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 51) cis-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 54) Toluene | (1) | | | Not Detected | | | | | 0.1 |
| 55) trans-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 57) 1,1,2-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 59) Tetrachloroethene | (1) | 9.852( 0.001) | 166 | 11951 | 0.195 | 0.19 | | | 0.1 |
| 60) 1,3-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 62) Dibromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 63) 1,2-Dibromoethane | (1) | | | Not Detected | | | | | 0.1 |
| 64) Chlorobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 66) Ethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 68) m+p-Xylene | (1) | | | Not Detected | | | | | 0.2 |
| 69) o-Xylene | (1) | | | Not Detected | | | | | 0.1 |
| 70) Styrene | (1) | | | Not Detected | | | | | 0.1 |
| 71) Bromoform | (1) | | | Not Detected | | | | | 0.2 |
| 73) Isopropylbenzene | (1) | | | Not Detected | | | | | 0.1 |

WAT12 0058

Digitally signed by Anita M. Dale on 09/27/2010 at 11:00. Target 3.5 esignature user ID: amd00492

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087283

Data file: /chem/SH08359.i/10sep27a.b/ss27s07.d
Data file Sample Info. Line: XXXXX;6087283;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 10:50 Automation

Injection date and time: **27-SEP-2010 09:59**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Target Compounds | I.S. Ref. | RT | (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|---|
| 75) 1,1,2,2-Tetrachloroethane | (1) | | | | Not Detected | | | | | 0.1 |
| 76) Bromobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 77) 1,2,3-Trichloropropane | (1) | | | | Not Detected | | | | | 0.1 |
| 79) n-Propylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 80) 2-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 81) 1,3,5-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 82) 4-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.2 |
| 83) tert-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 85) 1,2,4-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 86) sec-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 88) p-Isopropyltoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 87) 1,3-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 89) 1,4-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 90) n-Butylbenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 92) 1,2-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | | | | Not Detected | | | | | 0.4 |
| 96) 1,2,4-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 97) Hexachlorobutadiene | (1) | | | | Not Detected | | | | | 0.2 |
| 98) Naphthalene | (1) | | | | Not Detected | | | | | 0.2 |
| 99) 1,2,3-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |

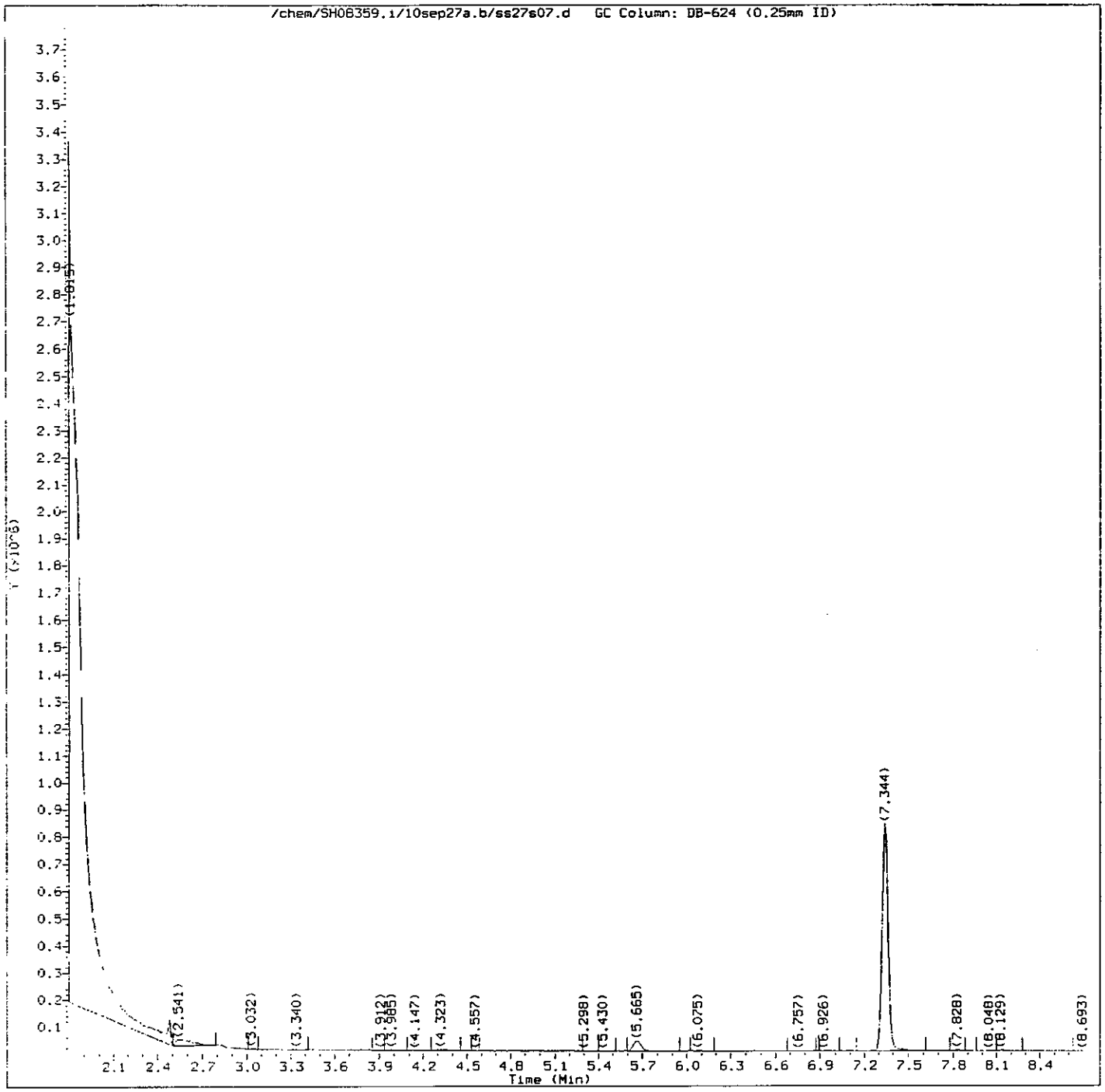
Total number of targets = 59

Comments:

WAT12 8859

Digitally signed by Anita M. Dale on 09/27/2010 at 11:00. Target 3.5 esignature user ID: amd00492

Auditor: Date: 09/28/10




Total Ion Chromatogram (TIC)

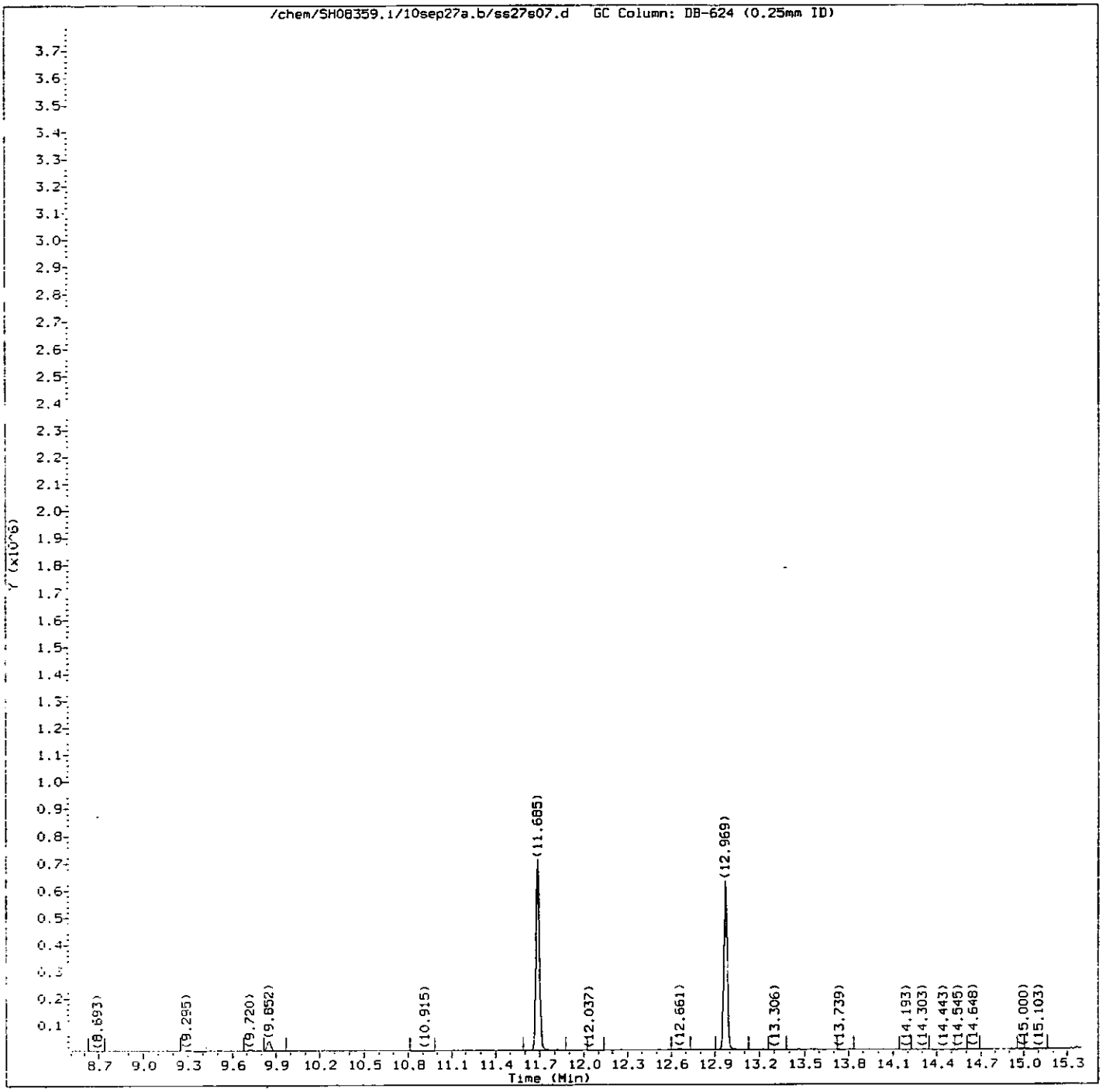
Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s07.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 09:59 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 10:50 Automation

Sample Name: XXXXX Lab Sample ID: 6087283 WAT12 0068

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s07.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 09:59 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 10:50 Automation

WAT12 0061

Sample Name: XXXXX Lab Sample ID: 6087283

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s07.d
Injection date and time: 27-SEP-2010 09:59

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 10:50 Automation

Sample Name: XXXXX

Lab Sample ID: 6087283

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 27) cis-1,2-Dichloroethene | (1) | 5.657 | 96 | 24846 | 0.358 |
| 43)*Fluorobenzene | (1) | 7.344 | 96 | 1001584 | 5.000 |
| 59) Tetrachloroethene | (1) | 9.852 | 166 | 11951 | 0.195 |
| 74)$4-Bromofluorobenzene | (1) | 11.685 | 174 | 174057 | 4.604 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.969 | 152 | 144163 | 4.173 |

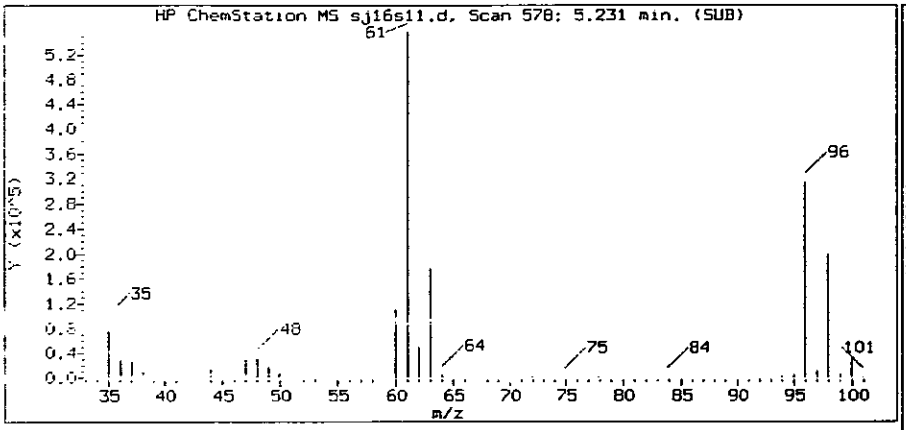
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

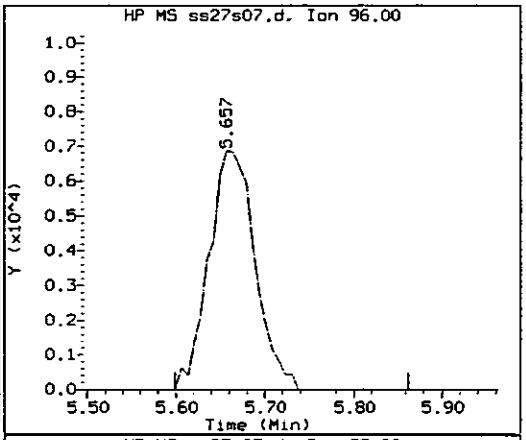


WAT12 0062

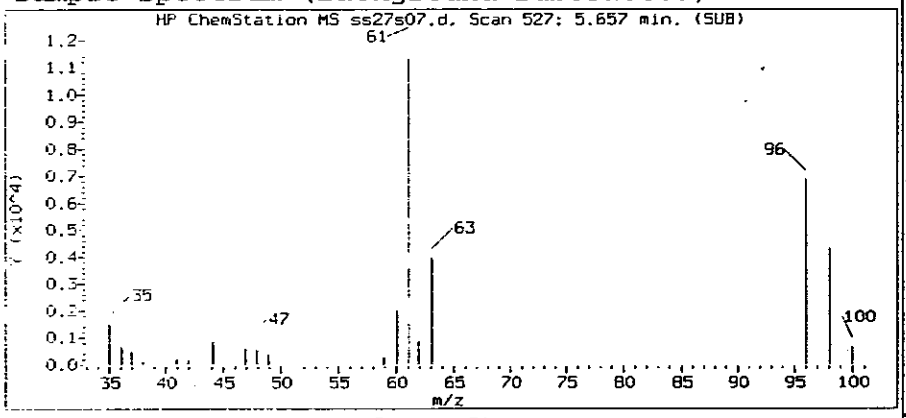
Digitally signed by Anita M. Dale
on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492

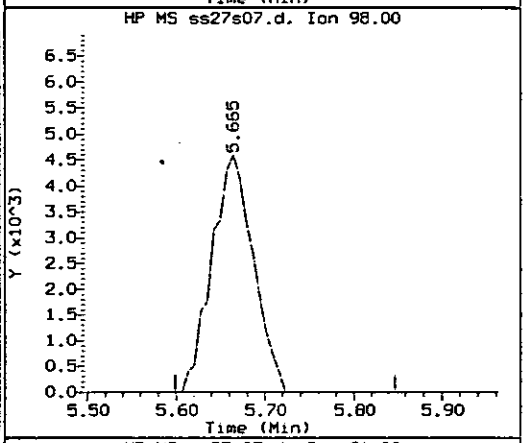
Reference Standard Spectrum for cis-1,2-Dichloroethene



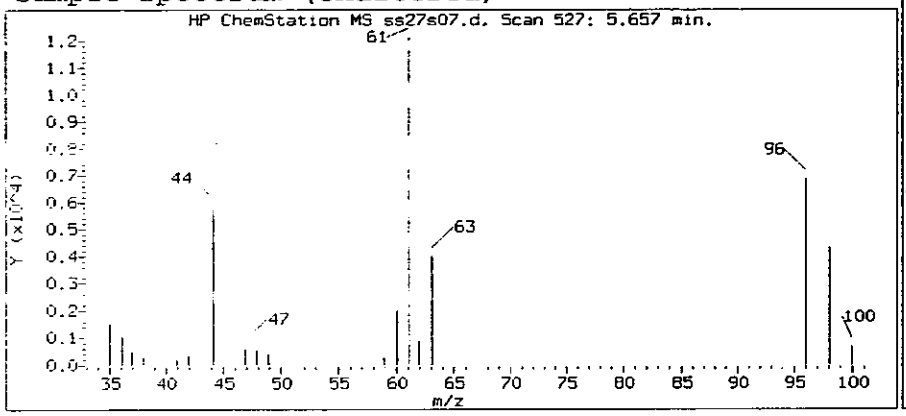



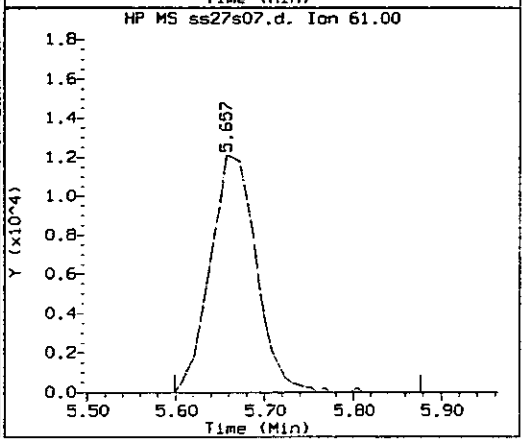

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s07.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 09:59  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 10:50 Automation

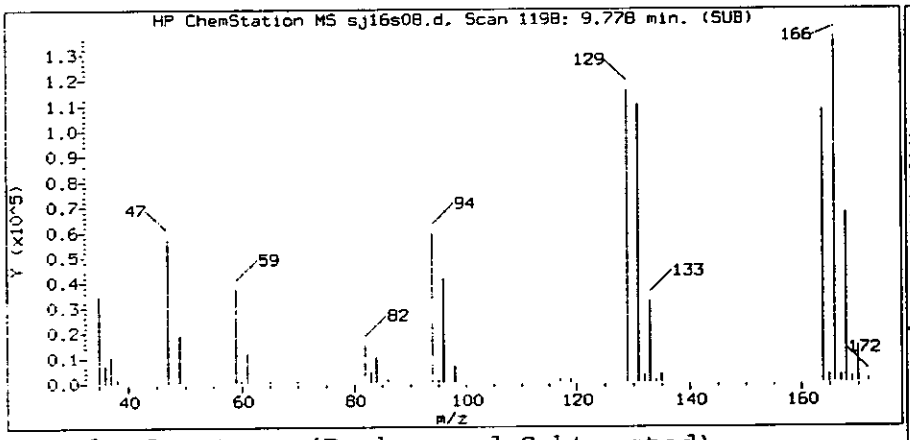
Sample Name: XXXXX  Lab Sample ID: 6087283

Compound Number : 27
Compound Name : cis-1,2-Dichloroethene
Scan Number : 527
Retention Time (minutes): 5.657
Relative Retention Time : 0.000
Quant Ion : 96.00
Area (flag) : 24846
On-Column Amount (ng) : 0.3583

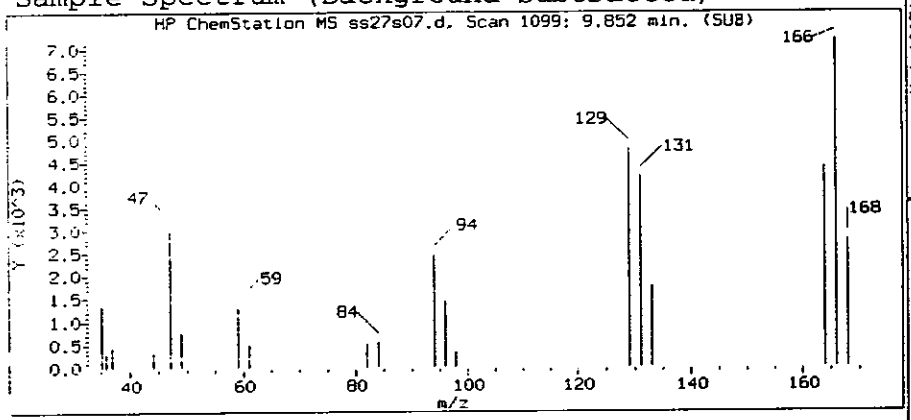
WAT12 8863

Digitally signed by Anita M. Dale on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492

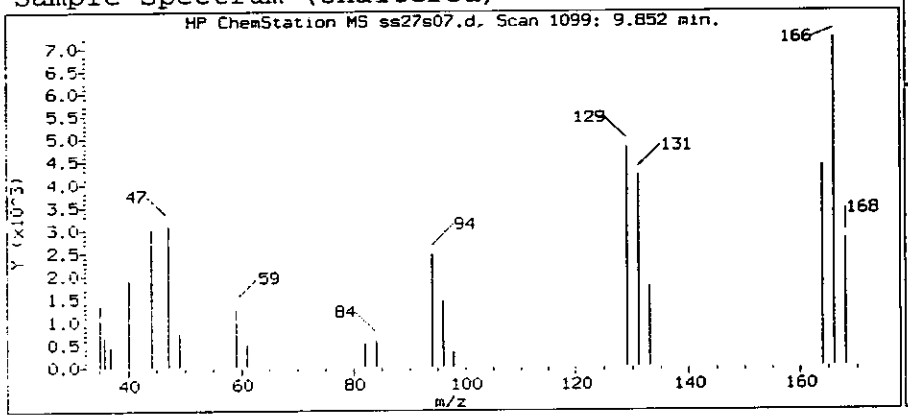
Reference Standard Spectrum for Tetrachloroethene

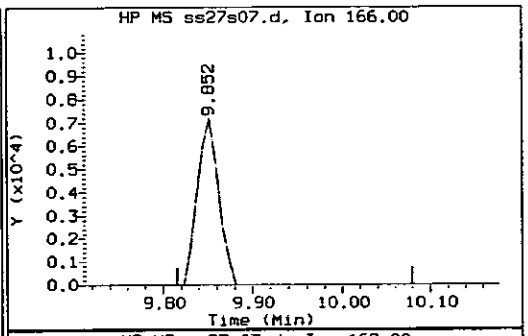


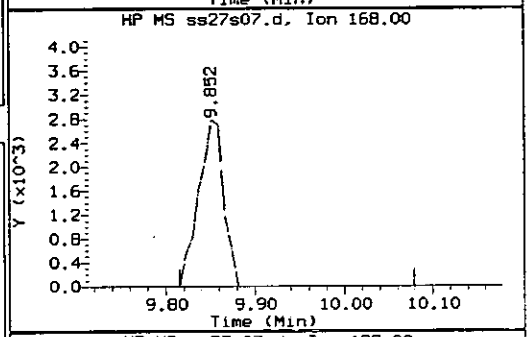

Sample Spectrum (Background Subtracted)

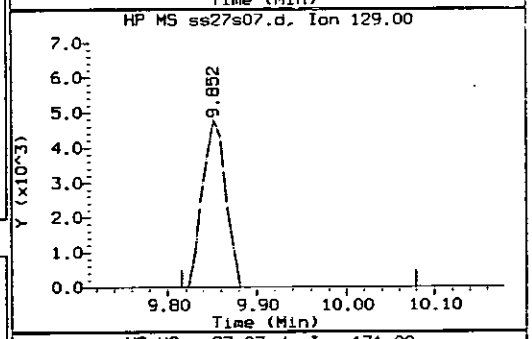


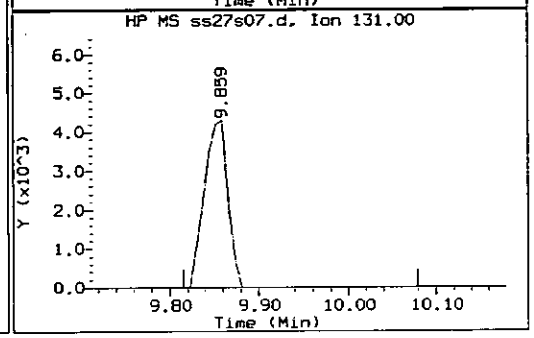

Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s07.d
Injection date and time: 27-SEP-2010 09:59

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 10:50 Automation

Sample Name: XXXXX

Lab Sample ID: 6087283

| | |
|---|---|
| Compound Number | : 59 |
| Compound Name | : Tetrachloroethene |
| Scan Number | : 1099 |
| Retention Time (minutes) | : 9.852 |
| Relative Retention Time | : 0.001 |
| Quant Ion | : 166.00 |
| Area (flag) | : 11951 |
| On-Column Amount (ng) | : 0.1949 |

WAT12 0064

Digitally signed by Anita M. Dale on 09/27/2010 at 11:00.
Target 3.5 esignature user ID: amd00492

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087284

Data file: /chem/SH08359.i/10sep27a.b/ss27s08.d
Data file Sample Info. Line: XXXXX;6087284;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Injection date and time: **27-SEP-2010 10:25**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Internal Standards | RT (+/-RT) | Scan | QIon | Area(+/- %Change) | Conc. (on-column) | QC Flag |
|---|---|---|---|---|---|---|
| 43) Fluorobenzene | 7.344(-0.007) | 757 | 96 | 973977 ( -11) | 5.00 | |

| Surrogate Standards | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | %Rec. | QC flags | QC Limits |
|---|---|---|---|---|---|---|---|---|
| 74) 4-Bromofluorobenzene | (1) | 11.685( 0.002) | 174 | 172542 | 4.693 | 94% | | 80 - 120 |
| 91) 1,2-Dichlorobenzene-d4 | (1) | 12.969( 0.002) | 152 | 145709 | 4.338 | 87% | | 80 - 120 |

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | 1.954(-0.000) | 85 | 71164M | 1.132 | 1.13 | | | 0.2 |
| 2) Chloromethane | (1) | | | Not Detected | | | | | 0.2 |
| 3) Vinyl Chloride | (1) | 2.196(-0.000) | 62 | 56882 | 0.432 | 0.43 | | | 0.1 |
| 4) Bromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 5) Chloroethane | (1) | 2.599(-0.000) | 64 | 785785 | 10.673 | 10.67 | | | 0.2 |
| 7) Trichlorofluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 10) 1,1-Dichloroethene | (1) | 3.406(-0.000) | 96 | 73350 | 1.308 | 1.31 | | | 0.1 |
| 17) Methylene Chloride | (1) | 3.971( 0.001) | 84 | 75009 | 1.316 | 1.32 | | | 0.3 |
| 21) trans-1,2-Dichloroethene | (1) | 4.315( 0.000) | 96 | 13055 | 0.191 | 0.19 | | | 0.1 |
| 23) 1,1-Dichloroethane | (1) | 4.865( 0.000) | 63 | 5474156 | 35.596 | 35.60 | | E | 0.1 |
| 27) cis-1,2-Dichloroethene | (1) | 5.665(-0.000) | 96 | 412665 | 6.119 | 6.12 | | | 0.1 |
| 28) 2,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.2 |
| 33) Bromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 35) Chloroform | (1) | | | Not Detected | | | | | 0.1 |
| 36) 1,1,1-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 39) Carbon Tetrachloride | (1) | | | Not Detected | | | | | 0.1 |
| 38) 1,1-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 40) Benzene | (1) | 6.948(-0.000) | 78 | 119855 | 0.509 | 0.51 | | | 0.1 |
| 41) 1,2-Dichloroethane | (1) | 6.970(-0.000) | 62 | 10346 | 0.221 | 0.22 | | | 0.1 |
| 44) Trichloroethene | (1) | 7.828( 0.000) | 95 | 57117 | 0.867 | 0.87 | | | 0.1 |
| 45) 1,2-Dichloropropane | (1) | 8.107( 0.001) | 63 | 17977 | 0.228 | 0.23 | | | 0.1 |
| 46) Dibromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 48) Bromodichloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 51) cis-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 54) Toluene | (1) | | | Not Detected | | | | | 0.1 |
| 55) trans-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 57) 1,1,2-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 59) Tetrachloroethene | (1) | 9.852( 0.001) | 166 | 19784 | 0.332 | 0.33 | | | 0.1 |
| 60) 1,3-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 62) Dibromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 63) 1,2-Dibromoethane | (1) | | | Not Detected | | | | | 0.1 |
| 64) Chlorobenzene | (1) | 10.673( 0.000) | 112 | 36963 | 0.283 | 0.28 | | | 0.1 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 66) Ethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 68) m+p-Xylene | (1) | | | Not Detected | | | | | 0.2 |
| 69) o-Xylene | (1) | | | Not Detected | | | | | 0.1 |
| 70) Styrene | (1) | | | Not Detected | | | | | 0.1 |
| 71) Bromoform | (1) | | | Not Detected | | | | | 0.2 |
| 73) Isopropylbenzene | (1) | | | Not Detected | | | | | 0.1 |

M = Compound was manually integrated. E = Compound concentration above calibration range.

WAT12 0865

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15. Target 3.5 esignature user ID: amd00492

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087284

Data file: /chem/SH08359.i/10sep27a.b/ss27s08.d
Data file Sample Info. Line: XXXXX;6087284;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Injection date and time: **27-SEP-2010 10:25**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 75) 1,1,2,2-Tetrachloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 76) Bromobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 77) 1,2,3-Trichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 79) n-Propylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 80) 2-Chlorotoluene | (1) | | | Not Detected | | | | | 0.1 |
| 81) 1,3,5-Trimethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 82) 4-Chlorotoluene | (1) | | | Not Detected | | | | | 0.2 |
| 83) tert-Butylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 85) 1,2,4-Trimethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 86) sec-Butylbenzene | (1) | 12.507( 0.000) | 134 | 4175M | 0.111 | 0.11 | | | 0.1 |
| 88) p-Isopropyltoluene | (1) | | | Not Detected | | | | | 0.1 |
| 87) 1,3-Dichlorobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 89) 1,4-Dichlorobenzene | (1) | 12.675( 0.001) | 146 | 159631 | 1.860 | 1.86 | | | 0.1 |
| 90) n-Butylbenzene | (1) | | | Not Detected | | | | | 0.2 |
| 92) 1,2-Dichlorobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | | | Not Detected | | | | | 0.4 |
| 96) 1,2,4-Trichlorobenzene | (1) | | | Not Detected | | | | | 0.2 |
| 97) Hexachlorobutadiene | (1) | | | Not Detected | | | | | 0.2 |
| 98) Naphthalene | (1) | | | Not Detected | | | | | 0.2 |
| 99) 1,2,3-Trichlorobenzene | (1) | | | Not Detected | | | | | 0.2 |

M = Compound was manually integrated.

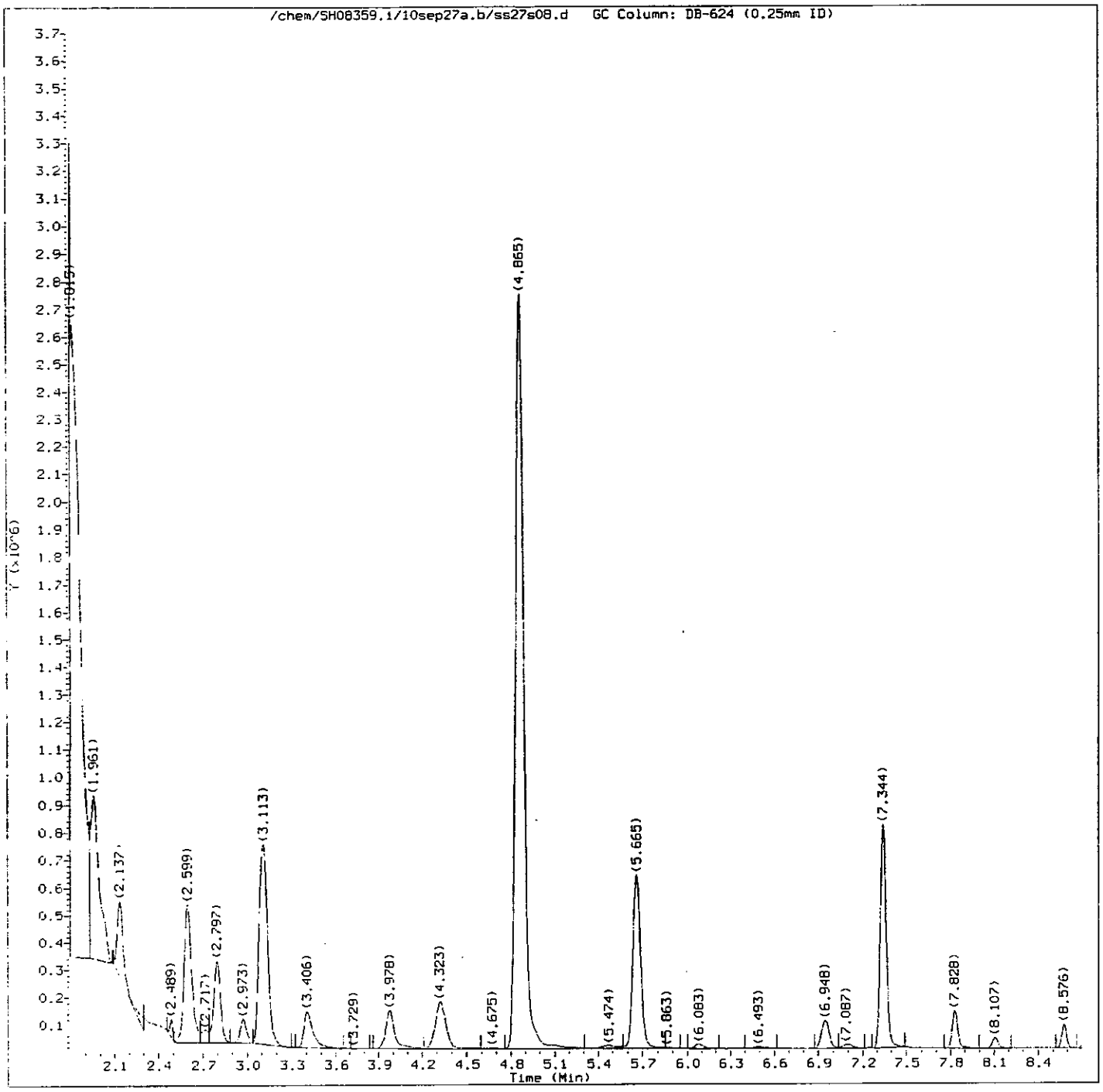
Total number of targets = 59

Comments:

WAT12 0066

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15. Target 3.5 esignature user ID: amd00492

Auditor: A Mulbee Date: 092811




Total Ion Chromatogram (TIC)

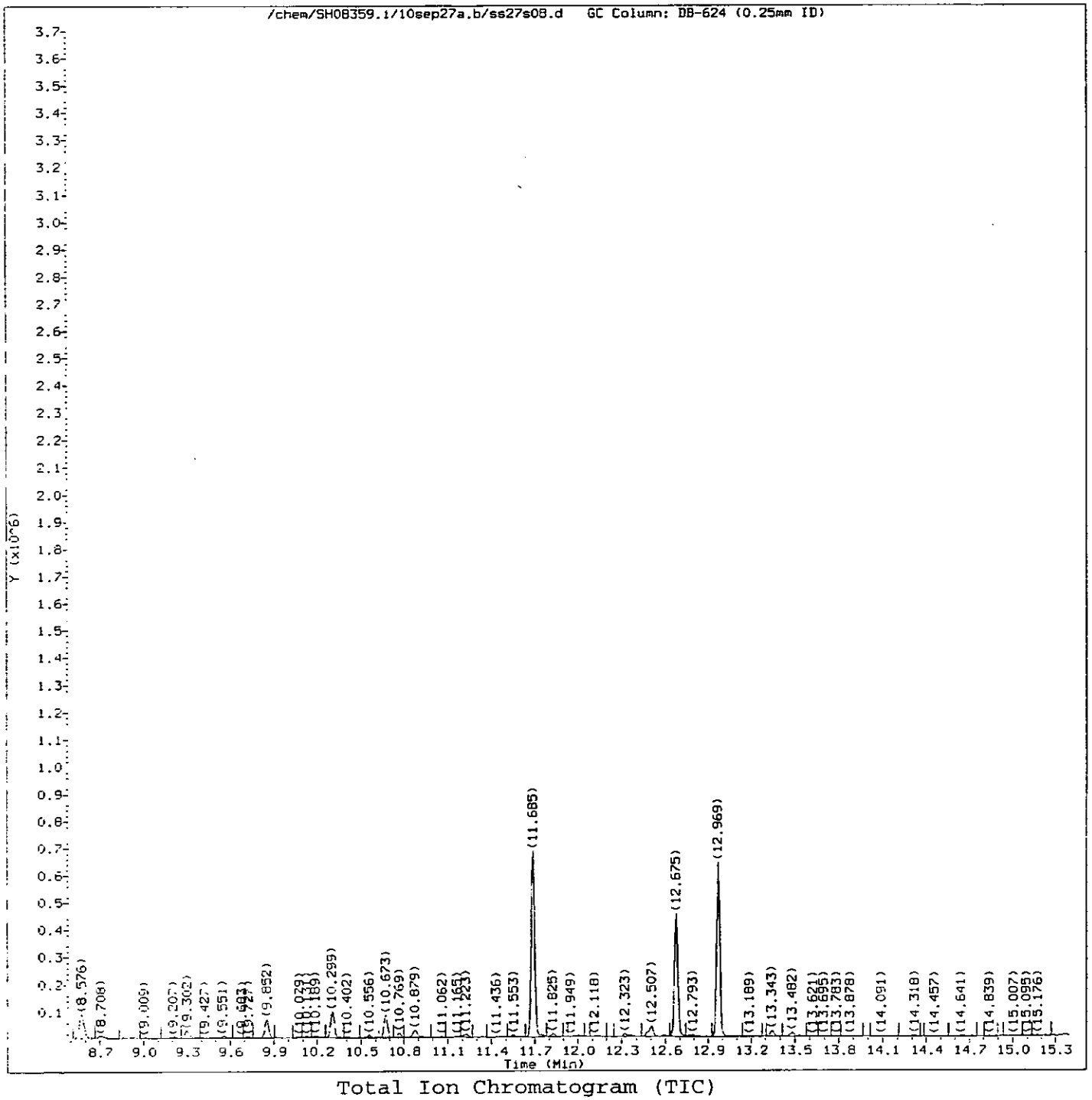
Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:25 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX Lab Sample ID: 6087284 WAT12 0867

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:25 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX Lab Sample ID: 6087284

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:25  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX  Lab Sample ID: 6087284

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | 1.954 | 85 | 71164M | 1.132 |
| 3) Vinyl Chloride | (1) | 2.196 | 62 | 56882 | 0.432 |
| 5) Chloroethane | (1) | 2.599 | 64 | 785785 | 10.673 |
| 10) 1,1-Dichloroethene | (1) | 3.406 | 96 | 73350 | 1.308 |
| 17) Methylene Chloride | (1) | 3.971 | 84 | 75009 | 1.316 |
| 21) trans-1,2-Dichloroethene | (1) | 4.315 | 96 | 13055 | 0.191 |
| 23) 1,1-Dichloroethane | (1) | 4.865 | 63 | 5474156 | 35.596 |
| 27) cis-1,2-Dichloroethene | (1) | 5.665 | 96 | 412665 | 6.119 |
| 40) Benzene | (1) | 6.948 | 78 | 119855 | 0.509 |
| 41) 1,2-Dichloroethane | (1) | 6.970 | 62 | 10346 | 0.221 |
| 43)*Fluorobenzene | (1) | 7.344 | 96 | 973977 | 5.000 |
| 44) Trichloroethene | (1) | 7.828 | 95 | 57117 | 0.867 |
| 45) 1,2-Dichloropropane | (1) | 8.107 | 63 | 17977 | 0.228 |
| 59) Tetrachloroethene | (1) | 9.852 | 166 | 19784 | 0.332 |
| 64) Chlorobenzene | (1) | 10.673 | 112 | 36963 | 0.283 |
| 74)$4-Bromofluorobenzene | (1) | 11.685 | 174 | 172542 | 4.693 |
| 86) sec-Butylbenzene | (1) | 12.507 | 134 | 4175M | 0.111 |
| 89) 1,4-Dichlorobenzene | (1) | 12.675 | 146 | 159631 | 1.860 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.969 | 152 | 145709 | 4.338 |

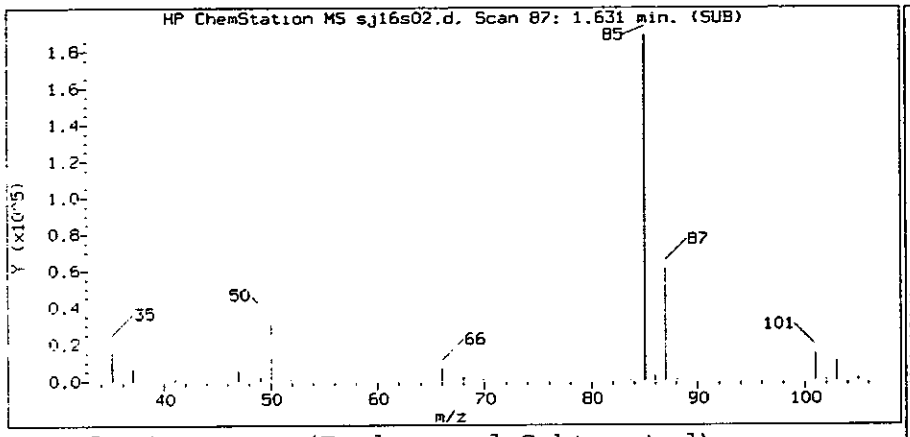
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

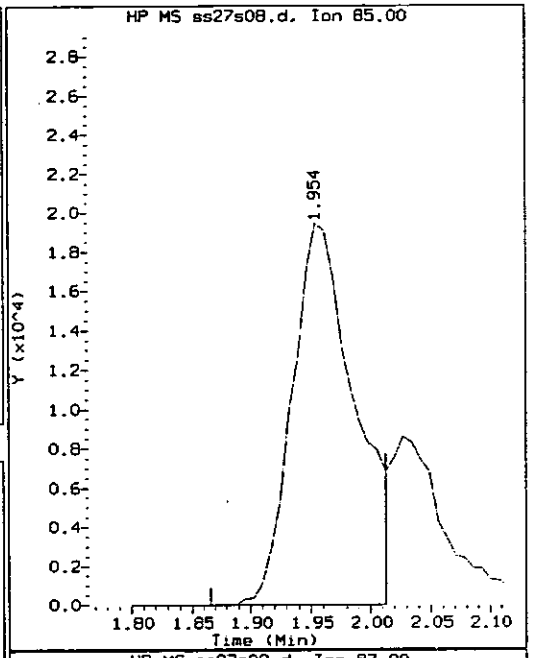


WAT12 0869

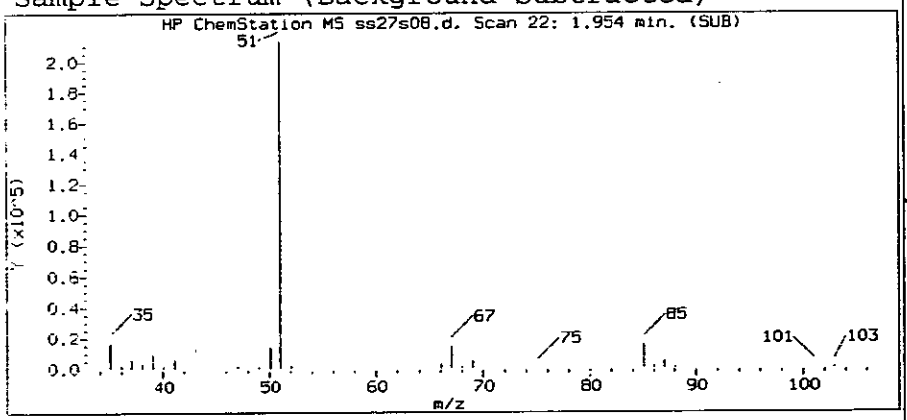
Digitally signed by Anita M. Dale
on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

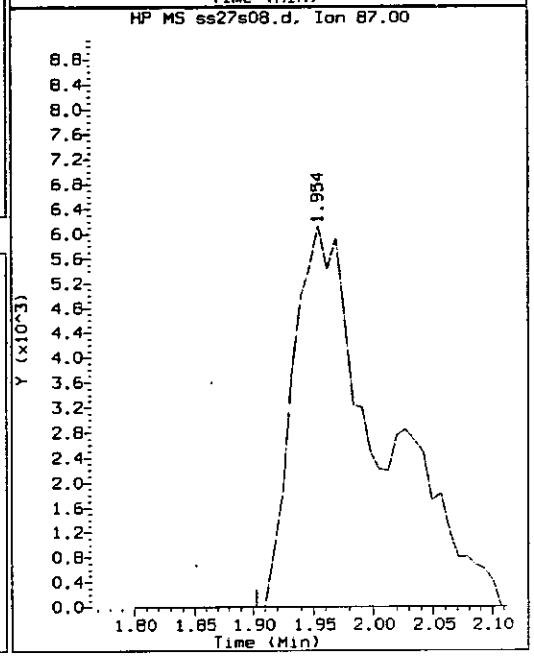
Reference Standard Spectrum for Dichlorodifluoromethane



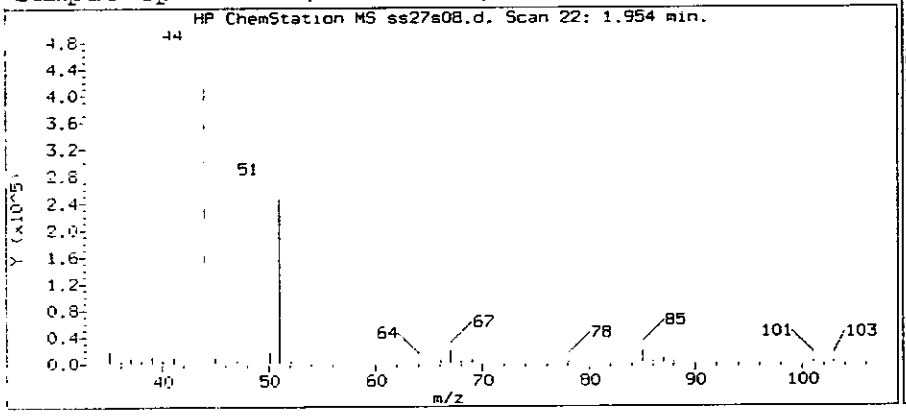




Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sublist used: DRAPERREV3

Sample Name: XXXXX

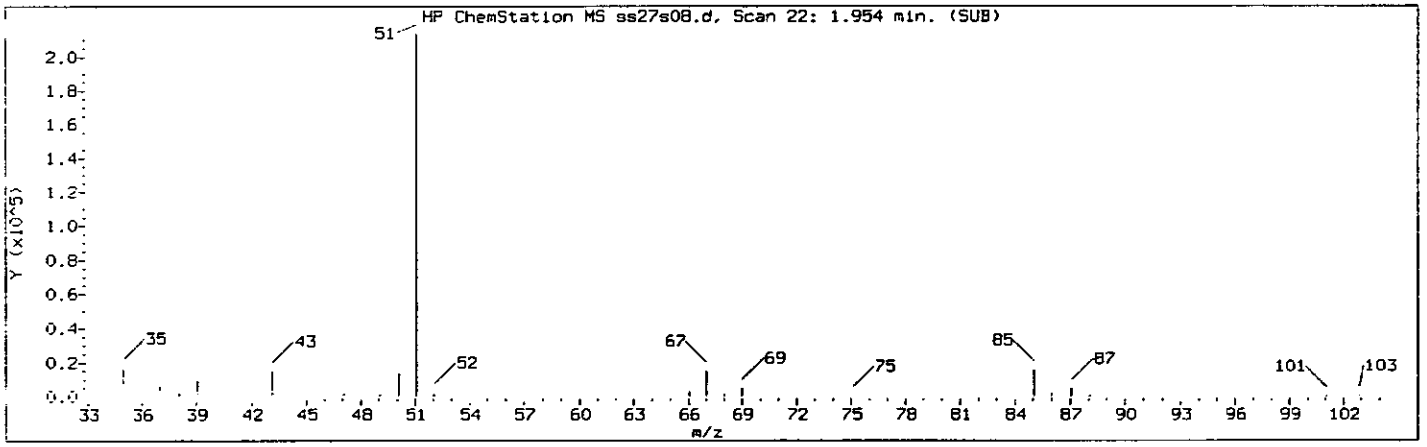
Lab Sample ID: 6087284

Compound Number : 1
Compound Name : Dichlorodifluoromethane
Scan Number : 22
Retention Time (minutes): 1.954
Relative Retention Time : -0.000
Quant Ion : 85.00
Area (flag) : 71164M
On-Column Amount (ng) : 1.1322

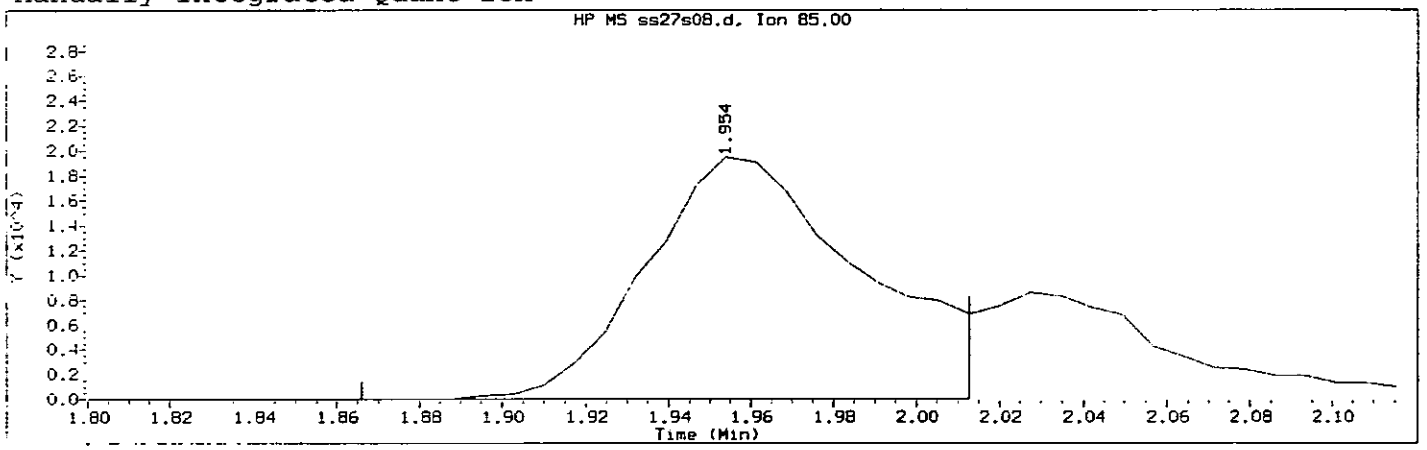
WAT12 8878

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:25  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX  Lab Sample ID: 6087284

| | | | |
|---|---|---|---|
| Compound Number | : 1 | | |
| Compound Name | : Dichlorodifluoromethane | | |
| Scan Number | : 22 | | |
| Retention Time (minutes) | : 1.954 | | |
| Quant Ion | : 85.00 | | |
| Area (flag) | : 71164M | | |
| On-Column Amount (ng) | : 1.1322 | | |
| Integration start scan | : 9 | Integration stop scan: | 29 |
| Y at integration start | : 0 | Y at integration end: | 0 |

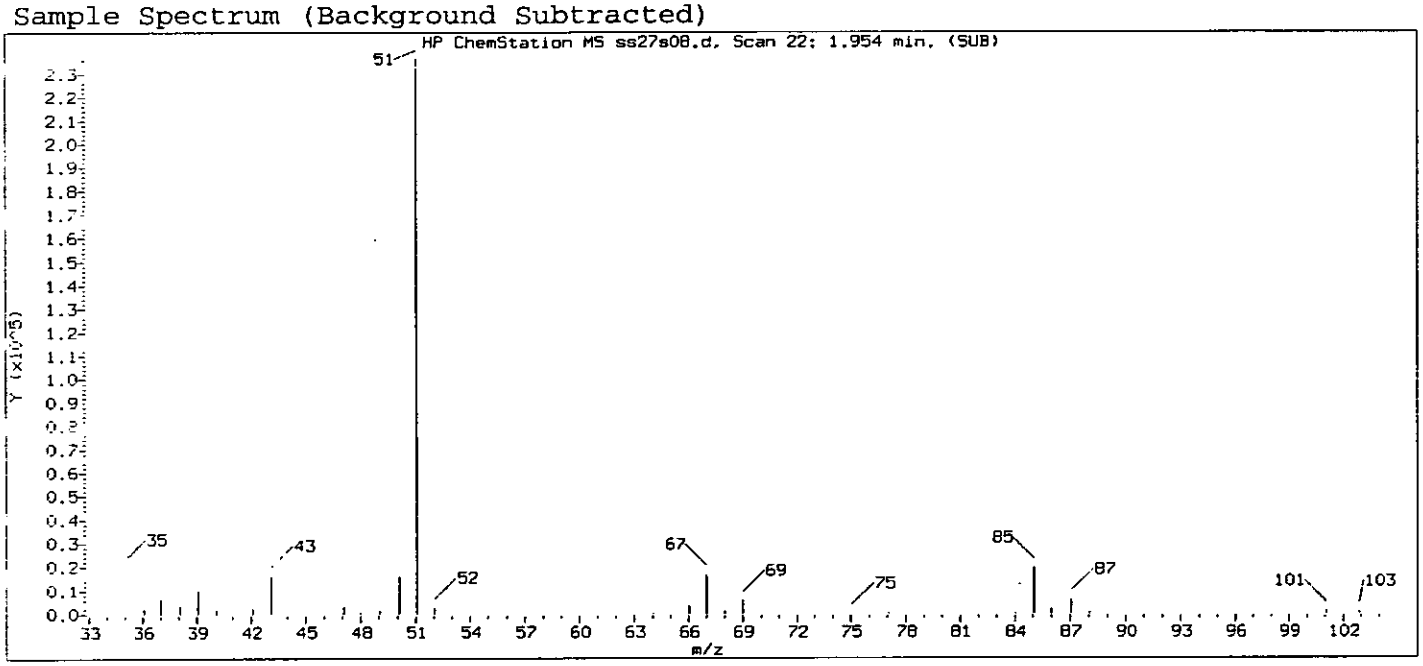
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Anita M. Dale on 09/27/2010 at 11:15. Target 3.5 esignature user ID: amd00492

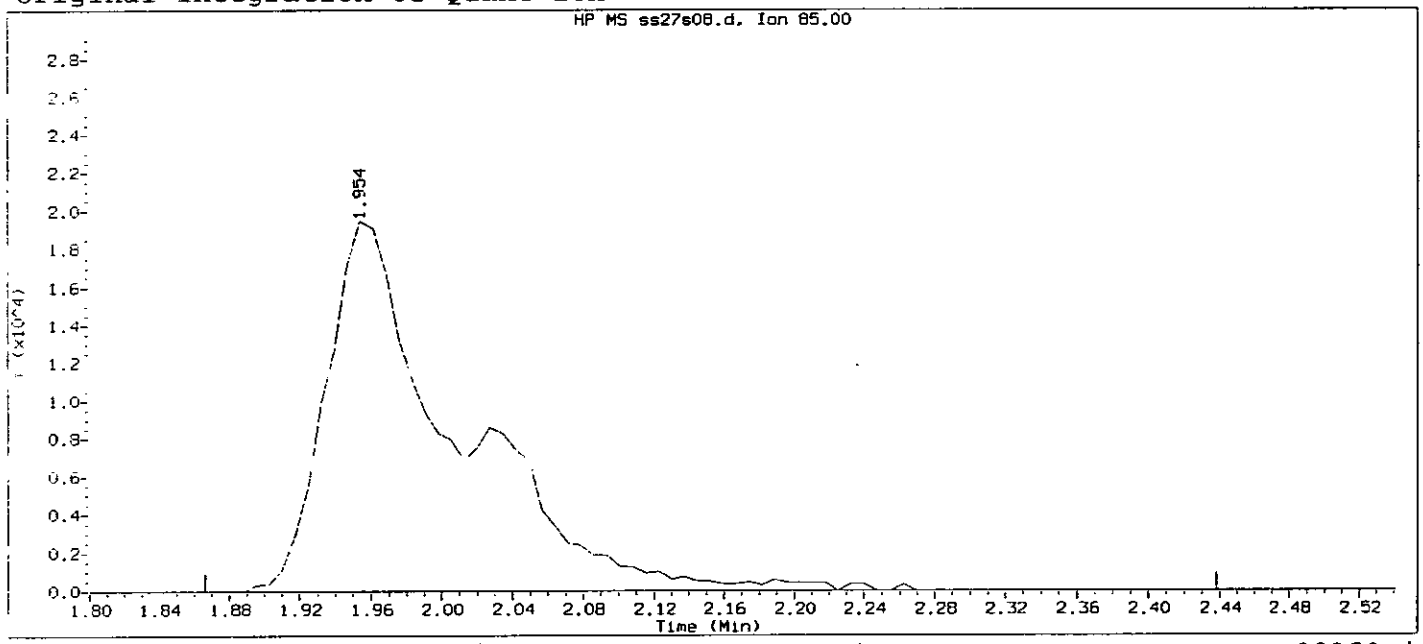
WAT12 8871

GC/MS audit/management approval: _____ CYLM

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:25  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 10:50 Automation

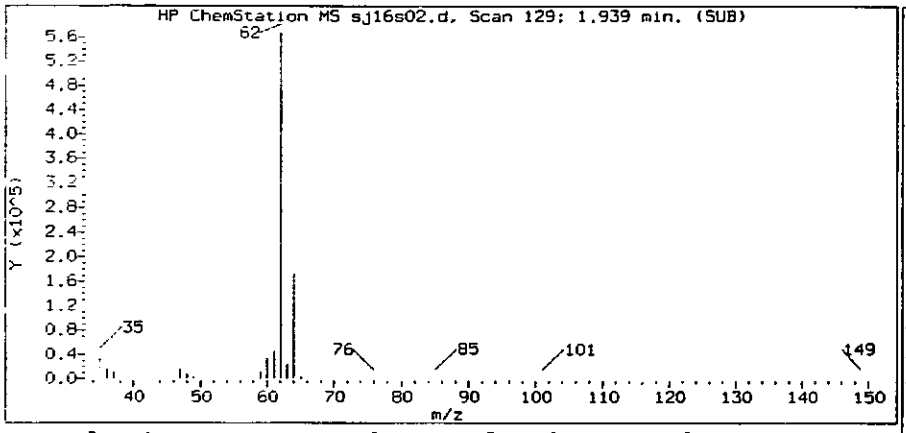
Sample Name: XXXXX  Lab Sample ID: 6087284

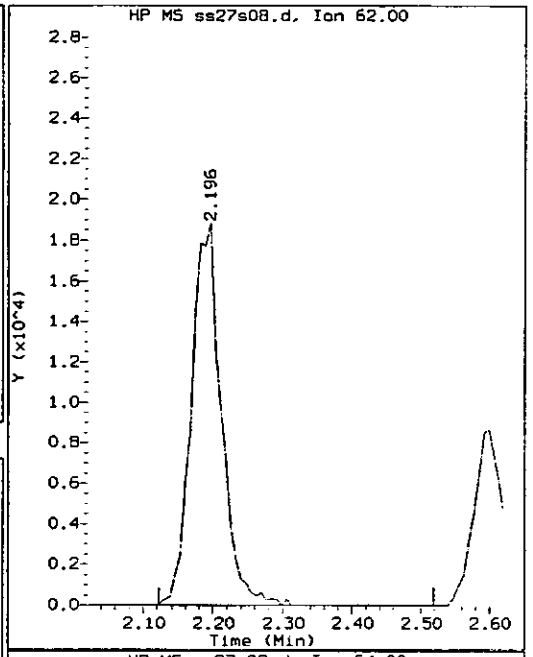
Compound Number : 1
Compound Name : Dichlorodifluoromethane
Scan Number : 22
Retention Time (minutes): 1.954
Quant Ion : 85.00
Area : 100468
On-column Amount (ng) : 1.5984
Integration start scan : 9  Integration stop scan: 87
Y at integration start : 0  Y at integration end: 0

WAT12 0072

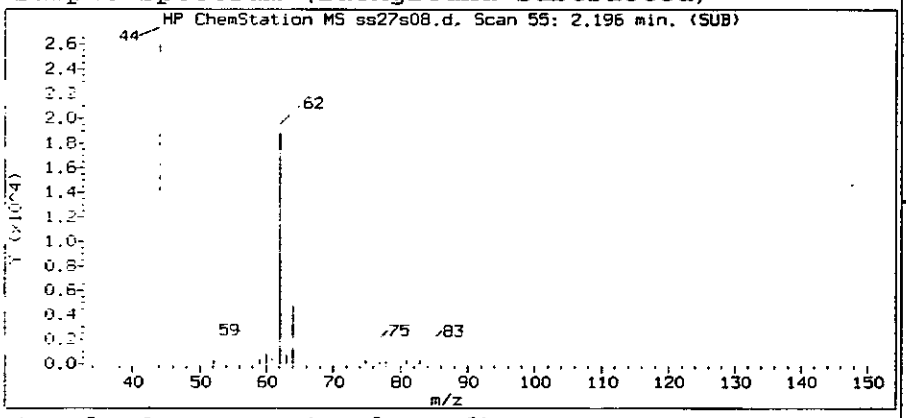
Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

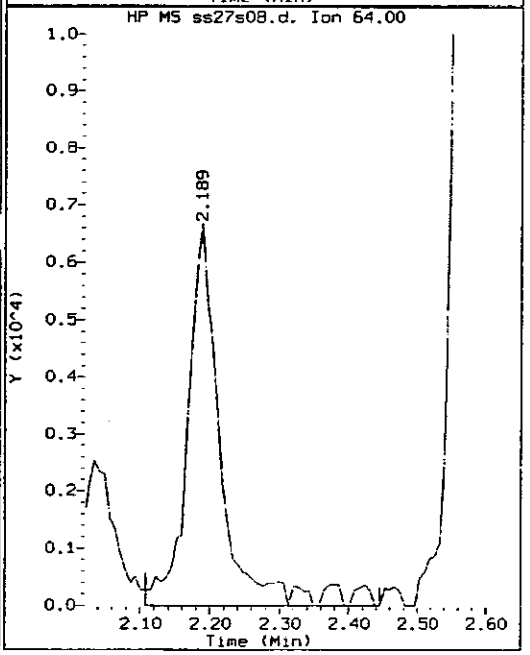
Reference Standard Spectrum for Vinyl Chloride



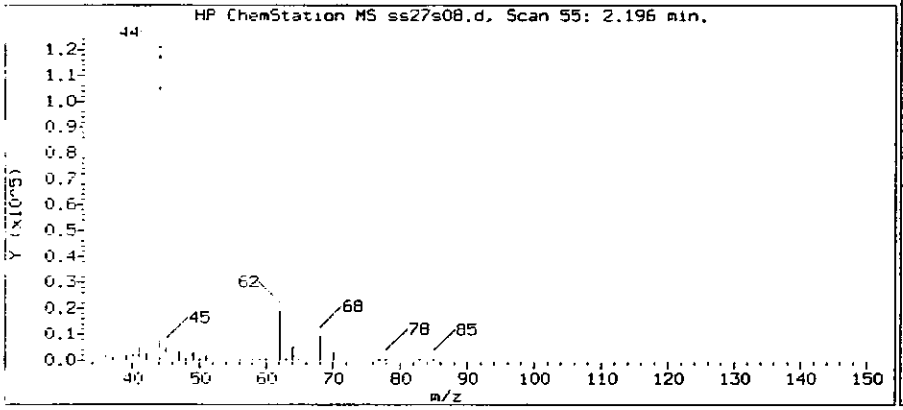




Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX

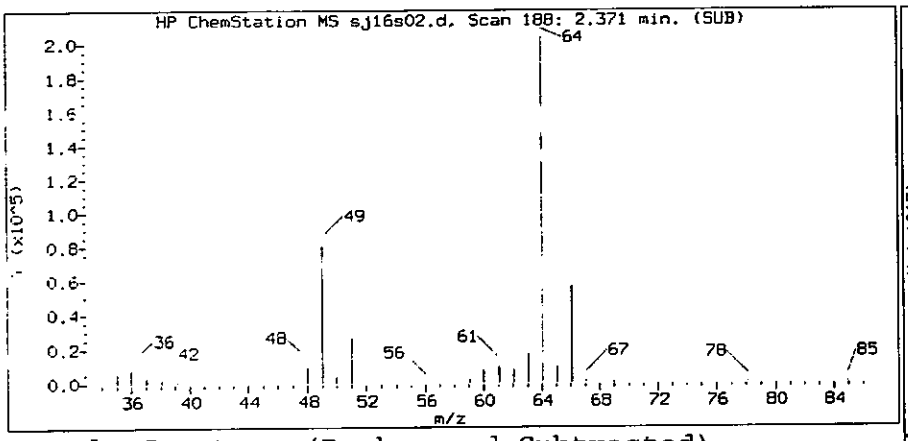
Lab Sample ID: 6087284

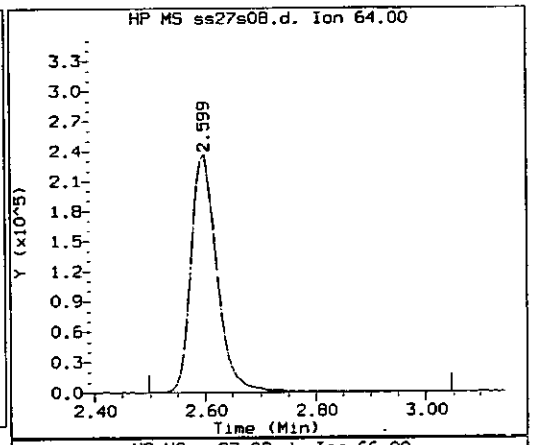
Compound Number : 3
Compound Name : Vinyl Chloride
Scan Number : 55
Retention Time (minutes): 2.196
Relative Retention Time : -0.000
Quant Ion : 62.00
Area (flag) : 56882
On-Column Amount (ng) : 0.4321

WAT12 0573

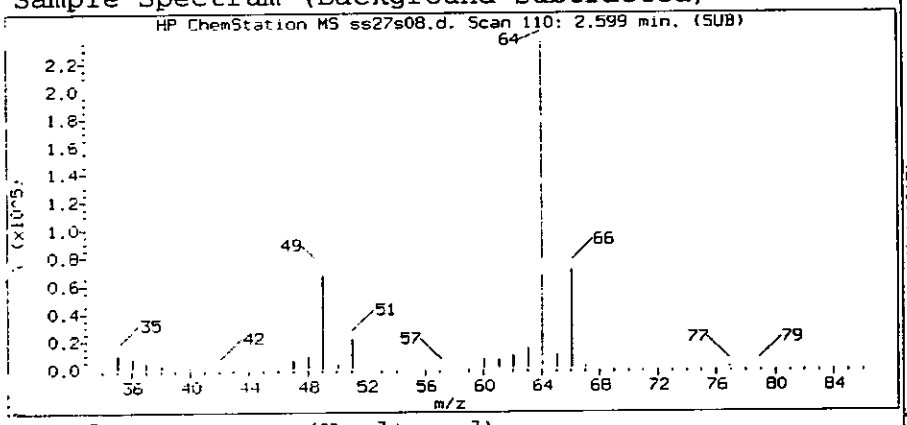
Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

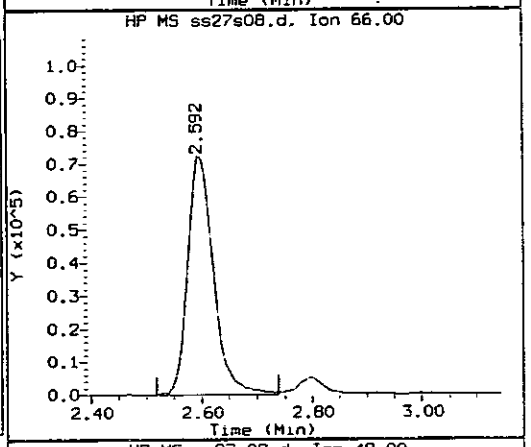
Reference Standard Spectrum for Chloroethane



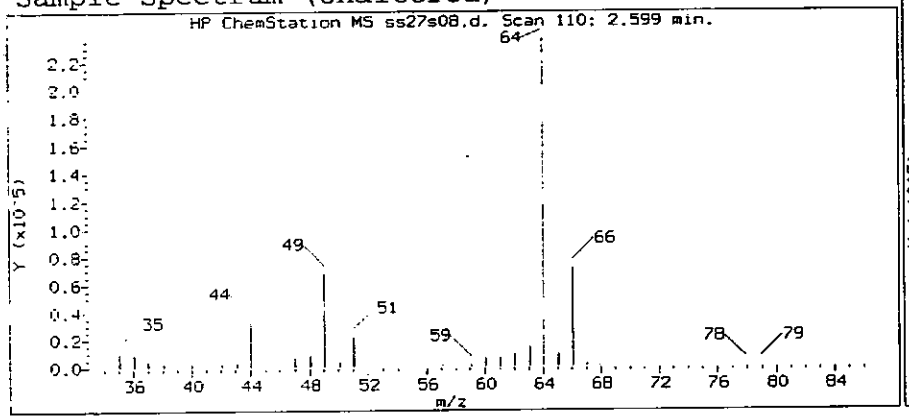



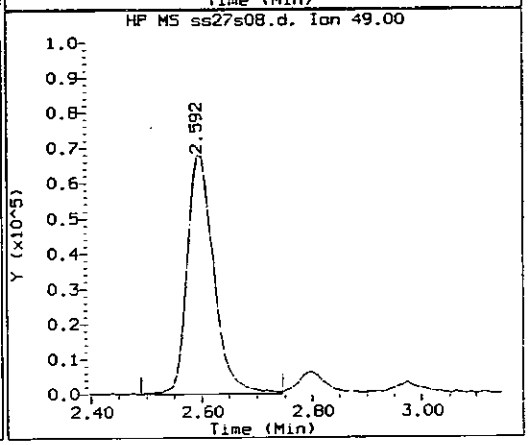

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX

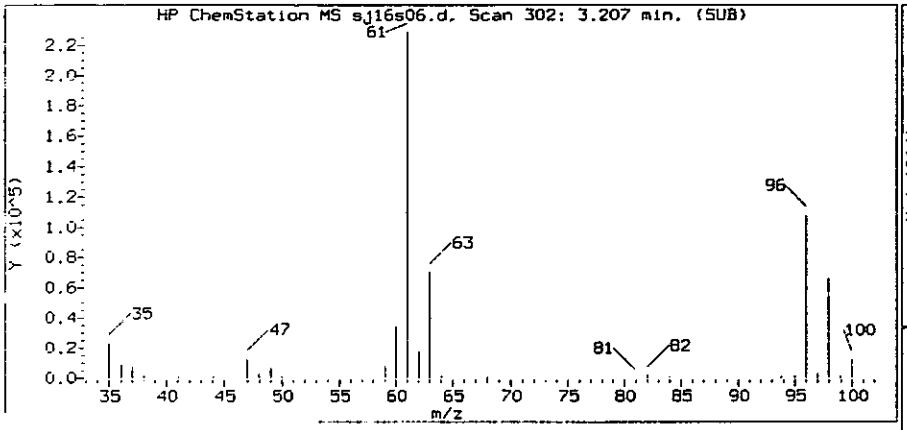
Lab Sample ID: 6087284

| | |
|---|---|
| Compound Number | : 5 |
| Compound Name | : Chloroethane |
| Scan Number | : 110 |
| Retention Time (minutes) | : 2.599 |
| Relative Retention Time | : -0.000 |
| Quant Ion | : 64.00 |
| Area (flag) | : 785785 |
| On-Column Amount (ng) | : 10.6726 |

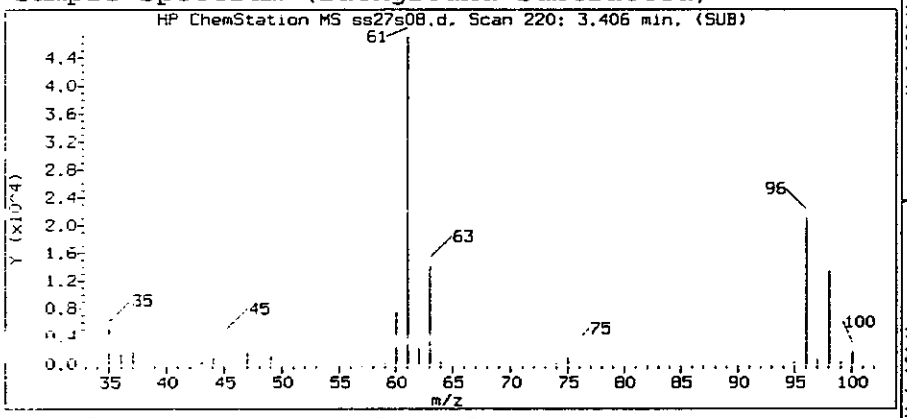
WAT12 0074

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

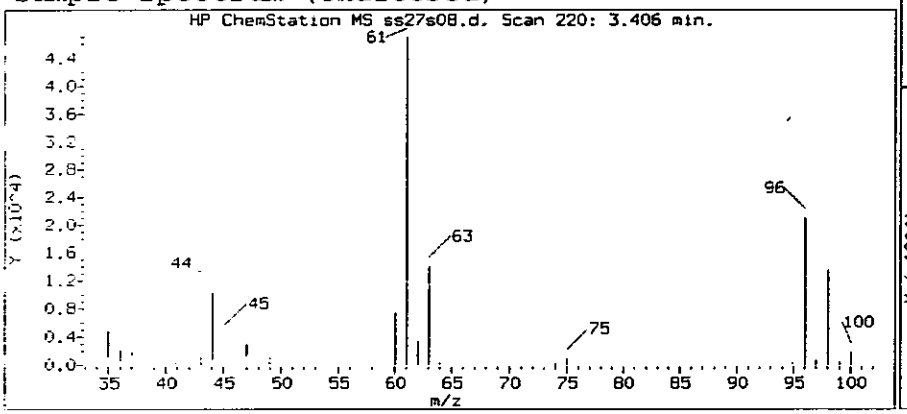
Reference Standard Spectrum for 1,1-Dichloroethene

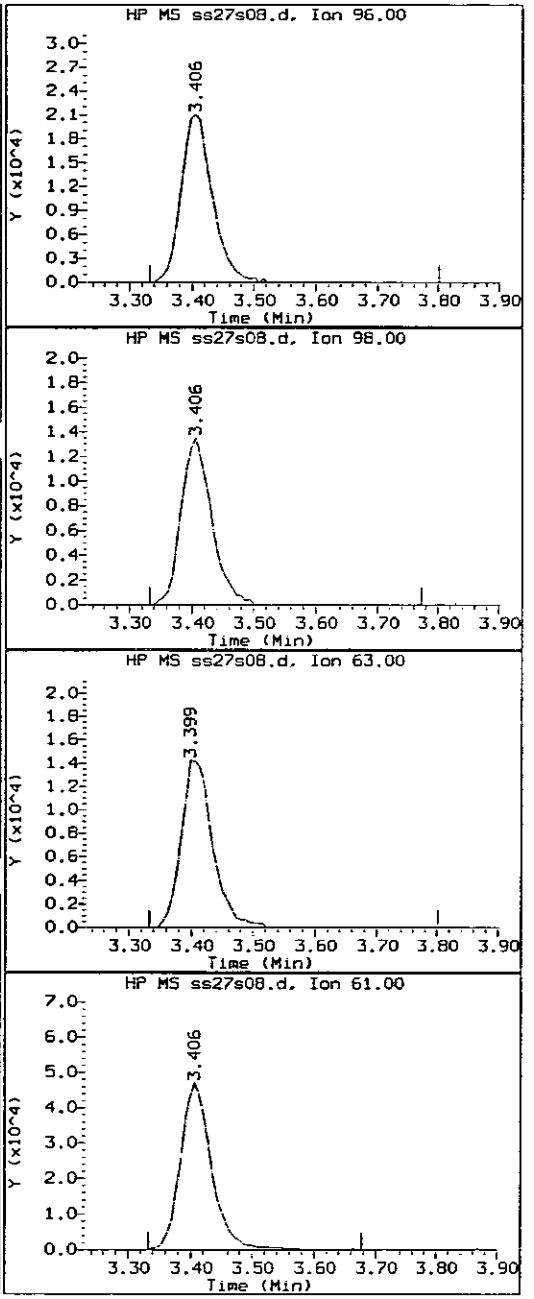



Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX

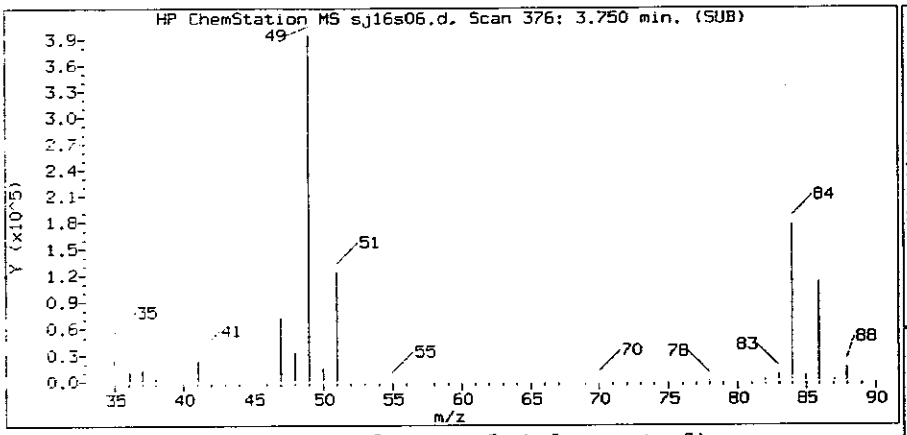
Lab Sample ID: 6087284

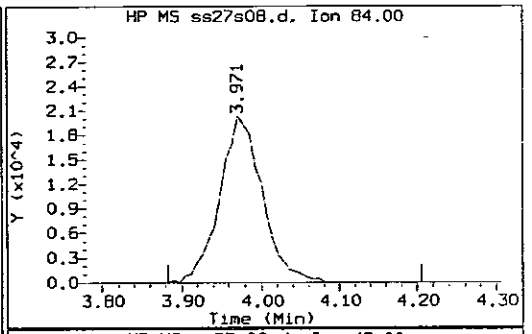
Compound Number : 10
Compound Name : 1,1-Dichloroethene
Scan Number : 220
Retention Time (minutes): 3.406
Relative Retention Time : -0.000
Quant Ion : 96.00
Area (flag) : 73350
On-Column Amount (ng) : 1.3079

WAT12 0075

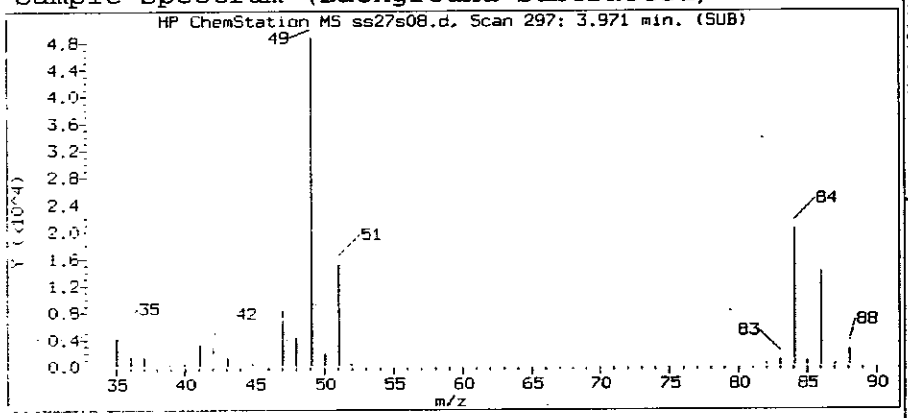
Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

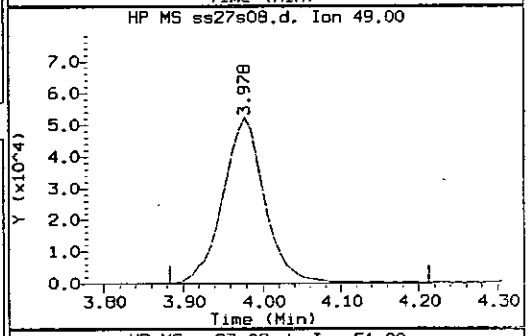
Reference Standard Spectrum for Methylene Chloride

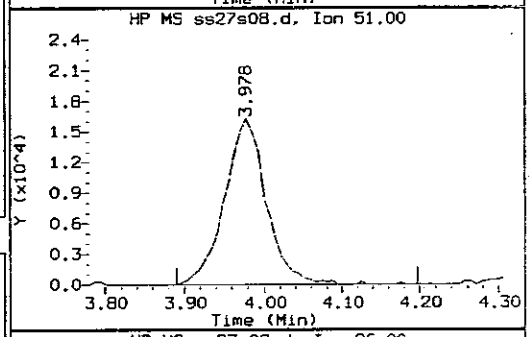


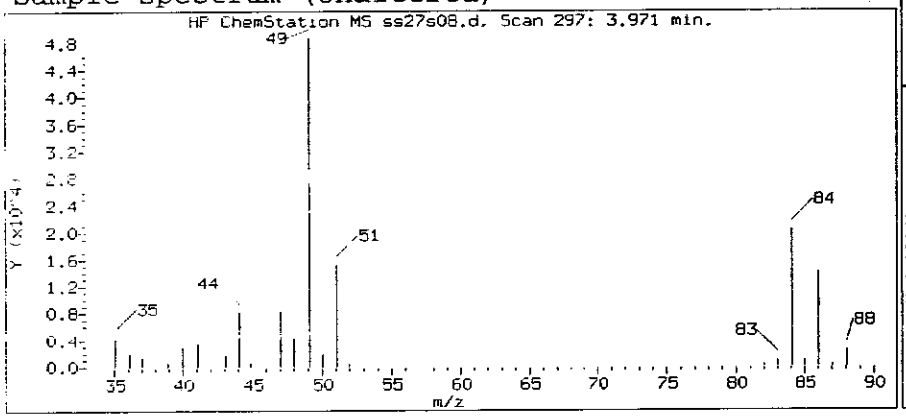

Sample Spectrum (Background Subtracted)

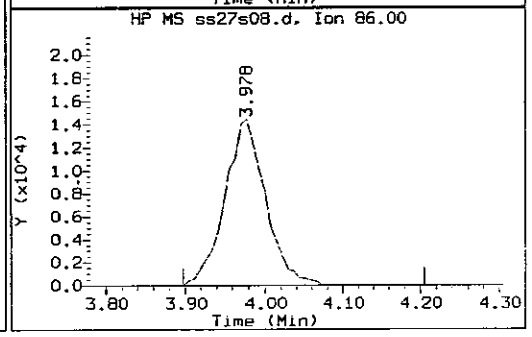



Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX

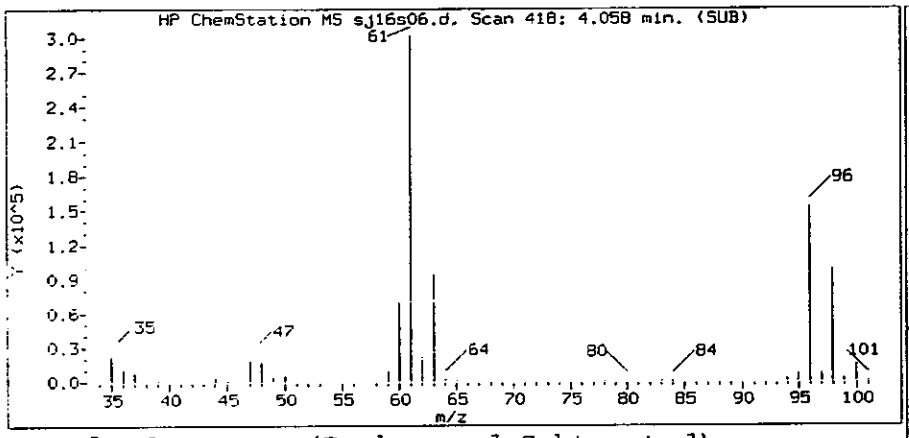
Lab Sample ID: 6087284

Compound Number : 17
Compound Name : Methylene Chloride
Scan Number : 297
Retention Time (minutes): 3.971
Relative Retention Time : 0.001
Quant Ion : 84.00
Area (flag) : 75009
On-Column Amount (ng) : 1.3160

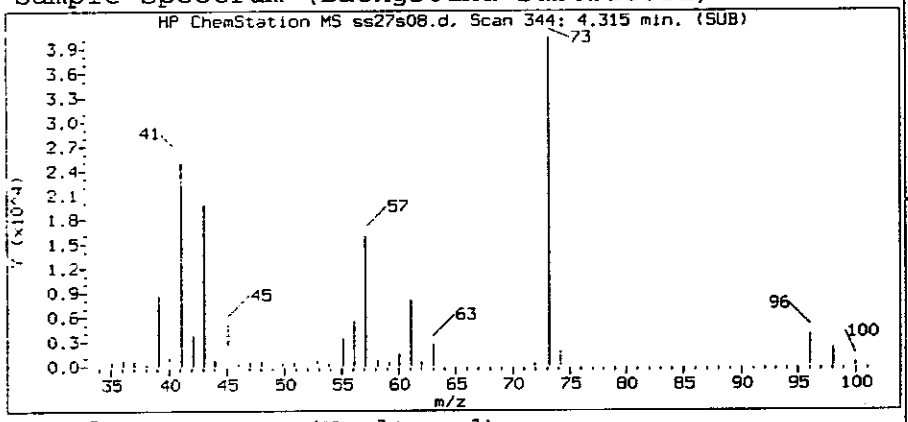
WAT12 6876

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

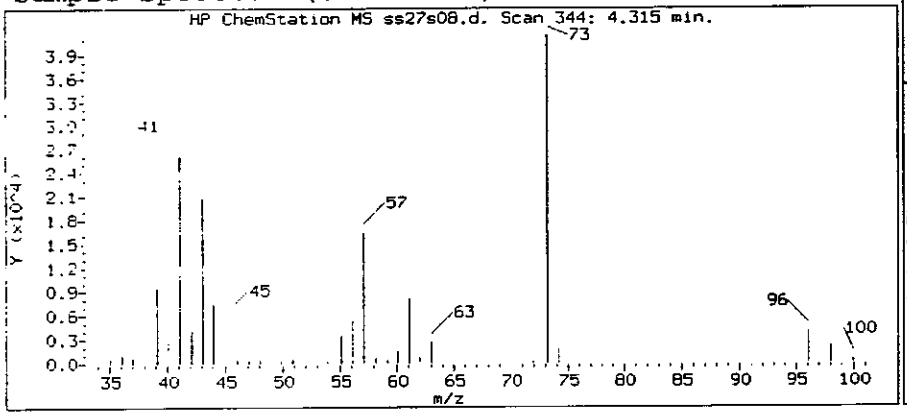
Reference Standard Spectrum for trans-1,2-Dichloroethene

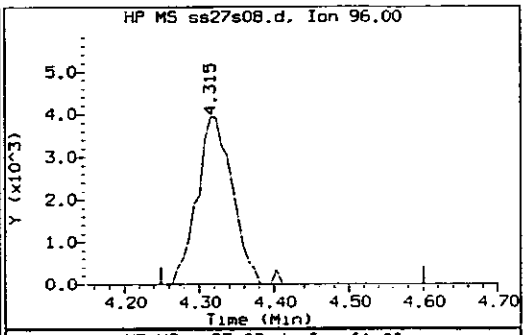


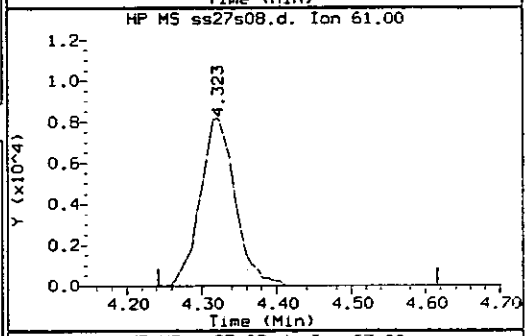

Sample Spectrum (Background Subtracted)

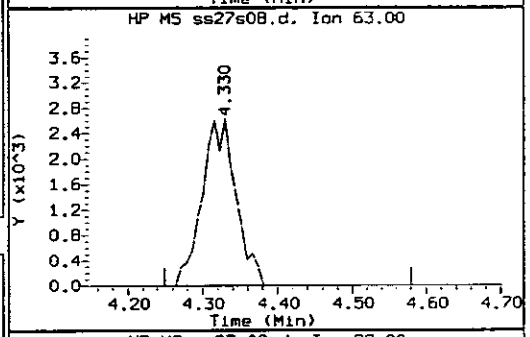


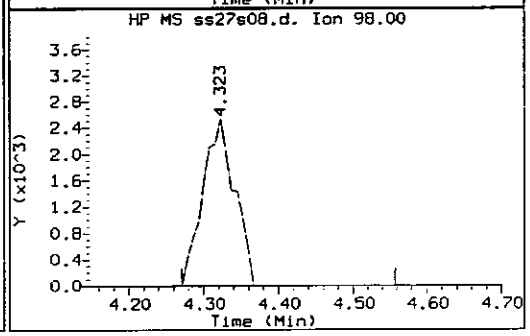

Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX

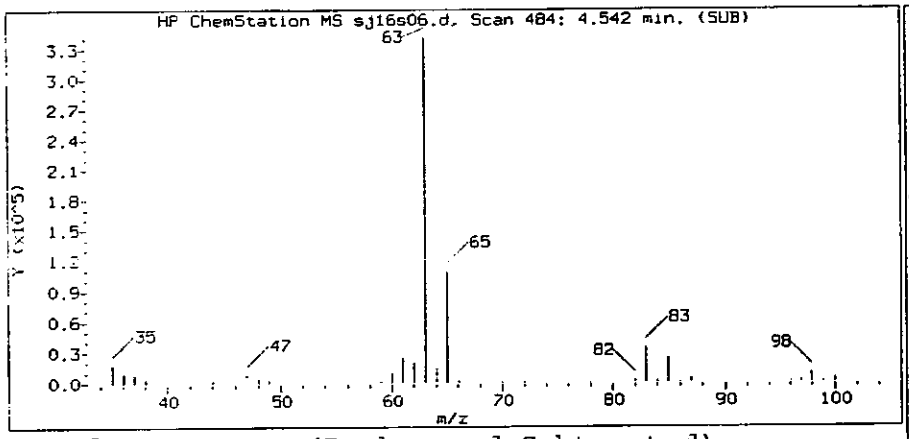
Lab Sample ID: 6087284

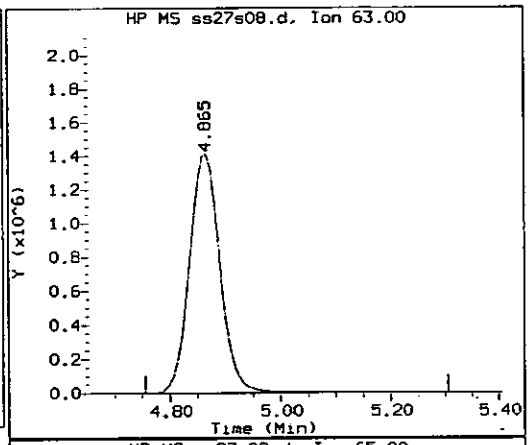
| | |
|---|---|
| Compound Number | : 21 |
| Compound Name | : trans-1,2-Dichloroethene |
| Scan Number | : 344 |
| Retention Time (minutes) | : 4.315 |
| Relative Retention Time | : 0.000 |
| Quant Ion | : 96.00 |
| Area (flag) | : 13055 |
| On-Column Amount (ng) | : 0.1911 |

WAT12 0077

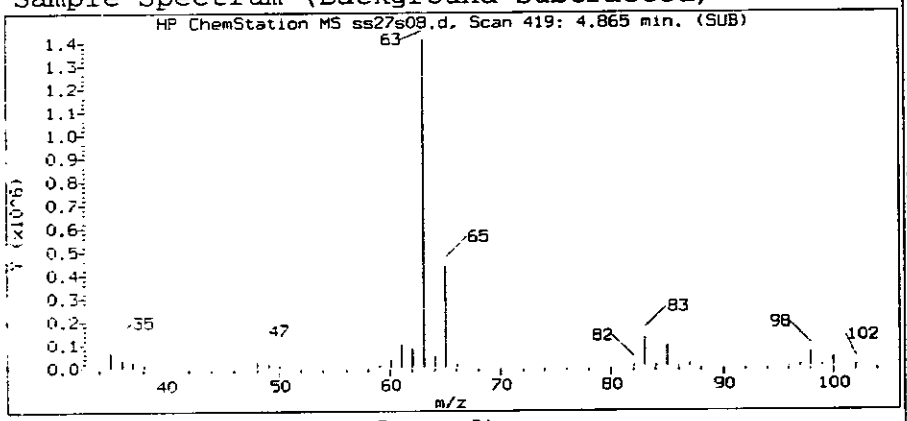
Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

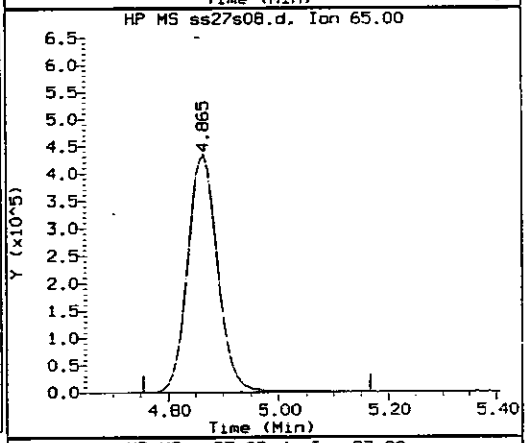
Reference Standard Spectrum for 1,1-Dichloroethane



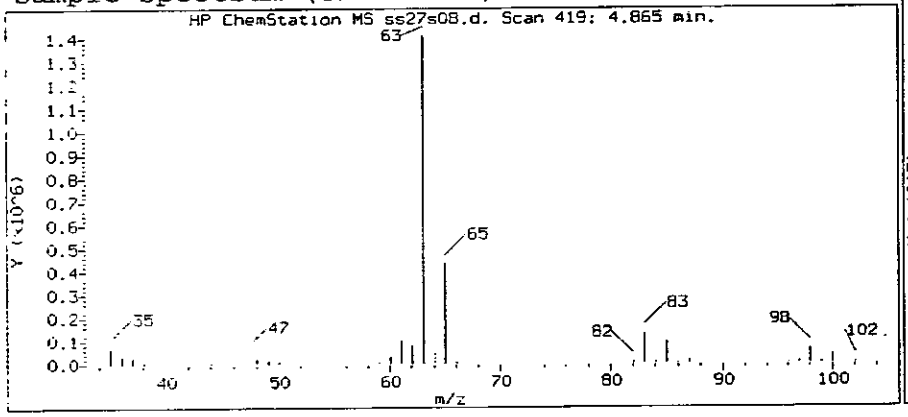



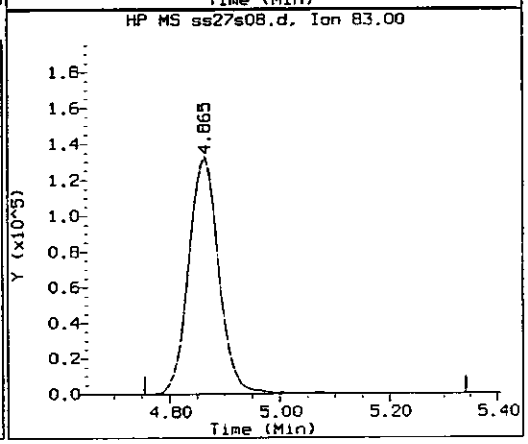

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX

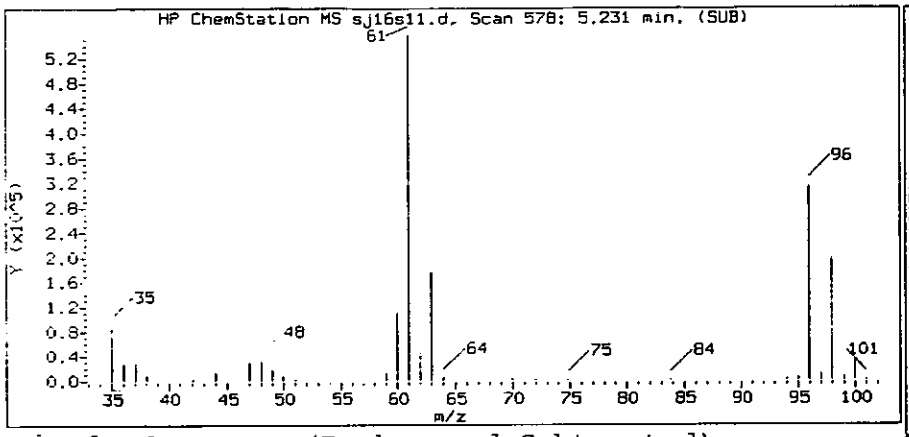
Lab Sample ID: 6087284

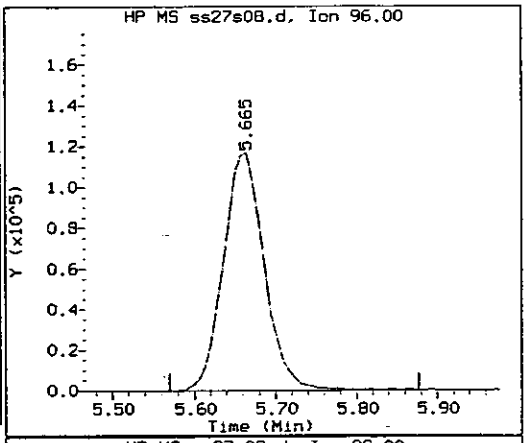
| | |
|---|---|
| Compound Number | : 23 |
| Compound Name | : 1,1-Dichloroethane |
| Scan Number | : 419 |
| Retention Time (minutes) | : 4.865 |
| Relative Retention Time | : 0.000 |
| Quant Ion | : 63.00 |
| Area (flag) | : 5474156 |
| On-Column Amount (ng) | : 35.5957 |

WAT12 0878

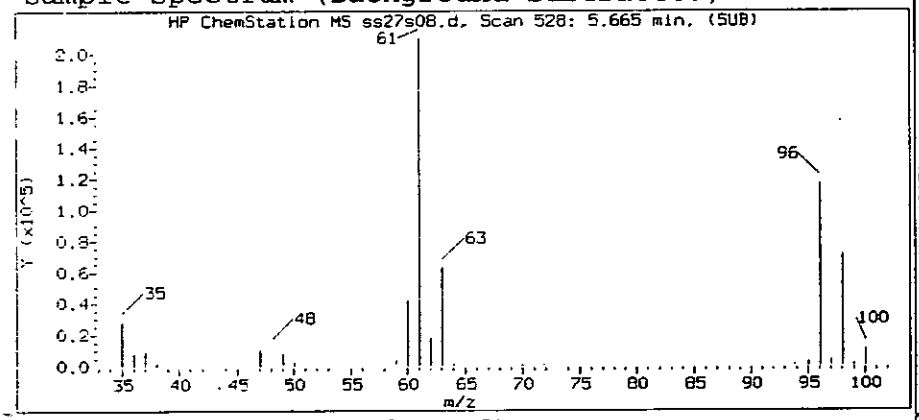
Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

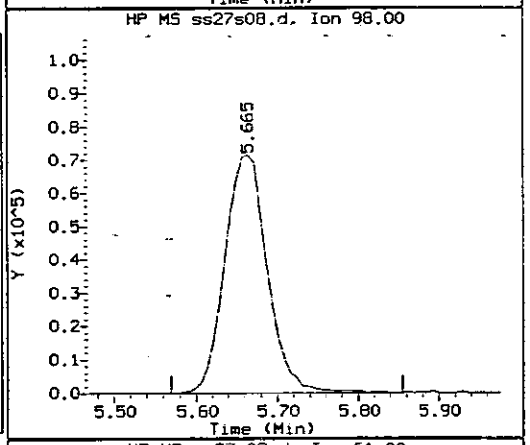
Reference Standard Spectrum for cis-1,2-Dichloroethene



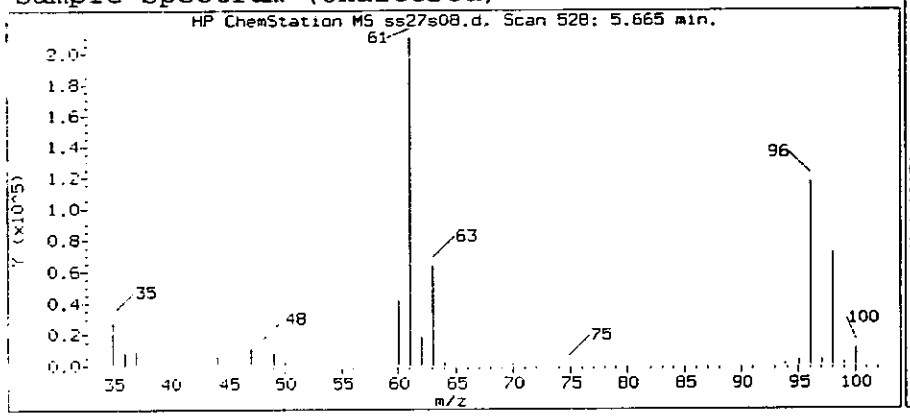



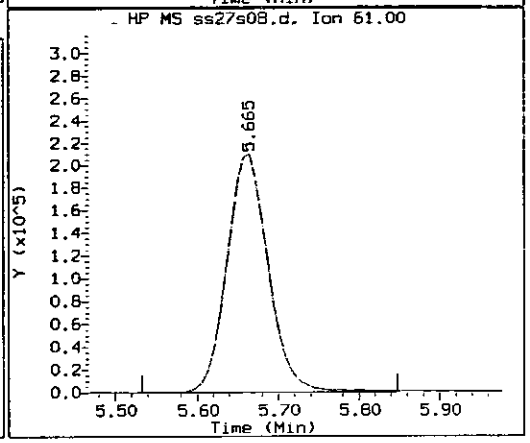

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX

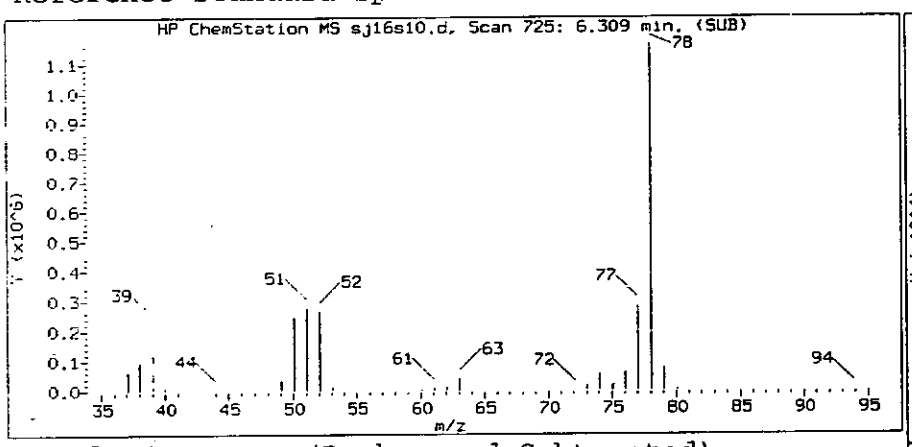
Lab Sample ID: 6087284

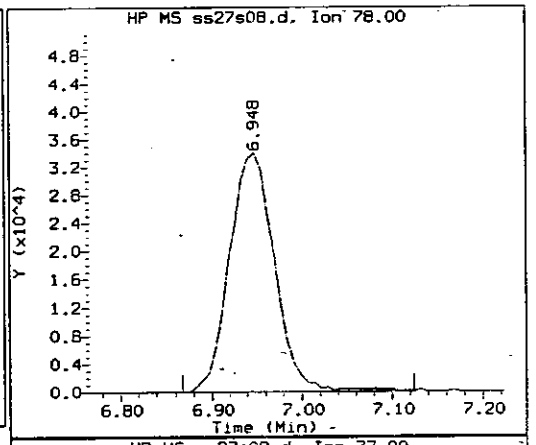
| | |
|---|---|
| Compound Number | : 27 |
| Compound Name | : cis-1,2-Dichloroethene |
| Scan Number | : 528 |
| Retention Time (minutes) | : 5.665 |
| Relative Retention Time | : -0.000 |
| Quant Ion | : 96.00 |
| Area (flag) | : 412665 |
| On-Column Amount (ng) | : 6.1192 |

WAT12 8879

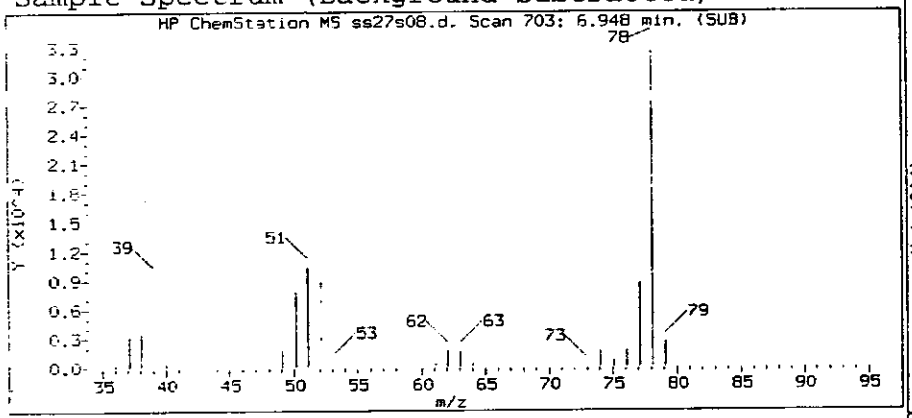
Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

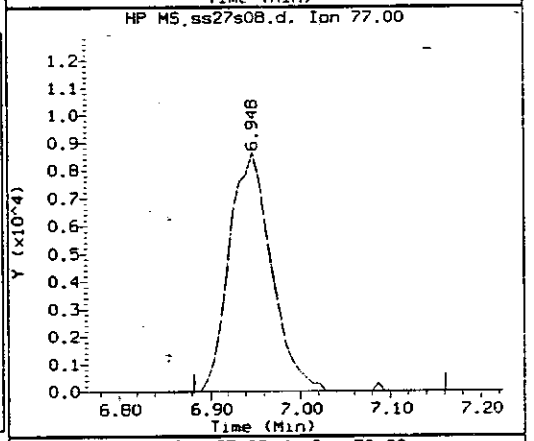
Reference Standard Spectrum for Benzene



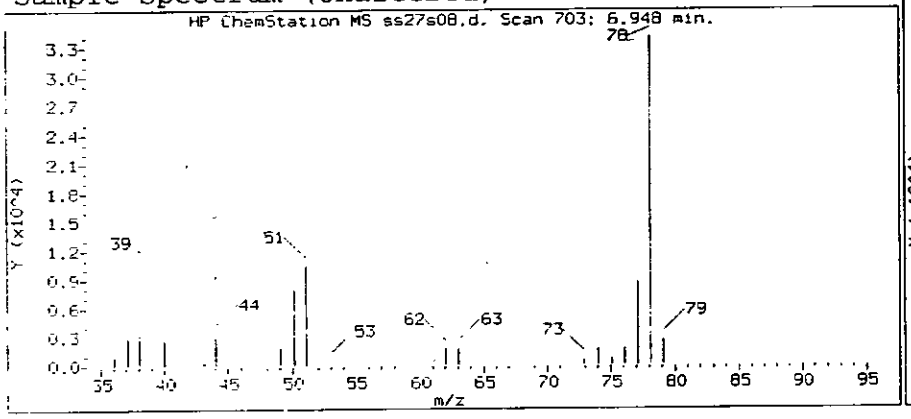



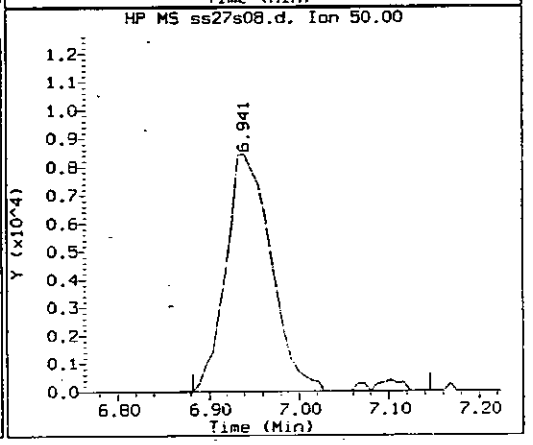

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sublist used: DRAPERREV3

Sample Name: XXXXX

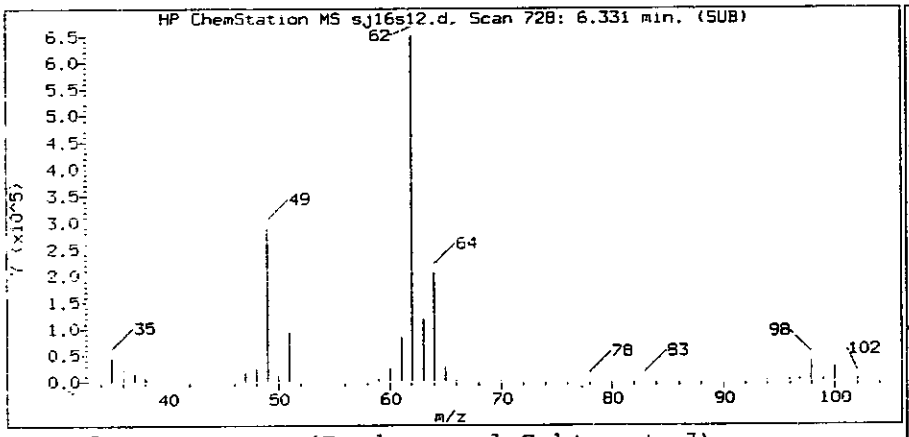
Lab Sample ID: 6087284

| | |
|---|---|
| Compound Number | : 40 |
| Compound Name | : Benzene |
| Scan Number | : 703 |
| Retention Time (minutes) | : 6.948 |
| Relative Retention Time | : -0.000 |
| Quant Ion | : 78.00 |
| Area (flag) | : 119855 |
| On-Column Amount (ng) | : 0.5086 |

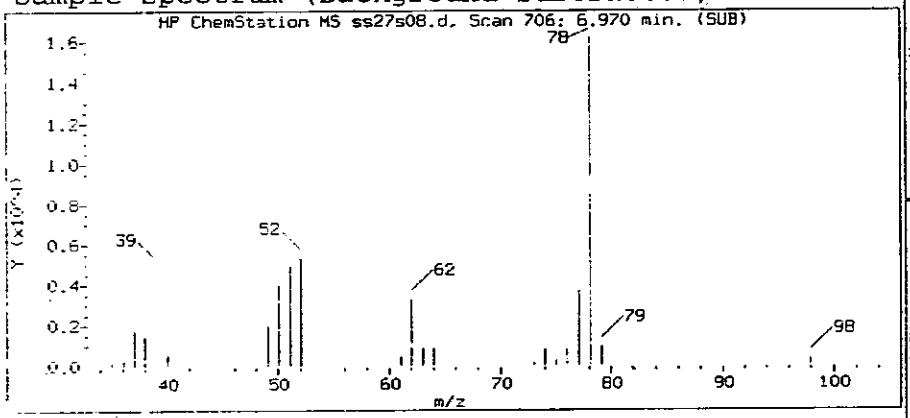
WAT12 9880

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

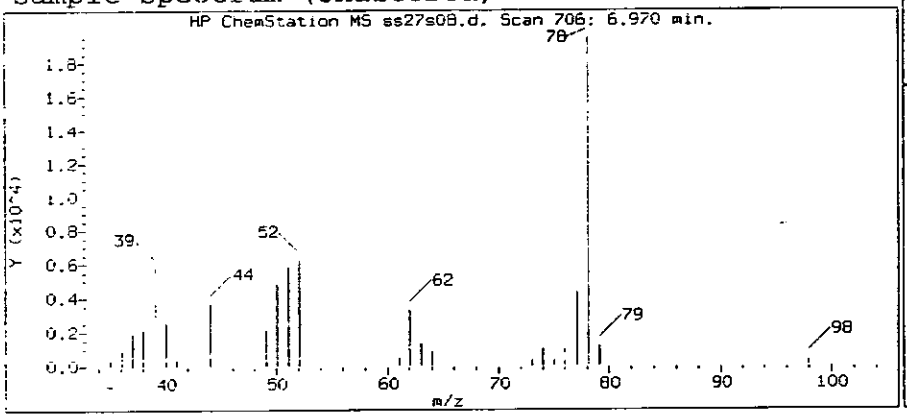
Reference Standard Spectrum for 1,2-Dichloroethane

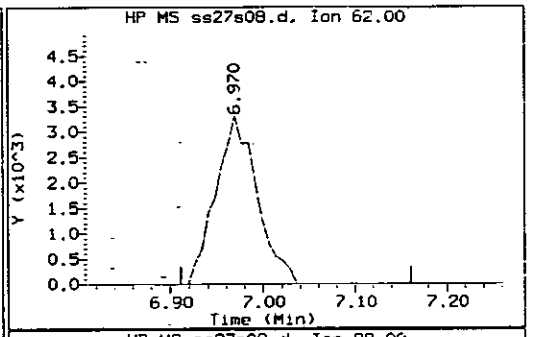


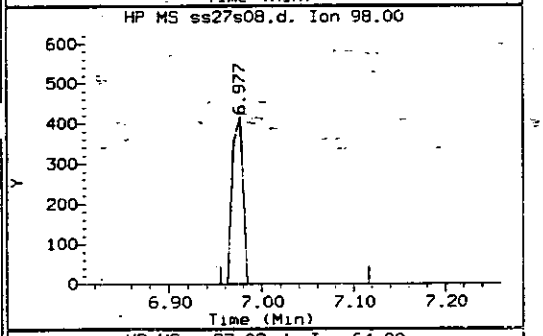

Sample Spectrum (Background Subtracted)

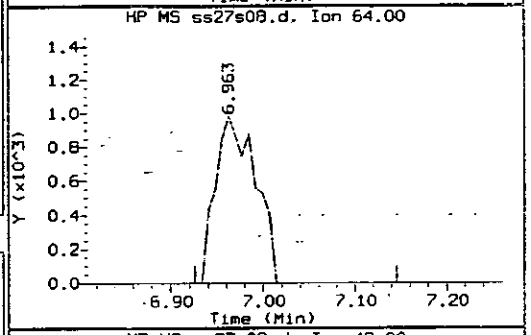


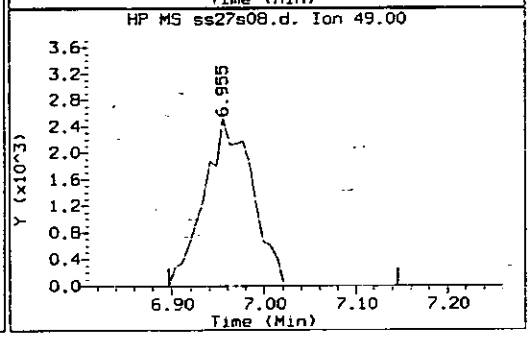

Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX

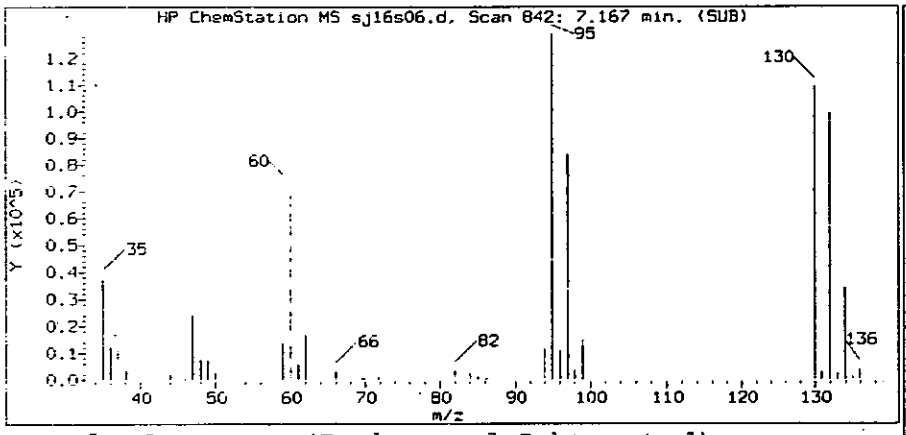
Lab Sample ID: 6087284

Compound Number : 41
Compound Name : 1,2-Dichloroethane
Scan Number : 706
Retention Time (minutes): 6.970
Relative Retention Time : -0.000
Quant Ion : 62.00
Area (flag) : 10346
On-Column Amount (ng) : 0.2211

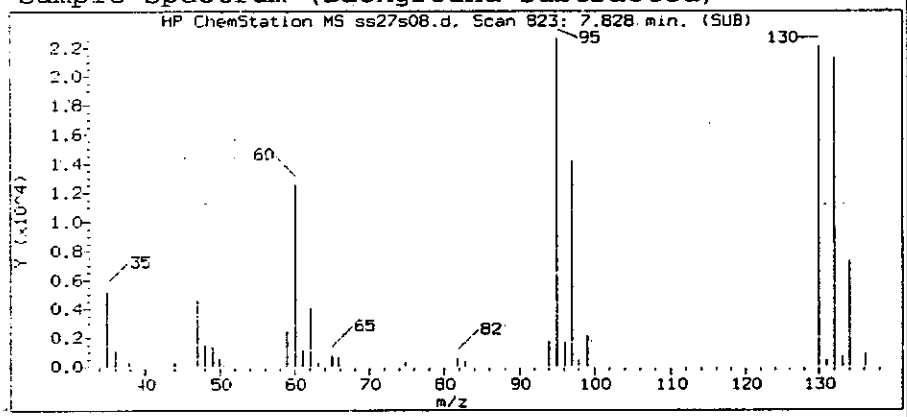
WAT12 0881

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

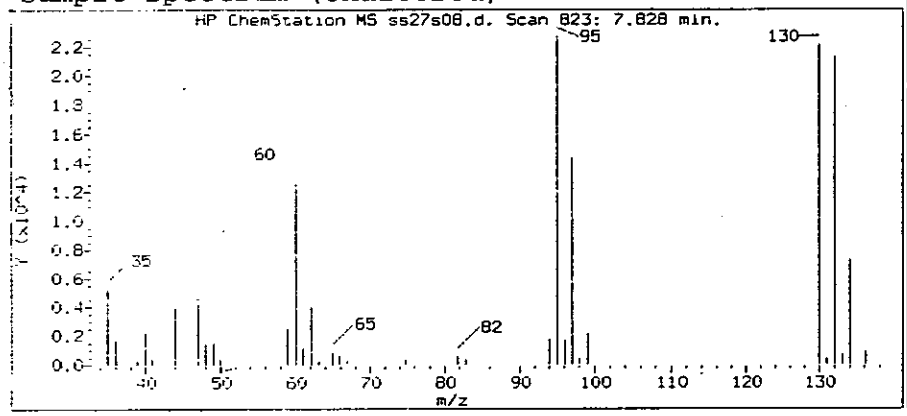
Reference Standard Spectrum for Trichloroethene

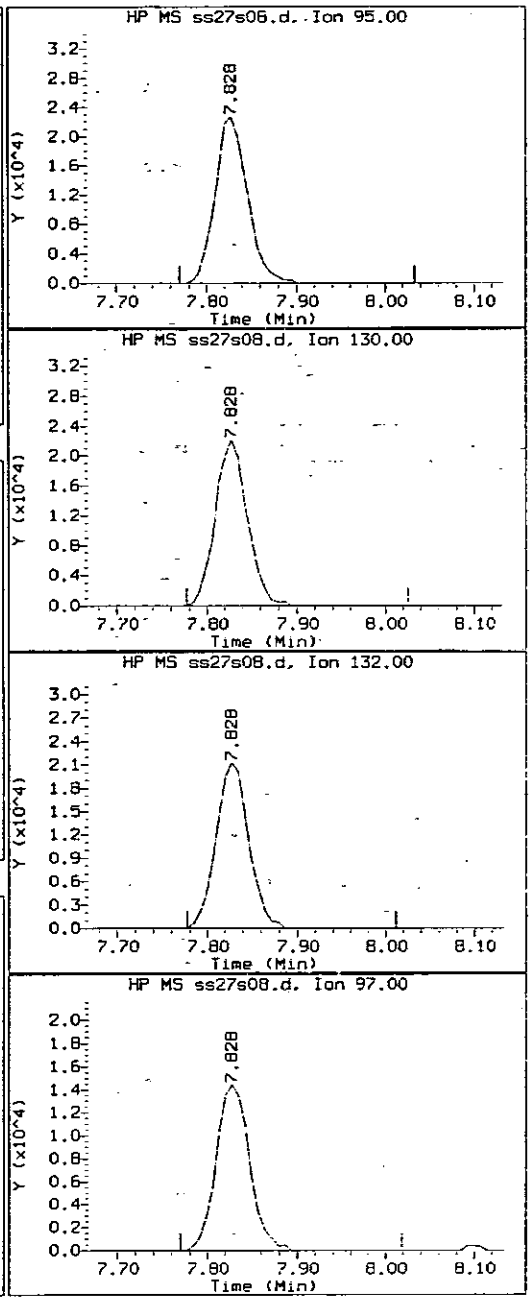



Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:25  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

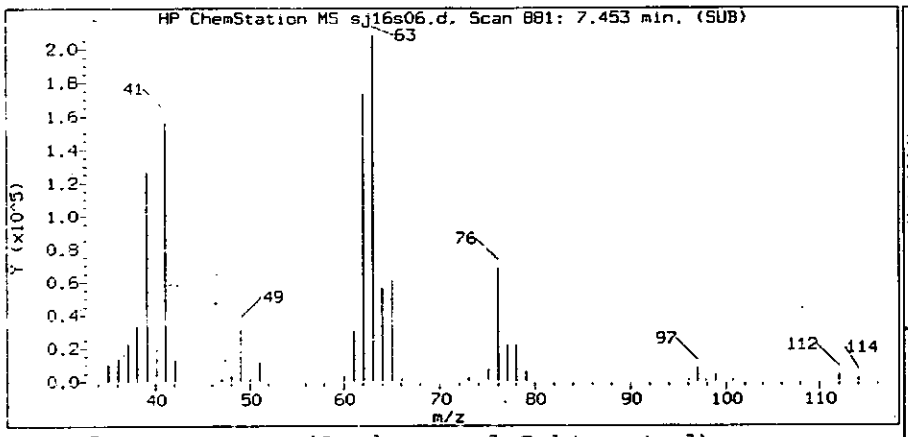
Sample Name: XXXXX  Lab Sample ID: 6087284

Compound Number : 44
Compound Name : Trichloroethene
Scan Number : 823
Retention Time (minutes): 7.828
Relative Retention Time : 0.000
Quant Ion : 95.00
Area (flag) : 57117
On-Column Amount (ng) : 0.8673

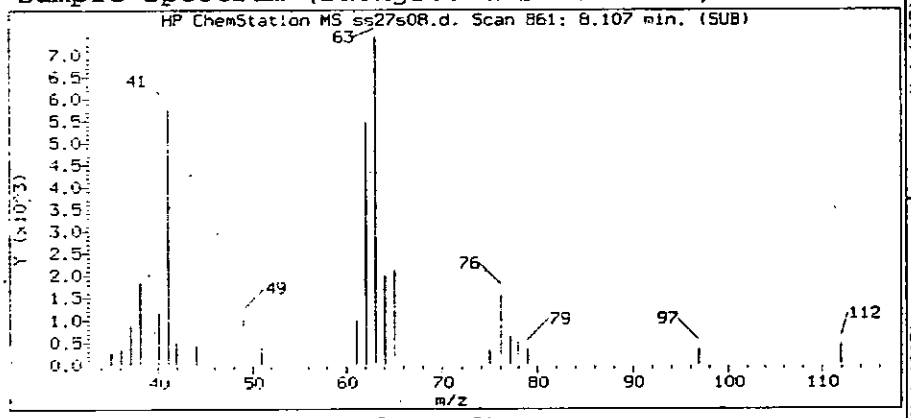
WAT12 0002

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

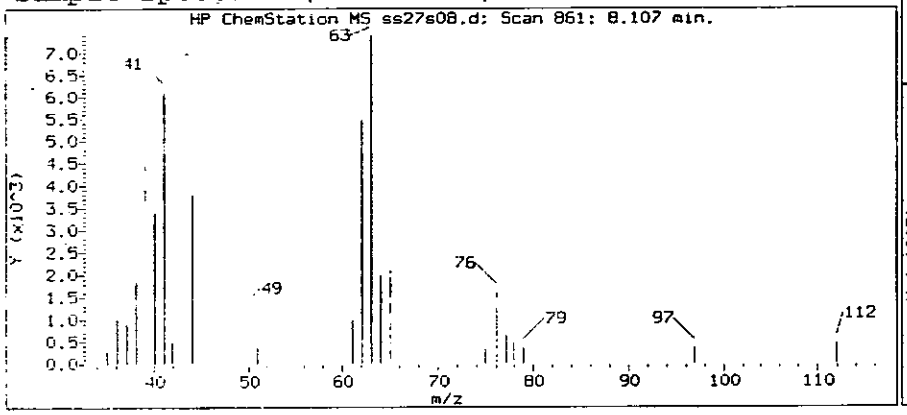
Reference Standard Spectrum for 1,2-Dichloropropane

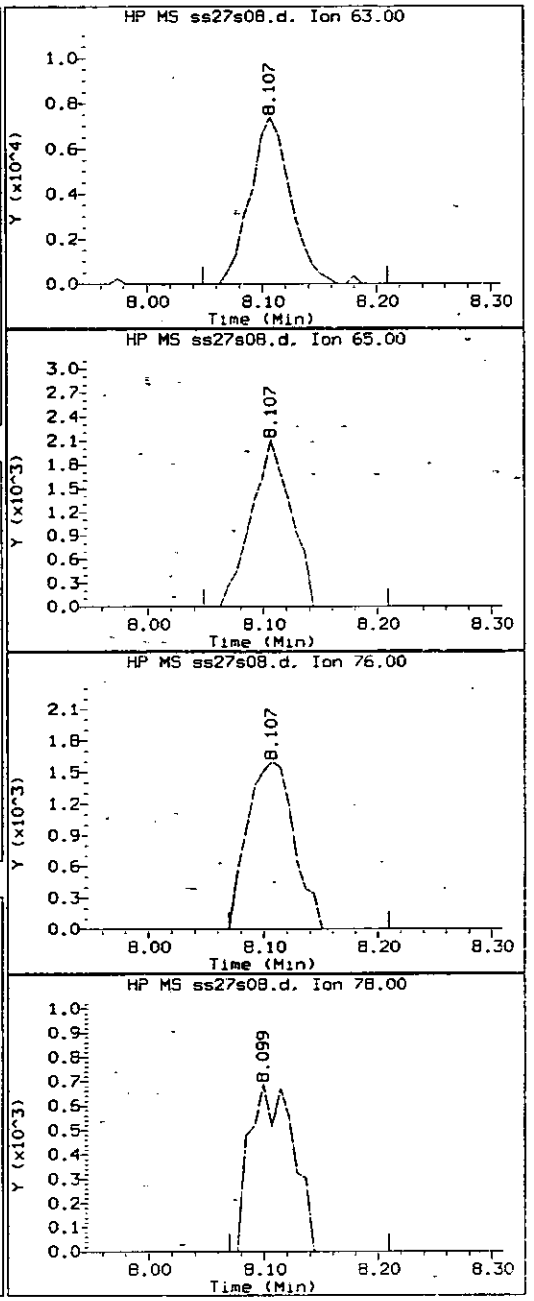



Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sublist used: DRAPERREV3

Sample Name: XXXXX

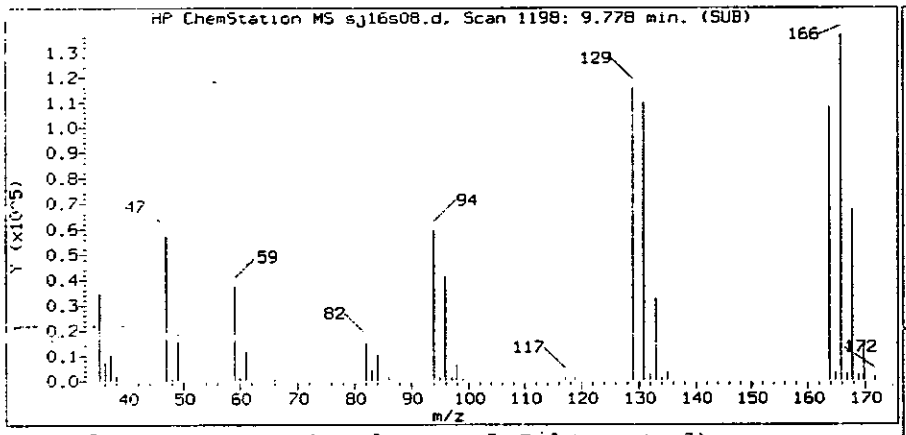
Lab Sample ID: 6087284

| | |
|---|---|
| Compound Number | : 45 |
| Compound Name | : 1,2-Dichloropropane |
| Scan Number | : 861 |
| Retention Time (minutes) | : 8.107 |
| Relative Retention Time | : 0.001 |
| Quant Ion | : 63.00 |
| Area (flag) | : 17977 |
| On-Column Amount (ng) | : 0.2283 |

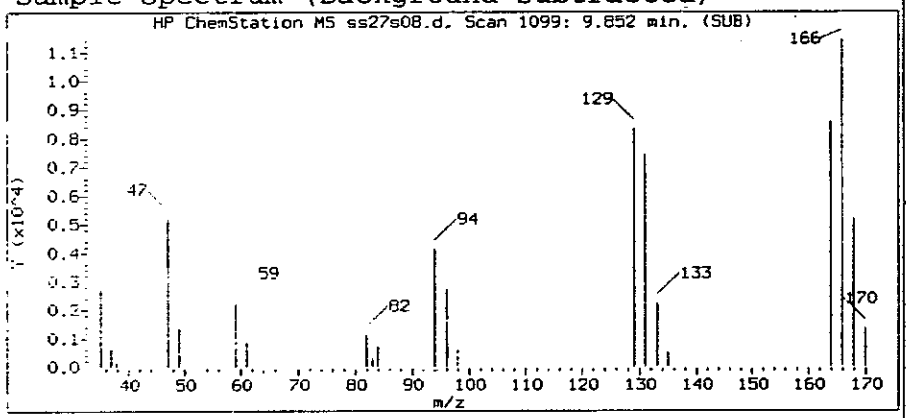
WAT12 5083

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

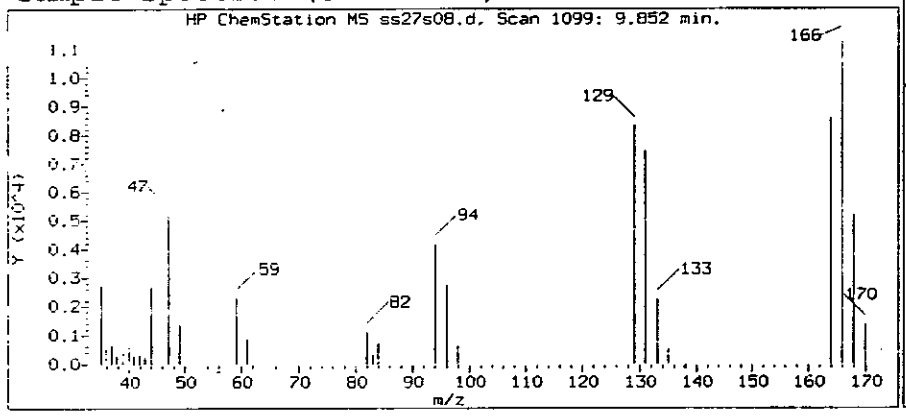
Reference Standard Spectrum for Tetrachloroethene

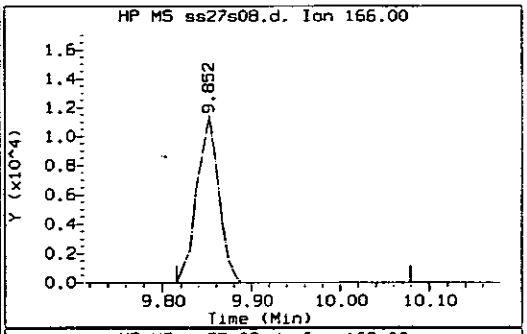


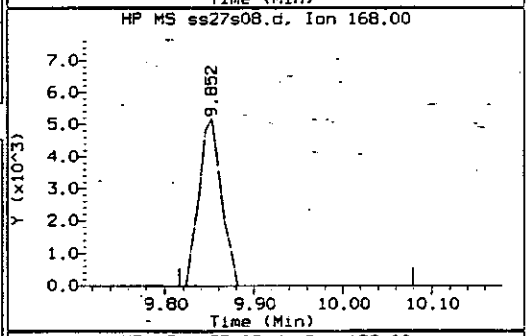

Sample Spectrum (Background Subtracted)

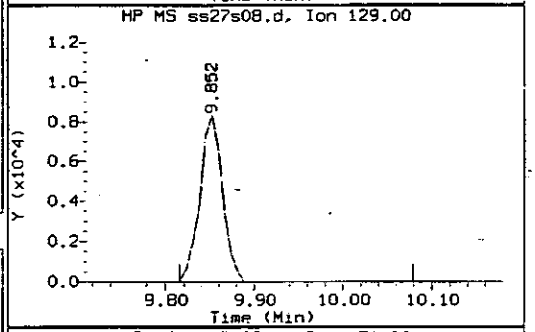


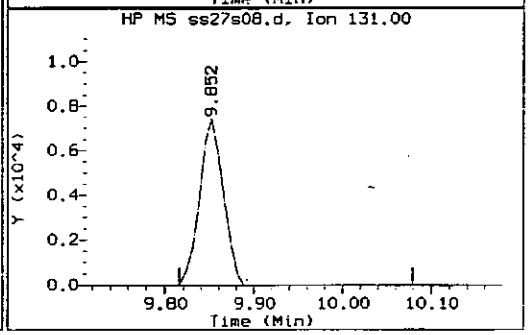

Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX

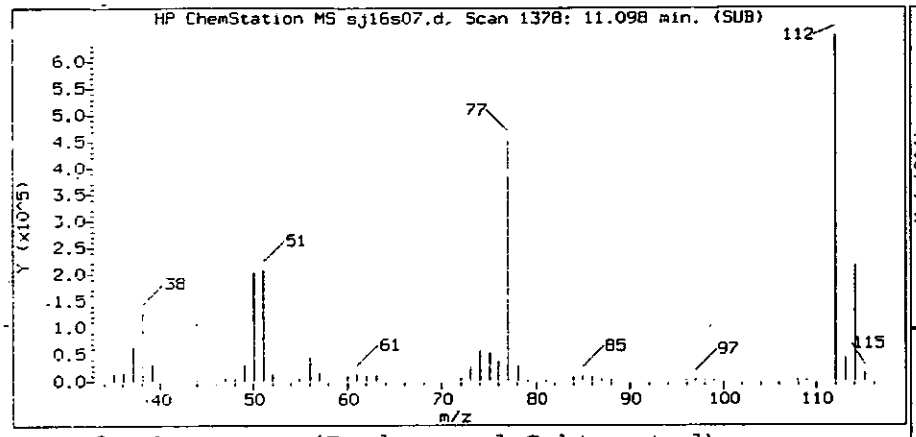
Lab Sample ID: 6087284

| | |
|---|---|
| Compound Number | : 59 |
| Compound Name | : Tetrachloroethene |
| Scan Number | : 1099 |
| Retention Time (minutes) | : 9.852 |
| Relative Retention Time | : 0.001 |
| Quant Ion | : 166.00 |
| Area (flag) | : 19784 |
| On-Column Amount (ng) | : 0.3317 |

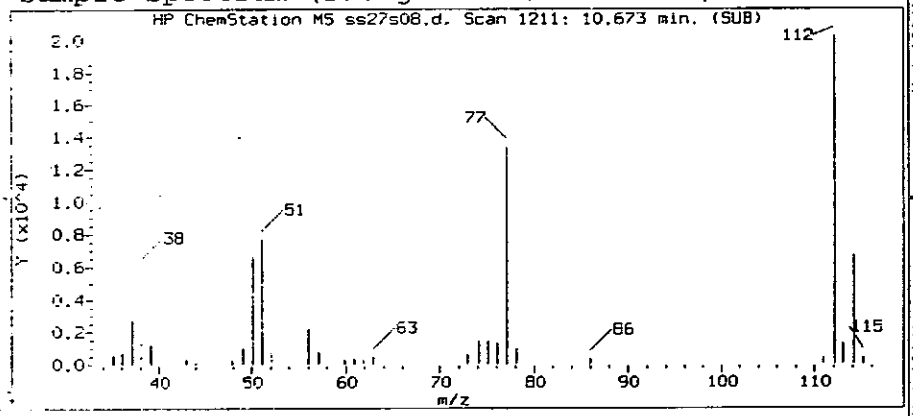
WAT12 0084

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

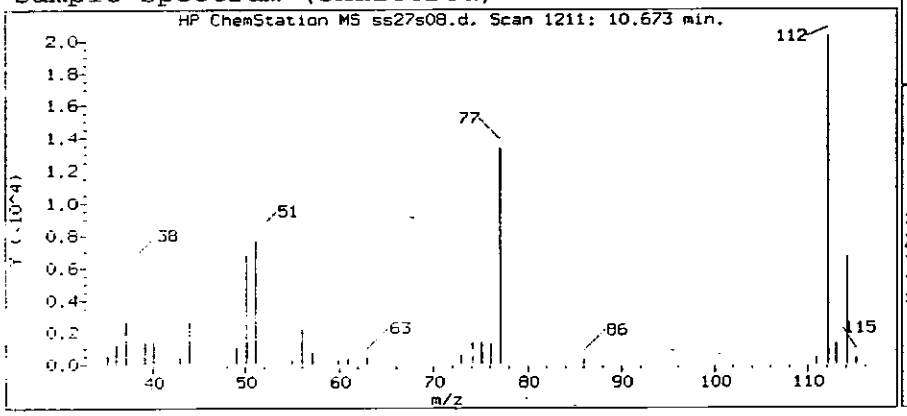
Reference Standard Spectrum for Chlorobenzene

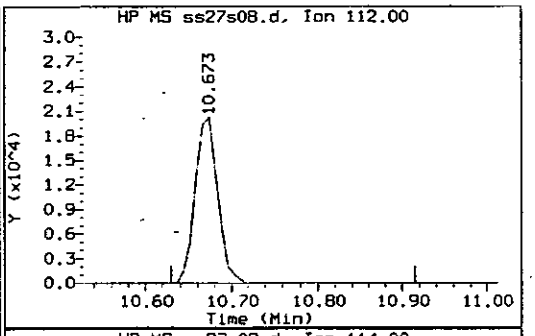


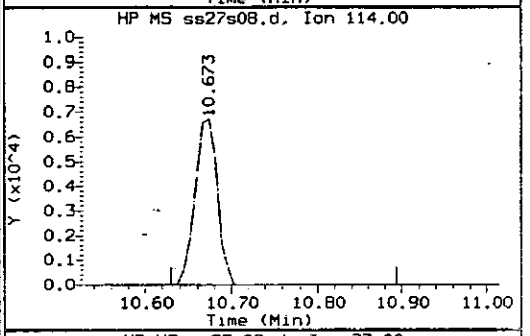

Sample Spectrum (Background Subtracted)

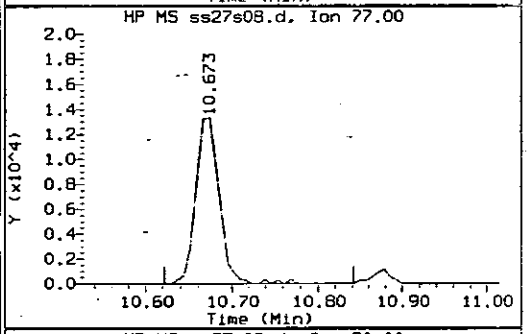


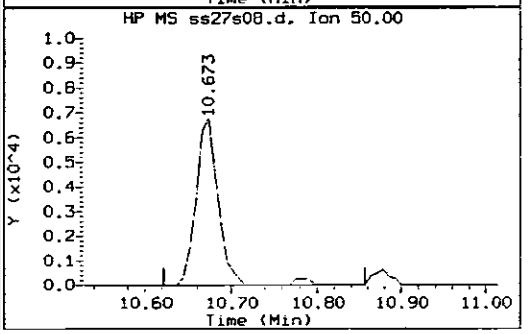

Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:25  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

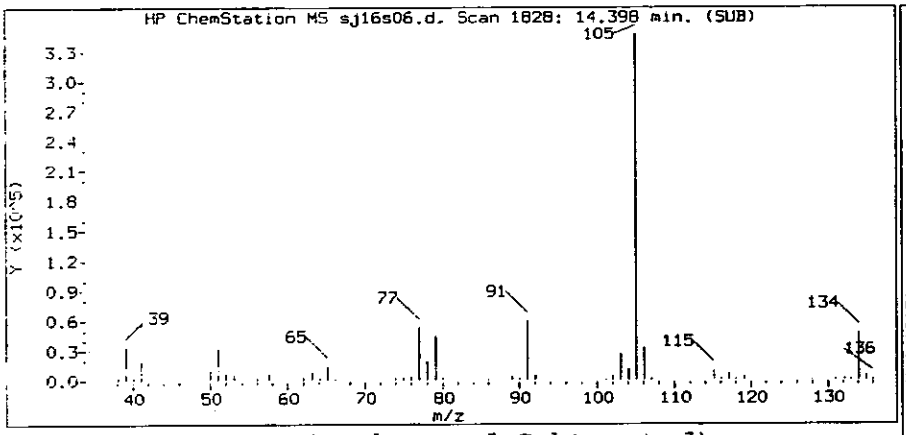
Sample Name: XXXXX  Lab Sample ID: 6087284

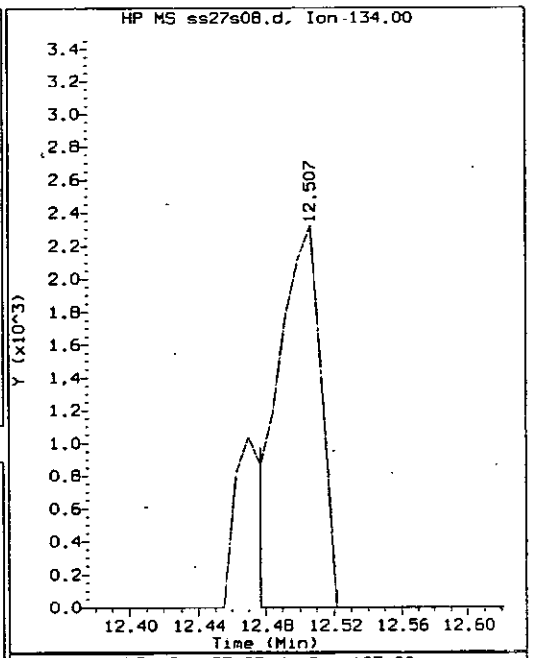
| | |
|---|---|
| Compound Number | : 64 |
| Compound Name | : Chlorobenzene |
| Scan Number | : 1211 |
| Retention Time (minutes) | : 10.673 |
| Relative Retention Time | : 0.000 |
| Quant Ion | : 112.00 |
| Area (flag) | : 36963 |
| On-Column Amount (ng) | : 0.2827 |

WAT12 0085

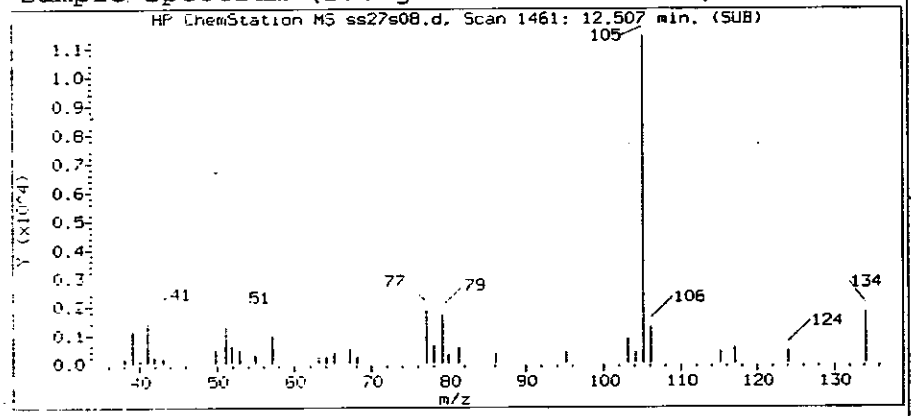
Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

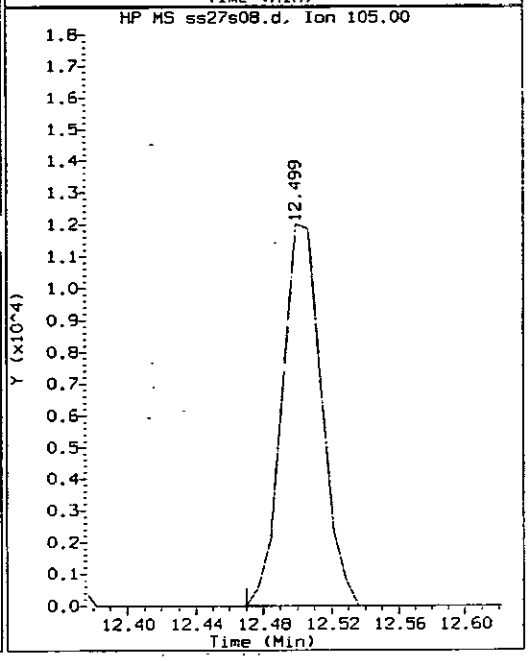
Reference Standard Spectrum for sec-Butylbenzene



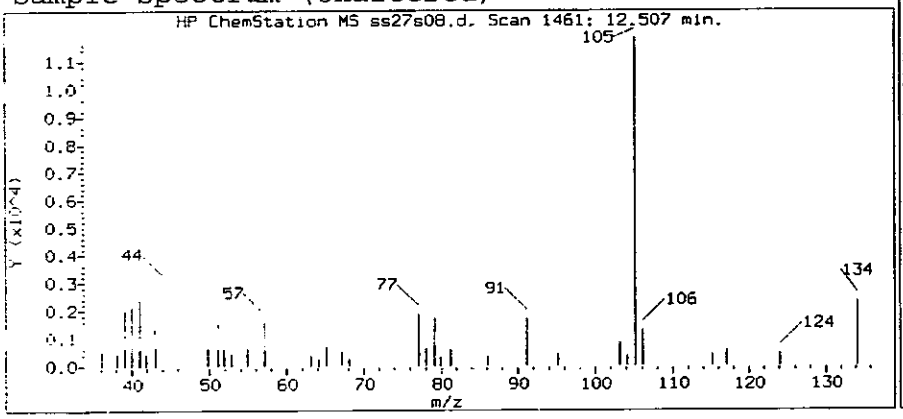




Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sublist used: DRAPERREV3

Sample Name: XXXXX

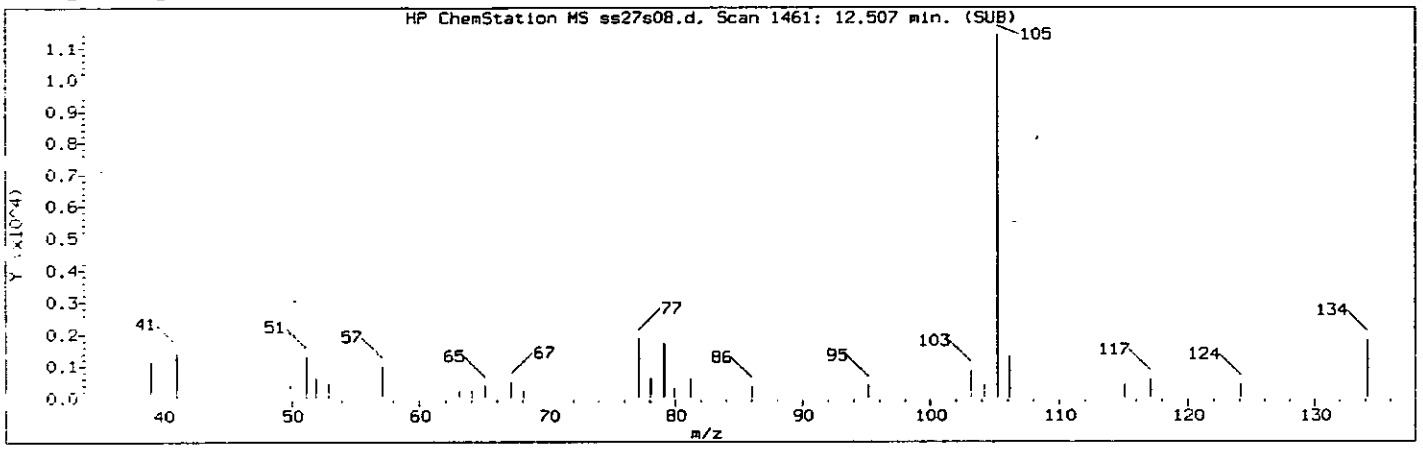
Lab Sample ID: 6087284

| | |
|---|---|
| Compound Number | : 86 |
| Compound Name | : sec-Butylbenzene |
| Scan Number | : 1461 |
| Retention Time (minutes) | : 12.507 |
| Relative Retention Time | : 0.000 |
| Quant Ion | : 134.00 |
| Area (flag) | : 4175M |
| On-Column Amount (ng) | : 0.1114 |

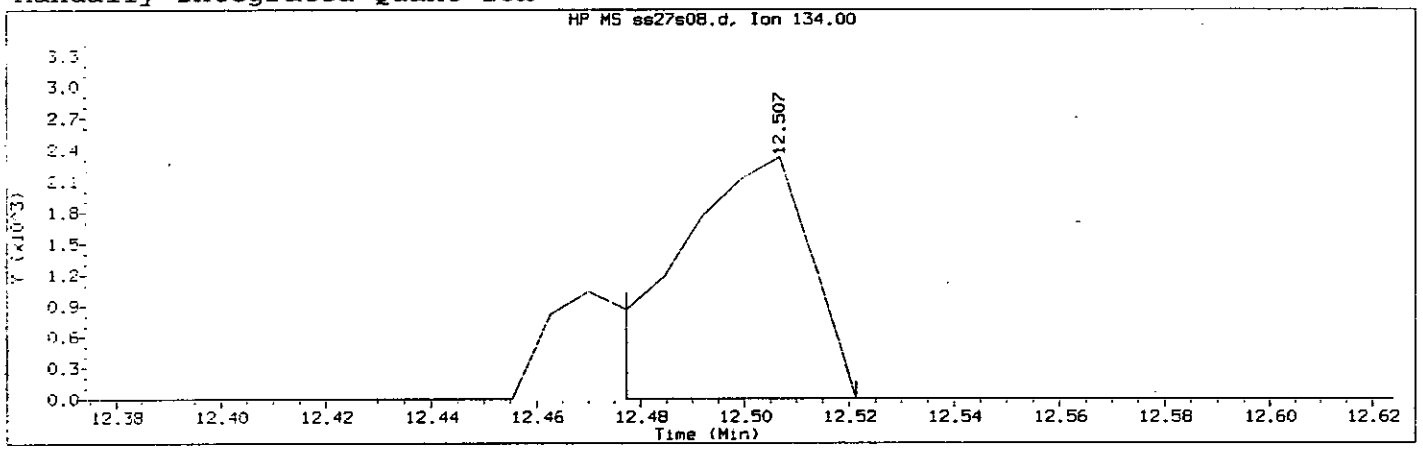
WAT12 8886

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:25  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sample Name: XXXXX  Lab Sample ID: 6087284

| | | | |
|---|---|---|---|
| Compound Number | : 86 | | |
| Compound Name | : sec-Butylbenzene | | |
| Scan Number | : 1461 | | |
| Retention Time (minutes) | : 12.507 | | |
| Quant Ion | : 134.00 | | |
| Area (flag) | : 4175M | | |
| On-Column Amount (ng) | : 0.1114 | | |
| Integration start scan | : 1456 | Integration stop scan: | 1462 |
| Y at integration start | : 0 | Y at integration end: | 0 |

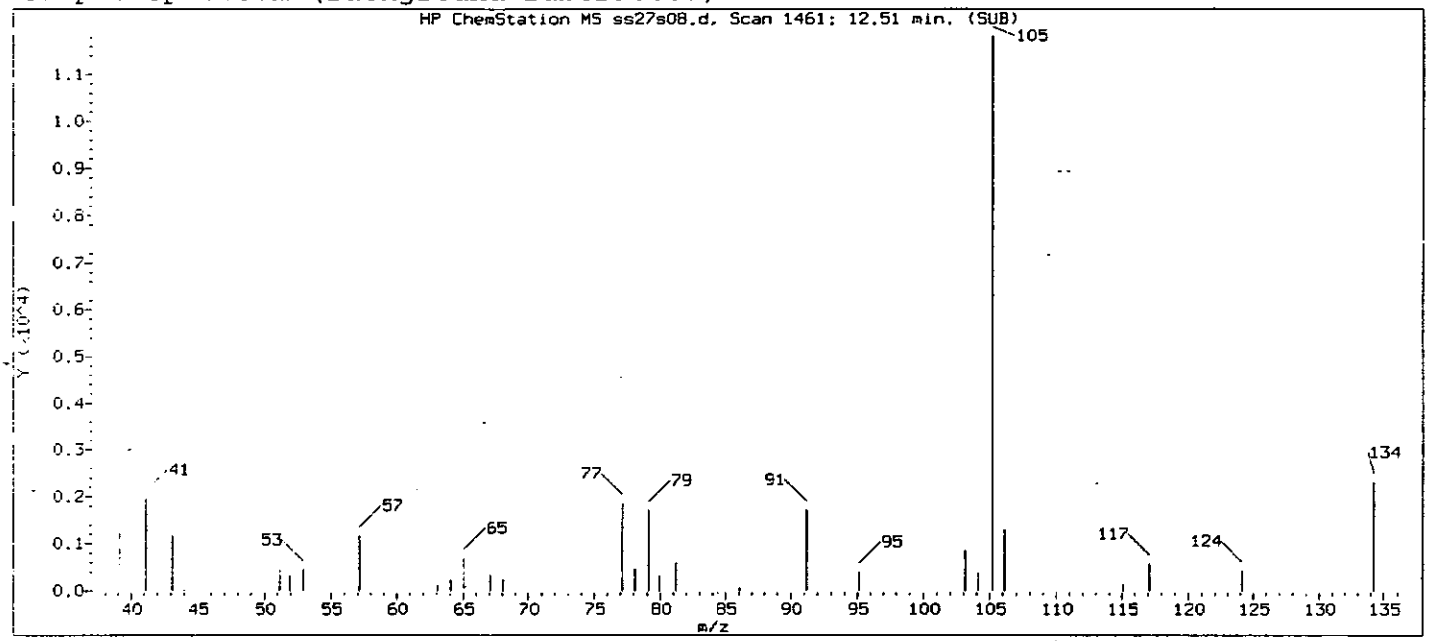
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Anita M. Dale on 09/27/2010 at 11:15. Target 3.5 esignature user ID: amd00492

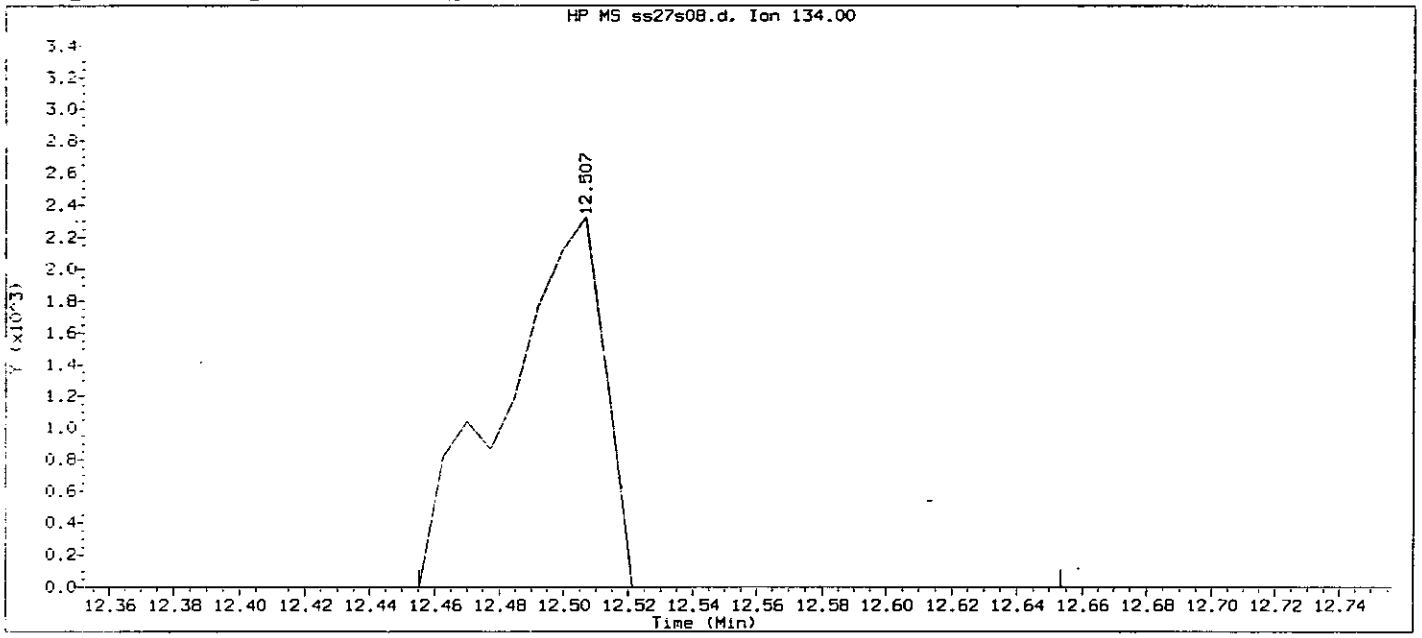
WAT12 0887

GC/MS audit/management approval: AMDale C92fiv

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:25  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 10:50 Automation

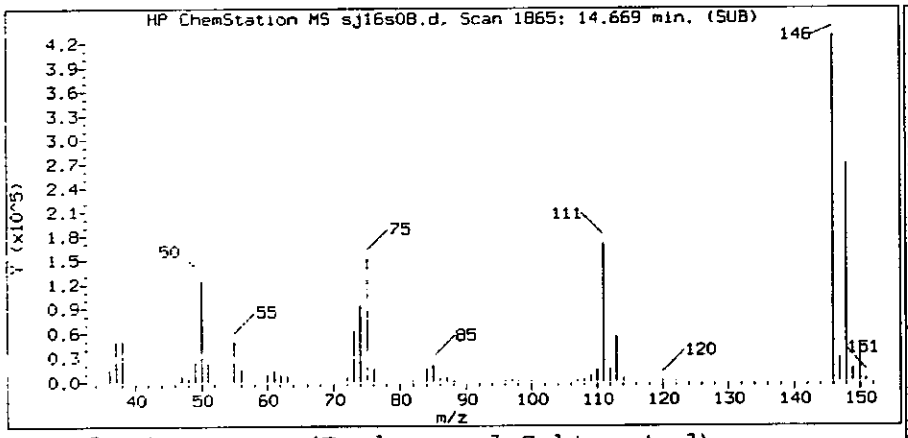
Sample Name: XXXXX  Lab Sample ID: 6087284

Compound Number : 86
Compound Name : sec-Butylbenzene
Scan Number : 1461
Retention Time (minutes): 12.507
Quant Ion : 134.00
Area : 4992
On-column Amount (ng) : 0.1332
Integration start scan : 1453  Integration stop scan: 1480
Y at integration start : 0  Y at integration end: 0

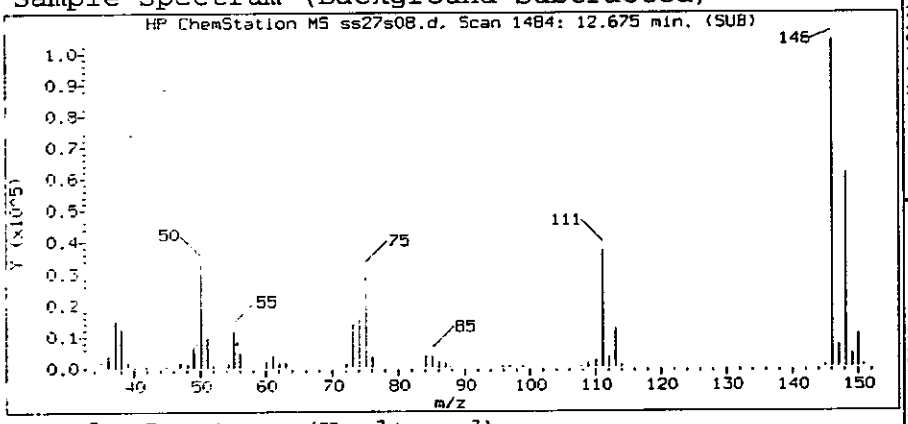
WAT12 0088

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

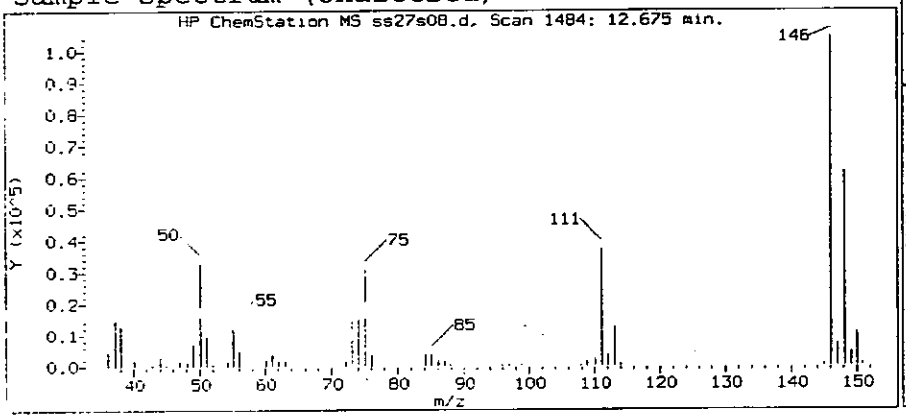
Reference Standard Spectrum for 1,4-Dichlorobenzene

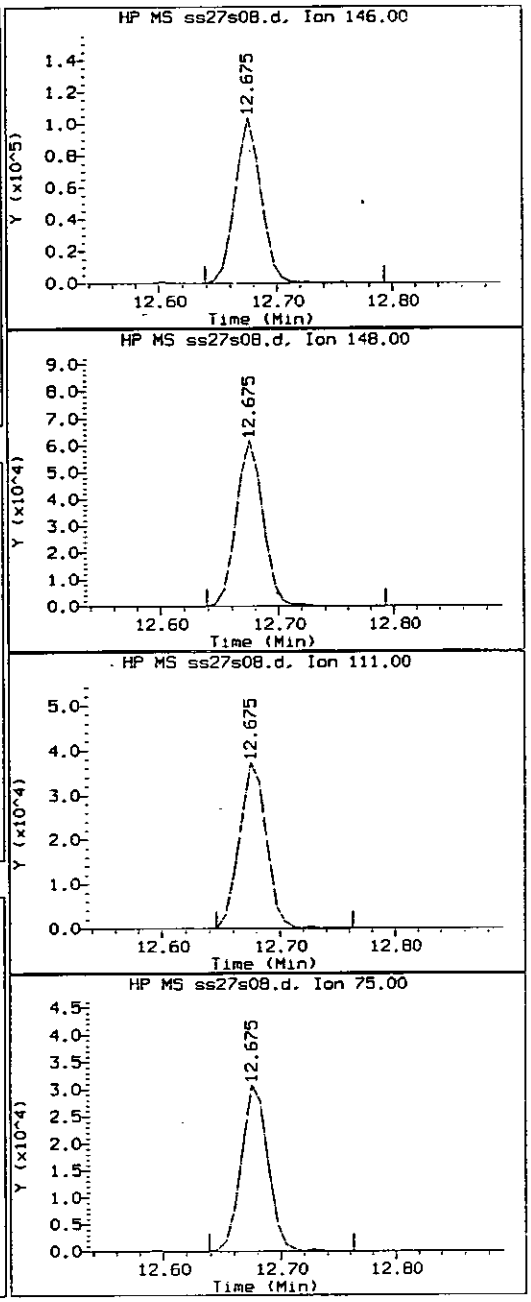



Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s08.d
Injection date and time: 27-SEP-2010 10:25

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:15 amd00492

Sublist used: DRAPERREV3

Sample Name: XXXXX

Lab Sample ID: 6087284

Compound Number : 89
Compound Name : 1,4-Dichlorobenzene
Scan Number : 1484
Retention Time (minutes): 12.675
Relative Retention Time : 0.001
Quant Ion : 146.00
Area (flag) : 159631
On-Column Amount (ng) : 1.8598

WAT12 8889

Digitally signed by Anita M. Dale on 09/27/2010 at 11:15.
Target 3.5 esignature user ID: amd00492

XXXXXDL

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

6087284DL

Data file: /chem/SH08359.i/10sep27a.b/ss27s13.d
Data file Sample Info. Line: XXXXXDL;6087284DL;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 13:02 cbe01947

Injection date and time: **27-SEP-2010 12:37**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **10.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 2.5 ml

| Internal Standards | RT (+/-RT) | Scan | QIon | Area(+/- %Change) | Conc. (on-column) | QC Flag |
|---|---|---|---|---|---|---|
| 43) Fluorobenzene | 7.344(-0.007) | 757 | 96 | 922568 ( -16) | 5.00 | |

| Surrogate Standards | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | %Rec. | QC flags | QC Limits |
|---|---|---|---|---|---|---|---|---|
| 74) 4 Bromofluorobenzene | (1) | 11.685( 0.002) | 174 | 159912 | 4.592 | 92% | | 80 - 120 |
| 91) 1,2-Dichlorobenzene-d4 | (1) | 12.969( 0.002) | 152 | 135291 | 4.252 | 85% | | 80 - 120 |

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 2) Chloromethane | (1) | | | Not Detected | | | | | 0.2 |
| 3) Vinyl Chloride | (1) | | | Not Detected | | | | | 0.1 |
| 4) Bromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 5) Chloroethane | (1) | 2.592( 0.000) | 64 | 62540 | 0.897 | 8.97 | | | 0.2 |
| 7) Trichlorofluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 10) 1,1-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 17) Methylene Chloride | (1) | | | Not Detected | | | | | 0.3 |
| 21) trans-1,2-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 23) 1,1-Dichloroethane | (1) | 4.858( 0.001) | 63 | 429980 | 2.952 | 29.52 | | | 0.1 |
| 27) cis-1,2-Dichloroethene | (1) | 5.657( 0.000) | 96 | 31644 | 0.495 | 4.95 | | | 0.1 |
| 28) 2,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.2 |
| 33) Bromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 35) Chloroform | (1) | | | Not Detected | | | | | 0.1 |
| 36) 1,1,1-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 39) Carbon Tetrachloride | (1) | | | Not Detected | | | | | 0.1 |
| 38) 1,1-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 40) Benzene | (1) | | | Not Detected | | | | | 0.1 |
| 41) 1,2-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 44) Trichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 45) 1,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 46) Dibromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 48) Bromodichloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 51) cis-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 54) Toluene | (1) | | | Not Detected | | | | | 0.1 |
| [illegible] | (1) | | | Not Detected | | | | | 0.1 |
| 57) 1,1,2-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 59) Tetrachloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 60) 1,3-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 62) Dibromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 63) 1,2-Dibromoethane | (1) | | | Not Detected | | | | | 0.1 |
| 64) Chlorobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 66) Ethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 68) m+p-Xylene | (1) | | | Not Detected | | | | | 0.2 |
| 69) o-Xylene | (1) | | | Not Detected | | | | | 0.1 |
| 70) Styrene | (1) | | | Not Detected | | | | | |
| 71) Bromoform | (1) | | | Not Detected | | | | | 0.2 |
| 73) Isopropylbenzene | (1) | | | Not Detected | | | | | 0.1 |

WAT12 8898

Digitally signed by Chelsea B. Eastep on 09/27/2010 at 13:03. Target 3.5 esignature user ID: cbe01947

XXXXXDL

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

6087284DL

Data file: /chem/SH08359.i/10sep27a.b/ss27s13.d
Data file Sample Info. Line: XXXXXDL;6087284DL;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 13:02 cbe01947

Injection date and time: **27-SEP-2010 12:37**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **10.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 2.5 ml

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 75) 1,1,2,2-Tetrachloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 76) Bromobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 77) 1,2,3-Trichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 79) n-Propylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 80) 2-Chlorotoluene | (1) | | | Not Detected | | | | | 0.1 |
| 81) 1,3,5-Trimethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 82) 4-Chlorotoluene | (1) | | | Not Detected | | | | | 0.2 |
| 83) tert-Butylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 85) 1,2,4-Trimethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 86) sec Butylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 88) p-Isopropyltoluene | (1) | | | Not Detected | | | | | 0.1 |
| 87) 1,3-Dichlorobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 89) 1,4-Dichlorobenzene | (1) | 12.675( 0.001) | 146 | 11456 | 0.141 | 1.41 | | | 0.1 |
| 90) n-Butylbenzene | (1) | | | Not Detected | | | | | 0.2 |
| 92) 1,2-Dichlorobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | | | Not Detected | | | | | 0.4 |
| 96) 1,2,4-Trichlorobenzene | (1) | | | Not Detected | | | | | 0.2 |
| 97) Hexachlorobutadiene | (1) | | | Not Detected | | | | | 0.2 |
| 98) Naphthalene | (1) | | | Not Detected | | | | | 0.2 |
| 99) 1,2,3-Trichlorobenzene | (1) | | | Not Detected | | | | | 0.2 |

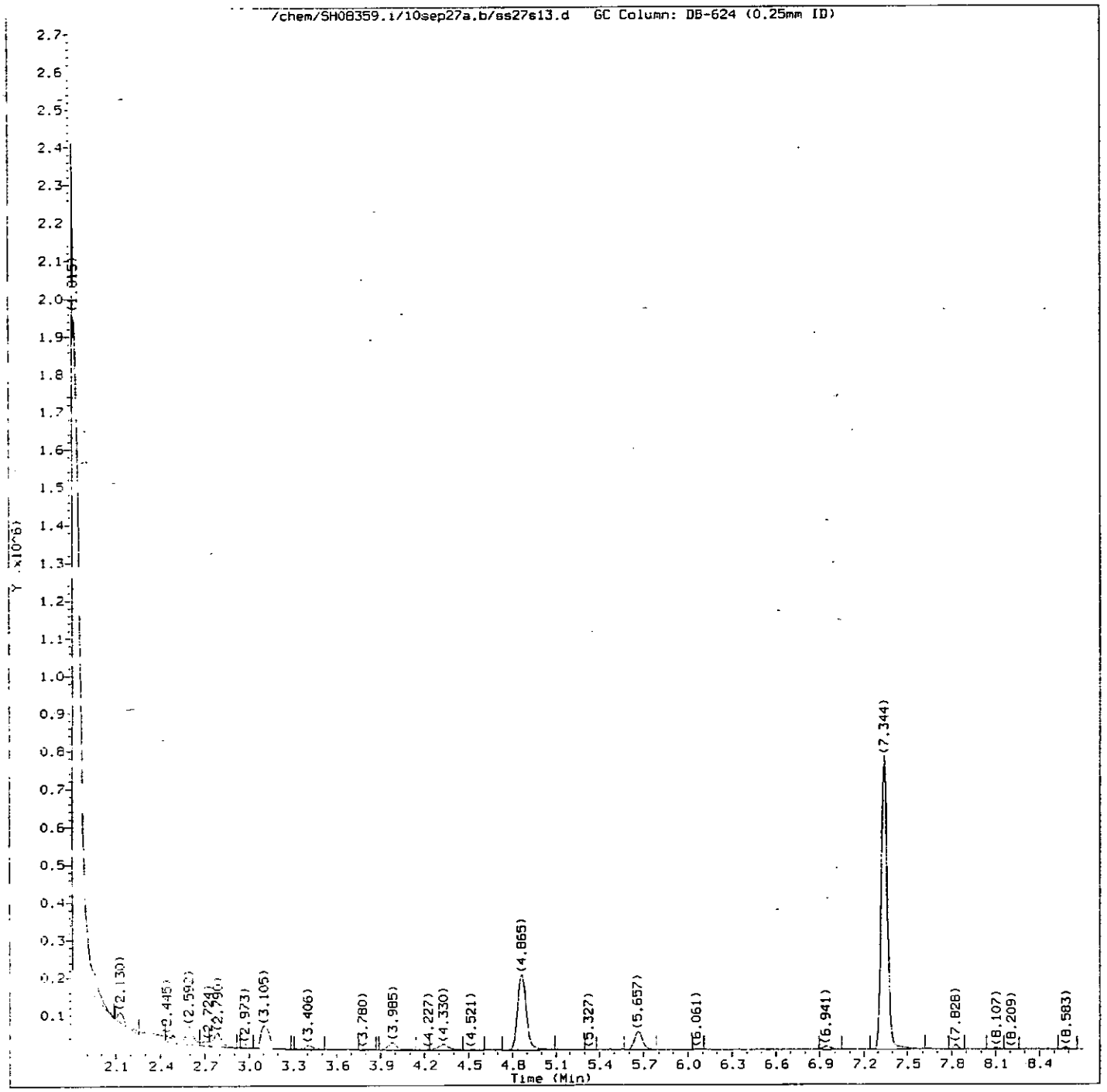
Total number of targets = 59

Comments:

WAT12 0891

Digitally signed by Chelsea B. Eastep on 09/27/2010 at 13:03. Target 3.5 esignature user ID: cbe01947

Auditor: Date: C9/27/10




Total Ion Chromatogram (TIC)

Target Revision 3.5

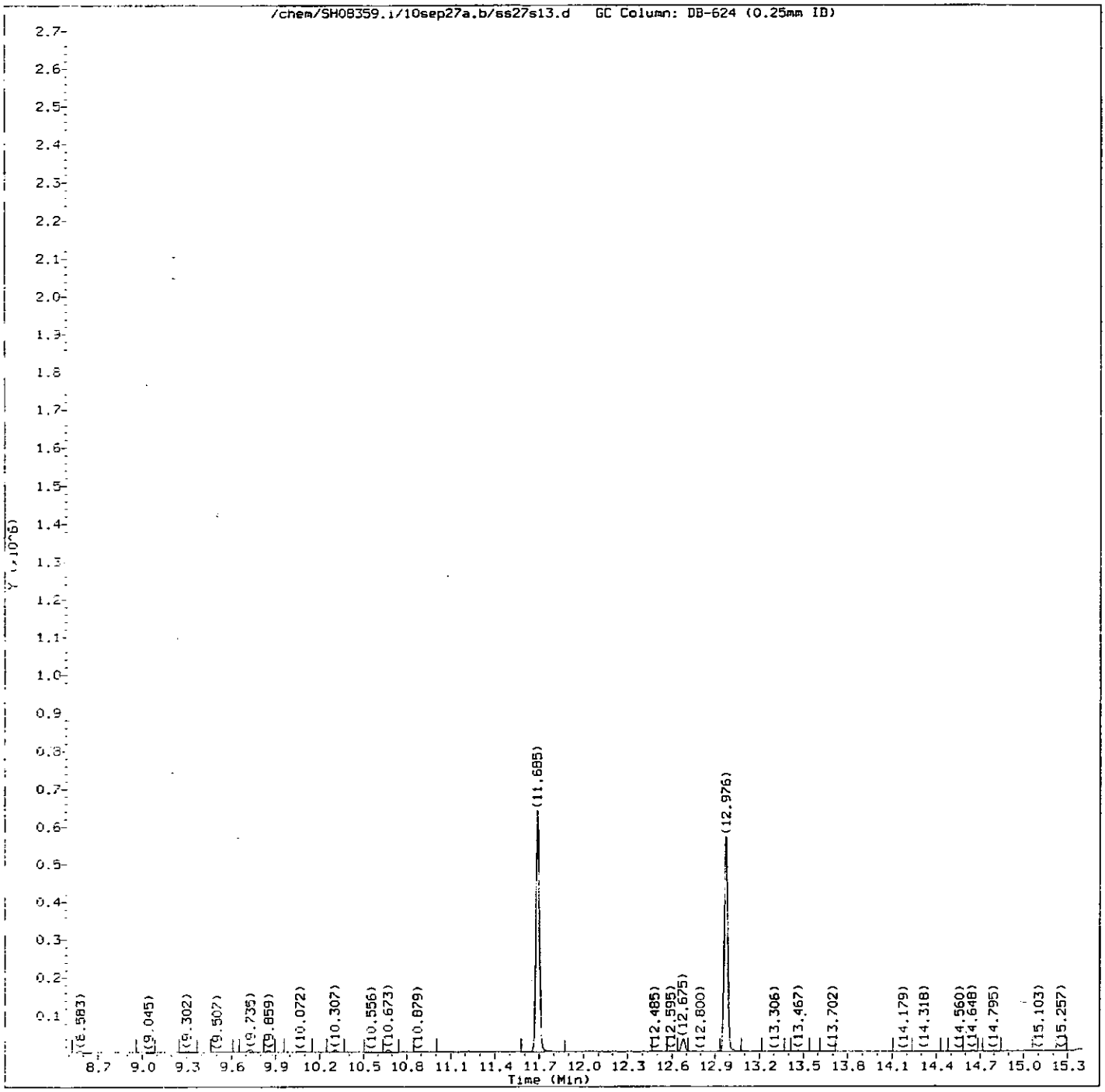
Data File: /chem/SH08359.i/10sep27a.b/ss27s13.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 12:37 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 13:02 cbe01947

WAT12 0892

Sample Name: XXXXXDL Lab Sample ID: 6087284DL

Digitally signed by Chelsea B. Eastep
on 09/27/2010 at 13:03.
Target 3.5 esignature user ID: cbe01947




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s13.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 12:37 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 13:02 cbe01947

WAT12 0893

Sample Name: XXXXXDL Lab Sample ID: 6087284DL

Digitally signed by Chelsea B. Eastep
on 09/27/2010 at 13:03.
Target 3.5 esignature user ID: cbe01947

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s13.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 12:37  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 13:02 cbe01947

Sample Name: XXXXXDL  Lab Sample ID: 6087284DL

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 5) Chloroethane | (1) | 2.592 | 64 | 62540 | 0.897 |
| 23) 1,1-Dichloroethane | (1) | 4.858 | 63 | 429980 | 2.952 |
| 27) cis-1,2-Dichloroethene | (1) | 5.657 | 96 | 31644 | 0.495 |
| 43)*Fluorobenzene | (1) | 7.344 | 96 | 922568 | 5.000 |
| 74)$4-Bromofluorobenzene | (1) | 11.685 | 174 | 159912 | 4.592 |
| 89) 1,4-Dichlorobenzene | (1) | 12.675 | 146 | 11456 | 0.141 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.969 | 152 | 135291 | 4.252 |

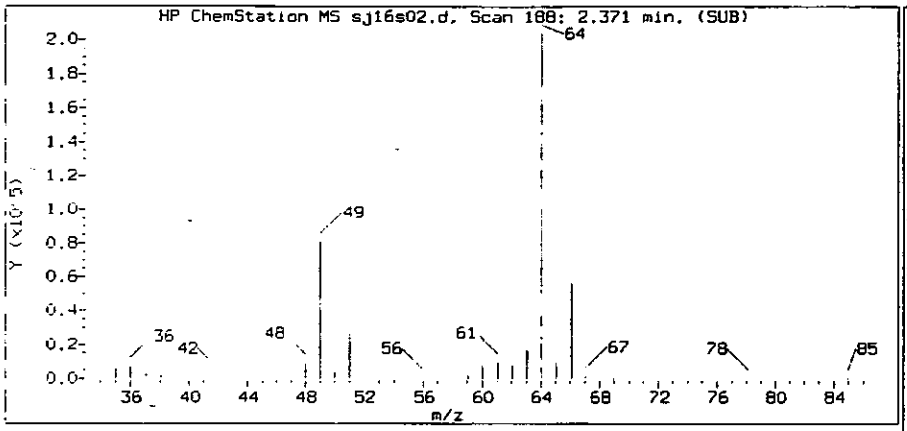
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

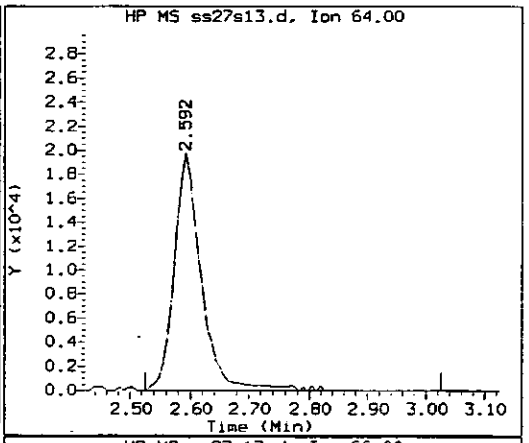


WAT12 #894

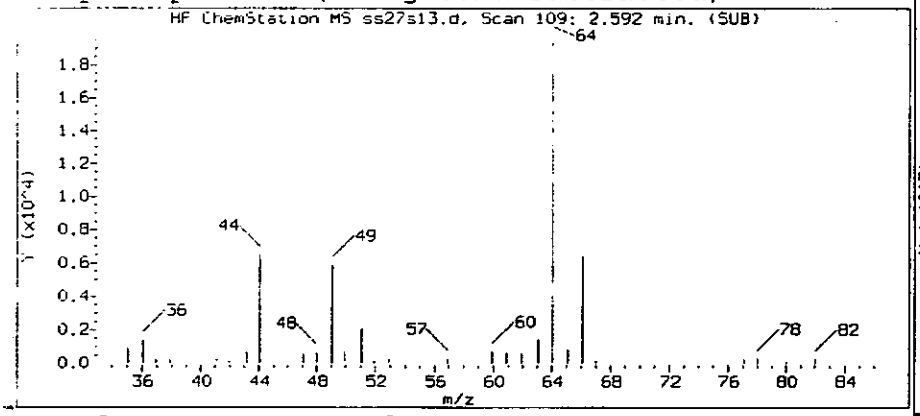
Digitally signed by Chelsea B. Eastep
on 09/27/2010 at 13:03.
Target 3.5 esignature user ID: cbe01947

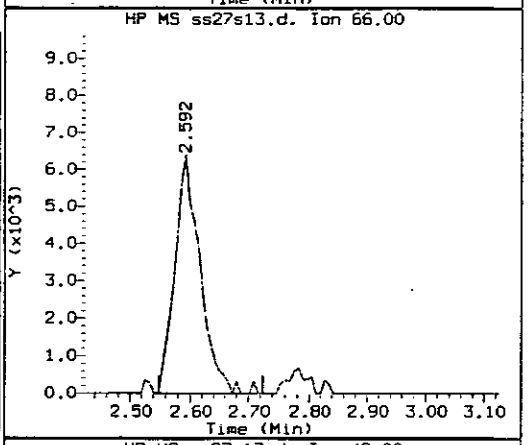
Reference Standard Spectrum for Chloroethane



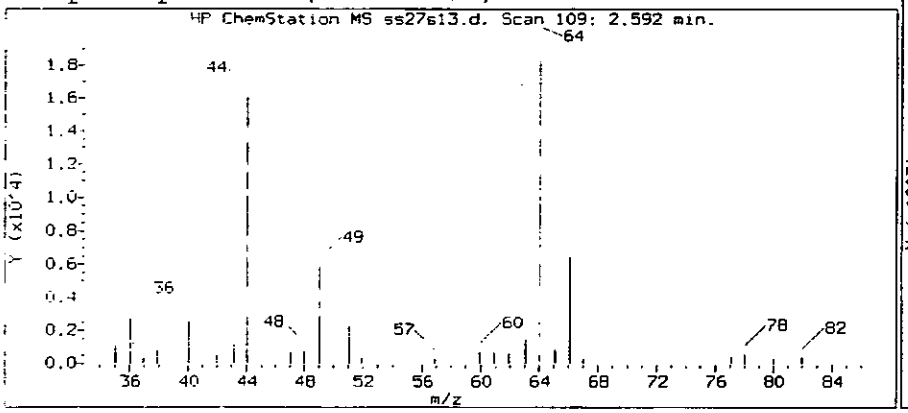



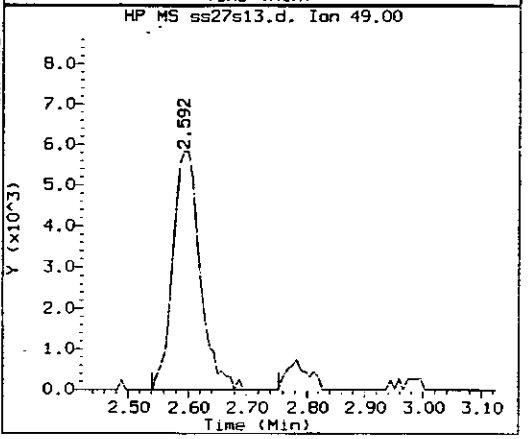

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s13.d
Injection date and time: 27-SEP-2010 12:37

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 13:02 cbe01947

Sample Name: XXXXXDL

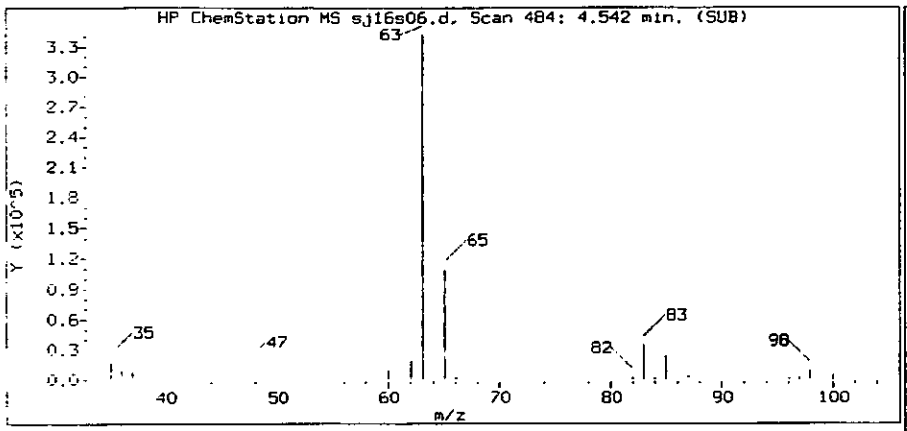
Lab Sample ID: 6087284DL

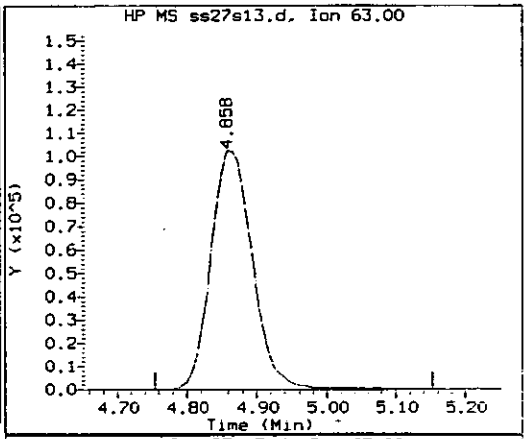
Compound Number : 5
Compound Name : Chloroethane
Scan Number : 109
Retention Time (minutes): 2.592
Relative Retention Time : 0.000
Quant Ion : 64.00
Area (flag) : 62540
On-Column Amount (ng) : 0.8968

WAT12 0895

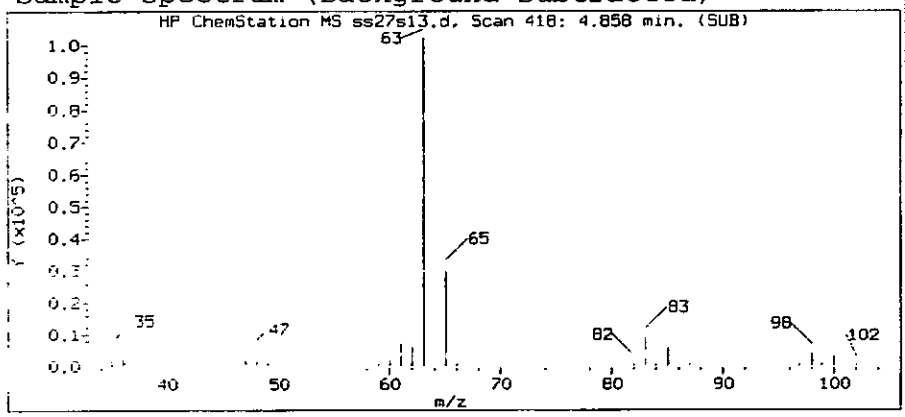
Digitally signed by Chelsea B. Eastep on 09/27/2010 at 13:03.
Target 3.5 esignature user ID: cbe01947

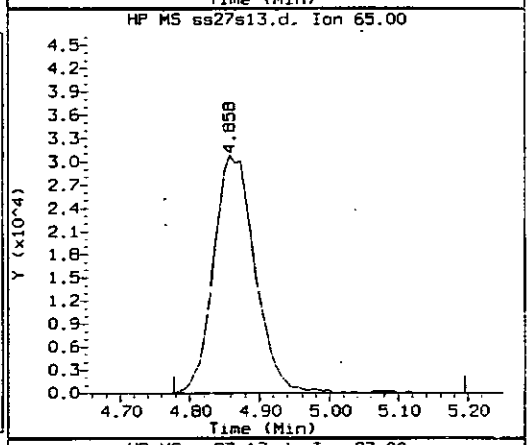
Reference Standard Spectrum for 1,1-Dichloroethane



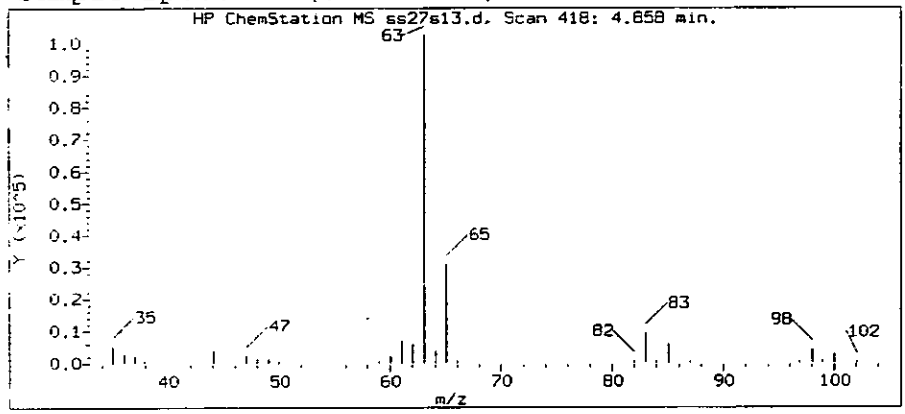



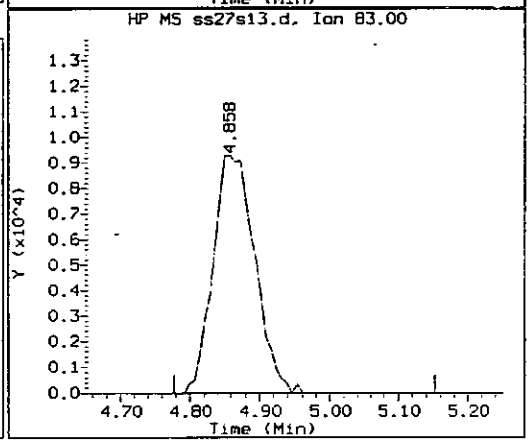

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s13.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 12:37  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 13:02 cbe01947

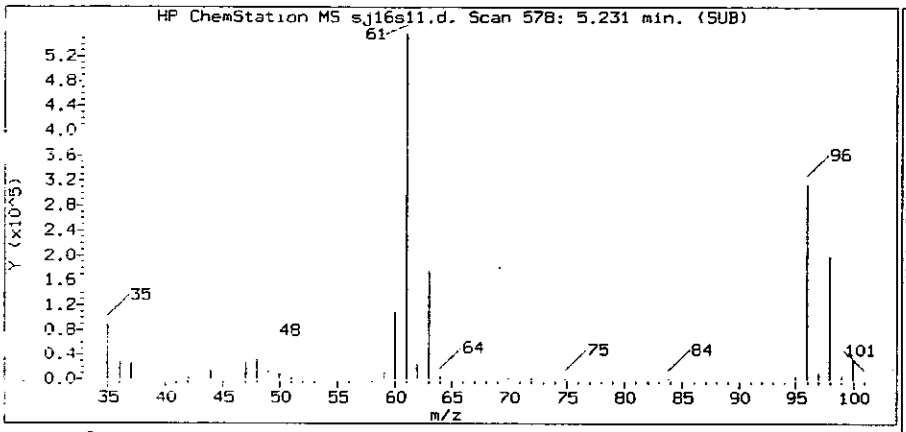
Sample Name: XXXXXDL  Lab Sample ID: 6087284DL

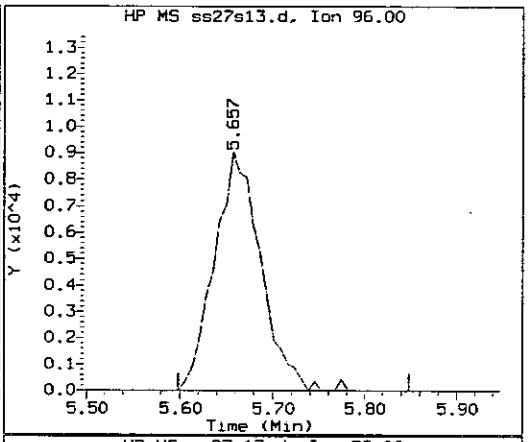
Compound Number : 23
Compound Name : 1,1-Dichloroethane
Scan Number : 418
Retention Time (minutes): 4.858
Relative Retention Time : 0.001
Quant Ion : 63.00
Area (flag) : 429980
On-Column Amount (ng) : 2.9517

WAT12 8896

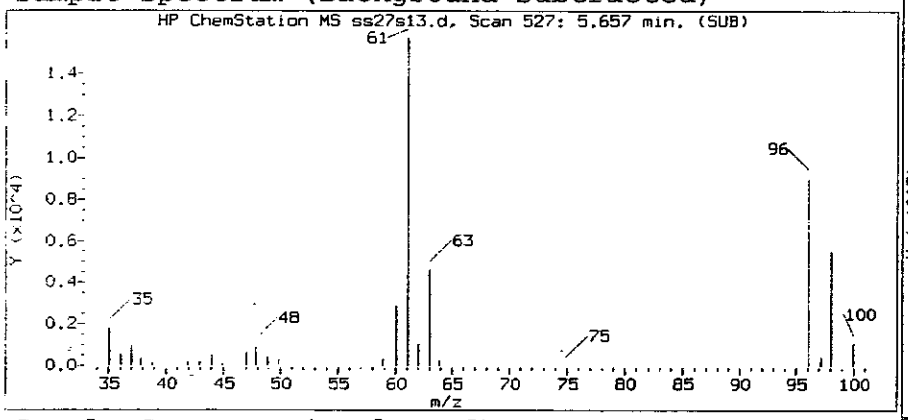
Digitally signed by Chelsea B. Eastep on 09/27/2010 at 13:03.
Target 3.5 esignature user ID: cbe01947

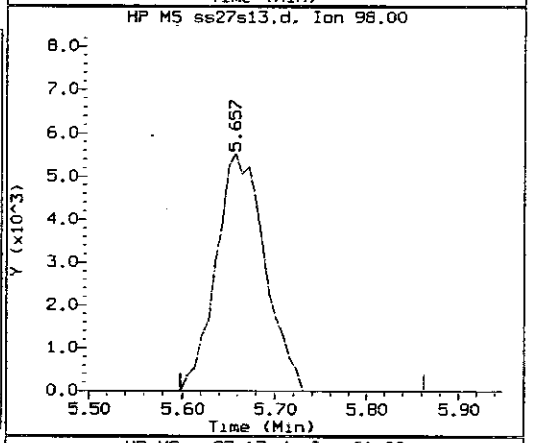
Reference Standard Spectrum for cis-1,2-Dichloroethene



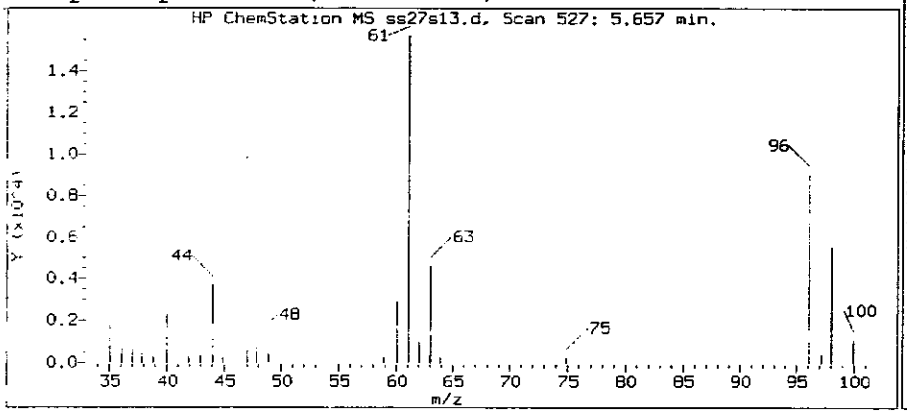



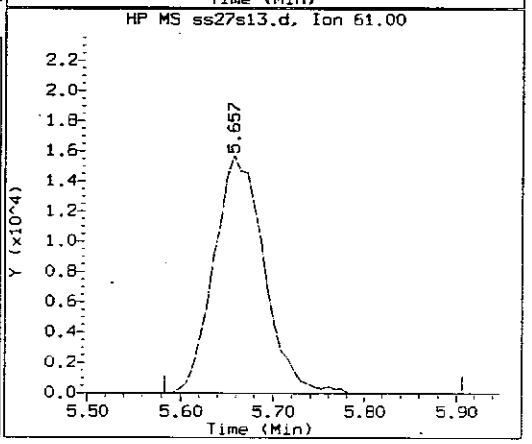

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s13.d
Injection date and time: 27-SEP-2010 12:37

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 13:02 cbe01947

Sample Name: XXXXXDL

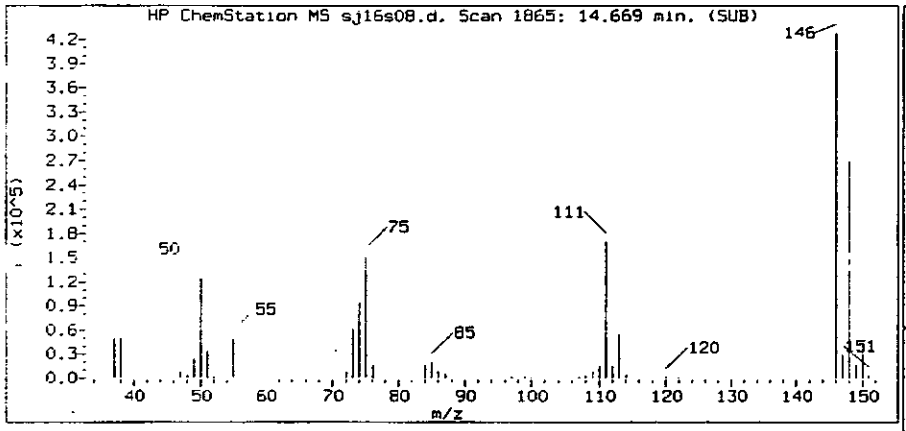
Lab Sample ID: 6087284DL

Compound Number : 27
Compound Name : cis-1,2-Dichloroethene
Scan Number : 527
Retention Time (minutes): 5.657
Relative Retention Time : 0.000
Quant Ion : 96.00
Area (flag) : 31644
On-Column Amount (ng) : 0.4954

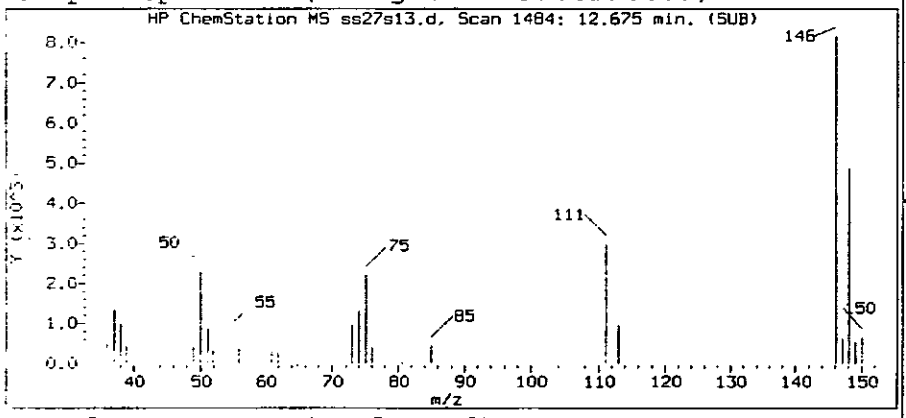
WAT12 8897

Digitally signed by Chelsea B. Eastep on 09/27/2010 at 13:03.
Target 3.5 esignature user ID: cbe01947

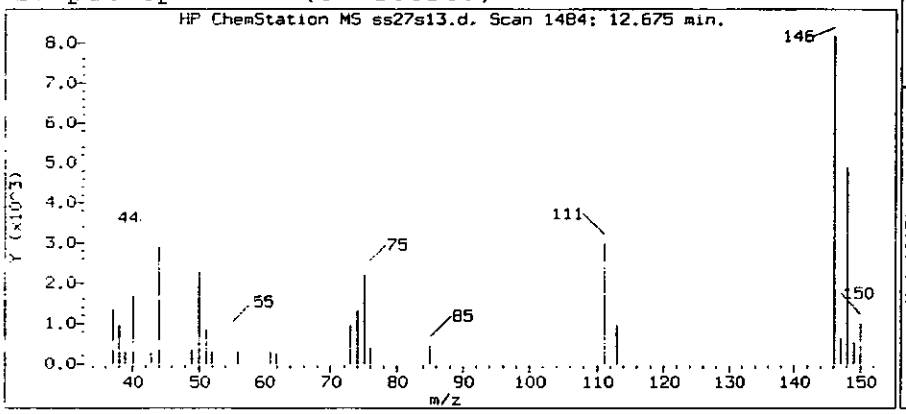
Reference Standard Spectrum for 1,4-Dichlorobenzene

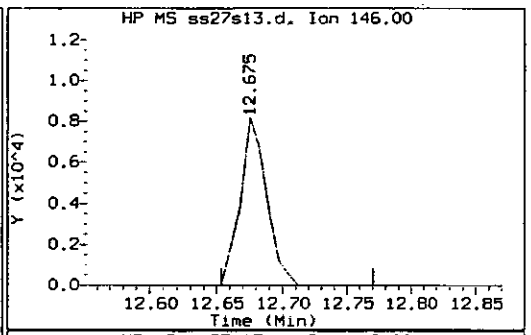


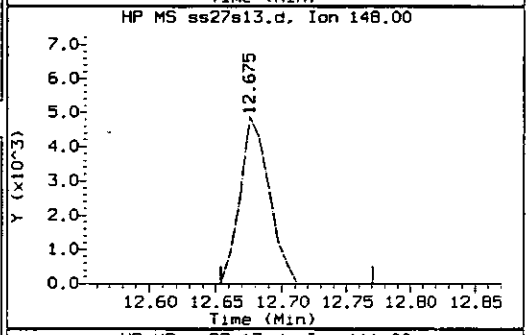

Sample Spectrum (Background Subtracted)

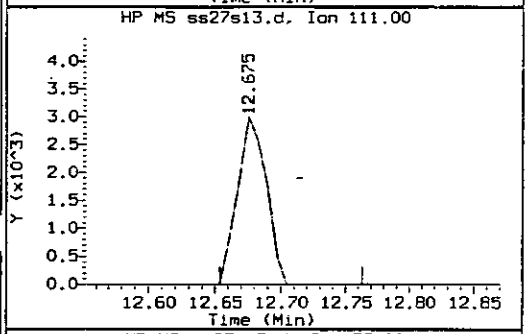


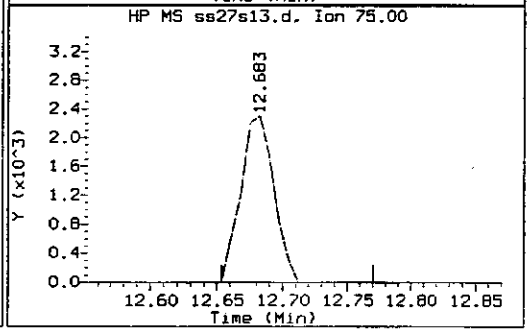

Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s13.d
Injection date and time: 27-SEP-2010 12:37

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 13:02 cbe01947

Sample Name: XXXXXDL

Lab Sample ID: 6087284DL

Compound Number : 89
Compound Name : 1,4-Dichlorobenzene
Scan Number : 1484
Retention Time (minutes): 12.675
Relative Retention Time : 0.001
Quant Ion : 146.00
Area (flag) : 11456
On-Column Amount (ng) : 0.1409

WAT12 0698

Digitally signed by Chelsea B. Eastep on 09/27/2010 at 13:03.
Target 3.5 esignature user ID: cbe01947

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087285

Data file: /chem/SH08359.i/10sep27a.b/ss27s09.d
Data file Sample Info. Line: XXXXX;6087285;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

Injection date and time: **27-SEP-2010 10:52**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Internal Standards | RT (+/-RT) | Scan | QIon | Area(+/- %Change) | Conc. (on-column) | QC Flag |
|---|---|---|---|---|---|---|
| 43) Fluorobenzene | 7.344(-0.007) | 757 | 96 | 970001 ( -11) | 5.00 | |

| Surrogate Standards | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | %Rec. | QC flags | QC Limits |
|---|---|---|---|---|---|---|---|---|
| 74) 4-Bromofluorobenzene | (1) | 11.685( 0.002) | 174 | 169057 | 4.617 | 92% | | 80 - 120 |
| 91) 1,2-Dichlorobenzene-d4 | (1) | 12.969( 0.002) | 152 | 143126 | 4.278 | 86% | | 80 - 120 |

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | 1.954(-0.000) | 85 | 34126 | 0.545 | 0.55 | | | 0.2 |
| 2) Chloromethane | (1) | | | Not Detected | | | | | 0.2 |
| 3) Vinyl Chloride | (1) | | | Not Detected | | | | | 0.1 |
| 4) Bromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 5) Chloroethane | (1) | 2.592( 0.000) | 64 | 71806 | 0.979 | 0.98 | | | 0.2 |
| 7) Trichlorofluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 10) 1,1-Dichloroethene | (1) | 3.399( 0.000) | 96 | 15319 | 0.274 | 0.27 | | | 0.1 |
| 17) Methylene Chloride | (1) | | | Not Detected | | | | | 0.3 |
| 21) trans-1,2-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 23) 1,1-Dichloroethane | (1) | 4.858( 0.001) | 63 | 1079762 | 7.050 | 7.05 | | | 0.1 |
| 27) cis-1,2-Dichloroethene | (1) | 5.665(-0.000) | 96 | 69152 | 1.030 | 1.03 | | | 0.1 |
| 28) 2,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.2 |
| 33) Bromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 35) Chloroform | (1) | | | Not Detected | | | | | 0.1 |
| 36) 1,1,1-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 39) Carbon Tetrachloride | (1) | | | Not Detected | | | | | 0.1 |
| 38) 1,1-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 40) Benzene | (1) | 6.941( 0.000) | 78 | 25135 | 0.107 | 0.11 | | | 0.1 |
| 41) 1,2-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 44) Trichloroethene | (1) | 7.828( 0.000) | 95 | 11947 | 0.182 | 0.18 | | | 0.1 |
| 45) 1,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 46) Dibromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 48) Bromodichloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 51) cis-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 54) Toluene | (1) | | | Not Detected | | | | | 0.1 |
| 55) trans-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 57) 1,1,2-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 59) Tetrachloroethene | (1) | 9.852( 0.001) | 166 | 6394 | 0.108 | 0.11 | | | 0.1 |
| 60) 1,3-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 62) Dibromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 63) 1,2-Dibromoethane | (1) | | | Not Detected | | | | | 0.1 |
| 64) Chlorobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 66) Ethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 68) m+p-Xylene | (1) | | | Not Detected | | | | | 0.2 |
| 69) o-Xylene | (1) | | | Not Detected | | | | | 0.1 |
| 70) Styrene | (1) | | | Not Detected | | | | | 0.1 |
| 71) Bromoform | (1) | | | Not Detected | | | | | 0.2 |
| 73) Isopropylbenzene | (1) | | | Not Detected | | | | | 0.1 |

WAT12 0099

Digitally signed by Anita M. Dale on 09/27/2010 at 11:23. Target 3.5 esignature user ID: amd00492

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087285

Data file: /chem/SH08359.i/10sep27a.b/ss27s09.d
Data file Sample Info. Line: XXXXX;6087285;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

Injection date and time: **27-SEP-2010 10:52**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Target Compounds | I.S. Ref. | RT | (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|---|
| 75) 1,1,2,2-Tetrachloroethane | (1) | | | | Not Detected | | | | | 0.1 |
| 76) Bromobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 77) 1,2,3-Trichloropropane | (1) | | | | Not Detected | | | | | 0.1 |
| 79) n-Propylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 80) 2-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 81) 1,3,5-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 82) 4-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.2 |
| 83) tert-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 85) 1,2,4-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 86) sec-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 88) p-Isopropyltoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 87) 1,3-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 89) 1,4-Dichlorobenzene | (1) | 12.675 | ( 0.001) | 146 | 11964 | 0.140 | 0.14 | | | 0.1 |
| 90) n-Butylbenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 92) 1,2-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | | | | Not Detected | | | | | 0.4 |
| 96) 1,2,4-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 97) Hexachlorobutadiene | (1) | | | | Not Detected | | | | | 0.2 |
| 98) Naphthalene | (1) | | | | Not Detected | | | | | 0.2 |
| 99) 1,2,3-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |

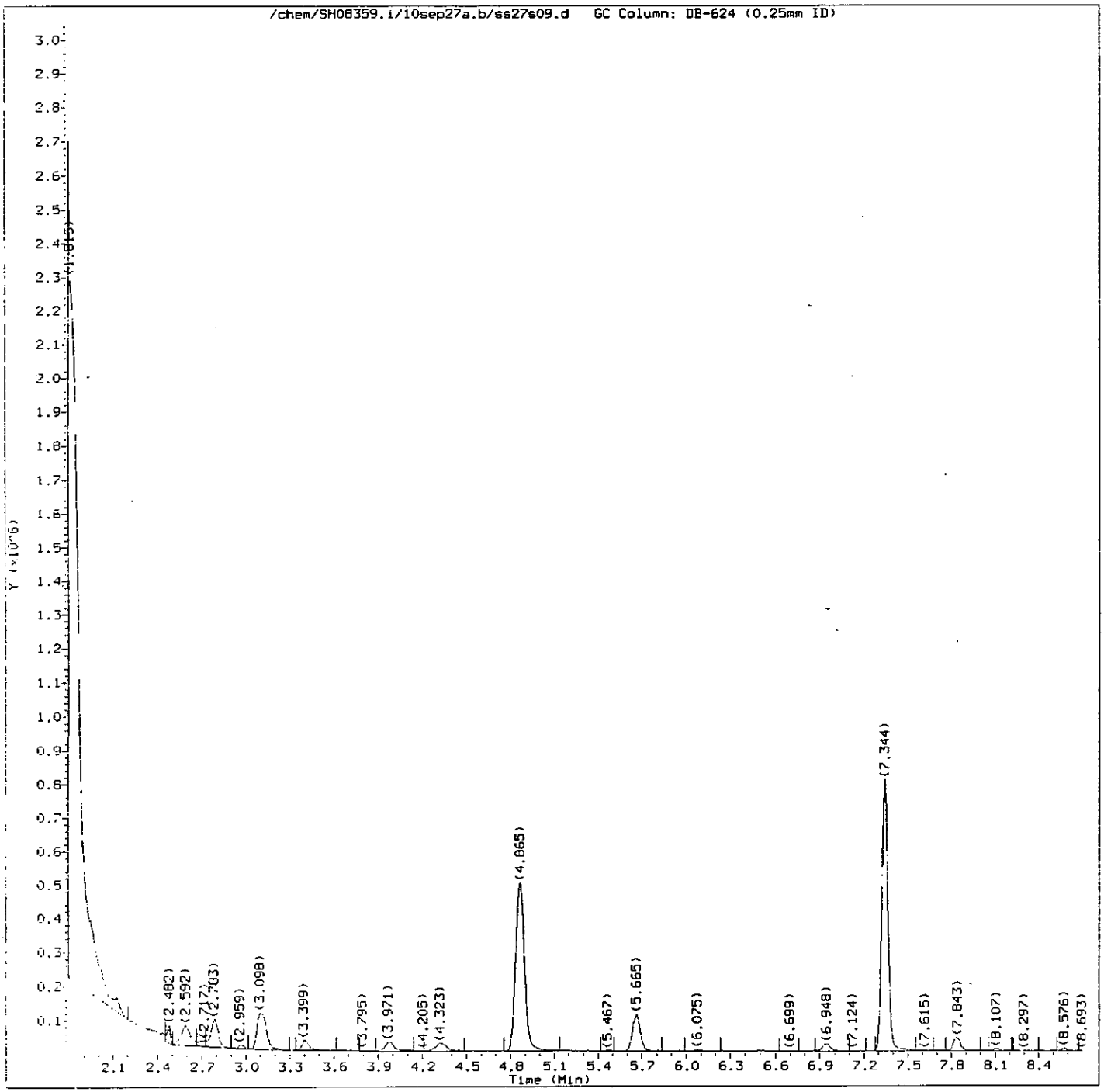
Total number of targets = 59

Comments:

WAT12 0100

Digitally signed by Anita M. Dale on 09/27/2010 at 11:23. Target 3.5 esignature user ID: amd00492

Auditor: Date: 09/28/10




Total Ion Chromatogram (TIC)

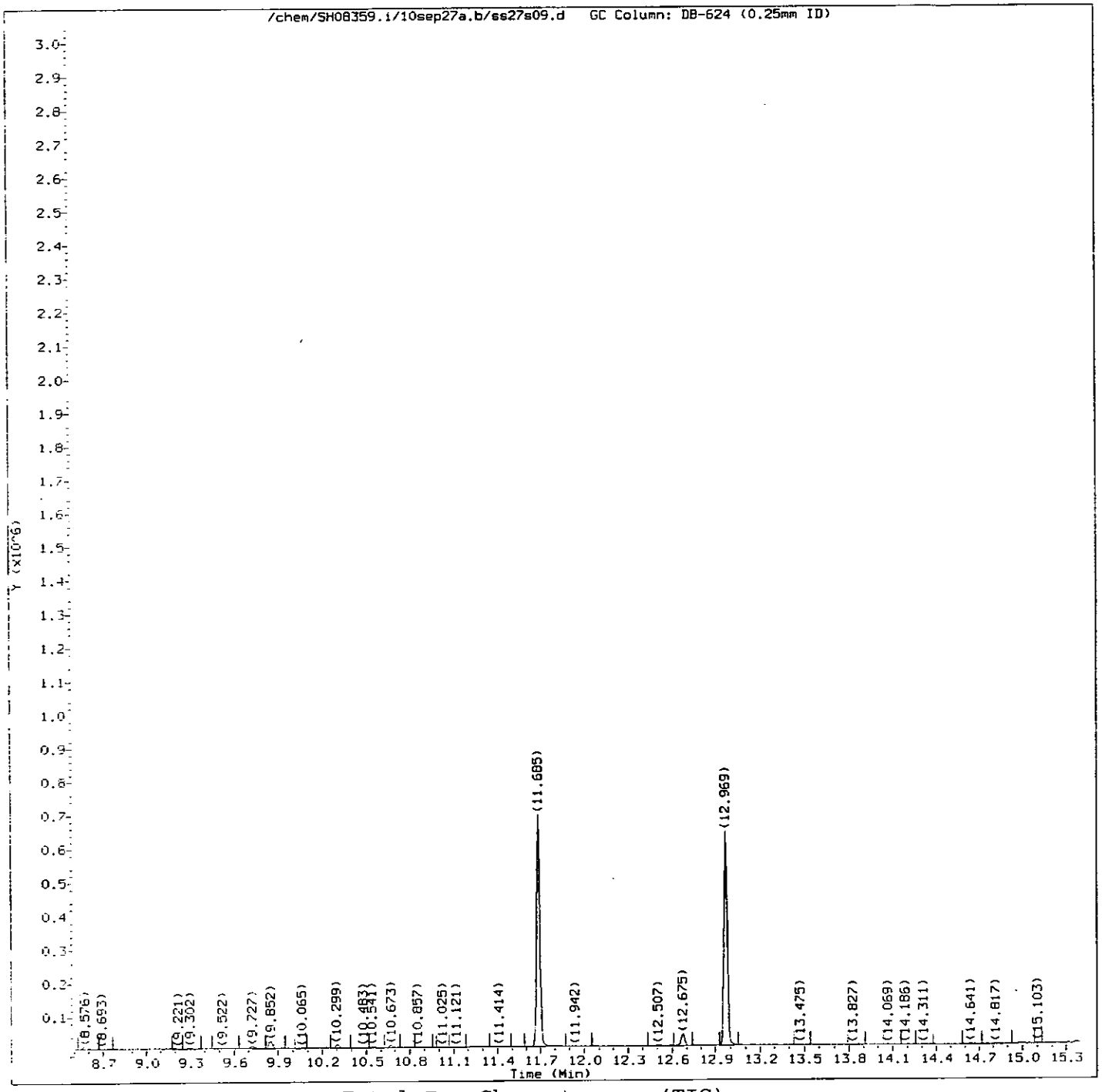
Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s09.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:52 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

Sample Name: XXXXX Lab Sample ID: 6087285 WAT12 0181

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:23.
Target 3.5 esignature user ID: amd00492




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s09.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:52 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

WAT12 8182

Sample Name: XXXXX Lab Sample ID: 6087285

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:23.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s09.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:52  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

Sample Name: XXXXX  Lab Sample ID: 6087285

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | 1.954 | 85 | 34126 | 0.545 |
| 5) Chloroethane | (1) | 2.592 | 64 | 71806 | 0.979 |
| 10) 1,1-Dichloroethene | (1) | 3.399 | 96 | 15319 | 0.274 |
| 23) 1,1-Dichloroethane | (1) | 4.858 | 63 | 1079762 | 7.050 |
| 27) cis-1,2-Dichloroethene | (1) | 5.665 | 96 | 69152 | 1.030 |
| 40) Benzene | (1) | 6.941 | 78 | 25135 | 0.107 |
| 43)*Fluorobenzene | (1) | 7.344 | 96 | 970001 | 5.000 |
| 44) Trichloroethene | (1) | 7.828 | 95 | 11947 | 0.182 |
| 59) Tetrachloroethene | (1) | 9.852 | 166 | 6394 | 0.108 |
| 74)$4-Bromofluorobenzene | (1) | 11.685 | 174 | 169057 | 4.617 |
| 89) 1,4-Dichlorobenzene | (1) | 12.675 | 146 | 11964 | 0.140 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.969 | 152 | 143126 | 4.278 |

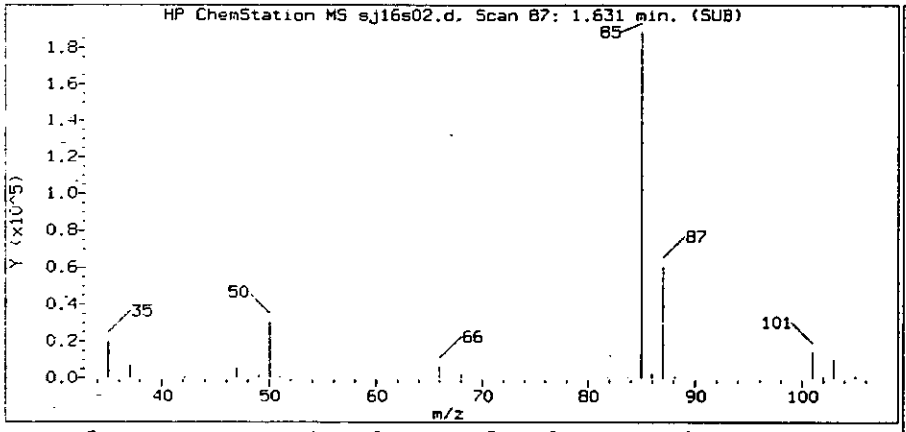
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

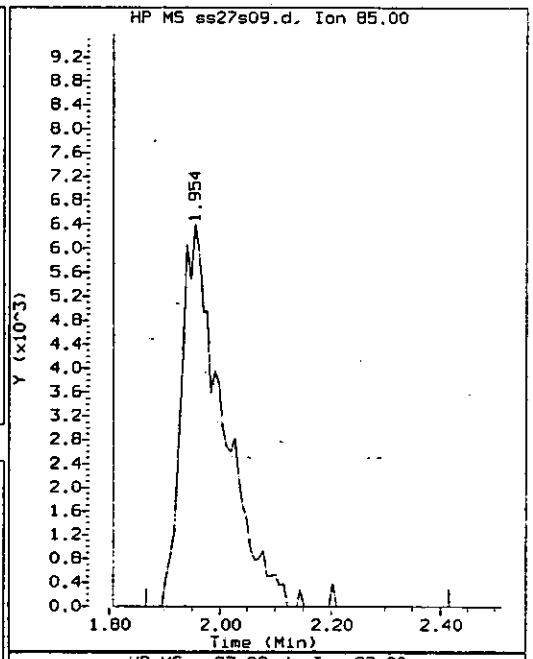


WAT12 0183

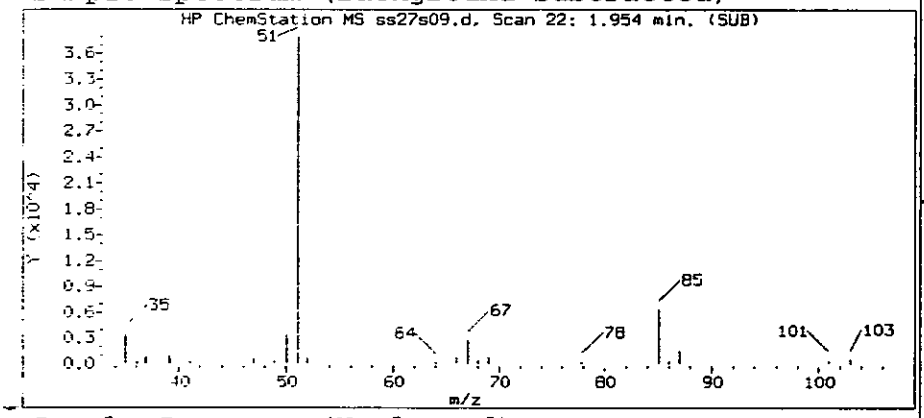
Digitally signed by Anita M. Dale
on 09/27/2010 at 11:23.
Target 3.5 esignature user ID: amd00492

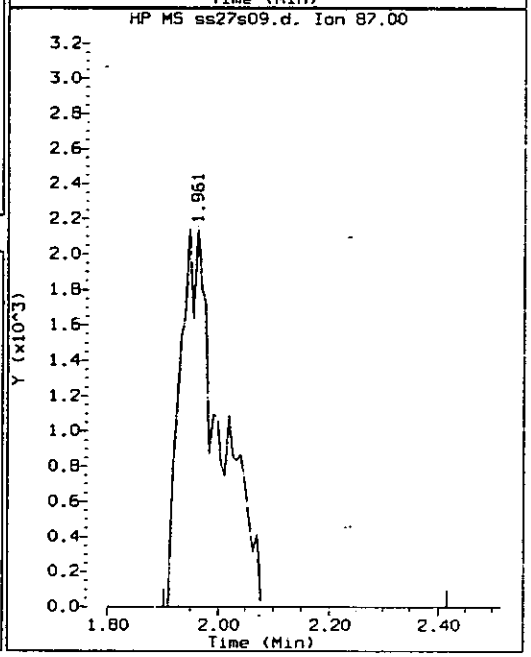
Reference Standard Spectrum for Dichlorodifluoromethane



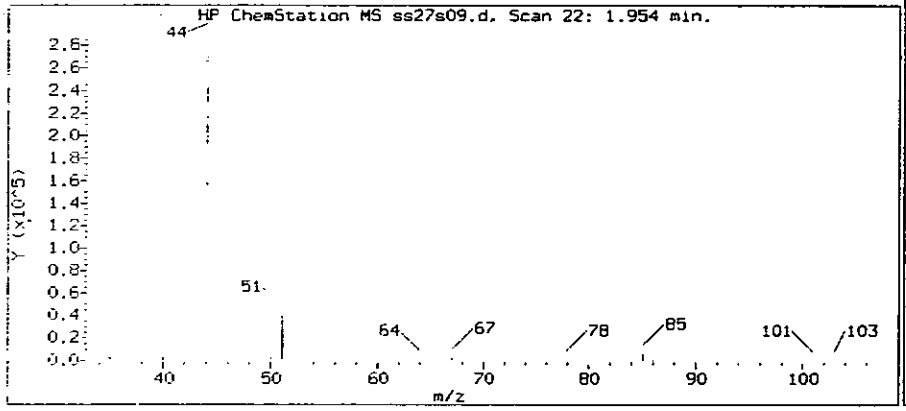




Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s09.d
Injection date and time: 27-SEP-2010 10:52

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

Sample Name: XXXXX

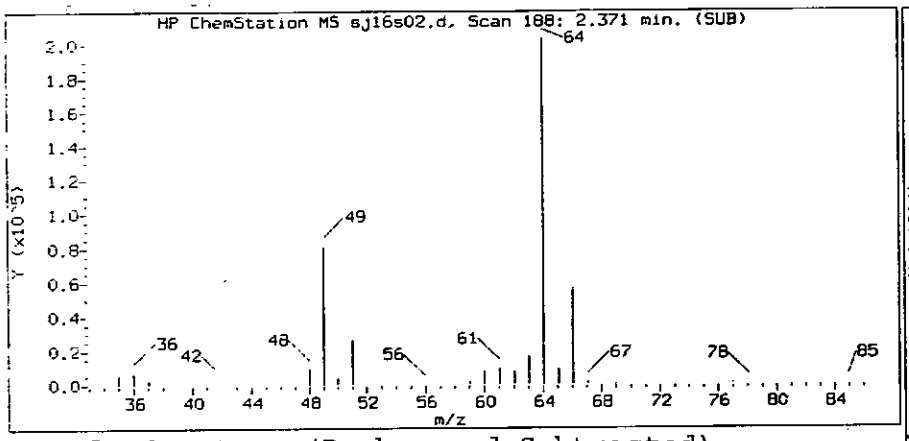
Lab Sample ID: 6087285

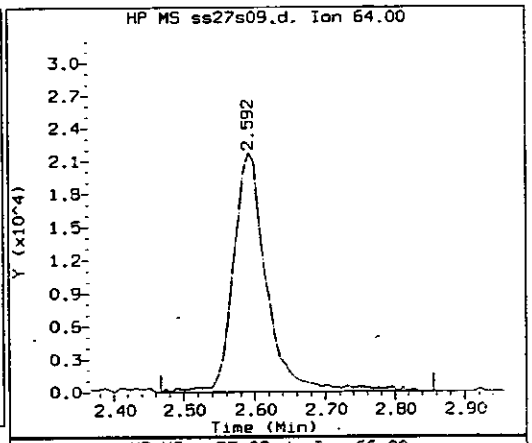
Compound Number : 1
Compound Name : Dichlorodifluoromethane
Scan Number : 22
Retention Time (minutes): 1.954
Relative Retention Time : -0.000
Quant Ion : 85.00
Area (flag) : 34126
On-Column Amount (ng) : 0.5451

WAT12 8184

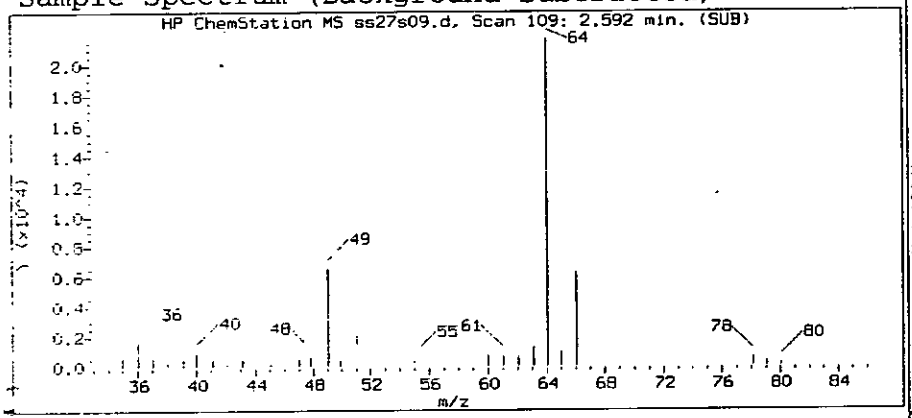
Digitally signed by Anita M. Dale on 09/27/2010 at 11:23.
Target 3.5 esignature user ID: amd00492

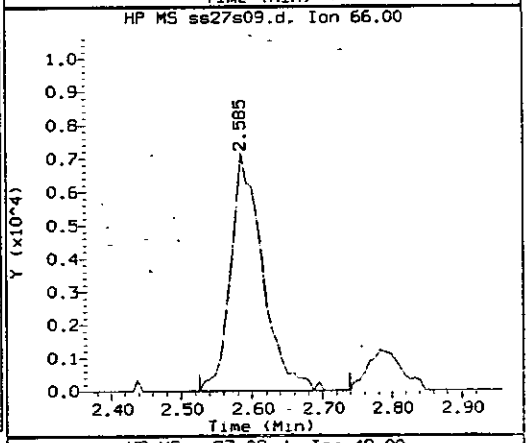
Reference Standard Spectrum for Chloroethane



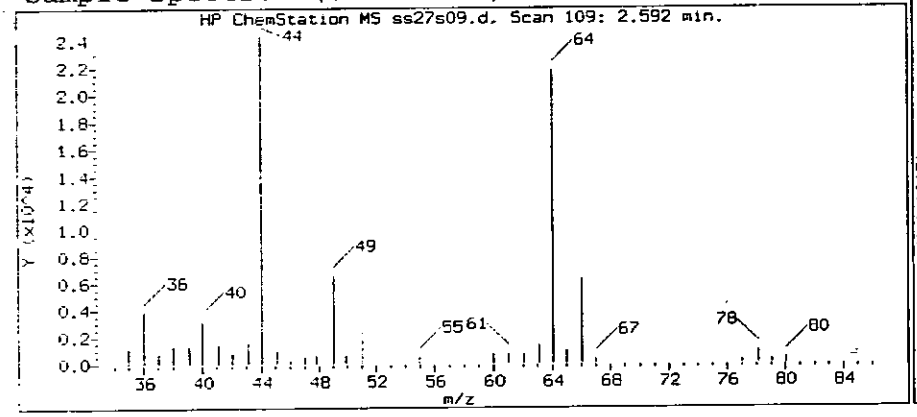



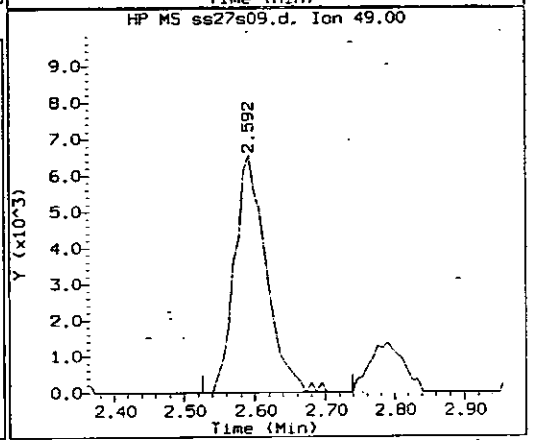

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s09.d
Injection date and time: 27-SEP-2010 10:52

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

Sublist used: DRAPERREV3

Sample Name: XXXXX

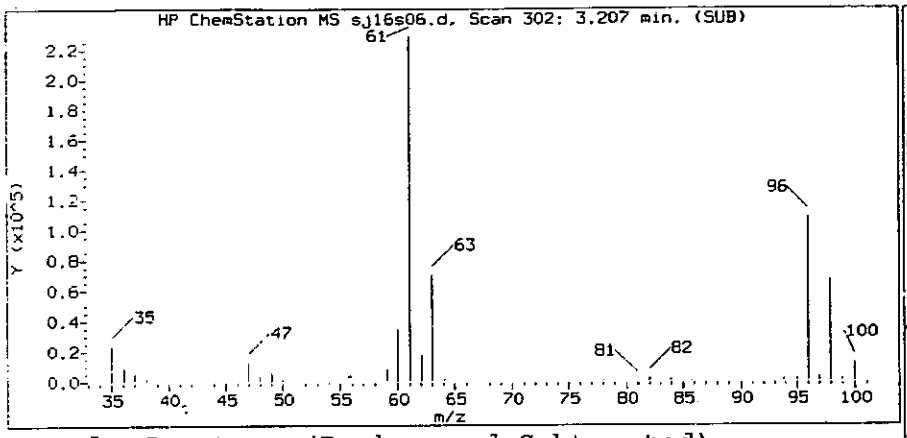
Lab Sample ID: 6087285

| | |
|---|---|
| Compound Number | : 5 |
| Compound Name | : Chloroethane |
| Scan Number | : 109 |
| Retention Time (minutes) | : 2.592 |
| Relative Retention Time | : 0.000 |
| Quant Ion | : 64.00 |
| Area (flag) | : 71806 |
| On-Column Amount (ng) | : 0.9793 |

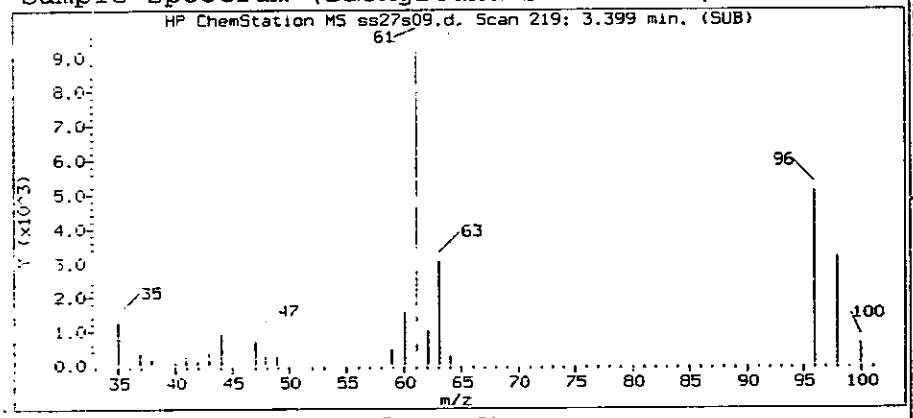
WAT12 0185

Digitally signed by Anita M. Dale on 09/27/2010 at 11:23.
Target 3.5 esignature user ID: amd00492

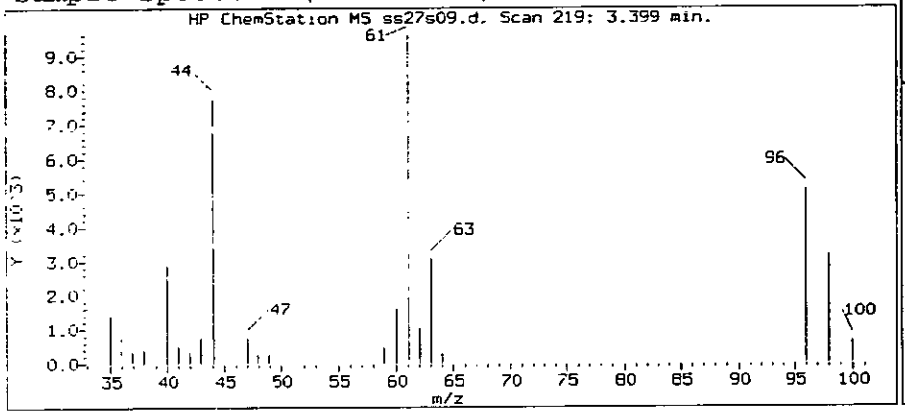
Reference Standard Spectrum for 1,1-Dichloroethene

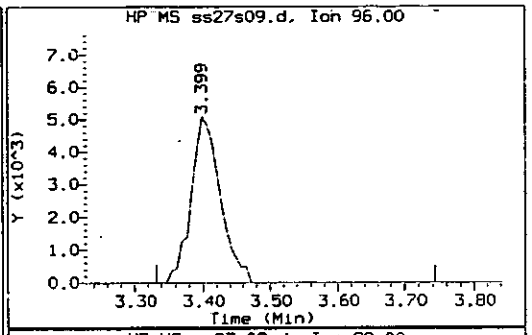


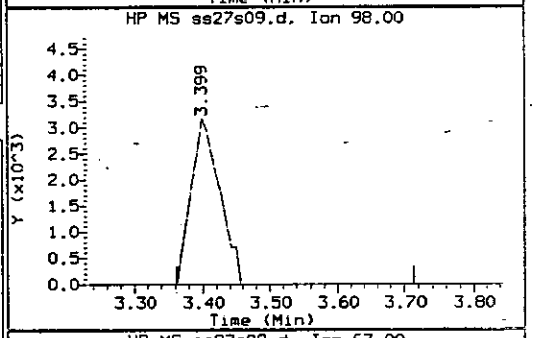

Sample Spectrum (Background Subtracted)

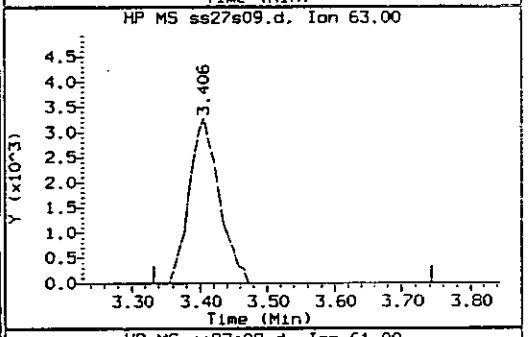


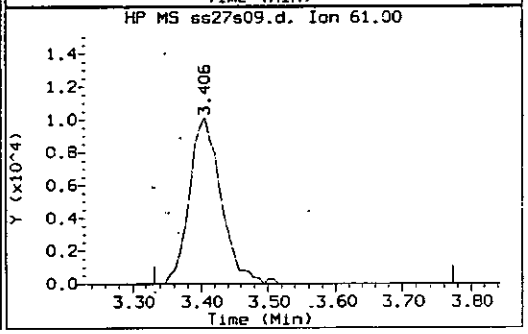

Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s09.d
Injection date and time: 27-SEP-2010 10:52

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

Sample Name: XXXXX

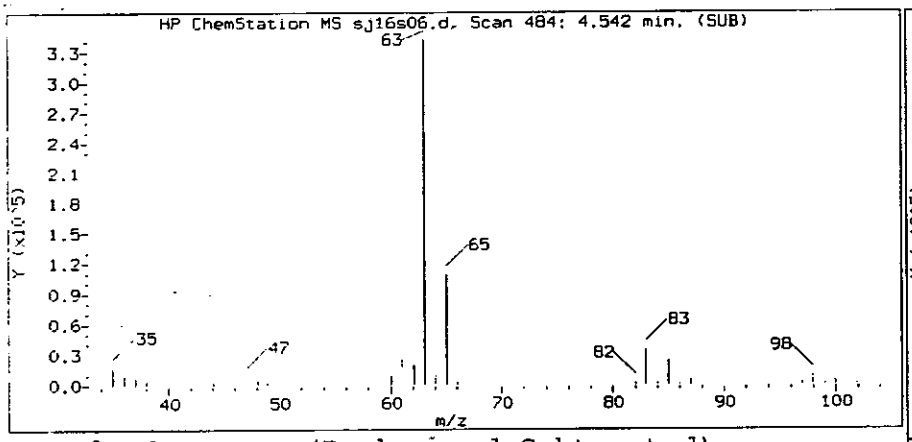
Lab Sample ID: 6087285

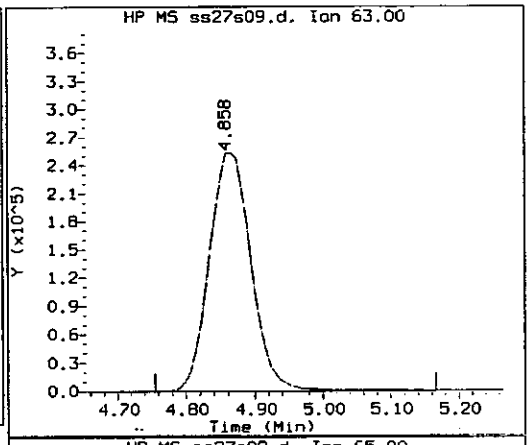
| | |
|---|---|
| Compound Number | : 10 |
| Compound Name | : 1,1-Dichloroethene |
| Scan Number | : 219 |
| Retention Time (minutes) | : 3.399 |
| Relative Retention Time | : 0.000 |
| Quant Ion | : 96.00 |
| Area (flag) | : 15319 |
| On-Column Amount (ng) | : 0.2743 |

WAT12 8106

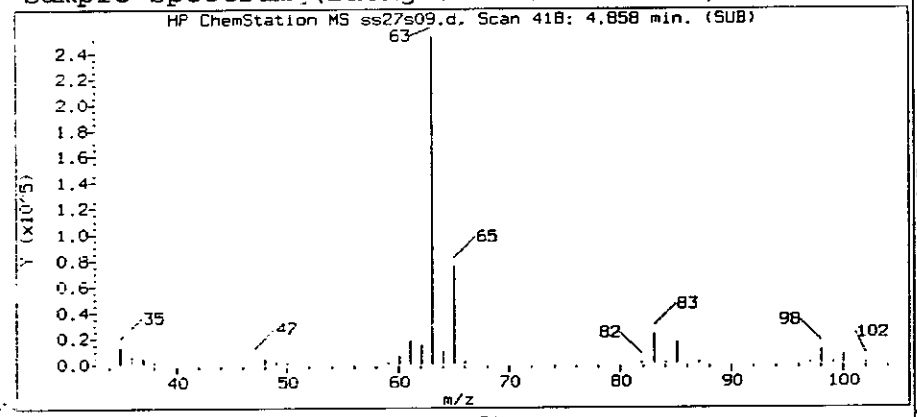
Digitally signed by Anita M. Dale on 09/27/2010 at 11:23.
Target 3.5 esignature user ID: amd00492

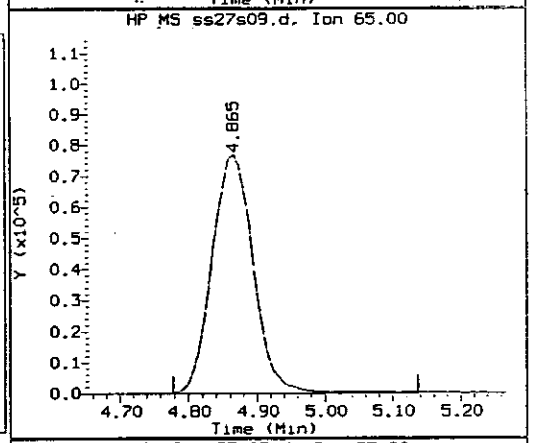
Reference Standard Spectrum for 1,1-Dichloroethane



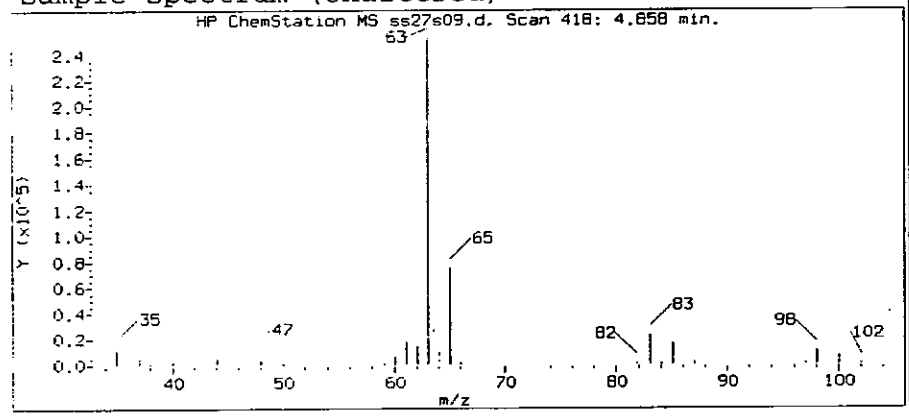



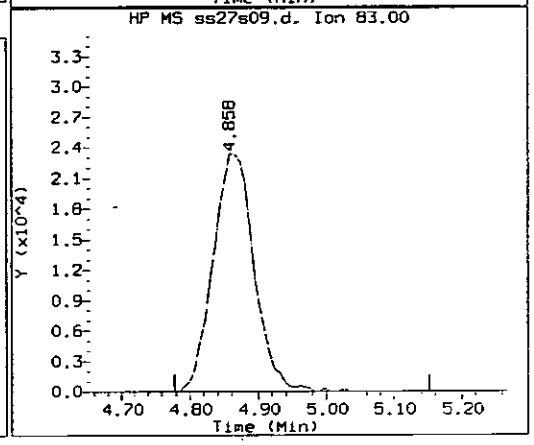

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s09.d
Injection date and time: 27-SEP-2010 10:52

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

Sublist used: DRAPERREV3

Sample Name: XXXXX

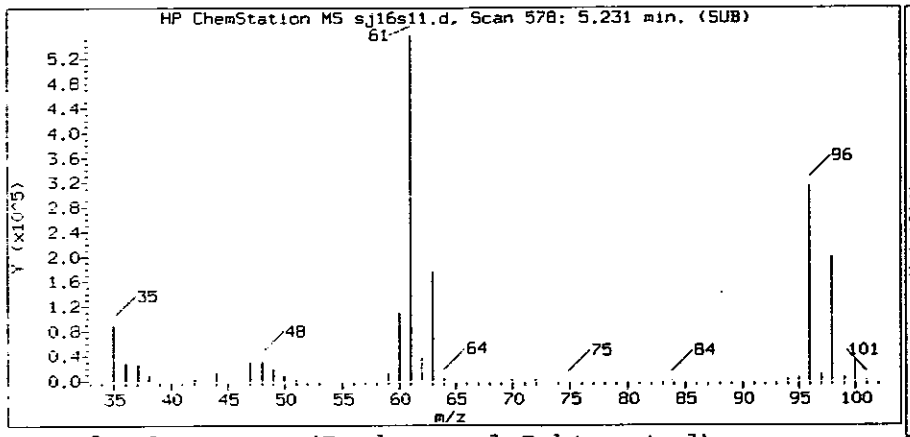
Lab Sample ID: 6087285

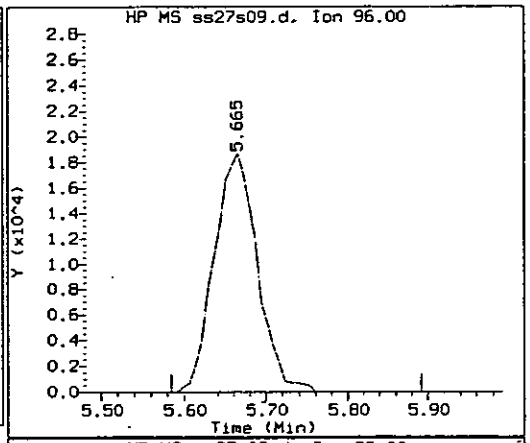
| | |
|---|---|
| Compound Number | : 23 |
| Compound Name | : 1,1-Dichloroethane |
| Scan Number | : 418 |
| Retention Time (minutes) | : 4.858 |
| Relative Retention Time | : 0.001 |
| Quant Ion | : 63.00 |
| Area (flag) | : 1079762 |
| On-Column Amount (ng) | : 7.0499 |

WAT12 0187

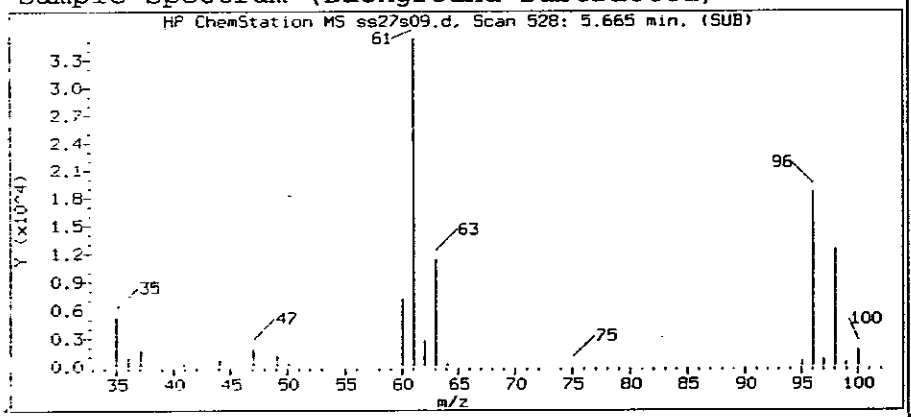
Digitally signed by Anita M. Dale on 09/27/2010 at 11:23.
Target 3.5 esignature user ID: amd00492

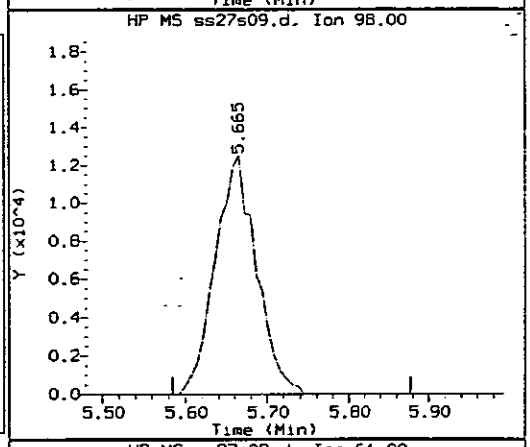
Reference Standard Spectrum for cis-1,2-Dichloroethene



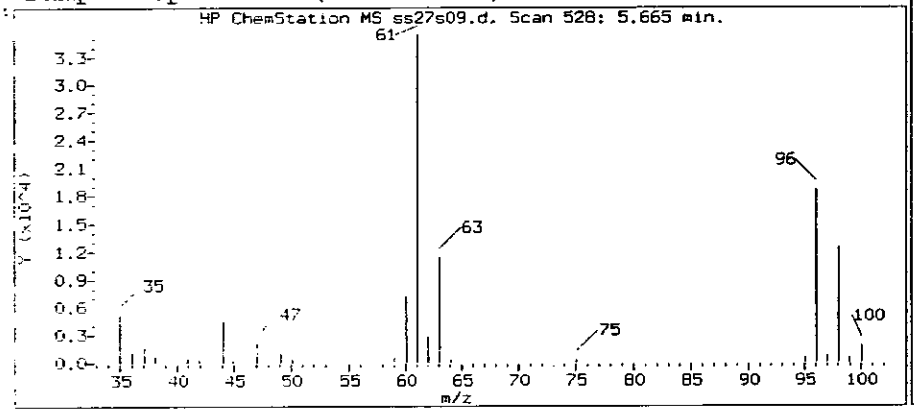



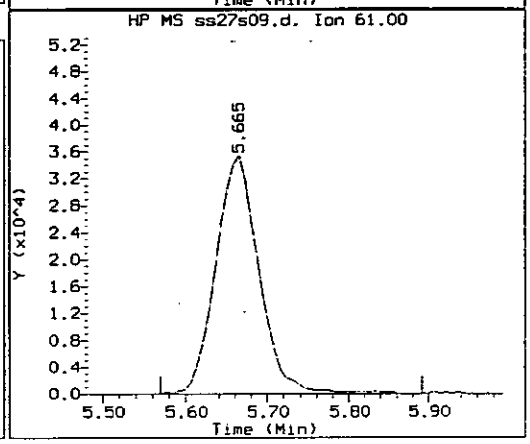

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s09.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 10:52  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

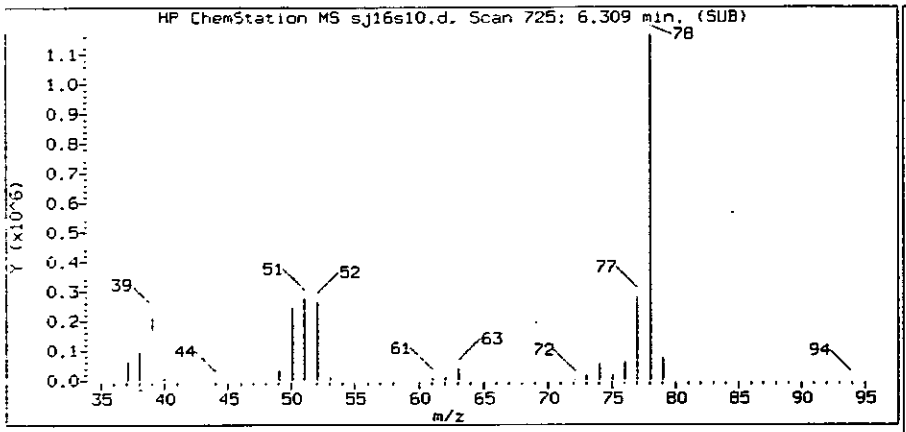
Sample Name: XXXXX  Lab Sample ID: 6087285

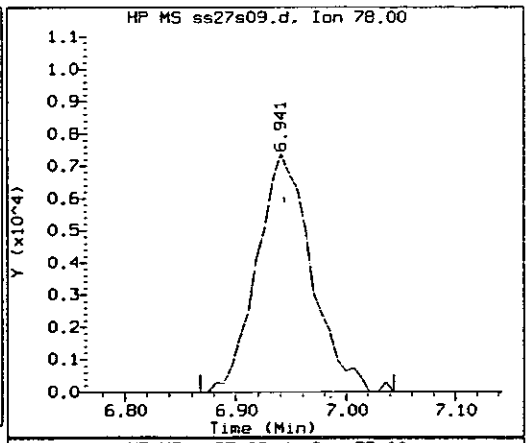
Compound Number : 27
Compound Name : cis-1,2-Dichloroethene
Scan Number : 528
Retention Time (minutes): 5.665
Relative Retention Time : -0.000
Quant Ion : 96.00
Area (flag) : 69152
On-Column Amount (ng) : 1.0296

WAT12 8188

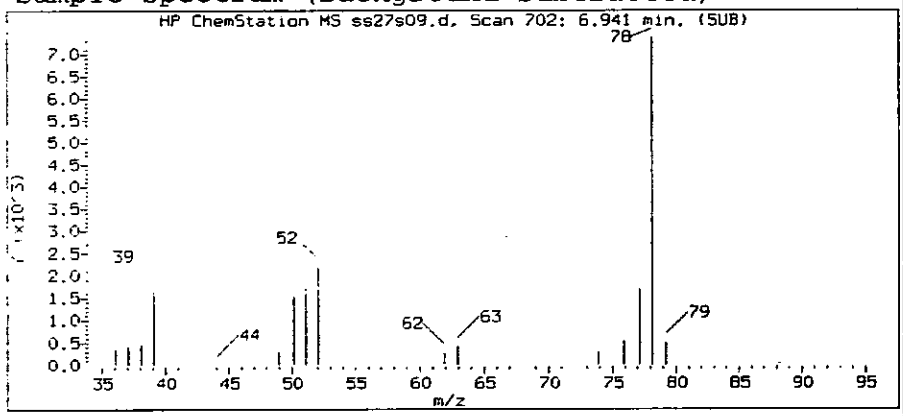
Digitally signed by Anita M. Dale on 09/27/2010 at 11:23.
Target 3.5 esignature user ID: amd00492

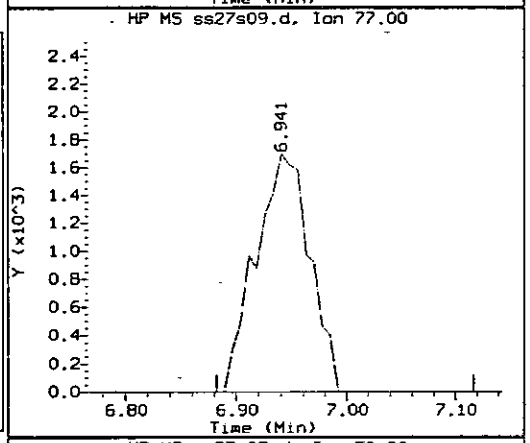
Reference Standard Spectrum for Benzene



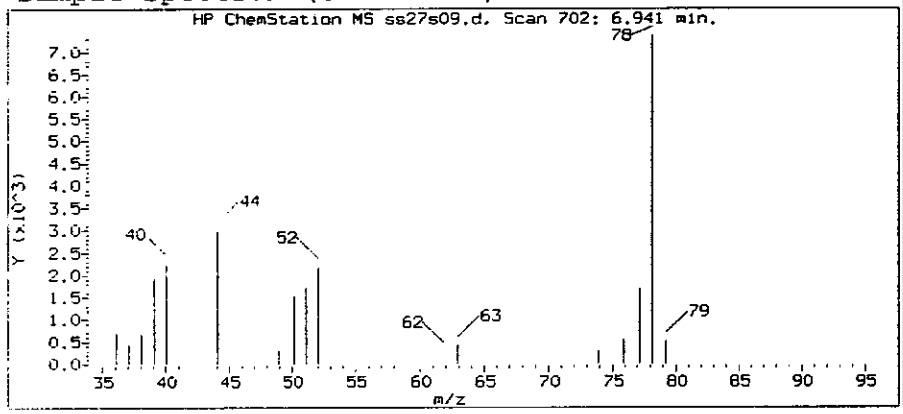



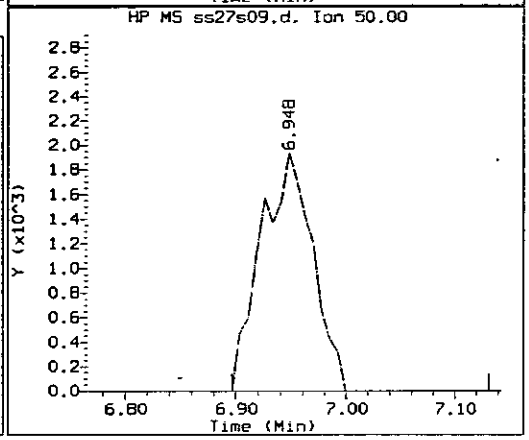

Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s09.d
Injection date and time: 27-SEP-2010 10:52

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

Sample Name: XXXXX

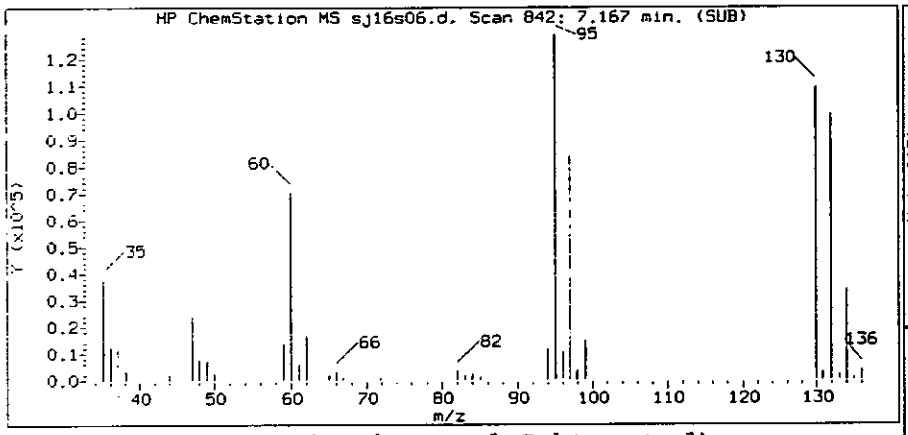
Lab Sample ID: 6087285

| | |
|---|---|
| Compound Number | : 40 |
| Compound Name | : Benzene |
| Scan Number | : 702 |
| Retention Time (minutes) | : 6.941 |
| Relative Retention Time | : 0.000 |
| Quant Ion | : 78.00 |
| Area (flag) | : 25135 |
| On-Column Amount (ng) | : 0.1071 |

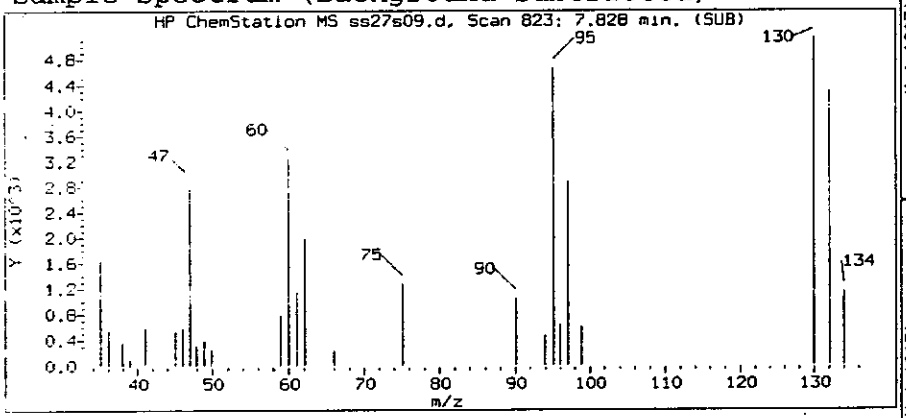
WAT12 0189

Digitally signed by Anita M. Dale on 09/27/2010 at 11:23.
Target 3.5 esignature user ID: amd00492

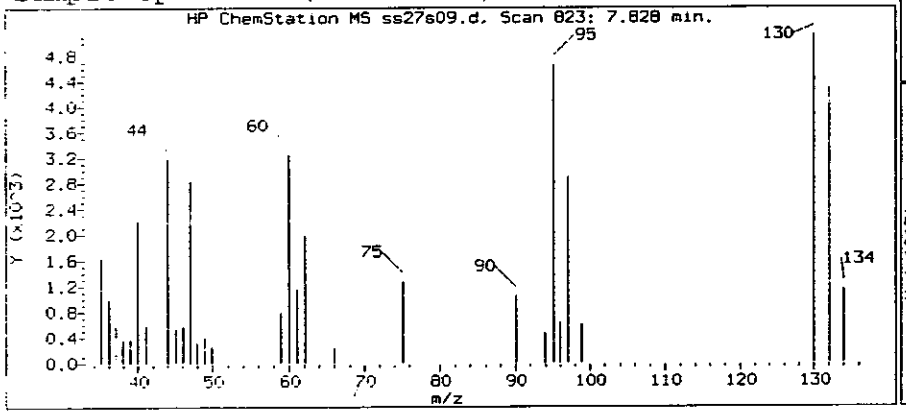
Reference Standard Spectrum for Trichloroethene

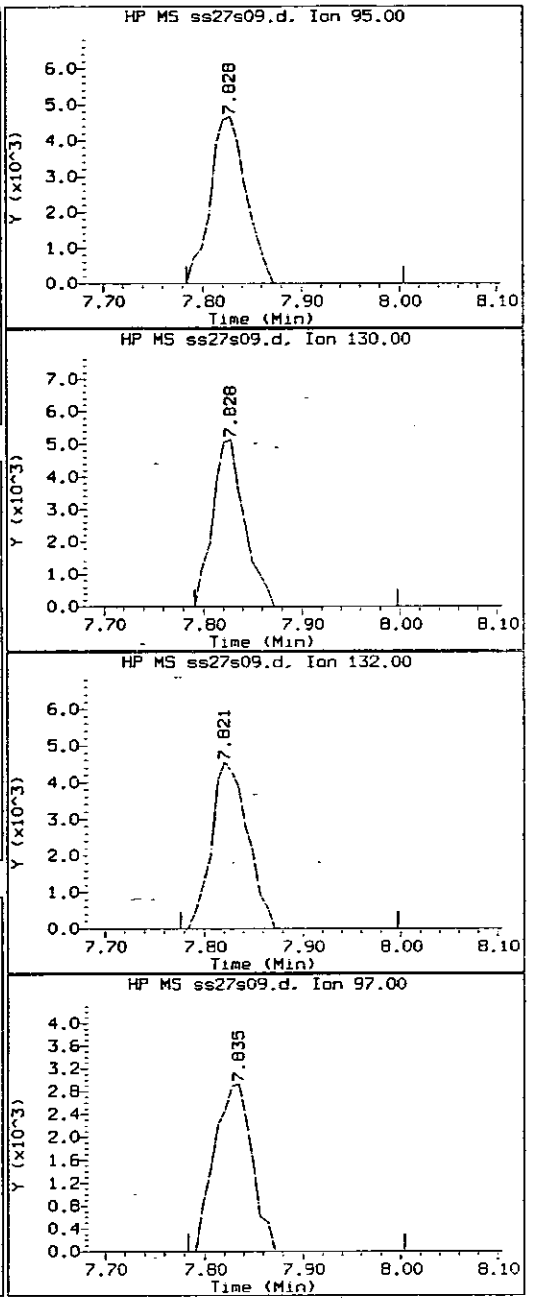



Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s09.d
Injection date and time: 27-SEP-2010 10:52

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

Sample Name: XXXXX

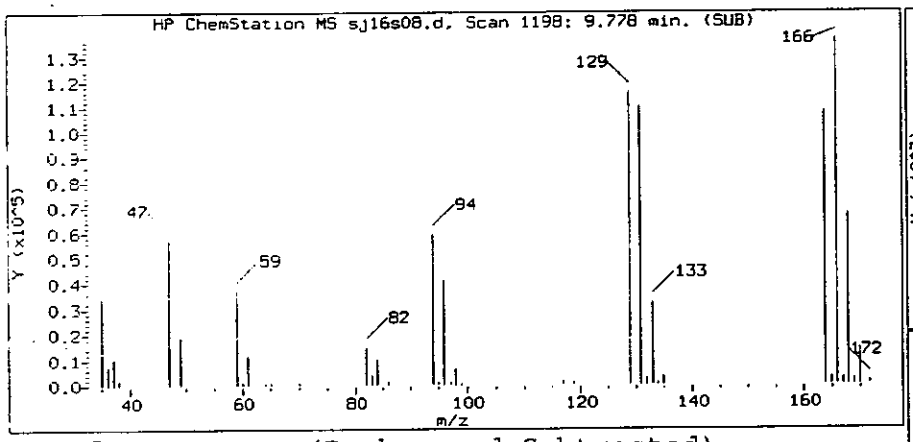
Lab Sample ID: 6087285

Compound Number : 44
Compound Name : Trichloroethene
Scan Number : 823
Retention Time (minutes): 7.828
Relative Retention Time : 0.000
Quant Ion : 95.00
Area (flag) : 11947
On-Column Amount (ng) : 0.1822

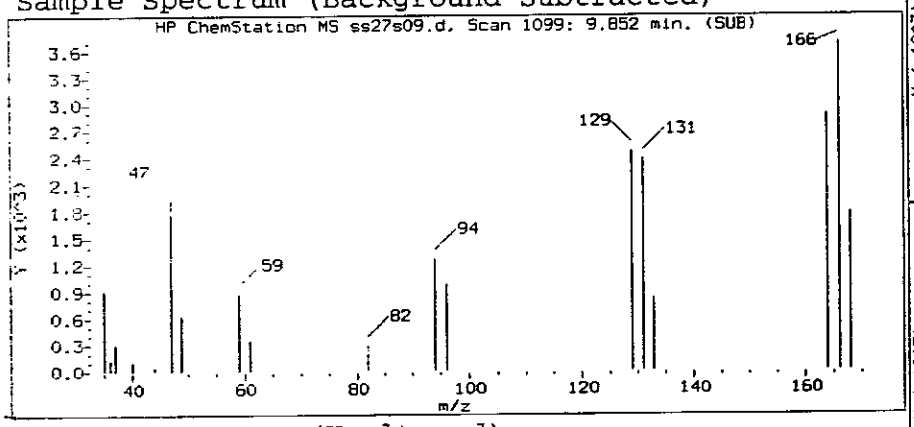
WAT12 0118

Digitally signed by Anita M. Dale on 09/27/2010 at 11:23.
Target 3.5 esignature user ID: amd00492

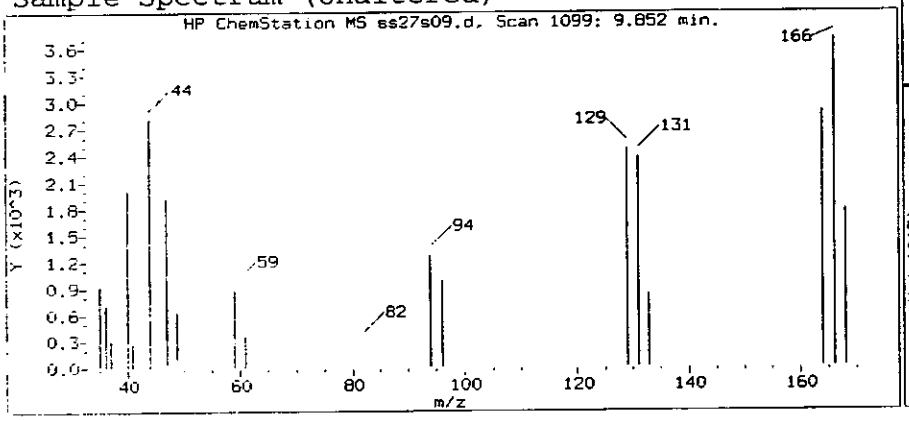
Reference Standard Spectrum for Tetrachloroethene

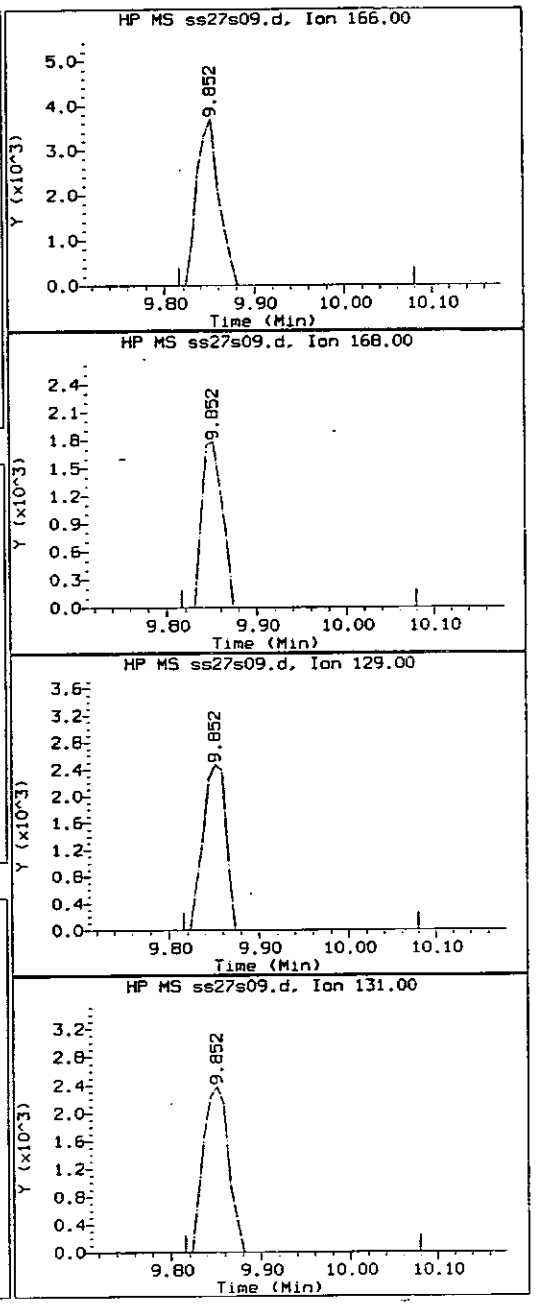



Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s09.d
Injection date and time: 27-SEP-2010 10:52

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

Sublist used: DRAPERREV3

Sample Name: XXXXX

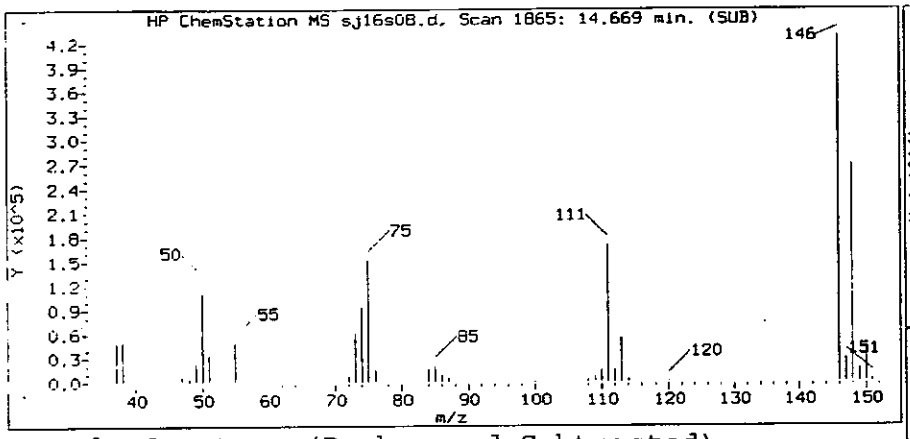
Lab Sample ID: 6087285

| | |
|---|---|
| Compound Number | : 59 |
| Compound Name | : Tetrachloroethene |
| Scan Number | : 1099 |
| Retention Time (minutes) | : 9.852 |
| Relative Retention Time | : 0.001 |
| Quant Ion | : 166.00 |
| Area (flag) | : 6394 |
| On-Column Amount (ng) | : 0.1076 |

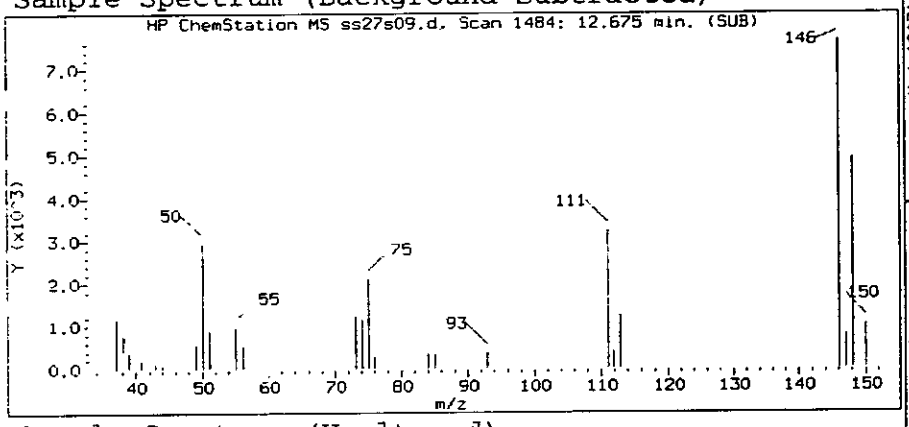
WAT12 0111

Digitally signed by Anita M. Dale on 09/27/2010 at 11:23.
Target 3.5 esignature user ID: amd00492

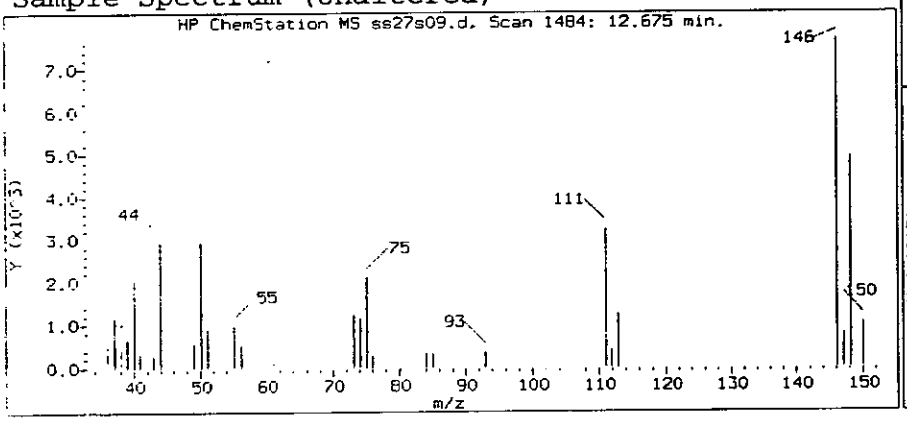
Reference Standard Spectrum for 1,4-Dichlorobenzene

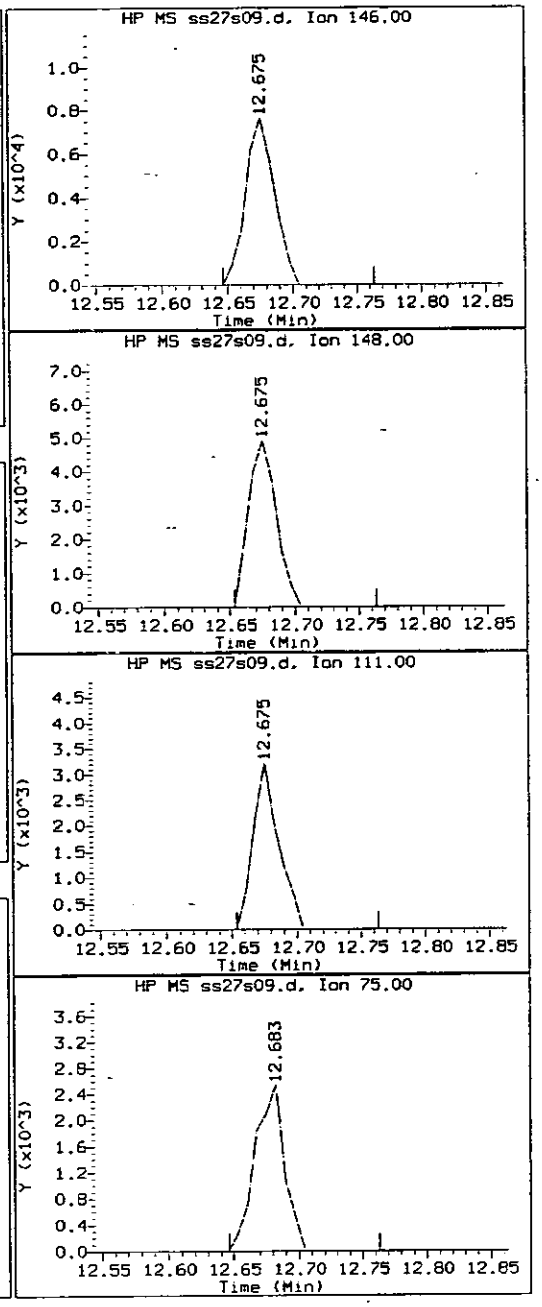



Sample Spectrum (Background Subtracted)




Sample Spectrum (Unaltered)




Data File: /chem/SH08359.i/10sep27a.b/ss27s09.d
Injection date and time: 27-SEP-2010 10:52

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:23 amd00492

Sample Name: XXXXX

Lab Sample ID: 6087285

| | |
|---|---|
| Compound Number | : 89 |
| Compound Name | : 1,4-Dichlorobenzene |
| Scan Number | : 1484 |
| Retention Time (minutes) | : 12.675 |
| Relative Retention Time | : 0.001 |
| Quant Ion | : 146.00 |
| Area (flag) | : 11964 |
| On-Column Amount (ng) | : 0.1400 |

WAT12 0112

Digitally signed by Anita M. Dale on 09/27/2010 at 11:23.
Target 3.5 esignature user ID: amd00492

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087286

Data file: /chem/SH08359.i/10sep27a.b/ss27s10.d
Data file Sample Info. Line: XXXXX;6087286;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 11:43 Automation

Injection date and time: **27-SEP-2010 11:18**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Internal Standards | RT (+/-RT) | Scan | QIon | Area(+/- %Change) | Conc. (on-column) | QC Flag |
|---|---|---|---|---|---|---|
| 43) Fluorobenzene | 7.344(-0.007) | 757 | 96 | 960160 ( -12) | 5.00 | |

| Surrogate Standards | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | %Rec. | QC flags | QC Limits |
|---|---|---|---|---|---|---|---|---|
| 74) 4-Bromofluorobenzene | (1) | 11.685( 0.002) | 174 | 168133 | 4.639 | 93% | | 80 - 120 |
| 91) 1,2-Dichlorobenzene-d4 | (1) | 12.969( 0.002) | 152 | 141115 | 4.261 | 85% | | 80 - 120 |

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 2) Chloromethane | (1) | | | Not Detected | | | | | 0.2 |
| 3) Vinyl Chloride | (1) | | | Not Detected | | | | | 0.1 |
| 4) Bromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 5) Chloroethane | (1) | | | Not Detected | | | | | 0.2 |
| 7) Trichlorofluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 10) 1,1-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 17) Methylene Chloride | (1) | | | Not Detected | | | | | 0.3 |
| 21) trans-1,2-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 23) 1,1-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 27) cis-1,2-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 28) 2,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.2 |
| 33) Bromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 35) Chloroform | (1) | | | Not Detected | | | | | 0.1 |
| 36) 1,1,1-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 39) Carbon Tetrachloride | (1) | | | Not Detected | | | | | 0.1 |
| 38) 1,1-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 40) Benzene | (1) | | | Not Detected | | | | | 0.1 |
| 41) 1,2-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 44) Trichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 45) 1,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 46) Dibromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 48) Bromodichloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 51) cis-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 54) Toluene | (1) | | | Not Detected | | | | | 0.1 |
| 55) trans-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 57) 1,1,2-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 59) Tetrachloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 60) 1,3-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 62) Dibromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 63) 1,2-Dibromoethane | (1) | | | Not Detected | | | | | 0.1 |
| 64) Chlorobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 66) Ethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 68) m+p-Xylene | (1) | | | Not Detected | | | | | 0.2 |
| 69) o-Xylene | (1) | | | Not Detected | | | | | 0.1 |
| 70) Styrene | (1) | | | Not Detected | | | | | 0.1 |
| 71) Bromoform | (1) | | | Not Detected | | | | | 0.2 |
| 73) Isopropylbenzene | (1) | | | Not Detected | | | | | 0.1 |

WAT12 4113

Digitally signed by Anita M. Dale on 09/27/2010 at 11:52. Target 3.5 esignature user ID: amd00492

XXXXX

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

6087286

Data file: /chem/SH08359.i/10sep27a.b/ss27s10.d
Data file Sample Info. Line: XXXXX;6087286;1;0;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 11:43 Automation

Injection date and time: **27-SEP-2010 11:18**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: **38A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Target Compounds | I.S. Ref. | RT | (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|---|
| 75) 1,1,2,2-Tetrachloroethane | (1) | | | | Not Detected | | | | | 0.1 |
| 76) Bromobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 77) 1,2,3-Trichloropropane | (1) | | | | Not Detected | | | | | 0.1 |
| 79) n-Propylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 80) 2-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 81) 1,3,5-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 82) 4-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.2 |
| 83) tert-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 85) 1,2,4-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 86) sec-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 88) p-Isopropyltoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 87) 1,3-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 89) 1,4-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 90) n-Butylbenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 92) 1,2-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | | | | Not Detected | | | | | 0.4 |
| 96) 1,2,4 Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 97) Hexachlorobutadiene | (1) | | | | Not Detected | | | | | 0.2 |
| 98) Naphthalene | (1) | | | | Not Detected | | | | | 0.2 |
| 99) 1,2,3-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |

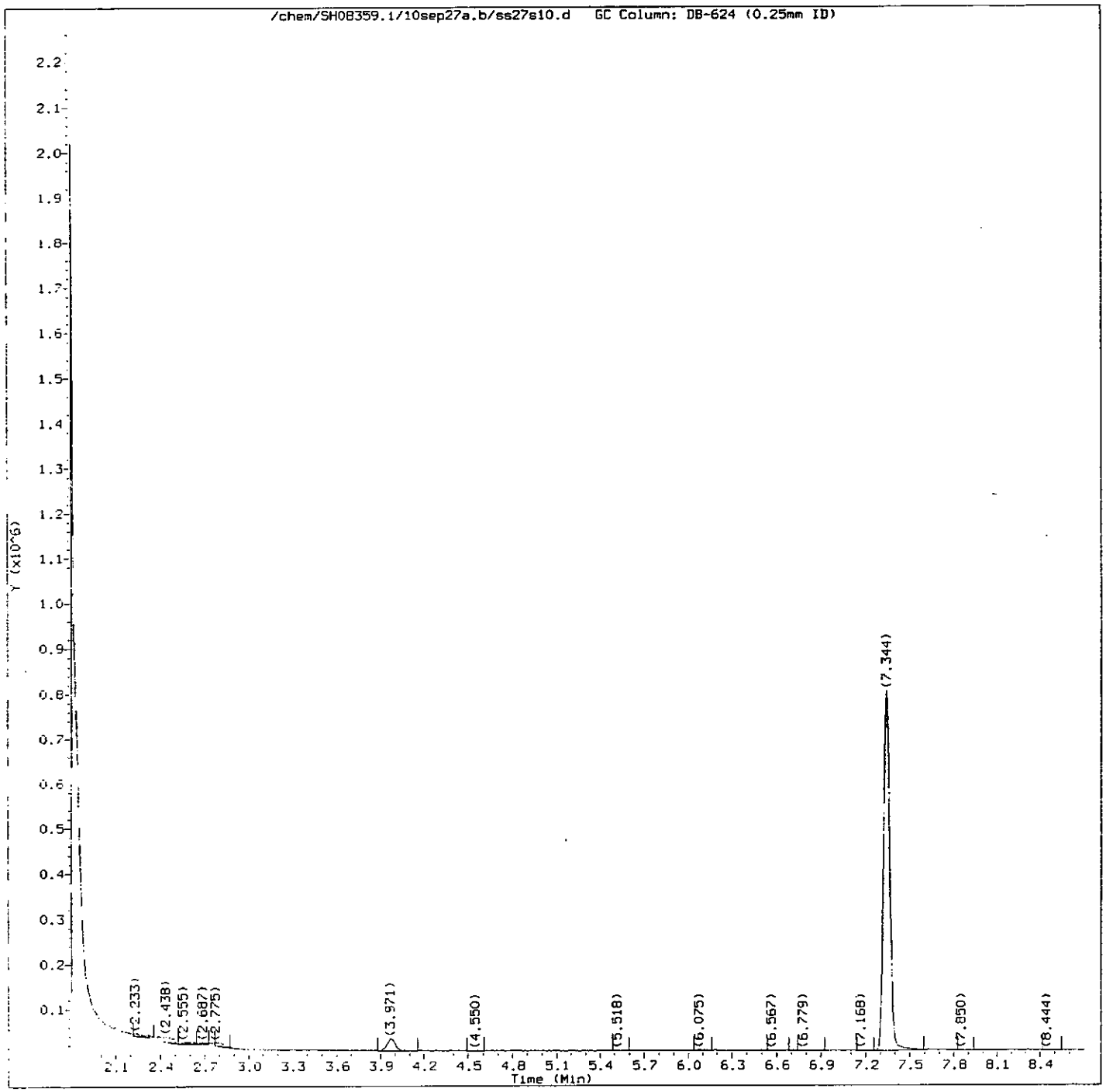
Total number of targets = 59

Comments:

WAT12 0114

Digitally signed by Anita M. Dale on 09/27/2010 at 11:52. Target 3.5 esignature user ID: amd00492

Auditor: Date:




Total Ion Chromatogram (TIC)

Target Revision 3.5

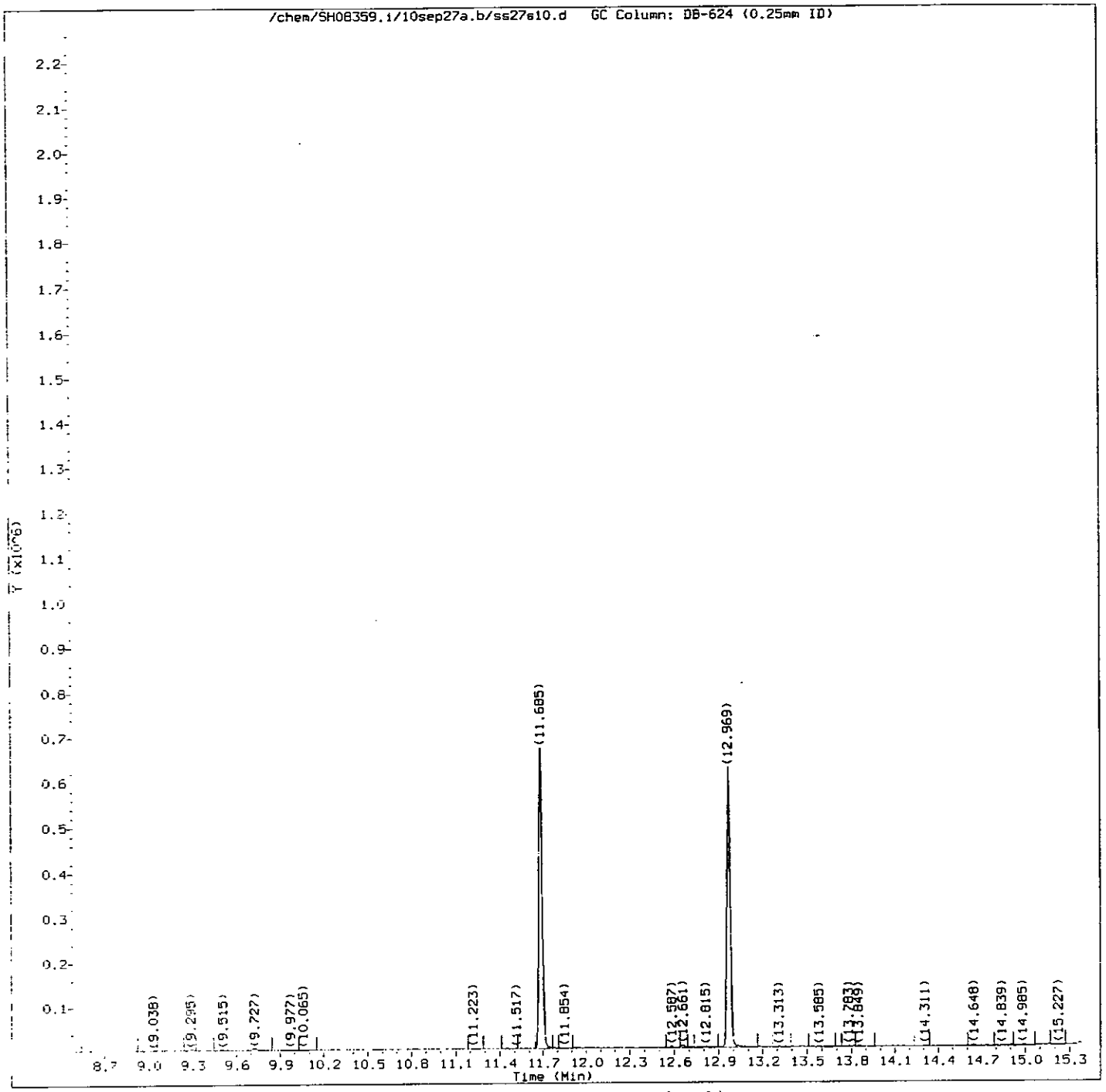
Data File: /chem/SH08359.i/10sep27a.b/ss27s10.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 11:18 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 11:43 Automation

WAT12 @115

Sample Name: XXXXX Lab Sample ID: 6087286

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:52.
Target 3.5 esignature user ID: amd00492




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s10.d
Injection date and time: 27-SEP-2010 11:18

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:43 Automation

WAT12 8116

Sample Name: XXXXX

Lab Sample ID: 6087286

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:52.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s10.d
Injection date and time: 27-SEP-2010 11:18

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 11:43 Automation

Sample Name: XXXXX

Lab Sample ID: 6087286

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 43)*Fluorobenzene | (1) | 7.344 | 96 | 960160 | 5.000 |
| 74)$4-Bromofluorobenzene | (1) | 11.685 | 174 | 168133 | 4.639 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.969 | 152 | 141115 | 4.261 |

* = Compound is an internal standard.
$ = Compound is a surrogate standard.



WAT12 8117

Digitally signed by Anita M. Dale
on 09/27/2010 at 11:52.
Target 3.5 esignature user ID: amd00492

# Standards Data

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: SH08359 Calibration Date(s): 09/24/10 09/24/10

Heated Purge: (Y/N) N Calibration Time(s): 11:23 13:10

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .25

LAB FILE ID: RRF 0.5 ss24i05.d RRF 5 = ss24i03.d
RRF 10= ss24i02.d RRF 25= ss24i01.d RRF =

| COMPOUND | RRF 0.5 | RRF 5 | RRF 10 | RRF 25 | RRF | $\overline{RRF}$ | % RSD | CAL. METHOD |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.3068 | 0.3153 | 0.3261 | 0.3426 | | 0.3227 | 5 | AVG |
| Chloromethane | 1.0296 | 0.9022 | 0.9081 | 0.9438 | | 0.9459 | 6 | AVG |
| Vinyl Chloride | 0.7068 | 0.6471 | 0.6599 | 0.6892 | | 0.6757 | 4 | AVG |
| Bromomethane | 0.3950 | 0.3565 | 0.3530 | 0.3512 | | 0.3639 | 6 | AVG |
| Chloroethane | 0.4172 | 0.3645 | 0.3587 | 0.3714 | | 0.3780 | 7 | AVG |
| Dichlorofluoromethane | 0.7795 | 0.7123 | 0.7127 | 0.7299 | | 0.7336 | 4 | AVG |
| Trichlorofluoromethane | 0.3432 | 0.3391 | 0.3504 | 0.3506 | | 0.3458 | 2 | AVG |
| Ethyl Ether | 0.2094 | 0.2047 | 0.2068 | 0.2173 | | 0.2095 | 3 | AVG |
| Acrolein | 0.0258 | 0.0244 | 0.0247 | 0.0267 | | 0.0254 | 4 | AVG |
| 1,1-Dichloroethene | 0.2983 | 0.2814 | 0.2896 | 0.2823 | | 0.2879 | 3 | AVG |
| Freon 113 | 0.2528 | 0.2507 | 0.2587 | 0.2481 | | 0.2526 | 2 | AVG |
| Acetone | 0.0118 | 0.0082 | 0.0089 | 0.0101 | | 0.0097 | 16 | AVG |
| Acetone(mz43) | 0.0575 | 0.0398 | 0.0396 | 0.0446 | | 0.0454 | 19 | AVG |
| Methyl Iodide | 0.6015 | 0.5765 | 0.5811 | 0.5645 | | 0.5809 | 3 | AVG |
| Carbon Disulfide | 1.0506 | 1.0063 | 1.0294 | 0.9975 | | 1.0210 | 2 | AVG |
| Allyl Chloride | 0.8050 | 0.7672 | 0.7811 | 0.7728 | | 0.7815 | 2 | AVG |
| Methylene Chloride | 0.3533 | 0.2698 | 0.2708 | 0.2766 | | 0.2926 | 14 | AVG |
| t-Butyl Alcohol | 0.0068 | 0.0059 | 0.0061 | 0.0070 | | 0.0064 | 8 | AVG |
| Acrylonitrile | 0.0556 | 0.0475 | 0.0484 | 0.0538 | | 0.0513 | 8 | AVG |
| trans-1,2-Dichloroethene | 0.3580 | 0.3419 | 0.3571 | 0.3458 | | 0.3507 | 2 | AVG |
| Methyl Tertiary Butyl Ether | 0.3496 | 0.3368 | 0.3343 | 0.3429 | | 0.3409 | 2 | AVG |
| 1,1-Dichloroethane | 0.8344 | 0.7753 | 0.7876 | 0.7606 | | 0.7895 | 4 | AVG |
| di-Isopropyl Ether | 0.1852 | 0.1856 | 0.1924 | 0.1952 | | 0.1896 | 3 | AVG |
| Ethyl t-Butyl Ether | 0.8350 | 0.8000 | 0.8106 | 0.8280 | | 0.8184 | 2 | AVG |
| cis-1,2-Dichloroethene | 0.3496 | 0.3450 | 0.3477 | 0.3425 | | 0.3462 | 1 | AVG |
| 2,2-Dichloropropane | 0.3439 | 0.3243 | 0.3332 | 0.3193 | | 0.3302 | 3 | AVG |
| 2-Butanone | 0.0854 | 0.0799 | 0.0835 | 0.0872 | | 0.0840 | 4 | AVG |
| Propionitrile | 0.0177 | 0.0169 | 0.0175 | 0.0190 | | 0.0178 | 5 | AVG |
| Methyl Acrylate | 0.1631 | 0.1488 | 0.1488 | 0.1562 | | 0.1542 | 4 | AVG |
| Methacrylonitrile | 0.0503 | 0.0509 | 0.0512 | 0.0512 | | 0.0509 | 1 | AVG |
| Bromochloromethane | 0.1146 | 0.1103 | 0.1091 | 0.1121 | | 0.1115 | 2 | AVG |
| Tetrahydrofuran | 0.0122 | 0.0105 | 0.0107 | 0.0109 | | 0.0111 | 7 | AVG |
| Chloroform | 0.5001 | 0.4554 | 0.4672 | 0.4584 | | 0.4703 | 4 | AVG |
| 1,1,1-Trichloroethane | 0.3312 | 0.3167 | 0.3247 | 0.3225 | | 0.3238 | 2 | AVG |
| 1-Chlorobutane | 0.0334 | 0.0352 | 0.0360 | 0.0364 | | 0.0352 | 4 | AVG |
| Carbon Tetrachloride | 0.2584 | 0.2582 | 0.2606 | 0.2501 | | 0.2568 | 2 | AVG |
| 1,1-Dichloropropene | 0.4641 | 0.4444 | 0.4547 | 0.4239 | | 0.4468 | 4 | AVG |
| Benzene | 1.2933 | 1.2002 | 1.2220 | 1.1238 | | 1.2098 | 6 | AVG |
| 1,2-Dichloroethane | 0.2460 | 0.2364 | 0.2345 | 0.2438 | | 0.2402 | 2 | AVG |
| t-Amyl Methyl Ether | 0.4465 | 0.4479 | 0.4469 | 0.4395 | | 0.4452 | 1 | AVG |
| Trichloroethene | 0.3496 | 0.3302 | 0.3417 | 0.3308 | | 0.3381 | 3 | AVG |
| 1,2-Dichloropropane | 0.4212 | 0.3941 | 0.4021 | 0.3995 | | 0.4042 | 3 | AVG |
| Methyl Methacrylate | 0.0847 | 0.0909 | 0.0932 | 0.0956 | | 0.0911 | 5 | AVG |
| Dibromomethane | 0.1125 | 0.1103 | 0.1107 | 0.1135 | | 0.1118 | 1 | AVG |
| Bromodichloromethane | 0.2730 | 0.2670 | 0.2722 | 0.2740 | | 0.2715 | 1 | AVG |
| 2-Nitropropane | 0.0014 | 0.0013 | 0.0013 | 0.0013 | | 0.0013 | 6 | AVG |
| Chloroacetonitrile | 0.0065 | 0.0049 | 0.0047 | 0.0049 | | 0.0052 | 15 | AVG |
| cis-1,3-Dichloropropene | 0.3737 | 0.3697 | 0.3667 | 0.3654 | | 0.3689 | 1 | AVG |
| 4-Methyl-2-Pentanone | 0.0535 | 0.0527 | 0.0534 | 0.0559 | | 0.0539 | 3 | AVG |
| 1,1-Dichloropropanone | 0.0023 | 0.0017 | 0.0017 | 0.0018 | | 0.0018 | 15 | AVG |
| Toluene | 0.7860 | 0.7281 | 0.7430 | 0.7162 | | 0.7433 | 4 | AVG |
| trans-1,3-Dichloropropene | 0.2480 | 0.2496 | 0.2548 | 0.2585 | | 0.2527 | 2 | AVG |

WaT12 0119



FORM VI VOA

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: SH08359 Calibration Date(s): 09/24/10 09/24/10

Heated Purge: (Y/N) N Calibration Time(s): 11:23 13:10

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .25

LAB FILE ID: RRF 0.5 ss24i05.d RRF 5 = ss24i03.d
RRF 10= ss24i02.d RRF 25= ss24i01.d RRF =

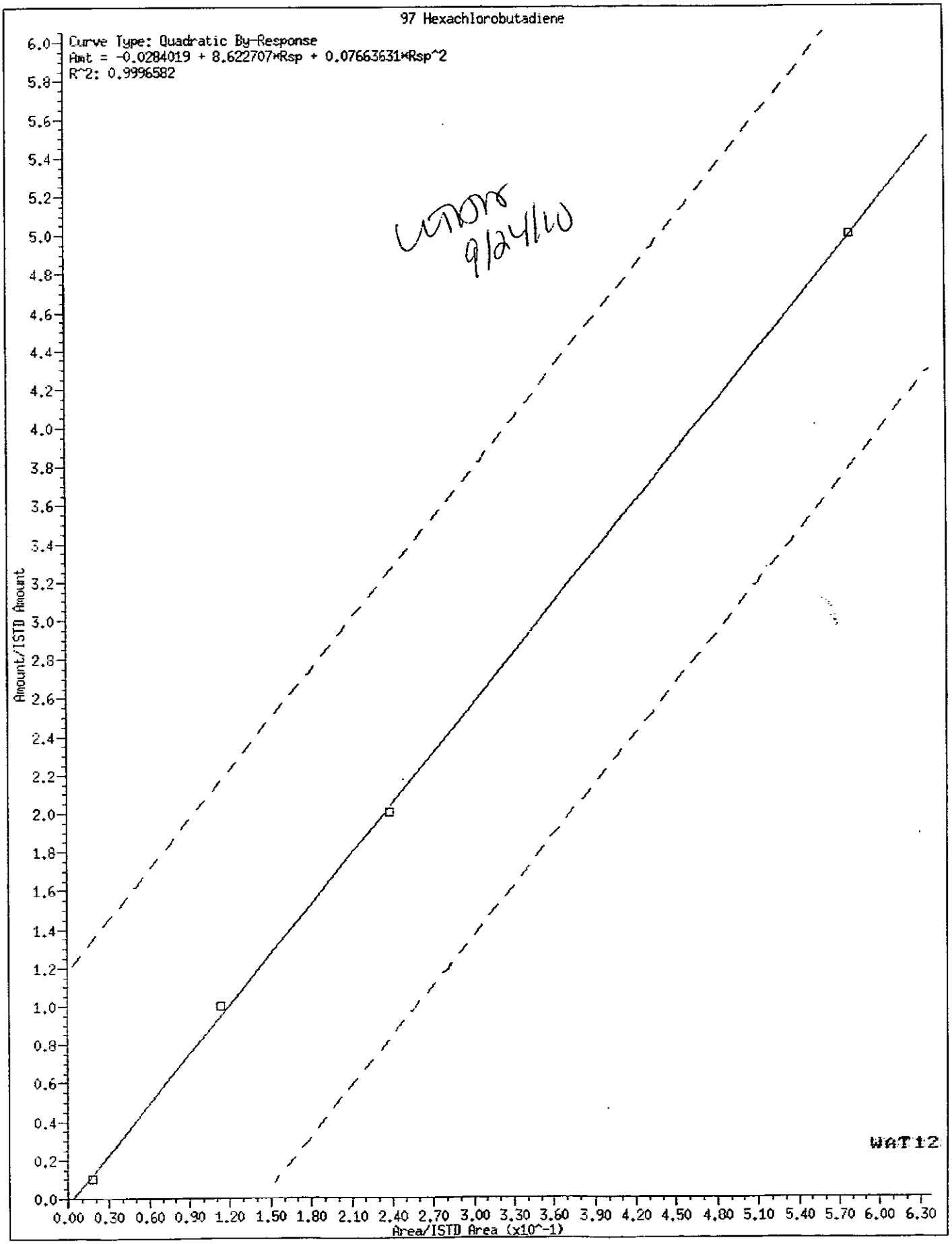
| COMPOUND | RRF 0.5 | RRF 5 | RRF 10 | RRF 25 | RRF | $\overline{RRF}$ | % RSD | CAL. METHOD |
|---|---|---|---|---|---|---|---|---|
| Ethyl Methacrylate | 0.1354 | 0.1465 | 0.1445 | 0.1436 | | 0.1425 | 3 | AVG |
| 1,1,2-Trichloroethane | 0.1138 | 0.1131 | 0.1153 | 0.1196 | | 0.1155 | 3 | AVG |
| Tetrachloroethene | 0.3122 | 0.3002 | 0.3098 | 0.3024 | | 0.3062 | 2 | AVG |
| 1,3-Dichloropropane | 0.2350 | 0.2287 | 0.2306 | 0.2364 | | 0.2327 | 2 | AVG |
| 2-Hexanone | 0.0477 | 0.0490 | 0.0504 | 0.0524 | | 0.0499 | 4 | AVG |
| Dibromochloromethane | 0.1591 | 0.1568 | 0.1647 | 0.1666 | | 0.1618 | 3 | AVG |
| 1,2-Dibromoethane | 0.1305 | 0.1313 | 0.1323 | 0.1329 | | 0.1317 | 1 | AVG |
| Chlorobenzene | 0.6816 | 0.6599 | 0.6769 | 0.6662 | | 0.6711 | 1 | AVG |
| 1,1,1,2-Tetrachloroethane | 0.2021 | 0.1952 | 0.2017 | 0.2091 | | 0.2020 | 3 | AVG |
| Ethylbenzene | 0.3980 | 0.3971 | 0.4101 | 0.4081 | | 0.4033 | 2 | AVG |
| m+p-Xylene | 0.4971 | 0.4888 | 0.5078 | 0.4561 | | 0.4875 | 5 | AVG |
| o-Xylene | 0.4503 | 0.4499 | 0.4712 | 0.4796 | | 0.4627 | 3 | AVG |
| Styrene | 0.6684 | 0.7158 | 0.7502 | 0.7329 | | 0.7168 | 5 | AVG |
| Xylene (Total) | 0.4815 | 0.4759 | 0.4956 | 0.4639 | | 0.4792 | 3 | AVG |
| Bromoform | 0.0672 | 0.0787 | 0.0784 | 0.0850 | | 0.0773 | 10 | AVG |
| Isopropylbenzene | 0.2655 | 0.2575 | 0.2687 | 0.2723 | | 0.2660 | 2 | AVG |
| 1,1,2,2-Tetrachloroethane | 0.1305 | 0.1212 | 0.1246 | 0.1344 | | 0.1277 | 5 | AVG |
| Bromobenzene | 0.2336 | 0.2269 | 0.2284 | 0.2410 | | 0.2325 | 3 | AVG |
| 1,2,3-Trichloropropane | 0.0258 | 0.0253 | 0.0258 | 0.0274 | | 0.0261 | 3 | AVG |
| trans-1,4-Dichloro-2-Butene | 0.0396 | 0.0400 | 0.0417 | 0.0441 | | 0.0413 | 5 | AVG |
| n-Propylbenzene | 0.2841 | 0.2660 | 0.2815 | 0.2833 | | 0.2787 | 3 | AVG |
| 2-Chlorotoluene | 0.2603 | 0.2504 | 0.2551 | 0.2591 | | 0.2562 | 2 | AVG |
| 1,3,5-Trimethylbenzene | 0.8583 | 0.8305 | 0.8520 | 0.8002 | | 0.8352 | 3 | AVG |
| 4-Chlorotoluene | 0.2655 | 0.2531 | 0.2576 | 0.2699 | | 0.2615 | 3 | AVG |
| tert-Butylbenzene | 0.1844 | 0.1803 | 0.1874 | 0.1941 | | 0.1865 | 3 | AVG |
| Pentachloroethane | 0.1163 | 0.1172 | 0.1208 | 0.1332 | | 0.1218 | 6 | AVG |
| 1,2,4-Trimethylbenzene | 0.8807 | 0.8477 | 0.8735 | 0.8167 | | 0.8546 | 3 | AVG |
| sec-Butylbenzene | 0.1943 | 0.1841 | 0.1922 | 0.1991 | | 0.1924 | 3 | AVG |
| p-Isopropyltoluene | 0.7913 | 0.7474 | 0.7751 | 0.7595 | | 0.7683 | 2 | AVG |
| 1,3-Dichlorobenzene | 0.4679 | 0.4417 | 0.4525 | 0.4830 | | 0.4613 | 4 | AVG |
| 1,4-Dichlorobenzene | 0.4542 | 0.4174 | 0.4339 | 0.4571 | | 0.4406 | 4 | AVG |
| n-Butylbenzene | 0.5531 | 0.4866 | 0.5068 | 0.5050 | | 0.5129 | 6 | AVG |
| 1,2-Dichlorobenzene | 0.3591 | 0.3262 | 0.3376 | 0.3573 | | 0.3451 | 5 | AVG |
| Hexachloroethane | 0.1733 | 0.1329 | 0.1368 | 0.1388 | | 0.1454 | 13 | AVG |
| 1,2-Dibromo-3-Chloropropane | 0.0100 | 0.0128 | 0.0139 | 0.0157 | | 0.0131 | 18 | AVG |
| Nitrobenzene | 0.0026 | 0.0027 | 0.0030 | 0.0038 | | 0.0030 | 18 | AVG |
| 1,2,4-Trichlorobenzene | 0.2071 | 0.1772 | 0.1839 | 0.1938 | | 0.1905 | 7 | AVG |
| Hexachlorobutadiene | 0.1787 | 0.1129 | 0.1192 | 0.1160 | | 0.1317 | 24 | 2NDDEG |
| Naphthalene | 0.2014 | 0.1994 | 0.2072 | 0.2238 | | 0.2080 | 5 | AVG |
| 1,2,3-Trichlorobenzene | 0.1400 | 0.1236 | 0.1289 | 0.1318 | | 0.1311 | 5 | AVG |
| 4-Bromofluorobenzene | 0.1824 | 0.1922 | 0.1884 | 0.1920 | | 0.1887 | 2 | AVG |
| 1,2-Dichlorobenzene-d4 | 0.1601 | 0.1700 | 0.1710 | 0.1886 | | 0.1724 | 7 | AVG |

Average %RSD 5

WAT12 0128



FORM VI VOA


97 Hexachlorobutadiene
Curve Type: Quadratic By-Response
Amt = -0.0284019 + 8.622707*Rsp + 0.07663631*Rsp^2
R^2: 0.9996582
Amount/ISTD Amount
Area/ISTD Area (x10^-1)
0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0
0.00 0.30 0.60 0.90 1.20 1.50 1.80 2.10 2.40 2.70 3.00 3.30 3.60 3.90 4.20 4.50 4.80 5.10 5.40 5.70 6.00 6.30
WAT12 8121

LMTOM
9/24/10

# EPA Method 524
# Internal/Surrogate Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/SH08359.i/10sep24a.b/ss24i01.d VSTD025
/chem/SH08359.i/10sep24a.b/ss24i02.d VSTD010
/chem/SH08359.i/10sep24a.b/ss24i03.d VSTD005
/chem/SH08359.i/10sep24a.b/ss24i05.d VSTD0.5

## Area Summary

File ID:

| Internal/Surrogate Standard Name | ss24i01.d | ss24i02.d | ss24i03.d | ss24i05.d | Avg. Area | %RSD | In Spec |
|---|---|---|---|---|---|---|---|
| Fluorobenzene | 1181796 | 1265346 | 1267102 | 1229614 | 1235964 | 3 | Yes |
| 4 Bromofluorobenzene | 226851 | 238455 | 243499 | 224235 | 233260 | 4 | Yes |
| 1,2-Dichlorobenzene-d4 | 222945 | 216368 | 215446 | 196856 | 212904 | 5 | Yes |

%RSD of internal standard area is flagged out of spec if greater than 30.

## RT Summary

File ID:

| Internal/Surrogate Standard Name | ss24i01.d | ss24i02.d | ss24i03.d | ss24i05.d | Avg. RT |
|---|---|---|---|---|---|
| Fluorobenzene | 7.337 | 7.329 | 7.322 | 7.329 | 7.329 |
| 4 Bromofluorobenzene | 11.678 | 11.678 | 11.671 | 11.678 | 11.676 |
| 1,2-Dichlorobenzene-d4 | 12.961 | 12.961 | 12.954 | 12.961 | 12.960 |

* indicates the retention time is greater than 30 seconds from the average RT.

Report generated on 09/24/2010 at 13:51

Lancaster Laboratories, Inc.
GC/MS Initial Calibration Verification

File: ss24s01.d
Inst: SH08359
Dilution Factor: 1.0

Injected: 09/24/10 at 14:03
Sample: LFBS22

Method: EPA 524.2 REV 4
Matrix/Level: WL
Batch: S102671AA

| COMPOUND NAME | SPIKE LEVEL | ICV CONC UG/L | ICV REC % | Range LOWER-UPPER | INSPEC |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 2.00 | 1.93 | 96 | 70-130 | YES |
| Chloromethane | 2.00 | 2.07 | 104 | 70-130 | YES |
| Vinyl Chloride | 2.00 | 1.97 | 99 | 70-130 | YES |
| Bromomethane | 2.00 | 2.02 | 101 | 70-130 | YES |
| Chloroethane | 2.00 | 2.17 | 109 | 70-130 | YES |
| Dichlorofluoromethane | 2.00 | 2.16 | 108 | 70-130 | YES |
| Trichlorofluoromethane | 2.00 | 1.98 | 99 | 70-130 | YES |
| Ethyl Ether | 5.00 | 4.78 | 96 | 70-130 | YES |
| Acrolein | 37.50 | 33.47 | 89 | 70-130 | YES |
| 1,1-Dichloroethene | 5.00 | 4.89 | 98 | 70-130 | YES |
| Freon 113 | 5.00 | 4.87 | 97 | 70-130 | YES |
| Acetone | 37.50 | 32.52 | 87 | 70-130 | YES |
| Methyl Iodide | 5.00 | 5.02 | 100 | 70-130 | YES |
| Carbon Disulfide | 5.00 | 4.98 | 100 | 70-130 | YES |
| Allyl Chloride | 5.00 | 4.71 | 94 | 70-130 | YES |
| Methylene Chloride | 5.00 | 4.58 | 92 | 70-130 | YES |
| t-Butyl Alcohol | 50.00 | 43.84 | 88 | 70-130 | YES |
| Acrylonitrile | 112.50 | 105.79 | 94 | 70-130 | YES |
| trans-1,2-Dichloroethene | 5.00 | 4.89 | 98 | 70-130 | YES |
| Methyl Tertiary Butyl Ether | 5.00 | 4.58 | 92 | 70-130 | YES |
| 1,1-Dichloroethane | 5.00 | 4.75 | 95 | 70-130 | YES |
| di-Isopropyl Ether | 5.00 | 4.80 | 96 | 70-130 | YES |
| Ethyl t-Butyl Ether | 5.00 | 4.66 | 93 | 70-130 | YES |
| cis-1,2-Dichloroethene | 5.00 | 4.74 | 95 | 70-130 | YES |
| 2,2-Dichloropropane | 5.00 | 4.76 | 95 | 70-130 | YES |
| 2-Butanone | 37.50 | 36.19 | 97 | 70-130 | YES |
| Propionitrile | 100.00 | 93.91 | 94 | 70-130 | YES |
| Methyl Acrylate | 25.00 | 23.55 | 94 | 70-130 | YES |
| Methacrylonitrile | 37.50 | 35.53 | 95 | 70-130 | YES |
| Bromochloromethane | 5.00 | 4.69 | 94 | 70-130 | YES |
| Tetrahydrofuran | 45.00 | 41.65 | 93 | 70-130 | YES |
| Chloroform | 5.00 | 4.86 | 97 | 70-130 | YES |
| 1,1,1-Trichloroethane | 5.00 | 4.82 | 96 | 70-130 | YES |
| 1-Chlorobutane | 5.00 | 5.30 | 106 | 70-130 | YES |
| Carbon Tetrachloride | 5.00 | 4.81 | 96 | 70-130 | YES |
| 1,1-Dichloropropene | 5.00 | 4.74 | 95 | 70-130 | YES |
| Benzene | 5.00 | 4.76 | 95 | 70-130 | YES |
| 1,2-Dichloroethane | 5.00 | 4.91 | 98 | 70-130 | YES |
| t-Amyl Methyl Ether | 5.00 | 4.60 | 92 | 70-130 | YES |
| Trichloroethene | 5.00 | 4.83 | 97 | 70-130 | YES |
| 1,2-Dichloropropane | 5.00 | 4.79 | 96 | 70-130 | YES |
| Methyl Methacrylate | 5.00 | 4.08 | 82 | 70-130 | YES |
| Dibromomethane | 5.00 | 4.82 | 96 | 70-130 | YES |
| Bromodichloromethane | 5.00 | 4.80 | 96 | 70-130 | YES |
| 2-Nitropropane | 500.00 | 468.62 | 94 | 70-130 | YES |
| Chloroacetonitrile | 250.00 | 197.96 | 79 | 70-130 | YES |
| cis-1,3-Dichloropropene | 5.00 | 4.72 | 94 | 70-130 | YES |
| 4-Methyl-2-Pentanone | 25.00 | 23.28 | 93 | 70-130 | YES |
| 1,1-Dichloropropanone | 500.00 | 429.95 | 86 | 70-130 | YES |
| Toluene | 5.00 | 4.73 | 95 | 70-130 | YES |
| trans-1,3-Dichloropropene | 5.00 | 4.65 | 93 | 70-130 | YES |
| Ethyl Methacrylate | 5.00 | 5.74 | 115 | 70-130 | YES |
| 1,1,2-Trichloroethane | 5.00 | 4.90 | 98 | 70-130 | YES |
| Tetrachloroethene | 5.00 | 4.76 | 95 | 70-130 | YES |
| 1,3-Dichloropropane | 5.00 | 4.72 | 94 | 70-130 | YES |
| 2-Hexanone | 25.00 | 23.70 | 95 | 70-130 | YES |
| Dibromochloromethane | 5.00 | 4.72 | 94 | 70-130 | YES |
| 1,2-Dibromoethane | 5.00 | 4.78 | 96 | 70-130 | YES |

N/C = Could not calculate

Lab Chronicle: _____ Ent. by _____

_____ Ver. by WAT 12 8:23

Lancaster Laboratories, Inc.
GC/MS Initial Calibration Verification

File: ss24s01.d
Inst: SH08359
Dilution Factor: 1.0

Injected: 09/24/10 at 14:03
Sample: LFBS22

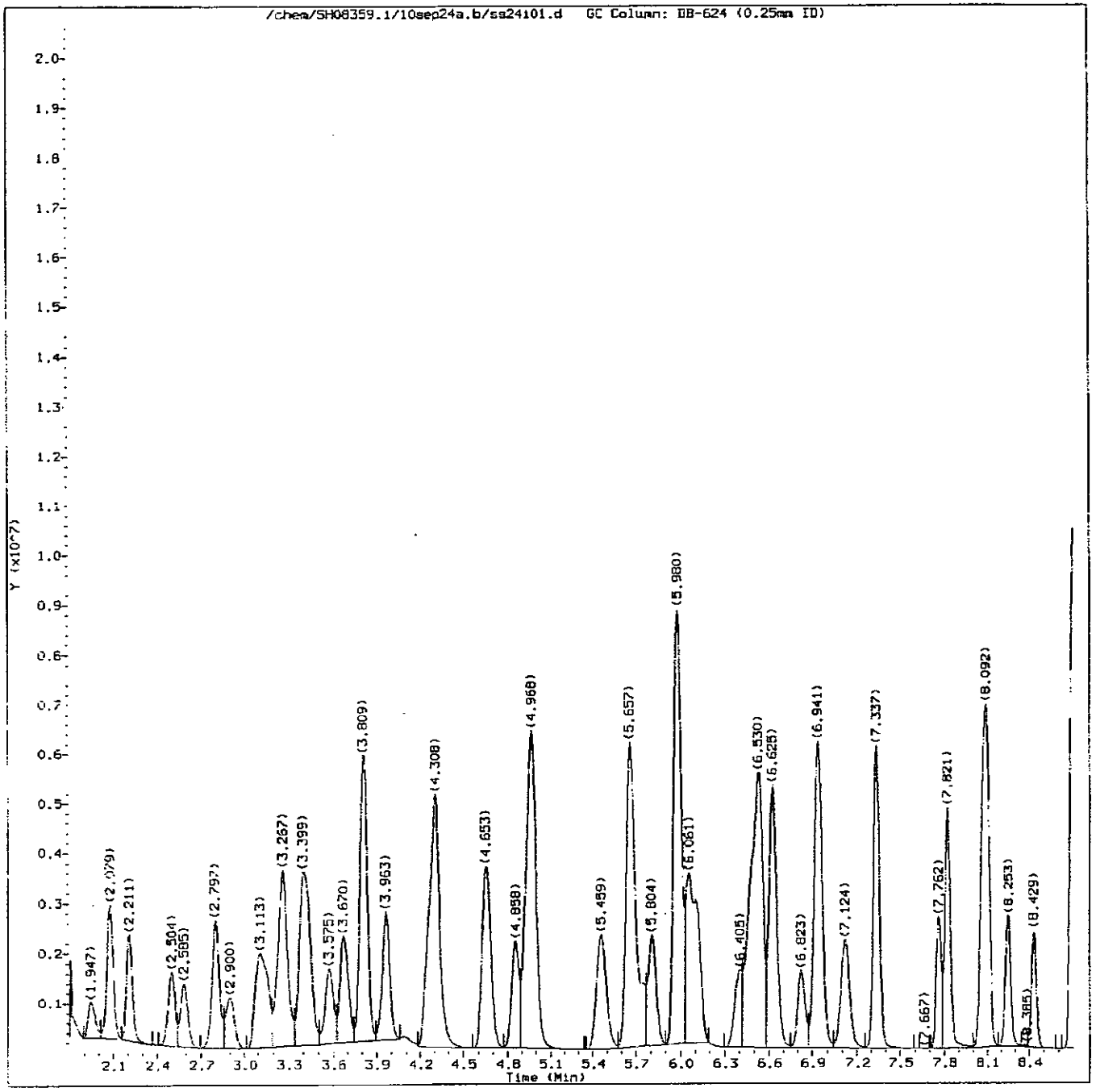
Method: EPA 524.2 REV 4
Matrix/Level: WL
Batch: S102671AA

| COMPOUND NAME | SPIKE LEVEL | ICV CONC UG/L | ICV REC % | Range LOWER-UPPER | INSPEC |
|---|---|---|---|---|---|
| Chlorobenzene | 5.00 | 4.65 | 93 | 70-130 | YES |
| 1,1,1,2-Tetrachloroethane | 5.00 | 4.66 | 93 | 70-130 | YES |
| Ethylbenzene | 5.00 | 4.59 | 92 | 70-130 | YES |
| m+p-Xylene | 10.00 | 9.44 | 94 | 70-130 | YES |
| o-Xylene | 5.00 | 4.51 | 90 | 70-130 | YES |
| Styrene | 5.00 | 4.67 | 93 | 70-130 | YES |
| Xylene (Total) | 15.00 | 13.95 | 93 | 70-130 | YES |
| Bromoform | 5.00 | 4.69 | 94 | 70-130 | YES |
| Isopropylbenzene | 5.00 | 4.62 | 92 | 70-130 | YES |
| 1,1,2,2-Tetrachloroethane | 5.00 | 4.65 | 93 | 70-130 | YES |
| Bromobenzene | 5.00 | 4.51 | 90 | 70-130 | YES |
| 1,2,3-Trichloropropane | 5.00 | 4.55 | 91 | 70-130 | YES |
| trans-1,4-Dichloro-2-Butene | 25.00 | 23.60 | 94 | 70-130 | YES |
| n-Propylbenzene | 5.00 | 4.59 | 92 | 70-130 | YES |
| 2-Chlorotoluene | 5.00 | 4.62 | 92 | 70-130 | YES |
| 1,3,5-Trimethylbenzene | 5.00 | 4.65 | 93 | 70-130 | YES |
| 4-Chlorotoluene | 5.00 | 4.61 | 92 | 70-130 | YES |
| tert-Butylbenzene | 5.00 | 4.59 | 92 | 70-130 | YES |
| Pentachloroethane | 5.00 | 4.59 | 92 | 70-130 | YES |
| 1,2,4-Trimethylbenzene | 5.00 | 4.63 | 93 | 70-130 | YES |
| sec-Butylbenzene | 5.00 | 4.63 | 93 | 70-130 | YES |
| p-Isopropyltoluene | 5.00 | 4.58 | 92 | 70-130 | YES |
| 1,3-Dichlorobenzene | 5.00 | 4.57 | 91 | 70-130 | YES |
| 1,4-Dichlorobenzene | 5.00 | 4.54 | 91 | 70-130 | YES |
| n-Butylbenzene | 5.00 | 4.51 | 90 | 70-130 | YES |
| 1,2-Dichlorobenzene | 5.00 | 4.54 | 91 | 70-130 | YES |
| Hexachloroethane | 5.00 | 4.50 | 90 | 70-130 | YES |
| 1,2-Dibromo-3-Chloropropane | 5.00 | 4.69 | 94 | 70-130 | YES |
| Nitrobenzene | 250.00 | 179.64 | 72 | 70-130 | YES |
| 1,2,4-Trichlorobenzene | 5.00 | 4.08 | 82 | 70-130 | YES |
| Hexachlorobutadiene | 5.00 | 4.15 | 83 | 70-130 | YES |
| Naphthalene | 5.00 | 4.16 | 83 | 70-130 | YES |
| 1,2,3-Trichlorobenzene | 5.00 | 3.99 | 80 | 70-130 | YES |

N/C = Could not calculate

Lab Chronicle: _____ Ent. by WAT 12 8124

_____ Ver. by _____




Total Ion Chromatogram (TIC)

Target Revision 3.5

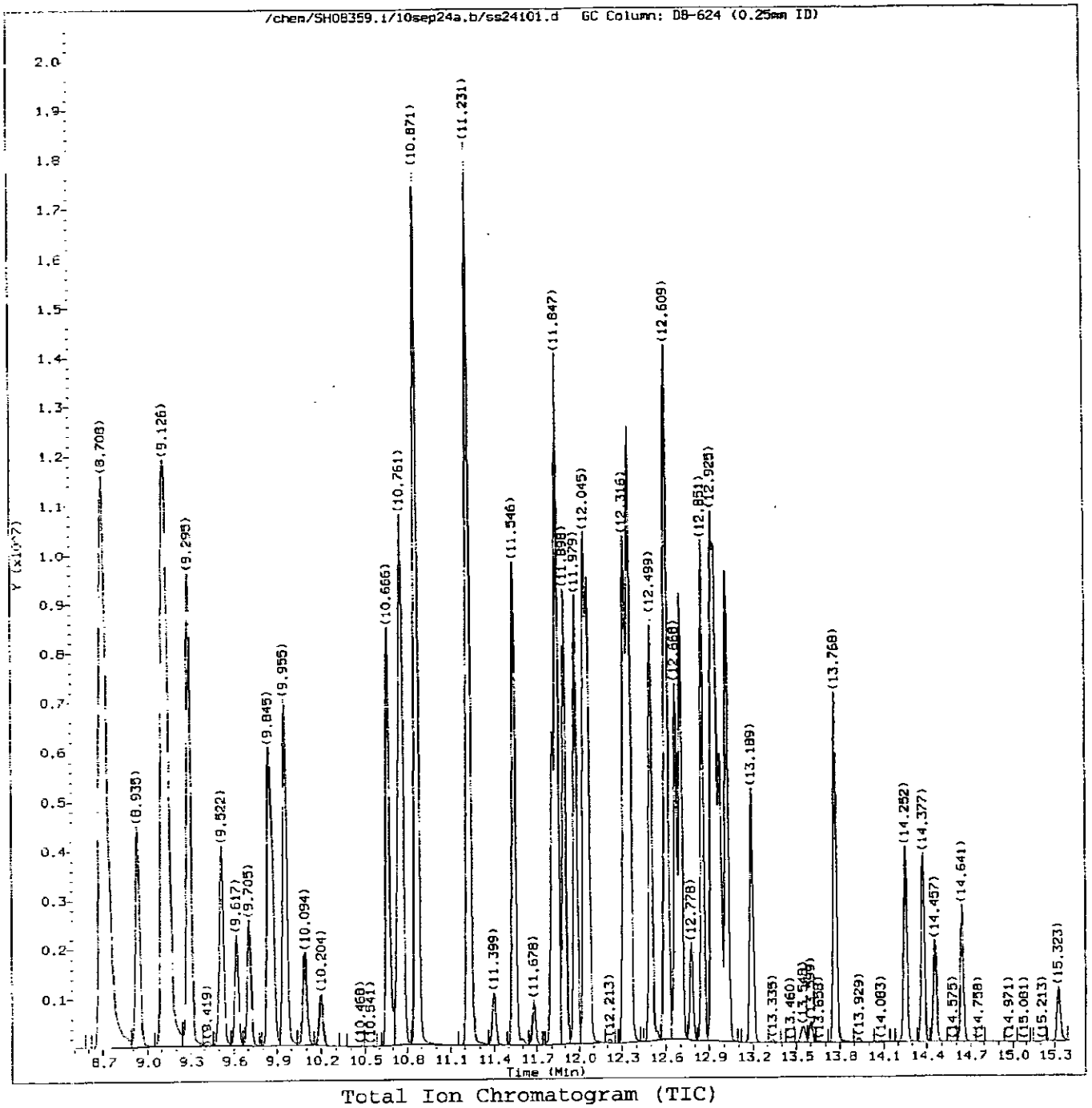
Data File: /chem/SH08359.i/10sep24a.b/ss24i01.d Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 11:23 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:44
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD025 Lab Sample ID: VSTD025

WAT12 8125

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i01.d
Injection date and time: 24-SEP-2010 11:23

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:44

Sublist used: REV4+ACROI

Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD025

Lab Sample ID: VSTD025

WAT12 #126

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i01.d
Injection date and time: 24-SEP-2010 11:23

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:44
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sublist used: REV4+ACROI

Sample Name: VSTD025

Lab Sample ID: VSTD025

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | 1.947 | 85 | 2024298 | 25.000 |
| 2) Chloromethane | (1) | 2.079 | 50 | 5576770 | 25.000 |
| 3) Vinyl Chloride | (1) | 2.211 | 62 | 4072731 | 25.000 |
| 4) Bromomethane | (1) | 2.504 | 94 | 2074947 | 25.000 |
| 5) Chloroethane | (1) | 2.585 | 64 | 2194327 | 25.000 |
| 6) Dichlorofluoromethane | (1) | 2.797 | 67 | 4313034 | 25.000 |
| 7) Trichlorofluoromethane | (1) | 2.893 | 101 | 2071400M | 25.000 |
| 8) Ethyl Ether | (1) | 3.098 | 59 | 1283882 | 25.000 |
| 9) Acrolein | (1) | 3.267 | 56 | 7883210 | 1250.000 |
| 10) 1,1-Dichloroethene | (1) | 3.391 | 96 | 1667959 | 25.000 |
| 11) Freon 113 | (1) | 3.428 | 101 | 1466048 | 25.000 |
| 13) Acetone(mz43) | (1) | 3.428 | 43 | 2636001 | 250.000 |
| 12) Acetone | (1) | 3.435 | 58 | 596145 | 250.000 |
| 14) Methyl Iodide | (1) | 3.575 | 142 | 3335567 | 25.000 |
| 15) Carbon Disulfide | (1) | 3.670 | 76 | 5894295 | 25.000 |
| 16) Allyl Chloride | (1) | 3.809 | 39 | 4566338 | 25.000 |
| 17) Methylene Chloride | (1) | 3.963 | 84 | 1634164 | 25.000 |
| 18) t-Butyl Alcohol | (1) | 4.088 | 59 | 825348 | 500.000 |
| 19) Acrylonitrile | (1) | 4.264 | 53 | 3970244 | 312.500 |
| 21) trans-1,2-Dichloroethene | (1) | 4.308 | 96 | 2043276 | 25.000 |
| 22) Methyl Tertiary Butyl Ether | (1) | 4.315 | 73 | 2026181 | 25.000 |
| 23) 1,1-Dichloroethane | (1) | 4.858 | 63 | 4494333 | 25.000 |
| 24) di-Isopropyl Ether | (1) | 4.953 | 87 | 1153533 | 25.000 |
| 26) Ethyl t-Butyl Ether | (1) | 5.459 | 59 | 4892922 | 25.000 |
| 27) cis-1,2-Dichloroethene | (1) | 5.650 | 96 | 2024069 | 25.000 |
| 29) 2-Butanone | (1) | 5.665 | 43 | 5151467 | 250.000 |
| 28) 2,2-Dichloropropane | (1) | 5.679 | 77 | 1886578 | 25.000 |
| 30) Propionitrile | (1) | 5.753 | 54 | 2239955 | 500.000 |
| 31) Methyl Acrylate | (1) | 5.811 | 55 | 4614406 | 125.000 |
| 32) Methacrylonitrile | (1) | 5.973 | 67 | 3024230 | 250.000 |
| 33) Bromochloromethane | (1) | 5.995 | 128 | 662453 | 25.000 |
| 34) Tetrahydrofuran | (1) | 6.061 | 71 | 905106 | 350.000 |
| 35) Chloroform | (1) | 6.112 | 83 | 2708754 | 25.000 |
| 36) 1,1,1-Trichloroethane | (1) | 6.398 | 97 | 1905432 | 25.000 |
| 37) 1-Chlorobutane | (1) | 6.537 | 49 | 214973 | 25.000 |
| 38) 1,1-Dichloropropene | (1) | 6.625 | 75 | 2505046 | 25.000 |
| 39) Carbon Tetrachloride | (1) | 6.640 | 117 | 1477998 | 25.000 |
| 40) Benzene | (1) | 6.933 | 78 | 6640428 | 25.000 |
| 41) 1,2-Dichloroethane | (1) | 6.963 | 62 | 1440466 | 25.000 |

M = Compound was manually integrated.


WAT12 B127

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i01.d
Injection date and time: 24-SEP-2010 11:23

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:44
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sublist used: REV4+ACROI

Sample Name: VSTD025

Lab Sample ID: VSTD025

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 42) t-Amyl Methyl Ether | (1) | 7.117 | 73 | 2596769 | 25.000 |
| 43) *Fluorobenzene | (1) | 7.337 | 96 | 1181796 | 5.000 |
| 44) Trichloroethene | (1) | 7.821 | 95 | 1954564 | 25.000 |
| 45) 1,2-Dichloropropane | (1) | 8.099 | 63 | 2360852 | 25.000 |
| 46) Dibromomethane | (1) | 8.239 | 93 | 670793 | 25.000 |
| 47) Methyl Methacrylate | (1) | 8.253 | 69 | 564961 | 25.000 |
| 48) Bromodichloromethane | (1) | 8.429 | 83 | 1618938 | 25.000 |
| 49) 2-Nitropropane | (1) | 8.708 | 46 | 836364 | 2625.000 |
| 50) Chloroacetonitrile | (1) | 8.745 | 75 | 1453035 | 1250.000 |
| 51) cis-1,3-Dichloropropene | (1) | 8.935 | 75 | 2159293 | 25.000 |
| 52) 4-Methyl-2-Pentanone | (1) | 9.111 | 58 | 3305672 | 250.000 |
| 53) 1,1-Dichloropropanone | (1) | 9.133 | 83 | 1038394 | 2500.000 |
| 54) Toluene | (1) | 9.295 | 92 | 4232089 | 25.000 |
| 55) trans-1,3-Dichloropropene | (1) | 9.522 | 75 | 1527191 | 25.000 |
| 56) Ethyl Methacrylate | (1) | 9.617 | 69 | 848795 | 25.000 |
| 57) 1,1,2-Trichloroethane | (1) | 9.705 | 83 | 706975 | 25.000 |
| 59) Tetrachloroethene | (1) | 9.845 | 166 | 1787039 | 25.000 |
| 60) 1,3-Dichloropropane | (1) | 9.874 | 76 | 1396654 | 25.000 |
| 61) 2-Hexanone | (1) | 9.955 | 58 | 3096099 | 250.000 |
| 62) Dibromochloromethane | (1) | 10.094 | 129 | 984568 | 25.000 |
| 63) 1,2-Dibromoethane | (1) | 10.204 | 107 | 785178 | 25.000 |
| 64) Chlorobenzene | (1) | 10.666 | 112 | 3936411 | 25.000 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | 10.739 | 131 | 1235694 | 25.000 |
| 66) Ethylbenzene | (1) | 10.761 | 106 | 2411603 | 25.000 |
| 68) m+p-Xylene | (1) | 10.871 | 106 | 5390366 | 50.000 |
| 69) o-Xylene | (1) | 11.223 | 106 | 2833705 | 25.000 |
| 70) Styrene | (1) | 11.238 | 104 | 4330681 | 25.000 |
| 71) Bromoform | (1) | 11.399 | 173 | 502185 | 25.000 |
| 73) Isopropylbenzene | (1) | 11.546 | 120 | 1608880 | 25.000 |
| 74) $4-Bromofluorobenzene | (1) | 11.678 | 174 | 226851 | 5.000 |
| 75) 1,1,2,2-Tetrachloroethane | (1) | 11.795 | 83 | 794269M | 25.000 |
| 72) Xylene (Total) | (1) | | 106 | 8224071 | 75.000 |
| 76) Bromobenzene | (1) | 11.810 | 156 | 1423772 | 25.000 |
| 77) 1,2,3-Trichloropropane | (1) | 11.839 | 110 | 161853 | 25.000 |
| 78) trans-1,4-Dichloro-2-Butene | (1) | 11.847 | 53 | 2605573 | 250.000 |
| 79) n-Propylbenzene | (1) | 11.898 | 120 | 1674151 | 25.000 |
| 80) 2-Chlorotoluene | (1) | 11.979 | 126 | 1530823 | 25.000 |
| 81) 1,3,5-Trimethylbenzene | (1) | 12.037 | 105 | 4728119 | 25.000 |
| 82) 4-Chlorotoluene | (1) | 12.067 | 126 | 1594948 | 25.000 |

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i01.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 11:23  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:44
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD025  Lab Sample ID: VSTD025

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 83) tert-Butylbenzene | (1) | 12.316 | 134 | 1146737 | 25.000 |
| 84) Pentachloroethane | (1) | 12.338 | 167 | 786816 | 25.000 |
| 85) 1,2,4-Trimethylbenzene | (1) | 12.353 | 105 | 4825631 | 25.000 |
| 86) sec-Butylbenzene | (1) | 12.499 | 134 | 1176672 | 25.000 |
| 87) 1,3-Dichlorobenzene | (1) | 12.595 | 146 | 2854165 | 25.000 |
| 88) p-Isopropyltoluene | (1) | 12.609 | 119 | 4488087 | 25.000 |
| 89) 1,4-Dichlorobenzene | (1) | 12.668 | 146 | 2700843 | 25.000 |
| 90) n-Butylbenzene | (1) | 12.947 | 92 | 2984072 | 25.000 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.961 | 152 | 222945 | 5.000 |
| 92) 1,2-Dichlorobenzene | (1) | 12.976 | 146 | 2111011 | 25.000 |
| 93) Hexachloroethane | (1) | 13.189 | 201 | 820094 | 25.000 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | 13.599 | 157 | 92920 | 25.000 |
| 95) Nitrobenzene | (1) | 13.768 | 77 | 447503 | 500.000 |
| 96) 1,2,4-Trichlorobenzene | (1) | 14.252 | 180 | 1145138 | 25.000 |
| 97) Hexachlorobutadiene | (1) | 14.369 | 225 | 685180 | 25.000 |
| 98) Naphthalene | (1) | 14.457 | 128 | 1322329 | 25.000 |
| 99) 1,2,3-Trichlorobenzene | (1) | 14.641 | 180 | 778523 | 25.000 |

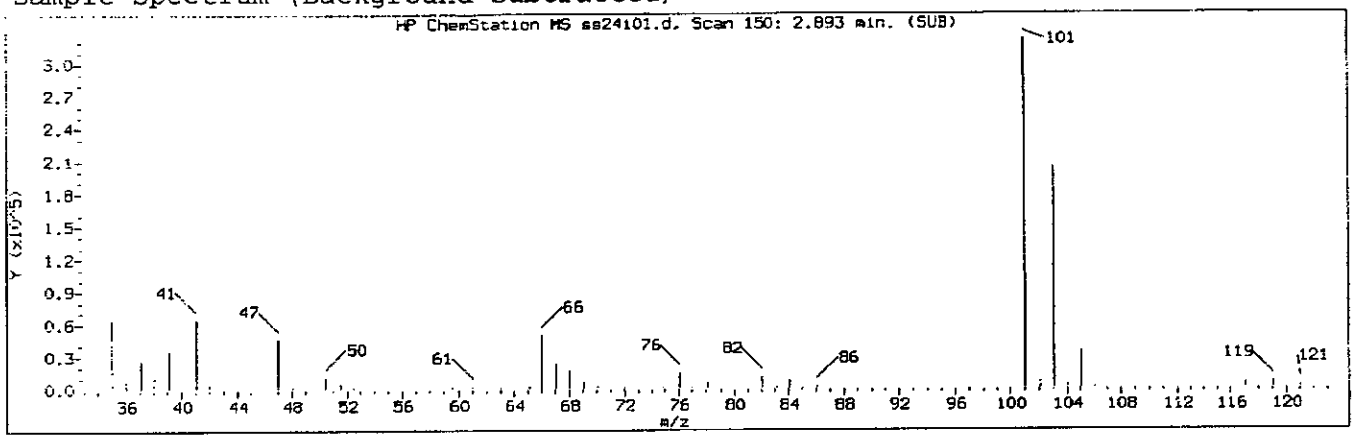
$ = Compound is a surrogate standard.



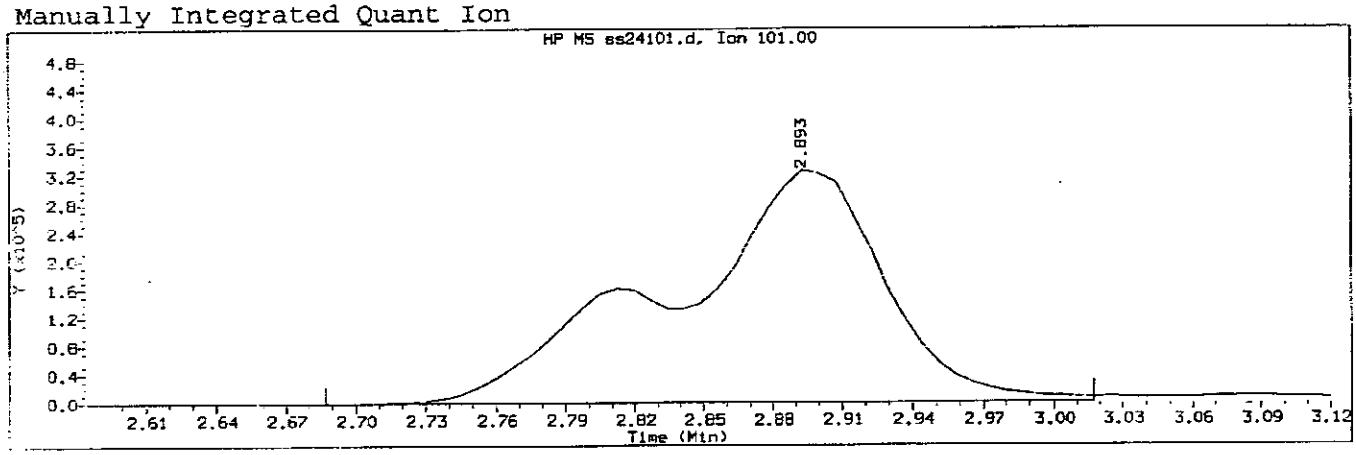
Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

WAT12 8129

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i01.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 11:23  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:44
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD025  Lab Sample ID: VSTD025

| | | | |
|---|---|---|---|
| Compound Number | : 7 | | |
| Compound Name | : Trichlorofluoromethane | | |
| Scan Number | : 150 | | |
| Retention Time (minutes) | : 2.893 | | |
| Quant Ion | : 101.00 | | |
| Area (flag) | : 2071400M | | |
| On-Column Amount (ng) | : 25.0000 | | |
| Integration start scan | : 121 | Integration stop scan: | 166 |
| Y at integration start | : 0 | Y at integration end: | 0 |

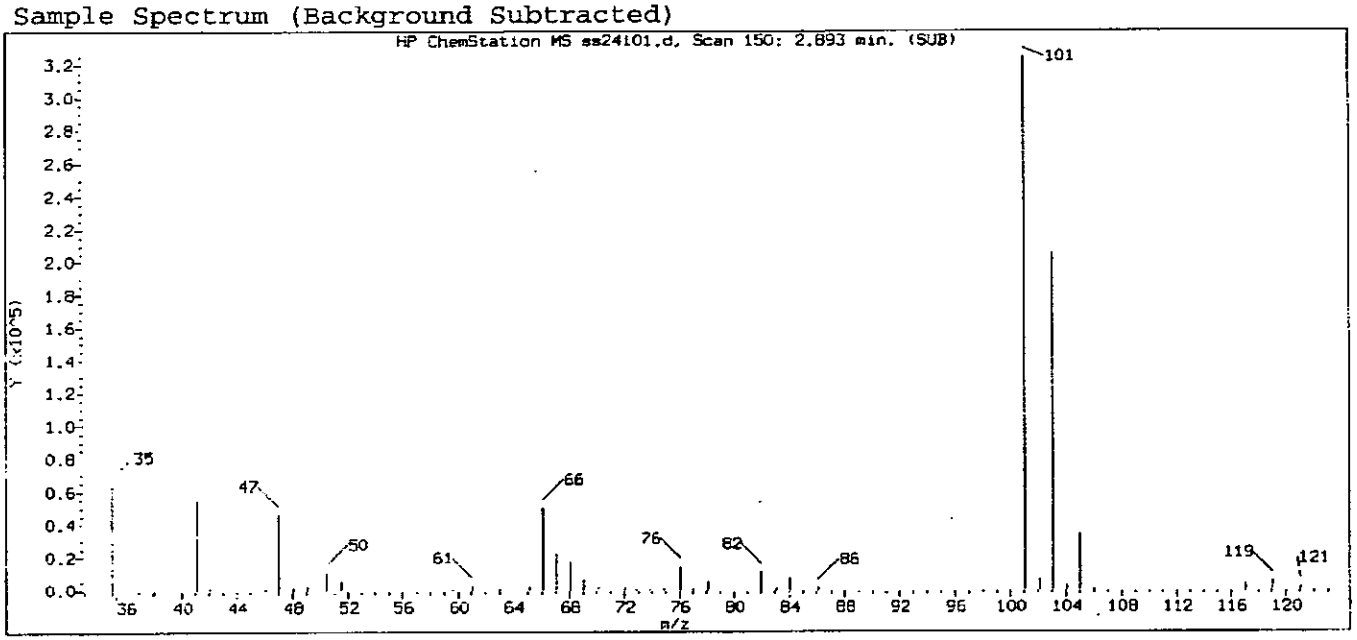
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Lauren C. Temple on 09/24/2010 at 13:50. Target 3.5 esignature user ID: lct01518

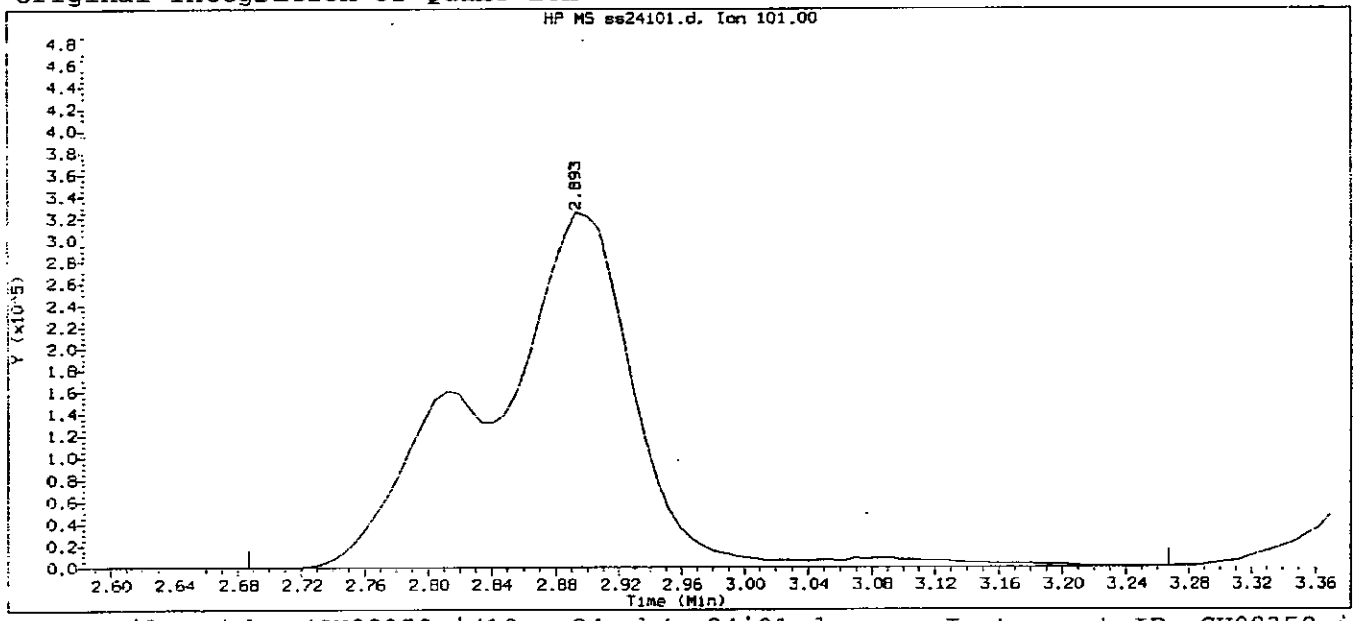
GC/MS audit/management approval: [signature] 09/24/10

WAT12 0138

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i01.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 11:23  Analyst ID: amd00492

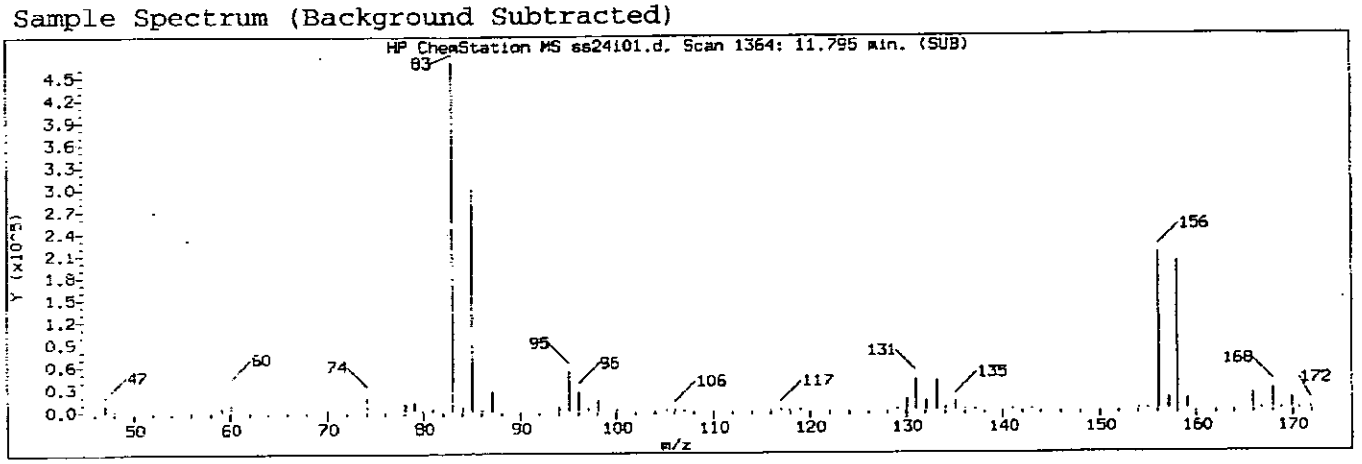
Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 11:44
Date, time and analyst ID of latest file update: 24-Sep-2010 11:44 Automation

Sample Name: VSTD025  Lab Sample ID: VSTD025

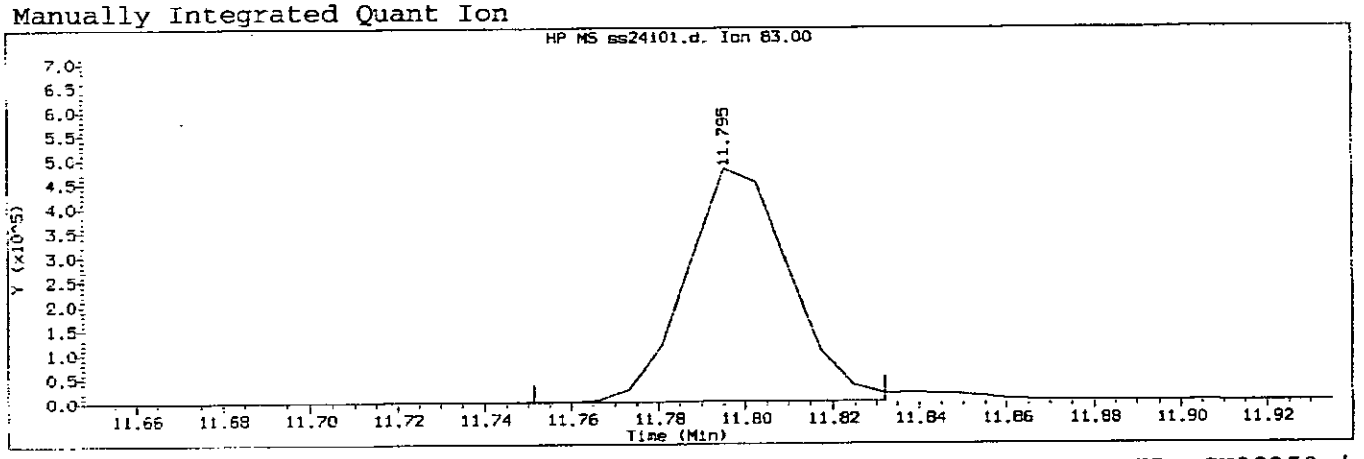
Compound Number : 7
Compound Name : Trichlorofluoromethane
Scan Number : 150
Retention Time (minutes): 2.893
Quant Ion : 101.00
Area : 2134959
On-column Amount (ng) : 26.2893
Integration start scan : 121  Integration stop scan: 200  WAT12 0131
Y at integration start : 0  Y at integration end: 0

Digitally signed by Lauren C. Temple on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i01.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 11:23  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:44
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD025  Lab Sample ID: VSTD025

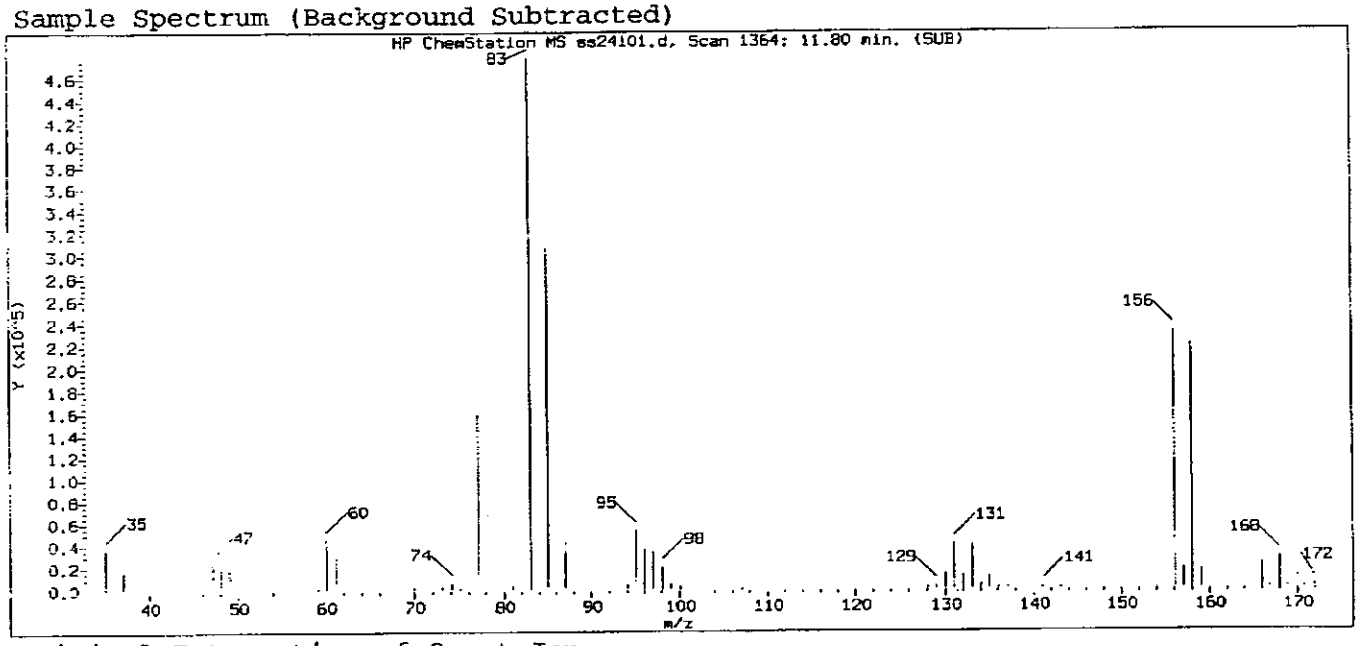
| | | | |
|---|---|---|---|
| Compound Number | : 75 | | |
| Compound Name | : 1,1,2,2-Tetrachloroethane | | |
| Scan Number | : 1364 | | |
| Retention Time (minutes) | : 11.795 | | |
| Quant Ion | : 83.00 | | |
| Area (flag) | : 794269M | | |
| On-Column Amount (ng) | : 25.0000 | | |
| Integration start scan | : 1357 | Integration stop scan: | 1368 |
| Y at integration start | : 0 | Y at integration end: | 0 |

Reason for manual integration: improper integration

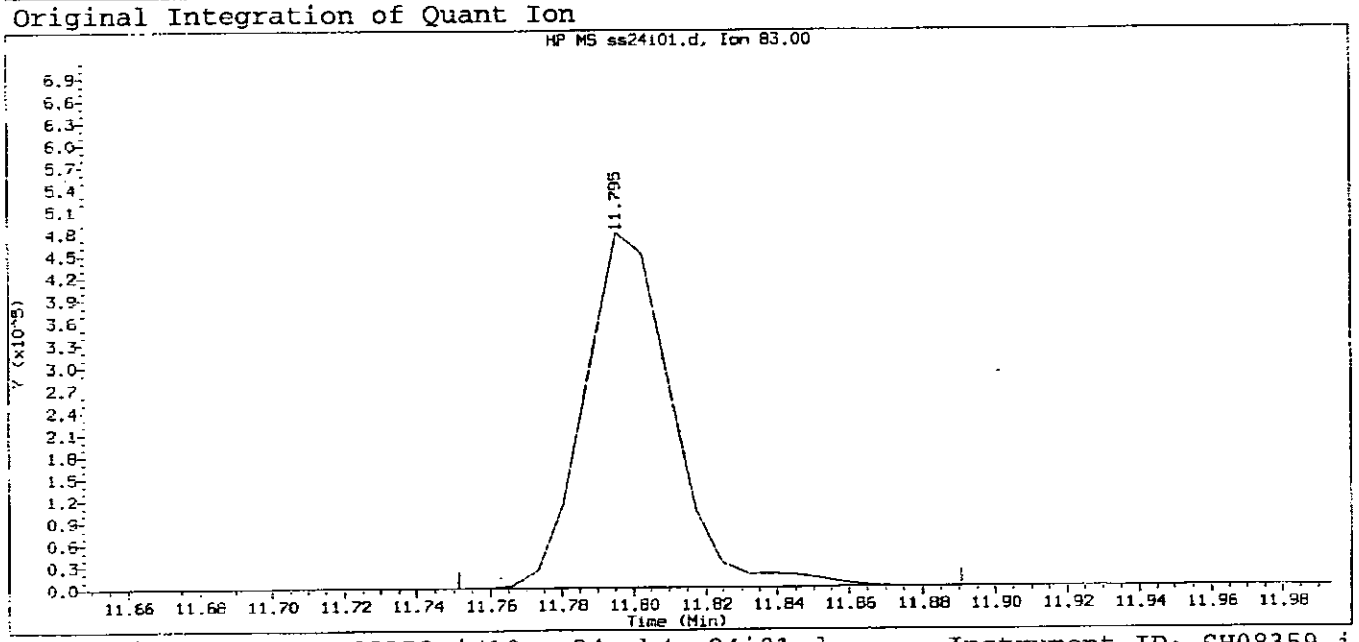
Analyst responsible for change: Digitally signed by Lauren C. Temple on 09/24/2010 at 13:50. Target 3.5 esignature user ID: lct01518

GC/MS audit/management approval: Annie Cyl WAT12 0132

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion



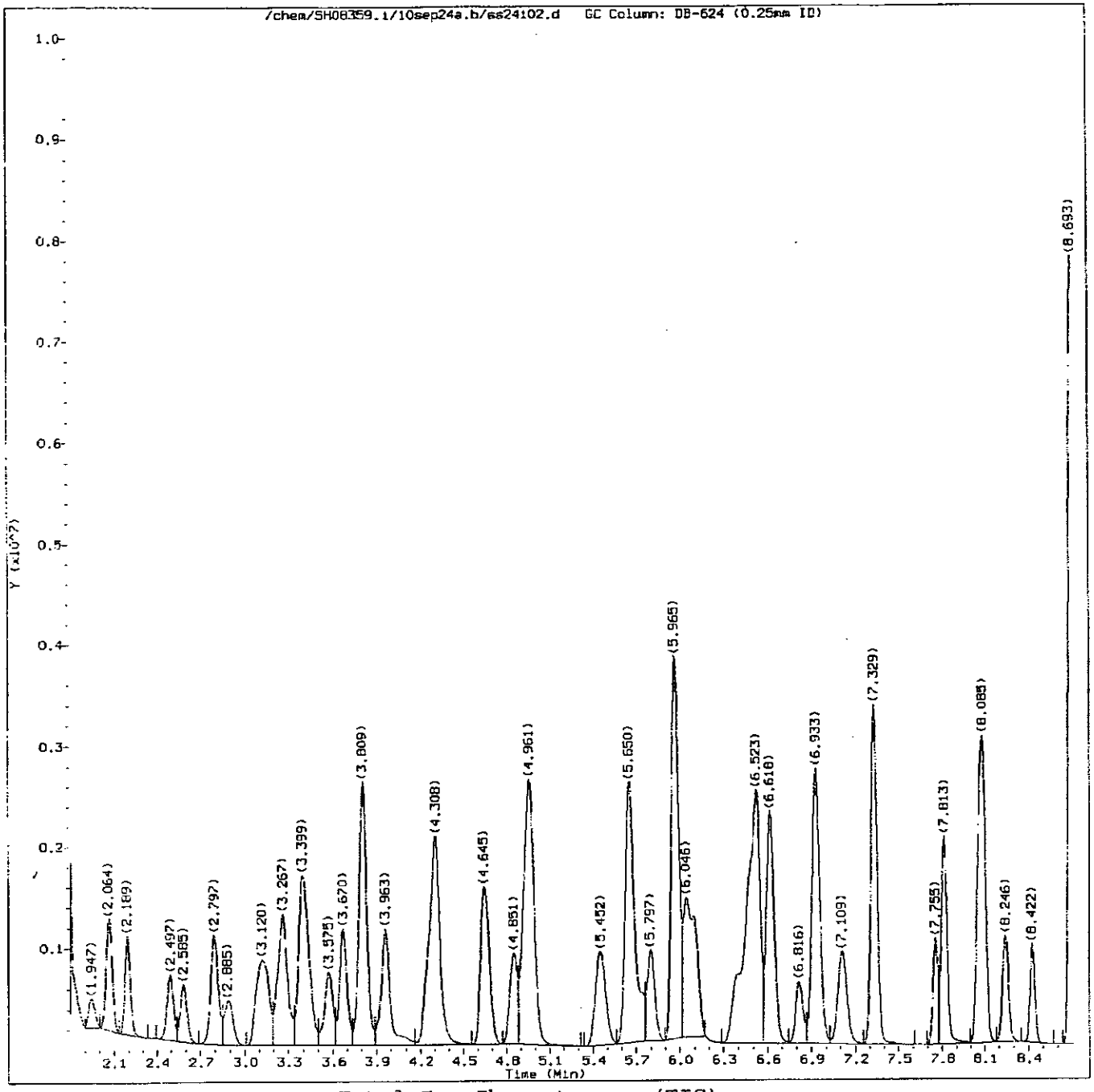

Data File: /chem/SH08359.i/10sep24a.b/ss24i01.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 11:23  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 11:44
Date, time and analyst ID of latest file update: 24-Sep-2010 11:44 Automation

Sample Name: VSTD025  Lab Sample ID: VSTD025

Compound Number : 75
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1364
Retention Time (minutes): 11.795
Quant Ion : 83.00
Area : 817204
On-column Amount (ng) : 27.2790
Integration start scan : 1357  Integration stop scan: 1376  WAT12 8133
Y at integration start : 0  Y at integration end: 0

Digitally signed by Lauren C. Temple on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i02.d
Injection date and time: 24-SEP-2010 11:50

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:44

Sublist used: REV4+ACROI

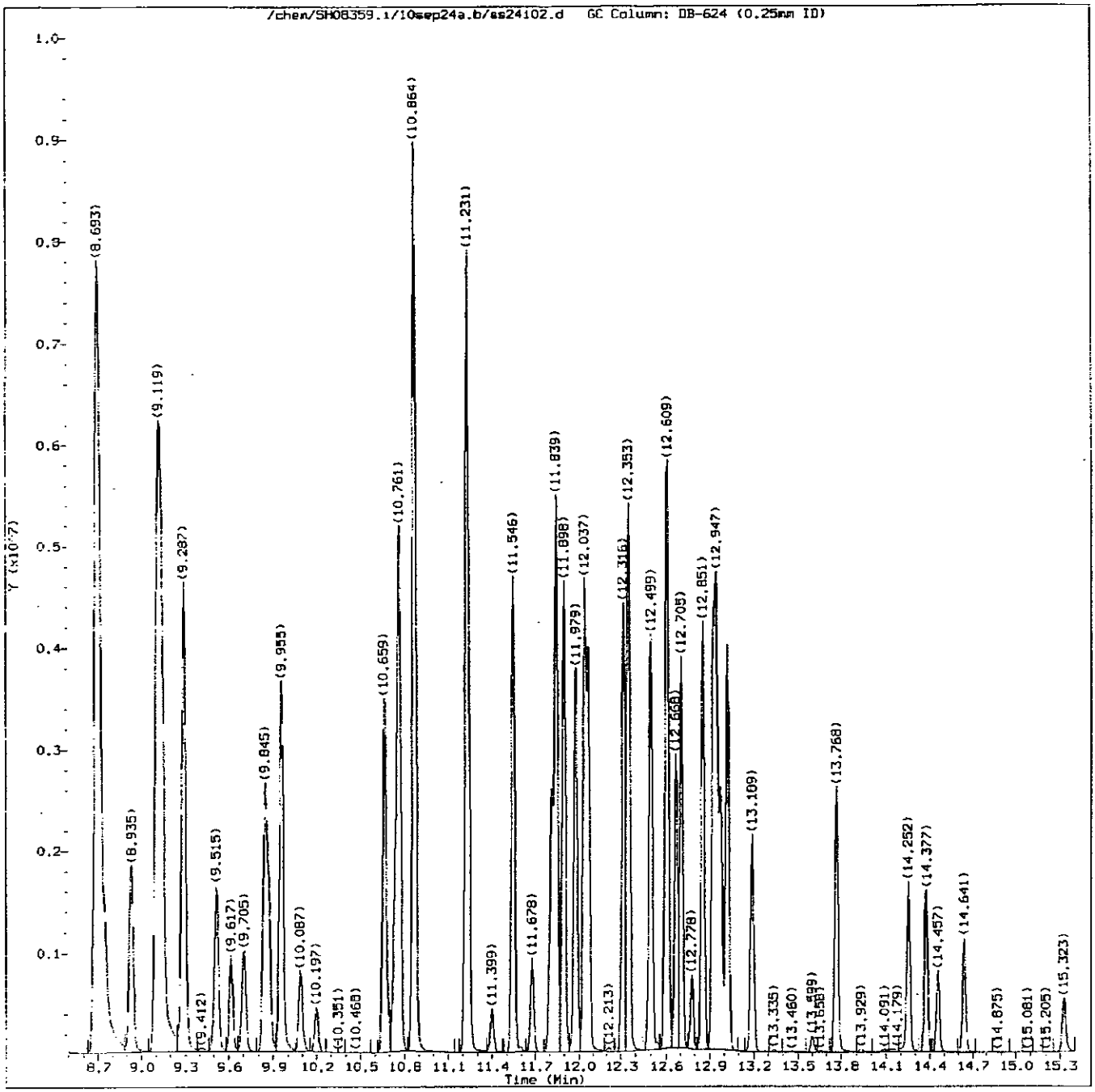
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD010

Lab Sample ID: VSTD010

WAT12 8134

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i02.d Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 11:50 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:44
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD010 Lab Sample ID: VSTD010

WAT12 8135

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i02.d
Injection date and time: 24-SEP-2010 11:50

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:44

Sublist used: REV4+ACROI

Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD010

Lab Sample ID: VSTD010

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | 1.947 | 85 | 825258 | 9.754 |
| 2) Chloromethane | (1) | 2.064 | 50 | 2298081 | 9.807 |
| 3) Vinyl Chloride | (1) | 2.189 | 62 | 1669913 | 9.782 |
| 4) Bromomethane | (1) | 2.497 | 94 | 893215 | 10.026 |
| 5) Chloroethane | (1) | 2.585 | 64 | 907817 | 9.827 |
| 6) Dichlorofluoromethane | (1) | 2.790 | 67 | 1803503 | 9.880 |
| 7) Trichlorofluoromethane | (1) | 2.885 | 101 | 886788 | 9.998 |
| 8) Ethyl Ether | (1) | 3.098 | 59 | 523264 | 9.752 |
| 9) Acrolein | (1) | 3.267 | 56 | 3130148 | 481.090 |
| 10) 1,1-Dichloroethene | (1) | 3.391 | 96 | 732942 | 10.128 |
| 11) Freon 113 | (1) | 3.428 | 101 | 654618 | 10.209 |
| 12) Acetone | (1) | 3.428 | 58 | 224072 | 93.482 |
| 13) Acetone(mz43) | (1) | 3.428 | 43 | 1002512 | 94.068 |
| 14) Methyl Iodide | (1) | 3.575 | 142 | 1470598 | 10.145 |
| 15) Carbon Disulfide | (1) | 3.670 | 76 | 2605215 | 10.158 |
| 16) Allyl Chloride | (1) | 3.809 | 39 | 1976634 | 10.053 |
| 17) Methylene Chloride | (1) | 3.963 | 84 | 685316 | 9.895 |
| 18) t-Butyl Alcohol | (1) | 4.081 | 59 | 306979 | 185.919 |
| 19) Acrylonitrile | (1) | 4.257 | 53 | 1527581 | 118.219 |
| 21) trans-1,2-Dichloroethene | (1) | 4.308 | 96 | 903829 | 10.162 |
| 22) Methyl Tertiary Butyl Ether | (1) | 4.315 | 73 | 845941 | 9.873 |
| 23) 1,1-Dichloroethane | (1) | 4.851 | 63 | 1993297 | 10.175 |
| 24) di-Isopropyl Ether | (1) | 4.953 | 87 | 486881 | 9.927 |
| 26) Ethyl t-Butyl Ether | (1) | 5.445 | 59 | 2051262 | 9.893 |
| 27) cis-1,2-Dichloroethene | (1) | 5.643 | 96 | 879860 | 10.074 |
| 29) 2-Butanone | (1) | 5.657 | 43 | 2113516 | 97.853 |
| 28) 2,2-Dichloropropane | (1) | 5.665 | 77 | 843160 | 10.213 |
| 30) Propionitrile | (1) | 5.745 | 54 | 883554 | 191.777 |
| 31) Methyl Acrylate | (1) | 5.804 | 55 | 1883365 | 48.797 |
| 32) Methacrylonitrile | (1) | 5.965 | 67 | 1294828 | 99.985 |
| 33) Bromochloromethane | (1) | 5.980 | 128 | 276151 | 9.865 |
| 34) Tetrahydrofuran | (1) | 6.046 | 71 | 377356 | 138.118 |
| 35) Chloroform | (1) | 6.105 | 83 | 1182407 | 10.095 |
| 36) 1,1,1-Trichloroethane | (1) | 6.391 | 97 | 821701 | 10.034 |
| 37) 1-Chlorobutane | (1) | 6.530 | 49 | 91182 | 9.952 |
| 38) 1,1-Dichloropropene | (1) | 6.618 | 75 | 1150737 | 10.350 |
| 39) Carbon Tetrachloride | (1) | 6.633 | 117 | 659565 | 10.206 |
| 40) Benzene | (1) | 6.926 | 78 | 3092569 | 10.419 |
| 41) 1,2-Dichloroethane | (1) | 6.955 | 62 | 593525 | 9.807 |



WAT12 B136

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i02.d
Injection date and time: 24-SEP-2010 11:50

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:44

Sublist used: REV4+ACROI

Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD010

Lab Sample ID: VSTD010

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 42) t-Amyl Methyl Ether | (1) | 7.109 | 73 | 1130893 | 10.084 |
| 43) *Fluorobenzene | (1) | 7.329 | 96 | 1265346 | 5.000 |
| 44) Trichloroethene | (1) | 7.813 | 95 | 864839 | 10.163 |
| 45) 1,2-Dichloropropane | (1) | 8.092 | 63 | 1017539 | 10.032 |
| 46) Dibromomethane | (1) | 8.231 | 93 | 280130 | 9.874 |
| 47) Methyl Methacrylate | (1) | 8.246 | 69 | 235935 | 9.874 |
| 48) Bromodichloromethane | (1) | 8.422 | 83 | 688767 | 9.967 |
| 49) 2-Nitropropane | (1) | 8.693 | 46 | 338558 | 1020.404 |
| 50) Chloroacetonitrile | (1) | 8.745 | 75 | 597810 | 489.962 |
| 51) cis-1,3-Dichloropropene | (1) | 8.928 | 75 | 927983 | 10.017 |
| 52) 4-Methyl-2-Pentanone | (1) | 9.104 | 58 | 1352541 | 97.717 |
| 53) 1,1-Dichloropropanone | (1) | 9.126 | 83 | 418691 | 969.851 |
| 54) Toluene | (1) | 9.287 | 92 | 1880387 | 10.184 |
| 55) trans-1,3-Dichloropropene | (1) | 9.515 | 75 | 644775 | 9.928 |
| 56) Ethyl Methacrylate | (1) | 9.617 | 69 | 365581 | 10.028 |
| 57) 1,1,2-Trichloroethane | (1) | 9.705 | 83 | 291900 | 9.817 |
| 59) Tetrachloroethene | (1) | 9.837 | 166 | 784040 | 10.121 |
| 60) 1,3-Dichloropropane | (1) | 9.867 | 76 | 583651 | 9.877 |
| 61) 2-Hexanone | (1) | 9.955 | 58 | 1275780 | 98.070 |
| 62) Dibromochloromethane | (1) | 10.087 | 129 | 416848 | 9.942 |
| 63) 1,2-Dibromoethane | (1) | 10.197 | 107 | 334820 | 9.978 |
| 64) Chlorobenzene | (1) | 10.659 | 112 | 1712977 | 10.080 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | 10.739 | 131 | 510433 | 9.819 |
| 66) Ethylbenzene | (1) | 10.761 | 106 | 1037730 | 10.024 |
| 68) m+p-Xylene | (1) | 10.864 | 106 | 2569980 | 21.072 |
| 69) o-Xylene | (1) | 11.223 | 106 | 1192498 | 9.912 |
| 70) Styrene | (1) | 11.231 | 104 | 1898567 | 10.117 |
| 71) Bromoform | (1) | 11.399 | 173 | 198455 | 9.598 |
| 73) Isopropylbenzene | (1) | 11.546 | 120 | 679898 | 9.933 |
| 74) $4-Bromofluorobenzene | (1) | 11.678 | 174 | 238455 | 4.954 |
| 75) 1,1,2,2-Tetrachloroethane | (1) | 11.795 | 83 | 315260M | 9.620 |
| 72) Xylene (Total) | (1) | | 106 | 3762478 | 30.984 |
| 76) Bromobenzene | (1) | 11.810 | 156 | 578101 | 9.733 |
| 77) 1,2,3-Trichloropropane | (1) | 11.839 | 110 | 65265 | 9.699 |
| 78) trans-1,4-Dichloro-2-Butene | (1) | 11.847 | 53 | 1055004 | 97.194 |
| 79) n-Propylbenzene | (1) | 11.898 | 120 | 712290 | 9.967 |
| 80) 2-Chlorotoluene | (1) | 11.971 | 126 | 645653 | 9.923 |
| 81) 1,3,5-Trimethylbenzene | (1) | 12.037 | 105 | 2156181 | 10.314 |
| 82) 4-Chlorotoluene | (1) | 12.067 | 126 | 651901 | 9.766 |

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i02.d
Injection date and time: 24-SEP-2010 11:50

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:44

Sublist used: REV4+ACROI

Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD010

Lab Sample ID: VSTD010

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 83) tert-Butylbenzene | (1) | 12.316 | 134 | 474338 | 9.826 |
| 84) Pentachloroethane | (1) | 12.338 | 167 | 305629 | 9.512 |
| 85) 1,2,4-Trimethylbenzene | (1) | 12.353 | 105 | 2210651 | 10.337 |
| 86) sec-Butylbenzene | (1) | 12.499 | 134 | 486420 | 9.823 |
| 87) 1,3-Dichlorobenzene | (1) | 12.595 | 146 | 1145186 | 9.674 |
| 88) p-Isopropyltoluene | (1) | 12.609 | 119 | 1961532 | 10.101 |
| 89) 1,4-Dichlorobenzene | (1) | 12.668 | 146 | 1098025 | 9.740 |
| 90) n-Butylbenzene | (1) | 12.947 | 92 | 1282443 | 10.017 |
| 91) $1,2-Dichlorobenzene-d4 | (1) | 12.961 | 152 | 216368 | 4.755 |
| 92) 1,2-Dichlorobenzene | (1) | 12.976 | 146 | 854442 | 9.718 |
| 93) Hexachloroethane | (1) | 13.189 | 201 | 346157 | 9.927 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | 13.599 | 157 | 35149 | 9.380 |
| 95) Nitrobenzene | (1) | 13.768 | 77 | 149541 | 175.313 |
| 96) 1,2,4-Trichlorobenzene | (1) | 14.252 | 180 | 465294 | 9.737 |
| 97) Hexachlorobutadiene | (1) | 14.369 | 225 | 301718 | 10.139 |
| 98) Naphthalene | (1) | 14.457 | 128 | 524309 | 9.615 |
| 99) 1,2,3-Trichlorobenzene | (1) | 14.641 | 180 | 326157 | 9.890 |

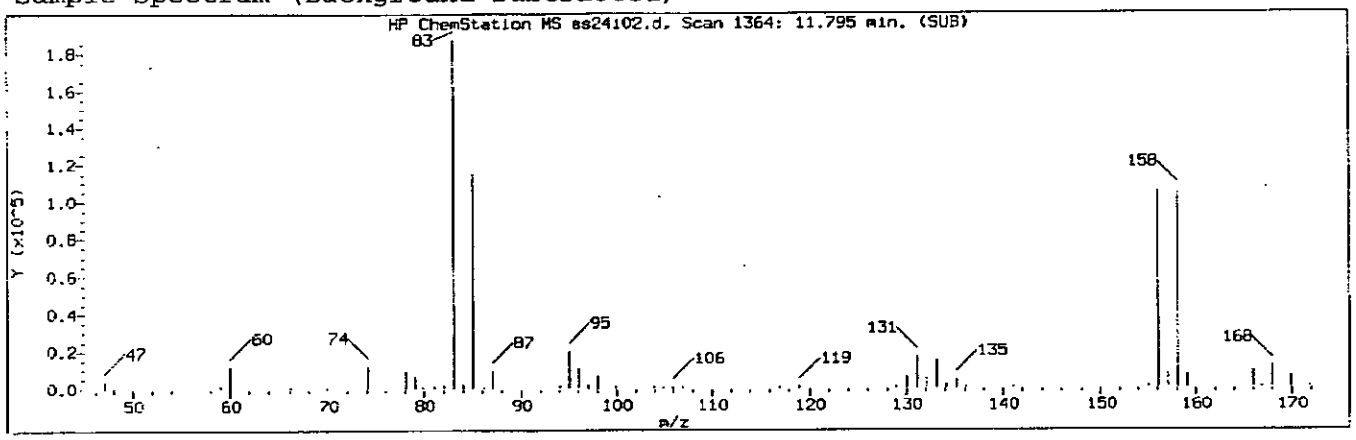
$ = Compound is a surrogate standard.



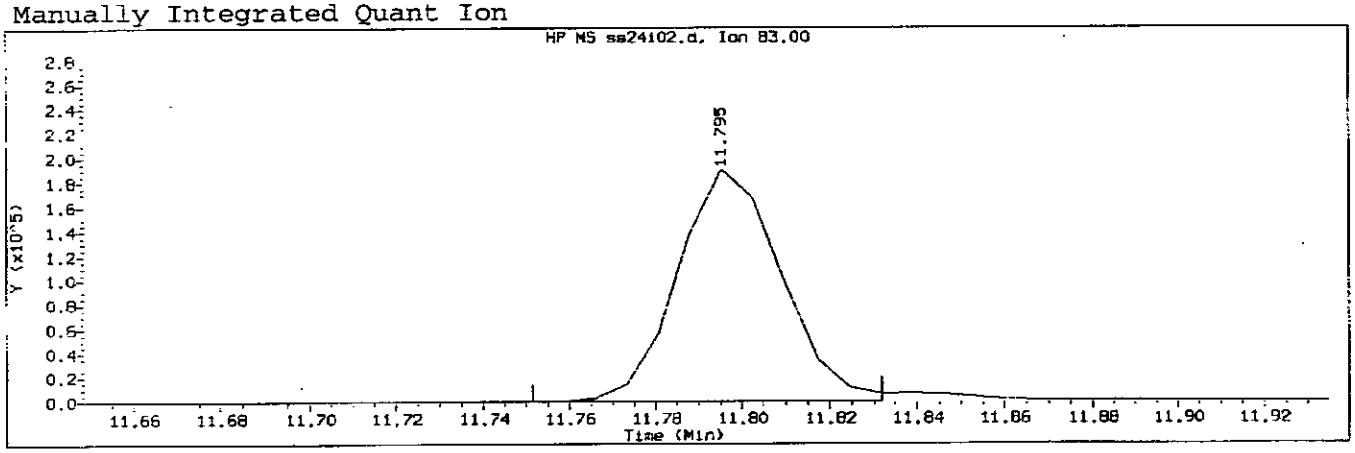
WAT12 0138

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i02.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 11:50  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:44
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD010  Lab Sample ID: VSTD010

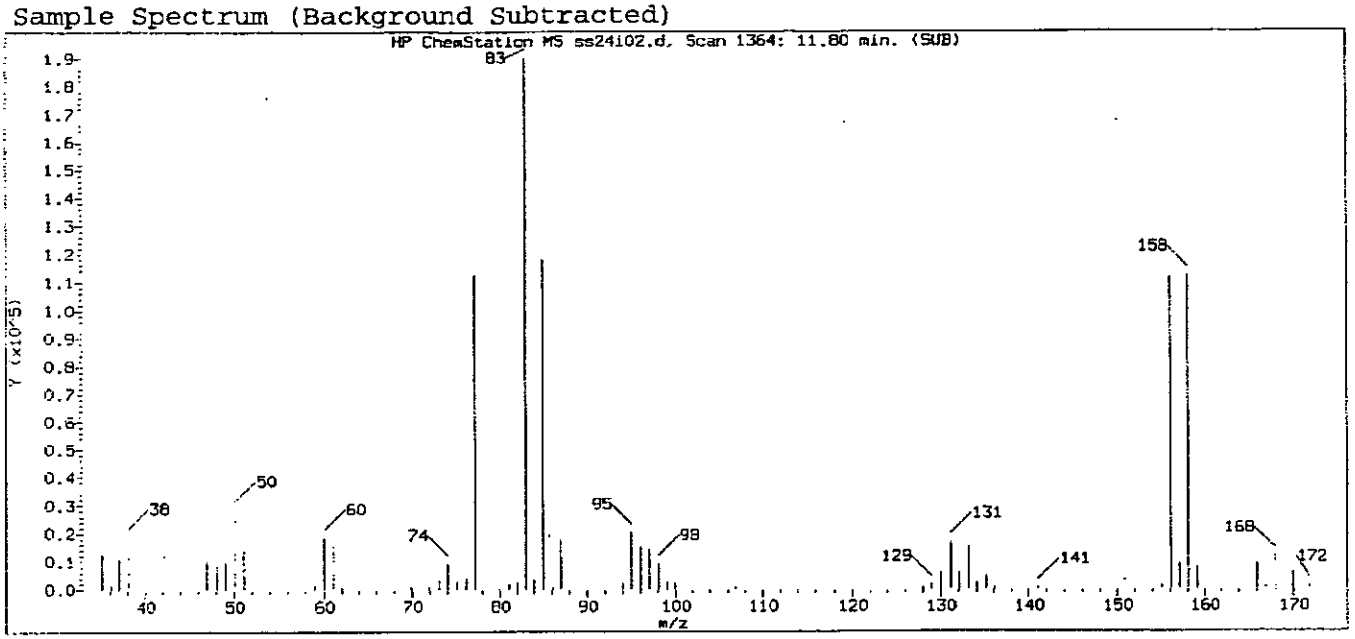
| | |
|---|---|
| Compound Number | : 75 |
| Compound Name | : 1,1,2,2-Tetrachloroethane |
| Scan Number | : 1364 |
| Retention Time (minutes) | : 11.795 |
| Quant Ion | : 83.00 |
| Area (flag) | : 315260M |
| On-Column Amount (ng) | : 9.6200 |
| Integration start scan | : 1357  Integration stop scan: 1368 |
| Y at integration start | : 0  Y at integration end: 0 |

Reason for manual integration: improper integration

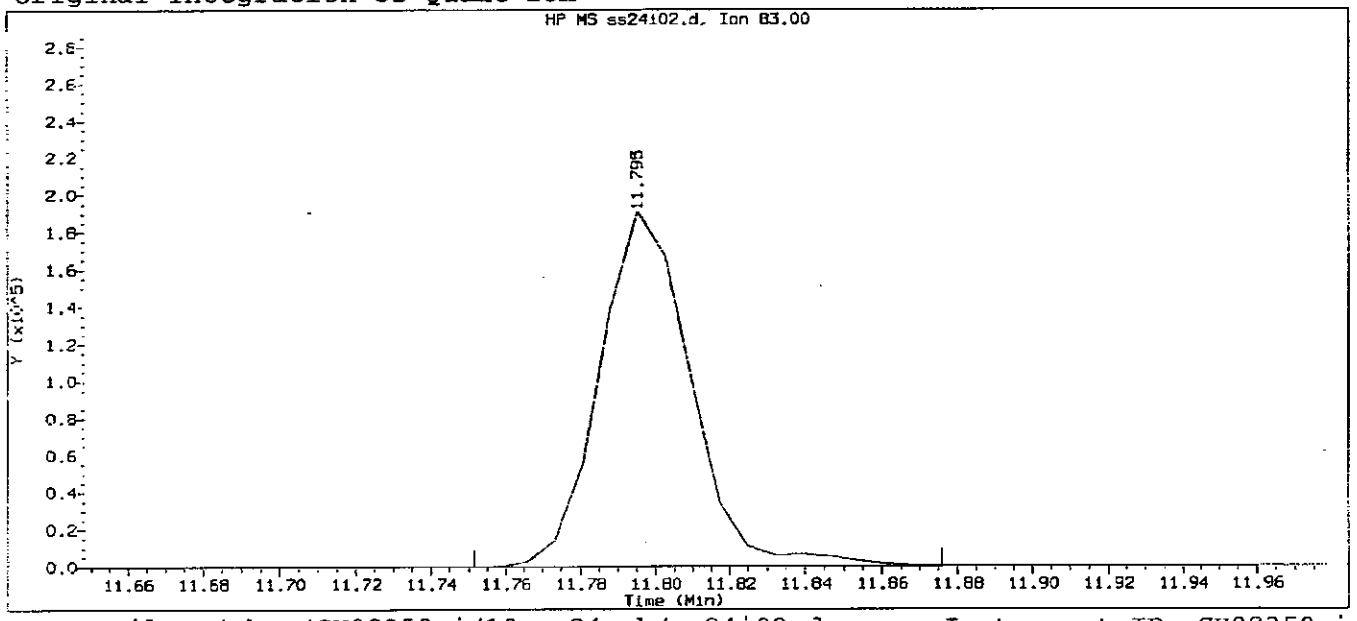
Analyst responsible for change: Digitally signed by Lauren C. Temple on 09/24/2010 at 13:50 Target 3.5 esignature user ID: lct01518

GC/MS audit/management approval: _____ WAT12 0139

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion



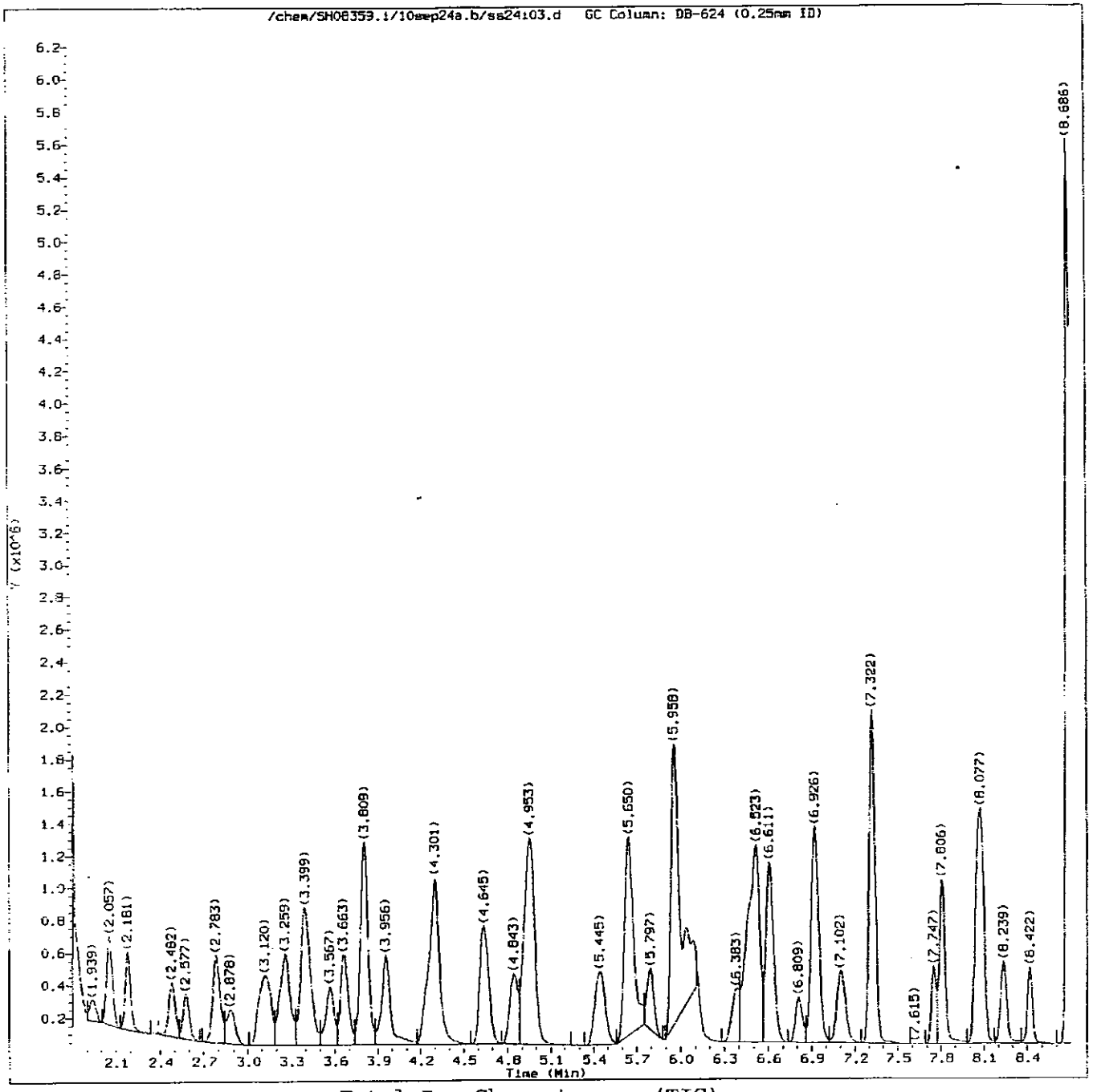

Data File: /chem/SH08359.i/10sep24a.b/ss24i02.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 11:50  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:02
Date, time and analyst ID of latest file update: 24-Sep-2010 13:02 Automation

Sample Name: VSTD010  Lab Sample ID: VSTD010

Compound Number : 75
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1364
Retention Time (minutes): 11.795
Quant Ion : 83.00
Area : 322791
On-column Amount (ng) : 9.5957
Integration start scan : 1357  Integration stop scan: 1374  WAT12 8148
Y at integration start : 0  Y at integration end: 0

Digitally signed by Lauren C. Temple on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i03.d
Injection date and time: 24-SEP-2010 12:16

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:44

Sublist used: REV4+ACROI

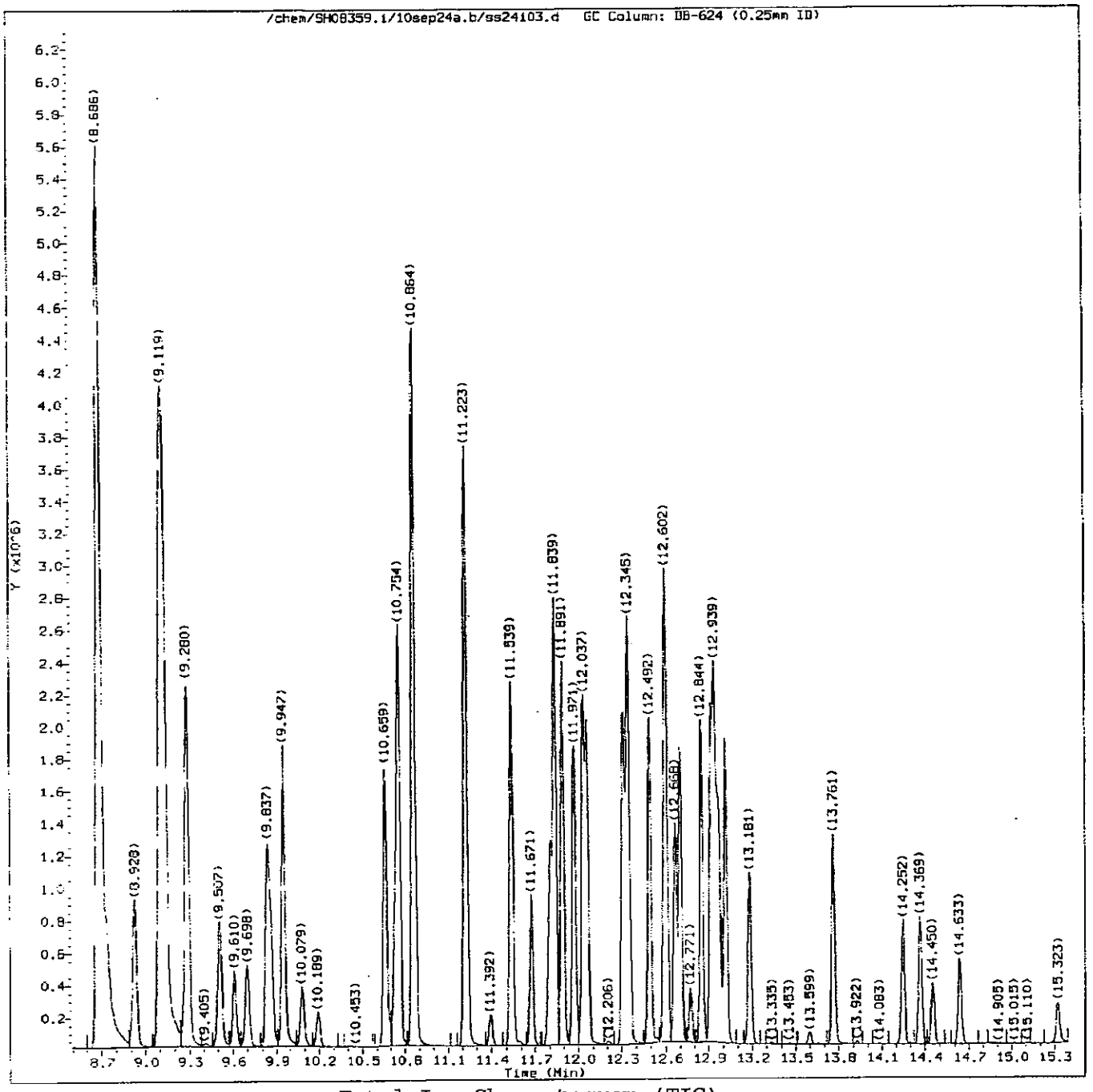
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD005

Lab Sample ID: VSTD005

WOT12 8141

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i03.d
Injection date and time: 24-SEP-2010 12:16

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:44

Sublist used: REV4+ACROI

Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD005

Lab Sample ID: VSTD005

WAT12 0142

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i03.d
Injection date and time: 24-SEP-2010 12:16

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:44
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sublist used: REV4+ACROI

Sample Name: VSTD005

Lab Sample ID: VSTD005

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | 1.947 | 85 | 399471 | 4.806 |
| 2) Chloromethane | (1) | 2.057 | 50 | 1143126 | 4.914 |
| 3) Vinyl Chloride | (1) | 2.181 | 62 | 819918 | 4.862 |
| 4) Bromomethane | (1) | 2.482 | 94 | 451692 | 5.042 |
| 5) Chloroethane | (1) | 2.577 | 64 | 461917 | 4.995 |
| 6) Dichlorofluoromethane | (1) | 2.783 | 67 | 902514 | 4.958 |
| 7) Trichlorofluoromethane | (1) | 2.878 | 101 | 429720 | 4.891 |
| 8) Ethyl Ether | (1) | 3.091 | 59 | 259392 | 4.884 |
| 9) Acrolein | (1) | 3.259 | 56 | 1546522 | 241.432 |
| 10) 1,1-Dichloroethene | (1) | 3.384 | 96 | 356583 | 4.947 |
| 11) Freon 113 | (1) | 3.421 | 101 | 317608 | 4.964 |
| 13) Acetone(mz43) | (1) | 3.421 | 43 | 504900 | 48.174 |
| 12) Acetone | (1) | 3.428 | 58 | 103959 | 45.333 |
| 14) Methyl Iodide | (1) | 3.567 | 142 | 730493 | 5.022 |
| 15) Carbon Disulfide | (1) | 3.663 | 76 | 1275141 | 4.976 |
| 16) Allyl Chloride | (1) | 3.809 | 39 | 972182 | 4.958 |
| 17) Methylene Chloride | (1) | 3.956 | 84 | 341852 | 4.952 |
| 18) t-Butyl Alcohol | (1) | 4.066 | 59 | 148613 | 93.019 |
| 19) Acrylonitrile | (1) | 4.257 | 53 | 751669 | 59.460 |
| 21) trans-1,2-Dichloroethene | (1) | 4.301 | 96 | 433164 | 4.908 |
| 22) Methyl Tertiary Butyl Ether | (1) | 4.301 | 73 | 426765 | 4.982 |
| 23) 1,1-Dichloroethane | (1) | 4.843 | 63 | 982371 | 5.005 |
| 24) di-Isopropyl Ether | (1) | 4.939 | 87 | 235148 | 4.857 |
| 26) Ethyl t-Butyl Ether | (1) | 5.445 | 59 | 1013693 | 4.921 |
| 27) cis-1,2-Dichloroethene | (1) | 5.643 | 96 | 437124 | 4.999 |
| 29) 2-Butanone | (1) | 5.650 | 43 | 1012503 | 47.829 |
| 28) 2,2-Dichloropropane | (1) | 5.665 | 77 | 410916 | 4.980 |
| 30) Propionitrile | (1) | 5.738 | 54 | 429453 | 95.281 |
| 31) Methyl Acrylate | (1) | 5.797 | 55 | 942862 | 24.593 |
| 32) Methacrylonitrile | (1) | 5.958 | 67 | 645395 | 49.845 |
| 33) Bromochloromethane | (1) | 5.973 | 128 | 139790 | 4.991 |
| 34) Tetrahydrofuran | (1) | 6.046 | 71 | 186919 | 68.871 |
| 35) Chloroform | (1) | 6.097 | 83 | 577087 | 4.947 |
| 36) 1,1,1-Trichloroethane | (1) | 6.383 | 97 | 401339 | 4.929 |
| 37) 1-Chlorobutane | (1) | 6.523 | 49 | 44595 | 4.906 |
| 38) 1,1-Dichloropropene | (1) | 6.611 | 75 | 563105 | 5.038 |
| 39) Carbon Tetrachloride | (1) | 6.625 | 117 | 327152 | 5.037 |
| 40) Benzene | (1) | 6.919 | 78 | 1520742 | 5.077 |
| 41) 1,2-Dichloroethane | (1) | 6.948 | 62 | 299523 | 4.961 |



WAT12 8143

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i03.d
Injection date and time: 24-SEP-2010 12:16

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:44
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sublist used: REV4+ACROI

Sample Name: VSTD005

Lab Sample ID: VSTD005

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 42) t-Amyl Methyl Ether | (1) | 7.102 | 73 | 567474 | 5.035 |
| 43)*Fluorobenzene | (1) | 7.322 | 96 | 1267102 | 5.000 |
| 44) Trichloroethene | (1) | 7.806 | 95 | 418342 | 4.939 |
| 45) 1,2-Dichloropropane | (1) | 8.085 | 63 | 499387 | 4.944 |
| 46) Dibromomethane | (1) | 8.224 | 93 | 139821 | 4.947 |
| 47) Methyl Methacrylate | (1) | 8.246 | 69 | 115174 | 4.874 |
| 48) Bromodichloromethane | (1) | 8.415 | 83 | 338255 | 4.925 |
| 49) 2-Nitropropane | (1) | 8.686 | 46 | 166984 | 509.843 |
| 50) Chloroacetonitrile | (1) | 8.737 | 75 | 307949 | 251.359 |
| 51) cis-1,3-Dichloropropene | (1) | 8.928 | 75 | 468458 | 5.033 |
| 52) 4-Methyl-2-Pentanone | (1) | 9.097 | 58 | 667160 | 48.740 |
| 53) 1,1-Dichloropropanone | (1) | 9.119 | 83 | 215127 | 498.415 |
| 54) Toluene | (1) | 9.280 | 92 | 922598 | 4.993 |
| 55) trans-1,3-Dichloropropene | (1) | 9.515 | 75 | 316314 | 4.908 |
| 56) Ethyl Methacrylate | (1) | 9.610 | 69 | 185672 | 5.057 |
| 57) 1,1,2-Trichloroethane | (1) | 9.698 | 83 | 143324 | 4.874 |
| 59) Tetrachloroethene | (1) | 9.837 | 166 | 380378 | 4.935 |
| 60) 1,3-Dichloropropane | (1) | 9.859 | 76 | 289825 | 4.932 |
| 61) 2-Hexanone | (1) | 9.947 | 58 | 621472 | 48.447 |
| 62) Dibromochloromethane | (1) | 10.079 | 129 | 198704 | 4.819 |
| 63) 1,2-Dibromoethane | (1) | 10.189 | 107 | 166373 | 4.967 |
| 64) Chlorobenzene | (1) | 10.659 | 112 | 836173 | 4.942 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | 10.732 | 131 | 247305 | 4.831 |
| 66) Ethylbenzene | (1) | 10.754 | 106 | 503119 | 4.901 |
| 68) m+p-Xylene | (1) | 10.864 | 106 | 1238796 | 10.095 |
| 69) o-Xylene | (1) | 11.216 | 106 | 570078 | 4.818 |
| 70) Styrene | (1) | 11.231 | 104 | 907018 | 4.883 |
| 71) Bromoform | (1) | 11.392 | 173 | 99715 | 4.876 |
| 73) Isopropylbenzene | (1) | 11.539 | 120 | 326220 | 4.837 |
| 74)$4-Bromofluorobenzene | (1) | 11.671 | 174 | 243499 | 5.034 |
| 75) 1,1,2,2-Tetrachloroethane | (1) | 11.788 | 83 | 153543M | 4.781 |
| 72) Xylene (Total) | (1) | | 106 | 1808874 | 14.913 |
| 76) Bromobenzene | (1) | 11.803 | 156 | 287525 | 4.888 |
| 77) 1,2,3-Trichloropropane | (1) | 11.832 | 110 | 32090 | 4.839 |
| 78) trans-1,4-Dichloro-2-Butene | (1) | 11.839 | 53 | 506330 | 47.668 |
| 79) n-Propylbenzene | (1) | 11.891 | 120 | 337039 | 4.803 |
| 80) 2-Chlorotoluene | (1) | 11.971 | 126 | 317321 | 4.913 |
| 81) 1,3,5-Trimethylbenzene | (1) | 12.030 | 105 | 1052313 | 5.018 |
| 82) 4-Chlorotoluene | (1) | 12.059 | 126 | 320746 | 4.864 |

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i03.d
Injection date and time: 24-SEP-2010 12:16

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:44

Sublist used: REV4+ACROI

Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD005

Lab Sample ID: VSTD005

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 83) tert-Butylbenzene | (1) | 12.309 | 134 | 228450 | 4.814 |
| 84) Pentachloroethane | (1) | 12.331 | 167 | 148465 | 4.736 |
| 85) 1,2,4-Trimethylbenzene | (1) | 12.345 | 105 | 1074104 | 5.010 |
| 86) sec-Butylbenzene | (1) | 12.492 | 134 | 233252 | 4.799 |
| 87) 1,3-Dichlorobenzene | (1) | 12.595 | 146 | 559660 | 4.811 |
| 88) p-Isopropyltoluene | (1) | 12.602 | 119 | 947054 | 4.913 |
| 89) 1,4-Dichlorobenzene | (1) | 12.661 | 146 | 528874 | 4.785 |
| 90) n-Butylbenzene | (1) | 12.939 | 92 | 616575 | 4.871 |
| 91) $1,2-Dichlorobenzene-d4 | (1) | 12.954 | 152 | 215446 | 4.815 |
| 92) 1,2-Dichlorobenzene | (1) | 12.969 | 146 | 413375 | 4.792 |
| 93) Hexachloroethane | (1) | 13.181 | 201 | 168389 | 4.880 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | 13.592 | 157 | 16205 | 4.524 |
| 95) Nitrobenzene | (1) | 13.761 | 77 | 68832 | 86.159 |
| 96) 1,2,4-Trichlorobenzene | (1) | 14.245 | 180 | 224535 | 4.790 |
| 97) Hexachlorobutadiene | (1) | 14.369 | 225 | 142993 | 4.864 |
| 98) Naphthalene | (1) | 14.450 | 128 | 252700 | 4.745 |
| 99) 1,2,3-Trichlorobenzene | (1) | 14.633 | 180 | 156635 | 4.826 |

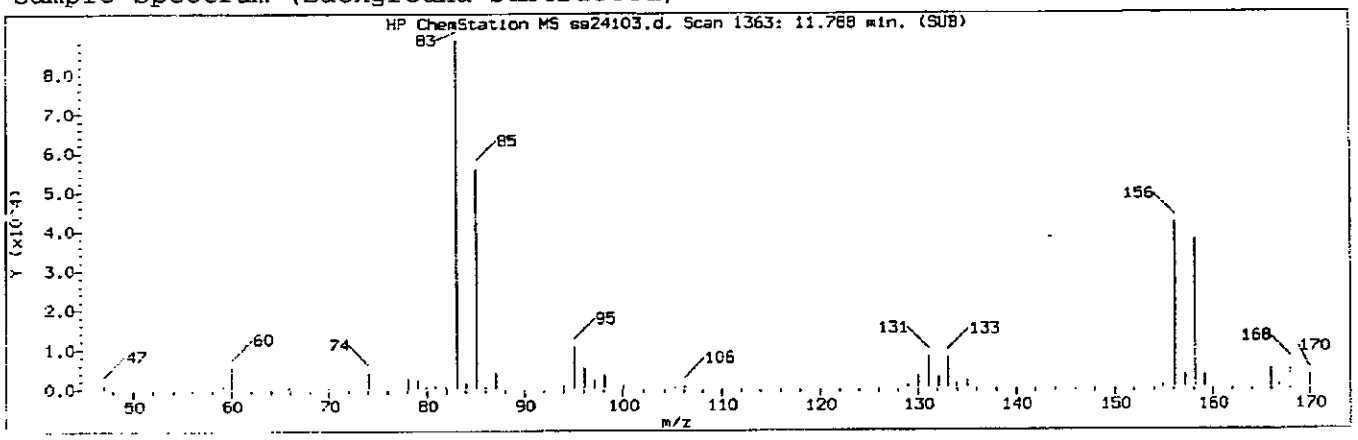
$ = Compound is a surrogate standard.



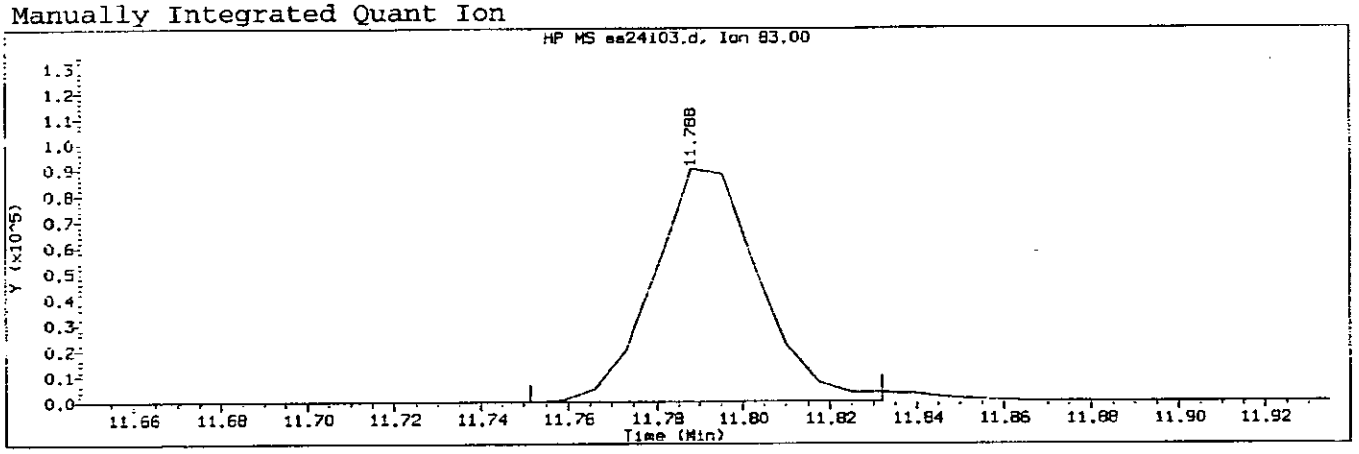
WAT12 8145

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i03.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 12:16  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:44
Date, time and analyst ID of latest file update: 24-Sep-2010 13:44 lct01518

Sample Name: VSTD005  Lab Sample ID: VSTD005

| | |
|---|---|
| Compound Number | : 75 |
| Compound Name | : 1,1,2,2-Tetrachloroethane |
| Scan Number | : 1363 |
| Retention Time (minutes) | : 11.788 |
| Quant Ion | : 83.00 |
| Area (flag) | : 153543M |
| On-Column Amount (ng) | : 4.7812 |
| Integration start scan | : 1357  Integration stop scan: 1368 |
| Y at integration start | : 0  Y at integration end: 0 |

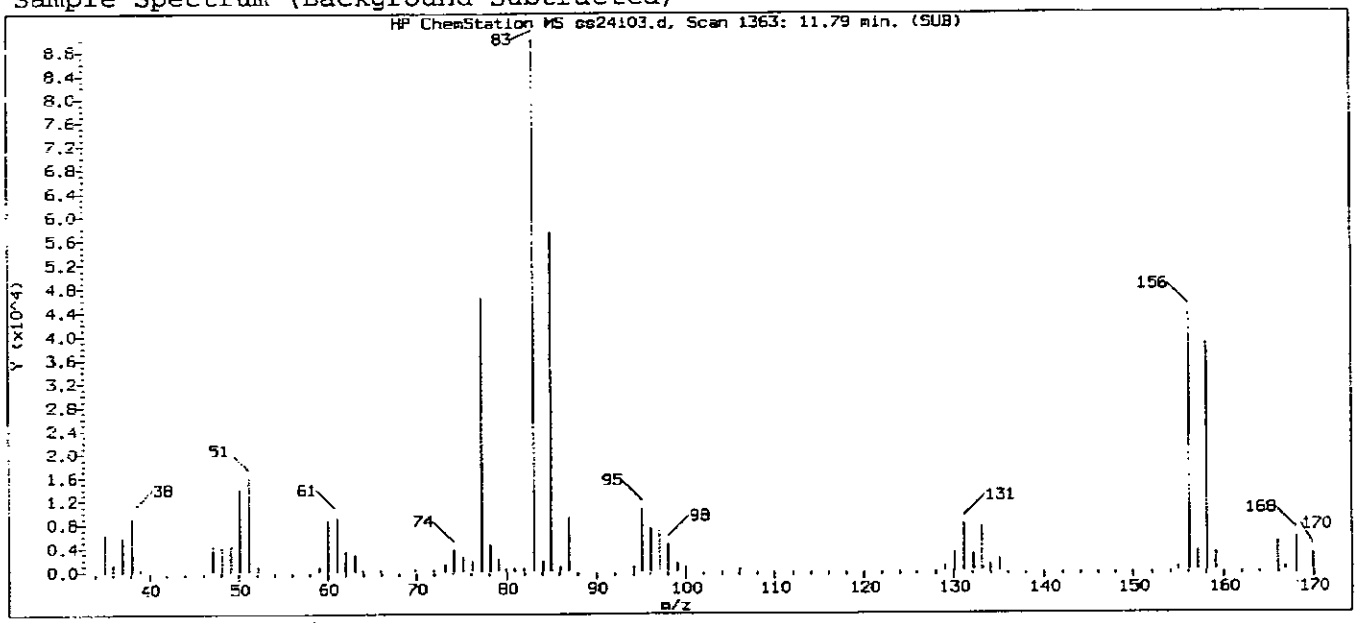
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Lauren C. Temple on 09/24/2010 at 13:50. Target 3.5 esignature user ID: lct01518

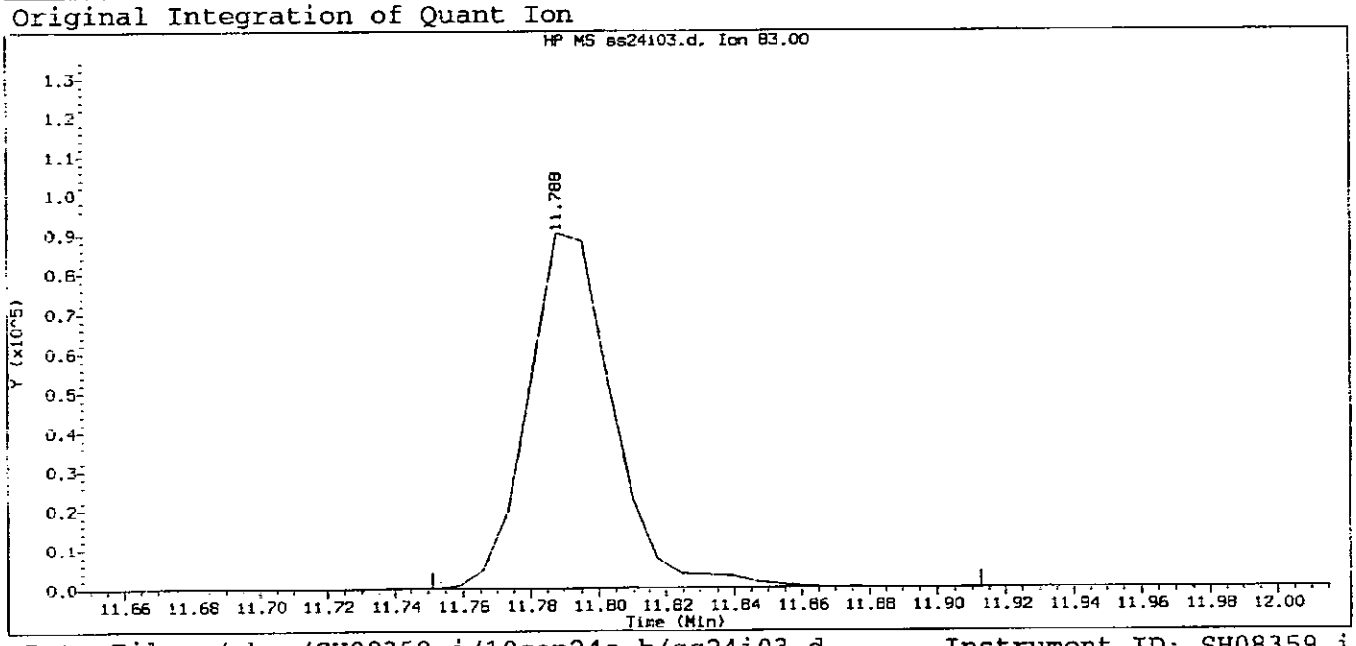
GC/MS audit/management approval: Amuyee C9L9IV

WAT12 8146

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i03.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 12:16  Analyst ID: amd00492

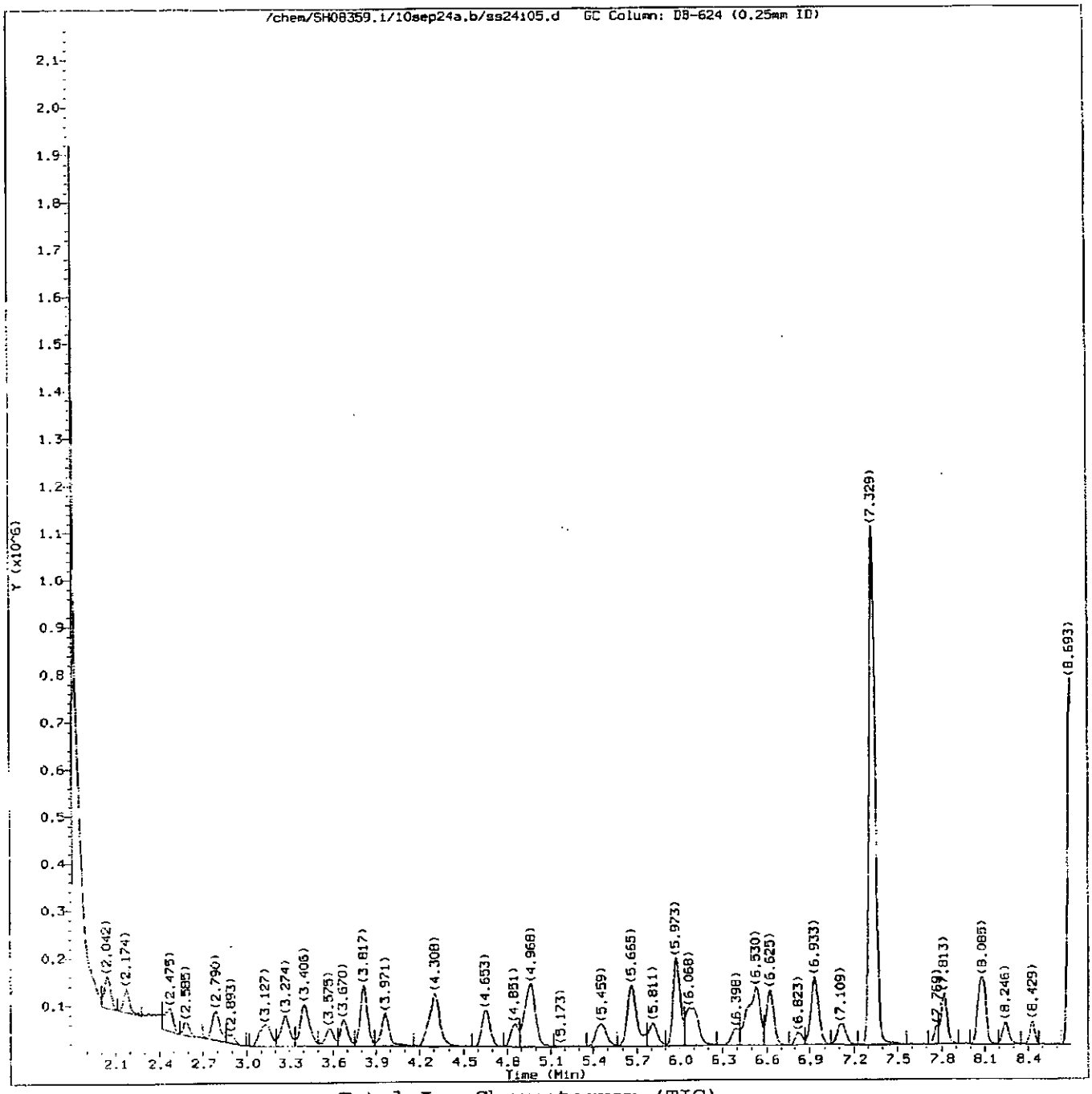
Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:02
Date, time and analyst ID of latest file update: 24-Sep-2010 13:02 Automation

Sample Name: VSTD005  Lab Sample ID: VSTD005

| | |
|---|---|
| Compound Number | : 75 |
| Compound Name | : 1,1,2,2-Tetrachloroethane |
| Scan Number | : 1363 |
| Retention Time (minutes) | : 11.788 |
| Quant Ion | : 83.00 |
| Area | : 156324 |
| On-column Amount (ng) | : 4.7546 |
| Integration start scan | : 1357  Integration stop scan: 1379 |
| Y at integration start | : 0  Y at integration end: 0 |

WAT12 5147

Digitally signed by Lauren C. Temple on 09/24/2010 at 13:50.
Target 3.5 esignature user ID: lct01518




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d
Injection date and time: 24-SEP-2010 13:10

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:49

Sublist used: REV4+ACROI

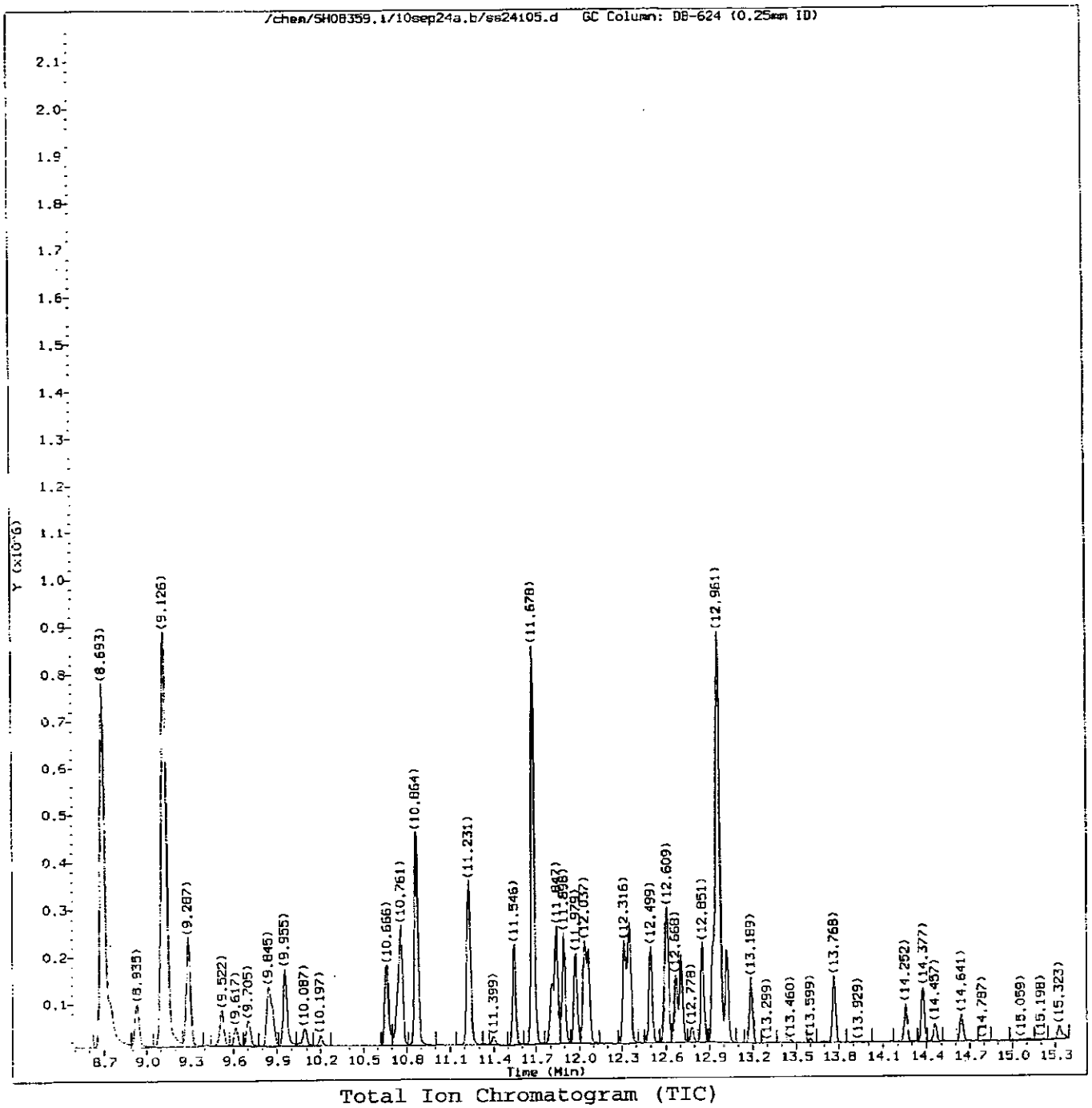
Date, time and analyst ID of latest file update: 24-Sep-2010 13:49 lct01518

Sample Name: VSTD0.5

Lab Sample ID: VSTD0.5

WAT12 0148

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:51.
Target 3.5 esignature user ID: lct01518




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d
Injection date and time: 24-SEP-2010 13:10

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:49

Sublist used: REV4+ACROI

Date, time and analyst ID of latest file update: 24-Sep-2010 13:49 lct01518

Sample Name: VSTD0.5

Lab Sample ID: VSTD0.5

WAT12 8149

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:51.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d
Injection date and time: 24-SEP-2010 13:10

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:49
Date, time and analyst ID of latest file update: 24-Sep-2010 13:49 lct01518

Sublist used: REV4+ACROI

Sample Name: VSTD0.5

Lab Sample ID: VSTD0.5

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | 1.954 | 85 | 37723 | 0.475 |
| 2) Chloromethane | (1) | 2.049 | 50 | 126605 | 0.544 |
| 3) Vinyl Chloride | (1) | 2.174 | 62 | 86907 | 0.523 |
| 4) Bromomethane | (1) | 2.482 | 94 | 48565 | 0.543 |
| 5) Chloroethane | (1) | 2.585 | 64 | 51305 | 0.552 |
| 6) Dichlorofluoromethane | (1) | 2.790 | 67 | 95854 | 0.531 |
| 7) Trichlorofluoromethane | (1) | 2.893 | 101 | 42205 | 0.496 |
| 8) Ethyl Ether | (1) | 3.113 | 59 | 25753 | 0.500 |
| 9) Acrolein | (1) | 3.267 | 56 | 158677 | 25.393 |
| 10) 1,1-Dichloroethene | (1) | 3.399 | 96 | 36675 | 0.518 |
| 11) Freon 113 | (1) | 3.421 | 101 | 31082 | 0.500 |
| 12) Acetone | (1) | 3.443 | 58 | 14476M | 6.050 |
| 13) Acetone(mz43) | (1) | 3.443 | 43 | 70722M | 6.335 |
| 14) Methyl Iodide | (1) | 3.575 | 142 | 73967 | 0.518 |
| 15) Carbon Disulfide | (1) | 3.677 | 76 | 129183 | 0.515 |
| 16) Allyl Chloride | (1) | 3.817 | 39 | 98983 | 0.515 |
| 17) Methylene Chloride | (1) | 3.963 | 84 | 43443 | 0.604 |
| 18) t-Butyl Alcohol | (1) | 4.095 | 59 | 16629M | 10.535 |
| 19) Acrylonitrile | (1) | 4.257 | 53 | 85275 | 6.759 |
| 21) trans-1,2-Dichloroethene | (1) | 4.308 | 96 | 44018 | 0.510 |
| 22) Methyl Tertiary Butyl Ether | (1) | 4.315 | 73 | 42984 | 0.513 |
| 23) 1,1-Dichloroethane | (1) | 4.851 | 63 | 102597 | 0.528 |
| 24) di-Isopropyl Ether | (1) | 4.953 | 87 | 22771 | 0.488 |
| 26) Ethyl t-Butyl Ether | (1) | 5.445 | 59 | 102670 | 0.510 |
| 27) cis-1,2-Dichloroethene | (1) | 5.650 | 96 | 42988 | 0.505 |
| 28) 2,2-Dichloropropane | (1) | 5.665 | 77 | 42286 | 0.521 |
| 29) 2-Butanone | (1) | 5.672 | 43 | 104999M | 5.083 |
| 30) Propionitrile | (1) | 5.760 | 54 | 43549 | 9.967 |
| 31) Methyl Acrylate | (1) | 5.811 | 55 | 100270 | 2.644 |
| 32) Methacrylonitrile | (1) | 5.973 | 67 | 61845 | 4.941 |
| 33) Bromochloromethane | (1) | 5.980 | 128 | 14091 | 0.514 |
| 34) Tetrahydrofuran | (1) | 6.068 | 71 | 20983 | 7.701 |
| 35) Chloroform | (1) | 6.105 | 83 | 61495 | 0.532 |
| 36) 1,1,1-Trichloroethane | (1) | 6.398 | 97 | 40722 | 0.511 |
| 37) 1-Chlorobutane | (1) | 6.530 | 49 | 4101 | 0.473 |
| 38) 1,1-Dichloropropene | (1) | 6.625 | 75 | 57063 | 0.519 |
| 39) Carbon Tetrachloride | (1) | 6.633 | 117 | 31776 | 0.503 |
| 40) Benzene | (1) | 6.933 | 78 | 159021 | 0.534 |
| 41) 1,2-Dichloroethane | (1) | 6.955 | 62 | 30245 | 0.512 |

M = Compound was manually integrated.


WAT12 0158

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:51.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d
Injection date and time: 24-SEP-2010 13:10

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:49
Date, time and analyst ID of latest file update: 24-Sep-2010 13:49 lct01518

Sublist used: REV4+ACROI

Sample Name: VSTD0.5

Lab Sample ID: VSTD0.5

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 42) t-Amyl Methyl Ether | (1) | 7.109 | 73 | 54900 | 0.501 |
| 43) *Fluorobenzene | (1) | 7.329 | 96 | 1229614 | 5.000 |
| 44) Trichloroethene | (1) | 7.813 | 95 | 42993 | 0.517 |
| 45) 1,2-Dichloropropane | (1) | 8.099 | 63 | 51788 | 0.521 |
| 46) Dibromomethane | (1) | 8.239 | 93 | 13838 | 0.503 |
| 47) Methyl Methacrylate | (1) | 8.253 | 69 | 10416 | 0.465 |
| 48) Bromodichloromethane | (1) | 8.429 | 83 | 33569 | 0.503 |
| 49) 2-Nitropropane | (1) | 8.701 | 46 | 18480 | 56.622 |
| 50) Chloroacetonitrile | (1) | 8.745 | 75 | 39658 | 30.784 |
| 51) cis-1,3-Dichloropropene | (1) | 8.935 | 75 | 45945 | 0.506 |
| 52) 4-Methyl-2-Pentanone | (1) | 9.111 | 58 | 65757 | 4.963 |
| 53) 1,1-Dichloropropanone | (1) | 9.126 | 83 | 27806 | 61.359 |
| 54) Toluene | (1) | 9.287 | 92 | 96643 | 0.529 |
| 55) trans-1,3-Dichloropropene | (1) | 9.522 | 75 | 30493 | 0.491 |
| 56) Ethyl Methacrylate | (1) | 9.617 | 69 | 16650 | 0.475 |
| 57) 1,1,2-Trichloroethane | (1) | 9.705 | 83 | 13999 | 0.493 |
| 59) Tetrachloroethene | (1) | 9.837 | 166 | 38392 | 0.510 |
| 60) 1,3-Dichloropropane | (1) | 9.874 | 76 | 28892 | 0.505 |
| 61) 2-Hexanone | (1) | 9.955 | 58 | 58632 | 4.779 |
| 62) Dibromochloromethane | (1) | 10.087 | 129 | 19568 | 0.492 |
| 63) 1,2-Dibromoethane | (1) | 10.197 | 107 | 16043 | 0.495 |
| 64) Chlorobenzene | (1) | 10.659 | 112 | 83806 | 0.508 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | 10.732 | 131 | 24852 | 0.500 |
| 66) Ethylbenzene | (1) | 10.761 | 106 | 48942 | 0.493 |
| 68) m+p-Xylene | (1) | 10.864 | 106 | 122250 | 1.020 |
| 69) o-Xylene | (1) | 11.223 | 106 | 55365 | 0.487 |
| 70) Styrene | (1) | 11.231 | 104 | 82182 | 0.466 |
| 71) Bromoform | (1) | 11.399 | 173 | 8261 | 0.434 |
| 73) Isopropylbenzene | (1) | 11.539 | 120 | 32645 | 0.499 |
| 74) $4-Bromofluorobenzene | (1) | 11.678 | 174 | 224235 | 4.831 |
| 75) 1,1,2,2-Tetrachloroethane | (1) | 11.795 | 83 | 16046M | 0.511 |
| 72) Xylene (Total) | (1) | | 106 | 177615 | 1.506 |
| 76) Bromobenzene | (1) | 11.810 | 156 | 28729 | 0.502 |
| 77) 1,2,3-Trichloropropane | (1) | 11.839 | 110 | 3170 | 0.494 |
| 78) trans-1,4-Dichloro-2-Butene | (1) | 11.847 | 53 | 48681 | 4.789 |
| 79) n-Propylbenzene | (1) | 11.891 | 120 | 34939 | 0.510 |
| 80) 2-Chlorotoluene | (1) | 11.971 | 126 | 32012 | 0.508 |
| 81) 1,3,5-Trimethylbenzene | (1) | 12.037 | 105 | 105538 | 0.514 |
| 82) 4-Chlorotoluene | (1) | 12.067 | 126 | 32649 | 0.508 |

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:51.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 13:10  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:49
Date, time and analyst ID of latest file update: 24-Sep-2010 13:49 lct01518

Sample Name: VSTD0.5  Lab Sample ID: VSTD0.5

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 83) tert-Butylbenzene | (1) | 12.316 | 134 | 22672 | 0.494 |
| 84) Pentachloroethane | (1) | 12.338 | 167 | 14295 | 0.477 |
| 85) 1,2,4-Trimethylbenzene | (1) | 12.353 | 105 | 108292 | 0.515 |
| 86) sec-Butylbenzene | (1) | 12.499 | 134 | 23895 | 0.505 |
| 87) 1,3-Dichlorobenzene | (1) | 12.595 | 146 | 57535 | 0.507 |
| 88) p-Isopropyltoluene | (1) | 12.609 | 119 | 97296 | 0.515 |
| 89) 1,4-Dichlorobenzene | (1) | 12.668 | 146 | 55843 | 0.515 |
| 90) n-Butylbenzene | (1) | 12.947 | 92 | 68009 | 0.539 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.961 | 152 | 196856 | 4.642 |
| 92) 1,2-Dichlorobenzene | (1) | 12.976 | 146 | 44157 | 0.520 |
| 93) Hexachloroethane | (1) | 13.189 | 201 | 21309 | 0.596 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | 13.599 | 157 | 1224 | 0.380 |
| 95) Nitrobenzene | (1) | 13.768 | 77 | 6414 | 8.647 |
| 96) 1,2,4-Trichlorobenzene | (1) | 14.252 | 180 | 25460 | 0.544 |
| 97) Hexachlorobutadiene | (1) | 14.369 | 225 | 21974 | 0.679 |
| 98) Naphthalene | (1) | 14.457 | 128 | 24768 | 0.484 |
| 99) 1,2,3-Trichlorobenzene | (1) | 14.641 | 180 | 17217 | 0.534 |

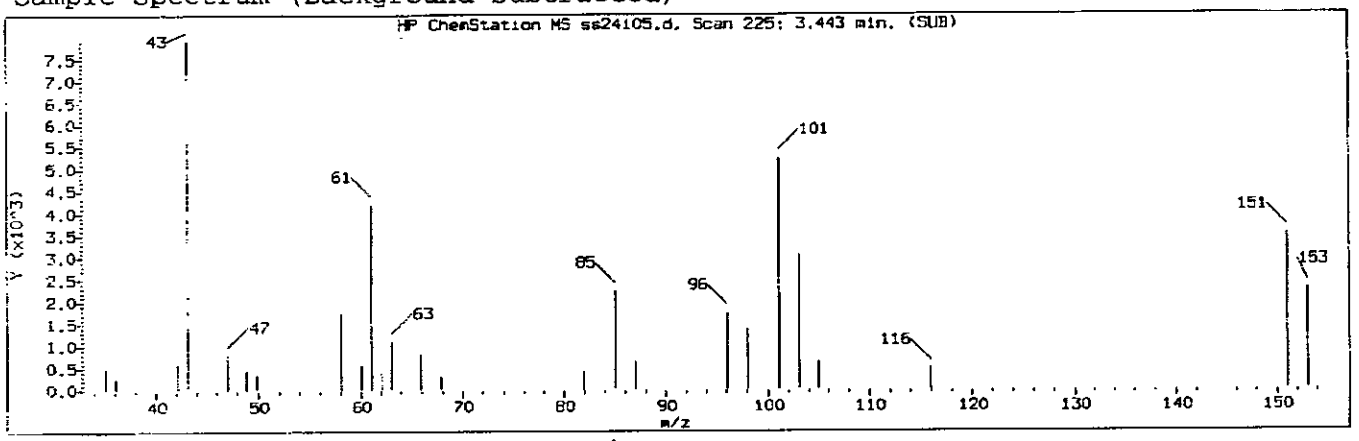
$ = Compound is a surrogate standard.



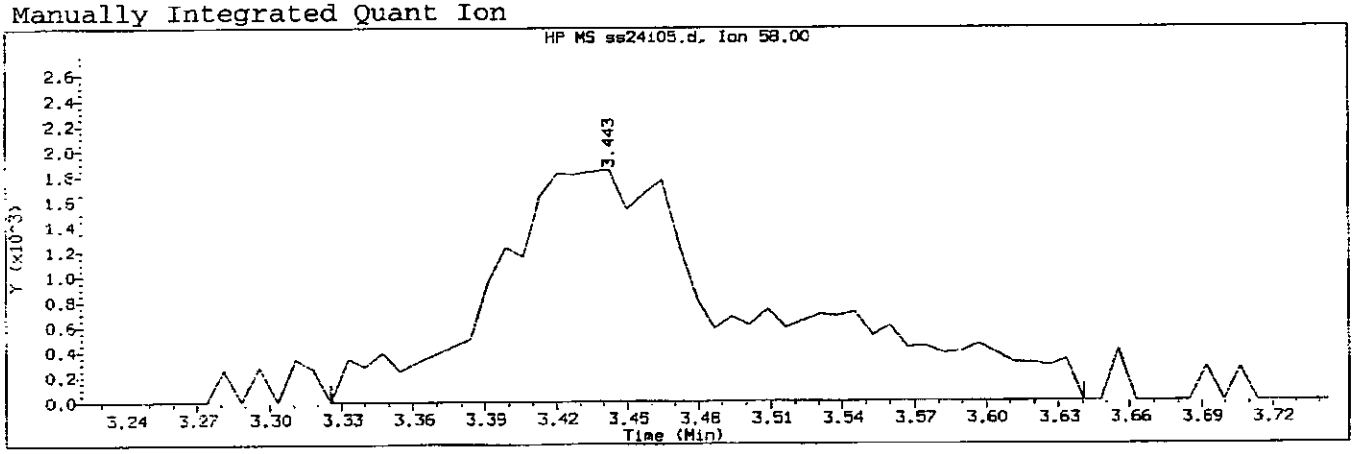
WAT12 8152

Digitally signed by Lauren C. Temple
on 09/24/2010 at 13:51.
Target 3.5 esignature user ID: lct01518

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 13:10  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:49
Date, time and analyst ID of latest file update: 24-Sep-2010 13:49 lct01518

Sample Name: VSTD0.5  Lab Sample ID: VSTD0.5

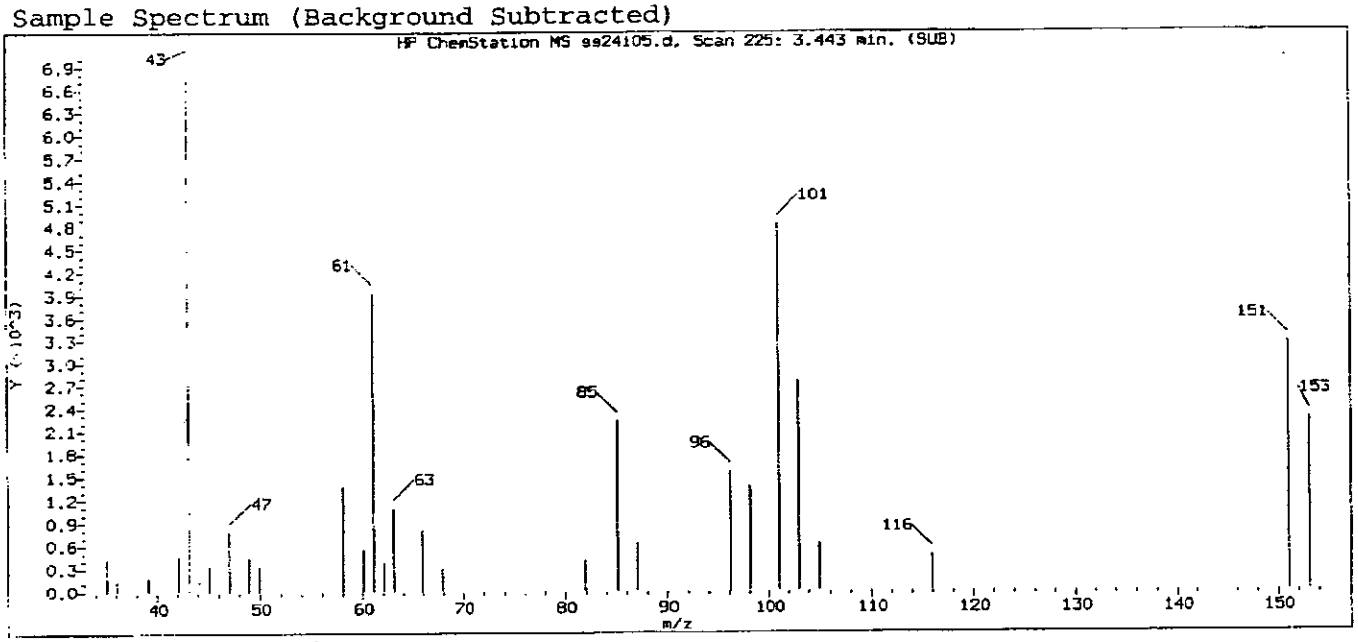
| | | | |
|---|---|---|---|
| Compound Number | : 12 | | |
| Compound Name | : Acetone | | |
| Scan Number | : 225 | | |
| Retention Time (minutes) | : 3.443 | | |
| Quant Ion | : 58.00 | | |
| Area (flag) | : 14476M | | |
| On-Column Amount (ng) | : 6.0497 | | |
| Integration start scan | : 208 | Integration stop scan: | 251 |
| Y at integration start | : 0 | Y at integration end: | 0 |

Reason for manual integration: improper integration

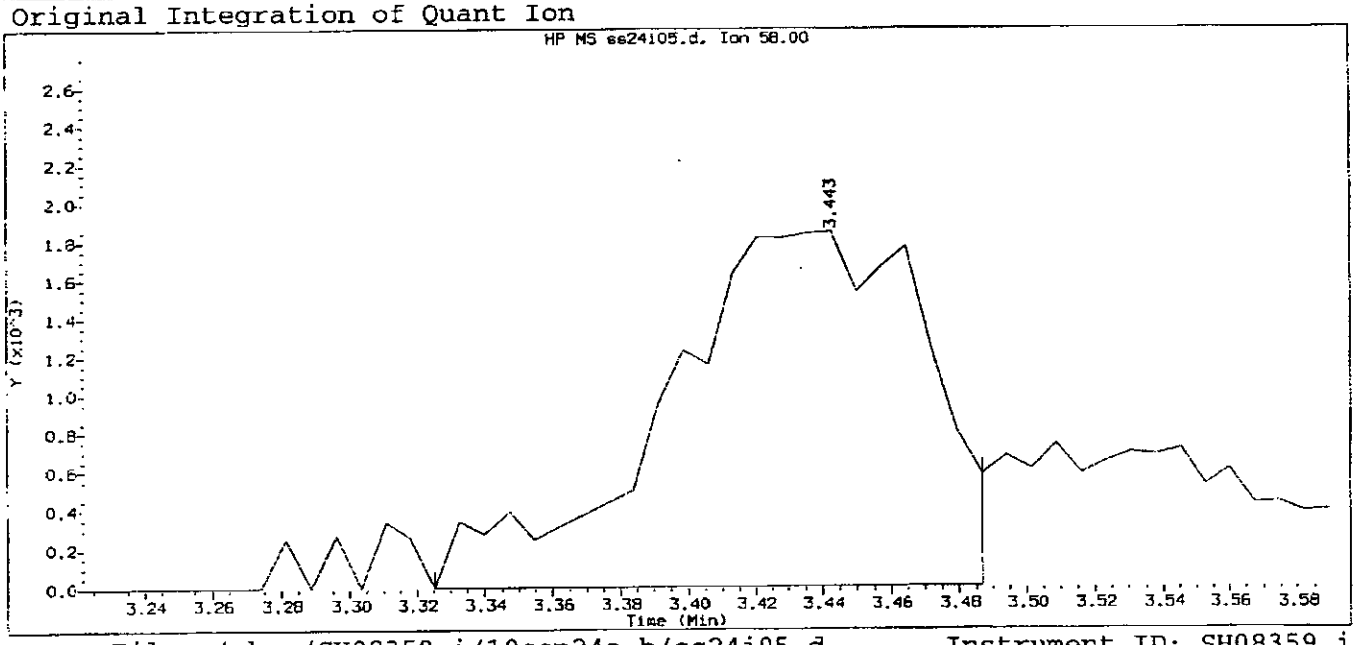
Analyst responsible for change: Digitally signed by Lauren C. Temple on 09/24/2010 at 13:51. Target 3.5 esignature user ID: lct01518

GC/MS audit/management approval: _____ WAT12 0153

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 13:10  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:35
Date, time and analyst ID of latest file update: 24-Sep-2010 13:35 Automation

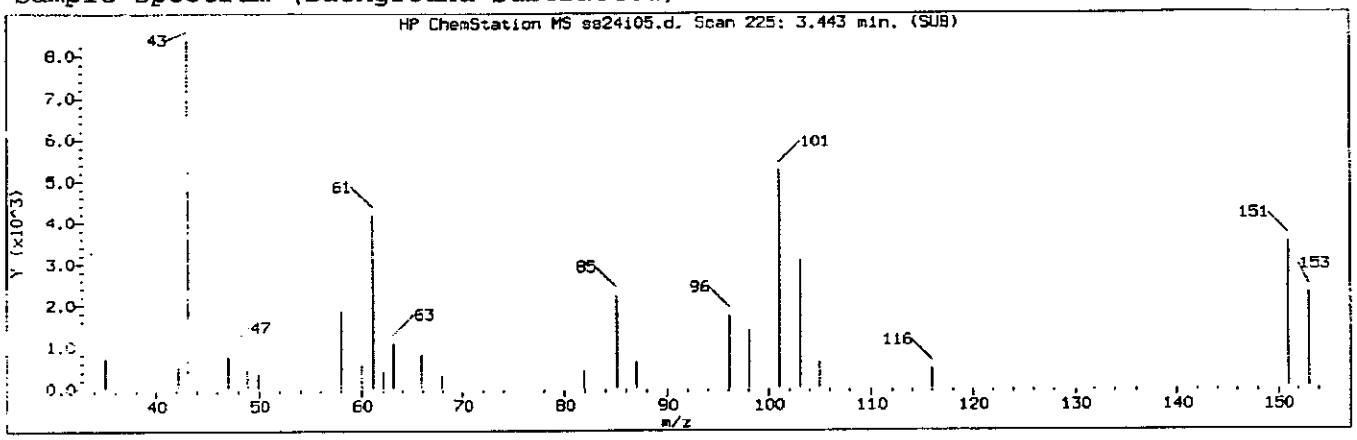
Sample Name: VSTD0.5  Lab Sample ID: VSTD0.5

Compound Number : 12
Compound Name : Acetone
Scan Number : 225
Retention Time (minutes): 3.443
Quant Ion : 58.00
Area : 9886
On-column Amount (ng) : 4.5700
Integration start scan : 208  Integration stop scan: 230
Y at integration start : 0  Y at integration end: 0

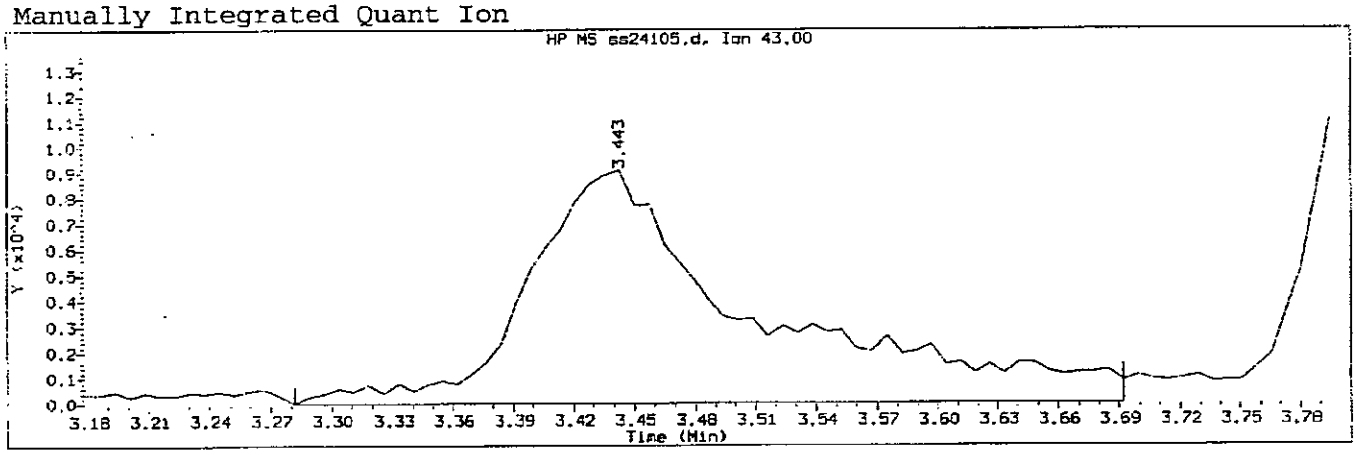
WAT12 8154

Digitally signed by Lauren C. Temple on 09/24/2010 at 13:51.
Target 3.5 esignature user ID: lct01518

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 13:10  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:49
Date, time and analyst ID of latest file update: 24-Sep-2010 13:49 lct01518

Sample Name: VSTD0.5  Lab Sample ID: VSTD0.5

| | | | |
|---|---|---|---|
| Compound Number | : 13 | | |
| Compound Name | : Acetone(mz43) | | |
| Scan Number | : 225 | | |
| Retention Time (minutes) | : 3.443 | | |
| Quant Ion | : 43.00 | | |
| Area (flag) | : 70722M | | |
| On-Column Amount (ng) | : 6.3348 | | |
| Integration start scan | : 202 | Integration stop scan: | 258 |
| Y at integration start | : 0 | Y at integration end: | 0 |

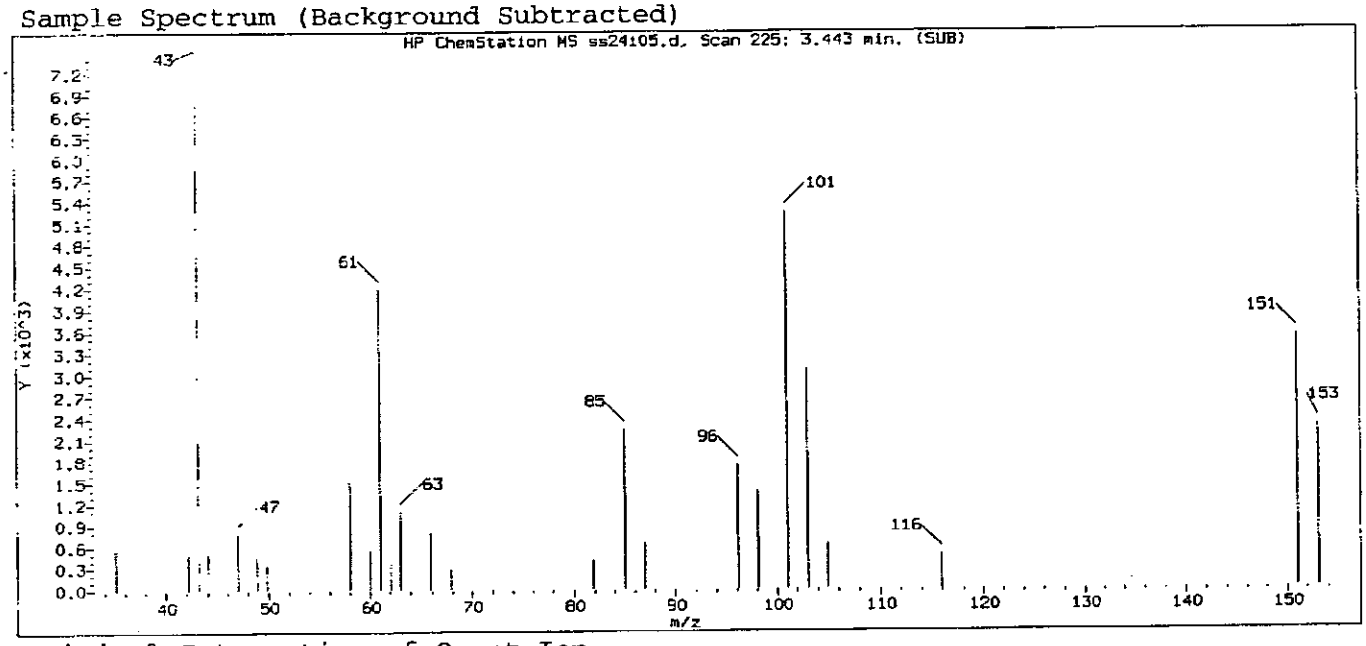
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Lauren C. Temple on 09/24/2010 at 13:51. Target 3.5 esignature user ID: lct01518

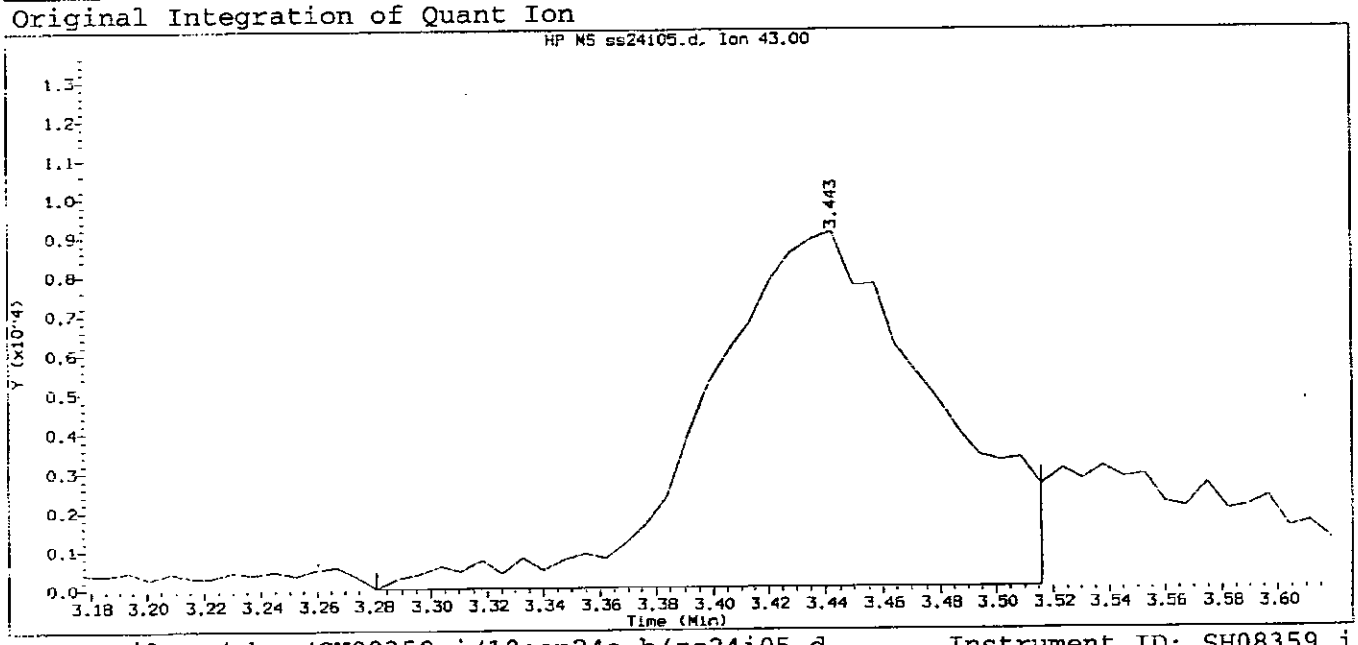
GC/MS audit/management approval: Dominique Cyzyn

WAT12 B155

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 13:10  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:35
Date, time and analyst ID of latest file update: 24-Sep-2010 13:35 Automation

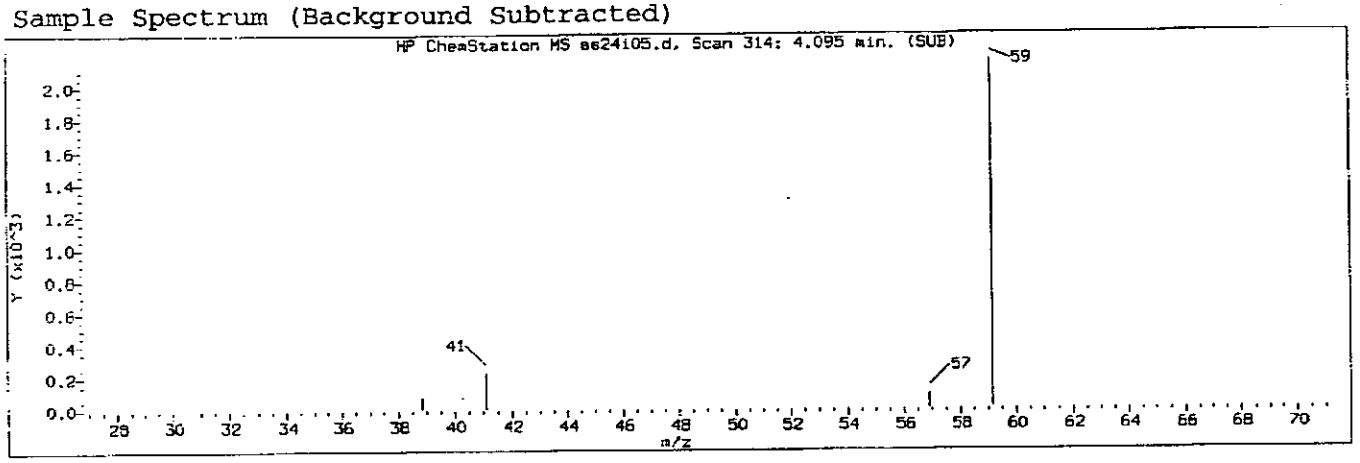
Sample Name: VSTD0.5  Lab Sample ID: VSTD0.5

Compound Number : 13
Compound Name : Acetone(mz43)
Scan Number : 225
Retention Time (minutes): 3.443
Quant Ion : 43.00
Area : 50562
On-column Amount (ng) : 4.9785
Integration start scan : 202  Integration stop scan: 234
Y at integration start : 0  Y at integration end: 0

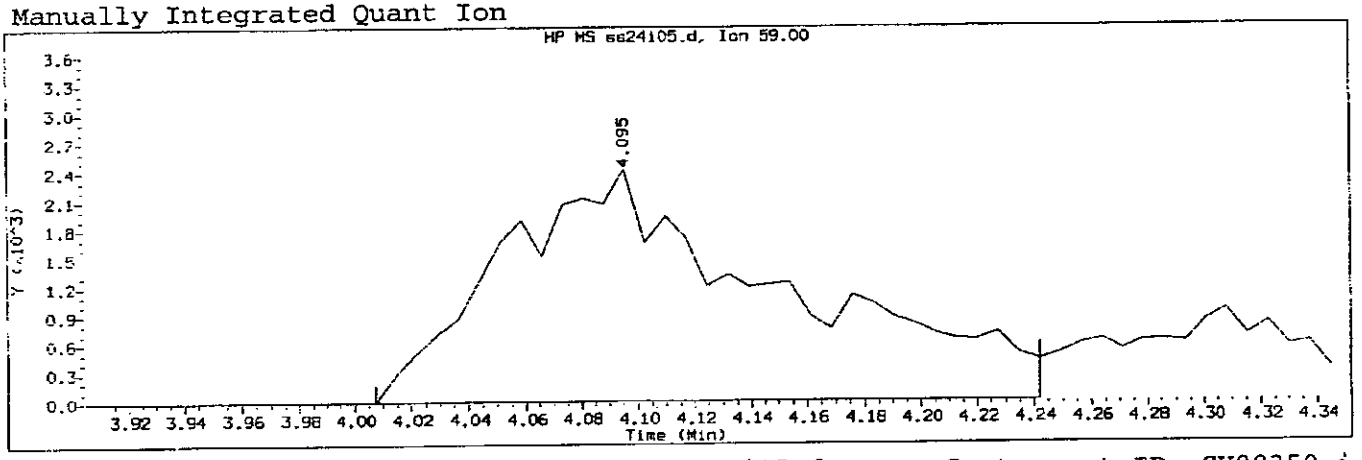
WAT12 8156

Digitally signed by Lauren C. Temple on 09/24/2010 at 13:51.
Target 3.5 esignature user ID: lct01518

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 13:10  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:49
Date, time and analyst ID of latest file update: 24-Sep-2010 13:49 lct01518

Sample Name: VSTD0.5  Lab Sample ID: VSTD0.5

| | | | |
|---|---|---|---|
| Compound Number | : 18 | | |
| Compound Name | : t-Butyl Alcohol | | |
| Scan Number | : 314 | | |
| Retention Time (minutes) | : 4.095 | | |
| Quant Ion | : 59.00 | | |
| Area (flag) | : 16629M | | |
| On-Column Amount (ng) | : 10.5345 | | |
| Integration start scan | : 301 | Integration stop scan: | 333 |
| Y at integration start | : 0 | Y at integration end: | 0 |

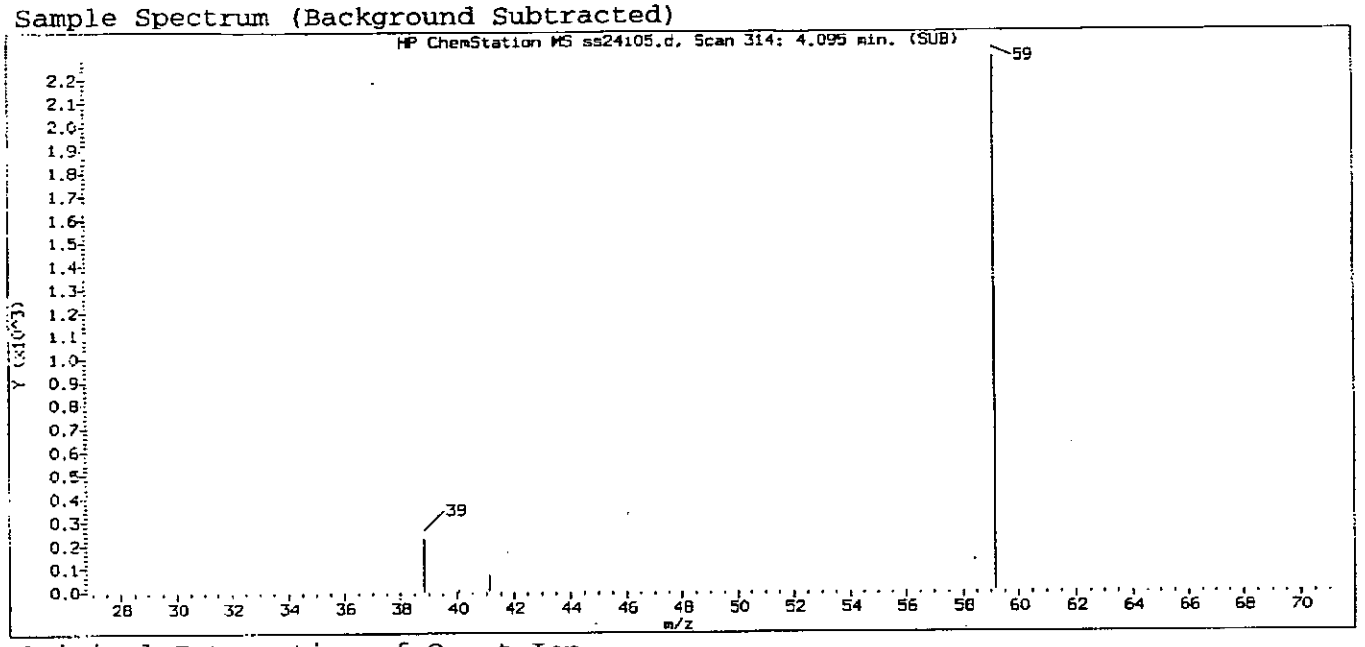
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Lauren C. Temple on 09/24/2010 at 13:51. Target 3.5 esignature user ID: lct01518

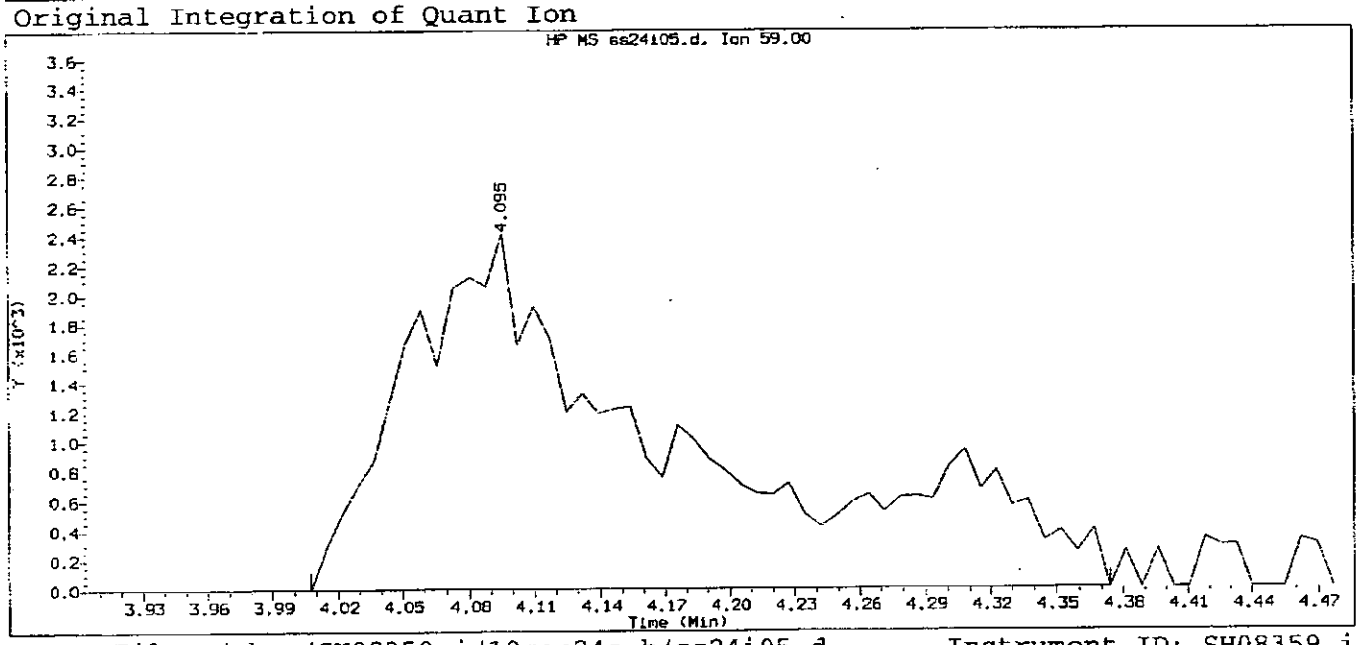
GC/MS audit/management approval: [signature] 09/24/10

WAT12 0157

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 13:10  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:35
Date, time and analyst ID of latest file update: 24-Sep-2010 13:35 Automation

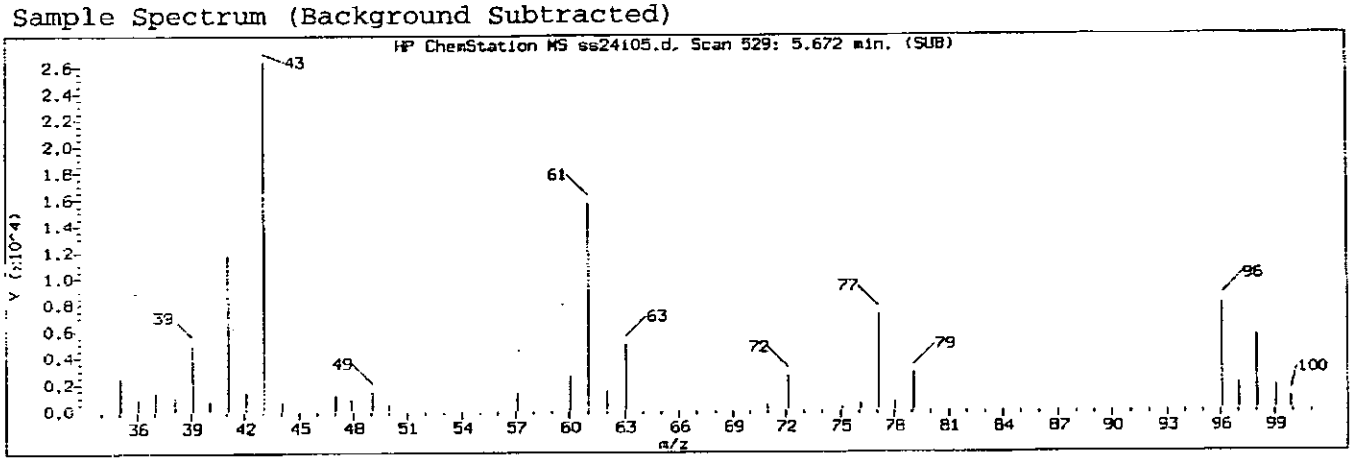
Sample Name: VSTD0.5  Lab Sample ID: VSTD0.5

Compound Number : 18
Compound Name : t-Butyl Alcohol
Scan Number : 314
Retention Time (minutes): 4.095
Quant Ion : 59.00
Area : 20938
On-column Amount (ng) : 12.4172
Integration start scan : 301  Integration stop scan: 351
Y at integration start : 0  Y at integration end: 0

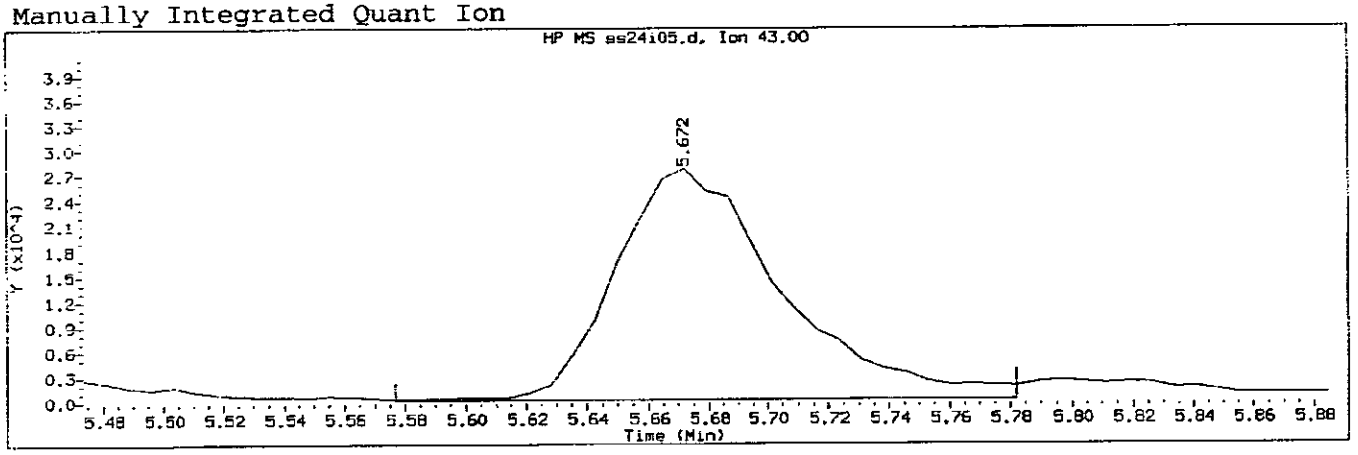
WAT12 0158

Digitally signed by Lauren C. Temple on 09/24/2010 at 13:51.
Target 3.5 esignature user ID: lct01518

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 13:10  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:49
Date, time and analyst ID of latest file update: 24-Sep-2010 13:49 lct01518

Sample Name: VSTD0.5  Lab Sample ID: VSTD0.5

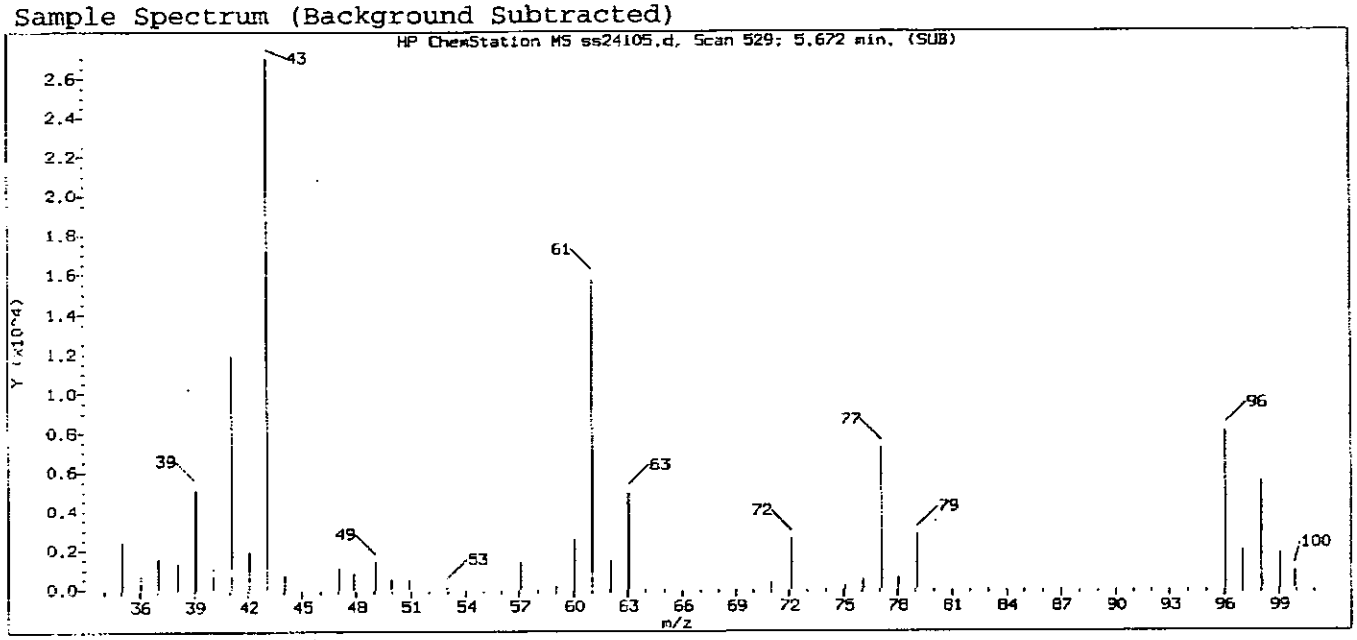
| | | | |
|---|---|---|---|
| Compound Number | : 29 | | |
| Compound Name | : 2-Butanone | | |
| Scan Number | : 529 | | |
| Retention Time (minutes) | : 5.672 | | |
| Quant Ion | : 43.00 | | |
| Area (flag) | : 104999M | | |
| On-Column Amount (ng) | : 5.0829 | | |
| Integration start scan | : 515 | Integration stop scan: | 543 |
| Y at integration start | : 290 | Y at integration end: | 278 |

Reason for manual integration: improper integration

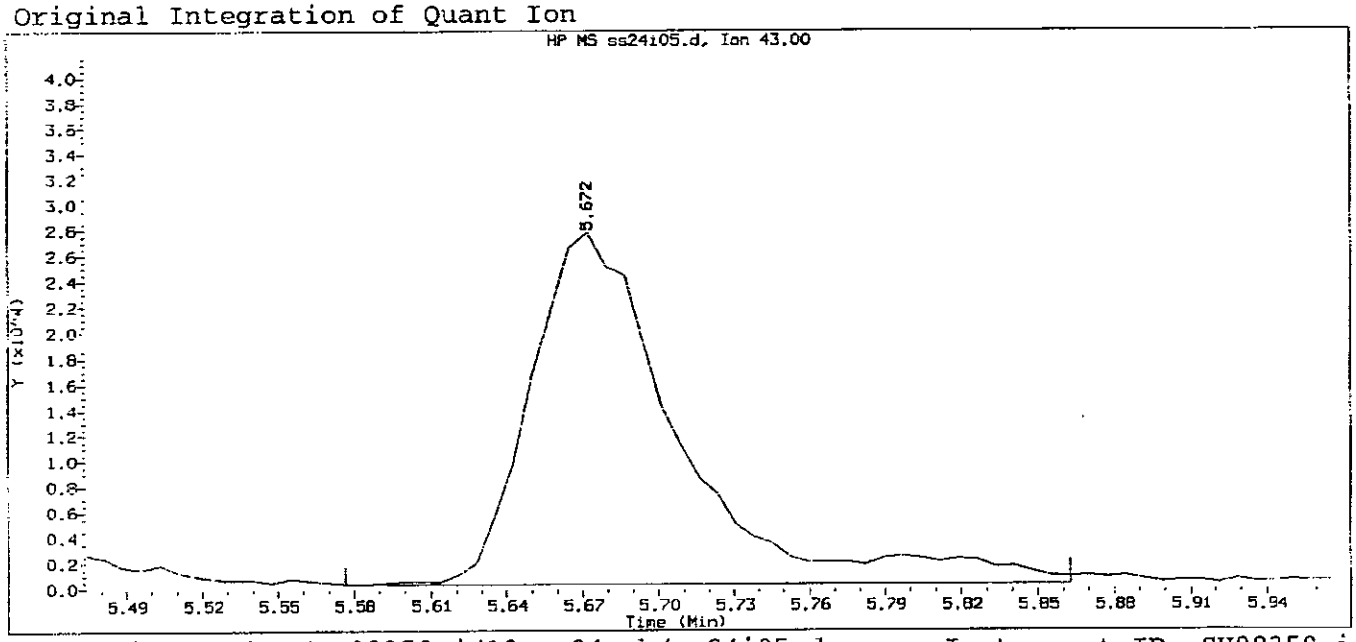
Analyst responsible for change: Digitally signed by Lauren C. Temple on 09/24/2010 at 13:51. Target 3.5 esignature user ID: lct01518

GC/MS audit/management approval: [illegible] cg24w WAT12 0159

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 13:10  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:35
Date, time and analyst ID of latest file update: 24-Sep-2010 13:35 Automation

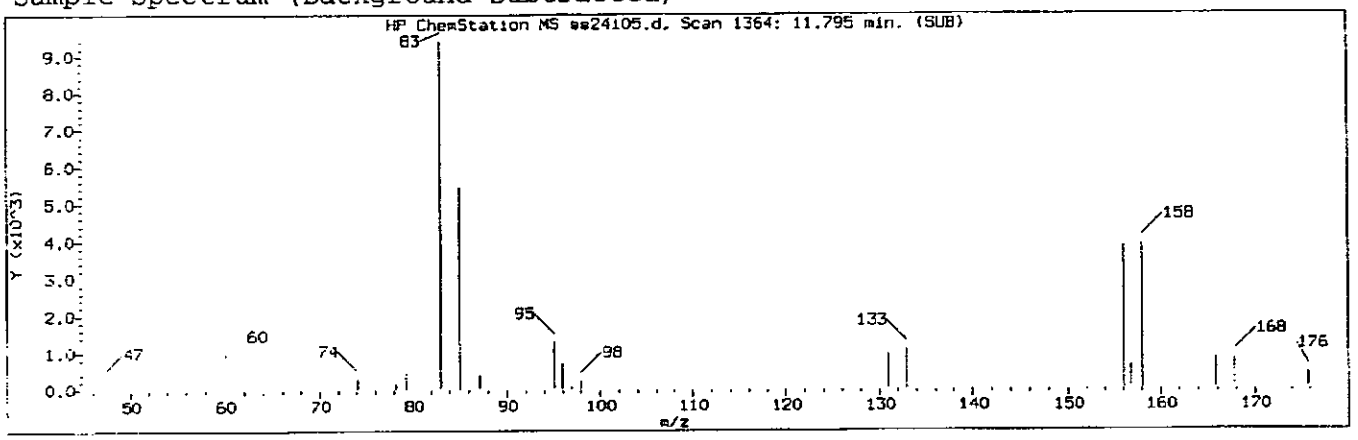
Sample Name: VSTD0.5  Lab Sample ID: VSTD0.5

Compound Number : 29
Compound Name : 2-Butanone
Scan Number : 529
Retention Time (minutes): 5.672
Quant Ion : 43.00
Area : 112498
On-column Amount (ng) : 5.3489
Integration start scan : 515  Integration stop scan: 554
Y at integration start : 290  Y at integration end: 273

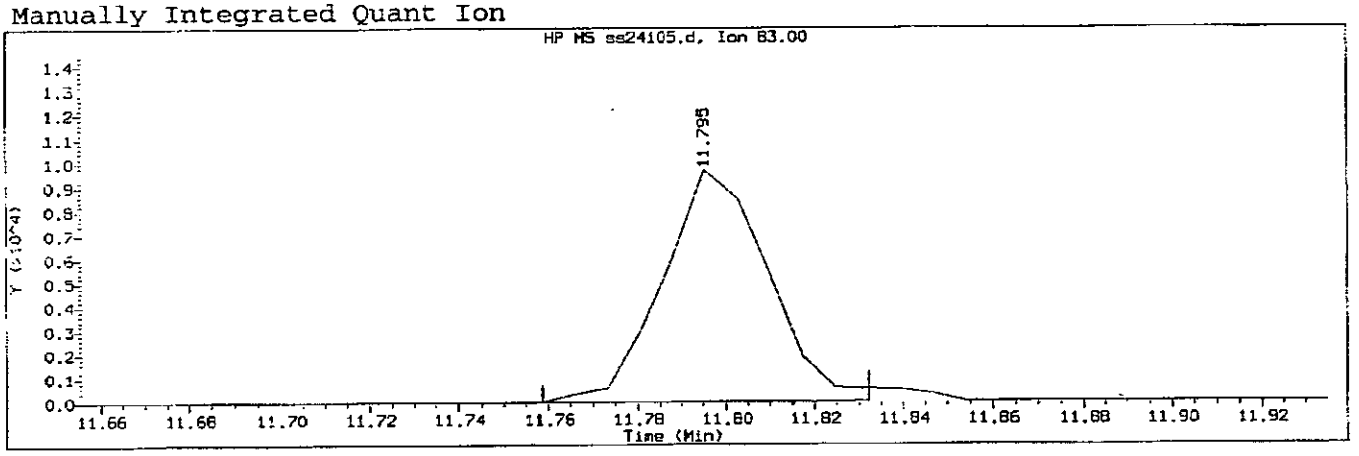
WAT12 0168

Digitally signed by Lauren C. Temple on 09/24/2010 at 13:51.
Target 3.5 esignature user ID: lct01518

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 13:10  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:49
Date, time and analyst ID of latest file update: 24-Sep-2010 13:49 lct01518

Sample Name: VSTD0.5  Lab Sample ID: VSTD0.5

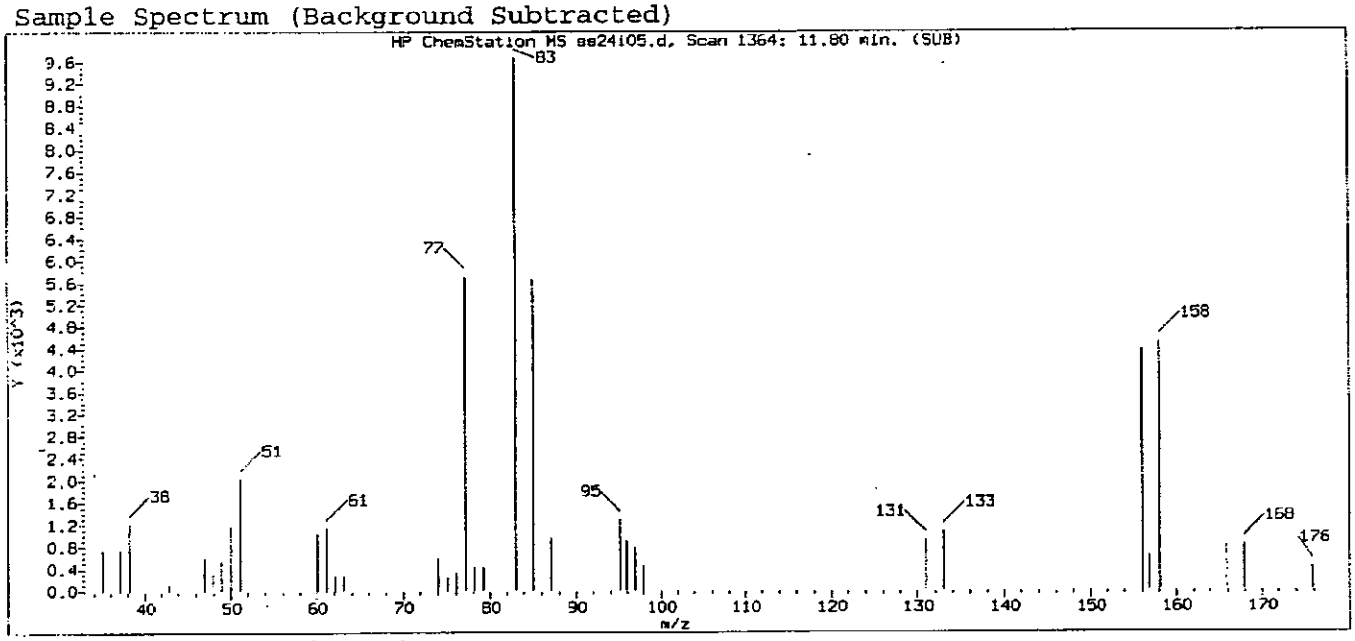
| | | |
|---|---|---|
| Compound Number | : | 75 |
| Compound Name | : | 1,1,2,2-Tetrachloroethane |
| Scan Number | : | 1364 |
| Retention Time (minutes) | : | 11.795 |
| Quant Ion | : | 83.00 |
| Area (flag) | : | 16046M |
| On-Column Amount (ng) | : | 0.5111 |
| Integration start scan | : | 1358  Integration stop scan: 1368 |
| Y at integration start | : | 0  Y at integration end: 0 |

Reason for manual integration: improper integration

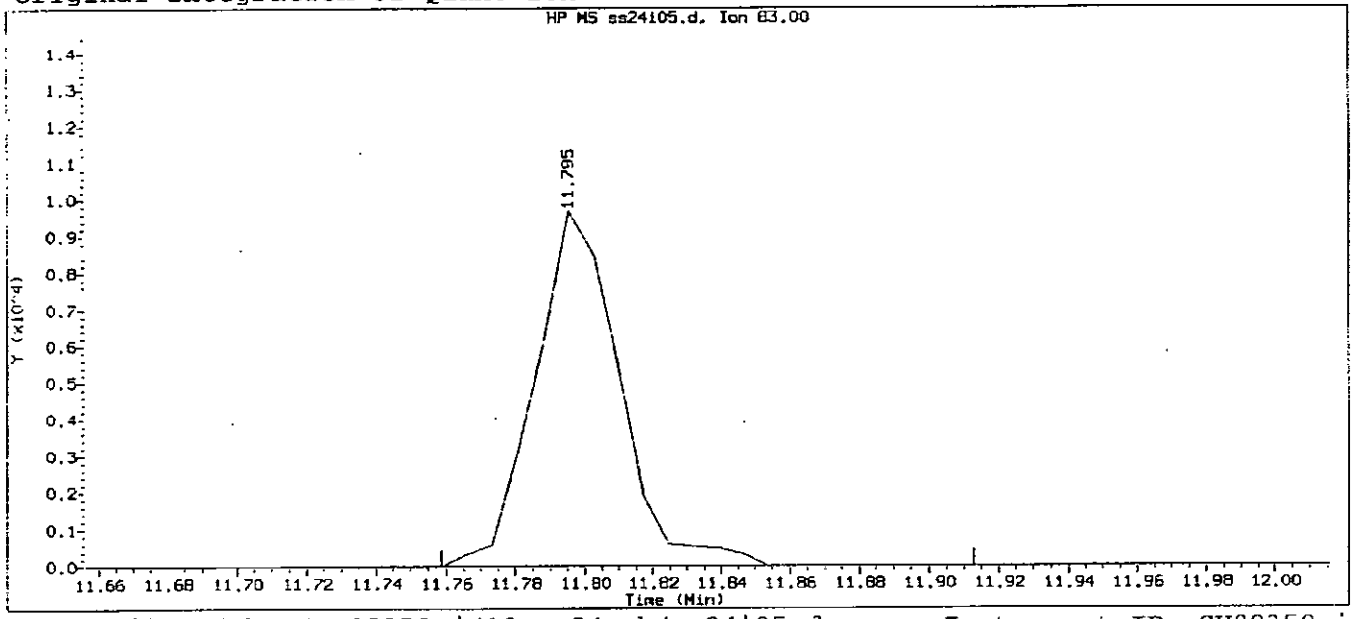
Analyst responsible for change: Digitally signed by Lauren C. Temple on 09/24/2010 at 13:51 Target 3.5 esignature user ID: lct01518

GC/MS audit/management approval: _____ 09/24/10 WAT12 0161

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion



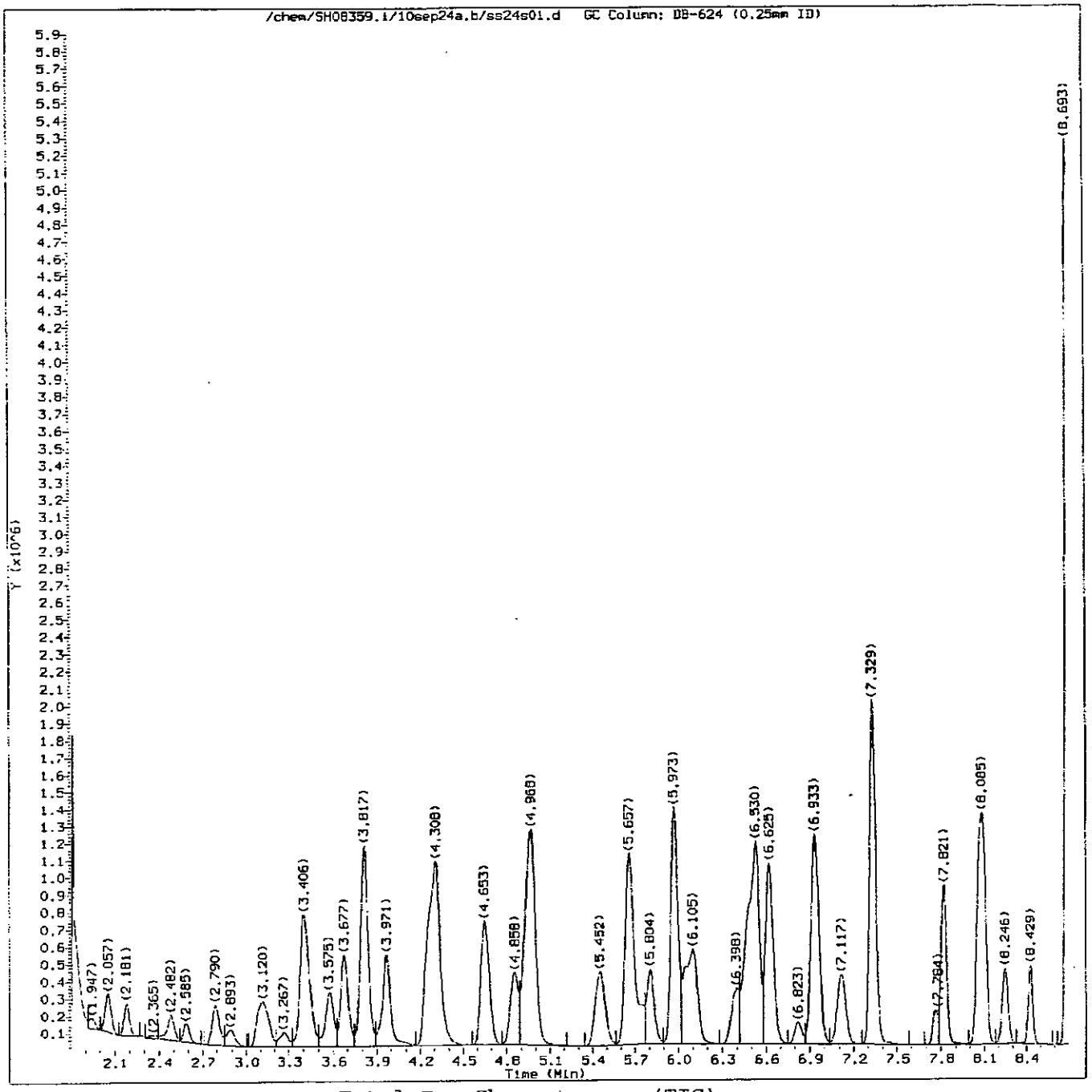

Data File: /chem/SH08359.i/10sep24a.b/ss24i05.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 13:10  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 24-SEP-2010 13:35
Date, time and analyst ID of latest file update: 24-Sep-2010 13:35 Automation

Sample Name: VSTD0.5  Lab Sample ID: VSTD0.5

Compound Number : 75
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1364
Retention Time (minutes): 11.795
Quant Ion : 83.00
Area : 16401
On-column Amount (ng) : 0.5105
Integration start scan : 1358  Integration stop scan: 1379  WAT12 B162
Y at integration start : 0  Y at integration end: 0

Digitally signed by Lauren C. Temple on 09/24/2010 at 13:51.
Target 3.5 esignature user ID: lct01518




Total Ion Chromatogram (TIC)

Target Revision 3.5

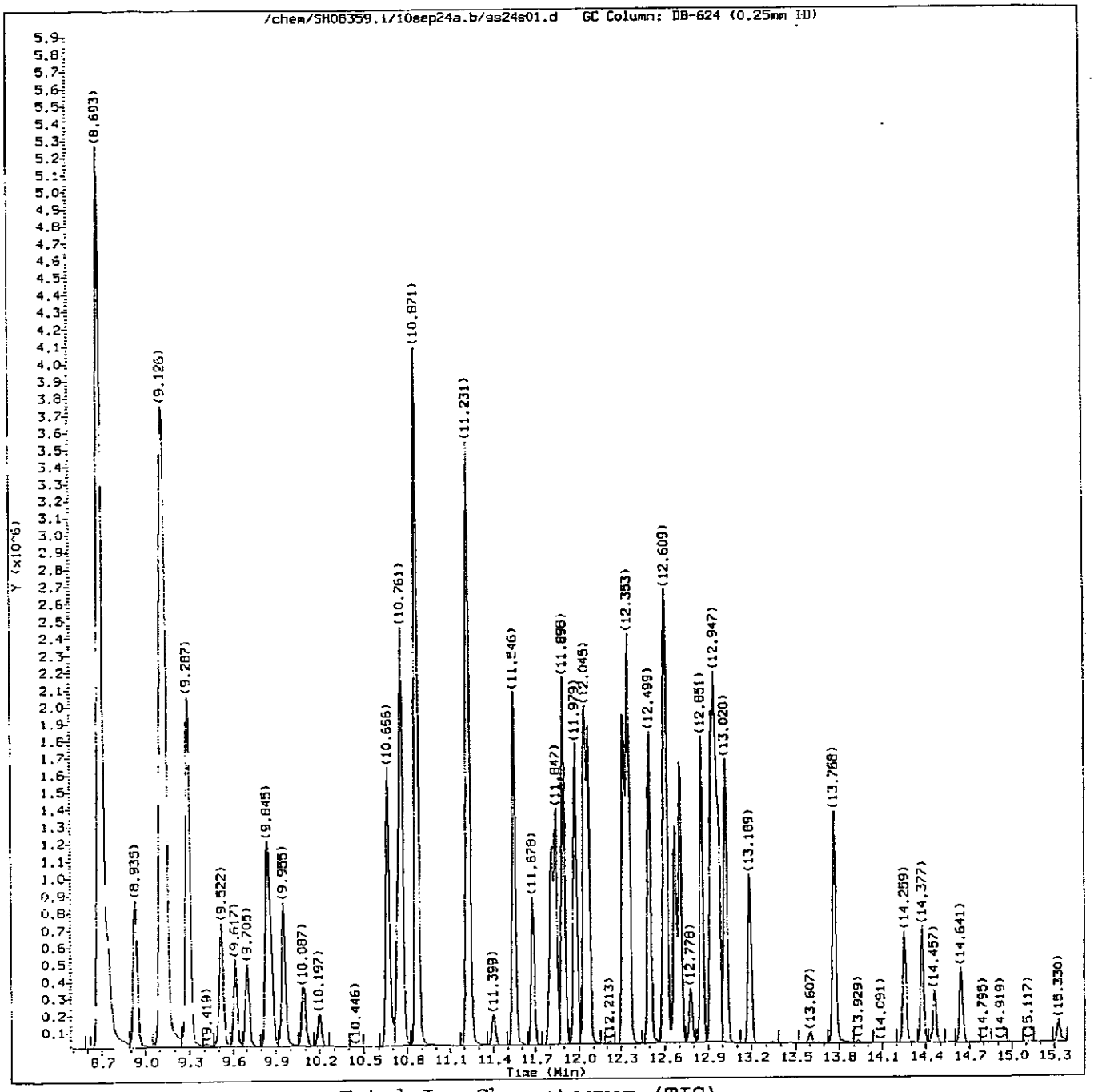
Data File: /chem/SH08359.i/10sep24a.b/ss24s01.d Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 14:03 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m Sublist used: REV4+ACRO
Calibration date and time: 24-SEP-2010 13:50
Date, time and analyst ID of latest file update: 24-Sep-2010 14:21 lct01518

Sample Name: LFBS22 Lab Sample ID: LFBS22

WAT12 8163

Digitally signed by Lauren C. Temple
on 09/24/2010 at 14:21.
Target 3.5 esignature user ID: lct01518




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24s01.d
Injection date and time: 24-SEP-2010 14:03

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:50

Sublist used: REV4+ACRO

Date, time and analyst ID of latest file update: 24-Sep-2010 14:21 lct01518

Sample Name: LFBS22

Lab Sample ID: LFBS22

WAT12 0164

Digitally signed by Lauren C. Temple
on 09/24/2010 at 14:21.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24s01.d
Injection date and time: 24-SEP-2010 14:03

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:50
Date, time and analyst ID of latest file update: 24-Sep-2010 14:21 lct01518

Sublist used: REV4+ACRO

Sample Name: LFBS22

Lab Sample ID: LFBS22

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | 1.954 | 85 | 150685 | 1.929 |
| 2) Chloromethane | (1) | 2.057 | 50 | 474635 | 2.073 |
| 3) Vinyl Chloride | (1) | 2.181 | 62 | 322891 | 1.974 |
| 4) Bromomethane | (1) | 2.489 | 94 | 178379 | 2.025 |
| 5) Chloroethane | (1) | 2.585 | 64 | 198866 | 2.173 |
| 6) Dichlorofluoromethane | (1) | 2.790 | 67 | 382909 | 2.156 |
| 7) Trichlorofluoromethane | (1) | 2.878 | 101 | 165795 | 1.980 |
| 8) Ethyl Ether | (1) | 3.105 | 59 | 242351 | 4.777 |
| 9) Acrolein | (1) | 3.274 | 56 | 205874 | 33.466 |
| 10) 1,1-Dichloroethene | (1) | 3.399 | 96 | 341107 | 4.894 |
| 11) Freon 113 | (1) | 3.421 | 101 | 298059 | 4.875 |
| 12) Acetone | (1) | 3.421 | 58 | 76610 | 32.521 |
| 14) Methyl Iodide | (1) | 3.582 | 142 | 705842 | 5.019 |
| 15) Carbon Disulfide | (1) | 3.677 | 76 | 1230936 | 4.980 |
| 16) Allyl Chloride | (1) | 3.817 | 39 | 890397 | 4.706 |
| 17) Methylene Chloride | (1) | 3.963 | 84 | 324229 | 4.577 |
| 18) t-Butyl Alcohol | (1) | 4.073 | 59 | 68124 | 43.837 |
| 19) Acrylonitrile | (1) | 4.264 | 53 | 1314061 | 105.791 |
| 21) trans-1,2-Dichloroethene | (1) | 4.308 | 96 | 414876 | 4.886 |
| 22) Methyl Tertiary Butyl Ether | (1) | 4.323 | 73 | 378109 | 4.581 |
| 23) 1,1-Dichloroethane | (1) | 4.851 | 63 | 908413M | 4.753 |
| 24) di-Isopropyl Ether | (1) | 4.946 | 87 | 220148 | 4.796 |
| 26) Ethyl t-Butyl Ether | (1) | 5.452 | 59 | 923458 | 4.661 |
| 27) cis-1,2-Dichloroethene | (1) | 5.650 | 96 | 397494 | 4.742 |
| 29) 2-Butanone | (1) | 5.665 | 43 | 736044 | 36.193 |
| 28) 2,2-Dichloropropane | (1) | 5.679 | 77 | 380366 | 4.759 |
| 30) Propionitrile | (1) | 5.753 | 54 | 403934 | 93.910 |
| 31) Methyl Acrylate | (1) | 5.804 | 55 | 879279 | 23.547 |
| 32) Methacrylonitrile | (1) | 5.973 | 67 | 437836 | 35.534 |
| 33) Bromochloromethane | (1) | 5.987 | 128 | 126535 | 4.686 |
| 34) Tetrahydrofuran | (1) | 6.053 | 71 | 111725 | 41.651 |
| 35) Chloroform | (1) | 6.112 | 83 | 553195 | 4.858 |
| 36) 1,1,1-Trichloroethane | (1) | 6.391 | 97 | 377689 | 4.818 |
| 37) 1-Chlorobutane | (1) | 6.537 | 49 | 45199 | 5.298 |
| 38) 1,1-Dichloropropene | (1) | 6.618 | 75 | 512705 | 4.740 |
| 39) Carbon Tetrachloride | (1) | 6.640 | 117 | 299097 | 4.810 |
| 40) Benzene | (1) | 6.933 | 78 | 1395113 | 4.763 |
| 41) 1,2-Dichloroethane | (1) | 6.955 | 62 | 285638 | 4.913 |
| 42) t-Amyl Methyl Ether | (1) | 7.117 | 73 | 496105 | 4.603 |

M = Compound was manually integrated.


WAT12 B165

Digitally signed by Lauren C. Temple
on 09/24/2010 at 14:21.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24s01.d
Injection date and time: 24-SEP-2010 14:03

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:50
Date, time and analyst ID of latest file update: 24-Sep-2010 14:21 lct01518

Sublist used: REV4+ACRO

Sample Name: LFBS22

Lab Sample ID: LFBS22

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 43) *Fluorobenzene | (1) | 7.329 | 96 | 1210521 | 5.000 |
| 44) Trichloroethene | (1) | 7.821 | 95 | 395369 | 4.830 |
| 45) 1,2-Dichloropropane | (1) | 8.099 | 63 | 468874 | 4.791 |
| 46) Dibromomethane | (1) | 8.239 | 93 | 130542 | 4.824 |
| 47) Methyl Methacrylate | (1) | 8.253 | 69 | 90068 | 4.083 |
| 48) Bromodichloromethane | (1) | 8.429 | 83 | 315281 | 4.796 |
| 49) 2-Nitropropane | (1) | 8.693 | 46 | 150570 | 468.620 |
| 50) Chloroacetonitrile | (1) | 8.745 | 75 | 251063 | 197.961 |
| 51) cis-1,3-Dichloropropene | (1) | 8.935 | 75 | 421387 | 4.719 |
| 52) 4-Methyl-2-Pentanone | (1) | 9.104 | 58 | 303739 | 23.285 |
| 53) 1,1-Dichloropropanone | (1) | 9.133 | 83 | 191813 | 429.946 |
| 54) Toluene | (1) | 9.287 | 92 | 852021 | 4.734 |
| 55) trans-1,3-Dichloropropene | (1) | 9.522 | 75 | 284357 | 4.648 |
| 56) Ethyl Methacrylate | (1) | 9.617 | 69 | 198025 | 5.739 |
| 57) 1,1,2-Trichloroethane | (1) | 9.705 | 83 | 137131 | 4.905 |
| 59) Tetrachloroethene | (1) | 9.845 | 166 | 352484 | 4.755 |
| 60) 1,3-Dichloropropane | (1) | 9.874 | 76 | 265859 | 4.720 |
| 61) 2-Hexanone | (1) | 9.955 | 58 | 286179 | 23.696 |
| 62) Dibromochloromethane | (1) | 10.087 | 129 | 185067 | 4.724 |
| 63) 1,2-Dibromoethane | (1) | 10.204 | 107 | 152412 | 4.779 |
| 64) Chlorobenzene | (1) | 10.666 | 112 | 756230 | 4.654 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | 10.739 | 131 | 228125 | 4.664 |
| 66) Ethylbenzene | (1) | 10.761 | 106 | 448050 | 4.589 |
| 68) m+p-Xylene | (1) | 10.864 | 106 | 1113961 | 9.439 |
| 69) o-Xylene | (1) | 11.223 | 106 | 505485 | 4.512 |
| 70) Styrene | (1) | 11.238 | 104 | 809785 | 4.666 |
| 71) Bromoform | (1) | 11.399 | 173 | 87834 | 4.692 |
| 73) Isopropylbenzene | (1) | 11.546 | 120 | 297387 | 4.618 |
| 74) $4-Bromofluorobenzene | (1) | 11.678 | 174 | 221965 | 4.858 |
| 72) Xylene (Total) | (1) | | 106 | 1619446 | 13.951 |
| 75) 1,1,2,2-Tetrachloroethane | (1) | 11.803 | 83 | 143773M | 4.652 |
| 76) Bromobenzene | (1) | 11.810 | 156 | 254089 | 4.514 |
| 77) 1,2,3-Trichloropropane | (1) | 11.839 | 110 | 28732 | 4.552 |
| 78) trans-1,4-Dichloro-2-Butene | (1) | 11.847 | 53 | 236149 | 23.598 |
| 79) n-Propylbenzene | (1) | 11.898 | 120 | 309987 | 4.594 |
| 80) 2-Chlorotoluene | (1) | 11.979 | 126 | 286545 | 4.619 |
| 81) 1,3,5-Trimethylbenzene | (1) | 12.037 | 105 | 941263 | 4.655 |
| 82) 4-Chlorotoluene | (1) | 12.067 | 126 | 292161 | 4.614 |
| 83) tert-Butylbenzene | (1) | 12.316 | 134 | 207400 | 4.592 |

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Lauren C. Temple
on 09/24/2010 at 14:21.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep24a.b/ss24s01.d
Injection date and time: 24-SEP-2010 14:03

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m
Calibration date and time: 24-SEP-2010 13:50
Date, time and analyst ID of latest file update: 24-Sep-2010 14:21 lct01518

Sublist used: REV4+ACRO

Sample Name: LFBS22

Lab Sample ID: LFBS22

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 84) Pentachloroethane | (1) | 12.338 | 167 | 135281 | 4.586 |
| 85) 1,2,4-Trimethylbenzene | (1) | 12.353 | 105 | 957279 | 4.626 |
| 86) sec-Butylbenzene | (1) | 12.499 | 134 | 215536 | 4.626 |
| 87) 1,3-Dichlorobenzene | (1) | 12.602 | 146 | 510012 | 4.567 |
| 88) p-Isopropyltoluene | (1) | 12.609 | 119 | 852007 | 4.580 |
| 89) 1,4-Dichlorobenzene | (1) | 12.668 | 146 | 484474 | 4.542 |
| 90) n-Butylbenzene | (1) | 12.947 | 92 | 560441 | 4.514 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.961 | 152 | 199322 | 4.774 |
| 92) 1,2-Dichlorobenzene | (1) | 12.976 | 146 | 379331 | 4.541 |
| 93) Hexachloroethane | (1) | 13.189 | 201 | 158618 | 4.505 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | 13.607 | 157 | 14849 | 4.686 |
| 95) Nitrobenzene | (1) | 13.768 | 77 | 131186 | 179.640 |
| 96) 1,2,4-Trichlorobenzene | (1) | 14.252 | 180 | 188345 | 4.084 |
| 97) Hexachlorobutadiene | (1) | 14.377 | 225 | 120490 | 4.153 |
| 98) Naphthalene | (1) | 14.457 | 128 | 209509 | 4.161 |
| 99) 1,2,3-Trichlorobenzene | (1) | 14.641 | 180 | 126555 | 3.988 |

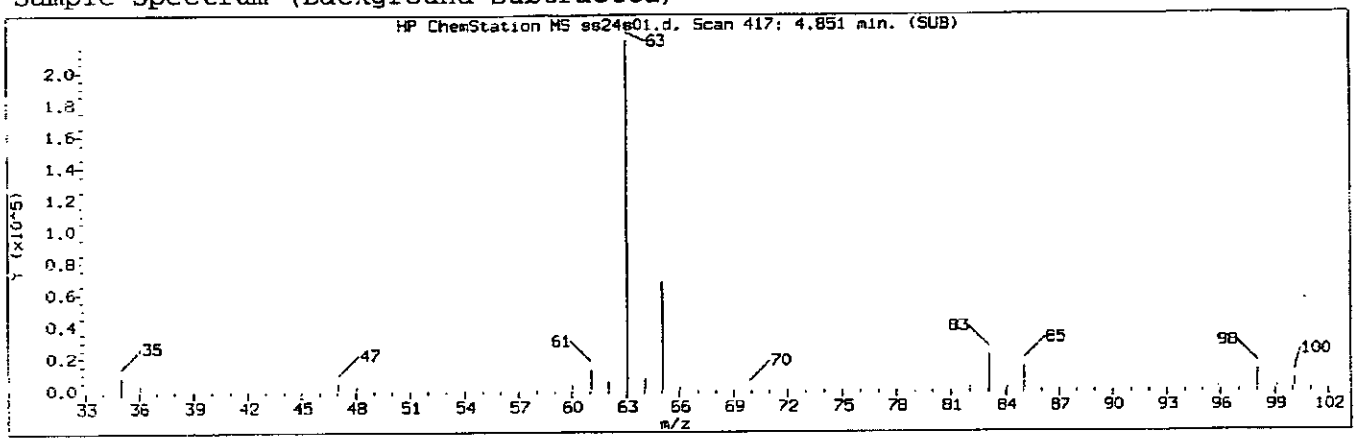
$ = Compound is a surrogate standard.



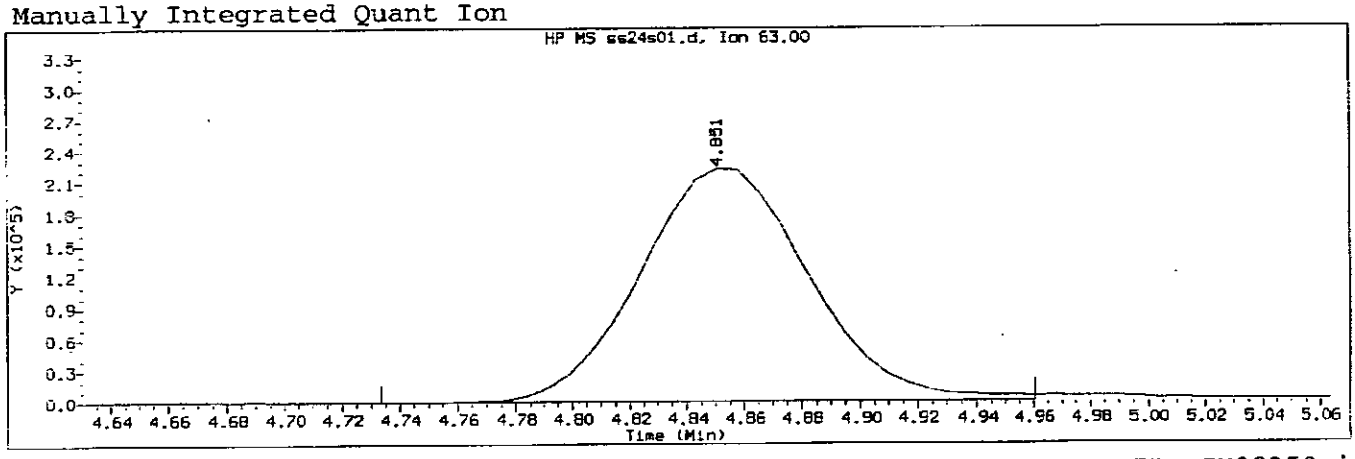
WnT12 B167

Digitally signed by Lauren C. Temple
on 09/24/2010 at 14:21.
Target 3.5 esignature user ID: lct01518

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24s01.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 14:03  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACRO
Calibration date and time: 24-SEP-2010 13:50
Date, time and analyst ID of latest file update: 24-Sep-2010 14:21 lct01518

Sample Name: LFBS22  Lab Sample ID: LFBS22

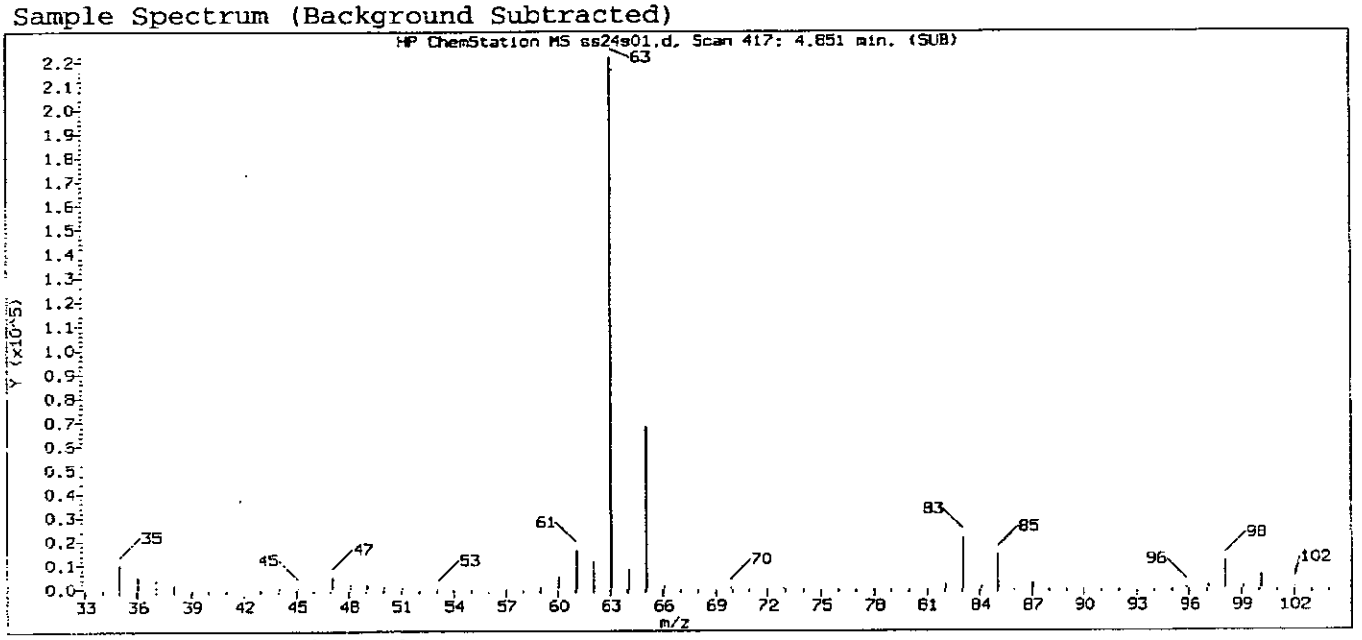
| | | | |
|---|---|---|---|
| Compound Number | : 23 | | |
| Compound Name | : 1,1-Dichloroethane | | |
| Scan Number | : 417 | | |
| Retention Time (minutes) | : 4.851 | | |
| Quant Ion | : 63.00 | | |
| Area (flag) | : 908413M | | |
| On-Column Amount (ng) | : 4.7527 | | |
| Integration start scan | : 400 | Integration stop scan: | 431 |
| Y at integration start | : 0 | Y at integration end: | 0 |

Reason for manual integration: improper integration

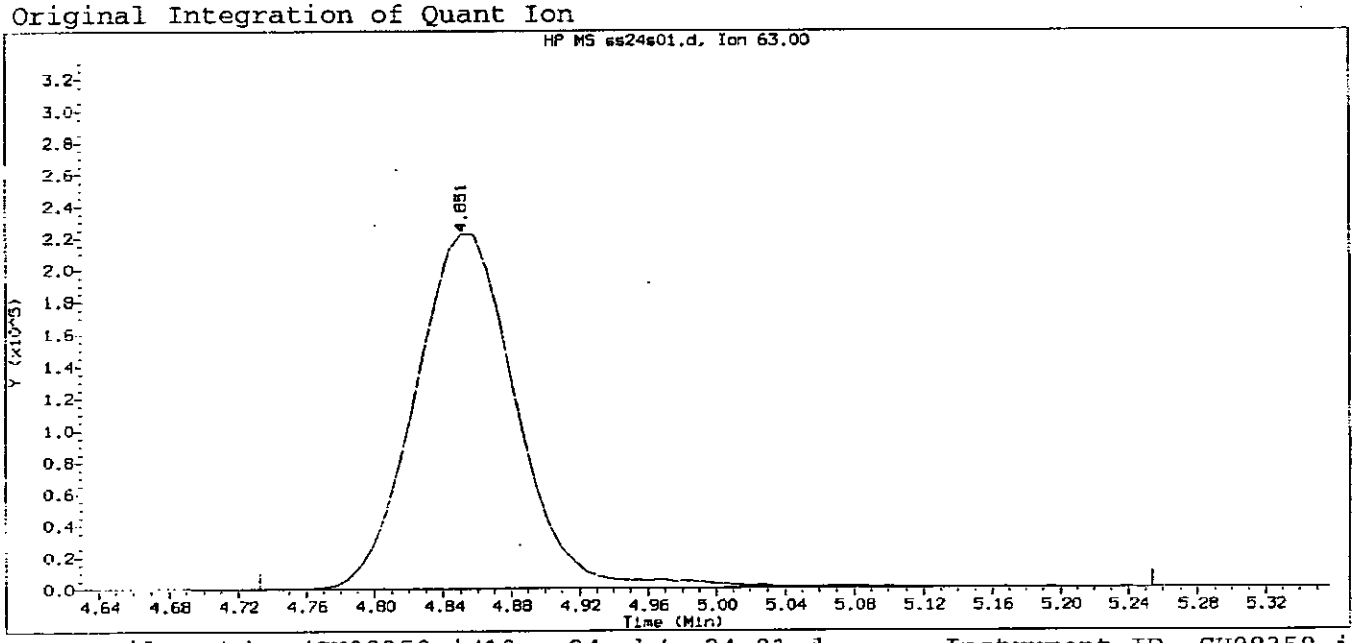
Analyst responsible for change: Digitally signed by Lauren C. Temple on 09/24/2010 at 14:21. Target 3.5 esignature user ID: lct01518

GC/MS audit/management approval: [signature] C9 24 10 WAT12 P150

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24s01.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 14:03  Analyst ID: amd00492

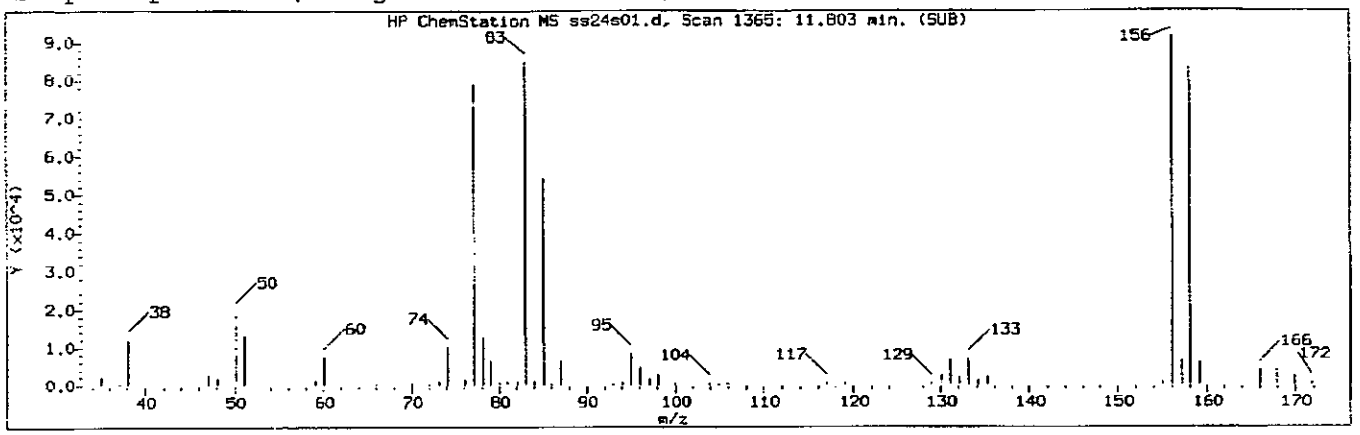
Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACRO
Calibration date and time: 24-SEP-2010 13:50
Date, time and analyst ID of latest file update: 24-Sep-2010 14:20 Automation

Sample Name: LFBS22  Lab Sample ID: LFBS22

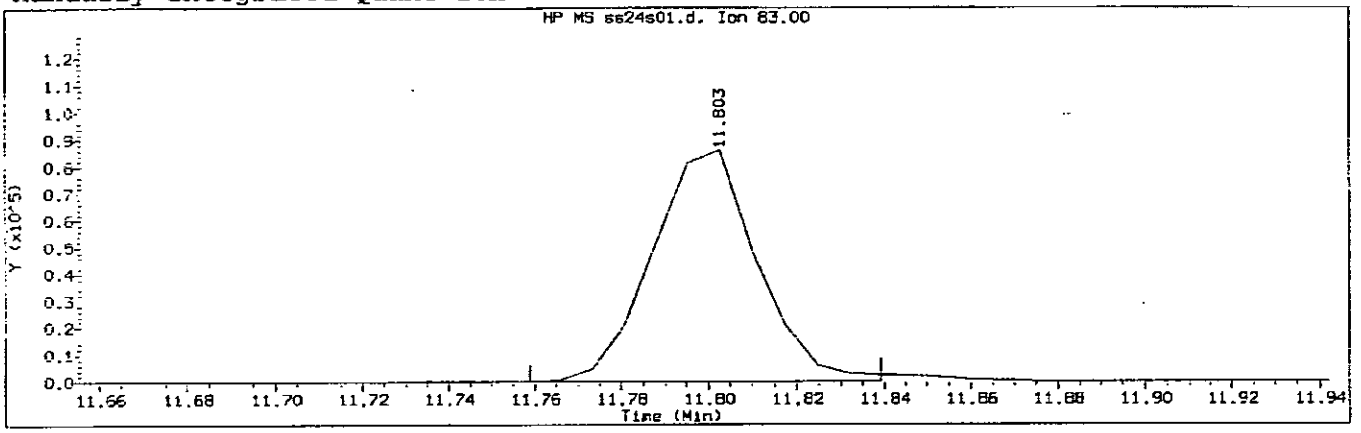
Compound Number : 23
Compound Name : 1,1-Dichloroethane
Scan Number : 417
Retention Time (minutes): 4.851
Quant Ion : 63.00
Area : 930046
On-column Amount (ng) : 4.8659
Integration start scan : 400  Integration stop scan: 471  WAT12 8169
Y at integration start : 0  Y at integration end: 0

Digitally signed by Lauren C. Temple on 09/24/2010 at 14:21.
Target 3.5 esignature user ID: lct01518

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24s01.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 14:03  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACRO
Calibration date and time: 24-SEP-2010 13:50
Date, time and analyst ID of latest file update: 24-Sep-2010 14:21 lct01518

Sample Name: LFBS22  Lab Sample ID: LFBS22

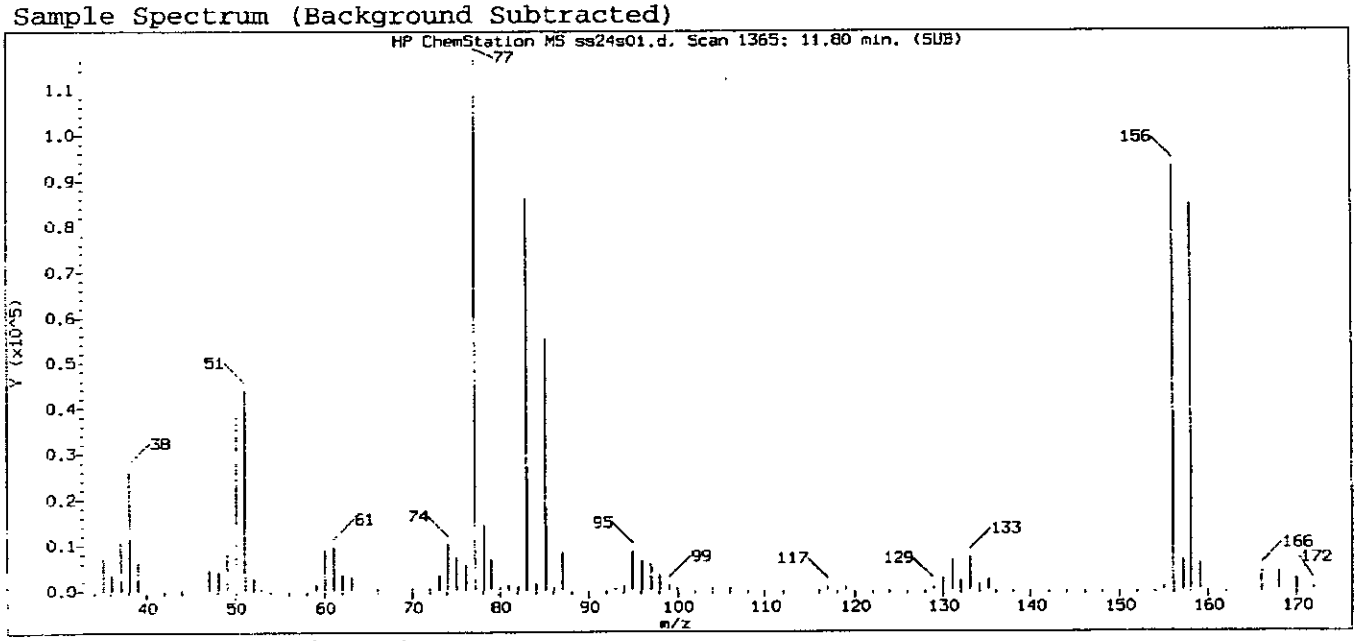
| | | |
|---|---|---|
| Compound Number | : | 75 |
| Compound Name | : | 1,1,2,2-Tetrachloroethane |
| Scan Number | : | 1365 |
| Retention Time (minutes) | : | 11.803 |
| Quant Ion | : | 83.00 |
| Area (flag) | : | 143773M |
| On-Column Amount (ng) | : | 4.6516 |
| Integration start scan | : | 1358  Integration stop scan: 1369 |
| Y at integration start | : | 0  Y at integration end: 0 |

Reason for manual integration: improper integration

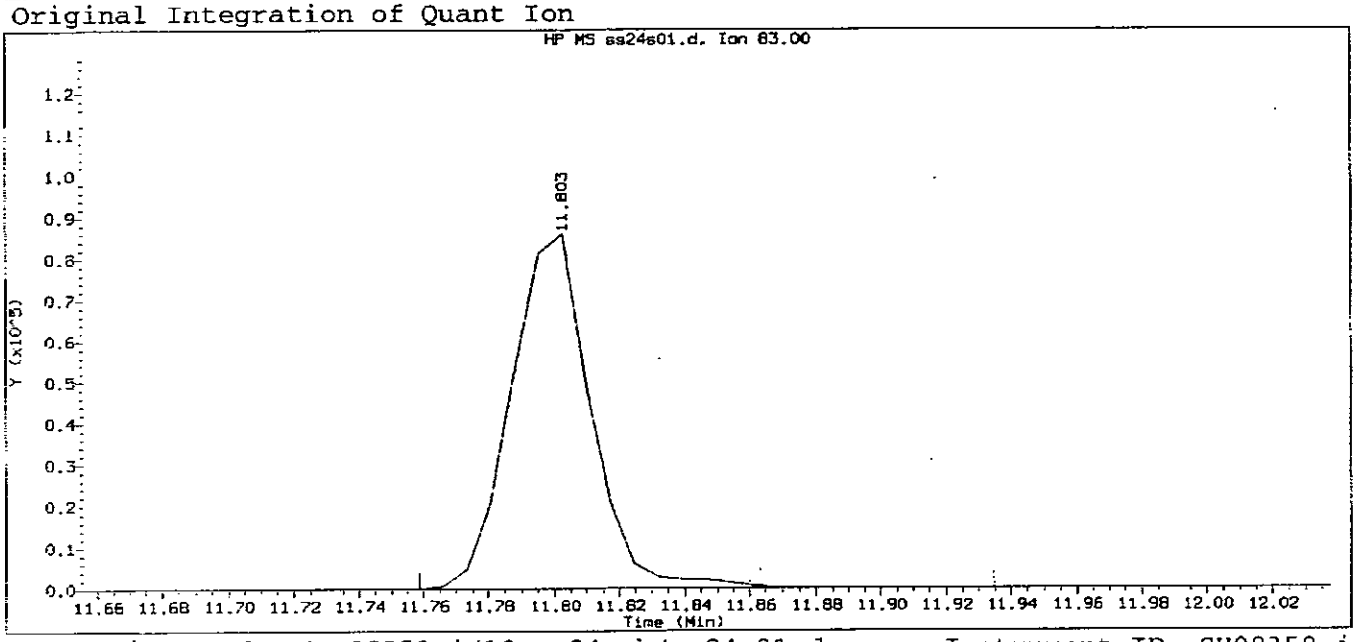
Analyst responsible for change: Digitally signed by Lauren C. Temple on 09/24/2010 at 14:21. Target 3.5 esignature user ID: lct01518

GC/MS audit/management approval: [illegible] C9/24/10 WATIZ 8178

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion




Data File: /chem/SH08359.i/10sep24a.b/ss24s01.d  Instrument ID: SH08359.i
Injection date and time: 24-SEP-2010 14:03  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep24a.b/S524RV4.m  Sublist used: REV4+ACRO
Calibration date and time: 24-SEP-2010 13:50
Date, time and analyst ID of latest file update: 24-Sep-2010 14:20 Automation

Sample Name: LFBS22  Lab Sample ID: LFBS22

Compound Number : 75
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1365
Retention Time (minutes): 11.803
Quant Ion : 83.00
Area : 145791
On-column Amount (ng) : 4.7169
Integration start scan : 1358  Integration stop scan: 1382  WAT12 8171
Y at integration start : 0  Y at integration end: 0

Digitally signed by Lauren C. Temple on 09/24/2010 at 14:21.
Target 3.5 esignature user ID: lct01518

CALIBRATION CHECK REPORT

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: SH08359 Calibration Date: 09/27/10 Time: 05:33

Lab File ID: ss27c01.d Init. Calib. Date(s): 09/24/2010 09/24/2010

| COMPOUND | RRF | RRF10 | %D | CALIB METH |
|---|---|---|---|---|
| Dichlorodifluoromethane | 0.3227 | 0.3444 | 7 | AVG |
| Chloromethane | 0.9459 | 0.9725 | 3 | AVG |
| Vinyl Chloride | 0.6757 | 0.7127 | 5 | AVG |
| Bromomethane | 0.3639 | 0.3858 | 6 | AVG |
| Chloroethane | 0.3780 | 0.3925 | 4 | AVG |
| Dichlorofluoromethane | 0.7336 | 0.7398 | 1 | AVG |
| Trichlorofluoromethane | 0.3458 | 0.3621 | 5 | AVG |
| Ethyl Ether | 0.2095 | 0.2265 | 8 | AVG |
| Acrolein | 0.0254 | 0.0245 | -3 | AVG |
| 1,1-Dichloroethene | 0.2879 | 0.2740 | -5 | AVG |
| Freon 113 | 0.2526 | 0.2566 | 2 | AVG |
| Acetone | 0.0097 | 0.0075 | -22 | AVG |
| Acetone(mz43) | 0.0454 | 0.0269 | -41 | AVG |
| Methyl Iodide | 0.5809 | 0.5358 | -8 | AVG |
| Carbon Disulfide | 1.0210 | 0.9955 | -2 | AVG |
| Allyl Chloride | 0.7815 | 0.7775 | -1 | AVG |
| Methylene Chloride | 0.2926 | 0.2789 | -5 | AVG |
| t-Butyl Alcohol | 0.0064 | 0.0045 | -29 | AVG |
| Acrylonitrile | 0.0513 | 0.0477 | -7 | AVG |
| trans-1,2-Dichloroethene | 0.3507 | 0.3358 | -4 | AVG |
| Methyl Tertiary Butyl Ether | 0.3409 | 0.3378 | -1 | AVG |
| 1,1-Dichloroethane | 0.7895 | 0.7669 | -3 | AVG |
| di-Isopropyl Ether | 0.1896 | 0.1990 | 5 | AVG |
| Ethyl t-Butyl Ether | 0.8184 | 0.8637 | 6 | AVG |
| cis-1,2-Dichloroethene | 0.3462 | 0.3368 | -3 | AVG |
| 2,2-Dichloropropane | 0.3302 | 0.3235 | -2 | AVG |
| 2-Butanone | 0.0840 | 0.0823 | -2 | AVG |
| Propionitrile | 0.0178 | 0.0159 | -11 | AVG |
| Methyl Acrylate | 0.1542 | 0.1630 | 6 | AVG |
| Methacrylonitrile | 0.0509 | 0.0505 | -1 | AVG |
| Bromochloromethane | 0.1115 | 0.1137 | 2 | AVG |
| Tetrahydrofuran | 0.0111 | 0.0100 | -10 | AVG |
| Chloroform | 0.4703 | 0.4735 | 1 | AVG |
| 1,1,1-Trichloroethane | 0.3238 | 0.3242 | 0 | AVG |
| 1-Chlorobutane | 0.0352 | 0.0395 | 12 | AVG |
| Carbon Tetrachloride | 0.2568 | 0.2546 | -1 | AVG |
| 1,1-Dichloropropene | 0.4468 | 0.4305 | -4 | AVG |
| Benzene | 1.2098 | 1.1974 | -1 | AVG |
| 1,2-Dichloroethane | 0.2402 | 0.2599 | 8 | AVG |
| t-Amyl Methyl Ether | 0.4452 | 0.4437 | 0 | AVG |

WAT12 0172

CALIBRATION CHECK REPORT

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: SH08359 Calibration Date: 09/27/10 Time: 05:33

Lab File ID: ss27c01.d Init. Calib. Date(s): 09/24/2010 09/24/2010

| COMPOUND | RRF | RRF10 | %D | CALIB METH |
|---|---|---|---|---|
| Trichloroethene | 0.3381 | 0.3362 | -1 | AVG |
| 1,2-Dichloropropane | 0.4042 | 0.4095 | 1 | AVG |
| Methyl Methacrylate | 0.0911 | 0.0920 | 1 | AVG |
| Dibromomethane | 0.1118 | 0.1194 | 7 | AVG |
| Bromodichloromethane | 0.2715 | 0.2873 | 6 | AVG |
| 2-Nitropropane | 0.0013 | 0.0014 | 11 | AVG |
| Chloroacetonitrile | 0.0052 | 0.0036 | -31 | AVG |
| cis-1,3-Dichloropropene | 0.3689 | 0.3800 | 3 | AVG |
| 4-Methyl-2-Pentanone | 0.0539 | 0.0593 | 10 | AVG |
| 1,1-Dichloropropanone | 0.0018 | 0.0018 | 1 | AVG |
| Toluene | 0.7433 | 0.7599 | 2 | AVG |
| trans-1,3-Dichloropropene | 0.2527 | 0.2655 | 5 | AVG |
| Ethyl Methacrylate | 0.1425 | 0.1479 | 4 | AVG |
| 1,1,2-Trichloroethane | 0.1155 | 0.1267 | 10 | AVG |
| Tetrachloroethene | 0.3062 | 0.2976 | -3 | AVG |
| 1,3-Dichloropropane | 0.2327 | 0.2450 | 5 | AVG |
| 2-Hexanone | 0.0499 | 0.0568 | 14 | AVG |
| Dibromochloromethane | 0.1618 | 0.1747 | 8 | AVG |
| 1,2-Dibromoethane | 0.1317 | 0.1343 | 2 | AVG |
| Chlorobenzene | 0.6711 | 0.6697 | 0 | AVG |
| 1,1,1,2-Tetrachloroethane | 0.2020 | 0.2097 | 4 | AVG |
| Ethylbenzene | 0.4033 | 0.3850 | -5 | AVG |
| m+p-Xylene | 0.4875 | 0.4836 | -1 | AVG |
| o-Xylene | 0.4627 | 0.4474 | -3 | AVG |
| Styrene | 0.7168 | 0.7310 | 2 | AVG |
| Xylene (Total) | 0.4792 | 0.4716 | -2 | AVG |
| Bromoform | 0.0773 | 0.0847 | 10 | AVG |
| Isopropylbenzene | 0.2660 | 0.2676 | 1 | AVG |
| 1,1,2,2-Tetrachloroethane | 0.1277 | 0.1423 | 11 | AVG |
| Bromobenzene | 0.2325 | 0.2341 | 1 | AVG |
| 1,2,3-Trichloropropane | 0.0261 | 0.0264 | 1 | AVG |
| trans-1,4-Dichloro-2-Butene | 0.0413 | 0.0482 | 17 | AVG |
| n-Propylbenzene | 0.2787 | 0.2814 | 1 | AVG |
| 2-Chlorotoluene | 0.2562 | 0.2623 | 2 | AVG |
| 1,3,5-Trimethylbenzene | 0.8352 | 0.8284 | -1 | AVG |
| 4-Chlorotoluene | 0.2615 | 0.2718 | 4 | AVG |
| tert-Butylbenzene | 0.1865 | 0.1874 | 0 | AVG |
| Pentachloroethane | 0.1218 | 0.1295 | 6 | AVG |
| 1,2,4-Trimethylbenzene | 0.8546 | 0.8578 | 0 | AVG |
| sec-Butylbenzene | 0.1924 | 0.1940 | 1 | AVG |

WAT12 B173

CALIBRATION CHECK REPORT

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: SH08359 Calibration Date: 09/27/10 Time: 05:33

Lab File ID: ss27c01.d Init. Calib. Date(s): 09/24/2010 09/24/2010

| COMPOUND | $\overline{RRF}$ | RRF10 | %D | CALIB METH |
|---|---|---|---|---|
| p-Isopropyltoluene | 0.7683 | 0.7730 | 1 | AVG |
| 1,3-Dichlorobenzene | 0.4613 | 0.4689 | 2 | AVG |
| 1,4-Dichlorobenzene | 0.4406 | 0.4459 | 1 | AVG |
| n-Butylbenzene | 0.5129 | 0.5133 | 0 | AVG |
| 1,2-Dichlorobenzene | 0.3451 | 0.3483 | 1 | AVG |
| Hexachloroethane | 0.1454 | 0.1378 | -5 | AVG |
| 1,2-Dibromo-3-Chloropropane | 0.0131 | 0.0146 | 12 | AVG |
| Nitrobenzene | 0.0030 | 0.0023 | -25 | AVG |
| 1,2,4-Trichlorobenzene | 0.1905 | 0.1758 | -8 | AVG |
| Hexachlorobutadiene | 0.1317 | 0.1071 | -19 | 2NDDEG |
| Naphthalene | 0.2080 | 0.2002 | -4 | AVG |
| 1,2,3-Trichlorobenzene | 0.1311 | 0.1210 | -8 | AVG |
| 4-Bromofluorobenzene | 0.1887 | 0.1926 | 2 | AVG |
| 1,2-Dichlorobenzene-d4 | 0.1724 | 0.1778 | 3 | AVG |

Average %Difference 6

WAT12 0174

Lancaster Laboratories
GC/MS Volatiles Method 524.2 Check Sample Summary

File: ss27c01.d Injected: 09/27/10 Method: EPA 524.2 REV 4
Inst: SH08359 Sample: VSTD010 Matrix/level: W/L

| COMPOUND NAME | CONCENTRATION SPIKED (UG/L) | CONCENTRATION MEASURED (UG/L) | % RECOVERY | IN SPEC |
|---|---|---|---|---|
| Dichlorodifluoromethane | 10.000 | 10.673 | 107 | YES |
| Chloromethane | 10.000 | 10.281 | 103 | YES |
| Vinyl Chloride | 10.000 | 10.547 | 105 | YES |
| Bromomethane | 10.000 | 10.601 | 106 | YES |
| Chloroethane | 10.000 | 10.385 | 104 | YES |
| Dichlorofluoromethane | 10.000 | 10.084 | 101 | YES |
| Trichlorofluoromethane | 10.000 | 10.471 | 105 | YES |
| Ethyl Ether | 10.000 | 10.810 | 108 | YES |
| Acrolein | 500.000 | 482.516 | 97 | YES |
| 1,1-Dichloroethene | 10.000 | 9.516 | 95 | YES |
| Freon 113 | 10.000 | 10.158 | 102 | YES |
| Acetone | 100.000 | 77.304 | 77 | YES |
| Acetone(mz43) | 100.000 | 59.309 | 59 | NO |
| Methyl Iodide | 10.000 | 9.223 | 92 | YES |
| Carbon Disulfide | 10.000 | 9.751 | 98 | YES |
| Allyl Chloride | 10.000 | 9.948 | 99 | YES |
| Methylene Chloride | 10.000 | 9.531 | 95 | YES |
| t-Butyl Alcohol | 200.000 | 140.827 | 70 | YES |
| Acrylonitrile | 124.800 | 115.997 | 93 | YES |
| trans-1,2-Dichloroethene | 10.000 | 9.575 | 96 | YES |
| Methyl Tertiary Butyl Ether | 10.000 | 9.909 | 99 | YES |
| 1,1-Dichloroethane | 10.000 | 9.714 | 97 | YES |
| di-Isopropyl Ether | 10.000 | 10.497 | 105 | YES |
| Ethyl t-Butyl Ether | 10.000 | 10.554 | 106 | YES |
| cis-1,2-Dichloroethene | 10.000 | 9.727 | 97 | YES |
| 2,2-Dichloropropane | 10.000 | 9.799 | 98 | YES |
| 2-Butanone | 100.000 | 97.969 | 98 | YES |
| Propionitrile | 200.000 | 178.908 | 89 | YES |
| Methyl Acrylate | 50.000 | 52.850 | 106 | YES |
| Methacrylonitrile | 100.000 | 99.205 | 99 | YES |
| Bromochloromethane | 10.000 | 10.190 | 102 | YES |
| Tetrahydrofuran | 140.000 | 126.015 | 90 | YES |
| Chloroform | 10.000 | 10.068 | 101 | YES |
| 1,1,1-Trichloroethane | 10.000 | 10.013 | 100 | YES |
| 1-Chlorobutane | 10.000 | 11.212 | 112 | YES |
| Carbon Tetrachloride | 10.000 | 9.914 | 99 | YES |
| 1,1-Dichloropropene | 10.000 | 9.635 | 96 | YES |
| Benzene | 10.000 | 9.897 | 99 | YES |
| 1,2-Dichloroethane | 10.000 | 10.820 | 108 | YES |

Lancaster Laboratories
GC/MS Volatiles Method 524.2 Check Sample Summary

File: ss27c01.d Injected: 09/27/10 Method: EPA 524.2 REV 4
Inst: SH08359 Sample: VSTD010 Matrix/level: W/L

| COMPOUND NAME | CONCENTRATION SPIKED (UG/L) | CONCENTRATION MEASURED (UG/L) | % RECOVERY | IN SPEC |
|---|---|---|---|---|
| t-Amyl Methyl Ether | 10.000 | 9.967 | 100 | YES |
| Trichloroethene | 10.000 | 9.945 | 99 | YES |
| 1,2-Dichloropropane | 10.000 | 10.132 | 101 | YES |
| Methyl Methacrylate | 10.000 | 10.099 | 101 | YES |
| Dibromomethane | 10.000 | 10.682 | 107 | YES |
| Bromodichloromethane | 10.000 | 10.581 | 106 | YES |
| 2-Nitropropane | 1050.00 | 1145.59 | 109 | YES |
| Chloroacetonitrile | 500.000 | 341.981 | 68 | NO |
| cis-1,3-Dichloropropene | 10.000 | 10.301 | 103 | YES |
| 4-Methyl-2-Pentanone | 100.000 | 110.100 | 110 | YES |
| 1,1-Dichloropropanone | 1000.00 | 985.897 | 99 | YES |
| Toluene | 10.000 | 10.223 | 102 | YES |
| trans-1,3-Dichloropropene | 10.000 | 10.506 | 105 | YES |
| Ethyl Methacrylate | 10.000 | 10.380 | 104 | YES |
| 1,1,2-Trichloroethane | 10.000 | 10.975 | 110 | YES |
| Tetrachloroethene | 10.000 | 9.719 | 97 | YES |
| 1,3-Dichloropropane | 10.000 | 10.531 | 105 | YES |
| 2-Hexanone | 100.000 | 113.924 | 114 | YES |
| Dibromochloromethane | 10.000 | 10.794 | 108 | YES |
| 1,2-Dibromoethane | 10.000 | 10.196 | 102 | YES |
| Chlorobenzene | 10.000 | 9.979 | 100 | YES |
| 1,1,1,2-Tetrachloroethane | 10.000 | 10.380 | 104 | YES |
| Ethylbenzene | 10.000 | 9.546 | 95 | YES |
| m+p-Xylene | 20.000 | 19.843 | 99 | YES |
| o-Xylene | 10.000 | 9.669 | 97 | YES |
| Styrene | 10.000 | 10.198 | 102 | YES |
| Xylene (Total) | 30.000 | 29.512 | 98 | YES |
| Bromoform | 10.000 | 10.961 | 110 | YES |
| Isopropylbenzene | 10.000 | 10.062 | 101 | YES |
| 1,1,2,2-Tetrachloroethane | 10.000 | 11.150 | 111 | YES |
| Bromobenzene | 10.000 | 10.068 | 101 | YES |
| 1,2,3-Trichloropropane | 10.000 | 10.133 | 101 | YES |
| trans-1,4-Dichloro-2-Butene | 100.000 | 116.544 | 117 | YES |
| n-Propylbenzene | 10.000 | 10.096 | 101 | YES |
| 2-Chlorotoluene | 10.000 | 10.235 | 102 | YES |
| 1,3,5-Trimethylbenzene | 10.000 | 9.918 | 99 | YES |
| 4-Chlorotoluene | 10.000 | 10.394 | 104 | YES |
| tert-Butylbenzene | 10.000 | 10.044 | 100 | YES |
| Pentachloroethane | 10.000 | 10.633 | 106 | YES |

Lancaster Laboratories
GC/MS Volatiles Method 524.2 Check Sample Summary

File: ss27c01.d Injected: 09/27/10 Method: EPA 524.2 REV 4
Inst: SH08359 Sample: VSTD010 Matrix/level: W/L

| COMPOUND NAME | CONCENTRATION SPIKED (UG/L) | CONCENTRATION MEASURED (UG/L) | % RECOVERY | IN SPEC |
|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | 10.000 | 10.037 | 100 | YES |
| sec-Butylbenzene | 10.000 | 10.081 | 101 | YES |
| p-Isopropyltoluene | 10.000 | 10.061 | 101 | YES |
| 1,3-Dichlorobenzene | 10.000 | 10.165 | 102 | YES |
| 1,4-Dichlorobenzene | 10.000 | 10.121 | 101 | YES |
| n-Butylbenzene | 10.000 | 10.008 | 100 | YES |
| 1,2-Dichlorobenzene | 10.000 | 10.094 | 101 | YES |
| Hexachloroethane | 10.000 | 9.473 | 95 | YES |
| 1,2-Dibromo-3-Chloropropane | 10.000 | 11.189 | 112 | YES |
| Nitrobenzene | 200.000 | 149.815 | 75 | YES |
| 1,2,4-Trichlorobenzene | 10.000 | 9.228 | 92 | YES |
| Hexachlorobutadiene | 10.000 | 9.109 | 91 | YES |
| Naphthalene | 10.000 | 9.629 | 96 | YES |
| 1,2,3-Trichlorobenzene | 10.000 | 9.232 | 92 | YES |
| 4-Bromofluorobenzene | 5.000 | 5.103 | 102 | YES |
| 1,2-Dichlorobenzene-d4 | 5.000 | 5.154 | 103 | YES |



WAT12 0177

# EPA Method 524
# Continuing Calibration Internal/Surrogate Standard Check

Initial Calibration Standards:

/chem/SH08359.i/10sep24a.b/ss24i01.d VSTD025
** /chem/SH08359.i/10sep24a.b/ss24i02.d VSTD010
/chem/SH08359.i/10sep24a.b/ss24i03.d VSTD005
/chem/SH08359.i/10sep24a.b/ss24i05.d VSTD0.5

** File is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem/SH08359.i/10sep27a.b/ss27c01.d

RT Summary

| Internal/Surrogate Standard Name | File ID: ss27c01.d | ICAL RT | In Spec |
|---|---|---|---|
| Fluorobenzene | 7.337 | 7.329 | Yes |
| 4-Bromofluorobenzene | 11.685 | 11.678 | Yes |
| 1,2-Dichlorobenzene-d4 | 12.969 | 12.961 | Yes |

A "No" indicates the retention time is greater than 30 seconds from the referenced ICAL standard.

Area Summary

| Internal/Surrogate Standard Name | File ID: ss27c01.d | ICAL Area | Low Limit | High Limit | In Spec |
|---|---|---|---|---|---|
| Fluorobenzene | 1092798 | 1265346 | 632673 | 2530692 | Yes |
| 4-Bromofluorobenzene | 210481 | 238455 | 119228 | 476910 | Yes |
| 1,2-Dichlorobenzene-d4 | 194266 | 216368 | 108184 | 432736 | Yes |

A "No" indicates the internal standard area is outside acceptable QC limits.

Comments: _____

Report generated on 09/27/2010 at 06:05

# EPA Method 524
# Continuing Calibration Internal/Surrogate Standard Check

Current Continuing Calibration Standard:

/chem/SH08359.i/10sep27a.b/ss27c01.d

Previous Continuing Calibration Standard:

/chem/SH08359.i/10sep25b.b/ss25c02.d

RT Summary

| Internal/Surrogate Standard Name | File ID: ss27c01.d | Previous CCAL RT | In Spec |
|---|---|---|---|
| Fluorobenzene | 7.337 | 7.351 | Yes |
| 4-Bromofluorobenzene | 11.685 | 11.685 | Yes |
| 1,2-Dichlorobenzene-d4 | 12.969 | 12.976 | Yes |

A "No" indicates the retention time is greater than 30 seconds from the average RT.

Area Summary

| Internal/Surrogate Standard Name | File ID: ss27c01.d | Previous CCAL Area | Low Limit | In Spec |
|---|---|---|---|---|
| Fluorobenzene | 1092798 | 1089197 | 762438 | Yes |
| 4-Bromofluorobenzene | 210481 | 212556 | 148789 | Yes |
| 1,2-Dichlorobenzene-d4 | 194266 | 198215 | 138750 | Yes |

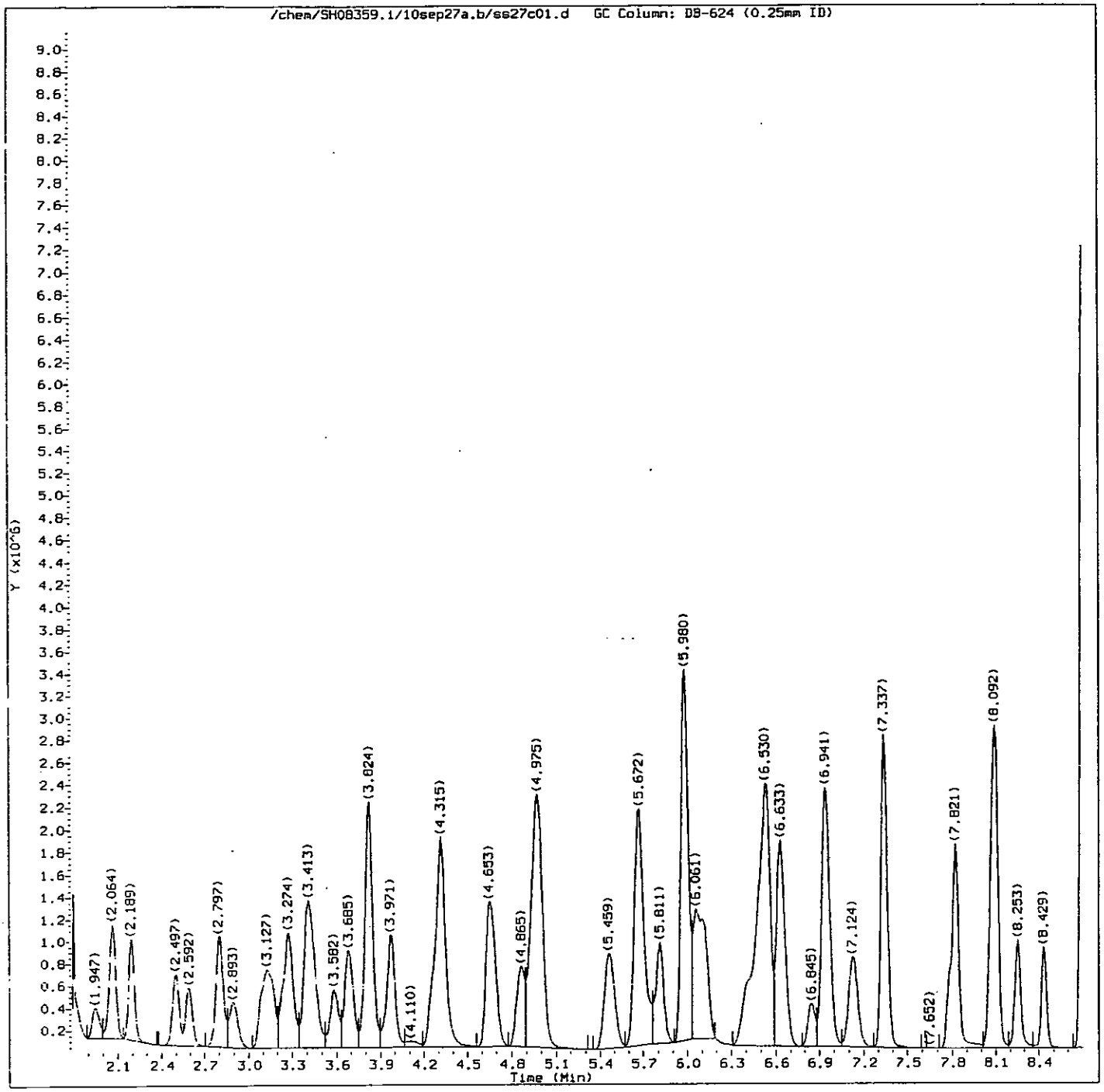
A "No" indicates the internal standard area is outside acceptable QC limits.

Comments: _____

_____

WaT12 8188

Report generated on 09/27/2010 at 06:05




Total Ion Chromatogram (TIC)

Target Revision 3.5

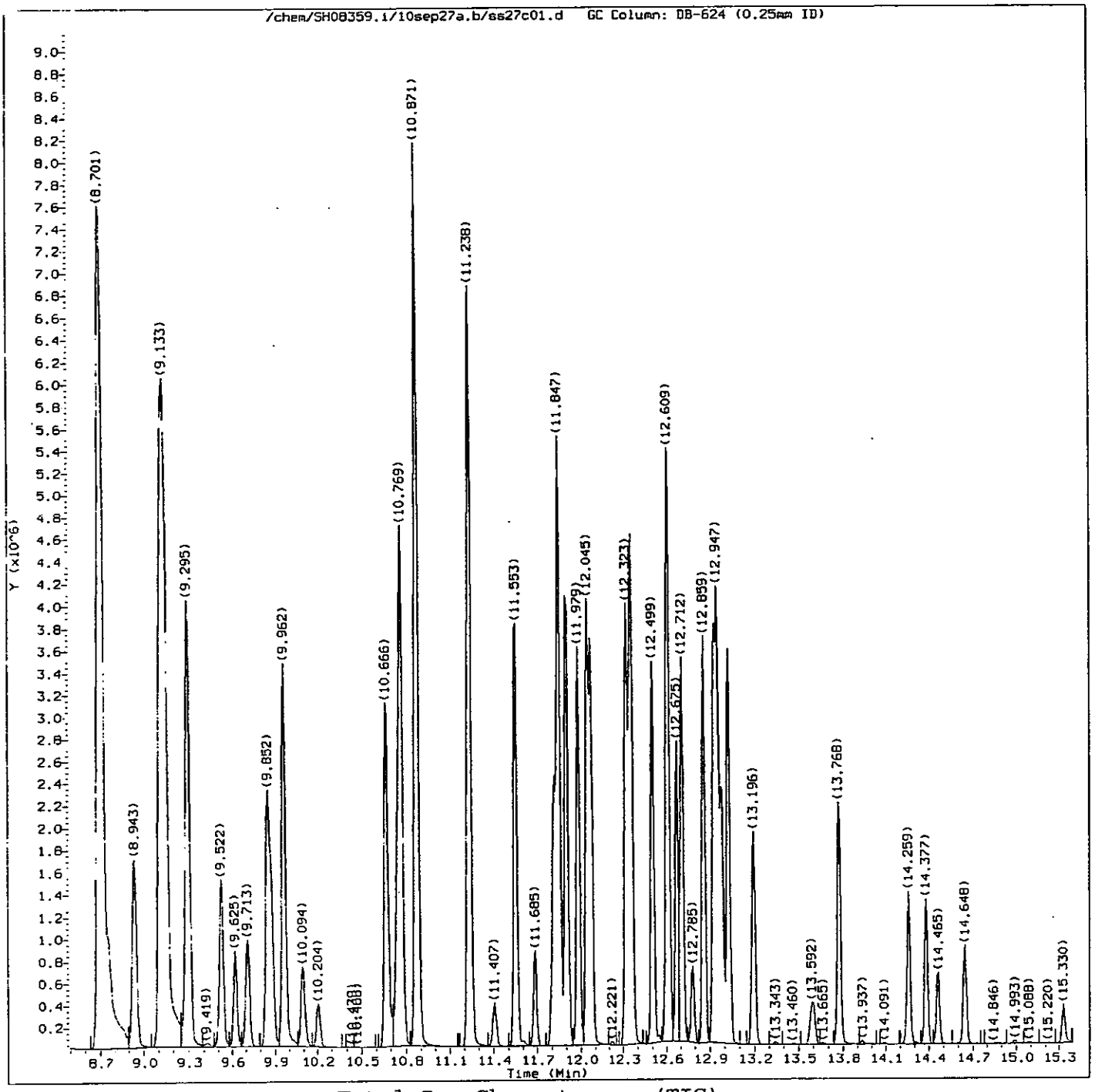
Data File: /chem/SH08359.i/10sep27a.b/ss27c01.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 05:33 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: REV4+ACROI
Calibration date and time: 27-SEP-2010 06:03
Date, time and analyst ID of latest file update: 27-Sep-2010 06:04 amd00492

WAT12 6181

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Anita M. Dale
on 09/27/2010 at 06:05.
Target 3.5 esignature user ID: amd00492




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27c01.d
Injection date and time: 27-SEP-2010 05:33

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 06:03

Sublist used: REV4+ACROI

Date, time and analyst ID of latest file update: 27-Sep-2010 06:04 amd00492

WAT12 0182

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Anita M. Dale
on 09/27/2010 at 06:05.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27c01.d
Injection date and time: 27-SEP-2010 05:33

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 06:03

Sublist used: REV4+ACROI

Date, time and analyst ID of latest file update: 27-Sep-2010 06:04 amd00492

Sample Name: VSTD010

Lab Sample ID: VSTD010

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | 1.947 | 85 | 752705 | 10.673 |
| 2) Chloromethane | (1) | 2.064 | 50 | 2125507 | 10.281 |
| 3) Vinyl Chloride | (1) | 2.189 | 62 | 1557719 | 10.547 |
| 4) Bromomethane | (1) | 2.497 | 94 | 843114 | 10.601 |
| 5) Chloroethane | (1) | 2.592 | 64 | 857919 | 10.385 |
| 6) Dichlorofluoromethane | (1) | 2.797 | 67 | 1616867 | 10.084 |
| 7) Trichlorofluoromethane | (1) | 2.893 | 101 | 791479M | 10.471 |
| 8) Ethyl Ether | (1) | 3.113 | 59 | 495075 | 10.810 |
| 9) Acrolein | (1) | 3.274 | 56 | 2679681 | 482.516 |
| 10) 1,1-Dichloroethene | (1) | 3.399 | 96 | 598780 | 9.516 |
| 11) Freon 113 | (1) | 3.435 | 101 | 560724 | 10.158 |
| 13) Acetone(mz43) | (1) | 3.443 | 43 | 588456 | 59.309 |
| 12) Acetone | (1) | 3.450 | 58 | 164394 | 77.304 |
| 14) Methyl Iodide | (1) | 3.582 | 142 | 1170991 | 9.223 |
| 15) Carbon Disulfide | (1) | 3.685 | 76 | 2175847 | 9.751 |
| 16) Allyl Chloride | (1) | 3.824 | 39 | 1699232 | 9.948 |
| 17) Methylene Chloride | (1) | 3.978 | 84 | 609532 | 9.531 |
| 18) t-Butyl Alcohol | (1) | 4.125 | 59 | 197564 | 140.827 |
| 19) Acrylonitrile | (1) | 4.279 | 53 | 1300713 | 115.997 |
| 21) trans-1,2-Dichloroethene | (1) | 4.315 | 96 | 733920 | 9.575 |
| 22) Methyl Tertiary Butyl Ether | (1) | 4.323 | 73 | 738226 | 9.909 |
| 23) 1,1-Dichloroethane | (1) | 4.865 | 63 | 1676049 | 9.714 |
| 24) di-Isopropyl Ether | (1) | 4.961 | 87 | 434984 | 10.497 |
| 26) Ethyl t-Butyl Ether | (1) | 5.459 | 59 | 1887795 | 10.554 |
| 27) cis-1,2-Dichloroethene | (1) | 5.657 | 96 | 736035 | 9.727 |
| 29) 2-Butanone | (1) | 5.672 | 43 | 1798577 | 97.969 |
| 28) 2,2-Dichloropropane | (1) | 5.687 | 77 | 707127 | 9.799 |
| 30) Propionitrile | (1) | 5.767 | 54 | 694698 | 178.908 |
| 31) Methyl Acrylate | (1) | 5.811 | 55 | 1781547 | 52.850 |
| 32) Methacrylonitrile | (1) | 5.973 | 67 | 1103497 | 99.205 |
| 33) Bromochloromethane | (1) | 5.987 | 128 | 248407 | 10.190 |
| 34) Tetrahydrofuran | (1) | 6.061 | 71 | 305149 | 126.015 |
| 35) Chloroform | (1) | 6.119 | 83 | 1034829 | 10.068 |
| 36) 1,1,1-Trichloroethane | (1) | 6.405 | 97 | 708533 | 10.013 |
| 37) 1-Chlorobutane | (1) | 6.537 | 49 | 86351 | 11.212 |
| 38) 1,1-Dichloropropene | (1) | 6.625 | 75 | 940882 | 9.635 |
| 39) Carbon Tetrachloride | (1) | 6.647 | 117 | 556526 | 9.914 |
| 40) Benzene | (1) | 6.941 | 78 | 2617000 | 9.897 |
| 41) 1,2-Dichloroethane | (1) | 6.963 | 62 | 567954 | 10.820 |

M = Compound was manually integrated.

WAT12 8183



Digitally signed by Anita M. Dale
on 09/27/2010 at 06:05.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27c01.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 05:33  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 27-SEP-2010 06:03
Date, time and analyst ID of latest file update: 27-Sep-2010 06:04 amd00492

Sample Name: VSTD010  Lab Sample ID: VSTD010

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 42) t-Amyl Methyl Ether | (1) | 7.124 | 73 | 969775 | 9.967 |
| 43) *Fluorobenzene | (1) | 7.337 | 96 | 1092798 | 5.000 |
| 44) Trichloroethene | (1) | 7.821 | 95 | 734807 | 9.945 |
| 45) 1,2-Dichloropropane | (1) | 8.107 | 63 | 895109 | 10.132 |
| 46) Dibromomethane | (1) | 8.239 | 93 | 260957 | 10.682 |
| 47) Methyl Methacrylate | (1) | 8.261 | 69 | 201106 | 10.099 |
| 48) Bromodichloromethane | (1) | 8.429 | 83 | 627934 | 10.581 |
| 49) 2-Nitropropane | (1) | 8.701 | 46 | 332289 | 1145.594 |
| 50) Chloroacetonitrile | (1) | 8.752 | 75 | 391537 | 341.981 |
| 51) cis-1,3-Dichloropropene | (1) | 8.935 | 75 | 830427 | 10.301 |
| 52) 4-Methyl-2-Pentanone | (1) | 9.111 | 58 | 1296529 | 110.100 |
| 53) 1,1-Dichloropropanone | (1) | 9.133 | 83 | 397066 | 985.897 |
| 54) Toluene | (1) | 9.295 | 92 | 1660812 | 10.223 |
| 55) trans-1,3-Dichloropropene | (1) | 9.522 | 75 | 580305 | 10.506 |
| 56) Ethyl Methacrylate | (1) | 9.625 | 69 | 323298 | 10.380 |
| 57) 1,1,2-Trichloroethane | (1) | 9.713 | 83 | 277020 | 10.975 |
| 59) Tetrachloroethene | (1) | 9.852 | 166 | 650356 | 9.719 |
| 60) 1,3-Dichloropropane | (1) | 9.874 | 76 | 535542 | 10.531 |
| 61) 2-Hexanone | (1) | 9.962 | 58 | 1242092 | 113.924 |
| 62) Dibromochloromethane | (1) | 10.094 | 129 | 381765 | 10.794 |
| 63) 1,2-Dibromoethane | (1) | 10.204 | 107 | 293560 | 10.196 |
| 64) Chlorobenzene | (1) | 10.666 | 112 | 1463781 | 9.979 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | 10.739 | 131 | 458337 | 10.380 |
| 66) Ethylbenzene | (1) | 10.769 | 106 | 841470 | 9.546 |
| 68) m+p-Xylene | (1) | 10.871 | 106 | 2114009 | 19.843 |
| 69) o-Xylene | (1) | 11.231 | 106 | 977885 | 9.669 |
| 70) Styrene | (1) | 11.238 | 104 | 1597715 | 10.198 |
| 71) Bromoform | (1) | 11.407 | 173 | 185226 | 10.961 |
| 73) Isopropylbenzene | (1) | 11.546 | 120 | 584897 | 10.062 |
| 74) $4-Bromofluorobenzene | (1) | 11.685 | 174 | 210481 | 5.103 |
| 72) Xylene (Total) | (1) | | 106 | 3091894 | 29.512 |
| 75) 1,1,2,2-Tetrachloroethane | (1) | 11.803 | 83 | 311112 | 11.150 |
| 76) Bromobenzene | (1) | 11.817 | 156 | 511573 | 10.068 |
| 77) 1,2,3-Trichloropropane | (1) | 11.839 | 110 | 57738 | 10.133 |
| 78) trans-1,4-Dichloro-2-Butene | (1) | 11.847 | 53 | 1052835 | 116.544 |
| 79) n-Propylbenzene | (1) | 11.898 | 120 | 615044 | 10.096 |
| 80) 2-Chlorotoluene | (1) | 11.979 | 126 | 573175 | 10.235 |
| 81) 1,3,5-Trimethylbenzene | (1) | 12.045 | 105 | 1810483 | 9.918 |
| 82) 4-Chlorotoluene | (1) | 12.067 | 126 | 594144 | 10.394 |

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

WAT12 0184



Digitally signed by Anita M. Dale
on 09/27/2010 at 06:05.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27c01.d
Injection date and time: 27-SEP-2010 05:33

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 06:03

Sublist used: REV4+ACROI

Date, time and analyst ID of latest file update: 27-Sep-2010 06:04 amd00492

Sample Name: VSTD010

Lab Sample ID: VSTD010

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 83) tert-Butylbenzene | (1) | 12.323 | 134 | 409494 | 10.044 |
| 84) Pentachloroethane | (1) | 12.345 | 167 | 283132 | 10.633 |
| 85) 1,2,4-Trimethylbenzene | (1) | 12.360 | 105 | 1874797 | 10.037 |
| 86) sec-Butylbenzene | (1) | 12.499 | 134 | 424018 | 10.081 |
| 87) 1,3-Dichlorobenzene | (1) | 12.602 | 146 | 1024781 | 10.165 |
| 88) p-Isopropyltoluene | (1) | 12.617 | 119 | 1689441 | 10.061 |
| 89) 1,4-Dichlorobenzene | (1) | 12.675 | 146 | 974664 | 10.121 |
| 90) n-Butylbenzene | (1) | 12.947 | 92 | 1121864 | 10.008 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.969 | 152 | 194266 | 5.154 |
| 92) 1,2-Dichlorobenzene | (1) | 12.983 | 146 | 761266 | 10.094 |
| 93) Hexachloroethane | (1) | 13.189 | 201 | 301112 | 9.473 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | 13.607 | 157 | 32009 | 11.189 |
| 95) Nitrobenzene | (1) | 13.775 | 77 | 98766 | 149.815 |
| 96) 1,2,4-Trichlorobenzene | (1) | 14.259 | 180 | 384153 | 9.228 |
| 97) Hexachlorobutadiene | (1) | 14.377 | 225 | 234037 | 9.109 |
| 98) Naphthalene | (1) | 14.457 | 128 | 437664 | 9.629 |
| 99) 1,2,3-Trichlorobenzene | (1) | 14.648 | 180 | 264467 | 9.232 |

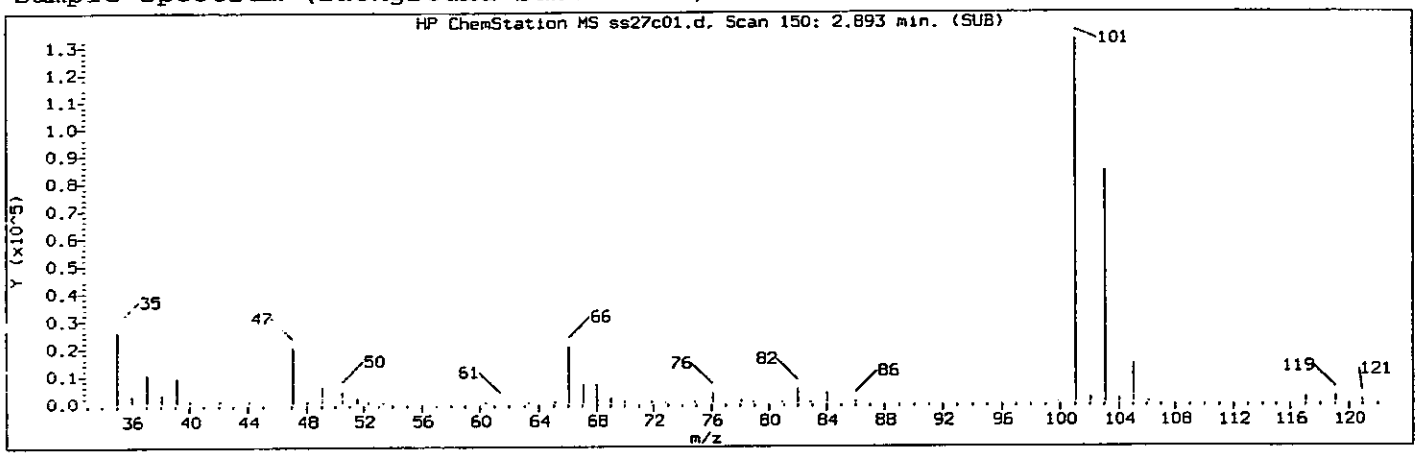
$ = Compound is a surrogate standard.



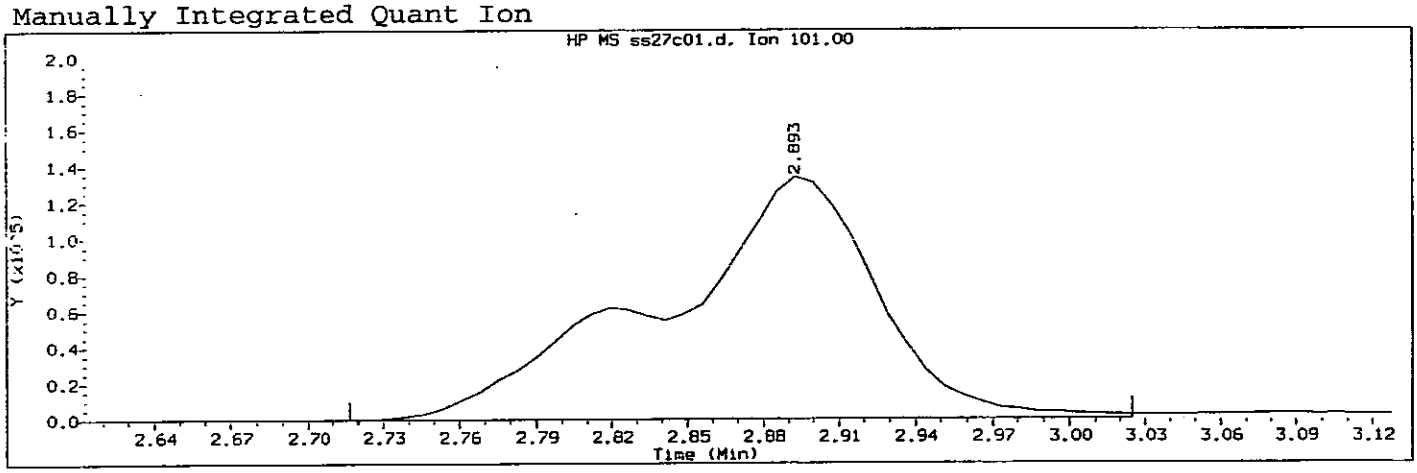
WAT12 0185

Digitally signed by Anita M. Dale
on 09/27/2010 at 06:05.
Target 3.5 esignature user ID: amd00492

Sample Spectrum (Background Subtracted)




Manually Integrated Quant Ion




Data File: /chem/SH08359.i/10sep27a.b/ss27c01.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 05:33  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 27-SEP-2010 06:03
Date, time and analyst ID of latest file update: 27-Sep-2010 06:04 amd00492

Sample Name: VSTD010  Lab Sample ID: VSTD010

| | | | |
|---|---|---|---|
| Compound Number | : 7 | | |
| Compound Name | : Trichlorofluoromethane | | |
| Scan Number | : 150 | | |
| Retention Time (minutes) | : 2.893 | | |
| Quant Ion | : 101.00 | | |
| Area (flag) | : 791479M | | |
| On-Column Amount (ng) | : 10.4713 | | |
| Integration start scan | : 125 | Integration stop scan: | 167 |
| Y at integration start | : 0 | Y at integration end: | 0 |

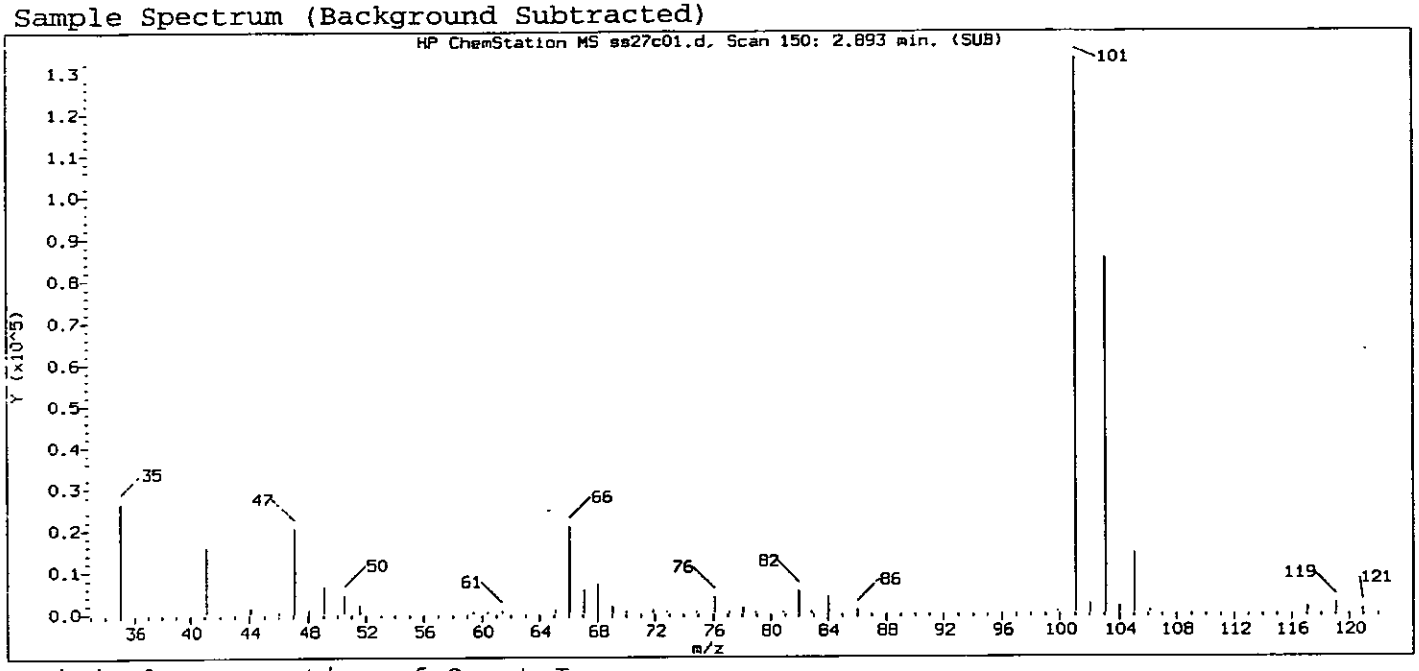
Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Anita M. Dale on 09/27/2010 at 06:05. Target 3.5 esignature user ID: amd00492

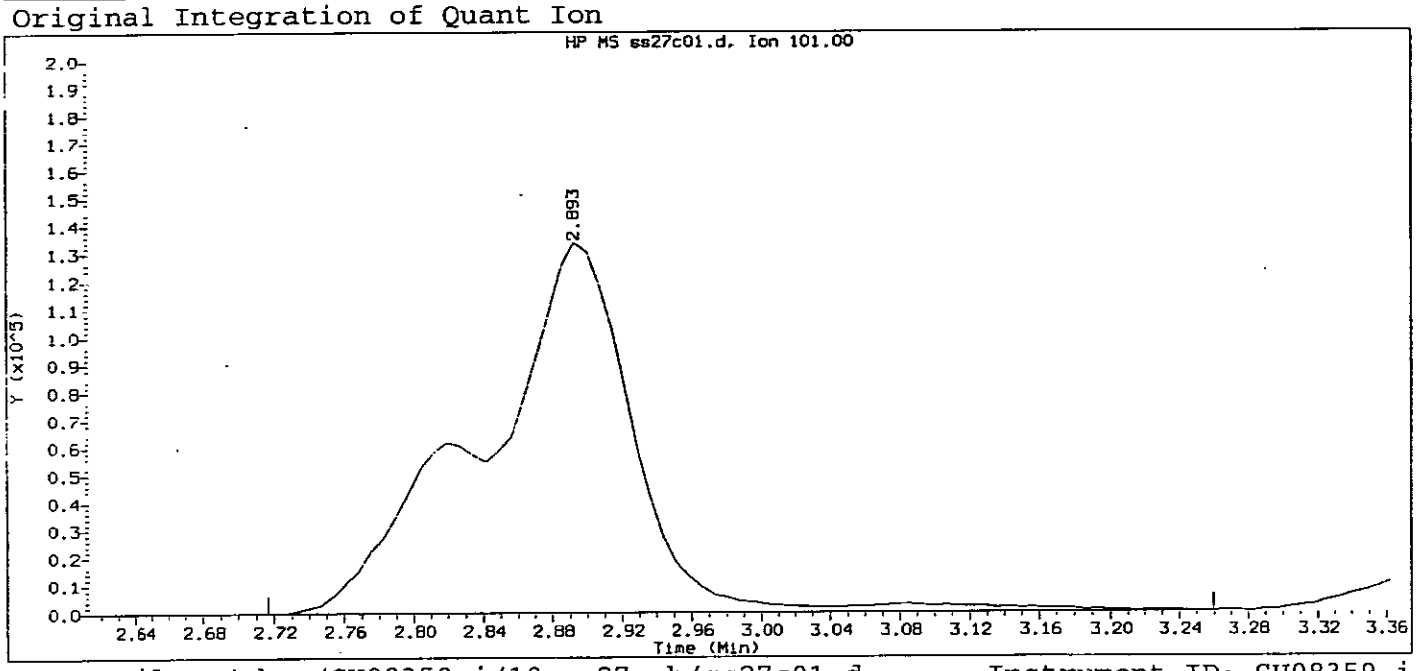
WAT12 8186

GC/MS audit/management approval: [signature] 092810

Sample Spectrum (Background Subtracted)




Original Integration of Quant Ion




Data File: /chem/SH08359.i/10sep27a.b/ss27c01.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 05:33  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: REV4+ACROI
Calibration date and time: 27-SEP-2010 06:03
Date, time and analyst ID of latest file update: 27-Sep-2010 06:03 Automation

Sample Name: VSTD010  Lab Sample ID: VSTD010

Compound Number : 7
Compound Name : Trichlorofluoromethane
Scan Number : 150
Retention Time (minutes): 2.893
Quant Ion : 101.00
Area : 812966
On-column Amount (ng) : 10.7556
Integration start scan : 125  Integration stop scan: 199
Y at integration start : 0  Y at integration end: 0

WAT12 0187

Digitally signed by Anita M. Dale on 09/27/2010 at 06:05.
Target 3.5 esignature user ID: amd00492

# Raw QC Data

Data File: /chem/SH08359.i/10sep24a.b/ss24t01.d



Date : 24-SEP-2010 10:56

Client ID: BFB MAY12-10

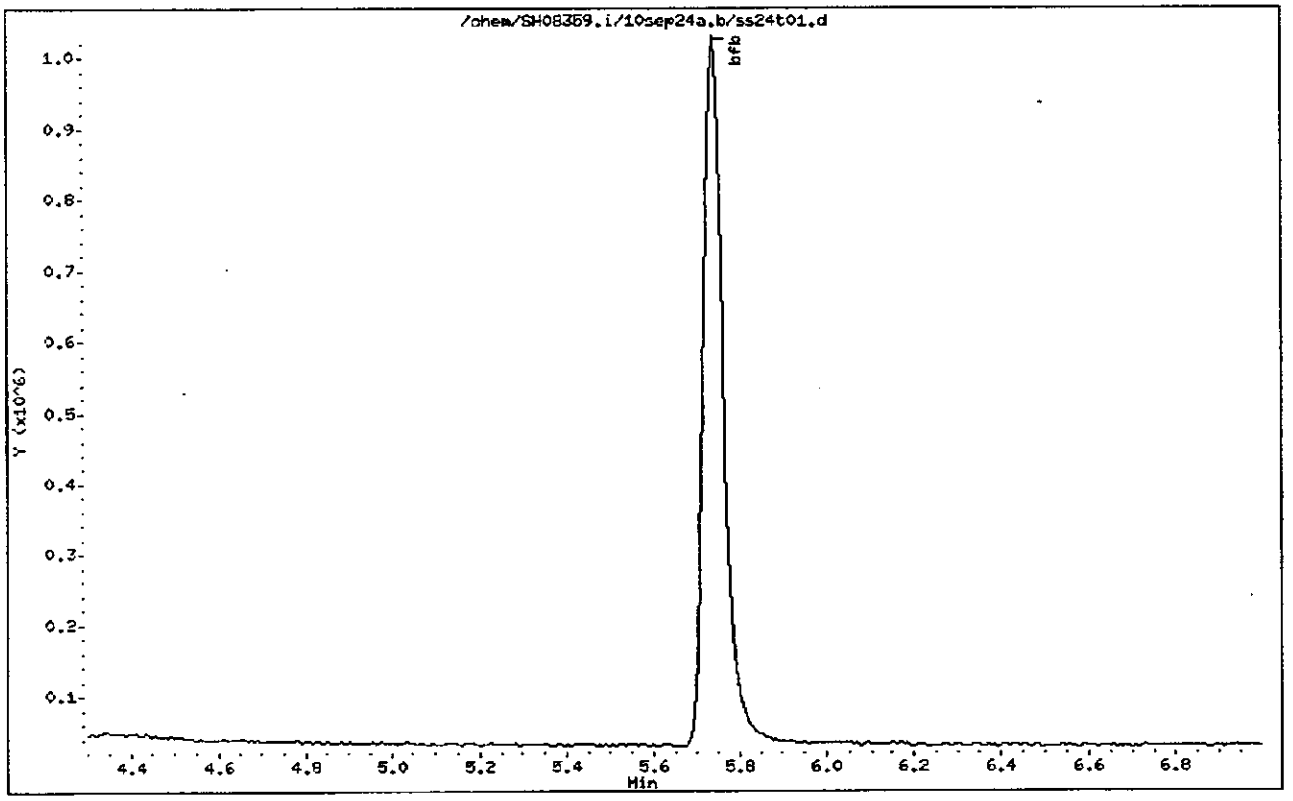
Instrument: SH08359.i

Sample Info: BFB MAY12-10;50NG BFB;1;3;

Operator: amd00492

Column phase: DB-624

Column diameter: 0.25




WAT12 6189

Digitally signed by Anita M. Dale on 09/24/2010 at 11:05.
Target 3.5 esignature user ID: amd00492

Data File: /chem/SH08359.i/10sep24a.b/ss24t01.d



Date : 24-SEP-2010 10:56

Client ID: BFB MAY12-10

Instrument: SH08359.i

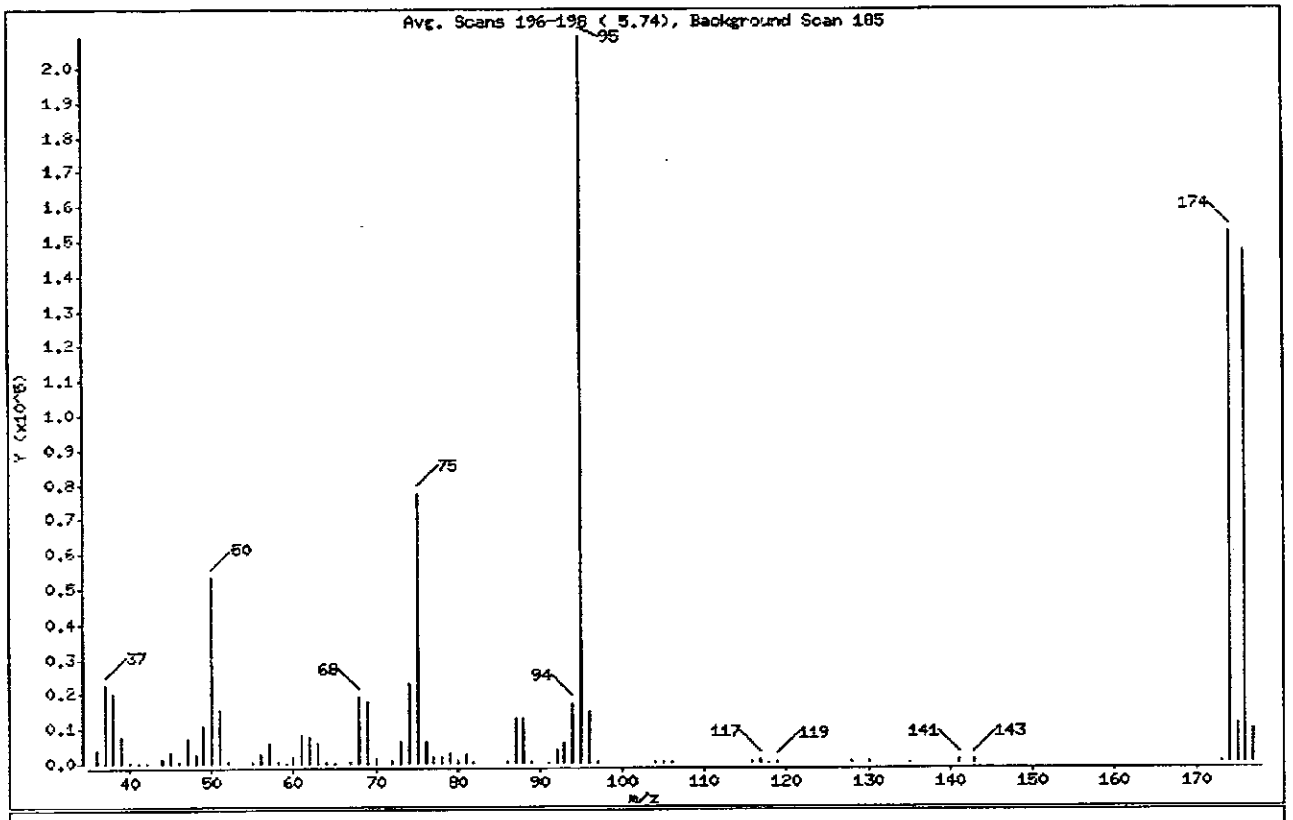
Sample Info: BFB MAY12-10;50NG BFB;1;3;

Operator: amd00492

Column phase: DB-624

Column diameter: 0.25

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 15.00 - 40.00% of mass 95 | 26.46 |
| 75 | 30.00 - 80.00% of mass 95 | 37.08 |
| 96 | 5.00 - 9.00% of mass 95 | 7.18 |
| 173 | Less than 2.00% of mass 174 | 0.31 ( 0.43) |
| 174 | 50.00 - 100.00% of mass 95 | 72.86 |
| 175 | 5.00 - 9.00% of mass 174 | 5.31 ( 7.29) |
| 176 | 95.00 - 101.00% of mass 174 | 70.44 ( 96.68) |
| 177 | 5.00 - 9.00% of mass 176 | 4.71 ( 6.69) |

WAT12 E198

Digitally signed by Anita M. Dale on 09/24/2010 at 11:05.
Target 3.5 esignature user ID: amd00492

Data File: /chem/SH08359.i/10sep24a.b/ss24t01.d

Date : 24-SEP-2010 10:56

Client ID: BFB MAY12-10

Instrument: SH08359.i

Sample Info: BFB MAY12-10:50NG BFB:1:3:

Operator: amd00492

Column phase: DB-624

Column diameter: 0.25

Data File: ss24t01.d
Spectrum: Avg. Scans 196-198 ( 5.74), Background Scan 185
Location of Maximum: 95.00
Number of points: 70

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 3777 | 57.00 | 5798 | 77.00 | 1759 | 105.00 | 426 |
| 37.00 | 22760 | 58.00 | 319 | 78.00 | 1819 | 106.00 | 611 |
| 38.00 | 20008 | 59.00 | 92 | 79.00 | 3108 | 116.00 | 514 |
| 39.00 | 7626 | 60.00 | 1756 | 80.00 | 1093 | 117.00 | 746 |
| 40.00 | 267 | 61.00 | 8411 | 81.00 | 3094 | 118.00 | 151 |
| 41.00 | 55 | 62.00 | 7923 | 82.00 | 699 | 119.00 | 654 |
| 42.00 | 97 | 63.00 | 5684 | 86.00 | 460 | 128.00 | 559 |
| 44.00 | 1419 | 64.00 | 493 | 87.00 | 13046 | 130.00 | 587 |
| 45.00 | 3360 | 65.00 | 109 | 88.00 | 12919 | 135.00 | 190 |
| 46.00 | 514 | 67.00 | 545 | 89.00 | 407 | 141.00 | 872 |
| 47.00 | 7072 | 68.00 | 19256 | 91.00 | 217 | 143.00 | 944 |
| 48.00 | 2299 | 69.00 | 17600 | 92.00 | 3613 | 173.00 | 651 |
| 49.00 | 11091 | 70.00 | 1289 | 93.00 | 5917 | 174.00 | 152320 |
| 50.00 | 53248 | 72.00 | 865 | 94.00 | 17352 | 175.00 | 11108 |
| 51.00 | 15201 | 73.00 | 6366 | 95.00 | 209088 | 176.00 | 147264 |
| 52.00 | 556 | 74.00 | 23064 | 96.00 | 15023 | 177.00 | 9850 |
| 55.00 | 644 | 75.00 | 77544 | 97.00 | 614 | | |
| 56.00 | 3092 | 76.00 | 6306 | 104.00 | 568 | | |

WAT12 0191

Digitally signed by Anita M. Dale on 09/24/2010 at 11:05.
Target 3.5 esignature user ID: amd00492

Data File: /chem/SH08359.i/10sep27a.b/ss27t01.d



Date : 27-SEP-2010 05:19

Client ID: BFB MAY12-10

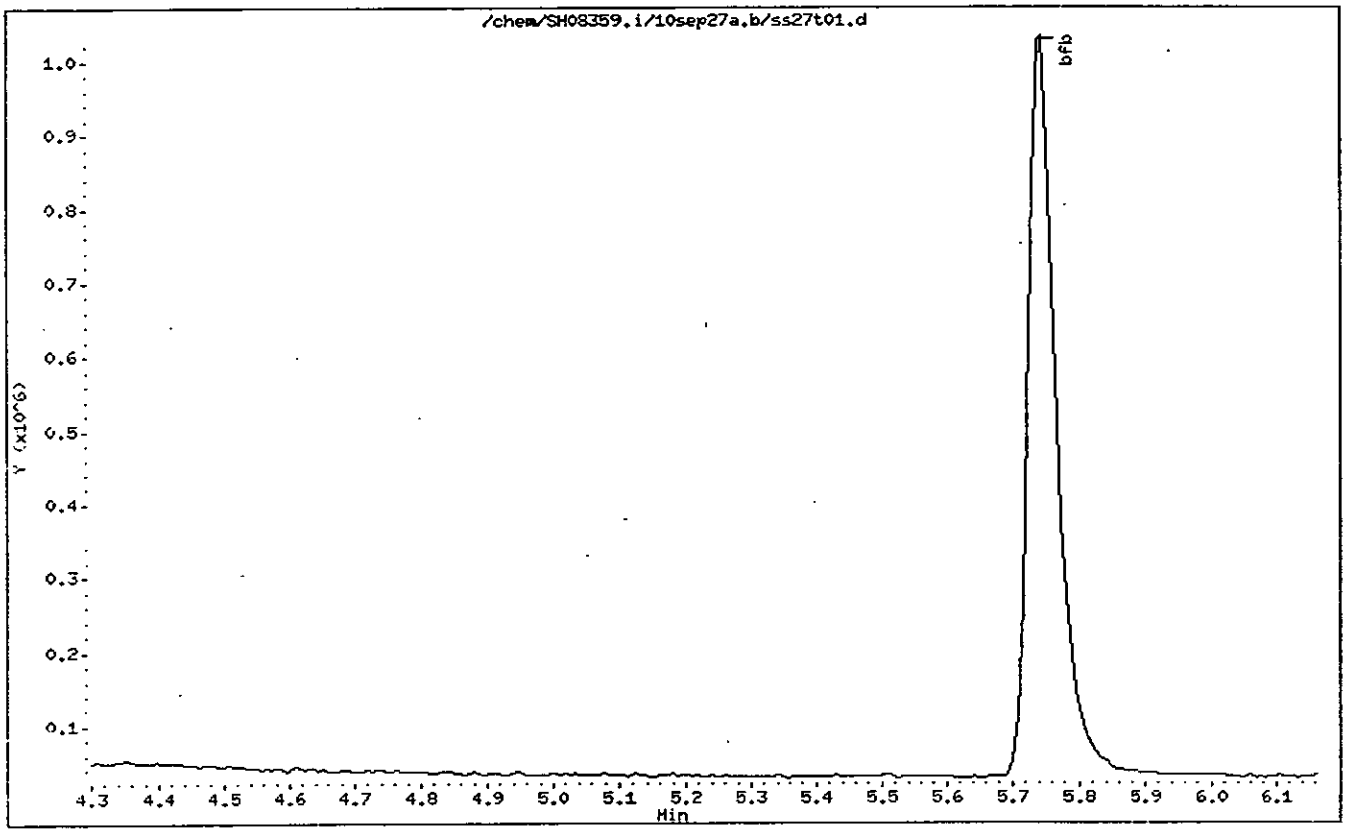
Instrument: SH08359.i

Sample Info: BFB MAY12-10;50NG BFB;1;3;

Operator: amd00492

Column phase: DB-624

Column diameter: 0.25




WAT12 8192

Digitally signed by Anita M. Dale on 09/27/2010 at 05:26.
Target 3.5 esignature user ID: amd00492

Data File: /chem/SH08359.i/10sep27a.b/ss27t01.d

Date : 27-SEP-2010 05:19

Client ID: BFB MAY12-10

Instrument: SH08359.i

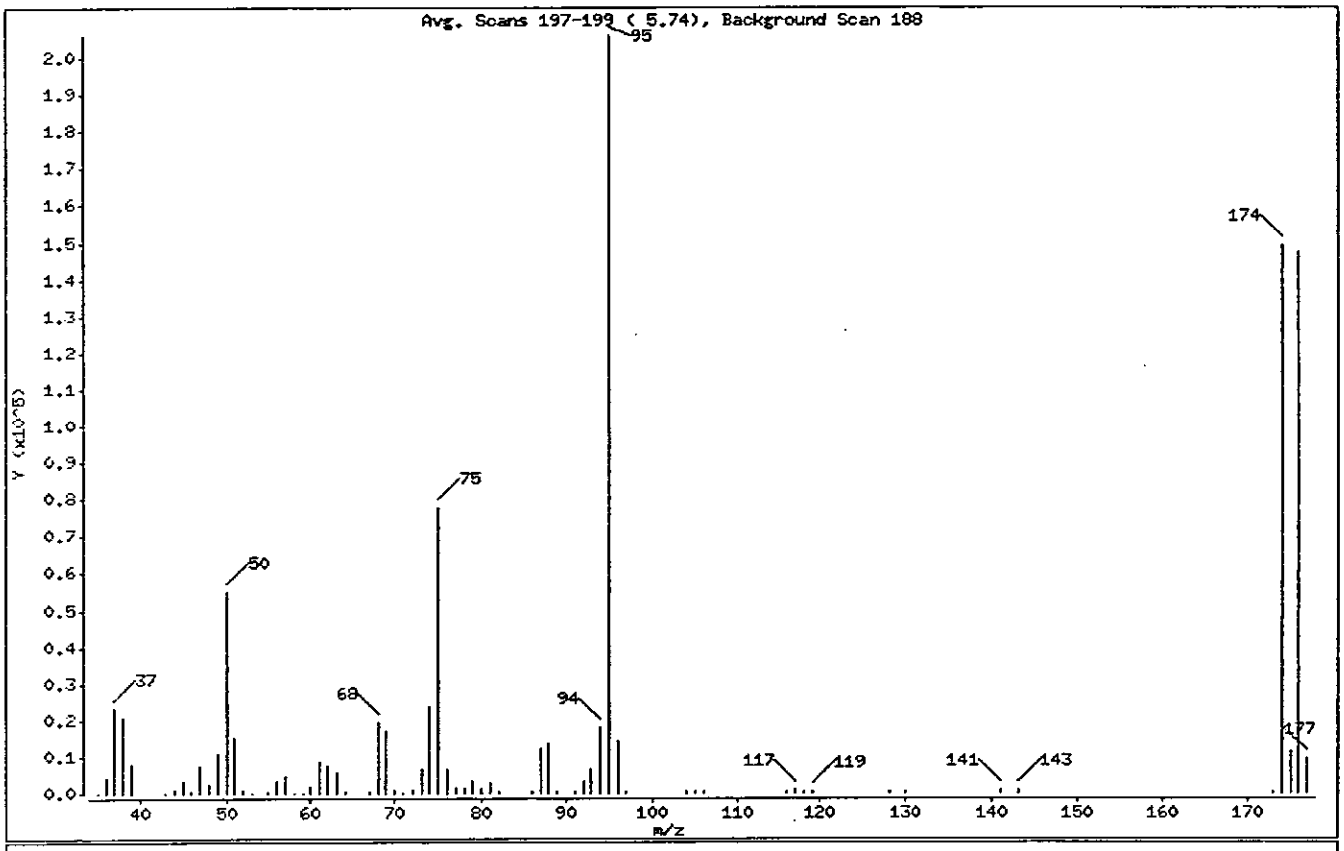
Sample Info: BFB MAY12-10;50NG BFB;1;3;

Operator: amd00492

Column phase: DB-624

Column diameter: 0.25

1 bfb




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 15.00 - 40.00% of mass 95 | 26.67 |
| 75 | 30.00 - 80.00% of mass 95 | 37.68 |
| 96 | 5.00 - 9.00% of mass 95 | 6.91 |
| 173 | Less than 2.00% of mass 174 | 0.25 ( 0.34) |
| 174 | 50.00 - 100.00% of mass 95 | 72.42 |
| 175 | 5.00 - 9.00% of mass 174 | 5.41 ( 7.47) |
| 176 | 95.00 - 101.00% of mass 174 | 71.54 ( 98.79) |
| 177 | 5.00 - 9.00% of mass 176 | 4.67 ( 6.53) |



Digitally signed by Anita M. Dale on 09/27/2010 at 05:26.
Target 3.5 esignature user ID: amd00492

Data File: /chem/SH08359.i/10sep27a.b/ss27t01.d

Date : 27-SEP-2010 05:19

Client ID: BFB MAY12-10

Instrument: SH08359.i

Sample Info: BFB MAY12-10;50NG BFB;1;3;

Operator: amd00492

Column phase: DB-624

Column diameter: 0.25

Data File: ss27t01.d

Spectrum: Avg. Scans 197-199 ( 5.74), Background Scan 188

Location of Maximum: 95.00

Number of points: 69

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 35.00 | 16 | 57.00 | 4906 | 77.00 | 1580 | 105.00 | 427 |
| 36.00 | 4385 | 58.00 | 232 | 78.00 | 1556 | 106.00 | 474 |
| 37.00 | 23192 | 59.00 | 97 | 79.00 | 3200 | 116.00 | 331 |
| 38.00 | 20888 | 60.00 | 2050 | 80.00 | 1197 | 117.00 | 1039 |
| 39.00 | 7978 | 61.00 | 8576 | 81.00 | 3076 | 118.00 | 601 |
| 43.00 | 96 | 62.00 | 7351 | 82.00 | 684 | 119.00 | 649 |
| 44.00 | 908 | 63.00 | 5568 | 86.00 | 363 | 128.00 | 586 |
| 45.00 | 3244 | 64.00 | 480 | 87.00 | 12542 | 130.00 | 576 |
| 46.00 | 422 | 67.00 | 522 | 88.00 | 13821 | 141.00 | 794 |
| 47.00 | 7562 | 68.00 | 19232 | 89.00 | 285 | 143.00 | 748 |
| 48.00 | 2360 | 69.00 | 17184 | 91.00 | 630 | 173.00 | 507 |
| 49.00 | 11118 | 70.00 | 1181 | 92.00 | 3499 | 174.00 | 149312 |
| 50.00 | 55008 | 71.00 | 86 | 93.00 | 6462 | 175.00 | 11153 |
| 51.00 | 15272 | 72.00 | 784 | 94.00 | 18032 | 176.00 | 147520 |
| 52.00 | 748 | 73.00 | 6449 | 95.00 | 206208 | 177.00 | 9629 |
| 53.00 | 87 | 74.00 | 23832 | 96.00 | 14259 | | |
| 55.00 | 449 | 75.00 | 77704 | 97.00 | 492 | | |
| 56.00 | 3084 | 76.00 | 6448 | 104.00 | 559 | | |



Digitally signed by Anita M. Dale on 09/27/2010 at 05:26.
Target 3.5 esignature user ID: amd00492

VBLKS26

# Lancaster Laboratories
## Analysis Summary for GC/MS Volatiles

VBLKS26

Data file: /chem/SH08359.i/10sep27a.b/ss27b02.d
Data file Sample Info. Line: VBLKS26;VBLKS26;1;3;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 07:09 Automation

Injection date and time: **27-SEP-2010 06:53**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 06:03
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Internal Standards | RT (+/-RT) | Scan | QIon | Area(+/- %Change) | Conc. (on-column) | QC Flag |
|---|---|---|---|---|---|---|
| 43) Fluorobenzene | 7.337( 0.000) | 756 | 96 | 1038912 ( -5) | 5.00 | |

| Surrogate Standards | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | %Rec. | QC flags | QC Limits |
|---|---|---|---|---|---|---|---|---|
| 74) 4-Bromofluorobenzene | (1) | 11.685( 0.000) | 174 | 180203 | 4.595 | 92% | | 80 - 120 |
| 91) 1,2-Dichlorobenzene-d4 | (1) | 12.969( 0.000) | 152 | 147869 | 4.127 | 83% | | 80 - 120 |

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 2) Chloromethane | (1) | | | Not Detected | | | | | 0.2 |
| 3) Vinyl Chloride | (1) | | | Not Detected | | | | | 0.1 |
| 4) Bromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 5) Chloroethane | (1) | | | Not Detected | | | | | 0.2 |
| 7) Trichlorofluoromethane | (1) | | | Not Detected | | | | | 0.2 |
| 10) 1,1-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 17) Methylene Chloride | (1) | | | Not Detected | | | | | 0.3 |
| 21) trans-1,2-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 23) 1,1-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 27) cis-1,2-Dichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 28) 2,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.2 |
| 33) Bromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 35) Chloroform | (1) | | | Not Detected | | | | | 0.1 |
| 36) 1,1,1-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 39) Carbon Tetrachloride | (1) | | | Not Detected | | | | | 0.1 |
| 38) 1,1-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 40) Benzene | (1) | | | Not Detected | | | | | 0.1 |
| 41) 1,2-Dichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 44) Trichloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 45) 1,2-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 46) Dibromomethane | (1) | | | Not Detected | | | | | 0.1 |
| 48) Bromodichloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 51) cis-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 54) Toluene | (1) | | | Not Detected | | | | | 0.1 |
| 55) trans-1,3-Dichloropropene | (1) | | | Not Detected | | | | | 0.1 |
| 57) 1,1,2-Trichloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 59) Tetrachloroethene | (1) | | | Not Detected | | | | | 0.1 |
| 60) 1,3-Dichloropropane | (1) | | | Not Detected | | | | | 0.1 |
| 62) Dibromochloromethane | (1) | | | Not Detected | | | | | 0.1 |
| 63) 1,2-Dibromoethane | (1) | | | Not Detected | | | | | 0.1 |
| 64) Chlorobenzene | (1) | | | Not Detected | | | | | 0.1 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | | | Not Detected | | | | | 0.1 |
| 66) Ethylbenzene | (1) | | | Not Detected | | | | | 0.1 |
| 68) m+p-Xylene | (1) | | | Not Detected | | | | | 0.2 |
| 69) o-Xylene | (1) | | | Not Detected | | | | | 0.1 |
| 70) Styrene | (1) | | | Not Detected | | | | | 0.1 |
| 71) Bromoform | (1) | | | Not Detected | | | | | 0.2 |
| 73) Isopropylbenzene | (1) | | | Not Detected | | | | | 0.1 |

WAT12 0195

Digitally signed by Anita M. Dale on 09/27/2010 at 07:11. Target 3.5 esignature user ID: amd00492

VBLKS26 Lancaster Laboratories Analysis Summary for GC/MS Volatiles VBLKS26

Data file: /chem/SH08359.i/10sep27a.b/ss27b02.d
Data file Sample Info. Line: VBLKS26;VBLKS26;1;3;;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 07:09 Automation

Injection date and time: **27-SEP-2010 06:53**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27b02.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 06:03
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Target Compounds | I.S. Ref. | RT | (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|---|
| 75) 1,1,2,2-Tetrachloroethane | (1) | | | | Not Detected | | | | | 0.1 |
| 76) Bromobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 77) 1,2,3-Trichloropropane | (1) | | | | Not Detected | | | | | 0.1 |
| 79) n-Propylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 80) 2-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 81) 1,3,5-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 82) 4-Chlorotoluene | (1) | | | | Not Detected | | | | | 0.2 |
| 83) tert-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 85) 1,2,4-Trimethylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 86) sec-Butylbenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 88) p-Isopropyltoluene | (1) | | | | Not Detected | | | | | 0.1 |
| 87) 1,3-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 89) 1,4-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 90) n-Butylbenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 92) 1,2-Dichlorobenzene | (1) | | | | Not Detected | | | | | 0.1 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | | | | Not Detected | | | | | 0.4 |
| 96) 1,2,4-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |
| 97) Hexachlorobutadiene | (1) | | | | Not Detected | | | | | 0.2 |
| 98) Naphthalene | (1) | | | | Not Detected | | | | | 0.2 |
| 99) 1,2,3-Trichlorobenzene | (1) | | | | Not Detected | | | | | 0.2 |

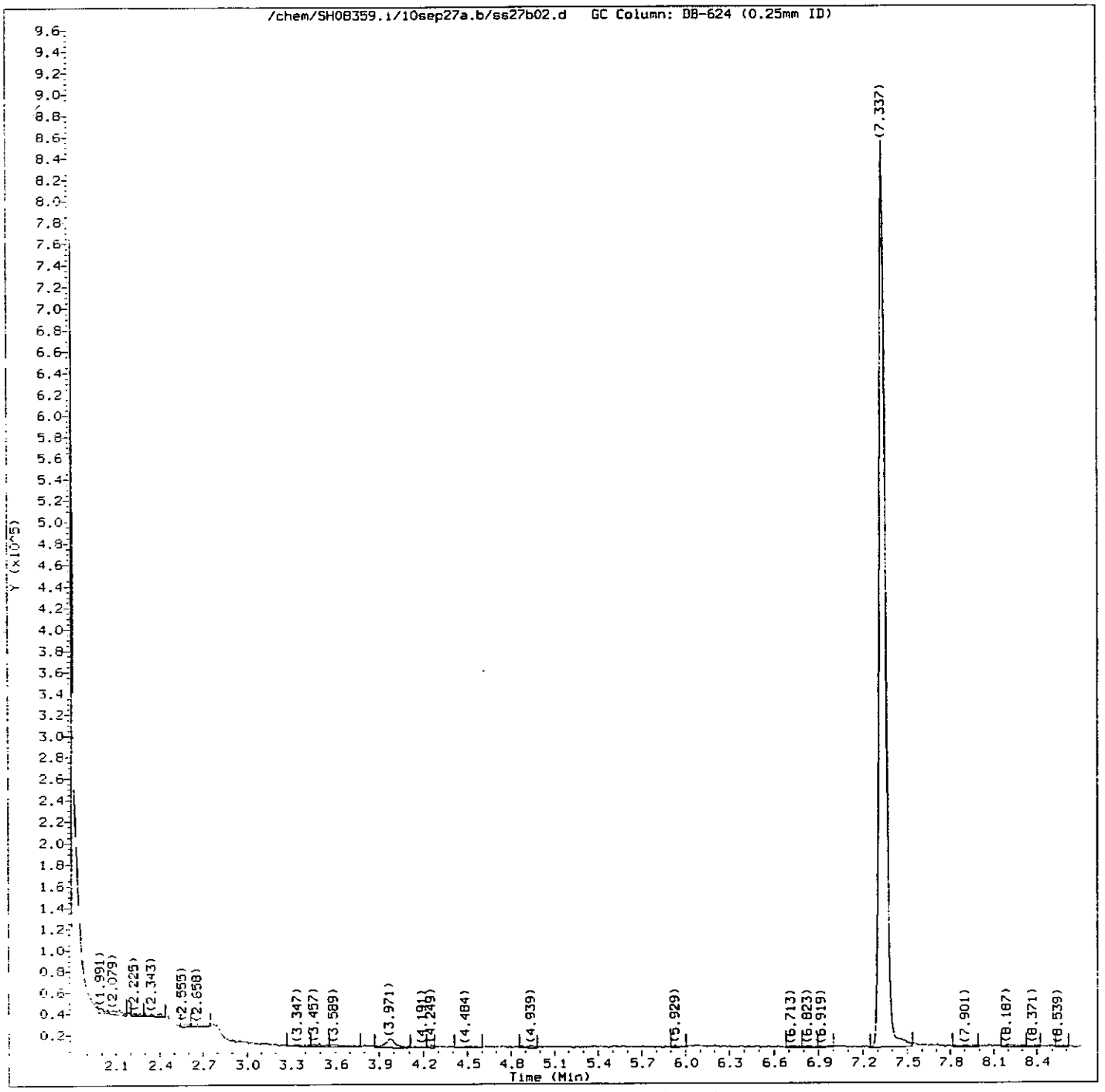
Total number of targets = 59

Comments:

WAT12 0196

Digitally signed by Anita M. Dale on 09/27/2010 at 07:11. Target 3.5 esignature user ID: amd00492

Auditor: Date:




Total Ion Chromatogram (TIC)

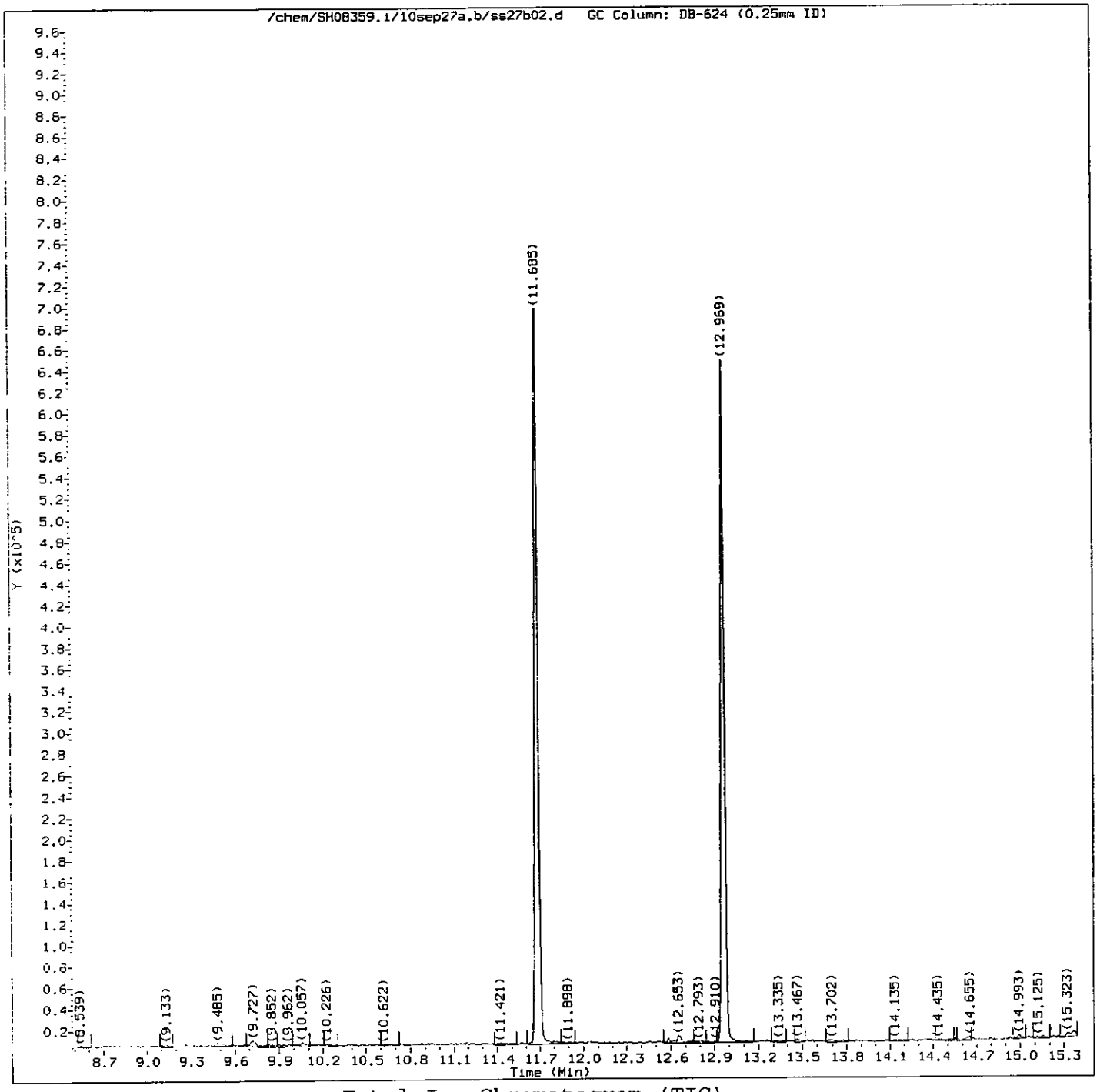
Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27b02.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 06:53 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 06:03
Date, time and analyst ID of latest file update: 27-Sep-2010 07:09 Automation

Sample Name: VBLKS26 Lab Sample ID: VBLKS26 WAT12 8197

Digitally signed by Anita M. Dale
on 09/27/2010 at 07:11.
Target 3.5 esignature user ID: amd00492




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27b02.d
Injection date and time: 27-SEP-2010 06:53

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 06:03

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 07:09 Automation

Sample Name: VBLKS26

Lab Sample ID: VBLKS26

WAT12 0198

Digitally signed by Anita M. Dale
on 09/27/2010 at 07:11.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27b02.d
Injection date and time: 27-SEP-2010 06:53

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 06:03

Sublist used: DRAPERREV3

Date, time and analyst ID of latest file update: 27-Sep-2010 07:09 Automation

Sample Name: VBLKS26

Lab Sample ID: VBLKS26

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 43)*Fluorobenzene | (1) | 7.337 | 96 | 1038912 | 5.000 |
| 74)$4-Bromofluorobenzene | (1) | 11.685 | 174 | 180203 | 4.595 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.969 | 152 | 147869 | 4.127 |

* = Compound is an internal standard.
$ = Compound is a surrogate standard.



WAT12 6199

Digitally signed by Anita M. Dale
on 09/27/2010 at 07:11.
Target 3.5 esignature user ID: amd00492

LFBS26 Lancaster Laboratories Analysis Summary for GC/MS Volatiles LFBS26

Data file: /chem/SH08359.i/10sep27a.b/ss27s02.d
Data file Sample Info. Line: LFBS26;LFBS26;1;3;LCS;;DRAPER;
Date, time and analyst ID of latest file update: 27-Sep-2010 08:03 Automation

Injection date and time: **27-SEP-2010 07:46**
Instrument ID: **SH08359.i** Batch: **S102702AA**

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27ba1.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Internal Standards | RT (+/-RT) | Scan | QIon | Area(+/- %Change) | Conc. (on-column) | QC Flag |
|---|---|---|---|---|---|---|
| 43) Fluorobenzene | 7.337( 0.000) | 756 | 96 | 1131115 ( 4) | 5.00 | |

| Surrogate Standards | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | %Rec. | QC flags | QC Limits |
|---|---|---|---|---|---|---|---|---|
| 74) 4-Bromofluorobenzene | (1) | 11.685( 0.000) | 174 | 202211 | 4.736 | 95% | | 80 - 120 |
| 91) 1,2-Dichlorobenzene-d4 | (1) | 12.969( 0.000) | 152 | 184816 | 4.738 | 95% | | 80 - 120 |

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | 1.954(-0.000) | 85 | 138346 | 1.895 | 1.90 | | | 0.2 |
| 2) Chloromethane | (1) | 2.057( 0.000) | 50 | 463565 | 2.166 | 2.17 | | | 0.2 |
| 3) Vinyl Chloride | (1) | 2.181( 0.000) | 62 | 318815 | 2.086 | 2.09 | | | 0.1 |
| 4) Bromomethane | (1) | 2.489( 0.000) | 94 | 176350 | 2.142 | 2.14 | | | 0.1 |
| 5) Chloroethane | (1) | 2.592( 0.000) | 64 | 189918 | 2.221 | 2.22 | | | 0.2 |
| 7) Trichlorofluoromethane | (1) | 2.885( 0.000) | 101 | 155859 | 1.992 | 1.99 | | | 0.2 |
| 10) 1,1-Dichloroethene | (1) | 3.406(-0.000) | 96 | 313847 | 4.819 | 4.82 | | | 0.1 |
| 17) Methylene Chloride | (1) | 3.971( 0.000) | 84 | 315238 | 4.762 | 4.76 | | | 0.3 |
| 21) trans-1,2-Dichloroethene | (1) | 4.323(-0.000) | 96 | 372481 | 4.695 | 4.70 | | | 0.1 |
| 23) 1,1-Dichloroethane | (1) | 4.858( 0.000) | 63 | 864196 | 4.839 | 4.84 | | | 0.1 |
| 27) cis-1,2-Dichloroethene | (1) | 5.665(-0.000) | 96 | 365667 | 4.669 | 4.67 | | | 0.1 |
| 28) 2,2-Dichloropropane | (1) | 5.687( 0.000) | 77 | 356415 | 4.772 | 4.77 | | | 0.2 |
| 33) Bromochloromethane | (1) | 5.995(-0.000) | 128 | 115905 | 4.594 | 4.59 | | | 0.1 |
| 35) Chloroform | (1) | 6.119( 0.000) | 83 | 530843 | 4.989 | 4.99 | | | 0.1 |
| 36) 1,1,1-Trichloroethane | (1) | 6.398( 0.000) | 97 | 352361 | 4.811 | 4.81 | | | 0.1 |
| 39) Carbon Tetrachloride | (1) | 6.640( 0.000) | 117 | 283744 | 4.883 | 4.88 | | | 0.1 |
| 38) 1,1-Dichloropropene | (1) | 6.625( 0.000) | 75 | 475147 | 4.701 | 4.70 | | | 0.1 |
| 40) Benzene | (1) | 6.941( 0.000) | 78 | 1317411 | 4.814 | 4.81 | | | 0.1 |
| 41) 1,2-Dichloroethane | (1) | 6.963( 0.000) | 62 | 288627 | 5.312 | 5.31 | | | 0.1 |
| 44) Trichloroethene | (1) | 7.821( 0.000) | 95 | 366075 | 4.786 | 4.79 | | | 0.1 |
| 45) 1,2-Dichloropropane | (1) | 8.107( 0.000) | 63 | 450069 | 4.922 | 4.92 | | | 0.1 |
| 46) Dibromomethane | (1) | 8.239( 0.000) | 93 | 128873 | 5.097 | 5.10 | | | 0.1 |
| 48) Bromodichloromethane | (1) | 8.429( 0.000) | 83 | 313659 | 5.106 | 5.11 | | | 0.1 |
| 51) cis-1,3-Dichloropropene | (1) | 8.935( 0.000) | 75 | 404443 | 4.847 | 4.85 | | | 0.1 |
| 54) Toluene | (1) | 9.295( 0.000) | 92 | 818145 | 4.865 | 4.87 | | | 0.1 |
| 55) trans-1,3-Dichloropropene | (1) | 9.529(-0.000) | 75 | 285194 | 4.989 | 4.99 | | | 0.1 |
| 57) 1,1,2-Trichloroethane | (1) | 9.713( 0.000) | 83 | 136068 | 5.208 | 5.21 | | | 0.1 |
| 59) Tetrachloroethene | (1) | 9.845( 0.000) | 166 | 326416 | 4.713 | 4.71 | | | 0.1 |
| 60) 1,3-Dichloropropane | (1) | 9.874( 0.000) | 76 | 258443 | 4.910 | 4.91 | | | 0.1 |
| 62) Dibromochloromethane | (1) | 10.094( 0.000) | 129 | 183597 | 5.015 | 5.02 | | | 0.1 |
| 63) 1,2-Dibromoethane | (1) | 10.204( 0.000) | 107 | 139131 | 4.668 | 4.67 | | | 0.1 |
| 64) Chlorobenzene | (1) | 10.666( 0.000) | 112 | 708722 | 4.668 | 4.67 | | | 0.1 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | 10.739( 0.000) | 131 | 221664 | 4.850 | 4.85 | | | 0.1 |
| 66) Ethylbenzene | (1) | 10.769( 0.000) | 106 | 397811 | 4.360 | 4.36 | | | 0.1 |
| 68) m+p-Xylene | (1) | 10.871( 0.000) | 106 | 994331 | 9.017 | 9.02 | | | 0.2 |
| 69) o-Xylene | (1) | 11.231( 0.000) | 106 | 450156 | 4.300 | 4.30 | | | 0.1 |
| 70) Styrene | (1) | 11.238( 0.000) | 104 | 735501 | 4.536 | 4.54 | | | 0.1 |
| 71) Bromoform | (1) | 11.407( 0.000) | 173 | 87497 | 5.002 | 5.00 | | | 0.2 |
| 73) Isopropylbenzene | (1) | 11.546( 0.000) | 120 | 280815 | 4.667 | 4.67 | | | 0.1 |

WAT12 0288

Digitally signed by Anita M. Dale on 09/27/2010 at 08:03. Target 3.5 esignature user ID: amd00492

LFBS26 Lancaster Laboratories Analysis Summary for GC/MS Volatiles LFBS26

Data file: /chem/SH08359.i/10sep27a.b/ss27s02.d Injection date and time: **27-SEP-2010 07:46**
Data file Sample Info. Line: LFBS26;LFBS26;1;3;LCS;;DRAPER; Instrument ID: **SH08359.i** Batch: **S102702AA**
Date, time and analyst ID of latest file update: 27-Sep-2010 08:03 Automation

Blank Data file reference: **/chem/SH08359.i/10sep27a.b/ss27ba1.d**

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: **DRAPERREV3**
Calibration date and time (Last Method Edit): 27-SEP-2010 07:32
Mid Level Daily Calibration Standard Reference: **/chem/SH08359.i/10sep27a.b/ss27c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

| Target Compounds | I.S. Ref. | RT (+/-RRT) | QIon | Area | Conc. (on-column) | Conc. (in sample) | Blank Conc. | Qual. | Reporting Limit (on-column) |
|---|---|---|---|---|---|---|---|---|---|
| 75) 1,1,2,2-Tetrachloroethane | (1) | 11.803( 0.000) | 83 | 145613 | 5.042 | 5.04 | | | 0.1 |
| 76) Bromobenzene | (1) | 11.817( 0.000) | 156 | 233926 | 4.448 | 4.45 | | | 0.1 |
| 77) 1,2,3-Trichloropropane | (1) | 11.839( 0.000) | 110 | 26235 | 4.448 | 4.45 | | | 0.1 |
| 79) n-Propylbenzene | (1) | 11.898( 0.000) | 120 | 292029 | 4.631 | 4.63 | | | 0.1 |
| 80) 2-Chlorotoluene | (1) | 11.979( 0.000) | 126 | 271022 | 4.675 | 4.68 | | | 0.1 |
| 81) 1,3,5-Trimethylbenzene | (1) | 12.045( 0.000) | 105 | 847370 | 4.485 | 4.48 | | | 0.1 |
| 82) 4-Chlorotoluene | (1) | 12.074(-0.000) | 126 | 279044 | 4.716 | 4.72 | | | 0.2 |
| 83) tert-Butylbenzene | (1) | 12.323( 0.000) | 134 | 192459 | 4.561 | 4.56 | | | 0.1 |
| 85) 1,2,4-Trimethylbenzene | (1) | 12.360( 0.000) | 105 | 871115 | 4.506 | 4.51 | | | 0.1 |
| 86) sec-Butylbenzene | (1) | 12.499( 0.000) | 134 | 198095 | 4.550 | 4.55 | | | 0.1 |
| 88) p-Isopropyltoluene | (1) | 12.617( 0.000) | 119 | 791680 | 4.555 | 4.55 | | | 0.1 |
| 87) 1,3-Dichlorobenzene | (1) | 12.602( 0.000) | 146 | 474053 | 4.543 | 4.54 | | | 0.1 |
| 89) 1,4-Dichlorobenzene | (1) | 12.675( 0.000) | 146 | 452987 | 4.544 | 4.54 | | | 0.1 |
| 90) n-Butylbenzene | (1) | 12.954(-0.000) | 92 | 531122 | 4.578 | 4.58 | | | 0.2 |
| 92) 1,2-Dichlorobenzene | (1) | 12.983( 0.000) | 146 | 358308 | 4.590 | 4.59 | | | 0.1 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | 13.607( 0.000) | 157 | 13077 | 4.416 | 4.42 | | | 0.4 |
| 96) 1,2,4-Trichlorobenzene | (1) | 14.259( 0.000) | 180 | 174275 | 4.044 | 4.04 | | | 0.2 |
| 97) Hexachlorobutadiene | (1) | 14.377( 0.000) | 225 | 103876 | 3.821 | 3.82 | | | 0.2 |
| 98) Naphthalene | (1) | 14.465(-0.000) | 128 | 191079 | 4.062 | 4.06 | | | 0.2 |
| 99) 1,2,3-Trichlorobenzene | (1) | 14.648( 0.000) | 180 | 112121 | 3.781 | 3.78 | | | 0.2 |

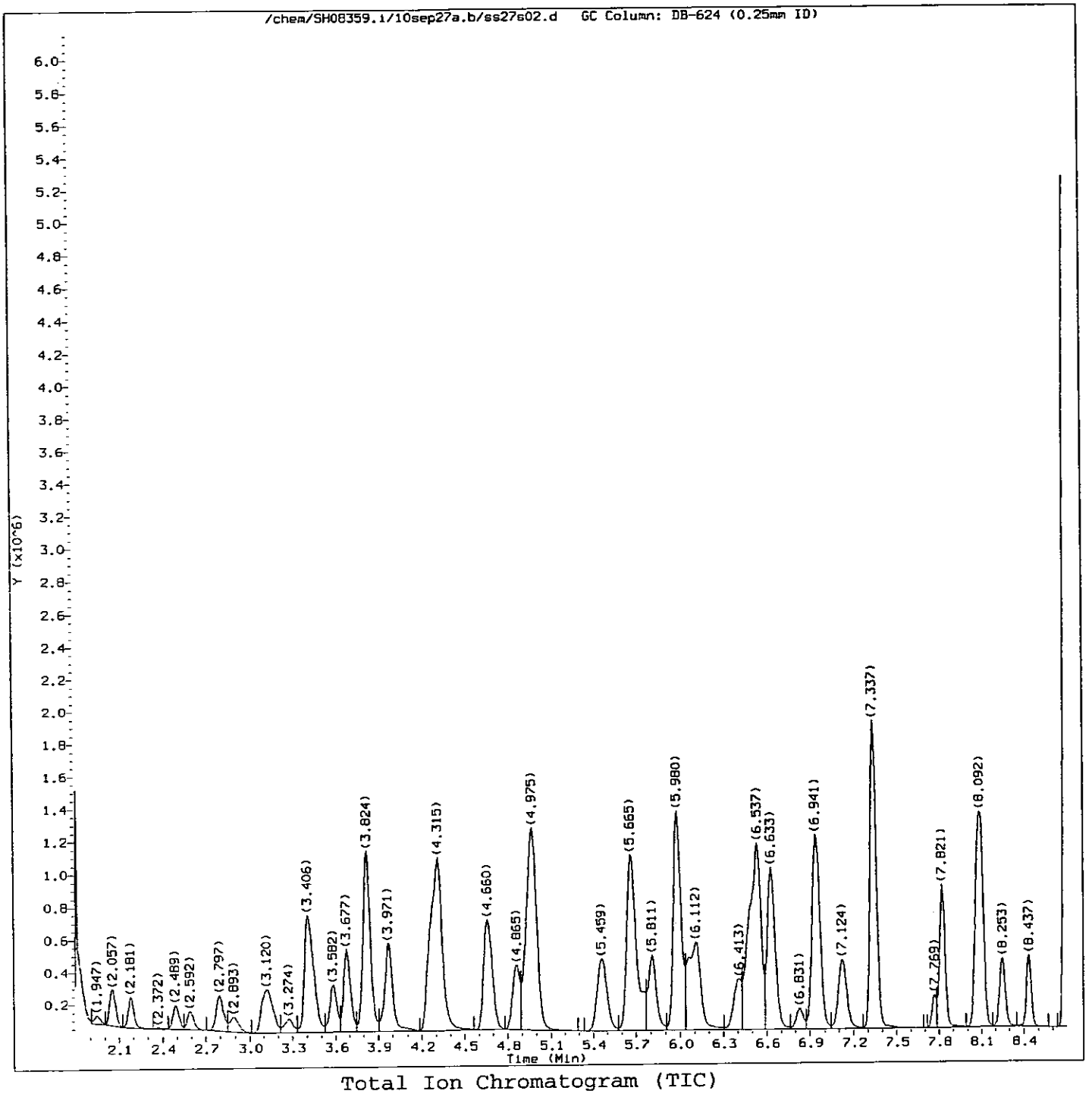
Total number of targets = 59

Comments:

WAT12 0251

Digitally signed by Anita M. Dale on 09/27/2010 at 08:03. Target 3.5 esignature user ID: amd00492

Auditor: Date: 09 29 10




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s02.d
Injection date and time: 27-SEP-2010 07:46

Instrument ID: SH08359.i
Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m
Calibration date and time: 27-SEP-2010 07:32

Sublist used: DRAPERREV3

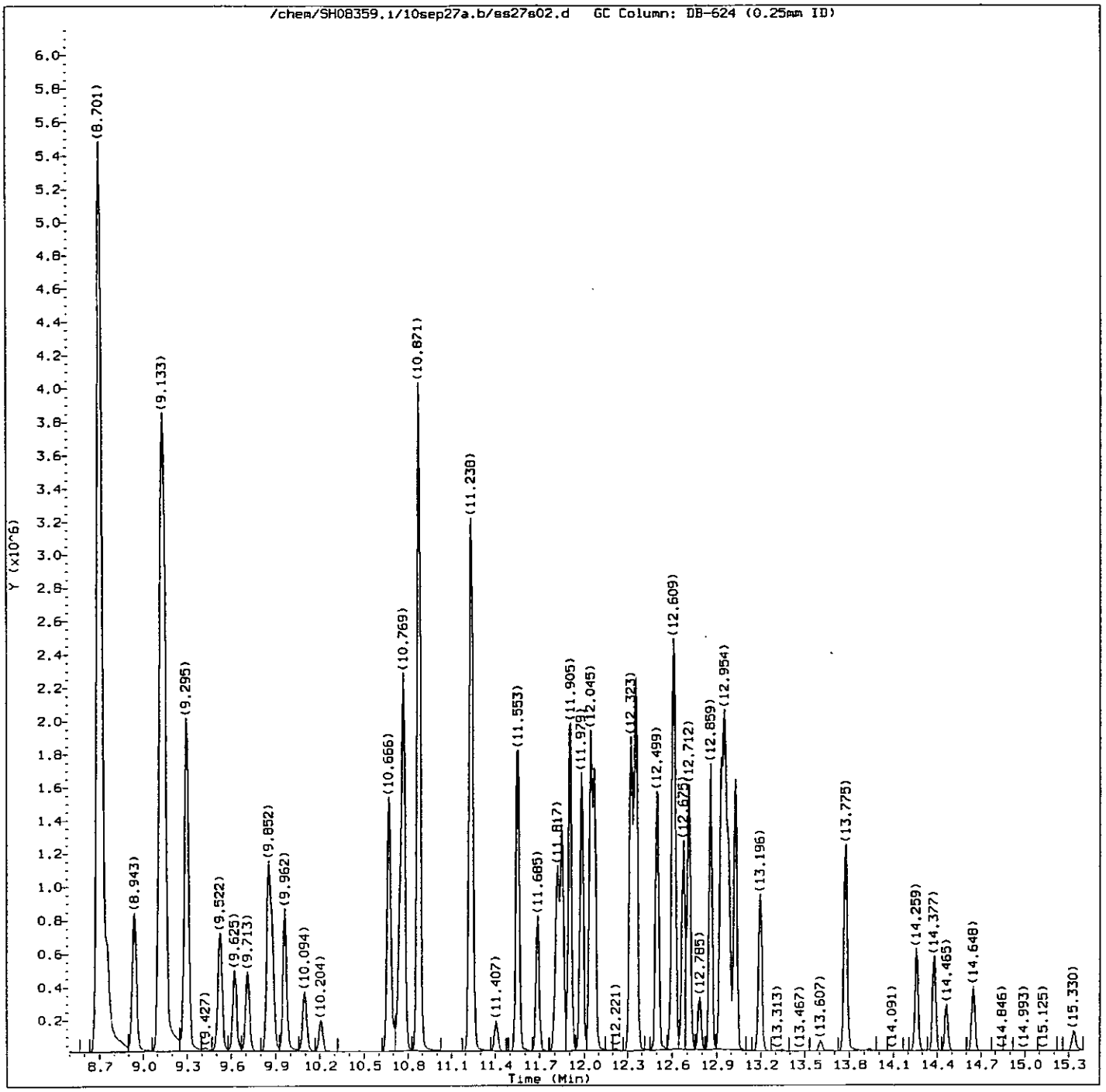
Date, time and analyst ID of latest file update: 27-Sep-2010 08:03 Automation

WAT12 0202

Sample Name: LFBS26

Lab Sample ID: LFBS26

Digitally signed by Anita M. Dale
on 09/27/2010 at 08:03.
Target 3.5 esignature user ID: amd00492




Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s02.d Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 07:46 Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 08:03 Automation

Sample Name: LFBS26 Lab Sample ID: LFBS26 WAT12 6283

Digitally signed by Anita M. Dale
on 09/27/2010 at 08:03.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s02.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 07:46  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 08:03 Automation

Sample Name: LFBS26  Lab Sample ID: LFBS26

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 1) Dichlorodifluoromethane | (1) | 1.954 | 85 | 138346 | 1.895 |
| 2) Chloromethane | (1) | 2.057 | 50 | 463565 | 2.166 |
| 3) Vinyl Chloride | (1) | 2.181 | 62 | 318815 | 2.086 |
| 4) Bromomethane | (1) | 2.489 | 94 | 176350 | 2.142 |
| 5) Chloroethane | (1) | 2.592 | 64 | 189918 | 2.221 |
| 7) Trichlorofluoromethane | (1) | 2.885 | 101 | 155859 | 1.992 |
| 10) 1,1-Dichloroethene | (1) | 3.406 | 96 | 313847 | 4.819 |
| 17) Methylene Chloride | (1) | 3.971 | 84 | 315238 | 4.762 |
| 21) trans-1,2-Dichloroethene | (1) | 4.323 | 96 | 372481 | 4.695 |
| 23) 1,1-Dichloroethane | (1) | 4.858 | 63 | 864196 | 4.839 |
| 27) cis-1,2-Dichloroethene | (1) | 5.665 | 96 | 365667 | 4.669 |
| 28) 2,2-Dichloropropane | (1) | 5.687 | 77 | 356415 | 4.772 |
| 33) Bromochloromethane | (1) | 5.995 | 128 | 115905 | 4.594 |
| 35) Chloroform | (1) | 6.119 | 83 | 530843 | 4.989 |
| 36) 1,1,1-Trichloroethane | (1) | 6.398 | 97 | 352361 | 4.811 |
| 38) 1,1-Dichloropropene | (1) | 6.625 | 75 | 475147 | 4.701 |
| 39) Carbon Tetrachloride | (1) | 6.640 | 117 | 283744 | 4.883 |
| 40) Benzene | (1) | 6.941 | 78 | 1317411 | 4.814 |
| 41) 1,2-Dichloroethane | (1) | 6.963 | 62 | 288627 | 5.312 |
| 43) *Fluorobenzene | (1) | 7.337 | 96 | 1131115 | 5.000 |
| 44) Trichloroethene | (1) | 7.821 | 95 | 366075 | 4.786 |
| 45) 1,2-Dichloropropane | (1) | 8.107 | 63 | 450069 | 4.922 |
| 46) Dibromomethane | (1) | 8.239 | 93 | 128873 | 5.097 |
| 48) Bromodichloromethane | (1) | 8.429 | 83 | 313659 | 5.106 |
| 51) cis-1,3-Dichloropropene | (1) | 8.935 | 75 | 404443 | 4.847 |
| 54) Toluene | (1) | 9.295 | 92 | 818145 | 4.865 |
| 55) trans-1,3-Dichloropropene | (1) | 9.529 | 75 | 285194 | 4.989 |
| 57) 1,1,2-Trichloroethane | (1) | 9.713 | 83 | 136068 | 5.208 |
| 59) Tetrachloroethene | (1) | 9.845 | 166 | 326416 | 4.713 |
| 60) 1,3-Dichloropropane | (1) | 9.874 | 76 | 258443 | 4.910 |
| 62) Dibromochloromethane | (1) | 10.094 | 129 | 183597 | 5.015 |
| 63) 1,2-Dibromoethane | (1) | 10.204 | 107 | 139131 | 4.668 |
| 64) Chlorobenzene | (1) | 10.666 | 112 | 708722 | 4.668 |
| 65) 1,1,1,2-Tetrachloroethane | (1) | 10.739 | 131 | 221664 | 4.850 |
| 66) Ethylbenzene | (1) | 10.769 | 106 | 397811 | 4.360 |
| 68) m+p-Xylene | (1) | 10.871 | 106 | 994331 | 9.017 |
| 69) o-Xylene | (1) | 11.231 | 106 | 450156 | 4.300 |
| 70) Styrene | (1) | 11.238 | 104 | 735501 | 4.536 |
| 71) Bromoform | (1) | 11.407 | 173 | 87497 | 5.002 |

* = Compound is an internal standard.



Digitally signed by Anita M. Dale
on 09/27/2010 at 08:03.
Target 3.5 esignature user ID: amd00492

Quant Report

Target Revision 3.5

Data File: /chem/SH08359.i/10sep27a.b/ss27s02.d  Instrument ID: SH08359.i
Injection date and time: 27-SEP-2010 07:46  Analyst ID: amd00492

Method used: /chem/SH08359.i/10sep27a.b/S524RV4.m  Sublist used: DRAPERREV3
Calibration date and time: 27-SEP-2010 07:32
Date, time and analyst ID of latest file update: 27-Sep-2010 08:03 Automation

Sample Name: LFBS26  Lab Sample ID: LFBS26

| Compounds | I.S. Ref. | RT | QIon | Area | On-Column Amount (ng) |
|---|---|---|---|---|---|
| 73) Isopropylbenzene | (1) | 11.546 | 120 | 280815 | 4.667 |
| 74)$4-Bromofluorobenzene | (1) | 11.685 | 174 | 202211 | 4.736 |
| 75) 1,1,2,2-Tetrachloroethane | (1) | 11.803 | 83 | 145613 | 5.042 |
| 76) Bromobenzene | (1) | 11.817 | 156 | 233926 | 4.448 |
| 77) 1,2,3-Trichloropropane | (1) | 11.839 | 110 | 26235 | 4.448 |
| 79) n-Propylbenzene | (1) | 11.898 | 120 | 292029 | 4.631 |
| 80) 2-Chlorotoluene | (1) | 11.979 | 126 | 271022 | 4.675 |
| 81) 1,3,5-Trimethylbenzene | (1) | 12.045 | 105 | 847370 | 4.485 |
| 82) 4-Chlorotoluene | (1) | 12.074 | 126 | 279044 | 4.716 |
| 83) tert-Butylbenzene | (1) | 12.323 | 134 | 192459 | 4.561 |
| 85) 1,2,4-Trimethylbenzene | (1) | 12.360 | 105 | 871115 | 4.506 |
| 86) sec-Butylbenzene | (1) | 12.499 | 134 | 198095 | 4.550 |
| 87) 1,3-Dichlorobenzene | (1) | 12.602 | 146 | 474053 | 4.543 |
| 88) p-Isopropyltoluene | (1) | 12.617 | 119 | 791680 | 4.555 |
| 89) 1,4-Dichlorobenzene | (1) | 12.675 | 146 | 452987 | 4.544 |
| 90) n-Butylbenzene | (1) | 12.954 | 92 | 531122 | 4.578 |
| 91)$1,2-Dichlorobenzene-d4 | (1) | 12.969 | 152 | 184816 | 4.738 |
| 92) 1,2-Dichlorobenzene | (1) | 12.983 | 146 | 358308 | 4.590 |
| 94) 1,2-Dibromo-3-Chloropropane | (1) | 13.607 | 157 | 13077 | 4.416 |
| 96) 1,2,4-Trichlorobenzene | (1) | 14.259 | 180 | 174275 | 4.044 |
| 97) Hexachlorobutadiene | (1) | 14.377 | 225 | 103876 | 3.821 |
| 98) Naphthalene | (1) | 14.465 | 128 | 191079 | 4.062 |
| 99) 1,2,3-Trichlorobenzene | (1) | 14.648 | 180 | 112121 | 3.781 |

$ = Compound is a surrogate standard.



WAT12 0285

Digitally signed by Anita M. Dale
on 09/27/2010 at 08:03.
Target 3.5 esignature user ID: amd00492

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601

# GC/MS Volatiles pH Log

**Batch # S102702AA**

| LLI# | pH | Date Checked | Initials/ Employee # | Comments |
|---|---|---|---|---|
| 6087280 | <2 | 9/27/2010 | amd00492 | 38a |
| 6087281 | <2 | 9/27/2010 | amd00492 | 38a |
| 6087282 | <2 | 9/27/2010 | amd00492 | 38a |
| 6087283 | <2 | 9/27/2010 | amd00492 | 38a |
| 6087284 1DL | <2 | 9/27/2010 | amd00492 | 38a |
| 6087285 | <2 | 9/27/2010 | amd00492 | 38a |
| 6087286 | <2 | 9/27/2010 | amd00492 | 38a |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Lancaster Laboratories
Runlog for Shimadzu GC/MS System SH08359 **SH #01**

** Shift #1 Analyst: LCT ** Shift #2 Analyst: _____ ** Shift #3 Analyst: _____ *

Comment Code:

| | | | |
|---|---|---|---|
| R | = Reinjection necessary | X | = Sample sent to be reextracted |
| S | = Surrogate problem | I | = Internal Standard problem |
| NU | = Not used | F | = Further dilution required |
| MR | = Meets requirements | IUO | = Internal use only |
| Cz | = Confirms z, (z = S, I or X) | T | = Injected outside valid tune period |

Other problems or comments are as follows:

*
*
*
*

Data Directory Path is - C:\CLASS5K\USER\DATA\10sep24a\

| FILE | SAMPLE | LLI# | DATE | TIME | BATCH | D.F. | NOTES |
|---|---|---|---|---|---|---|---|
| SS24T01.D | BFB MAY12-10 | 50NG BFB | 24 SEP 10 | 10:56 | | | MR |
| SS24I01.D | VSTD025 | VSTD025 | 24 SEP 10 | 11:23 | | | MR |
| SS24I02.D | VSTD010 | VSTD010 | 24 SEP 10 | 11:50 | | | MR |
| SS24I03.D | VSTD005 | VSTD005 | 24 SEP 10 | 12:16 | | | MR |
| SS24I04.D | VSTD0.5 | VSTD0.5 | 24 SEP 10 | 12:43 | | | NU |
| SS24I05.D | VSTD0.5 | VSTD0.5 | 24 SEP 10 | 13:10 | | | MR |
| SS24B01.D | VBLKS22 | VBLKS22 | 24 SEP 10 | 13:36 | S102671AA | | MR |
| SS24S01.D | LFBS22 | LFBS22 | 24 SEP 10 | 14:03 | S102671AA | | MR |

Lancaster Laboratories
Runlog for Shimadzu GC/MS System SH08359 **SH #01**

** Shift #1 Analyst:____AMD/CBE_____** Shift #2 Analyst:_____** Shift #3 Analyst:_____*

Comment Code:

| | | | |
|---|---|---|---|
| R | = Reinjection necessary | X | = Sample sent to be reextracted |
| S | = Surrogate problem | I | = Internal Standard problem |
| NU | = Not used | F | = Further dilution required |
| MR | = Meets requirements | IUO | = Internal use only |
| Cz | = Confirms z, (z = S, I or X) | T | = Injected outside valid tune period |

Other problems or comments are as follows:

*_____*

*_____*

*_____*

*_____*

Data Directory Path is - C:\CLASS5K\USER\DATA\10sep27a\

| FILE | SAMPLE | LLI# | DATE | TIME | BATCH | D.F. | NOTES |
|---|---|---|---|---|---|---|---|
| SS27T01.D | BFB MAY12-10 | 50NG BFB | 27 SEP 10 | 5:19 | | | MR |
| SS27C01.D | VSTD010 | VSTD010 | 27 SEP 10 | 5:33 | | | MR |
| SS27BA1.D | VBLKS26 | VBLKS26 | 27 SEP 10 | 6:00 | S102702AA | | NU |
| SS27B01.D | VBLKS25 | VBLKS25 | 27 SEP 10 | 6:26 | S102701AA | | MR |
| SS27B02.D | VBLKS26 | VBLKS26 | 27 SEP 10 | 6:53 | S102702AA | | MR |
| SS27S01.D | LFBS25 | LFBS25 | 27 SEP 10 | 7:20 | S102701AA | | MR |
| SS27S02.D | LFBS26 | LFBS26 | 27 SEP 10 | 7:46 | S102702AA | | MR |
| SS27S03.D | XXXXXDL | 6089186DL | 27 SEP 10 | 8:13 | S102701AA | 10 | ~~MR~~ NU ③ |
| SS27S04.D | XXXXX | 6087280 | 27 SEP 10 | 8:39 | S102702AA | | MR |
| SS27S05.D | XXXXX | 6087281 | 27 SEP 10 | 9:06 | S102702AA | | MR |
| SS27S06.D | XXXXX | 6087282 | 27 SEP 10 | 9:32 | S102702AA | | MR |
| SS27S07.D | XXXXX | 6087283 | 27 SEP 10 | 9:59 | S102702AA | | MR |
| SS27S08.D | XXXXX | 6087284 | 27 SEP 10 | 10:25 | S102702AA | | F |
| SS27S09.D | XXXXX | 6087285 | 27 SEP 10 | 10:52 | S102702AA | | MR |
| SS27S10.D | XXXXX | 6087286 | 27 SEP 10 | 11:18 | S102702AA | | MR |
| SS27S11.D | XXXXX | 6085898 | 27 SEP 10 | 11:45 | S102701AA | | MR |
| SS27S12.D | XXXXX | 6085900 | 27 SEP 10 | 12:11 | S102701AA | | MR |
| SS27S13.D | XXXXXDL | 6087284DL | 27 SEP 10 | 12:37 | S102702AA | 10 | MR |

③ AHU 1/8/00
092910

WAT12 0288

CompuChem

A Division Of

Liberty Analytical Corp.

9/29/2010

JANET FRAZIER

DRAPER

2206 SOUTH MAIN STREET

BLACKSBURG, VA 24060

Subject:

Report of Data - Project: WATAUGA COUNTY LANDFILL 6520-39 WorkOrder: 1009181

Attn.: JANET FRAZIER

Enclosed are the results of analytical work performed in accordance with the referenced account number. This report covers sample(s) appearing on the listing.

Thank you for selecting CompuChem for your sample analysis. If you should have questions or require additional analytical services, please contact your representative at 1-800-833-5097

Sincerely,

Joan Purdie

Compuchem

a division of Liberty Analytical Corporation

Attachment

TOTAL NUMBER

OF PAGES _____

**501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050**

## CompuChem, a division of Liberty Analytical

**Client:** DRAPER **Work:** 1009181

**Project:** WATAUGA COUNTY LANDFILL 6520-39 **Sdg:** 1009181

| Lab ID | Client ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| 1009181-01 | S-1 | Water | 09/13/2010 16:15 | 09/16/2010 09:32 |
| 1009181-02 | S-2 | Water | 09/13/2010 16:25 | 09/16/2010 09:32 |
| 1009181-03 | S-3 | Water | 09/13/2010 16:00 | 09/16/2010 09:32 |
| 1009181-04 | S-4 | Water | 09/14/2010 14:40 | 09/16/2010 09:32 |
| 1009181-05 | S-5 | Water | 09/13/2010 16:40 | 09/16/2010 09:32 |
| 1009181-06 | S-6 | Water | 09/14/2010 15:00 | 09/16/2010 09:32 |
| 1009181-07 | TRIP BLANK | Water | 09/03/2010 00:00 | 09/16/2010 09:32 |
| 1009181-08 | VHBLKXF | Water | 09/16/2010 00:00 | 09/16/2010 09:32 |

# I. SAMPLE DATA PACKAGE

## DOCUMENT SOM01.2

The sample data package shall include data for all analyses of all samples in one Sample Delivery Group (SDG), including field samples, dilutions, reanalyses, blanks, matrix spikes, matrix spike duplicates, and Laboratory Control Samples, if applicable. The sample data package consists of the following:

A. SDG Narrative

B. Traffic Report/Chain of Custody Records (TR/COC)

C. Volatiles Data

D. Semivolatiles Data

E. Pesticides Data

F. Aroclors Data

LAB CODE: LIBRTY

CONTRACT #:

CASE #:

SDG #: 1009181

# A. SDG Narrative

# CompuChem

**A division of Liberty Analytical Corporation**
**501 Madison Avenue**
**Cary, N.C. 27513**
**Tel: 919/379-4100 Fax: 919/379-4050**


## SDG NARRATIVE

## SDG # 1009181
## SOW # SOM01.2

**SAMPLE IDENTIFICATIONS:**

| | | | | | |
|---|---|---|---|---|---|
| **S-1** | **S-2** | **S-3** | **S-4** | **S-5** | **S-6** |

The 6 aqueous samples listed above were received intact, properly refrigerated at 0.6°C, in sealed shipping containers, on September 16, 2010, with proper documentation. All samples listed above were scheduled for the requested analysis of the volatile fraction only. The samples were prepared and analyzed following the current EPA Contract Laboratory Program (CLP) Multi-Media, Multi-Concentration Statement of Work (SOW), and Document SOM01.2. All pertinent Quality Assurance Notices are included in the narrative section.

**Volatiles**

Analysis holding time requirements were met for all of the samples in this SDG

The pH values of all samples were equal to 1.

There were volatile Project/Target Compound List (TCL) analytes identified above the Contract Required Quantitation Limit (CRQL) in two of these six samples.

Tentatively Identified Compounds (TICs) were found in one of these six samples.

No Total Alkanes were found in any these samples.

All the deuterated monitoring compounds (DMCs) met recovery criteria with no more than three DMCs failing.

All of the internal standards met response and retention time criteria in the analyses of these samples.

In a response to a Statement of Work Interpretation, the Organic Contract Laboratory Program Office stated that if the Mass Spectral Interpretation Specialist determines a TIC to be a laboratory artifact (including artifacts from the DMC solution), there is no need to report it. However, all TICs not reported due to a Mass Spectral Interpretation Specialist's assessment should be noted in the SDG Narrative. There are laboratory artifacts (including artifacts from the DMC solution) not reported on the Forms 1J. Their approximate retention time is as follows:
11.60 min. Laboratory artifact
These peaks are present in the standards, blanks, and samples.

No Manual integrations were performed on any of the process files associated with this SDG.

All bromofluorobenzene (BFB) abundance criteria were met for tunes associated to this SDG.

All QC criteria were met for all initial and continuing calibration standards associated to this SDG.
The associated method blanks and the storage blank and the met all quality control criteria.

No matrix spike/matrix spike duplicate (MS/MSD) samples were requested for the volatile fraction with this SDG.

As per the SOW, an example calculation is attached for Vinyl Chloride-$d_3$ in sample S-1.

I certify that this Sample Data Package complies with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the Electronic Data Deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Quentisha Forrester
Analyst II
September 29, 2010

**CASE:**
**SDG:** 1009181

**Example Calculation for the Volatile Fraction**

**RRF Calculation**

RRF=(Ax*Cis)/(Ais*Cx)

Where: Ax=Area of the characteristic ion (EICP) for the compound to be measured
Ais=Area of the characteristic ion (EICP) for the specific internal standard
Cis=Concentration of the internal standard
Cx=Concentration of the compound to be measured

Example: Vinyl chloride-d3 from VSTD050FR

| | |
|---|---|
| Ax= | 367128 |
| Ais= | 841844 |
| Cis= | 250 |
| Cx= | 250 |
| RRF= | 0.436 |

**Mean RRF from ICAL 0.449**

**Concentration Calculation**

Concentration(ug/L)=(Ax*Is*Df)/(Ais*RRF*Vo)

Where: Ax=Area of the characteristic ion (EICP) for the compound to be measured
Ais=Area of the characteristic ion (EICP) for the specific internal standard
Is=Amount of the internal standard added, in nanograms
Mean RRF=Relative response factor from the Initial calibration standard
Vo=Total volume of water purged, in milliliters
Df=Dilution factor

Example: Vinyl chloride-$d_3$ from S-1

| | |
|---|---|
| Ax= | 326972 |
| Ais= | 695418 |
| Is= | 250 |
| Mean RRF= | 0.449 |
| Vo= | 5 |
| Df= | 1 |

Concentration(ug/L)= 52

## GC and GC/MS Column and Trap Specifications Table

**SDG #:** 1009181

### COLUMNS

| Columns Utilized | Brand Name | Coating Material | ID (mm) | Film Thickness (um) | Length (m) |
|---|---|---|---|---|---|
| | **GC Laboratory** | | | | |
| | Restek | RTX-5 | 0.53 | 1.0 | 30 |
| | Restek | RTX-SMS | 0.53 | 1.0 | 30 |
| √ | Restek | clpest | 0.32 | 0.5 | 30 |
| √ | Restek | clpest2 | 0.32 | 0.42 | 30 |
| | J&W | DB-210 | 0.53 | 1.0 | 30 |
| | J&W | GS-GASPRO | 0.32 | N/A | 30 |
| | **GC Volatiles Laboratory** | | | | |
| | Restek | RTX-Volatiles | 0.53 | 2.0 | 30 |
| | **GC/MS Volatiles Laboratory** | | | | |
| | Restek | RTX-VMS | 0.18 | 1.0 | 20 |
| √ | Supelco | SPB-624 | 0.32 | 1.8 | 60 |
| | Supelco | SPB-624 | 0.53 | 3.0 | 75 |
| | Phenomonex | ZB-624 | 0.32 | 1.8 | 60 |
| | **GC/MS Semivolatiles Laboratory** | | | | |
| √ | Restek | RTX-5MS | 0.32 | 0.25 | 30 |
| | Phenomonex | ZB-5MS | 0.32 | 0.25 | 30 |
| | **HPLC Laboratory** | | | | |
| | Supelco | Supelcosil LC-PAH | 4.6 | 5.0 | 15 cm |
| | Supelco | Discovery RP Amide C16 | 4.6 | 5.0 | 25 cm |
| | Restek | Pinnacle Cyano | 4.6 | 5.0 | 25 cm |
| | Restek | Allure C18 | 4.6 | 5.0 | 25 cm |

### TRAPS

| | | |
|---|---|---|
| | **GC and GC/MS Volatiles Laboratory** | |
| | Supelco J (BETXTRAP™) | * 7.7 cm Carbopack C |
| | | * 1.2 cm Carbopack B |
| √ | Supelco K (Vocarb3000) | * 10 cm of Carbopack B (Graphitized Carbons) |
| | | * 6 cm of Carboxen 1000 (Carbon molecular sieves) |
| | | * 1 cm of Carboxen 1001 (Carbon molecular sieves) |

Rev. 28

*This table contains the GC columns (and volatile organic trap) used for the analysis of volatiles, semi-volatiles, pesticides and Aroclors by the SOM01.2 SOW.
Please see the SDG Narrative(s) for the specific fraction(s) relative to this SDG.

# CompuChem's Pagination Convention

As required by the EPA CLP Statement of Work (SOW) documents, data to be delivered must be paginated (by machine or hand). In the event that the initial numbering is incorrect (a page numbered twice or a page skipped, for example), it is CompuChem's policy to add an alphabetic suffix to a page number when necessary (e.g., 100A, 100B, etc.).

# Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC chemists. An Extracted Ion Current Profile (EICP) or a GC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC analysis. The manual editing/integration flags are:

**M** - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak.

**H** - Denotes that the data reviewer, GC/MS operator, or GC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

**MH** - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

**L** - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

**ML** - Denotes that an alternate library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

The EPA CLP SOW documents require additional explanations for manual editing/integration. In the accompanying raw data packages, additional codes have been applied to the "M" flag and carry the following meanings;

**M1** - The compound was not found by the automatic integration routine.

**M2** - The compound was incorrectly integrated by the automatic integration routine.

**M3** - The co-eluting compounds were incorrectly integrated by the automatic integration routine.

These codes will appear in the GC/MS and GC raw data.

Revision 7 (12/6/2005)

# DATA REPORTING QUALIFIERS

On the Form I, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on Form I for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 □g/L, but a concentration of 3 □g/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥ 85% in the SOM01.2 SOW document), the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.

For SW 846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the lower of the two values is reported and flagged with a P. When the RPD is equal to or less than 40%, our policy is to also report the lower of the two values, although the choice could be a project specific issue. These SW-846 policies are consistent with Method 8000C. If Method 8000B is required, the higher of the two values is reported. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

# DATA REPORTING QUALIFIERS (continued)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on Form I for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the Form I for the more diluted sample, and **all** reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate Forms I are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses <u>are not combined</u> on a single Form I.

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

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

Revision 12 (04-14-2010)

## B. Traffic Report/Chain of Custody Records (TR/COC)

The contractor shall include a copy of the TR/COCs for all of the samples in the SDG. The TR/COCs shall be arranged in increasing EPA sample number order, considering both letters and numbers.

In any instance where samples from more than one multi-sample TR/COC are in the same data package, the Contractor shall submit a copy of the SDG cover sheet with copies of the TR/COCs.

# CHAIN OF CUSTODY RECORD

17C
8-26-10

12

**Laboratory:** CompuChem Environmental Corp., Liberty Analytical 501 Madison Ave. Cary, NC 27513 (800) 833 5097 Fax (919) 379-4050 Attn: Cathy Dover

| | | | | | |
|---|---|---|---|---|---|
| **Client:** | Watauga County, NC | **Consultant:** | Draper Aden Associates | **Sample Site:** | Watauga County Landfill |
| **Attn:** | Mr. J.V. Potter | **Attn:** | Janet C. Frazier | **Location:** | Watauga County, NC |
| **Address:** | 842 West King Street?/Courthouse, Suite 1<br>Boone, NC 28607 | **Address:** | 2206 South Main Street<br>Blacksburg, Virginia 24060 | **Event:** | September 2010 Semiannual Assess. Monitoring Event |
| **Phone:** | (828) 264-5305 | **Phone:** | (540) 552-0444 | **DAA JN:** | 6520-39 |
| **Fax:** | 0 | **Fax:** | (540) 552-0291 | **Lab JN:** | |
| **Fax:** | 0 | | | | |

**Project Specific (PS) or Batch (B) QC:** YES
~~Sample Collection~~ for Project Complete? YES
Carrier: _____
Tracking Number: _____

**Box 1: Matrix**
SW Surface Water — T Trip Blank
GW Groundwater — E Equipment Blank
L Leachate — P Product
S Soil — O Other

**Box 2: Preservative**
A HCL — E NaOH
B $HNO_3$ — F ZnAc
C $H_2SO_4$ — G Other (Specify)
D $Na_2S_2O_3$ — H None

**Box 3: Filtered/Unfiltered**
F Filtered
U Unfiltered

**Box 4: Sample Type**
G Grab
C Composite

**Box 5: Sample Container Type**
P Plastic — V VOA
AG Amber Glass — CG Clear Glass

**Invoice**
Copy to Consultant: YES
Bill: CLIENT OTHER _____
Preserved and shipped on Ice: YES

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Box 4 - Sample Type** | | | | | G | | | | | | | | |
| **Box 3 - Filtered/Unfiltered** | | | | | U | | | | | | | | |
| **Required pH of Sample** | | | | | <2 | | | | | | | | |
| **Box 2 - Preservative** | | | | | A | | | | | | | | |
| **Box 5 - Sample Container Type** | | | | | 3-40ml V | | | | | | | | |
| **Sample ID** | **Date: 2010** | **Time** | **Box 1: Matrix** | **Number of Bottles** | **CLP VOLATILES I SOM0 1.2 - Medium Level VOC** | | | | | | | | |
| S-1 | 9/13 | 1615 | SW | 3 | X | | | | | | | | 1009181-01 |
| S-2 | 9/13 | 1625 | SW | 3 | X | | | | | | | | -02 |
| S-3 | 9/13 | 1600 | SW | 3 | X | | | | | | | | -03 |
| S-4 | 9/14 | 1440 | SW | 3 | X | | | | | | | | -04 |
| S-5 | 9/13 | 1640 | SW | 3 | X | | | | | | | | -05 |
| S-6 | 9/14 | 1500 | SW | 3 | X | | | | | | | | -06 |
| Trip Blank | 9/3 | | TB | 3 | X | | | | | | | | -07 |

**GENERAL NOTES:**
1. **Level 4 deliverables with EDD & PDF.**

**Clients Special Instructions:** Level 4 deliverables w/ EDD & PDF. SN0015

Received by lab in Good Condition ✓ Yes ____ No Custody Seal Intact ✓ Yes ____ No Temperature upon arrival 0.6°C Received on Ice ✓ Yes ____ No
Describe problems, if any: SOM01.2 storage blank → VHBLKXF → 1009181-08

| | | | | | | |
|---|---|---|---|---|---|---|
| Sampler Name (Print): Dale Slaughter | Date: 9/13/10 | #1 Relinquished by (Signature): Dale Slaughter | Date: 9/15/10 | #2 Relinquished by (Signature): | Date: | Sample Storage Time Requested: |
| Sampler Signature: Dale Slaughter | Time: 0730 | Company Name: DAA | Time: 1700 | Company Name: | Time: | |
| Sampler Name (Print): Chris Branscome | Date: 9/13/10 | #1 Received by (Signature): Jennifer Dorn | Date: 9/16/10 | #2 Received by (Signature): | Date: | 30 DYS ORG/6 MTHS INORG |
| Sampler Signature: Chris Branscome | Time: 0730 | Company Name: CompuChem | Time: 0932 | Company Name: | Time: | |

JVP 8-30-2012

2/5

WORK ORDER

Printed: 9/29/2010 10:50:20AM

**1009181**

# COMPUCHEM

| | | | |
|---|---|---|---|
| **Client:** | **DRAPER** | **Project Manager:** | **Cathy Dover** |
| **Project:** | **WATAUGA COUNTY LANDFILL 6520-39** | **Project Number:** | **WATAUGA COUNTY LANDFILL 6520-39** |
| **SDG:** | **1009181** **CASE:** | **Status:** | **Batched** |

**Report To:**
DRAPER
JANET FRAZIER
2206 SOUTH MAIN STREET
BLACKSBURG, VA 24060
Phone: (540)552-0444
Fax: -

**Invoice To:**
WATAUGA COUNTY, NC
MR. J.V. POLTER
842 WESTKING STREET/COURTHOUSE, SUITE 1
BOONE, NC 28607
Phone :-
Fax: -

| | | | |
|---|---|---|---|
| Date Due: | 10/06/2010 00:00 (20 day TAT) | | |
| Received By: | Cathy Dover | Date Received: | 09/16/2010 09:32 |
| Logged In By: | Cathy Dover | Date Logged In: | 09/17/2010 12:47 |

| | | | |
|---|---|---|---|
| J & B Flags?: **YES**<br>Metals ND to? **MDL** | TICS?: **EPA-TICS**<br>Spike Level: **FULL Spike** | Deliverable: **Style 9** | EDD : **36) DRAPER ACCESS** |

SOM01.2 VOC LOW* RPT. WATAUGA.SUB

| Analysis | Due | TAT | Expires | Received | Comments |
|---|---|---|---|---|---|
| **1009181-01 S-1 [Water] Sampled 09/13/2010 16:15 Eastern** | | | | | |
| SOM01.2 VOA LOW | 10/06/2010 16:00 | 20 | 09/26/2010 09:32 | 09/16/2010 09:32 | |
| **1009181-02 S-2 [Water] Sampled 09/13/2010 16:25 Eastern** | | | | | |
| SOM01.2 VOA LOW | 10/06/2010 16:00 | 20 | 09/26/2010 09:32 | 09/16/2010 09:32 | |
| **1009181-03 S-3 [Water] Sampled 09/13/2010 16:00 Eastern** | | | | | |
| SOM01.2 VOA LOW | 10/06/2010 16:00 | 20 | 09/26/2010 09:32 | 09/16/2010 09:32 | |
| **1009181-04 S-4 [Water] Sampled 09/14/2010 14:40 Eastern** | | | | | |
| SOM01.2 VOA LOW | 10/06/2010 16:00 | 20 | 09/26/2010 09:32 | 09/16/2010 09:32 | |
| **1009181-05 S-5 [Water] Sampled 09/13/2010 16:40 Eastern** | | | | | |
| SOM01.2 VOA LOW | 10/06/2010 16:00 | 20 | 09/26/2010 09:32 | 09/16/2010 09:32 | |
| **1009181-06 S-6 [Water] Sampled 09/14/2010 15:00 Eastern** | | | | | |
| SOM01.2 VOA LOW | 10/06/2010 16:00 | 20 | 09/26/2010 09:32 | 09/16/2010 09:32 | |
| **1009181-07 TRIP BLANK [Water] Sampled 09/03/2010 00:00 Eastern** | | | | | |
| SOM01.2 VOA LOW | 10/06/2010 16:00 | 20 | 09/26/2010 09:32 | 09/16/2010 09:32 | |
| **1009181-08 VHBLKXF [Water] Sampled 09/16/2010 00:00 Eastern** | | | | | **SOM01.2 LOW VOC STORAGE BLK** |
| SOM01.2 VOA LOW | 10/06/2010 16:00 | 20 | 09/26/2010 09:32 | 09/16/2010 09:32 | |

WORK ORDER

Printed: 9/29/2010 10:50:20AM

1009181

COMPUCHEM

| | | | |
|---|---|---|---|
| Client: | DRAPER | Project Manager: | Cathy Dover |
| Project: | WATAUGA COUNTY LANDFILL 6520-39 | Project Number: | WATAUGA COUNTY LANDFILL 6520-39 |
| SDG: | 1009181 CASE: | Status: | Batched |

# VOA Internal Chain of Custody Sheet

**Matrix** Water **Batch**: 0091719 **Status:** Batched **Analysis**: SOM01.2 VOA LOW

| Lab Id | Client Id | Received | Container | Extraction |
|---|---|---|---|---|
| 1009181-01 A | S-1 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009181-02 A | S-2 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009181-03 A | S-3 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009181-04 A | S-4 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009181-05 A | S-5 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009181-06 A | S-6 | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009181-07 A | TRIP BLANK | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |
| 1009181-08 A | VHBLKXF | 09/16/10 | 01b_40mL VOA, cool, H | SW 5030A/5030B |

| Relinquished By | Date/Time | Received By | Date/Time |
|---|---|---|---|
| #2B | 9-20-10 | Sm | 9-20-10 |
| Sm | 9-20-10 | #2B | 9-20-10 |
| #2B | 9-21-10 | Sm | 9-21-10 |
| Sm | 9-21-10 | #2B | 9-21-10 |
| | QF | | |
| | 9-29-10 | | |

# C. Volatile Data

1. Q C Summary
2. Sample Data
3. Standards Data
4. Raw Q C Data
5. Trace SIM Data (Optional)

LAB CODE: LIBRTY

CONTRACT #:

CASE #:

SDG #: 1009181

# 1. Q C Summary

a. Deuterated Monitoring Compound (DMC) Recovery
(Form II VOA)

b. Matrix Spike/Matrix Spike Duplicate Recovery
(Form III VOA)

c. Method Blank Summary
(Form IV VOA)

d. GC/MS Instrument Performance Check
(Form V VOA)

e. Internal Standard Area and RT Summary
(Form VIII VOA)

a. Deuterated Monitoring Compound (DMC) Recovery (Form II VOA)

2A - FORM II VOA-1
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: _____ SDG No.: 1009181

Level: (TRACE or LOW) LOW

| | EPA SAMPLE NO. | VDMC1 (VCL) # | VDMC2 (CLA) # | VDMC3 (DCE) # | VDMC4 (BUT) # | VDMC5 (CLF) # | VDMC6 (DCA) # | VDMC7 (BEN) # |
|---|---|---|---|---|---|---|---|---|
| 01 | S-1 | 105 | 107 | 82 | 83 | 95 | 99 | 108 |
| 02 | S-2 | 91 | 92 | 72 | 78 | 85 | 91 | 95 |
| 03 | S-3 | 90 | 93 | 72 | 76 | 85 | 90 | 96 |
| 04 | S-4 | 81 | 83 | 64 | 61 | 76 * | 79 | 83 |
| 05 | S-5 | 92 | 94 | 73 | 78 | 85 | 90 | 93 |
| 06 | S-6 | 82 | 83 | 65 | 66 | 75 * | 78 | 81 |
| 07 | TRIP BLANK | 92 | 93 | 72 | 73 | 84 | 88 | 93 |
| 08 | VBLKFS | 90 | 92 | 71 | 77 | 83 | 88 | 94 |
| 09 | VHBLKXF | 97 | 99 | 76 | 78 | 92 | 97 | 103 |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | | | | | | |
| 26 | | | | | | | | |
| 27 | | | | | | | | |
| 28 | | | | | | | | |
| 29 | | | | | | | | |
| 30 | | | | | | | | |

| | | QC LIMITS |
|---|---|---|
| VDMC1 | (VCL) = Vinyl chloride-d3 | (65-131) |
| VDMC2 | (CLA) = Chloroethane-d5 | (71-131) |
| VDMC3 | (DCE) = 1,1-Dichloroethene-d2 | (55-104) |
| VDMC4 | (BUT) = 2-Butanone-d5 | (49-155) |
| VDMC5 | (CLF) = Chloroform-d | (78-121) |
| VDMC6 | (DCA) = 1,2-Dichloroethane-d4 | (78-129) |
| VDMC7 | (BEN) = Benzene-d6 | (77-124) |

# Column to be used to flag recovery values
* Value outside of contract required QC limits

Page 1 of 1

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

X Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: _____ SDG No.: 1009181

Level: (TRACE or LOW) LOW

| | EPA SAMPLE NO. | VDMC8 (DPA) # | VDMC9 (TOL) # | VDMC10 (TDP) # | VDMC11 (HEX) # | VDMC12 (DXE) # | VDMC13 (TCA) # | VDMC14 (DCZ) # | TOT OUT |
|---|---|---|---|---|---|---|---|---|---|
| 01 | S-1 | 103 | 109 | 102 | 102 | 75 | 92 | 113 | 0 |
| 02 | S-2 | 93 | 96 | 92 | 92 | 68 | 86 | 99 | 0 |
| 03 | S-3 | 91 | 96 | 91 | 93 | 69 | 84 | 99 | 0 |
| 04 | S-4 | 80 | 83 | 78 | 77 | 55 | 73 | 85 | 1 |
| 05 | S-5 | 89 | 92 | 86 | 92 | 70 | 83 | 93 | 0 |
| 06 | S-6 | 78 * | 81 | 74 | 80 | 61 | 74 | 82 | 2 |
| 07 | TRIP BLANK | 89 | 94 | 87 | 89 | 63 | 82 | 95 | 0 |
| 08 | VBLKFS | 92 | 95 | 89 | 87 | 62 | 80 | 96 | 0 |
| 09 | VHBLKXF | 99 | 105 | 99 | 98 | 70 | 89 | 109 | 0 |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |
| 25 | | | | | | | | | |
| 26 | | | | | | | | | |
| 27 | | | | | | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |

| | QC LIMITS |
|---|---|
| VDMC8 (DPA) = 1,2-Dichloropropane-d6 | (79-124) |
| VDMC9 (TOL) = Toluene-d8 | (77-121) |
| VDMC10 (TDP) = trans-1,3-Dichloropropene-d4 | (73-121) |
| VDMC11 (HEX) = 2-Hexanone-d5 | (28-135) |
| VDMC12 (DXE) = 1,4-Dioxane-d8 | (50-150) |
| VDMC13 (TCA) = 1,1,2,2-Tetrachloroethane-d2 | (73-125) |
| VDMC14 (DCZ) = 1,2-Dichlorobenzene-d4 | (80-131) |

# Column to be used to flag recovery values
* Values outside of contract required QC limits
Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Page 1 of 1

b. Matrix Spike/Matrix Spike Duplicate Recovery
(Form III VOA)

## c. Method Blank Summary (Form IV VOA)

If more than a single form is necessary, forms shall be arranged in chronological order by date of analysis of the blanks and by instrument.

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKFS

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Lab File ID: 0092101-BLK1R91.d Lab Sample ID: 0092101-BLK1

Instrument ID: 5975hpms91

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 09/21/2010

Level: (TRACE or LOW/MED) LOW Time Analyzed: 0922

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

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | TIME ANALYZED |
|---|---|---|---|---|
| 01 | S-1 | 1009181-01 | 1009181-01R91.d | 1038 |
| 02 | S-2 | 1009181-02 | 1009181-02R91.d | 1105 |
| 03 | S-3 | 1009181-03 | 1009181-03R91.d | 1133 |
| 04 | S-4 | 1009181-04 | 1009181-04R91.d | 1200 |
| 05 | S-5 | 1009181-05 | 1009181-05R91.d | 1227 |
| 06 | S-6 | 1009181-06 | 1009181-06R91.d | 1254 |
| 07 | TRIP BLANK | 1009181-07 | 1009181-0791.d | 1321 |
| 08 | VHBLKXF | 1009181-08 | 1009181-0891.d | 1348 |
| 09 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |
| 23 | | | | |
| 24 | | | | |
| 25 | | | | |
| 26 | | | | |
| 27 | | | | |
| 28 | | | | |
| 29 | | | | |
| 30 | | | | |

COMMENTS:

## d. GC/MS Instrument Performance Check (Form V VOA)

If more than a single form is necessary, forms shall be arranged in chronological order, by instrument.

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFBFR

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Lab File ID: 0I20018-TUN191.d BFB Injection Date: 09/21/2010

Instrument ID: 5975hpms91 BFB Injection Time: 0000

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

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 19.7 |
| 75 | 30.0 - 80.0% of mass 95 | 51.8 |
| 95 | Base peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.7 |
| 173 | Less than 2.0% of mass 174 | 0.8 ( 1.1 )1 |
| 174 | 50.0 - 120% of mass 95 | 75.6 |
| 175 | 5.0 - 9.0% of mass 174 | 5.8 ( 7.6 )1 |
| 176 | 95.0 - 101% of mass 174 | 73.9 ( 97.8 )1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.7 ( 6.3 )2 |

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

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | VSTD010FR | 0I20018-CAL2 | I20018-CAL2.( | 09/21/2010 | 0018 |
| 02 | VSTD005FR | 0I20018-CAL1 | I20018-CAL1.( | 09/21/2010 | 0045 |
| 03 | VSTD200FR | 0I20018-CAL5 | I20018-CAL5.( | 09/21/2010 | 0112 |
| 04 | VSTD100FR | 0I20018-CAL4 | I20018-CAL4.( | 09/21/2010 | 0140 |
| 05 | VSTD050FR | 0I20018-CAL3 | I20018-CAL3.( | 09/21/2010 | 0207 |
| 06 | VSTD050FS | 0I20018-CCV1 | 20018-CCV1R91 | 09/21/2010 | 0800 |
| 07 | VBLKFS | 0092101-BLK1 | 92101-BLK1R91 | 09/21/2010 | 0922 |
| 08 | S-1 | 1009181-01 | 009181-01R91. | 09/21/2010 | 1038 |
| 09 | S-2 | 1009181-02 | 009181-02R91. | 09/21/2010 | 1105 |
| 10 | S-3 | 1009181-03 | 009181-03R91. | 09/21/2010 | 1133 |
| 11 | S-4 | 1009181-04 | 009181-04R91. | 09/21/2010 | 1200 |
| 12 | S-5 | 1009181-05 | 009181-05R91. | 09/21/2010 | 1227 |
| 13 | S-6 | 1009181-06 | 009181-06R91. | 09/21/2010 | 1254 |
| 14 | TRIP BLANK | 1009181-07 | 009181-0791.( | 09/21/2010 | 1321 |
| 15 | VHBLKXF | 1009181-08 | 009181-0891.( | 09/21/2010 | 1348 |
| 16 | VSTD050FU | 0I20018-CCV2 | 20018-CCV2R91 | 09/21/2010 | 1849 |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |

## e. Internal Standard Area and RT Summary (Form VIII VOA)

If more than a single form is necessary, forms shall be arranged in chronological order, by instrument.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

GC Column: SPB-624 ID: 0.32 (mm) Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD#####): VSTD050FR Date Analyzed: 09/21/2010

Lab File ID (Standard): 0I20018-CAL3.d Time Analyzed: 0207

Instrument ID: 5975hpms91 Heated Purge: (Y/N) N

| | | IS1 (CBZ) AREA # | RT # | IS2 (DFB) AREA # | RT # | IS3 (DCB) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 866277 | 12.47 | 841844 | 10.25 | 506865 | 14.12 |
| | UPPER LIMIT | 1732554 | 12.97 | 1683688 | 10.75 | 1013730 | 14.62 |
| | LOWER LIMIT | 433139 | 11.97 | 420922 | 9.75 | 253433 | 13.62 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | VSTD010FR | 778526 | 12.47 | 774298 | 10.25 | 459598 | 14.12 |
| 02 | VSTD005FR | 735037 | 12.47 | 740415 | 10.25 | 414892 | 14.12 |
| 03 | VSTD200FR | 909979 | 12.47 | 820692 | 10.25 | 541133 | 14.12 |
| 04 | VSTD100FR | 910164 | 12.47 | 875881 | 10.25 | 530610 | 14.12 |
| 05 | VSTD050FS | 855823 | 12.47 | 817818 | 10.25 | 515018 | 14.12 |
| 06 | | | | | | | |
| 07 | | | | | | | |
| 08 | | | | | | | |
| 09 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

GC Column: SPB-624 ID: 0.32 (mm) Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD#####): VSTD050FS Date Analyzed: 09/21/2010

Lab File ID (Standard): )I20018-CCV1R91.( Time Analyzed: 0800

Instrument ID: 5975hpms91 Heated Purge: (Y/N) N

| | | IS1 (CBZ) AREA # | RT # | IS2 (DFB) AREA # | RT # | IS3 (DCB) AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 855823 | 12.47 | 817818 | 10.25 | 515018 | 14.12 |
| | UPPER LIMIT | 1711646 | 12.97 | 1635636 | 10.75 | 1030036 | 14.62 |
| | LOWER LIMIT | 427912 | 11.97 | 408909 | 9.75 | 257509 | 13.62 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | VBLKFS | 756112 | 12.47 | 745406 | 10.25 | 391179 | 14.12 |
| 02 | S-1 | 702184 | 12.47 | 695418 | 10.25 | 363075 | 14.12 |
| 03 | S-2 | 753428 | 12.47 | 727790 | 10.25 | 402602 | 14.12 |
| 04 | S-3 | 731715 | 12.47 | 716706 | 10.25 | 377817 | 14.13 |
| 05 | S-4 | 725797 | 12.47 | 713611 | 10.25 | 372227 | 14.12 |
| 06 | S-5 | 657420 | 12.47 | 633490 | 10.25 | 343357 | 14.12 |
| 07 | S-6 | 667835 | 12.47 | 644812 | 10.25 | 353266 | 14.13 |
| 08 | TRIP BLANK | 681997 | 12.47 | 664310 | 10.25 | 356235 | 14.12 |
| 09 | VHBLKXF | 742952 | 12.47 | 722672 | 10.25 | 388075 | 14.12 |
| 10 | VSTD050FU | 879418 | 12.47 | 847994 | 10.25 | 526385 | 14.12 |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

Page 1 of 1

# 2. Sample Data

Sample data shall be arranged in packets with the Organic Analysis Data Sheet (Form I, VOA-1, VOA-2 and Form I VOA-TIC), followed by the raw data for volatile samples. These sample packets shall be placed in increasing EPA Sample ID number order, considering both letters and numbers.

a. Target Compound Results
(Form I, VOA-1, VOA-2)
Tabulated results (identification and quantitation) shall be included.

b. Tentatively Identified Compounds (Form I VOA-TIC)
Lists up to 30 organic compounds that are not target compounds, DMCs or internal standard compounds, or alkanes and are not listed on the volatile and semivolatile target compound list. This form shall be included even if no compounds are found.

c. Reconstructed Total Ion Chromatograms
Include for each sample or sample extract, including dilutions and reanalyses. The RIC shall contain the following header information: EPA Sample Number, date and time of analysis, GC/MS instrument identifier, lab file identifier, and analyst ID.

d. Quantitation Report showing calculations for TCL analytes
- Include a printout of the EICP for all manual changes to all compounds, internal standards, and system monitoring compounds.

e. Copies of raw spectra and copies of background-subtracted mass spectra of TCL analytes identified in the sample.
- The spectra shall include the following information: EPA Sample Number, Lab file ID, date and time of analysis, and instrument ID.
- The compound name must be clearly marked.

f. Quantitation Report showing calculations for TICs

g. Copies of mass spectra of organic compounds not listed in Exhibit C with associated best-match spectra.

Spectra shall be labeled as follows: EPA Sample ID number, lab file ID, date and time of analysis, and instrument ID. The compound name must be clearly marked.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-1

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-01

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-01R91.d

Level: (TRACE/LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/L | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 75-09-2 | Methylene chloride | 1.5 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 0.59 | J |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 79-01-6 | Trichloroethene | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
S-1

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-01

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-01R91.d

Level: (TRACE or LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

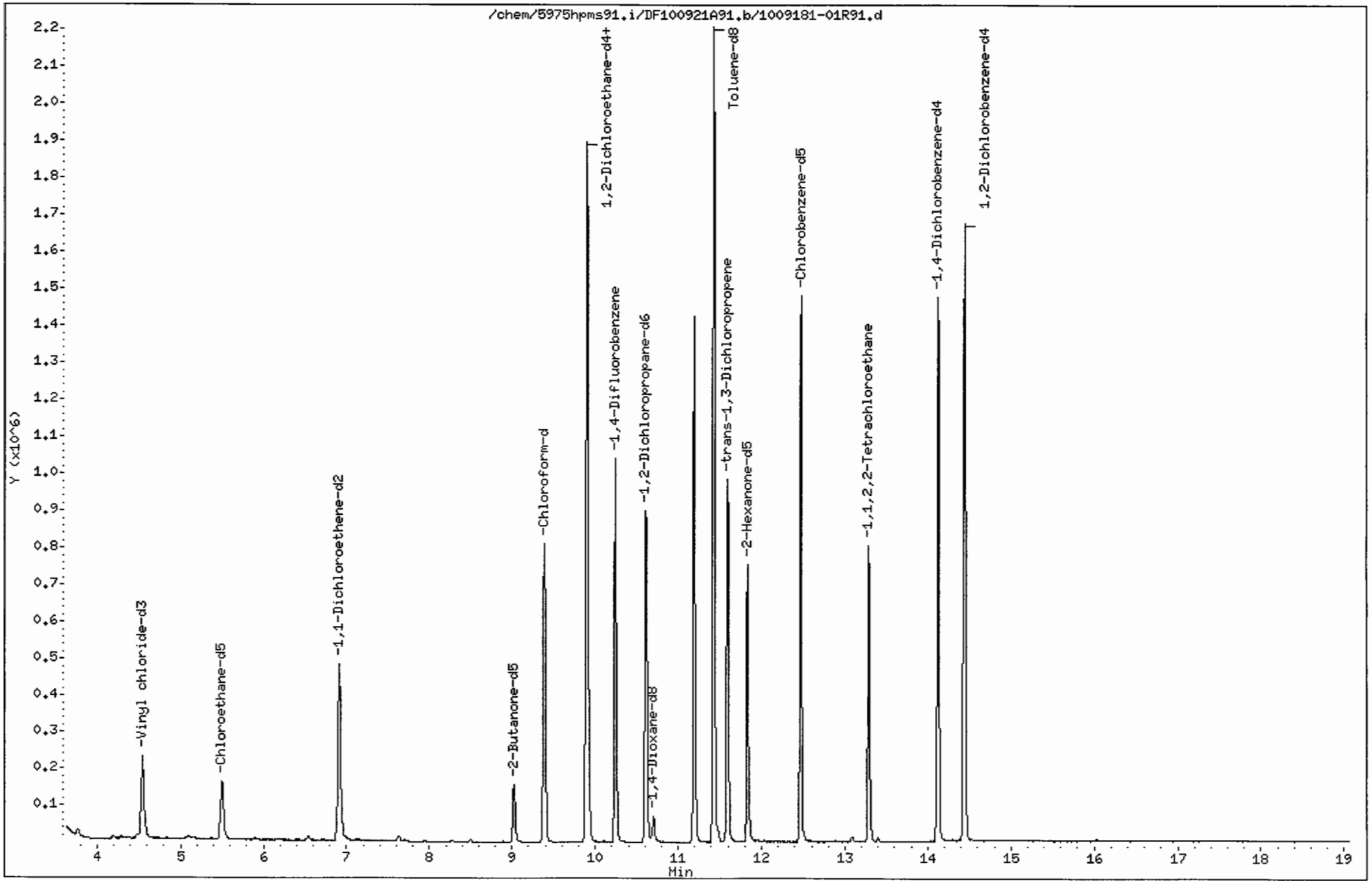
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-01R91.d
Date : 21-SEP-2010 10:38
Client ID: S-1
Sample Info: 1009181-01:STM
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: STM
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-01R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-01R91.d
Lab Smp Id: 1009181-01 Client Smp ID: S-1
Inj Date : 21-SEP-2010 10:38
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-01:STM
Misc Info : S-1
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 695418 | 250.000 | |
| 2 Chlorobenzene-d5 | 117 | 12.470 | 12.470 | (1.000) | 702184 | 250.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 14.123 | 14.123 | (1.000) | 363075 | 250.000 | |
| 4 Vinyl chloride-d3 | 65 | 4.545 | 4.551 | (0.444) | 326972 | 261.677 | 52.3355 |
| 5 Chloroethane-d5 | 69 | 5.502 | 5.502 | (0.537) | 222426 | 266.279 | 53.2558 |
| 6 1,1-Dichloroethene-d2 | 63 | 6.911 | 6.917 | (0.675) | 429255 | 204.974 | 40.9947 |
| 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 173729 | 417.247 | 83.4494 |
| 8 Chloroform-d | 84 | 9.386 | 9.386 | (0.916) | 634753 | 236.514 | 47.3029 |
| 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 404192 | 247.147 | 49.4294 |
| 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 1271622 | 270.704 | 54.1409 |
| 11 1,2-Dichloropropane-d6 | 67 | 10.611 | 10.611 | (0.851) | 349569 | 258.207 | 51.6413 |
| 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 1215779 | 273.016 | 54.6031 |
| 13 trans-1,3-Dichloropropene-d4 | 79 | 11.593 | 11.593 | (0.930) | 453697 | 254.321 | 50.8641 |
| 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 195376 | 509.405 | 101.881 |
| 15 1,4-Dioxane-d8 | 96 | 10.709 | 10.702 | (1.045) | 44387 | 3729.94 | 745.987 |
| 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 377844 | 230.872 | 46.1744 |

Sn 9-28-10

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-01R91.d
Report Date: 28-Sep-2010 12:07

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 451269 | 281.493 | 56.2987 |
| 18 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 20 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 22 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 24 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 29 Methylene chloride | 84 | 7.630 | 7.630 | (0.745) | 6522 | 7.40700 | 1.48140(a) |
| 30 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 8.502 | 8.502 | (0.830) | 6268 | 2.94314 | 0.588628(a) |
| 33 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 40 Benzene | 78 | Compound Not Detected. | | | | | |
| 41 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 43 Trichloroethene | 95 | Compound Not Detected. | | | | | |
| 45 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 56 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 65 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-01R91.d

Date : 21-SEP-2010 10:38

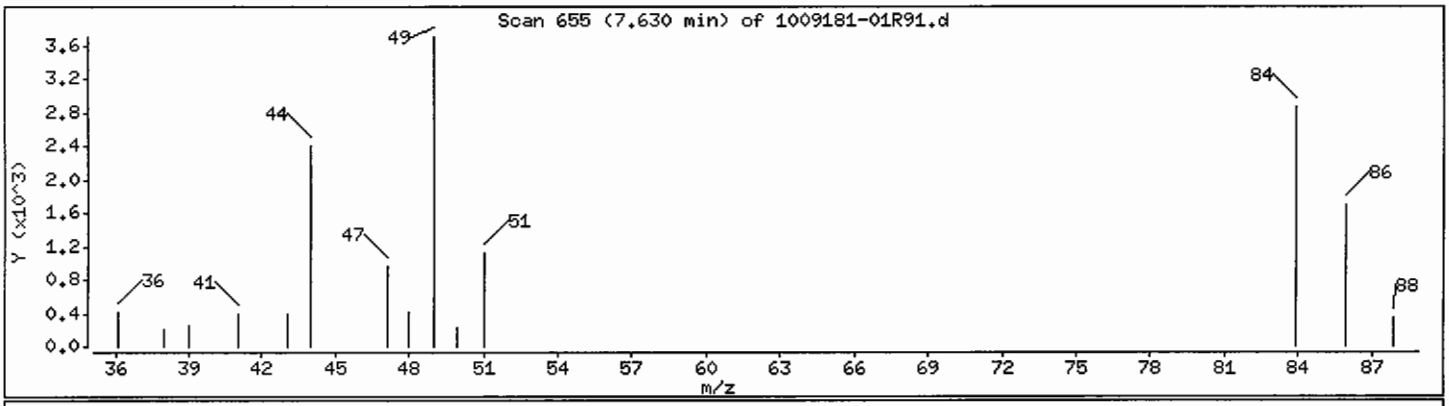
Client ID: S-1 | Instrument: 5975hpms91.i

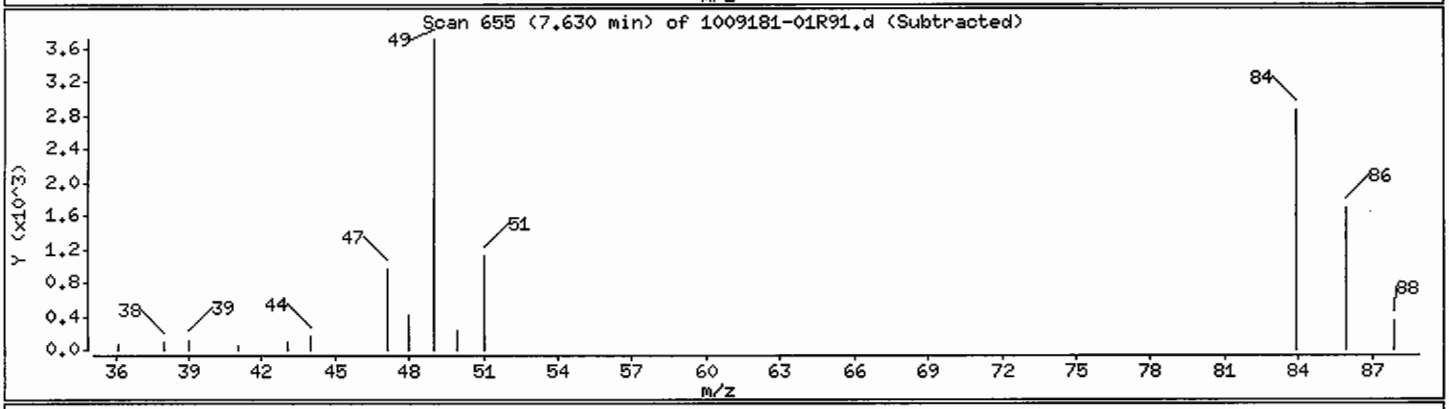
Sample Info: 1009181-01:STM

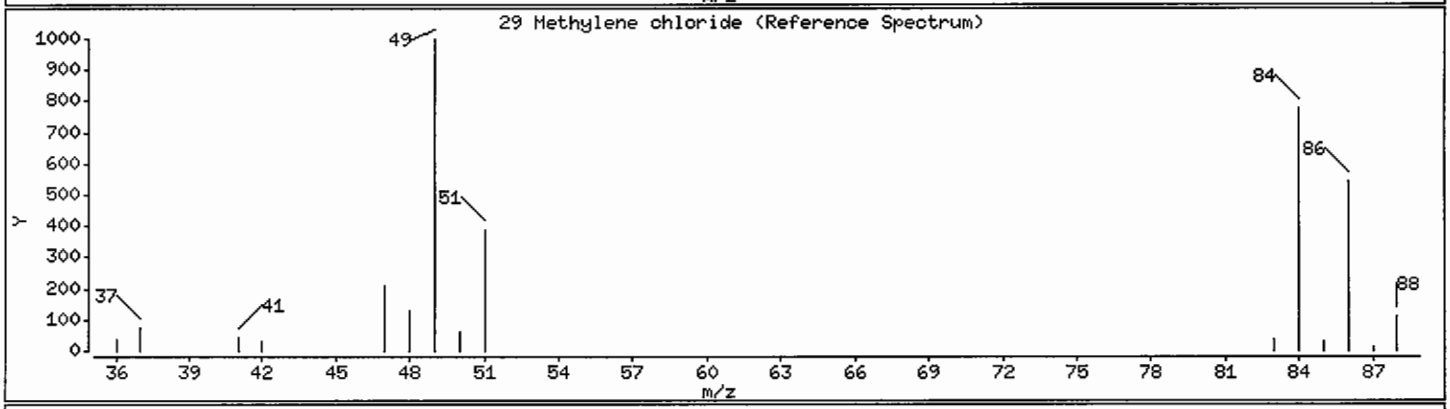
Purge Volume: 5.0 | Operator: STM

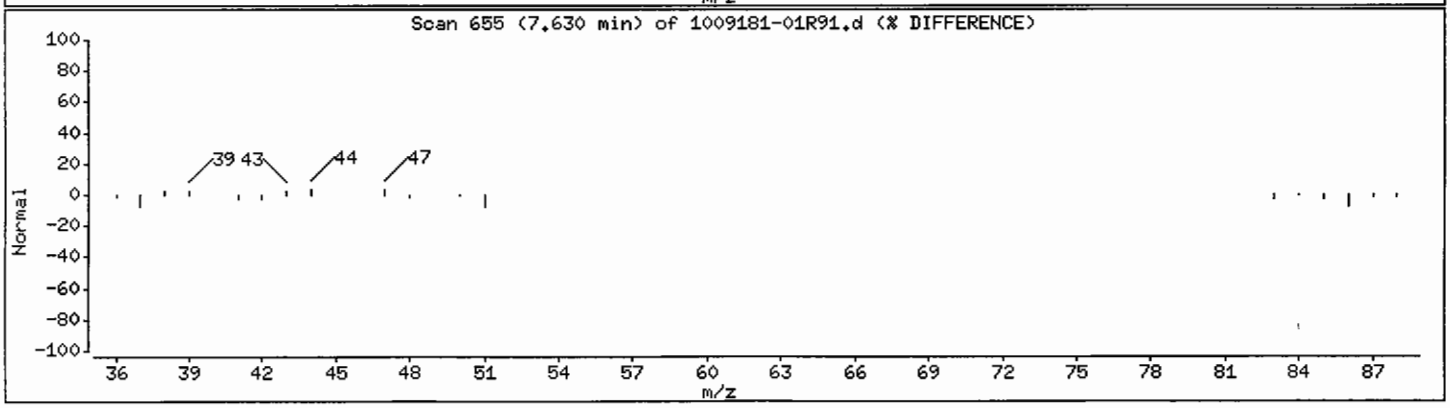
Column phase: SPB-624 | Column diameter: 0.32

29 Methylene chloride | Concentration: 1.48140 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-01R91.d

Date : 21-SEP-2010 10:38

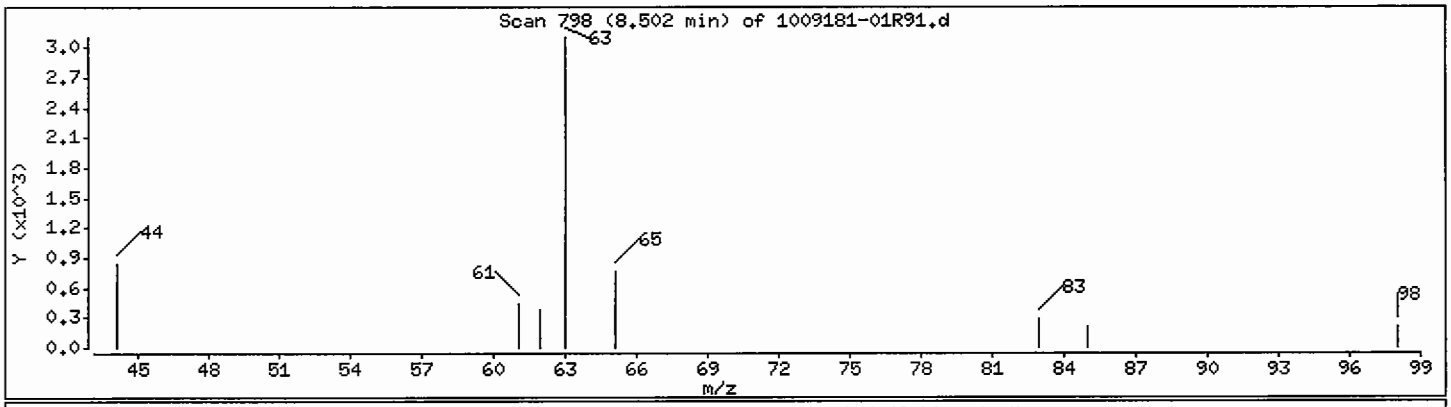
Client ID: S-1 | Instrument: 5975hpms91.i

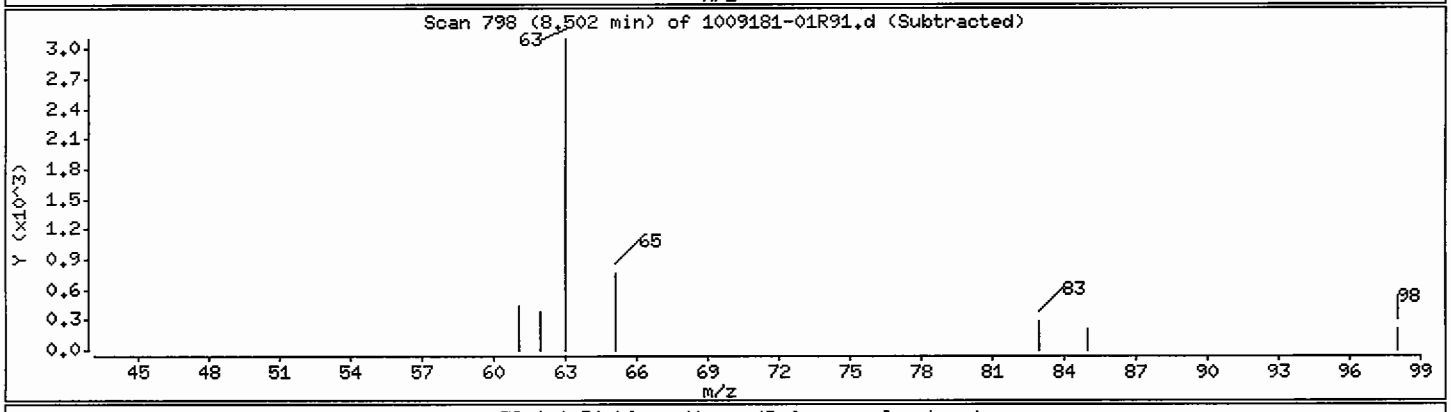
Sample Info: 1009181-01:STM

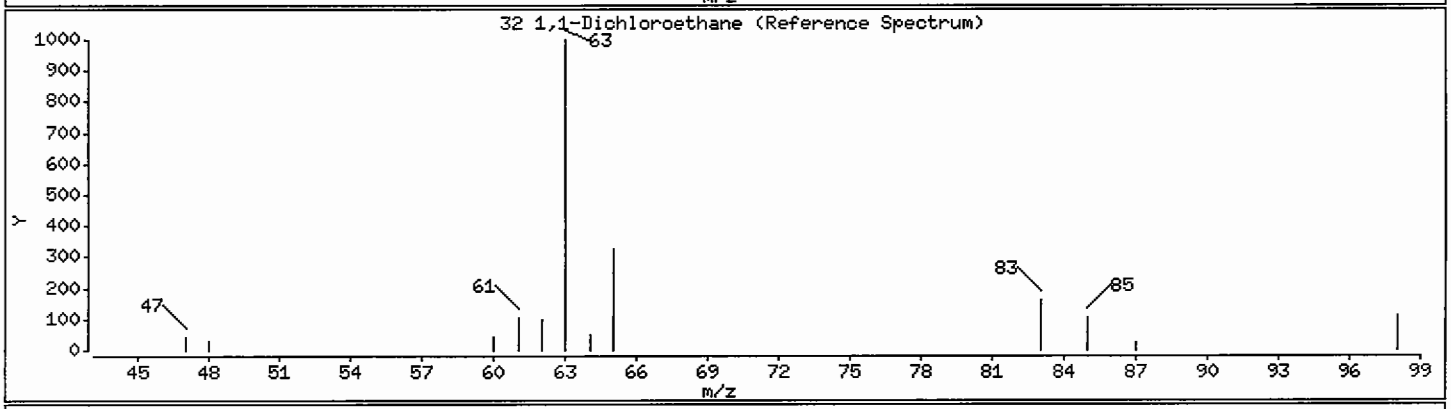
Purge Volume: 5.0 | Operator: STM

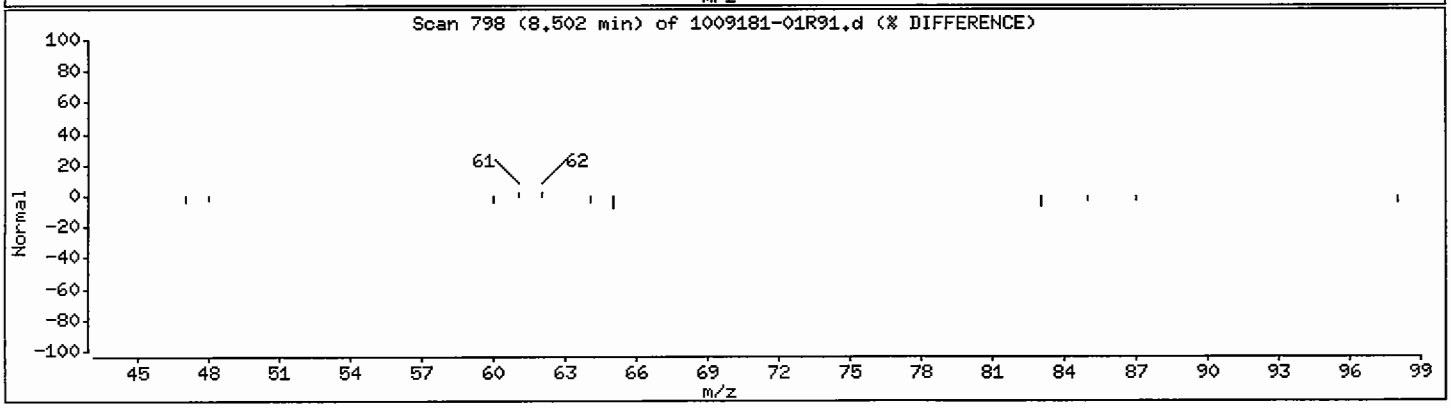
Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 0.588628 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-01R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-01R91.d
Lab Smp Id: 1009181-01 Client Smp ID: S-1
Inj Date : 21-SEP-2010 10:38
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-01:STM
Misc Info : S-1
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-2

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-02

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-02R91.d

Level: (TRACE/LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/L | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 75-00-3 | Chloroethane | 25 | |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 75-09-2 | Methylene chloride | 2.1 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 2.5 | J |
| 156-59-2 | cis-1,2-Dichloroethene | 0.79 | J |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 79-01-6 | Trichloroethene | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 2.5 | J |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
S-2

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-02

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-02R91.d

Level: (TRACE or LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

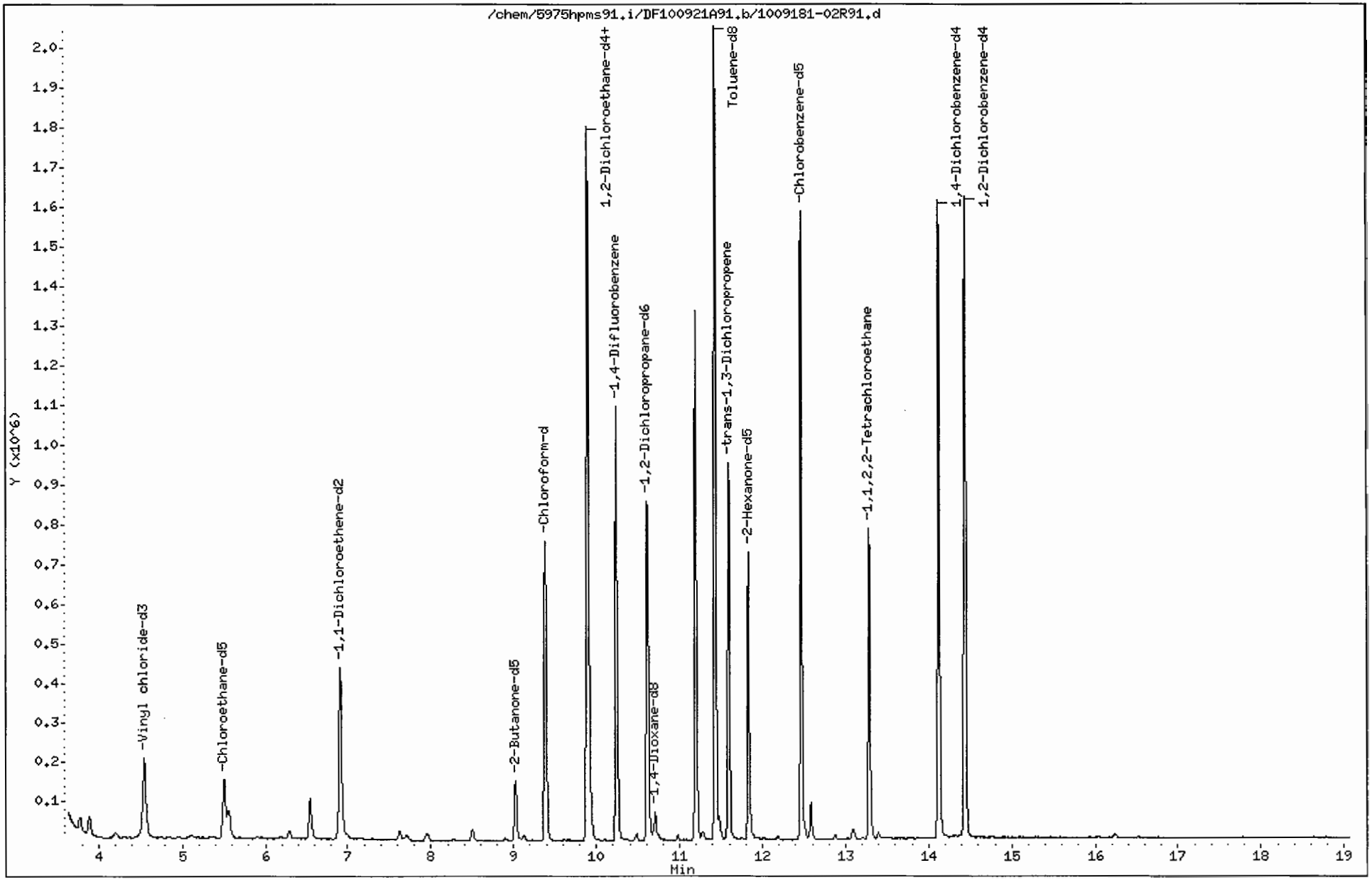
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | 75-45-6 | Difluorochloromethane | 3.89 | 5.3 | JN |
| 02 | | Unknown-01 | 6.55 | 7.2 | J |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d
Date : 21-SEP-2010 11:05
Client ID: S-2
Sample Info: 1009181-02:STM
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: STM
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d
Lab Smp Id: 1009181-02 Client Smp ID: S-2
Inj Date : 21-SEP-2010 11:05
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-02:STM
Misc Info : S-2
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 727790 | 250.000 | |
| 2 Chlorobenzene-d5 | 117 | 12.471 | 12.470 | (1.000) | 753428 | 250.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 14.123 | 14.123 | (1.000) | 402602 | 250.000 | |
| 4 Vinyl chloride-d3 | 65 | 4.551 | 4.551 | (0.444) | 296115 | 226.441 | 45.2883 |
| 5 Chloroethane-d5 | 69 | 5.502 | 5.502 | (0.537) | 201809 | 230.851 | 46.1702 |
| 6 1,1-Dichloroethene-d2 | 63 | 6.911 | 6.917 | (0.675) | 393600 | 179.588 | 35.9176 |
| 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 170249 | 390.702 | 78.1403 |
| 8 Chloroform-d | 84 | 9.392 | 9.386 | (0.917) | 599094 | 213.298 | 42.6597 |
| 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 387676 | 226.504 | 45.3008 |
| 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 1200028 | 238.088 | 47.6176 |
| 11 1,2-Dichloropropane-d6 | 67 | 10.611 | 10.611 | (0.851) | 336703 | 231.788 | 46.3576 |
| 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 1151102 | 240.911 | 48.1821 |
| 13 trans-1,3-Dichloropropene-d4 | 79 | 11.593 | 11.593 | (0.930) | 438000 | 228.823 | 45.7645 |
| 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 189606 | 460.737 | 92.1473 |
| 15 1,4-Dioxane-d8 | 96 | 10.709 | 10.702 | (1.045) | 42520 | 3414.12 | 682.824 |
| 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 376564 | 214.440 | 42.8881 |

SMG 28-10

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d
Report Date: 28-Sep-2010 12:07

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 441382 | 248.295 | 49.6590 |
| 18 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 20 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 22 Chloroethane | 64 | 5.557 | 5.557 | (0.542) | 81113 | 126.085 | 25.2170 |
| 24 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 29 Methylene chloride | 84 | 7.624 | 7.630 | (0.744) | 9611 | 10.4297 | 2.08593(a) |
| 30 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 8.502 | 8.502 | (0.830) | 27313 | 12.2544 | 2.45088(a) |
| 33 cis-1,2-Dichloroethene | 96 | 9.124 | 9.124 | (0.891) | 4778 | 3.92509 | 0.785019(a) |
| 37 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 40 Benzene | 78 | Compound Not Detected. | | | | | |
| 41 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 43 Trichloroethene | 95 | Compound Not Detected. | | | | | |
| 45 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 56 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 65 1,4-Dichlorobenzene | 146 | 14.147 | 14.147 | (1.002) | 37652 | 12.4501 | 2.49002(a) |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d

Date : 21-SEP-2010 11:05

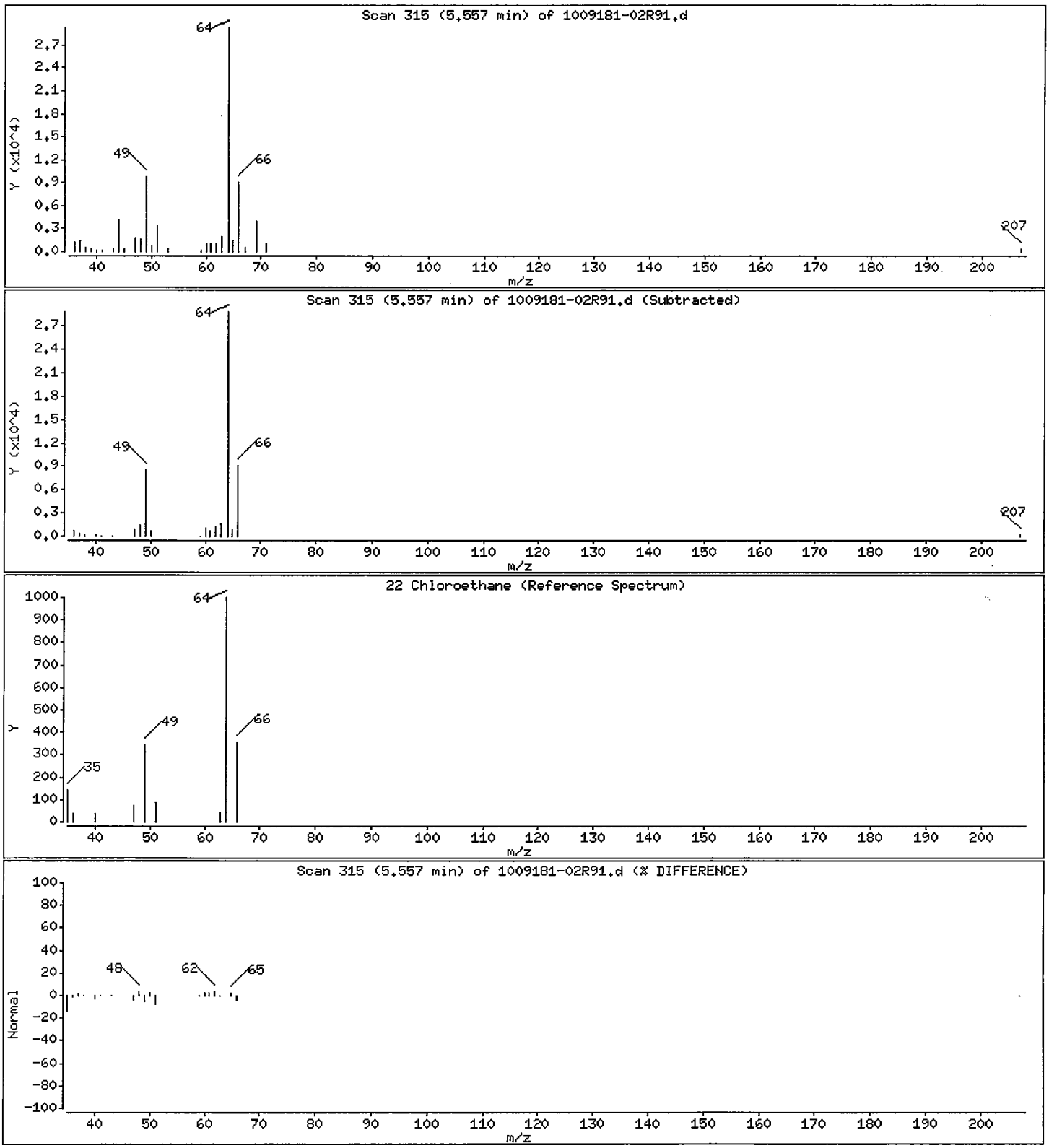
Client ID: S-2 | Instrument: 5975hpms91.i

Sample Info: 1009181-02:STM

Purge Volume: 5.0 | Operator: STM

Column phase: SPB-624 | Column diameter: 0.32

22 Chloroethane | Concentration: 25.2170 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d

Date : 21-SEP-2010 11:05

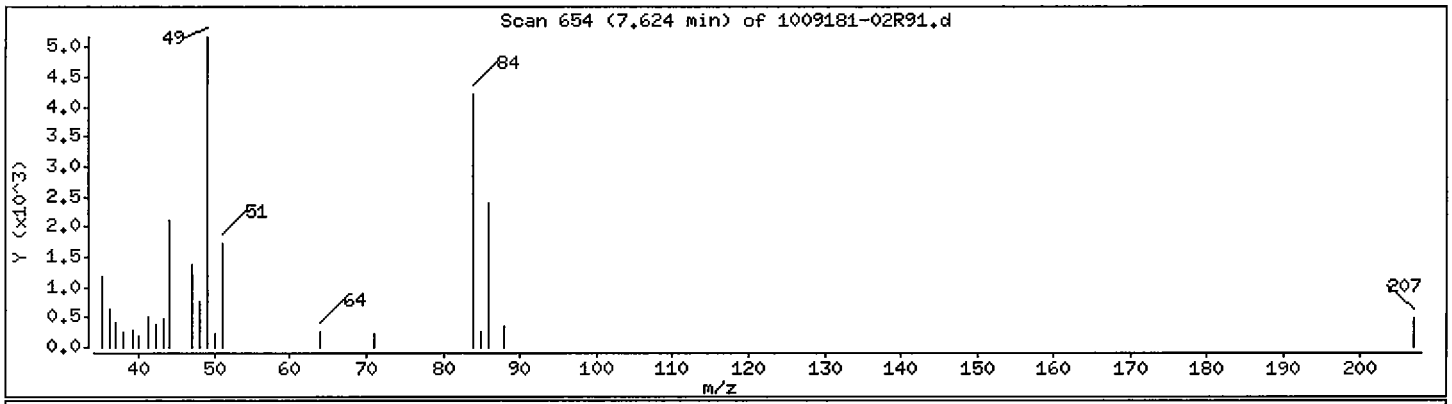
Client ID: S-2 | Instrument: 5975hpms91.i

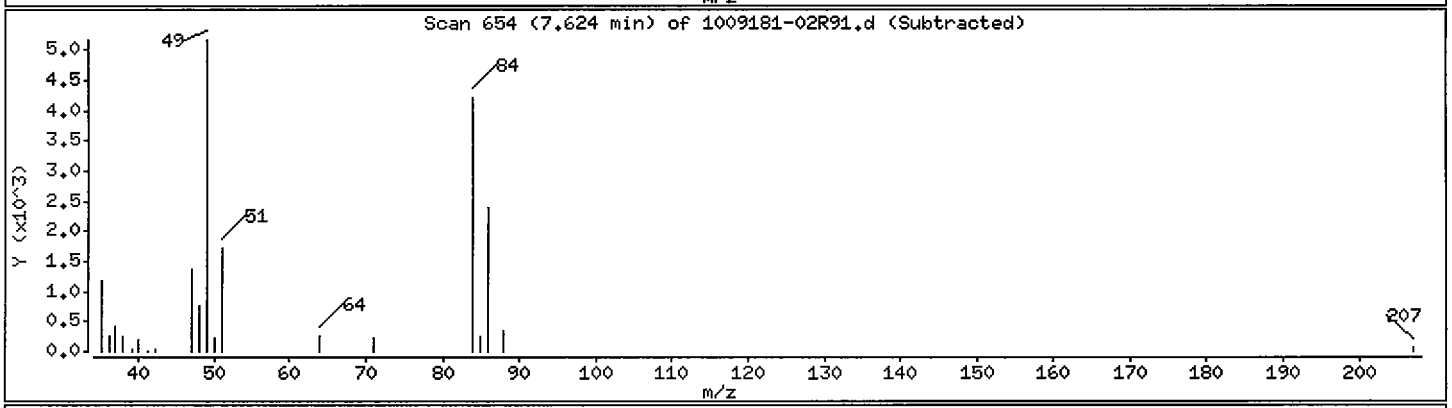
Sample Info: 1009181-02:STM

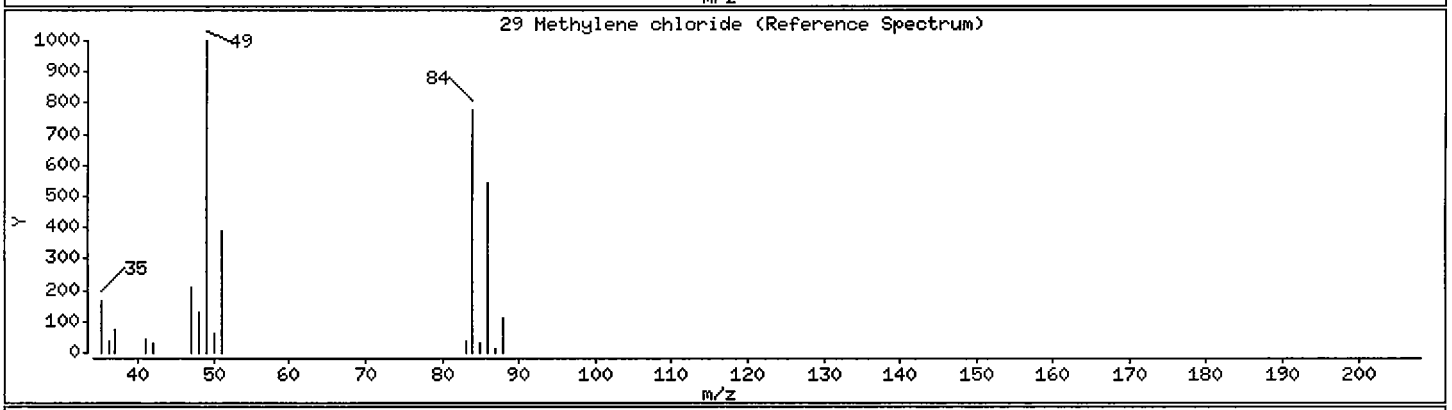
Purge Volume: 5.0 | Operator: STM

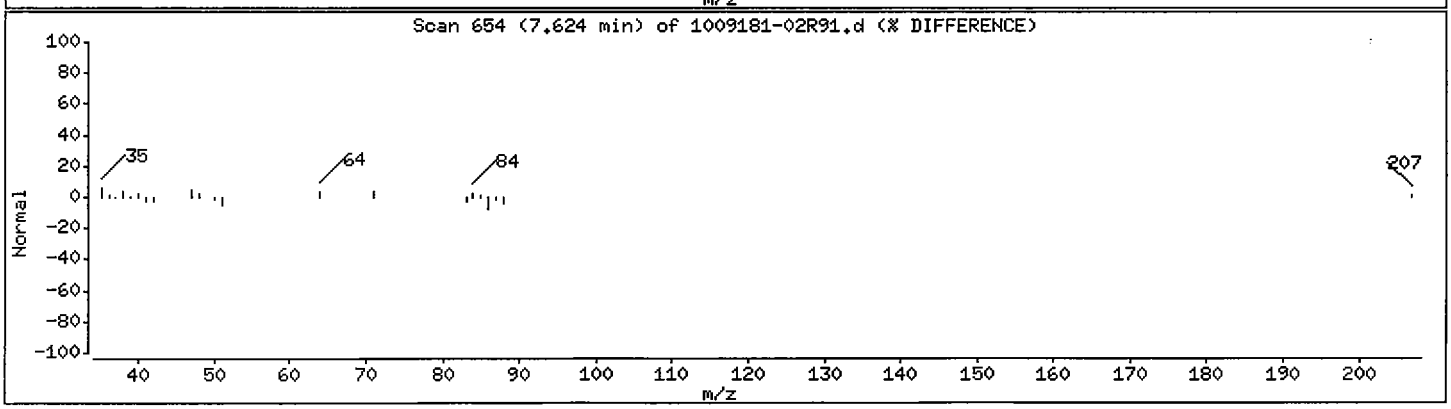
Column phase: SPB-624 | Column diameter: 0.32

29 Methylene chloride | Concentration: 2.08593 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d

Date : 21-SEP-2010 11:05

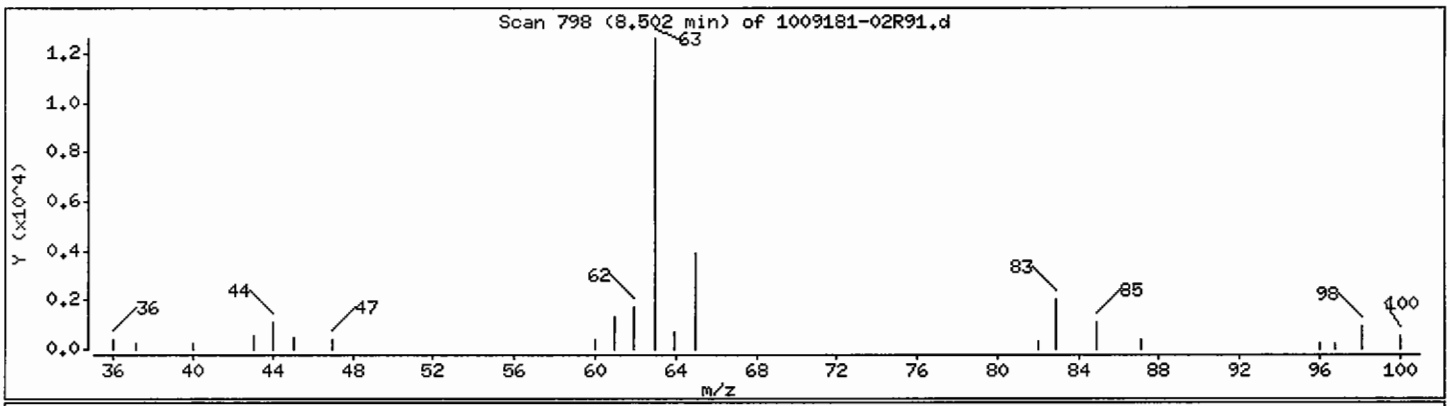
Client ID: S-2 | Instrument: 5975hpms91.i

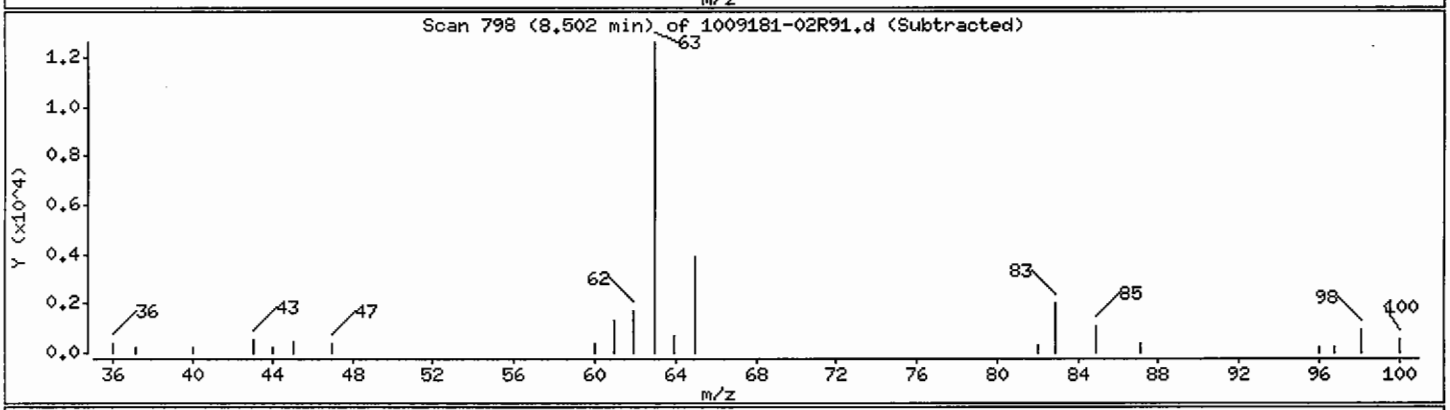
Sample Info: 1009181-02:STM

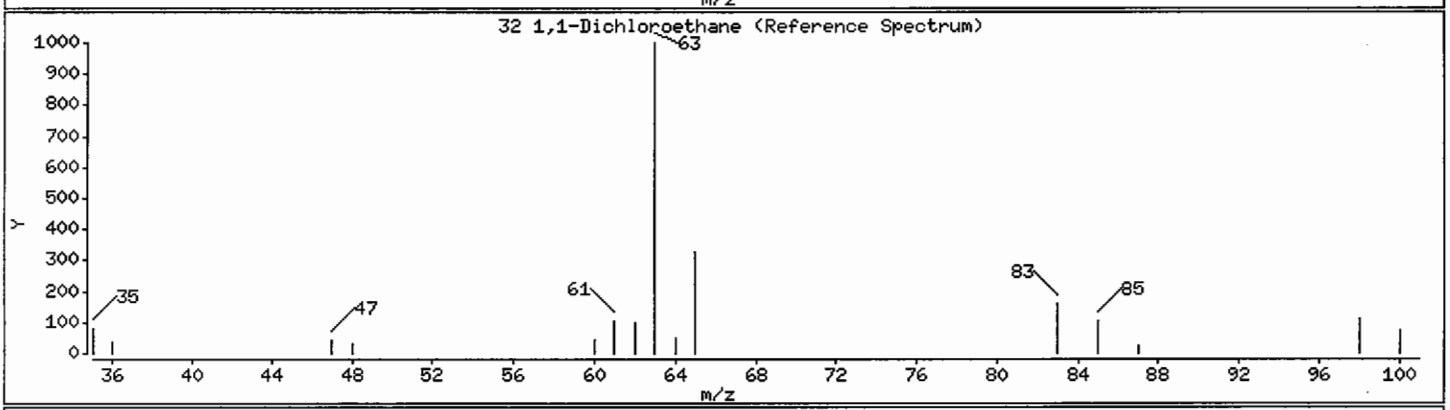
Purge Volume: 5.0 | Operator: STM

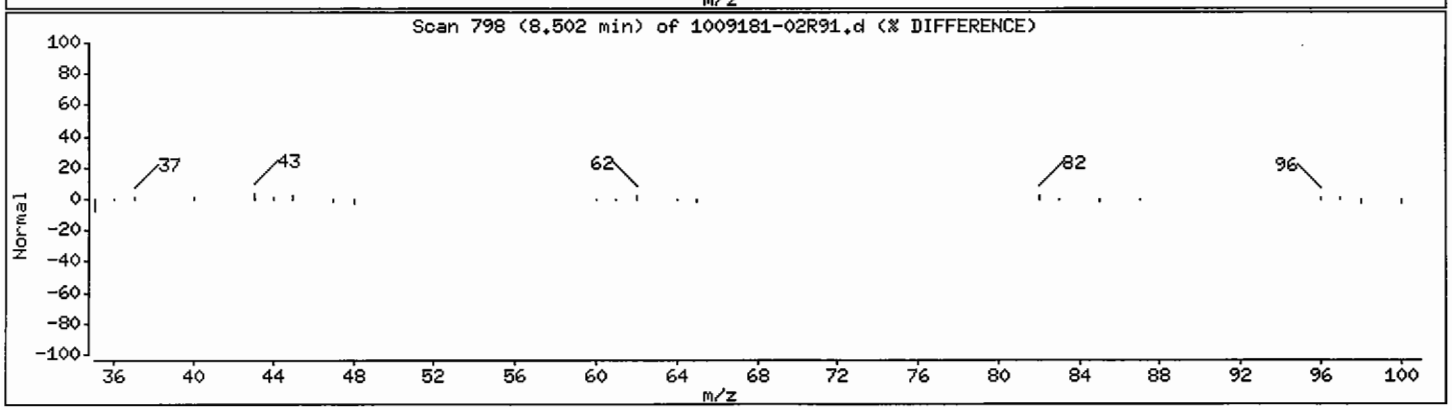
Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 2.45088 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d

Date : 21-SEP-2010 11:05

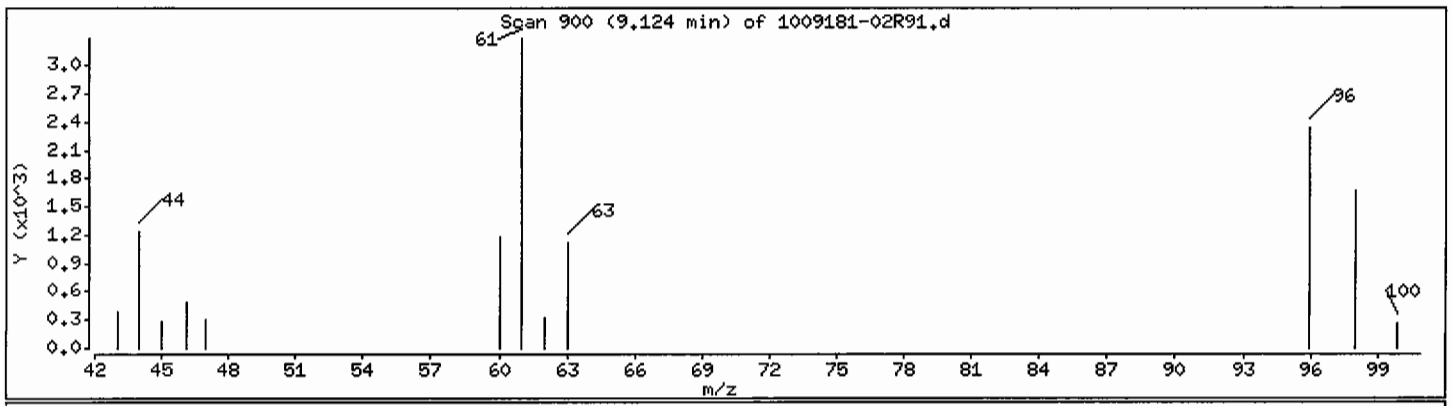
Client ID: S-2 | Instrument: 5975hpms91.i

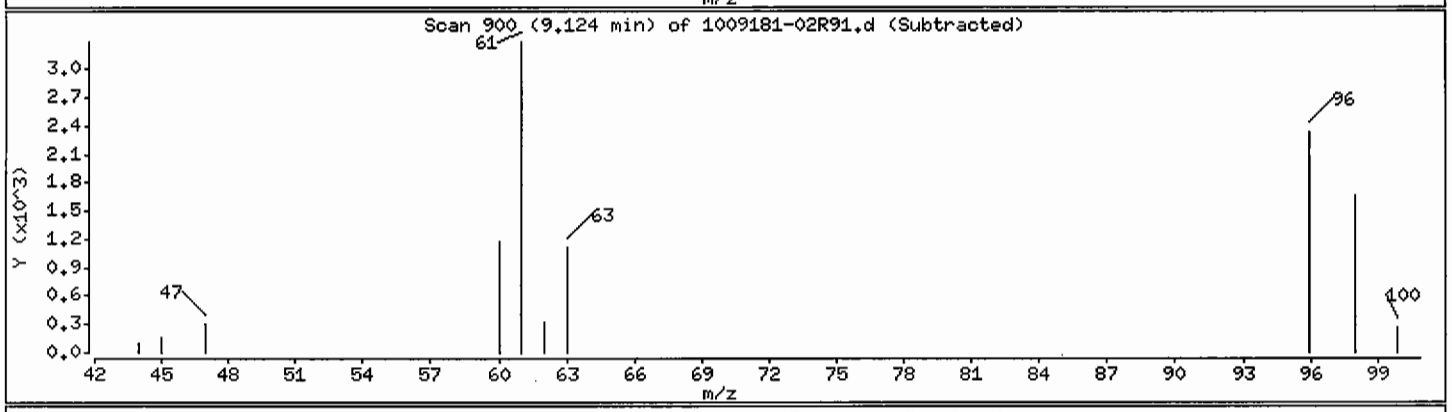
Sample Info: 1009181-02:STM

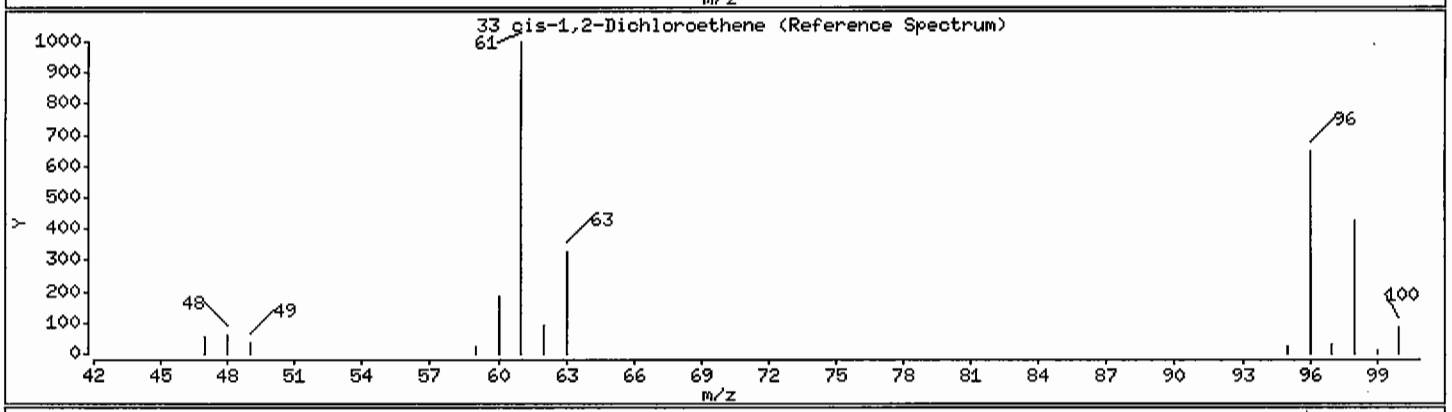
Purge Volume: 5.0 | Operator: STM

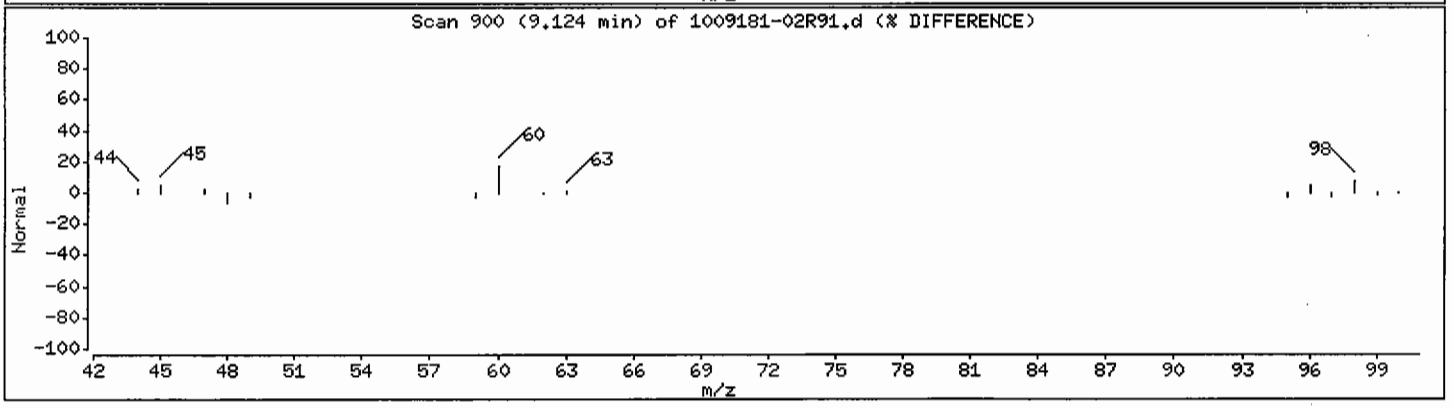
Column phase: SPB-624 | Column diameter: 0.32

33 cis-1,2-Dichloroethene | Concentration: 0.785019 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d

Date : 21-SEP-2010 11:05

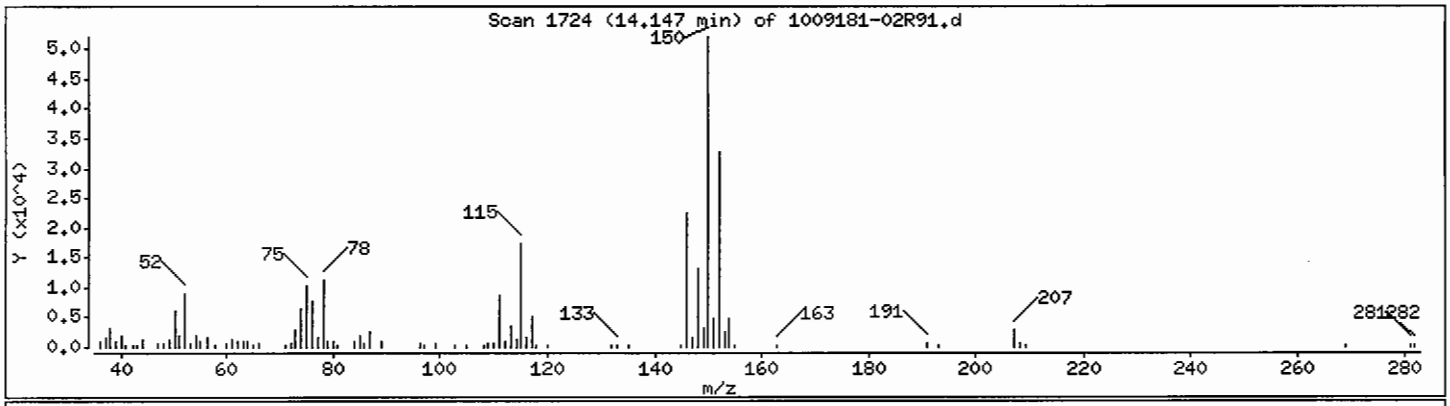
Client ID: S-2 | Instrument: 5975hpms91.i

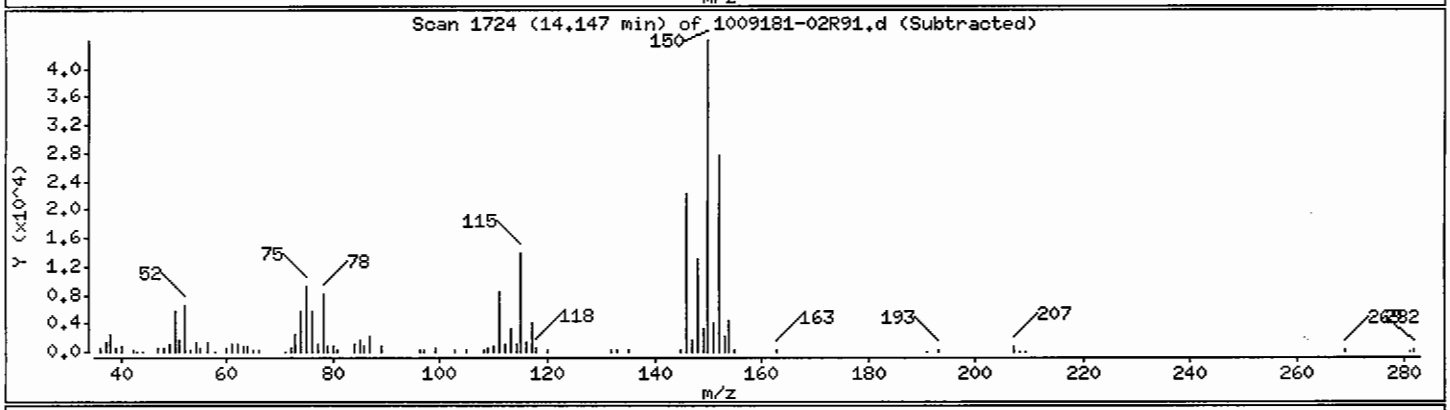
Sample Info: 1009181-02:STM

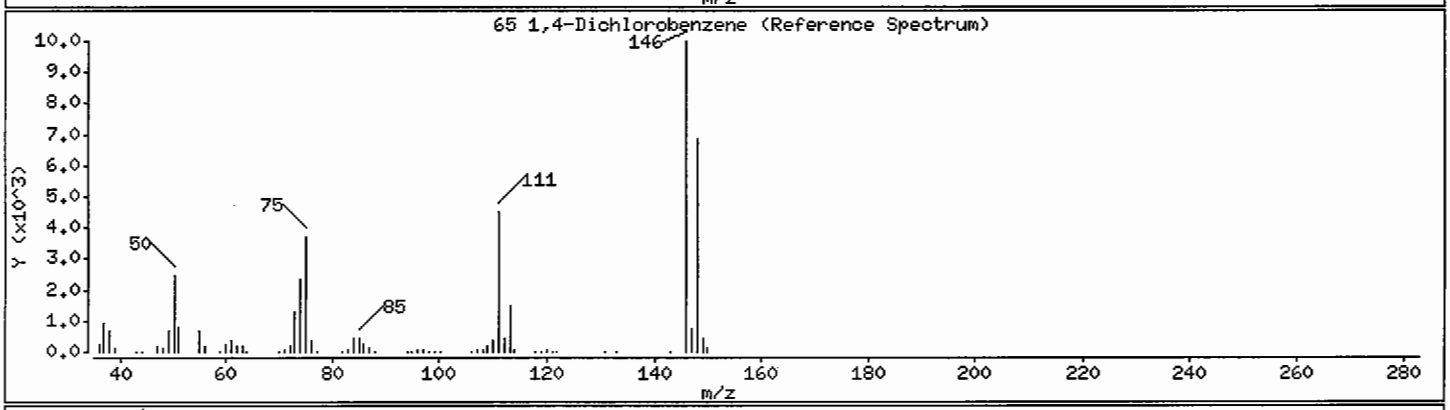
Purge Volume: 5.0 | Operator: STM

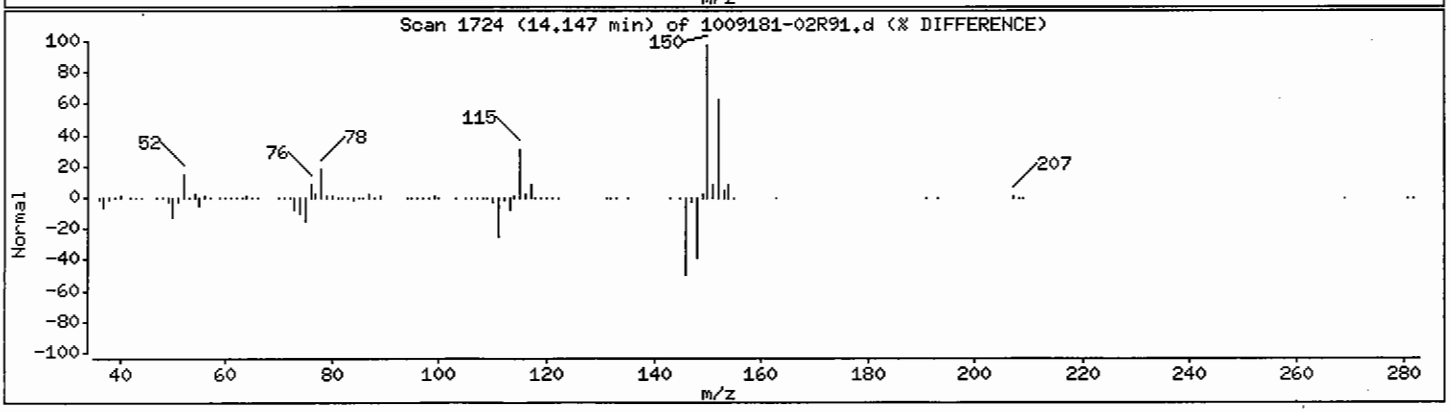
Column phase: SPB-624 | Column diameter: 0.32

65 1,4-Dichlorobenzene | Concentration: 2.49002 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d
Lab Smp Id: 1009181-02 Client Smp ID: S-2
Inj Date : 21-SEP-2010 11:05
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-02:STM
Misc Info : S-2
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| ISTD | RT | AREA | AMOUNT |
|---|---|---|---|
| * 1 1,4-Difluorobenzene | 10.245 | 1777376 | 250.000 |

| | CONCENTRATIONS | | | | QUANT | | |
|---|---|---|---|---|---|---|---|
| RT | AREA | ON-COL( ng) | FINAL( ug/L) | QUAL | LIBRARY | LIB ENTRY | CPND # |
| Difluorochloromethane | | | | CAS #: 75-45-6 | | | |
| 3.893 | 189607 | 26.6694636 | 5.33389 | 91 | NIS08.l | 1829 | 1 |
| Unknown | | | | CAS #: | | | |
| 6.545 | 256039 | 36.0135450 | 7.20271 | 0 | | 0 | 1 |

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d

Date : 21-SEP-2010 11:05

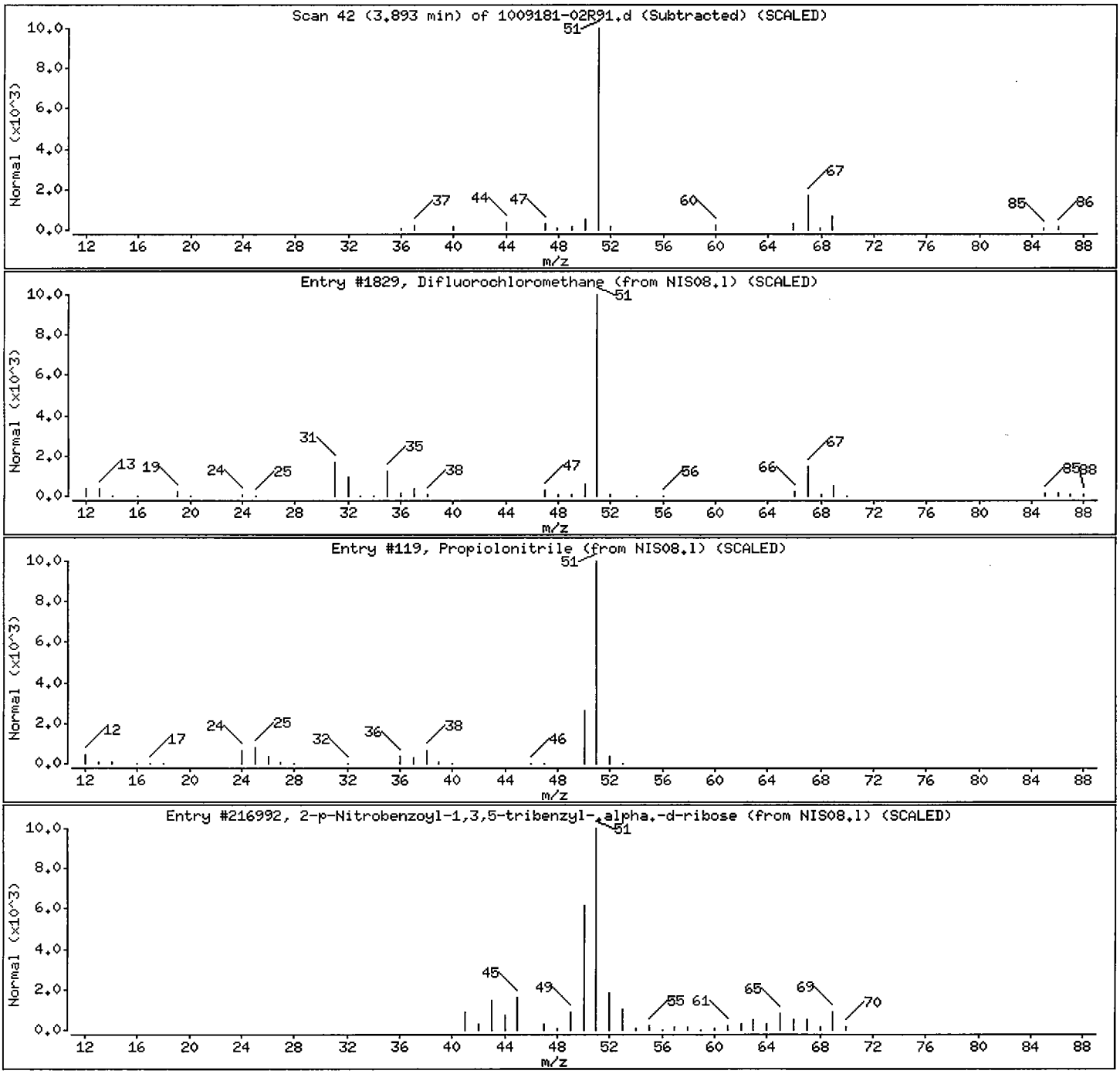
Client ID: S-2 Instrument: 5975hpms91.i

Sample Info: 1009181-02:STM

Purge Volume: 5.0 Operator: STM

Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Difluorochloromethane | 75-45-6 | NIS08.l | 1829 | 91 | CHClF2 | 86 |
| Propiolonitrile | 1070-71-9 | NIS08.l | 119 | 3 | C3HN | 51 |
| 2-p-Nitrobenzoyl-1,3,5-tribenzyl-.alpha. | 1000129-85-6 | NIS08.l | 216992 | 2 | C33H31NO8 | 569 |



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-02R91.d

Date : 21-SEP-2010 11:05

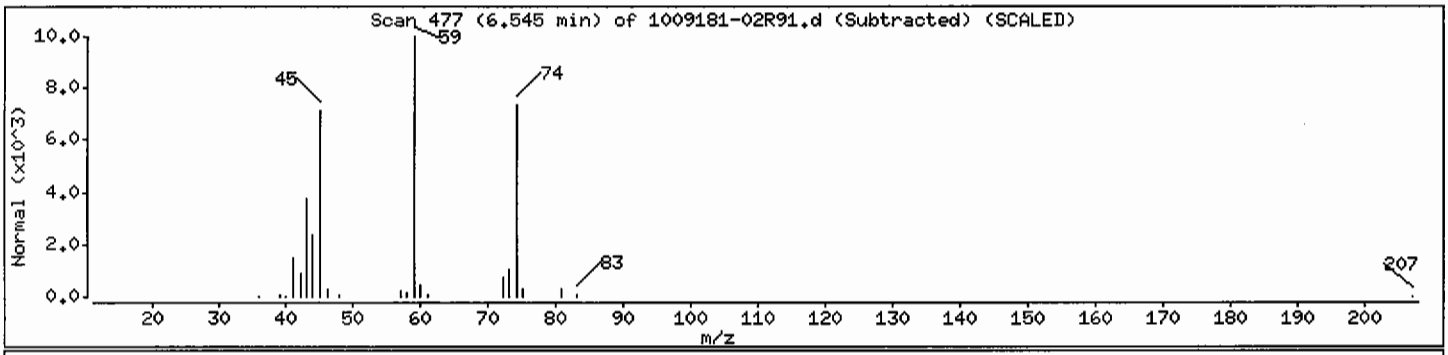
Client ID: S-2 Instrument: 5975hpms91.i

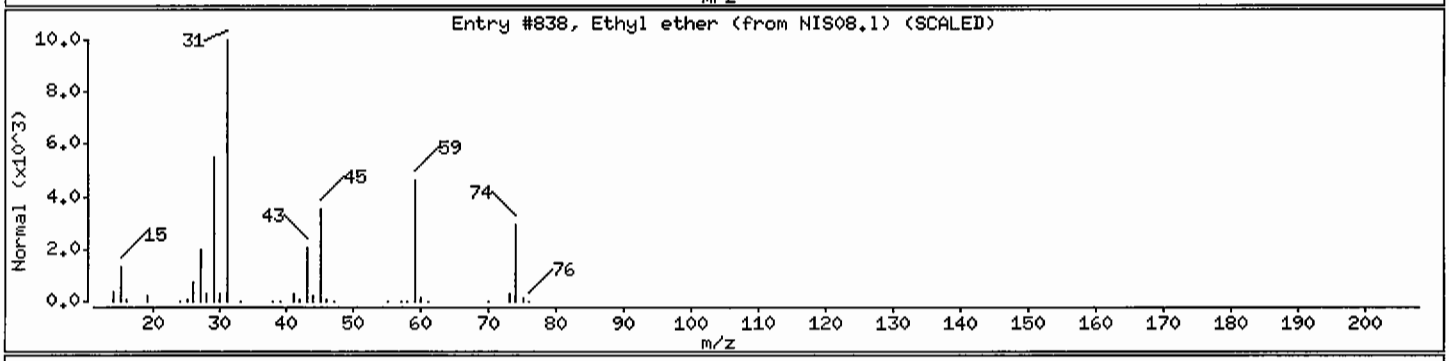
Sample Info: 1009181-02:STM

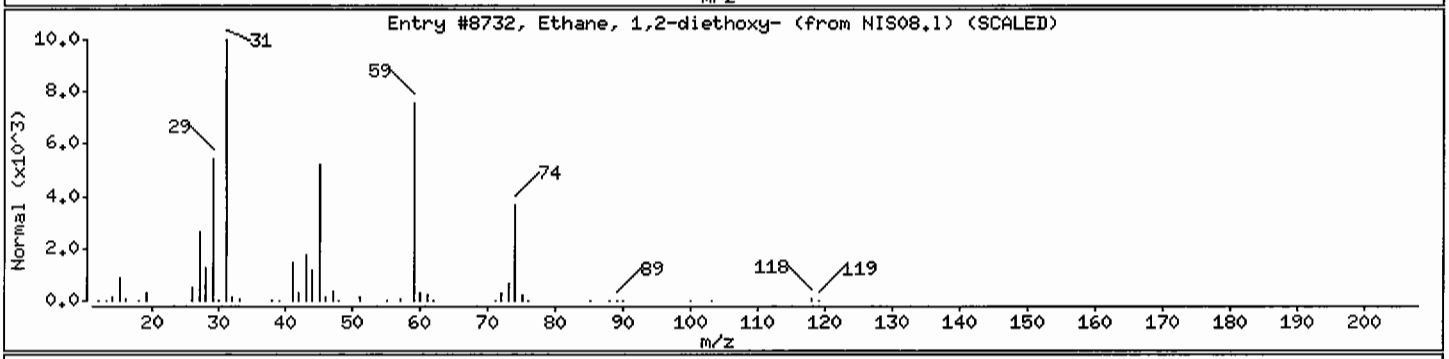
Purge Volume: 5.0 Operator: STM

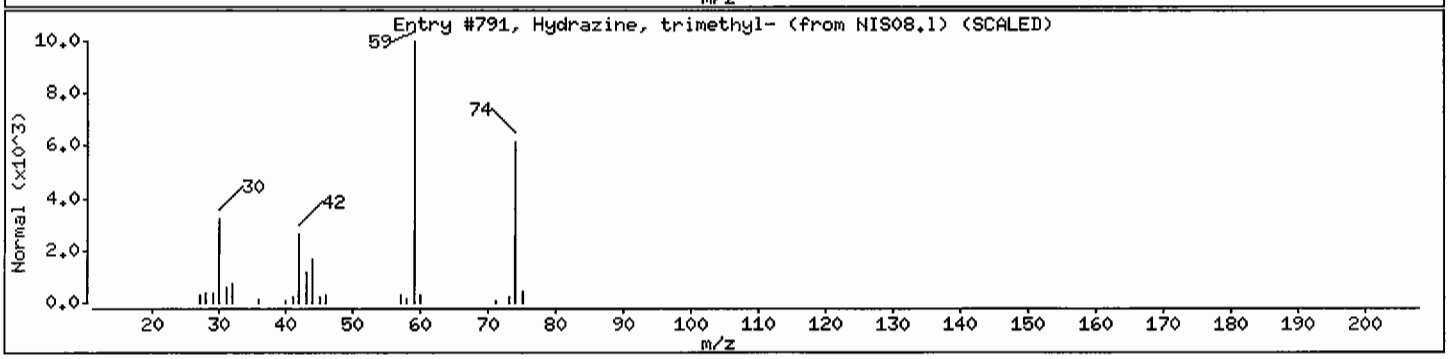
Column phase: SPB-624 Column diameter: 0.32

| Library Search Compound Match | CAS Number | Library | Entry | Quality | Formula | Weight |
|---|---|---|---|---|---|---|
| Unknown | | | | | | |
| Ethyl ether | 60-29-7 | NIS08.l | 838 | 80 | C4H10O | 74 |
| Ethane, 1,2-diethoxy- | 629-14-1 | NIS08.l | 8732 | 78 | C6H14O2 | 118 |
| Hydrazine, trimethyl- | 1741-01-1 | NIS08.l | 791 | 42 | C3H10N2 | 74 |



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-3

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-03

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-03R91.d

Level: (TRACE/LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/L | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 75-09-2 | Methylene chloride | 1.7 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 79-01-6 | Trichloroethene | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
S-3

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-03

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-03R91.d

Level: (TRACE or LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

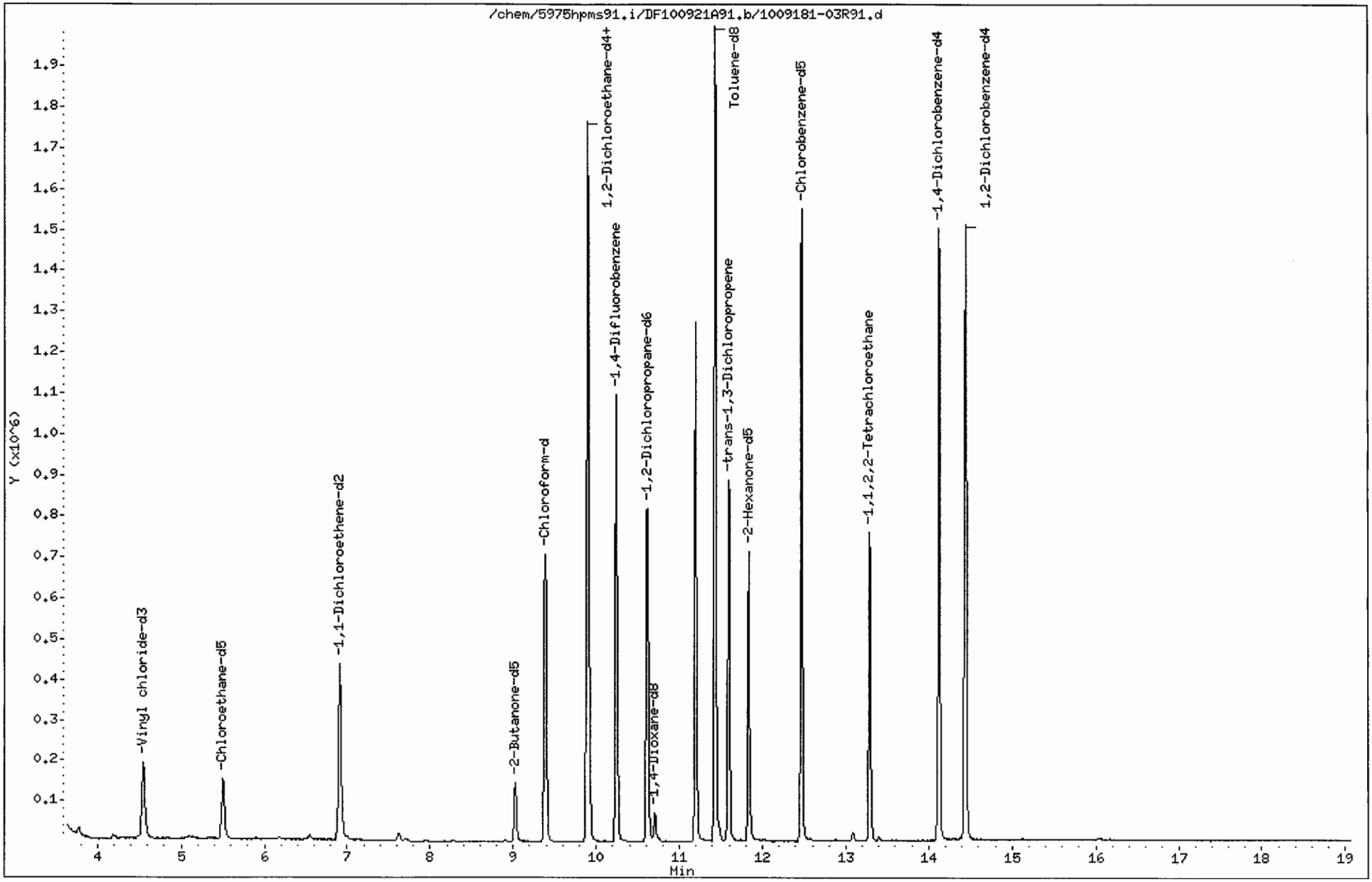
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-03R91.d
Date : 21-SEP-2010 11:33
Client ID: S-3
Sample Info: 1009181-03:STM
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: STM
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-03R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-03R91.d
Lab Smp Id: 1009181-03 Client Smp ID: S-3
Inj Date : 21-SEP-2010 11:33
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-03:STM
Misc Info : S-3
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 716706 | 250.000 | |
| * 2 Chlorobenzene-d5 | 117 | 12.470 | 12.470 | (1.000) | 731715 | 250.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 14.129 | 14.123 | (1.000) | 377817 | 250.000 | |
| $ 4 Vinyl chloride-d3 | 65 | 4.545 | 4.551 | (0.444) | 290899 | 225.893 | 45.1786 |
| $ 5 Chloroethane-d5 | 69 | 5.502 | 5.502 | (0.537) | 200461 | 232.855 | 46.5711 |
| $ 6 1,1-Dichloroethene-d2 | 63 | 6.910 | 6.917 | (0.675) | 388257 | 179.890 | 35.9780 |
| $ 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 163449 | 380.897 | 76.1795 |
| $ 8 Chloroform-d | 84 | 9.392 | 9.386 | (0.917) | 587438 | 212.383 | 42.4766 |
| $ 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 379759 | 225.310 | 45.0620 |
| $ 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 1170911 | 239.205 | 47.8410 |
| $ 11 1,2-Dichloropropane-d6 | 67 | 10.617 | 10.611 | (0.851) | 322429 | 228.548 | 45.7096 |
| $ 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 1119205 | 241.186 | 48.2371 |
| $ 13 trans-1,3-Dichloropropene-d4 | 79 | 11.592 | 11.593 | (0.930) | 421694 | 226.841 | 45.3683 |
| $ 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 185207 | 463.402 | 92.6804 |
| $ 15 1,4-Dioxane-d8 | 96 | 10.709 | 10.702 | (1.045) | 42326 | 3451.10 | 690.220(M) |
| $ 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 356492 | 209.034 | 41.8068 |

1 Smv 9-28-10

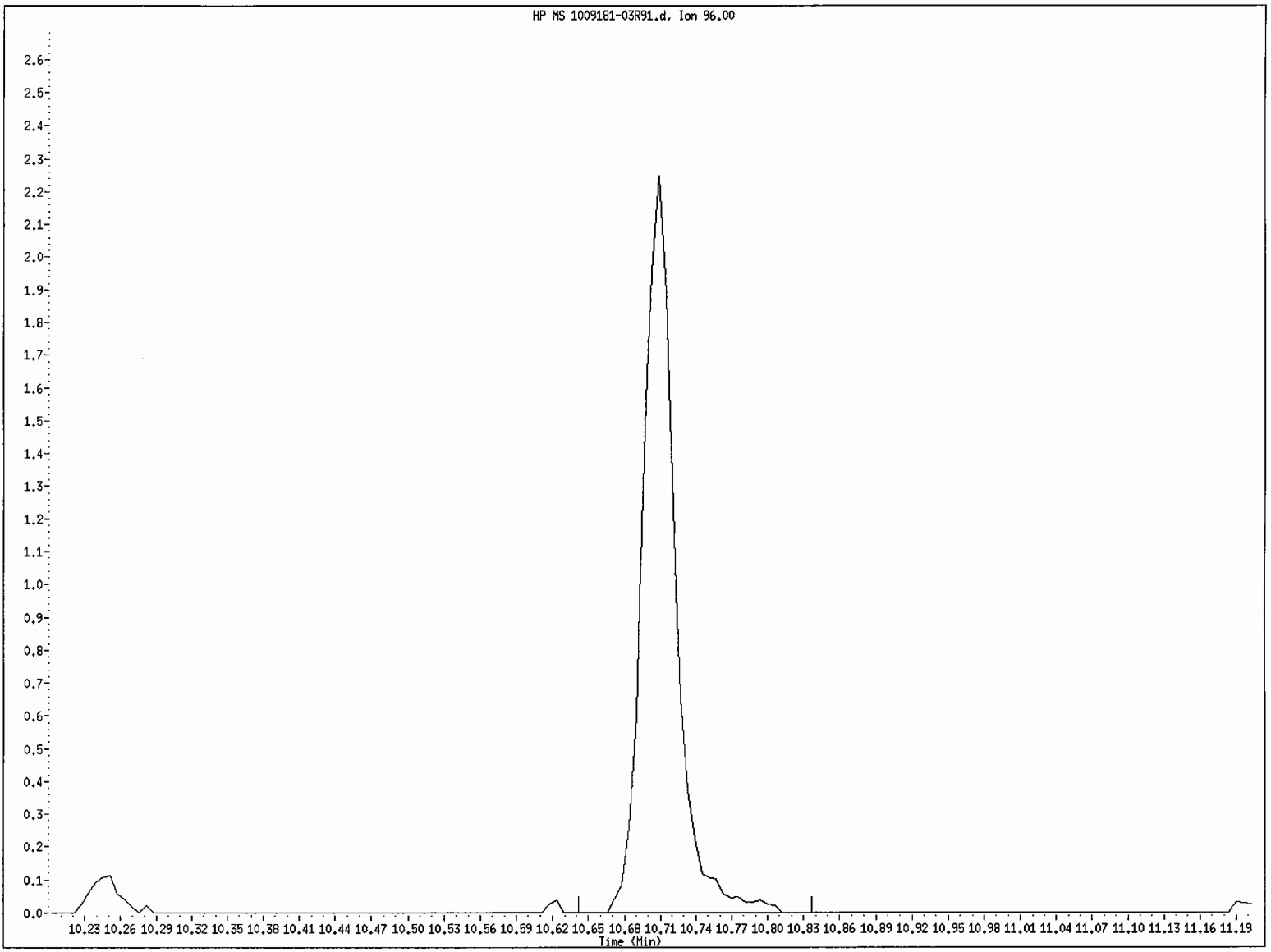
Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-03R91.d
Report Date: 28-Sep-2010 12:07

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.022) | 414501 | 248.470 | 49.6939 |
| 18 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 20 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 22 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 24 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 29 Methylene chloride | 84 | 7.630 | 7.630 | (0.745) | 7816 | 8.61293 | 1.72259(a) |
| 30 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 33 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 40 Benzene | 78 | Compound Not Detected. | | | | | |
| 41 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 43 Trichloroethene | 95 | Compound Not Detected. | | | | | |
| 45 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 56 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 65 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

1,4-Dioxane-d8 CAS Number 17647-74-4 Area = 42326  Manually integrated




File name: /chem/5975hpms91.i/DF100921A91.b/1009181-03R91.d
Client ID: S-3
Instrument ID: 5975hpms91.i
Injection Date and Time: 21-SEP-2010 11:33
Retention Time: 10.71
Operator ID: STM

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-03R91.d

Date : 21-SEP-2010 11:33

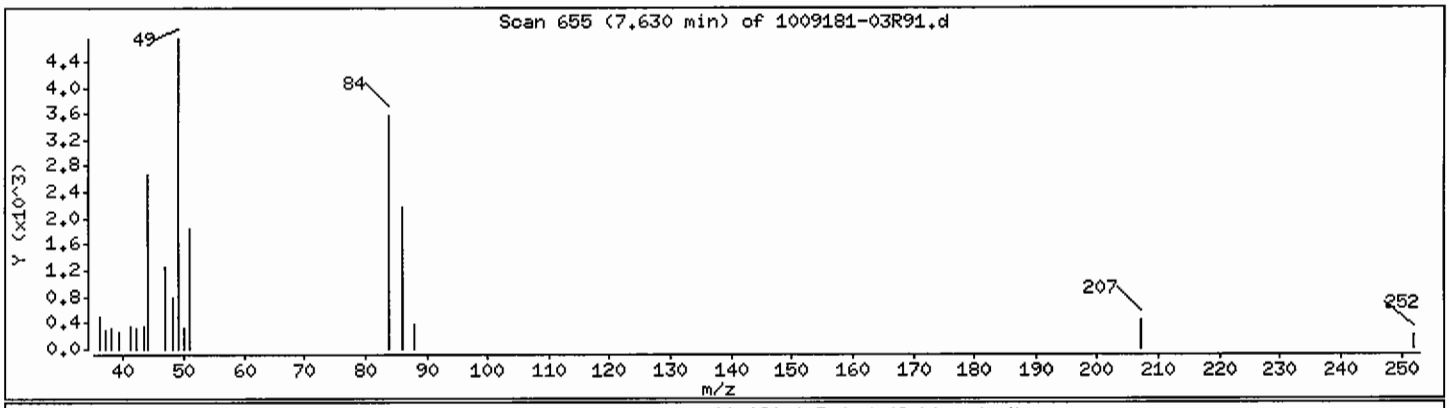
Client ID: S-3 | Instrument: 5975hpms91.i

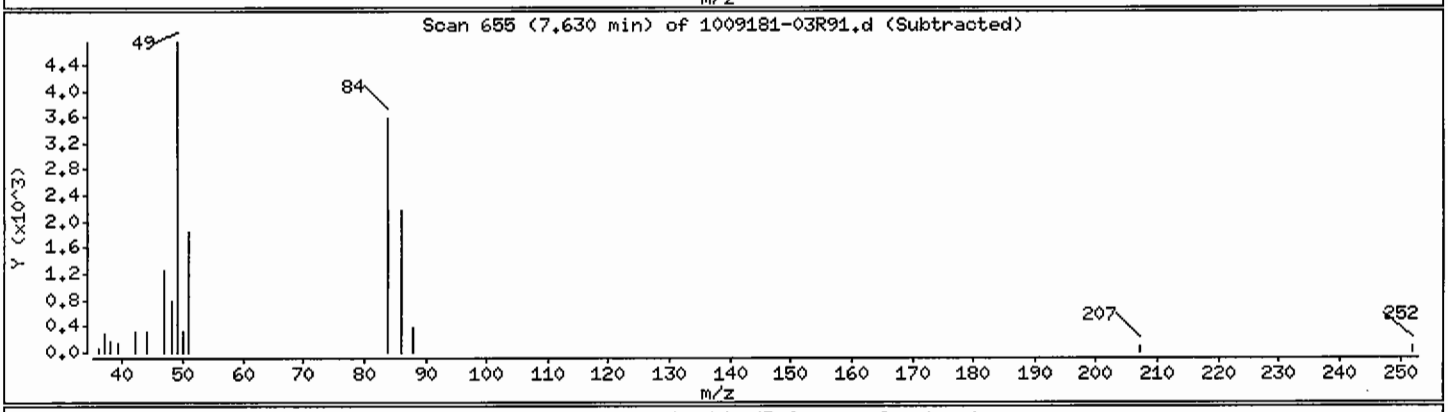
Sample Info: 1009181-03:STM

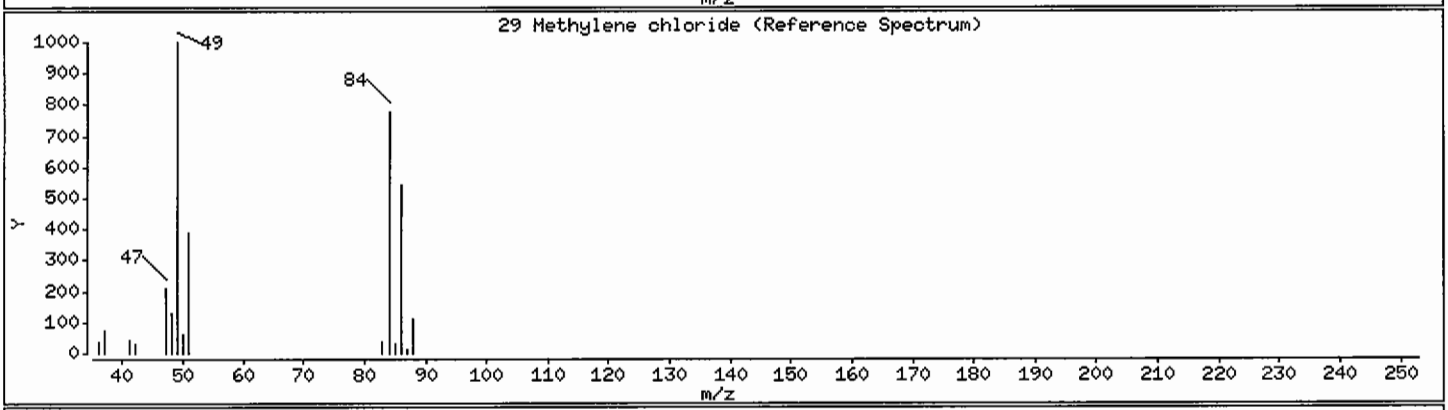
Purge Volume: 5.0 | Operator: STM

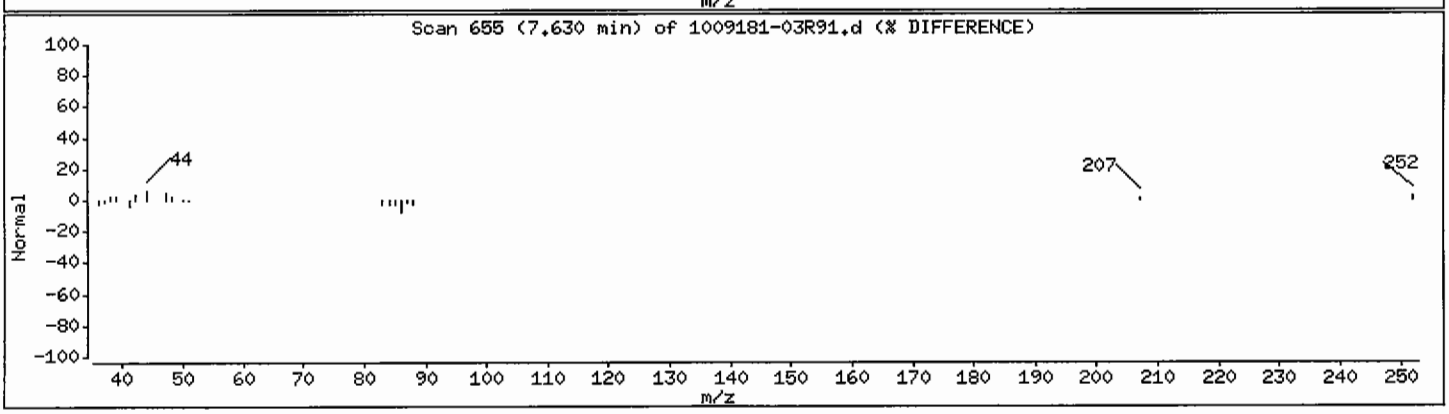
Column phase: SPB-624 | Column diameter: 0.32

29 Methylene chloride | Concentration: 1.72259 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-03R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-03R91.d
Lab Smp Id: 1009181-03 Client Smp ID: S-3
Inj Date : 21-SEP-2010 11:33
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-03:STM
Misc Info : S-3
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-4

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-04

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-04R91.d

Level: (TRACE/LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/L | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 75-00-3 | Chloroethane | 2.4 | J |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 75-09-2 | Methylene chloride | 1.7 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 3.9 | J |
| 156-59-2 | cis-1,2-Dichloroethene | 8.3 | |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 79-01-6 | Trichloroethene | 1.5 | J |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
S-4

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-04

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-04R91.d

Level: (TRACE or LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

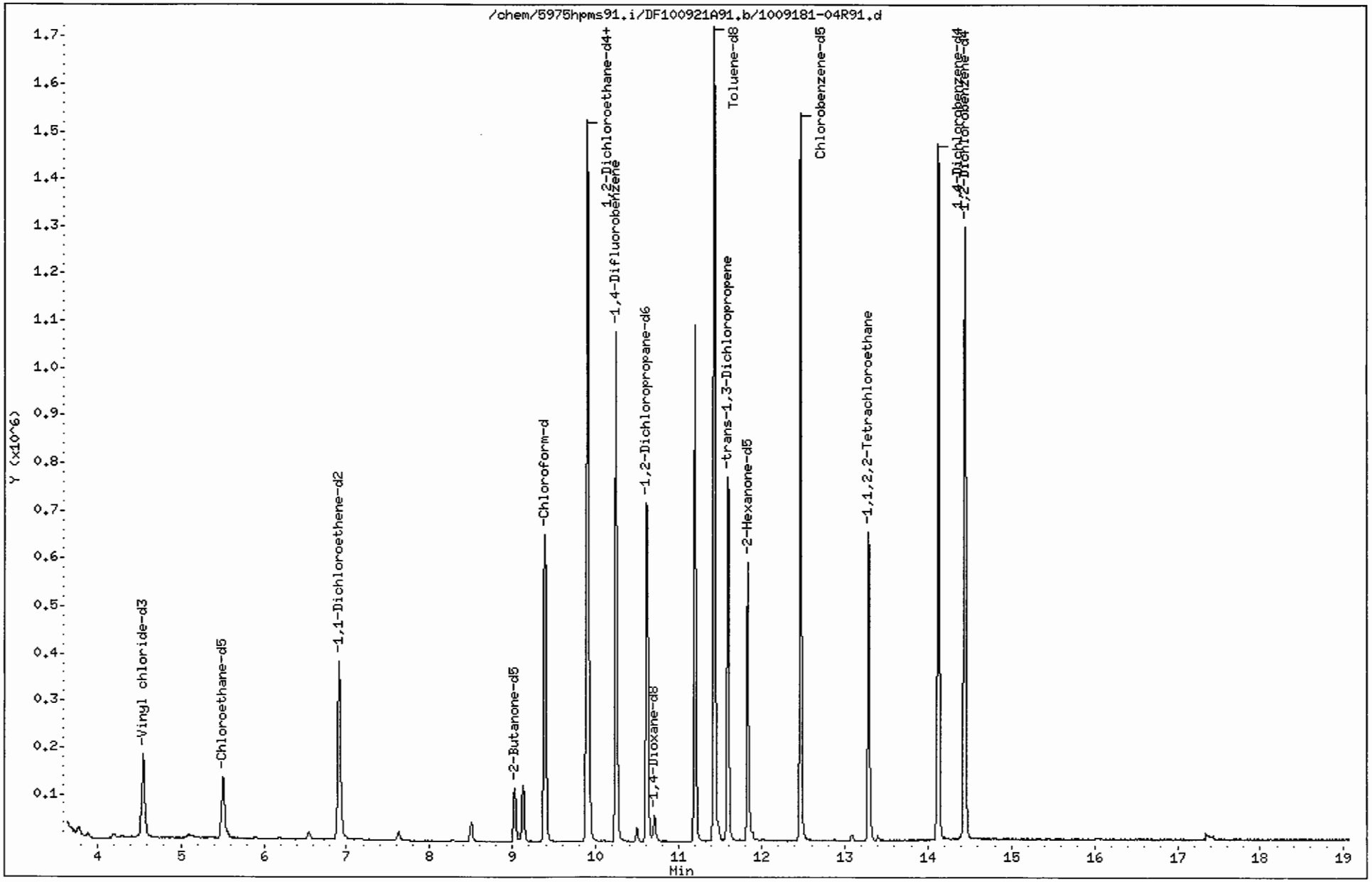
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-04R91.d
Date : 21-SEP-2010 12:00
Client ID: S-4
Sample Info: 1009181-04:STM
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: STM
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-04R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-04R91.d
Lab Smp Id: 1009181-04 Client Smp ID: S-4
Inj Date : 21-SEP-2010 12:00
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-04:STM
Misc Info : S-4
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 713611 | 250.000 | |
| * 2 Chlorobenzene-d5 | 117 | 12.470 | 12.470 | (1.000) | 725797 | 250.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 14.122 | 14.123 | (1.000) | 372227 | 250.000 | |
| $ 4 Vinyl chloride-d3 | 65 | 4.551 | 4.551 | (0.444) | 258166 | 201.344 | 40.2688 |
| $ 5 Chloroethane-d5 | 69 | 5.502 | 5.502 | (0.537) | 177314 | 206.861 | 41.3722 |
| $ 6 1,1-Dichloroethene-d2 | 63 | 6.910 | 6.917 | (0.675) | 345021 | 160.551 | 32.1102 |
| $ 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 131223 | 307.125 | 61.4250 |
| $ 8 Chloroform-d | 84 | 9.386 | 9.386 | (0.916) | 522779 | 189.826 | 37.9651(R) |
| $ 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 332526 | 198.142 | 39.6285 |
| $ 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 1013109 | 208.655 | 41.7310 |
| $ 11 1,2-Dichloropropane-d6 | 67 | 10.617 | 10.611 | (0.851) | 280940 | 200.763 | 40.1526 |
| $ 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 959725 | 208.505 | 41.7009 |
| $ 13 trans-1,3-Dichloropropene-d4 | 79 | 11.592 | 11.593 | (0.930) | 359084 | 194.737 | 38.9473 |
| $ 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 152949 | 385.810 | 77.1621 |
| $ 15 1,4-Dioxane-d8 | 96 | 10.709 | 10.702 | (1.045) | 33791 | 2767.14 | 553.428 |
| $ 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 310001 | 183.256 | 36.6511 |

Sw 9/28/10

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-04R91.d
Report Date: 28-Sep-2010 12:07

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 350827 | 213.459 | 42.6918 |
| 18 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 20 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 22 Chloroethane | 64 | 5.557 | 5.557 | (0.542) | 7467 | 11.8376 | 2.36752(a) |
| 24 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 29 Methylene chloride | 84 | 7.624 | 7.630 | (0.744) | 7640 | 8.45550 | 1.69110(a) |
| 30 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | 8.502 | 8.502 | (0.830) | 42177 | 19.2993 | 3.85987(a) |
| 33 cis-1,2-Dichloroethene | 96 | 9.130 | 9.124 | (0.891) | 49621 | 41.5733 | 8.31465 |
| 37 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 40 Benzene | 78 | Compound Not Detected. | | | | | |
| 41 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 43 Trichloroethene | 95 | 10.501 | 10.495 | (0.842) | 8647 | 7.45579 | 1.49116(a) |
| 45 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 56 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 65 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-04R91.d

Date : 21-SEP-2010 12:00

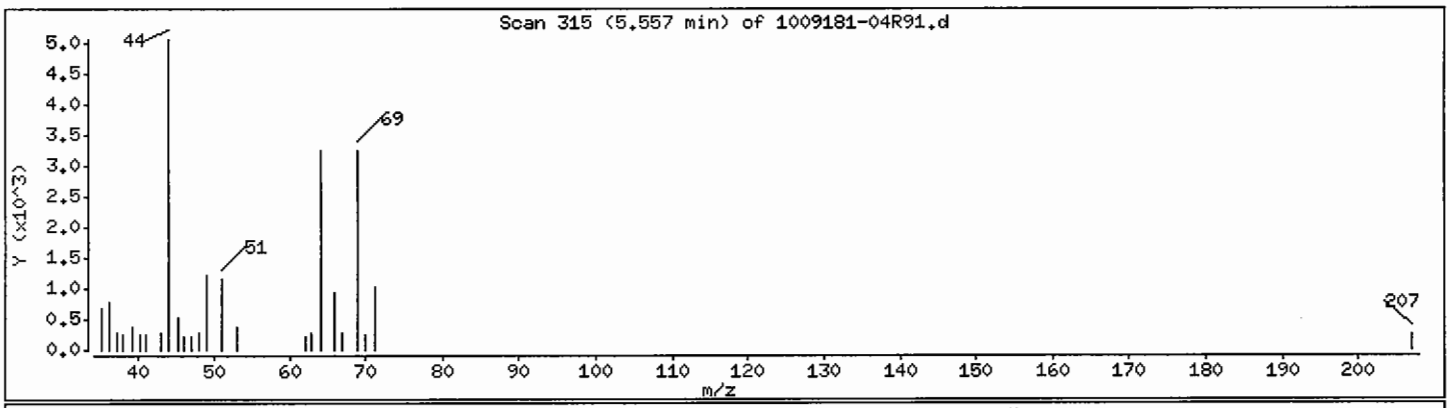
Client ID: S-4 | Instrument: 5975hpms91.i

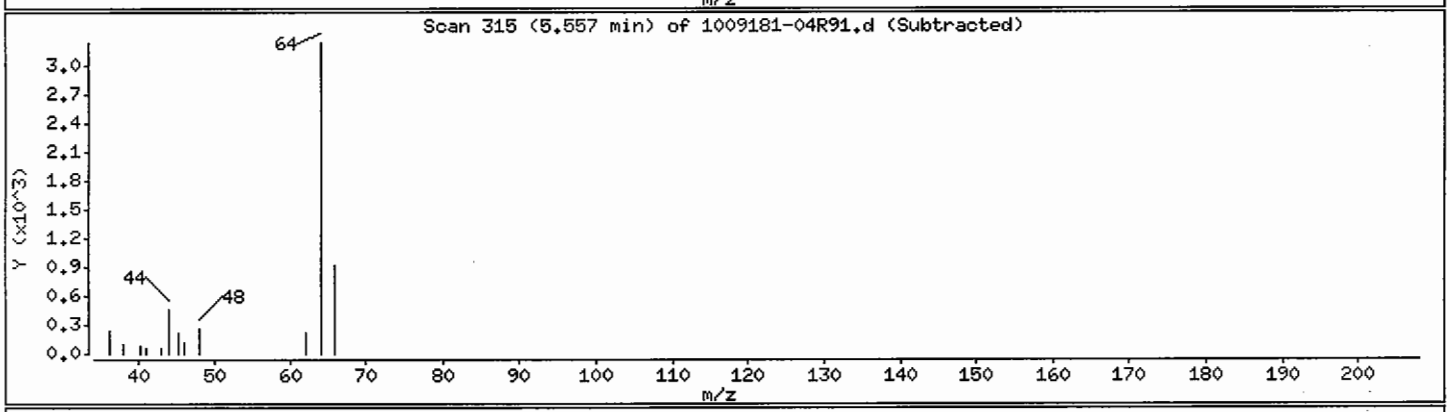
Sample Info: 1009181-04:STM

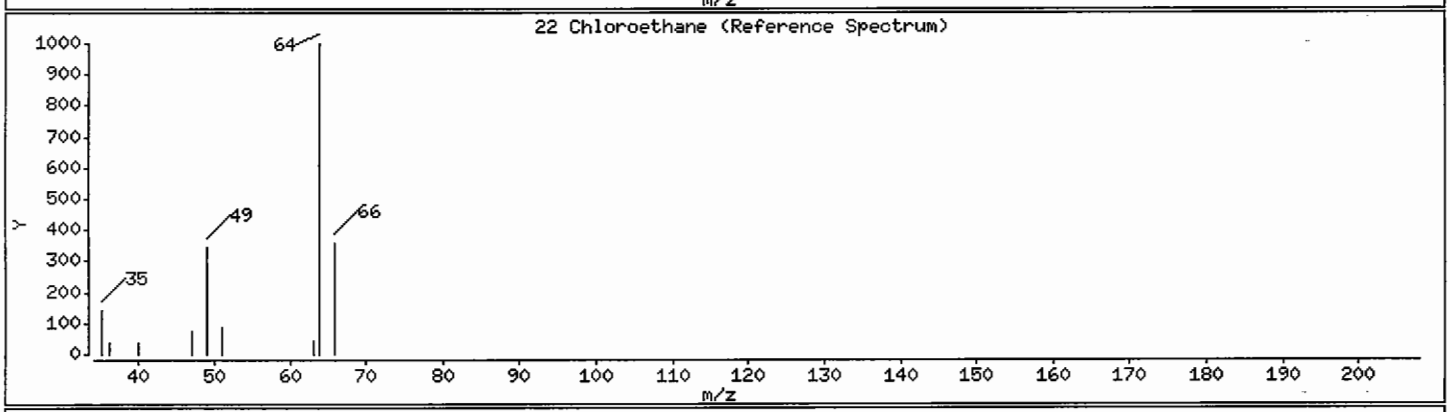
Purge Volume: 5.0 | Operator: STM

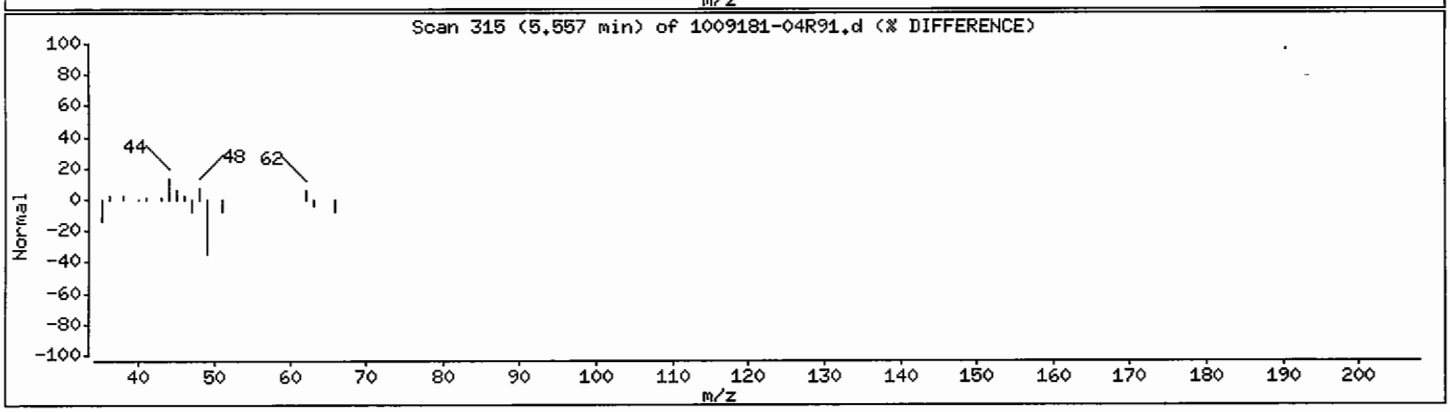
Column phase: SPB-624 | Column diameter: 0.32

22 Chloroethane | Concentration: 2.36752 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-04R91.d

Date : 21-SEP-2010 12:00

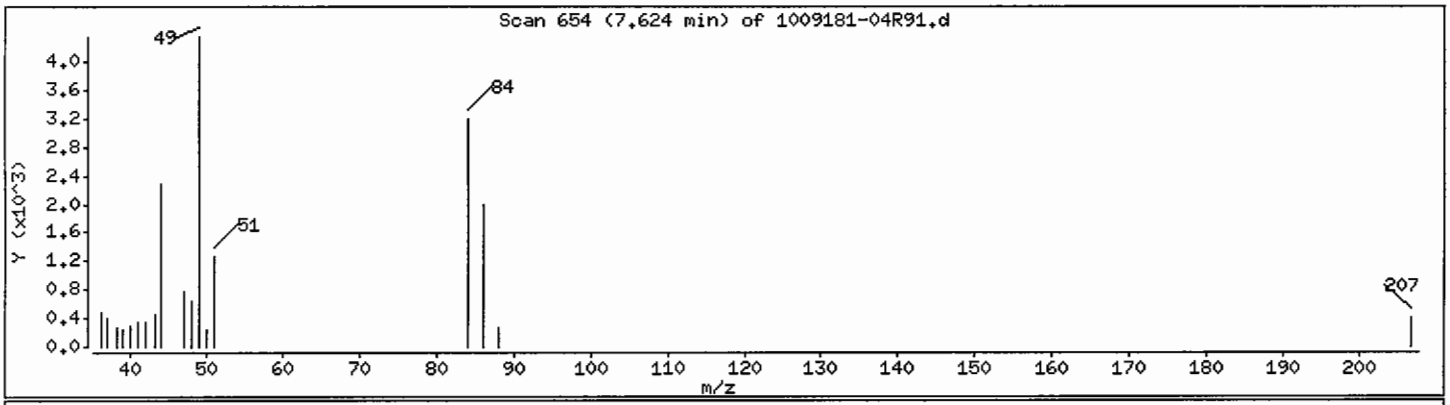
Client ID: S-4 | Instrument: 5975hpms91.i

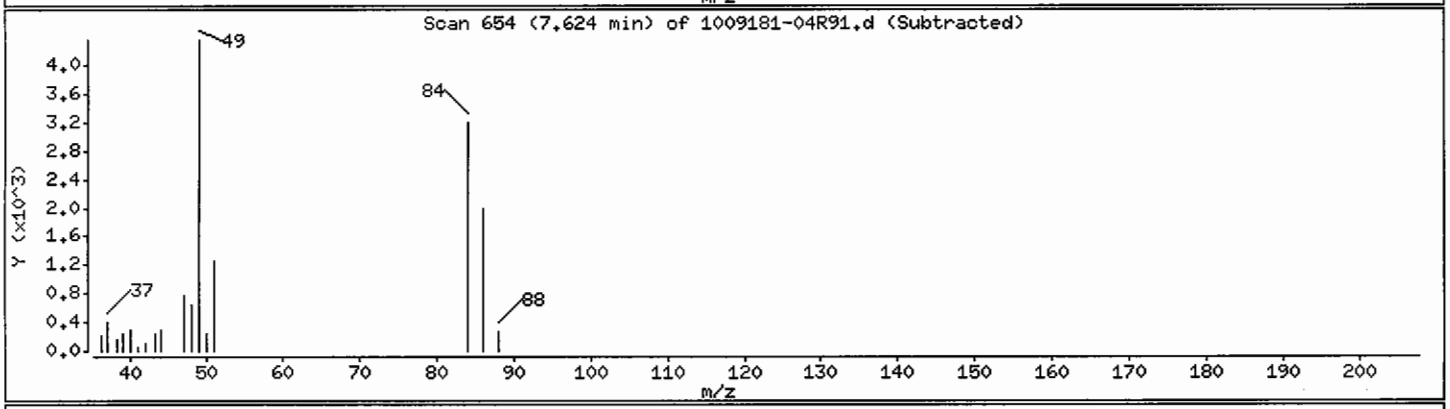
Sample Info: 1009181-04:STM

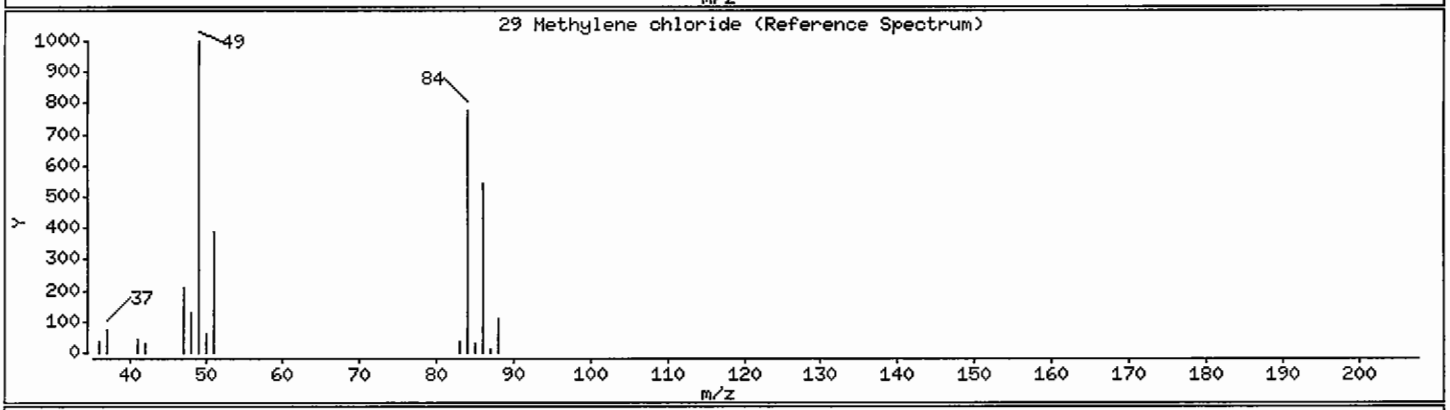
Purge Volume: 5.0 | Operator: STM

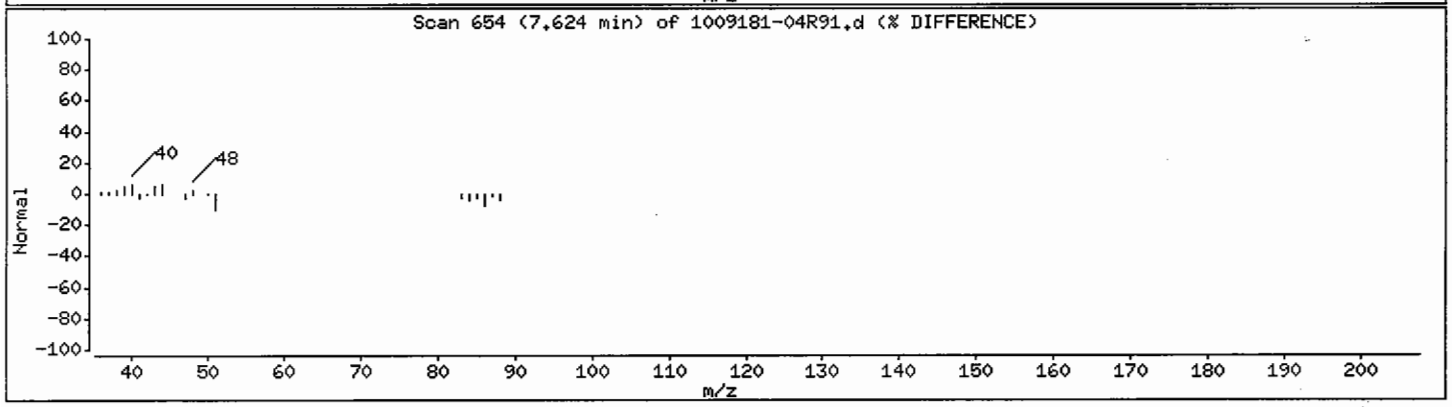
Column phase: SPB-624 | Column diameter: 0.32

29 Methylene chloride | Concentration: 1.69110 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-04R91.d

Date : 21-SEP-2010 12:00

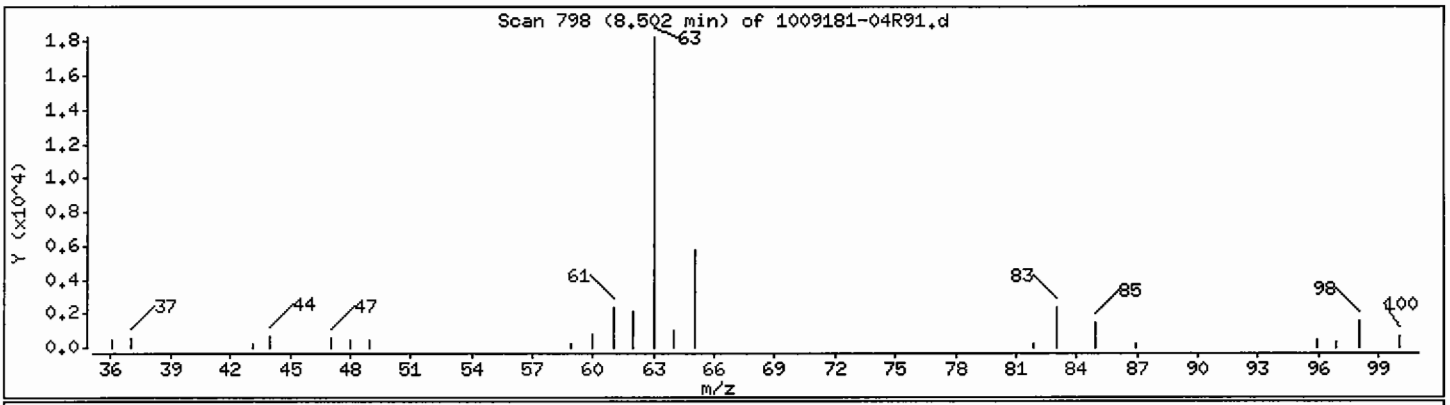
Client ID: S-4 | Instrument: 5975hpms91.i

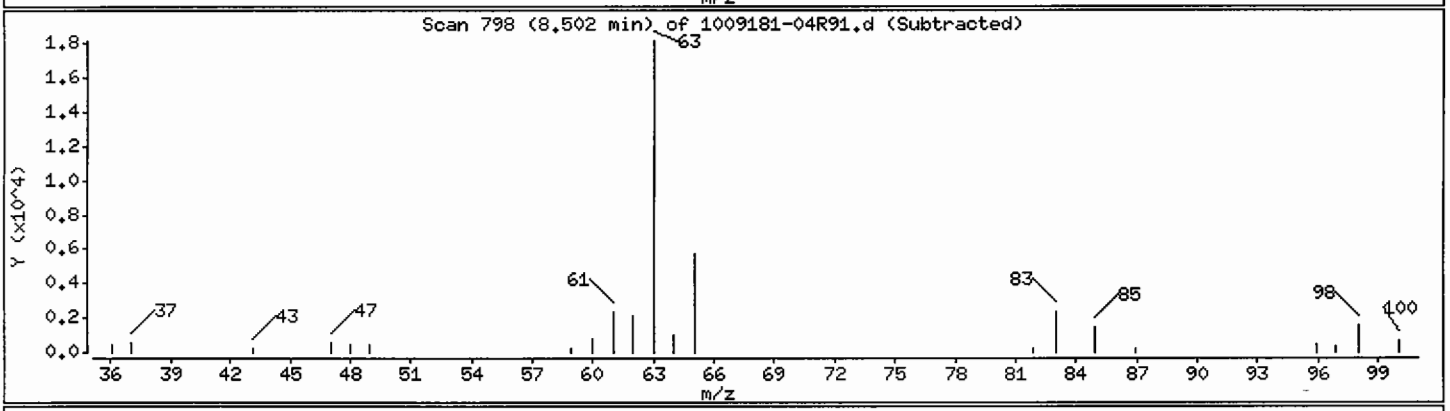
Sample Info: 1009181-04:STM

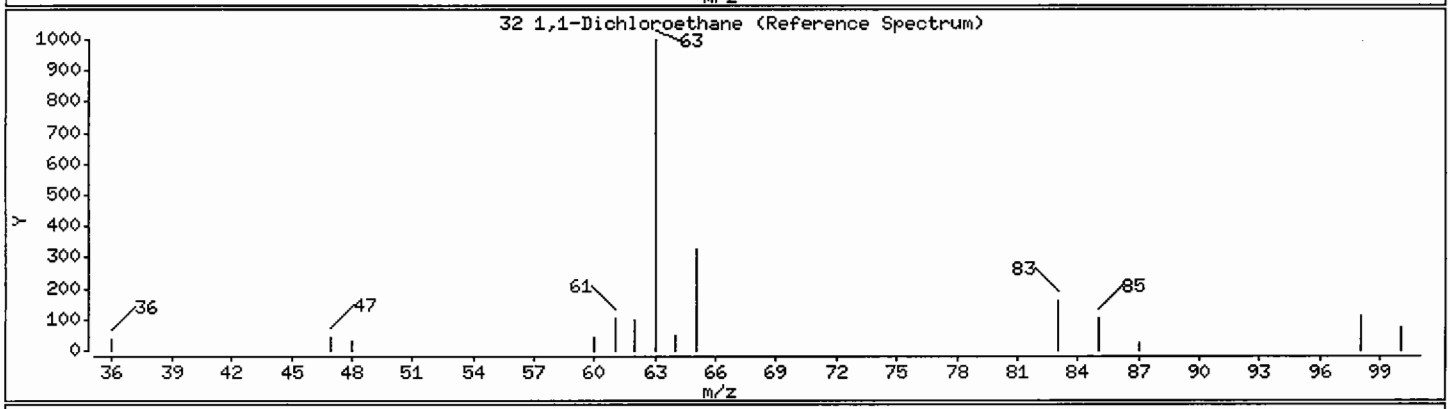
Purge Volume: 5.0 | Operator: STM

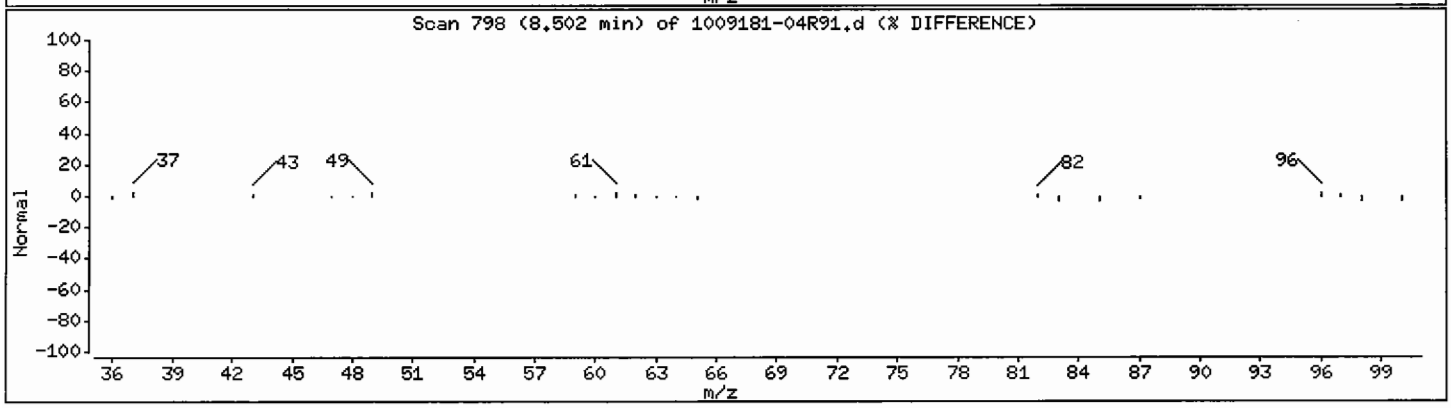
Column phase: SPB-624 | Column diameter: 0.32

32 1,1-Dichloroethane | Concentration: 3.85987 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-04R91.d

Date : 21-SEP-2010 12:00

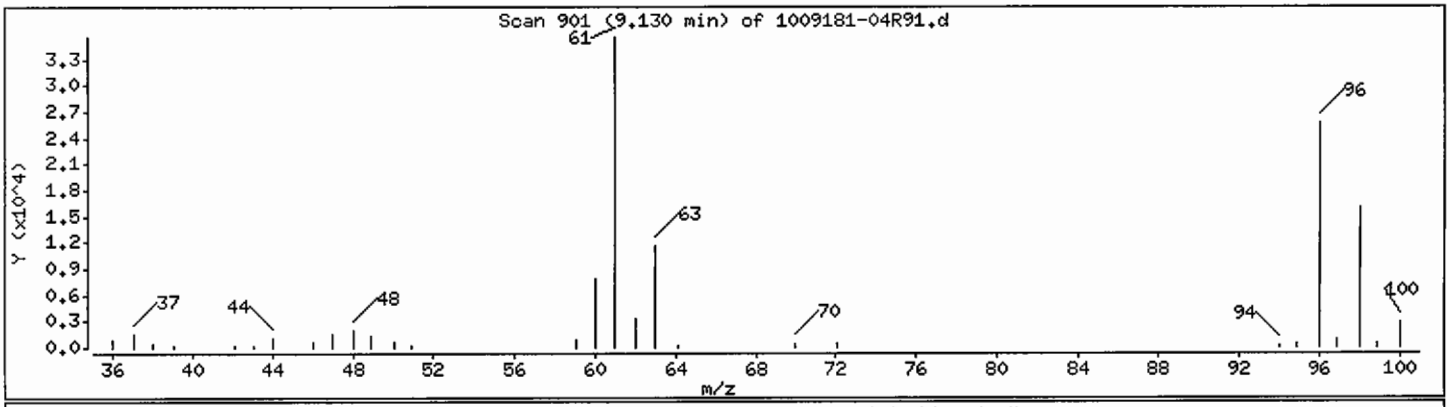
Client ID: S-4 | Instrument: 5975hpms91.i

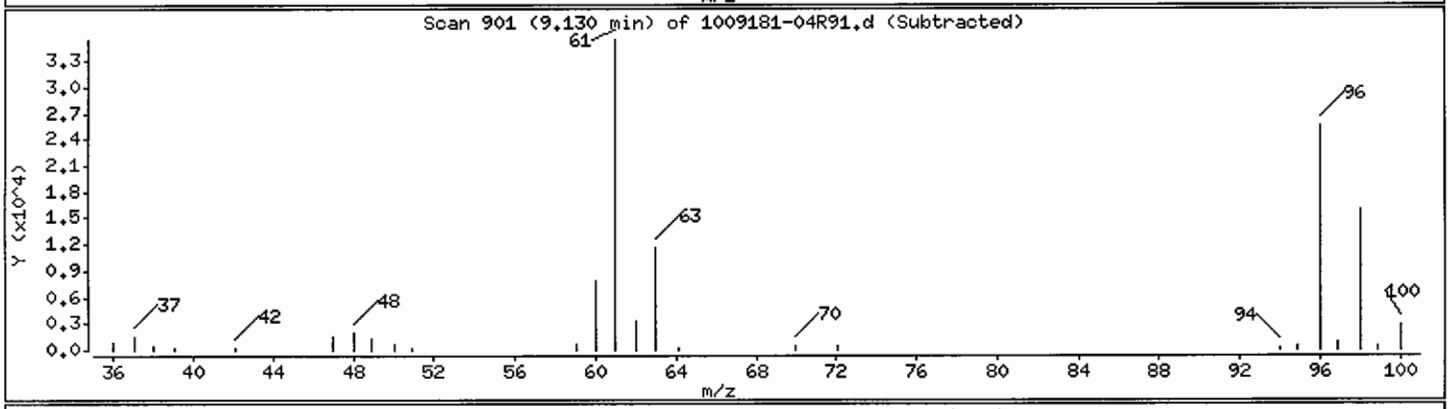
Sample Info: 1009181-04:STM

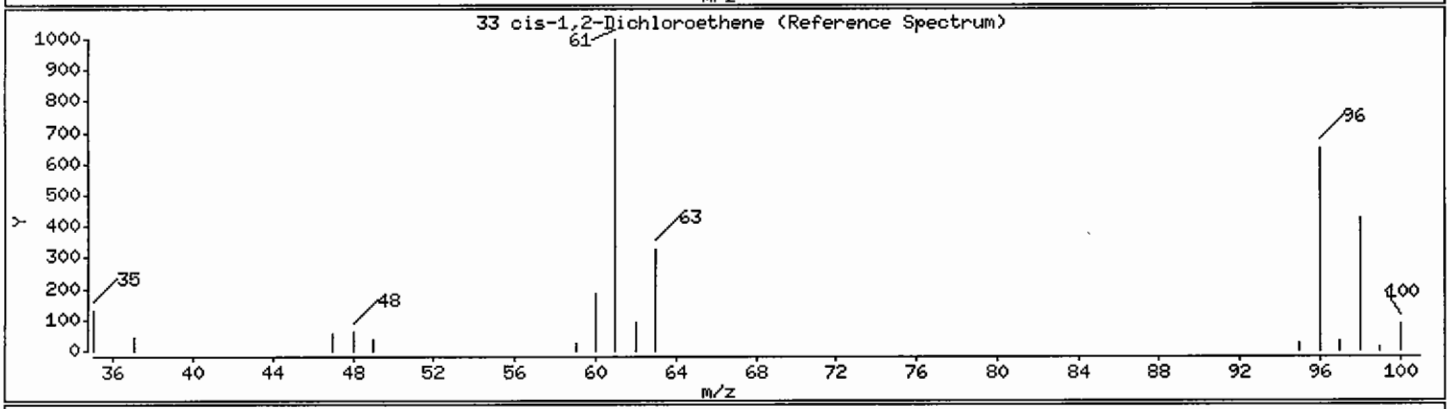
Purge Volume: 5.0 | Operator: STM

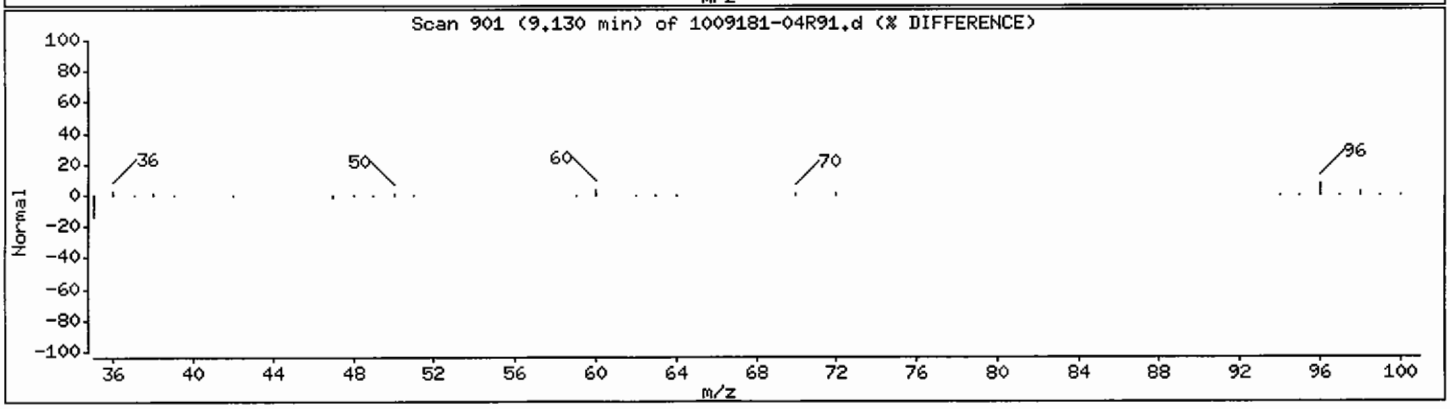
Column phase: SPB-624 | Column diameter: 0.32

33 cis-1,2-Dichloroethene | Concentration: 8.31465 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-04R91.d

Date : 21-SEP-2010 12:00

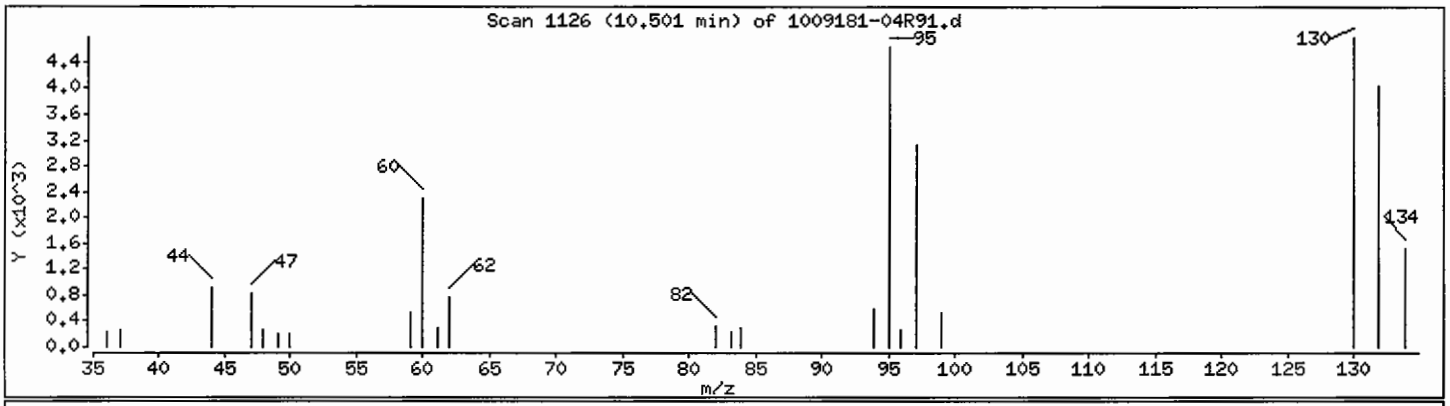
Client ID: S-4 | Instrument: 5975hpms91.i

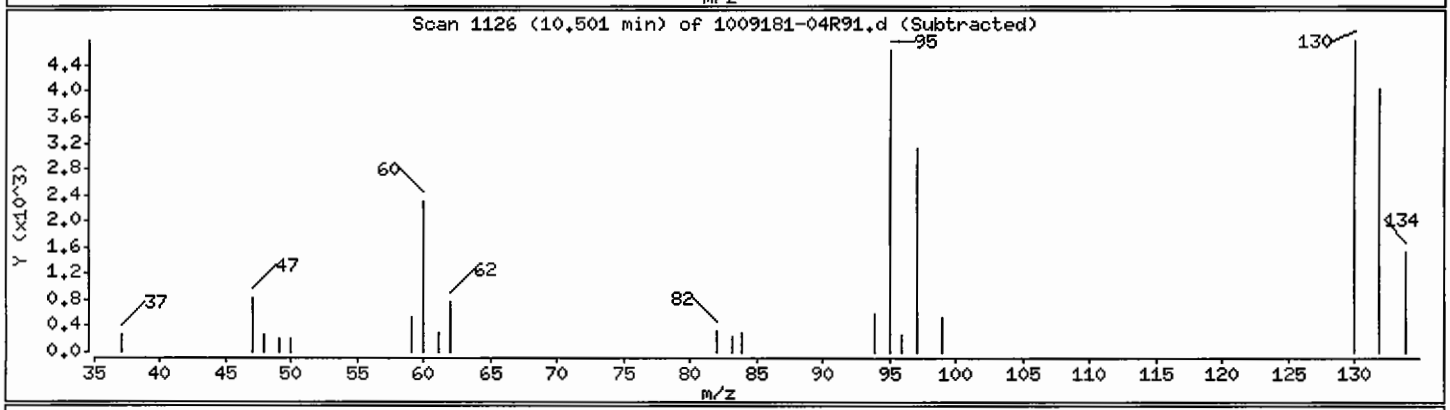
Sample Info: 1009181-04:STM

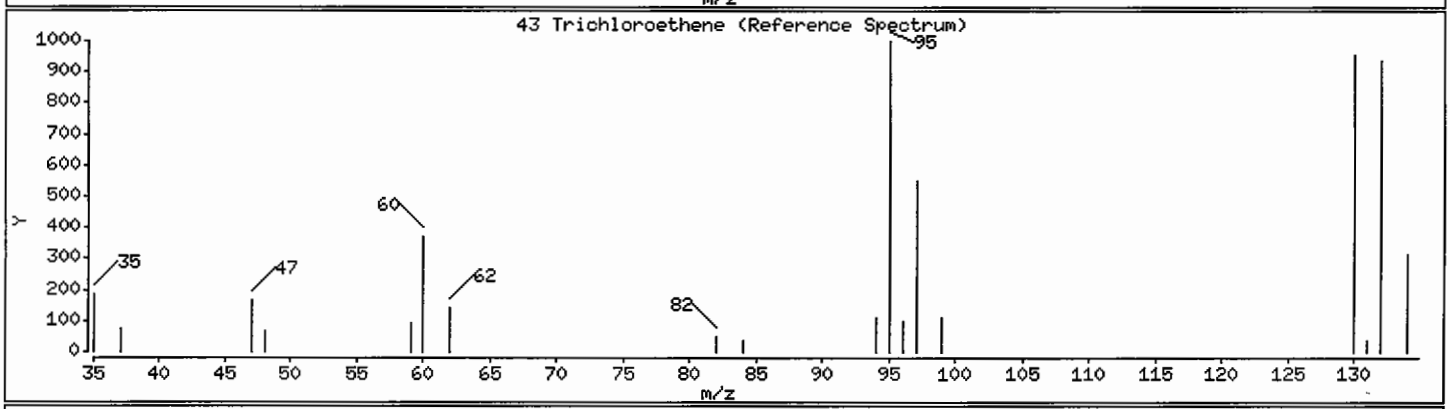
Purge Volume: 5.0 | Operator: STM

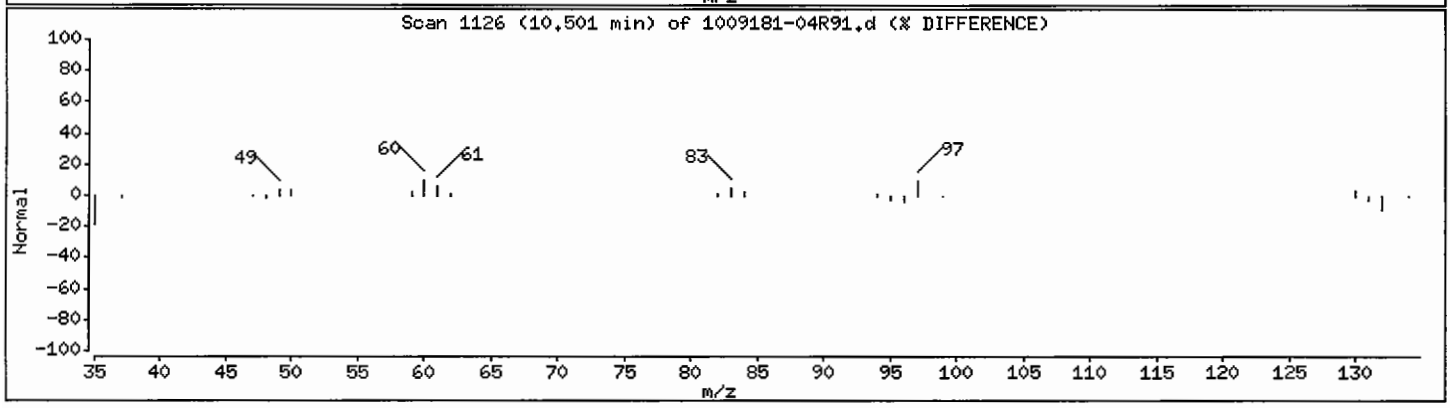
Column phase: SPB-624 | Column diameter: 0.32

43 Trichloroethene | Concentration: 1.49116 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-04R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-04R91.d
Lab Smp Id: 1009181-04 Client Smp ID: S-4
Inj Date : 21-SEP-2010 12:00
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-04:STM
Misc Info : S-4
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-5

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-05

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-05R91.d

Level: (TRACE/LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/L | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 3.3 | J |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 75-09-2 | Methylene chloride | 1.8 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 0.89 | J |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 79-01-6 | Trichloroethene | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
S-5

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-05

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-05R91.d

Level: (TRACE or LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

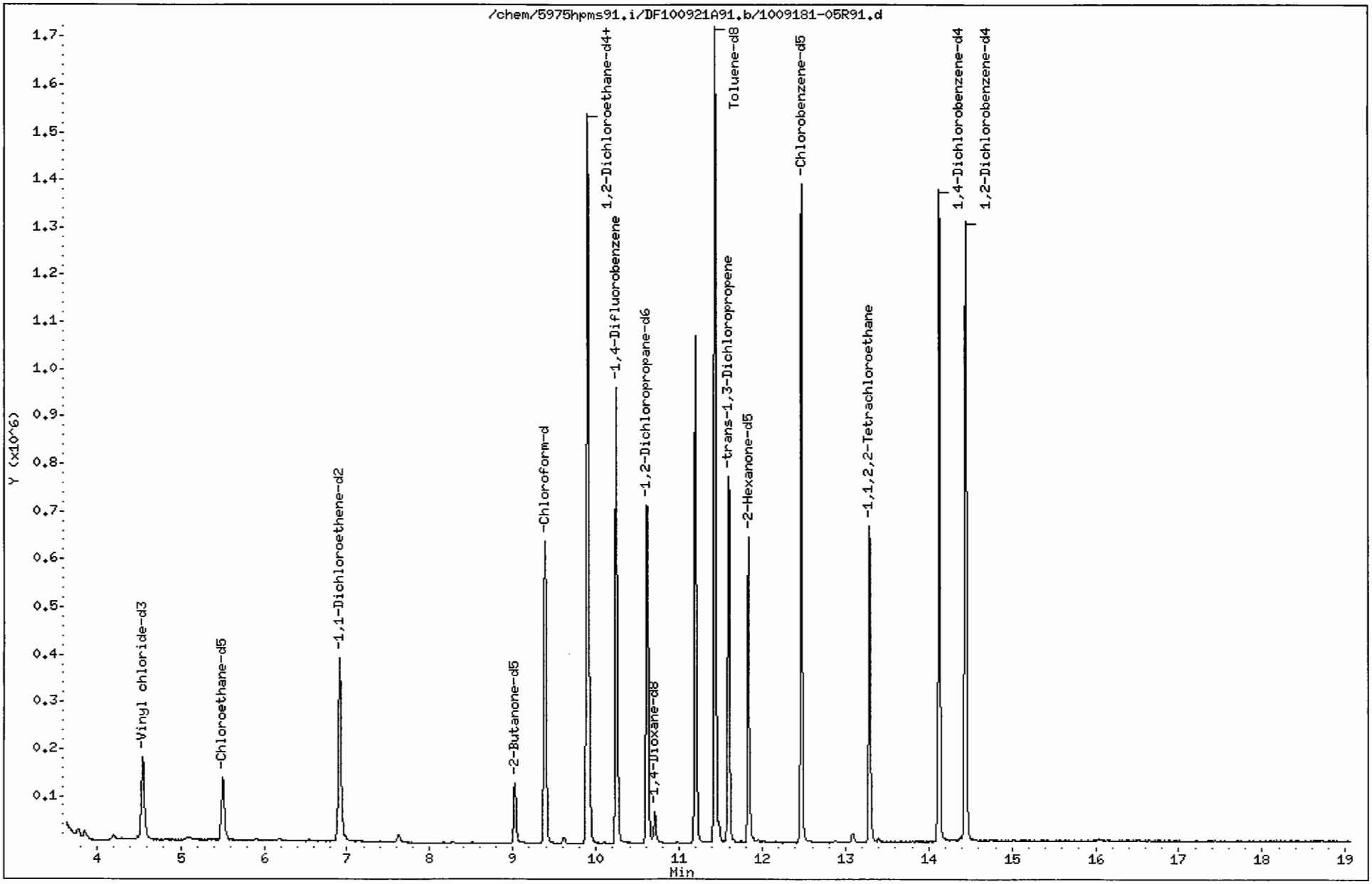
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-05R91.d
Date : 21-SEP-2010 12:27
Client ID: S-5
Sample Info: 1009181-05:STM
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: STM
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-05R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-05R91.d
Lab Smp Id: 1009181-05 Client Smp ID: S-5
Inj Date : 21-SEP-2010 12:27
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-05:STM
Misc Info : S-5
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 633490 | 250.000 | |
| 2 Chlorobenzene-d5 | 117 | 12.471 | 12.470 | (1.000) | 657420 | 250.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 14.123 | 14.123 | (1.000) | 343357 | 250.000 | |
| 4 Vinyl chloride-d3 | 65 | 4.551 | 4.551 | (0.444) | 261846 | 230.042 | 46.0085 |
| 5 Chloroethane-d5 | 69 | 5.502 | 5.502 | (0.537) | 178492 | 234.572 | 46.9144 |
| 6 1,1-Dichloroethene-d2 | 63 | 6.911 | 6.917 | (0.675) | 346568 | 181.667 | 36.3335 |
| 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 147149 | 387.958 | 77.5915 |
| 8 Chloroform-d | 84 | 9.386 | 9.386 | (0.916) | 519044 | 212.306 | 42.4613 |
| 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 333429 | 223.809 | 44.7617 |
| 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 1018810 | 231.653 | 46.3306 |
| 11 1,2-Dichloropropane-d6 | 67 | 10.611 | 10.611 | (0.851) | 280973 | 221.670 | 44.3340 |
| 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 963362 | 231.063 | 46.2126 |
| 13 trans-1,3-Dichloropropene-d4 | 79 | 11.593 | 11.593 | (0.930) | 358283 | 214.511 | 42.9023 |
| 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 165655 | 461.322 | 92.2644 |
| 15 1,4-Dioxane-d8 | 96 | 10.709 | 10.702 | (1.045) | 38075 | 3512.30 | 702.460 |
| 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 319203 | 208.321 | 41.6642 |

Sm 9-28-10

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-05R91.d
Report Date: 28-Sep-2010 12:07

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 353459 | 233.143 | 46.6286 |
| 18 Dichlorodifluoromethane | 85 | 3.856 | 3.856 | (0.376) | 18985 | 16.2682 | 3.25364(a) |
| 20 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 22 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 24 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 29 Methylene chloride | 84 | 7.624 | 7.630 | (0.744) | 7019 | 8.75070 | 1.75014(a) |
| 30 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 33 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 1,1,1-Trichloroethane | 97 | 9.617 | 9.617 | (0.771) | 8429 | 4.43104 | 0.886209(a) |
| 40 Benzene | 78 | Compound Not Detected. | | | | | |
| 41 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 43 Trichloroethene | 95 | Compound Not Detected. | | | | | |
| 45 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 56 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 65 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-05R91.d

Date : 21-SEP-2010 12:27

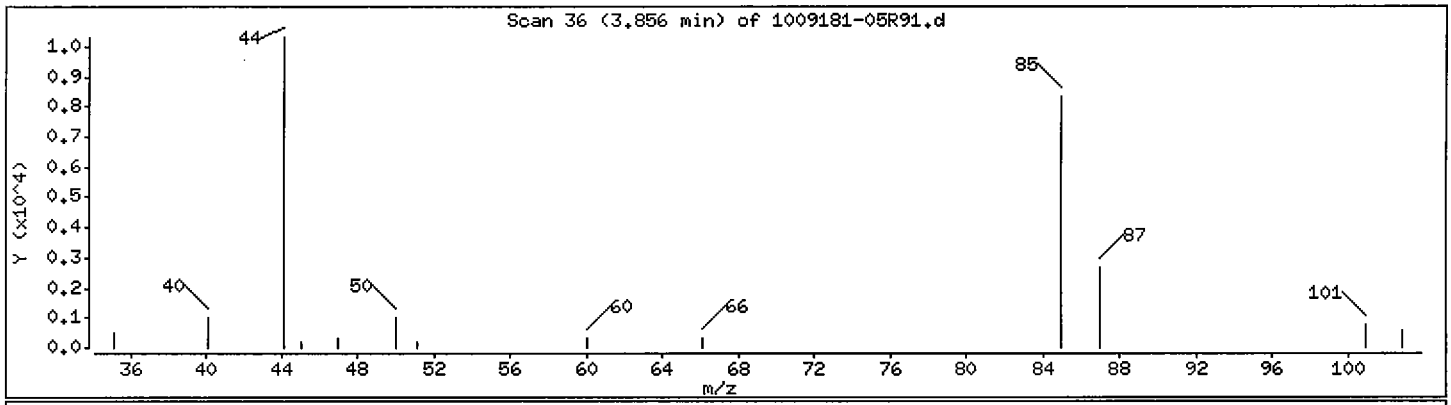
Client ID: S-5 | Instrument: 5975hpms91.i

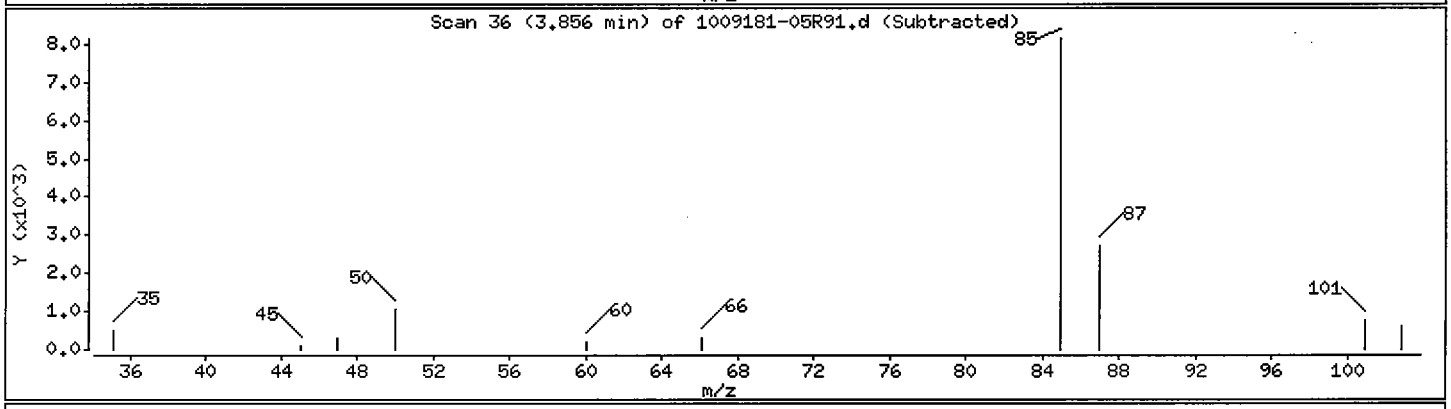
Sample Info: 1009181-05:STM

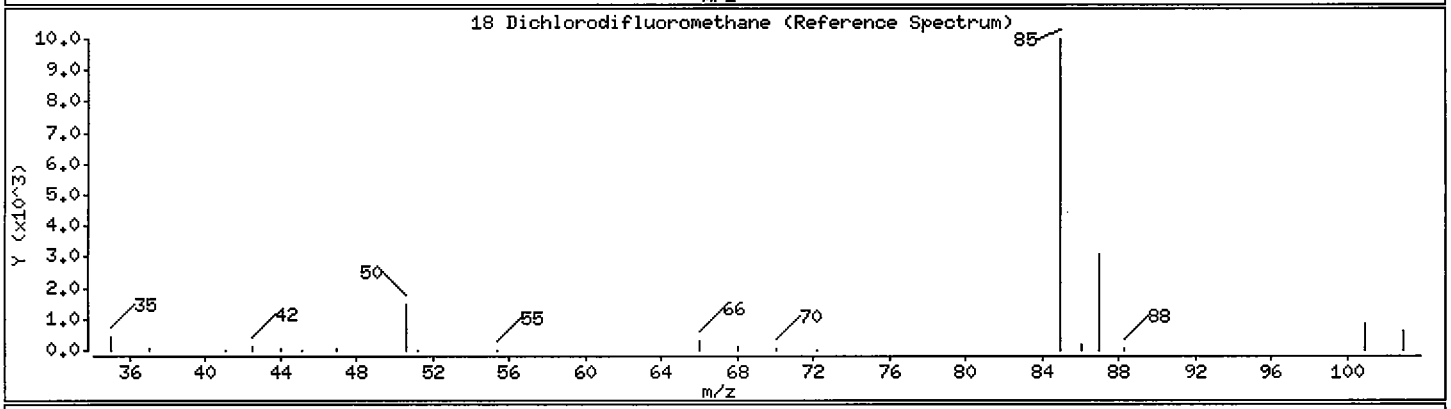
Purge Volume: 5.0 | Operator: STM

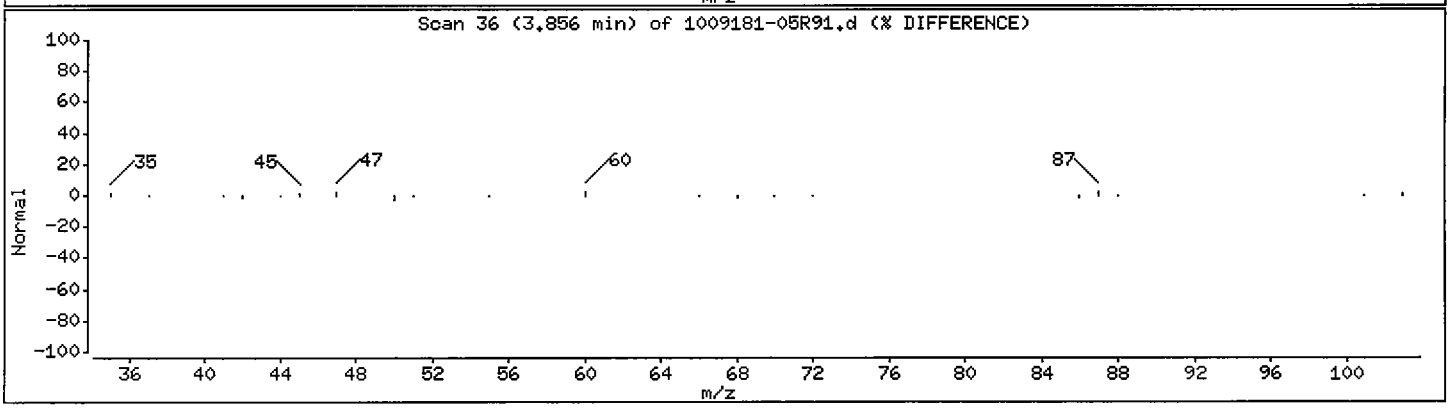
Column phase: SPB-624 | Column diameter: 0.32

18 Dichlorodifluoromethane | Concentration: 3.25364 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-05R91.d

Date : 21-SEP-2010 12:27

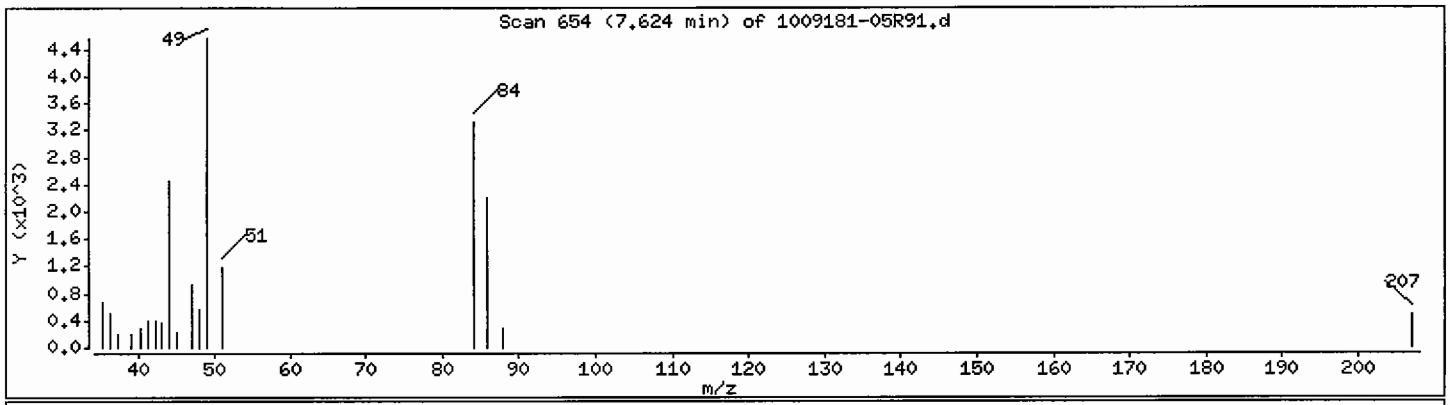
Client ID: S-5 | Instrument: 5975hpms91.i

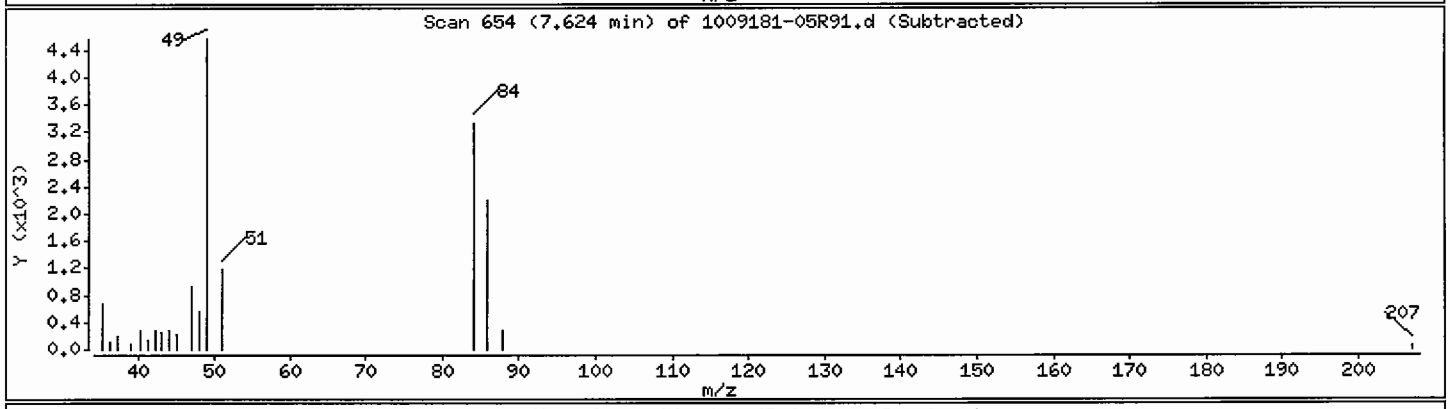
Sample Info: 1009181-05:STM

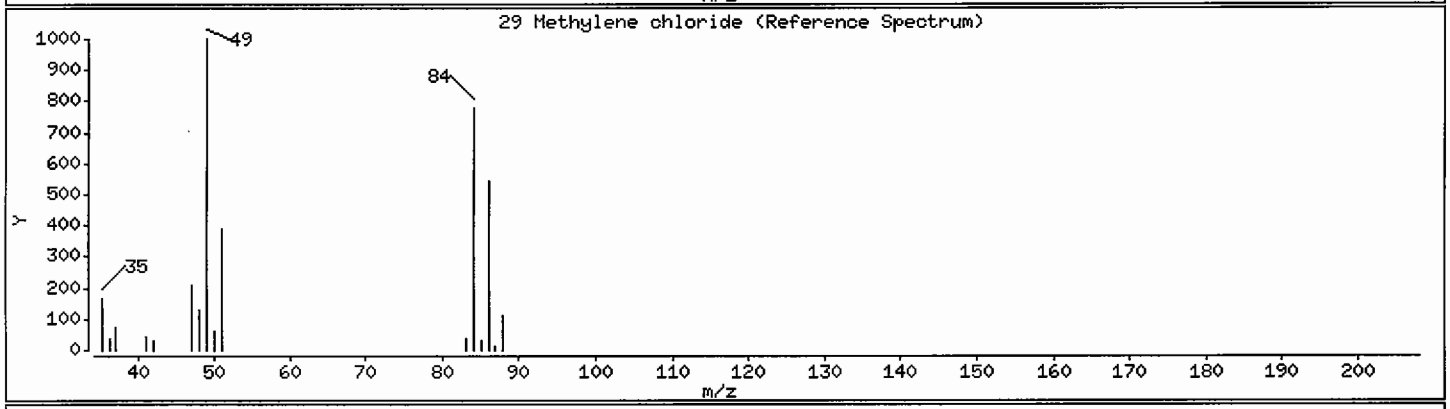
Purge Volume: 5.0 | Operator: STM

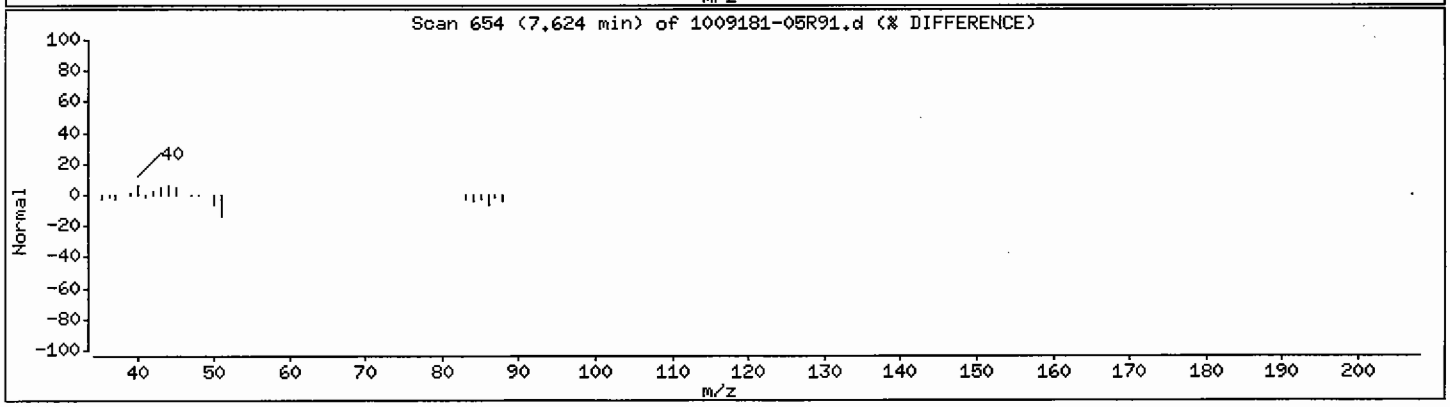
Column phase: SPB-624 | Column diameter: 0.32

29 Methylene chloride | Concentration: 1.75014 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-05R91.d

Date : 21-SEP-2010 12:27

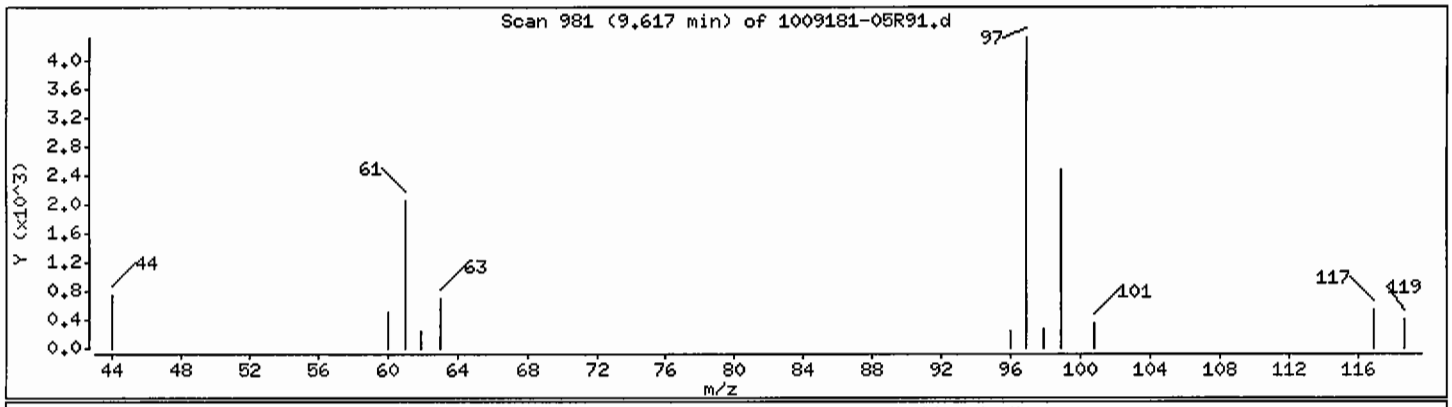
Client ID: S-5 | Instrument: 5975hpms91.i

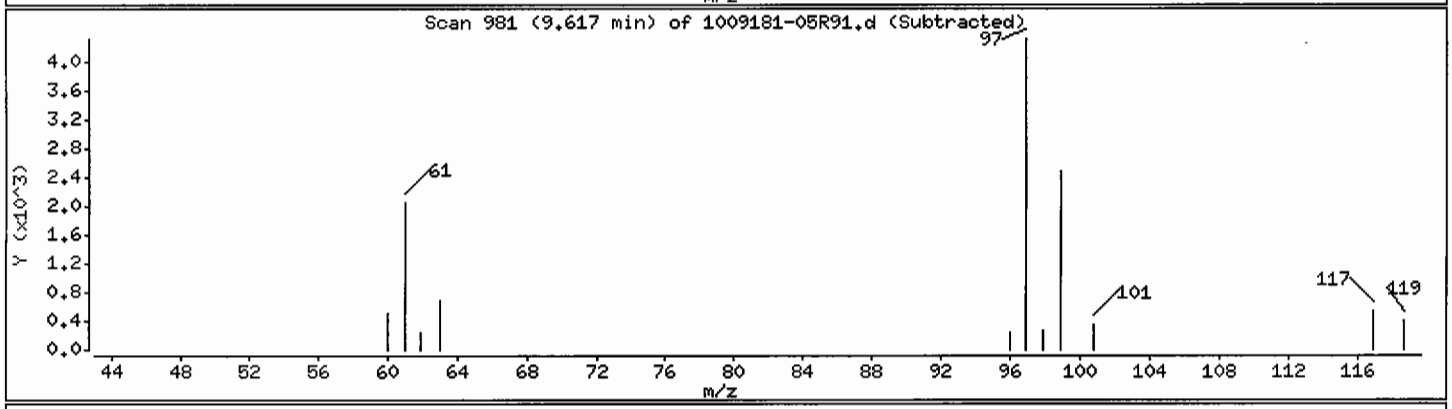
Sample Info: 1009181-05:STM

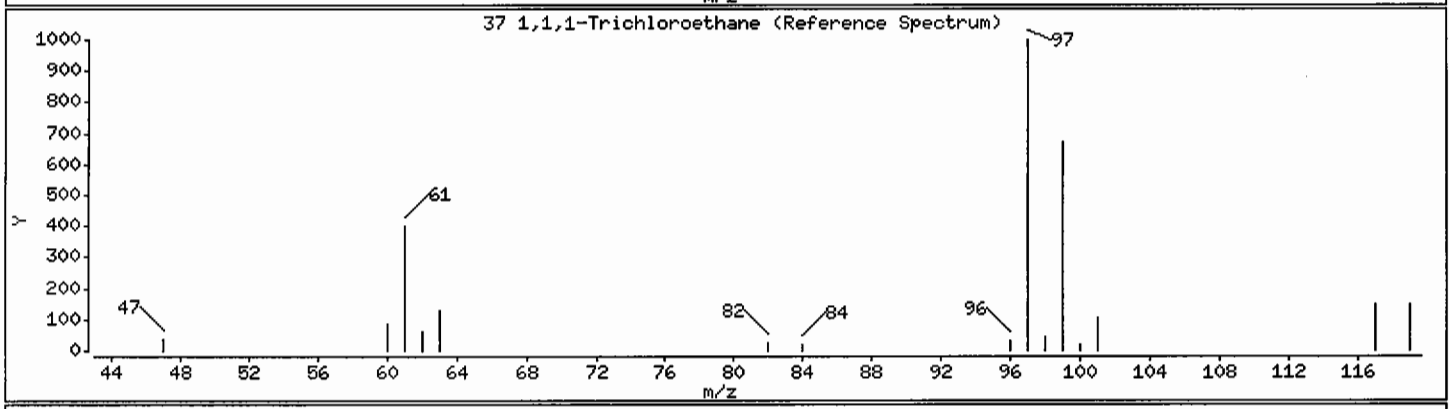
Purge Volume: 5.0 | Operator: STM

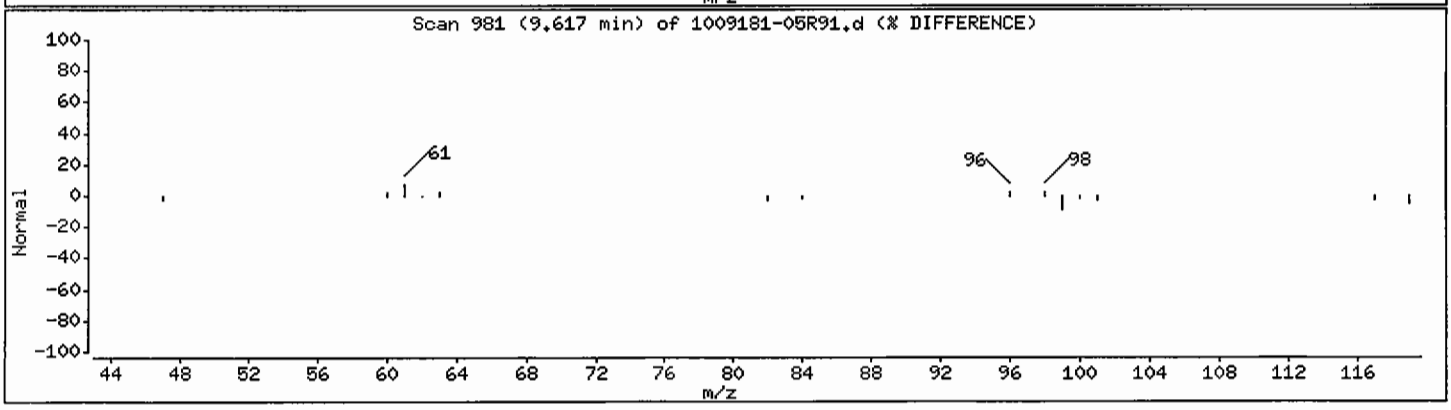
Column phase: SPB-624 | Column diameter: 0.32

37 1,1,1-Trichloroethane | Concentration: 0.886209 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-05R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-05R91.d
Lab Smp Id: 1009181-05 Client Smp ID: S-5
Inj Date : 21-SEP-2010 12:27
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-05:STM
Misc Info : S-5
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-6

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-06

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-06R91.d

Level: (TRACE/LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/L | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 75-09-2 | Methylene chloride | 2.1 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 79-01-6 | Trichloroethene | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
S-6

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-06

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-06R91.d

Level: (TRACE or LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

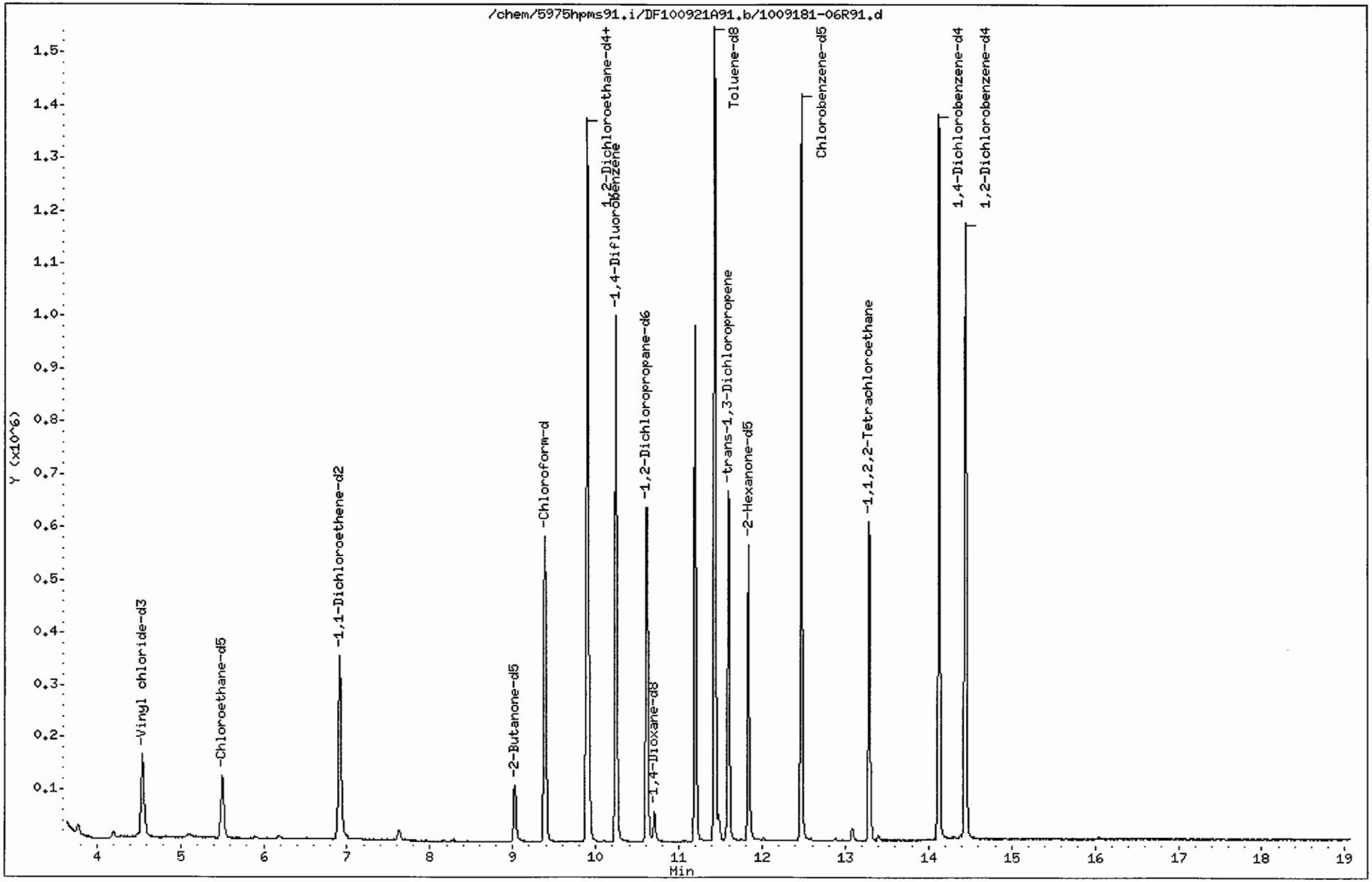
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-06R91.d
Date : 21-SEP-2010 12:54
Client ID: S-6
Sample Info: 1009181-06:STM
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: STM
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-06R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-06R91.d
Lab Smp Id: 1009181-06 Client Smp ID: S-6
Inj Date : 21-SEP-2010 12:54
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-06:STM
Misc Info : S-6
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 644812 | 250.000 | |
| * 2 Chlorobenzene-d5 | 117 | 12.470 | 12.470 | (1.000) | 667835 | 250.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 14.129 | 14.123 | (1.000) | 353266 | 250.000 | |
| $ 4 Vinyl chloride-d3 | 65 | 4.551 | 4.551 | (0.444) | 238943 | 206.235 | 41.2470 |
| $ 5 Chloroethane-d5 | 69 | 5.502 | 5.502 | (0.537) | 161419 | 208.410 | 41.6820 |
| $ 6 1,1-Dichloroethene-d2 | 63 | 6.910 | 6.917 | (0.675) | 313697 | 161.550 | 32.3099 |
| $ 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 127151 | 329.347 | 65.8694 |
| $ 8 Chloroform-d | 84 | 9.392 | 9.386 | (0.917) | 465590 | 187.098 | 37.4196(R) |
| $ 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 296711 | 195.665 | 39.1331 |
| $ 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 908799 | 203.417 | 40.6834 |
| $ 11 1,2-Dichloropropane-d6 | 67 | 10.611 | 10.611 | (0.851) | 252435 | 196.050 | 39.2099(R) |
| $ 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 862790 | 203.714 | 40.7427 |
| $ 13 trans-1,3-Dichloropropene-d4 | 79 | 11.592 | 11.593 | (0.930) | 315058 | 185.690 | 37.1380 |
| $ 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 145363 | 398.499 | 79.6998 |
| $ 15 1,4-Dioxane-d8 | 96 | 10.708 | 10.702 | (1.045) | 33847 | 3067.46 | 613.491 |
| $ 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 286484 | 184.052 | 36.8104 |

SM 9-28-10

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-06R91.d
Report Date: 28-Sep-2010 12:07

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.022) | 320889 | 205.723 | 41.1445 |
| 18 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 20 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 22 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 24 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 29 Methylene chloride | 84 | 7.630 | 7.630 | (0.745) | 8512 | 10.4257 | 2.08514(a) |
| 30 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 33 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 40 Benzene | 78 | Compound Not Detected. | | | | | |
| 41 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 43 Trichloroethene | 95 | Compound Not Detected. | | | | | |
| 45 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 56 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 65 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-06R91.d

Date : 21-SEP-2010 12:54

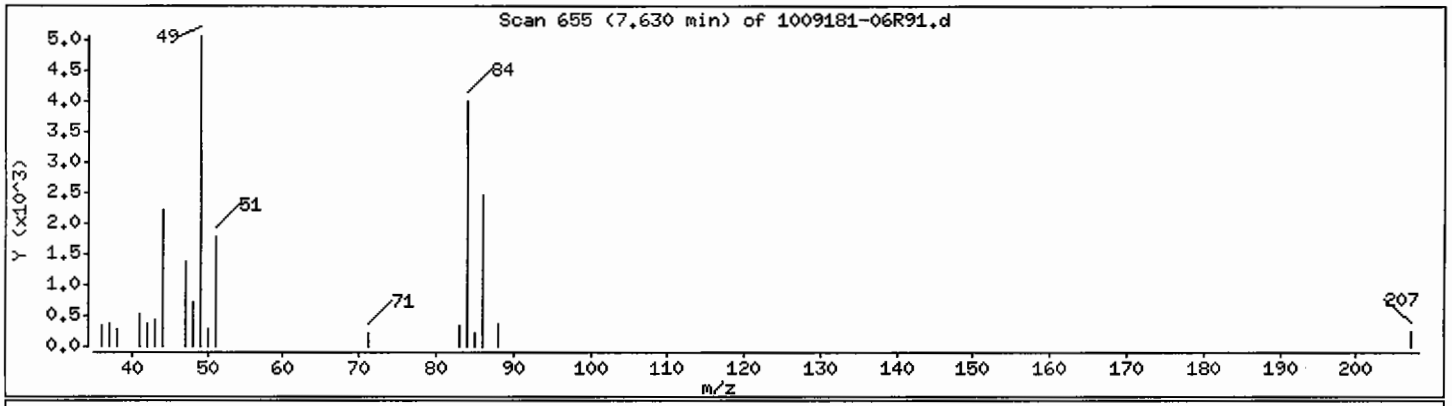
Client ID: S-6 | Instrument: 5975hpms91.i

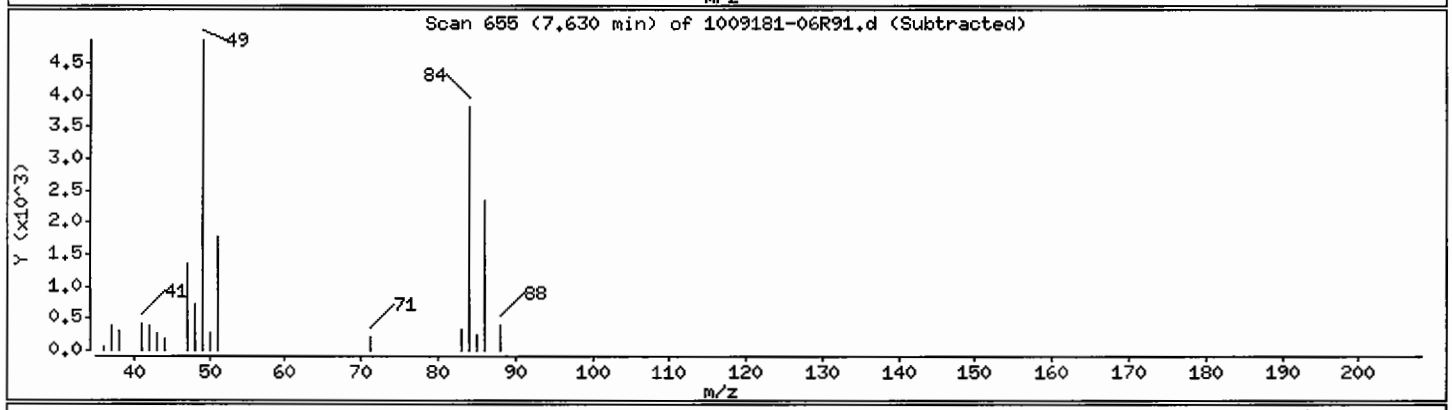
Sample Info: 1009181-06:STM

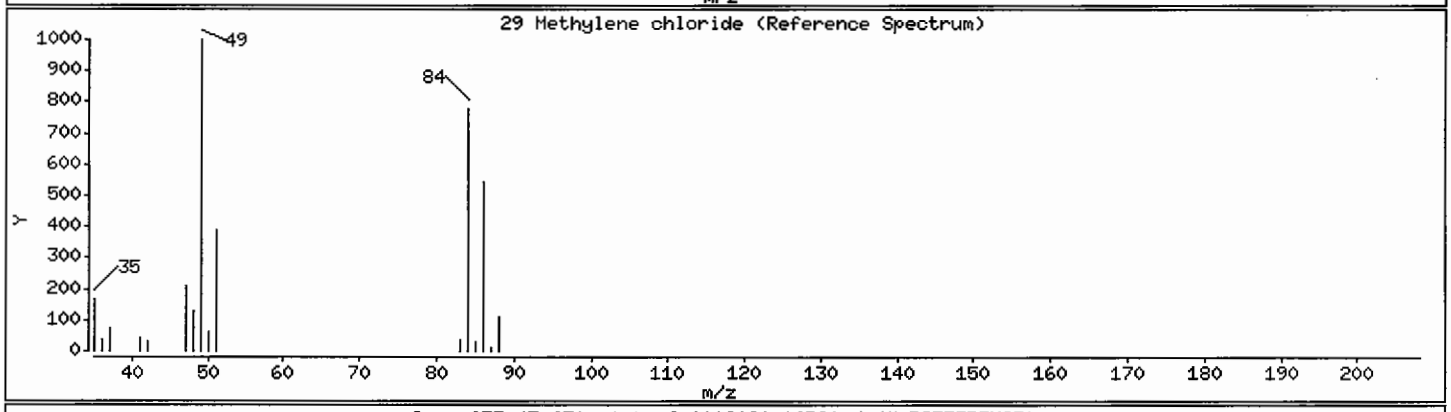
Purge Volume: 5.0 | Operator: STM

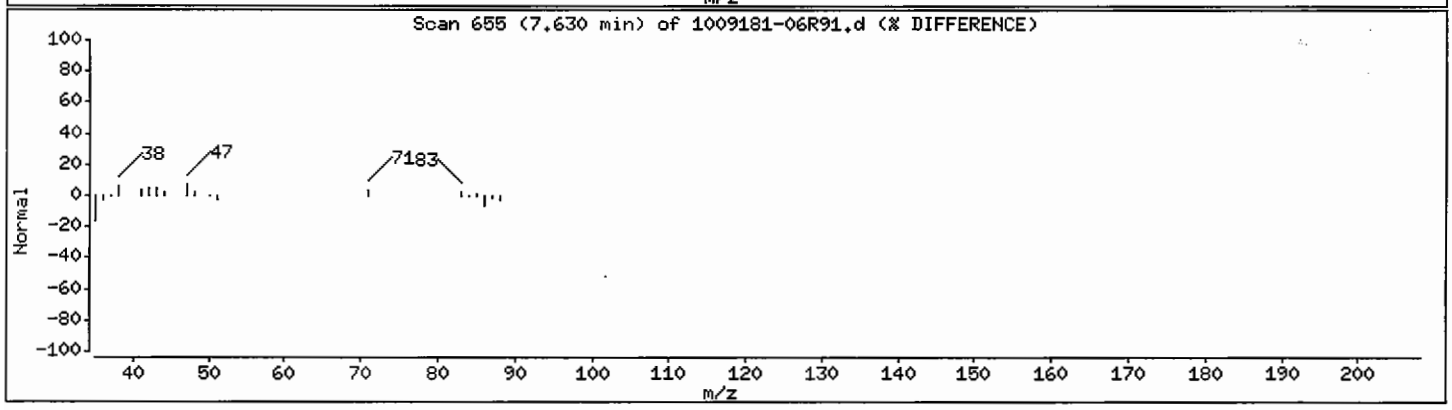
Column phase: SPB-624 | Column diameter: 0.32

29 Methylene chloride | Concentration: 2.08514 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-06R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-06R91.d
Lab Smp Id: 1009181-06 Client Smp ID: S-6
Inj Date : 21-SEP-2010 12:54
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-06:STM
Misc Info : S-6
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-07

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-0791.d

Level: (TRACE/LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/L | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 75-09-2 | Methylene chloride | 1.5 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 79-01-6 | Trichloroethene | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLANK

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-07

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-0791.d

Level: (TRACE or LOW/MED) LOW Date Received: 09/16/2010

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

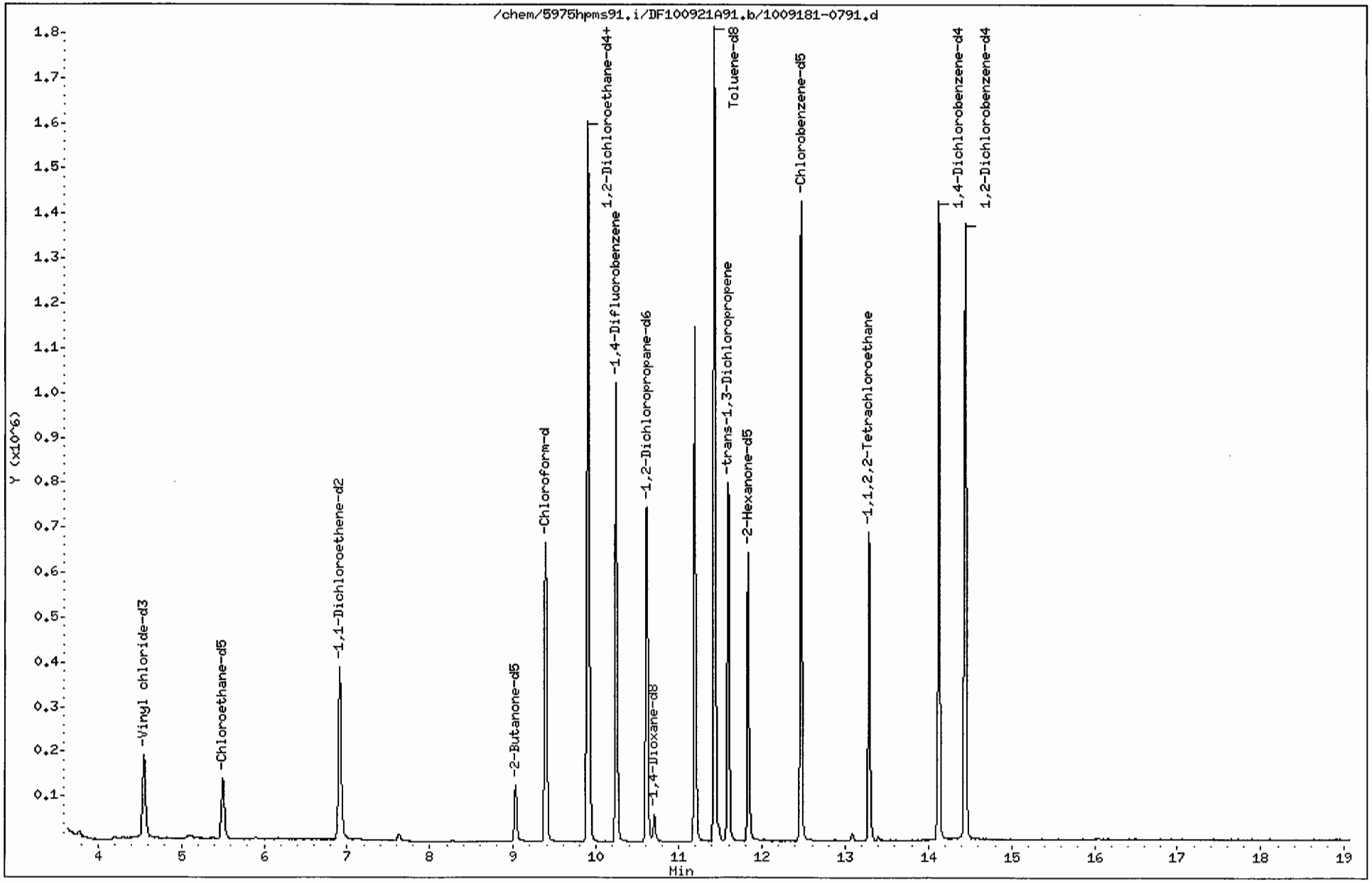
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-0791.d
Date : 21-SEP-2010 13:21
Client ID: TRIP BLANK
Sample Info: 1009181-07:STM
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: STM
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-0791.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-0791.d
Lab Smp Id: 1009181-07 Client Smp ID: TRIP BLANK
Inj Date : 21-SEP-2010 13:21
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-07:STM
Misc Info : TRIP BLANK
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 664310 | 250.000 | |
| 2 Chlorobenzene-d5 | 117 | 12.470 | 12.470 | (1.000) | 681997 | 250.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 14.123 | 14.123 | (1.000) | 356235 | 250.000 | |
| 4 Vinyl chloride-d3 | 65 | 4.551 | 4.551 | (0.444) | 273094 | 228.793 | 45.7586 |
| 5 Chloroethane-d5 | 69 | 5.502 | 5.502 | (0.537) | 185611 | 232.611 | 46.5222 |
| 6 1,1-Dichloroethene-d2 | 63 | 6.911 | 6.917 | (0.675) | 359711 | 179.809 | 35.9618 |
| 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 145110 | 364.832 | 72.9665 |
| 8 Chloroform-d | 84 | 9.392 | 9.386 | (0.917) | 536279 | 209.179 | 41.8358 |
| 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 342472 | 219.214 | 43.8427 |
| 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 1063138 | 233.021 | 46.6042 |
| 11 1,2-Dichloropropane-d6 | 67 | 10.617 | 10.611 | (0.851) | 291800 | 221.916 | 44.3832 |
| 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 1013403 | 234.306 | 46.8612 |
| 13 trans-1,3-Dichloropropene-d4 | 79 | 11.593 | 11.593 | (0.930) | 377313 | 217.764 | 43.5528 |
| 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 165543 | 444.397 | 88.8794 |
| 15 1,4-Dioxane-d8 | 96 | 10.709 | 10.702 | (1.045) | 36070 | 3172.98 | 634.595 |
| 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 326133 | 205.174 | 41.0348 |

Sw 9-28-10

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-0791.d
Report Date: 28-Sep-2010 12:07

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 373472 | 237.438 | 47.4876 |
| 18 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 20 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 22 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 24 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 29 Methylene chloride | 84 | 7.630 | 7.630 | (0.745) | .6497 | 7.72413 | 1.54483(a) |
| 30 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 33 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 40 Benzene | 78 | Compound Not Detected. | | | | | |
| 41 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 43 Trichloroethene | 95 | Compound Not Detected. | | | | | |
| 45 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 56 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 65 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-0791.d

Date : 21-SEP-2010 13:21

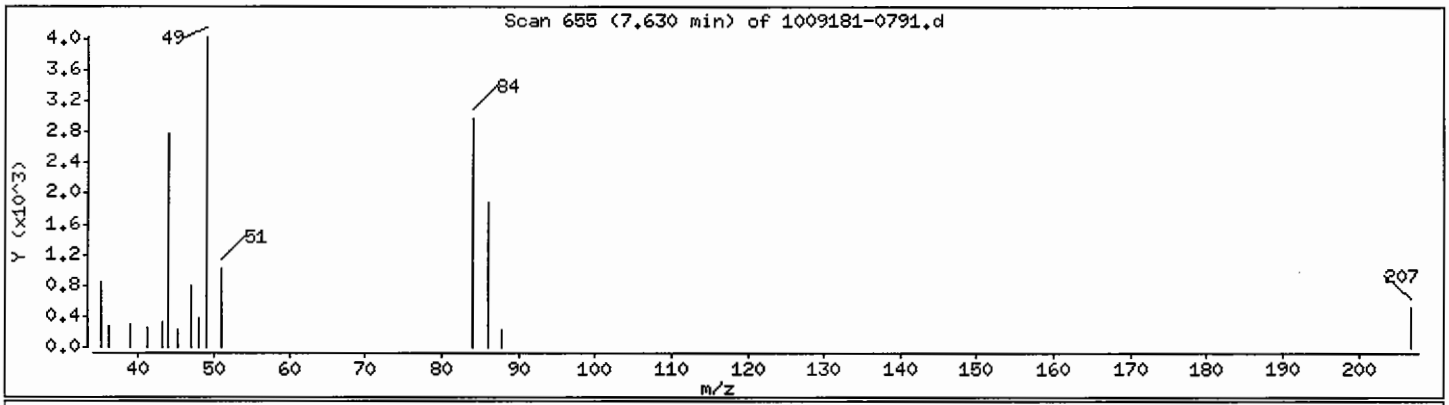
Client ID: TRIP BLANK | Instrument: 5975hpms91.i

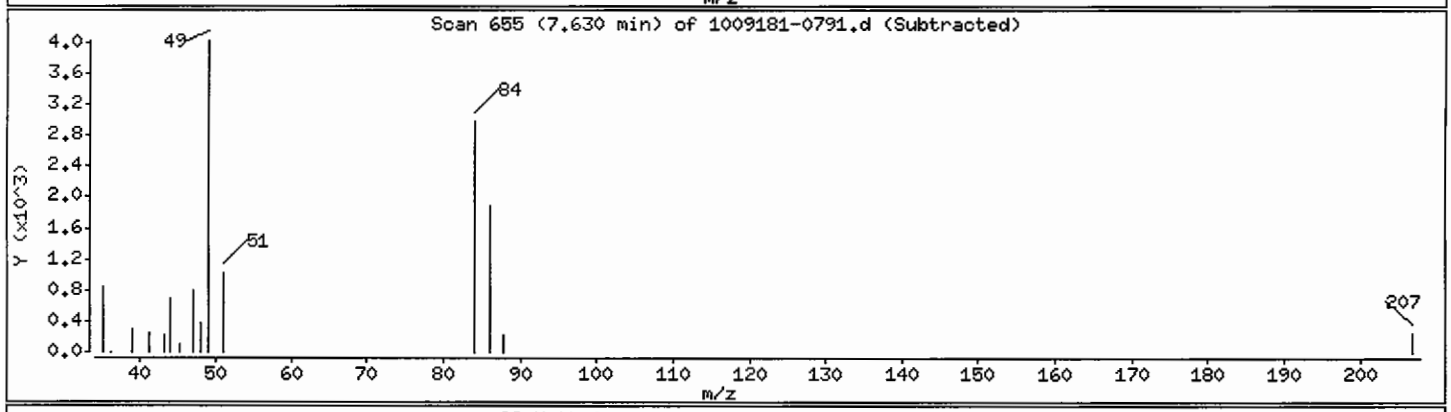
Sample Info: 1009181-07:STM

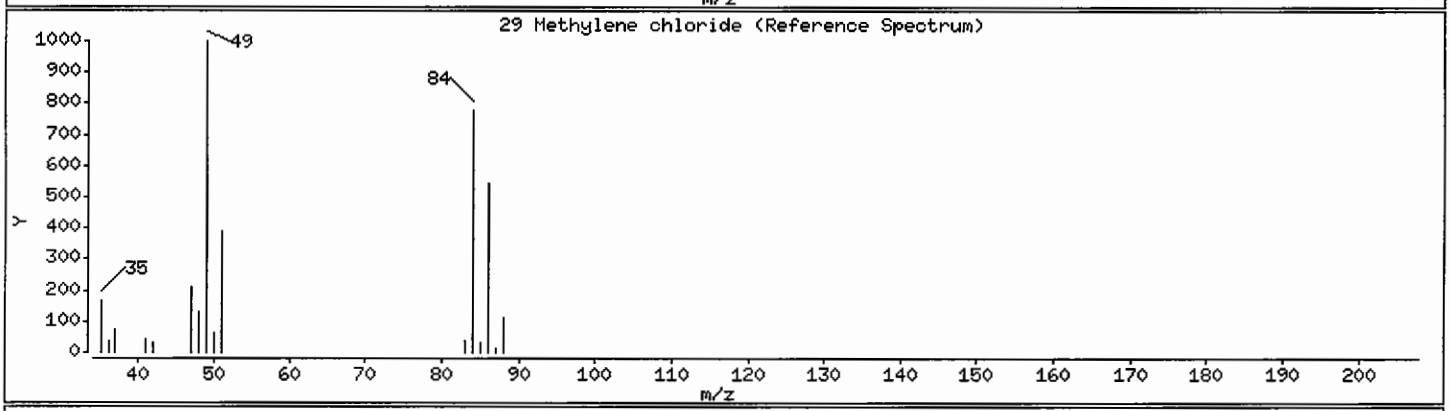
Purge Volume: 5.0 | Operator: STM

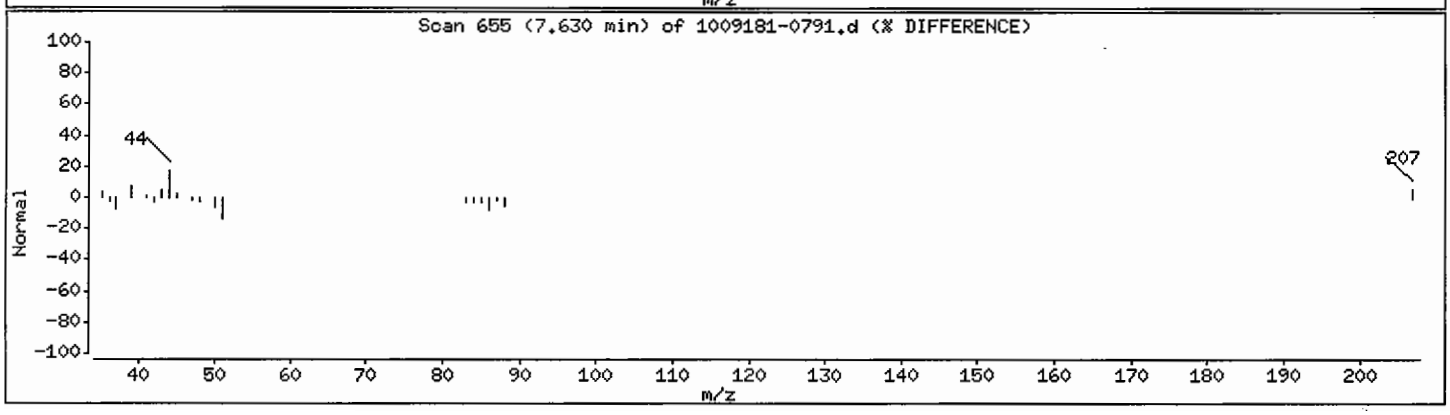
Column phase: SPB-624 | Column diameter: 0.32

29 Methylene chloride | Concentration: 1.54483 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-0791.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-0791.d
Lab Smp Id: 1009181-07 Client Smp ID: TRIP BLANK
Inj Date : 21-SEP-2010 13:21
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-07:STM
Misc Info : TRIP BLANK
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

# 3. Standards Data

a. Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3, VOA SIM)

b. Continuing Calibration Verification Data (Form VII VOA-1, VOA-2, VOA-3, VOA-SIM)

## a. Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3, VOA-SIM)

If more than one instrument is used, forms shall be arranged in order by instrument. Multiple initial calibrations from the same instrument shall be in chronological order.

(1) Reconstructed Ion Chromatograms and quantitation reports for the initial (five-point) calibration. Spectra not required.

(2) EICPs displaying each manual integration.

6A - FORM VI VOA-1
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: _____ SDG No.: 1009181

Instrument ID: 5975hpms91 Calibration Date(s): 09/21/2010 09/21/2010

Heated Purge: (Y/N) N Calibration Time(s): 0018 0207

Purge Volume: 5.0 (mL)

GC Column: SPB-624 ID: 0.32 (mm) Length: 60 (m)

LAB FILE ID: _____ RRF5.0= 0I20018-CAL1.d RRF10= 0I20018-CAL2.d

RRF50= 0I20018-CAL3.d RRF100= 0I20018-CAL4.d RRF200= 0I20018-CAL5.d

| COMPOUND | RRF5.0 | RRF10 | RRF50 | RRF100 | RRF200 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.491 | 0.465 | 0.463 | 0.450 | 0.433 | 0.461 | 4.7 |
| Vinyl chloride | 0.433 | 0.411 | 0.411 | 0.401 | 0.392 | 0.410 | 3.7 |
| Chloroethane | 0.243 | 0.228 | 0.218 | 0.209 | 0.207 | 0.221 | 6.6 |
| 1,1-Dichloroethene | 0.297 | 0.289 | 0.270 | 0.264 | 0.261 | 0.276 | 5.8 |
| Methylene chloride | 0.370 | 0.340 | 0.297 | 0.288 | 0.288 | 0.317 | 11.7 |
| trans-1,2-Dichloroethene | 0.377 | 0.401 | 0.460 | 0.465 | 0.469 | 0.435 | 9.7 |
| 1,1-Dichloroethane | 0.715 | 0.728 | 0.787 | 0.790 | 0.809 | 0.766 | 5.4 |
| cis-1,2-Dichloroethene | 0.282 | 0.356 | 0.473 | 0.480 | 0.499 | 0.418 | 22.6 |
| 1,1,1-Trichloroethane | 0.710 | 0.711 | 0.736 | 0.737 | 0.724 | 0.723 | 1.8 |
| Benzene | 1.511 | 1.653 | 1.845 | 1.828 | 1.769 | 1.721 | 8.1 |
| 1,2-Dichloroethane | 0.650 | 0.707 | 0.729 | 0.723 | 0.769 | 0.716 | 6.0 |
| Trichloroethene | 0.343 | 0.352 | 0.424 | 0.438 | 0.442 | 0.399 | 12.1 |

Report 1,4-Dioxane for Low-Medium VOA analysis only

6B - FORM VI VOA-2
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: _____ SDG No.: 1009181

Instrument ID: 5975hpms91 Calibration Date(s): 09/21/2010 09/21/2010

Heated Purge: (Y/N) N Calibration Time(s): 0018 0207

Purge Volume: 5.0 (mL)

GC Column: SPB-624 ID: 0.32 (mm) Length: 60 (m)

LAB FILE ID: _____ RRF5.0= 0I20018-CAL1.d RRF10= 0I20018-CAL2.d

RRF50= 0I20018-CAL3.d RRF100= 0I20018-CAL4.d RRF200= 0I20018-CAL5.d

| COMPOUND | RRF5.0 | RRF10 | RRF50 | RRF100 | RRF200 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | 0.428 | 0.453 | 0.461 | 0.453 | 0.439 | 0.447 | 2.9 |
| Tetrachloroethene | 0.359 | 0.391 | 0.380 | 0.391 | 0.386 | 0.382 | 3.5 |
| Chlorobenzene | 1.366 | 1.325 | 1.361 | 1.359 | 1.342 | 1.351 | 1.2 |
| 1,4-Dichlorobenzene | 1.816 | 1.893 | 1.862 | 1.924 | 1.894 | 1.878 | 2.2 |

6C - FORM VI VOA-3
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Instrument ID: 5975hpms91 Calibration Date(s): 09/21/2010 09/21/2010

Heated Purge: (Y/N) N Calibration Time(s): 0018 0207

Purge Volume: 5.0 (mL)

GC Column: SPB-624 ID: 0.32 (mm) Length: 60 (m)

LAB FILE ID: RRF5.0= 0I20018-CAL1.d RRF10= 0I20018-CAL2.d

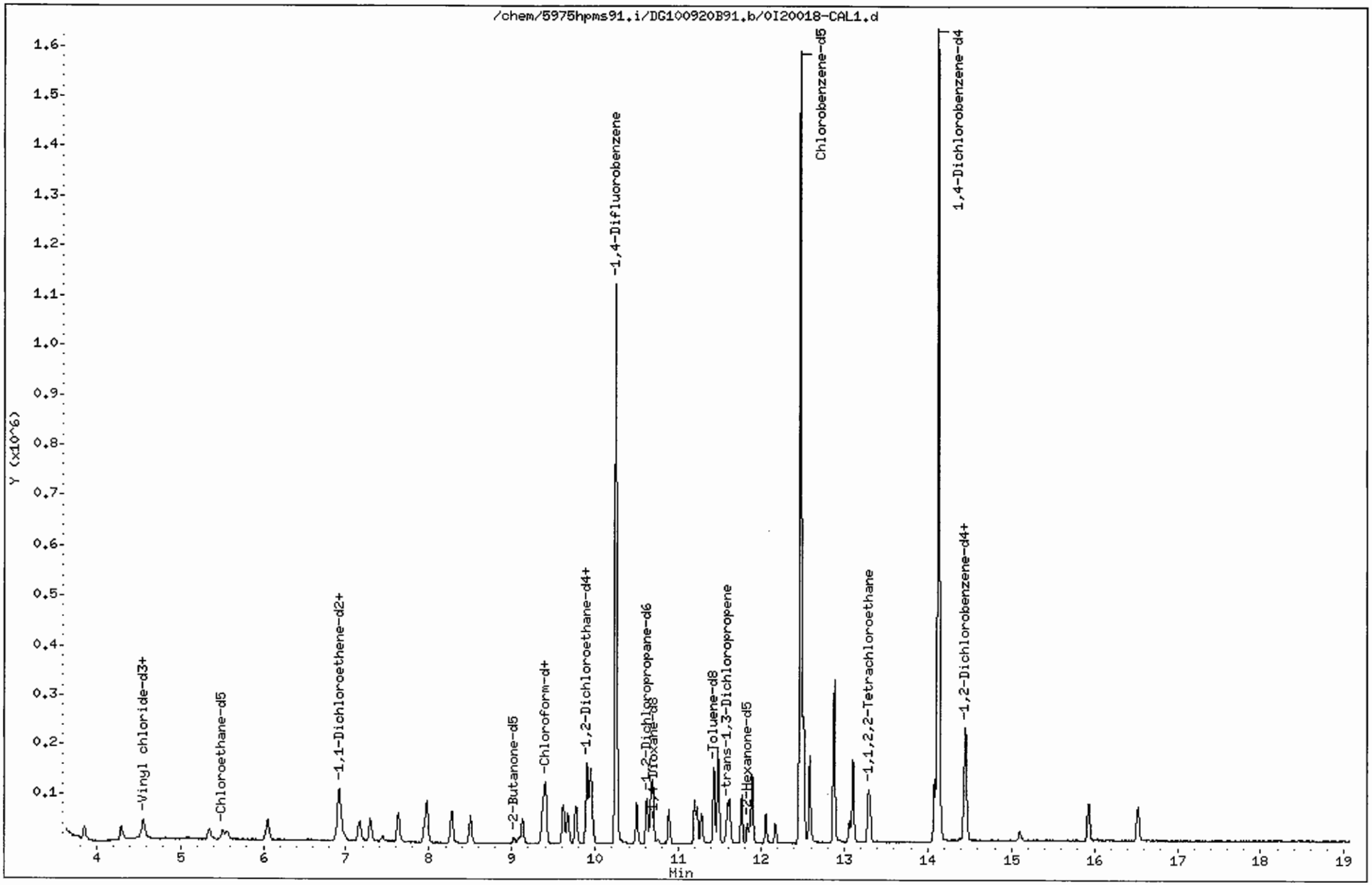
RRF50= 0I20018-CAL3.d RRF100= 0I20018-CAL4.d RRF200= 0I20018-CAL5.d

| COMPOUND | RRF5.0 | RRF10 | RRF50 | RRF100 | RRF200 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|
| Vinyl chloride-d3 | 0.490 | 0.470 | 0.436 | 0.422 | 0.427 | 0.449 | 6.6 |
| Chloroethane-d5 | 0.343 | 0.319 | 0.288 | 0.273 | 0.279 | 0.300 | 9.9 |
| 1,1-Dichloroethene-d2 | 0.829 | 0.780 | 0.732 | 0.705 | 0.718 | 0.753 | 6.8 |
| 2-Butanone-d5 | 0.096 | 0.137 | 0.144 | 0.161 | 0.210 | 0.150 | 27.7 |
| Chloroform-d | 0.952 | 0.955 | 0.954 | 0.950 | 1.012 | 0.965 | 2.8 |
| 1,2-Dichloroethane-d4 | 0.560 | 0.589 | 0.583 | 0.580 | 0.628 | 0.588 | 4.2 |
| Benzene-d6 | 1.464 | 1.622 | 1.775 | 1.759 | 1.743 | 1.672 | 7.9 |
| 1,2-Dichloropropane-d6 | 0.454 | 0.475 | 0.494 | 0.492 | 0.494 | 0.482 | 3.6 |
| Toluene-d8 | 1.258 | 1.471 | 1.708 | 1.726 | 1.765 | 1.585 | 13.7 |
| trans-1,3-Dichloropropene-d4 | 0.493 | 0.572 | 0.682 | 0.699 | 0.730 | 0.635 | 15.6 |
| 2-Hexanone-d5 | 0.069 | 0.113 | 0.149 | 0.160 | 0.192 | 0.137 | 34.4 |
| 1,4-Dioxane-d8 | 0.003 | 0.003 | 0.004 | 0.005 | 0.006 | 0.004 | 29.2 |
| 1,1,2,2-Tetrachloroethane-d2 | 0.553 | 0.607 | 0.575 | 0.568 | 0.610 | 0.583 | 4.3 |
| 1,2-Dichlorobenzene-d4 | 1.034 | 1.068 | 1.142 | 1.136 | 1.139 | 1.104 | 4.5 |

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL1.d
Date : 21-SEP-2010 00:45
Client ID: VSTD005FR
Sample Info: 0I20018-CAL1:TD
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: TD
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL1.d
Report Date: 28-Sep-2010 12:05

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL1.d
Lab Smp Id: 0I20018-CAL1 Client Smp ID: VSTD005FR
Inj Date : 21-SEP-2010 00:45
Operator : TD Inst ID: 5975hpms91.i
Smp Info : 0I20018-CAL1:TD
Misc Info : VSTD005FR
Comment :
Method : /chem/5975hpms91.i/DG100920B91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 10:55 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 00:45 Cal File: 0I20018-CAL1.d
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 740415 | 250.000 | |
| 2 Chlorobenzene-d5 | 117 | 12.470 | 12.470 | (1.000) | 735037 | 250.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 14.122 | 14.123 | (1.000) | 414892 | 250.000 | |
| 4 Vinyl chloride-d3 | 65 | 4.551 | 4.551 | (0.444) | 36293 | 25.0000 | 25.0000 |
| 5 Chloroethane-d5 | 69 | 5.508 | 5.502 | (0.538) | 25412 | 25.0000 | 25.0000 |
| 6 1,1-Dichloroethene-d2 | 63 | 6.917 | 6.917 | (0.675) | 61375 | 25.0000 | 25.0000 |
| 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 14224 | 50.0000 | 50.0000 |
| 8 Chloroform-d | 84 | 9.392 | 9.386 | (0.917) | 70497 | 25.0000 | 25.0000 |
| 9 1,2-Dichloroethane-d4 | 65 | 9.898 | 9.892 | (0.966) | 41428 | 25.0000 | 25.0000 |
| 10 Benzene-d6 | 84 | 9.910 | 9.904 | (0.795) | 107592 | 25.0000 | 25.0000 |
| 11 1,2-Dichloropropane-d6 | 67 | 10.617 | 10.611 | (0.851) | 33384 | 25.0000 | 25.0000 |
| 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 92456 | 25.0000 | 25.0000 |
| 13 trans-1,3-Dichloropropene-d4 | 79 | 11.592 | 11.593 | (0.930) | 36271 | 25.0000 | 25.0000 |
| 14 2-Hexanone-d5 | 63 | 11.836 | 11.830 | (0.949) | 10205 | 50.0000 | 50.0000 |
| 15 1,4-Dioxane-d8 | 96 | 10.708 | 10.702 | (1.045) | 3989 | 500.000 | 500.000 |
| 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 40683 | 25.0000 | 25.0000 |

Sm 9-28-10

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL1.d
Report Date: 28-Sep-2010 12:05

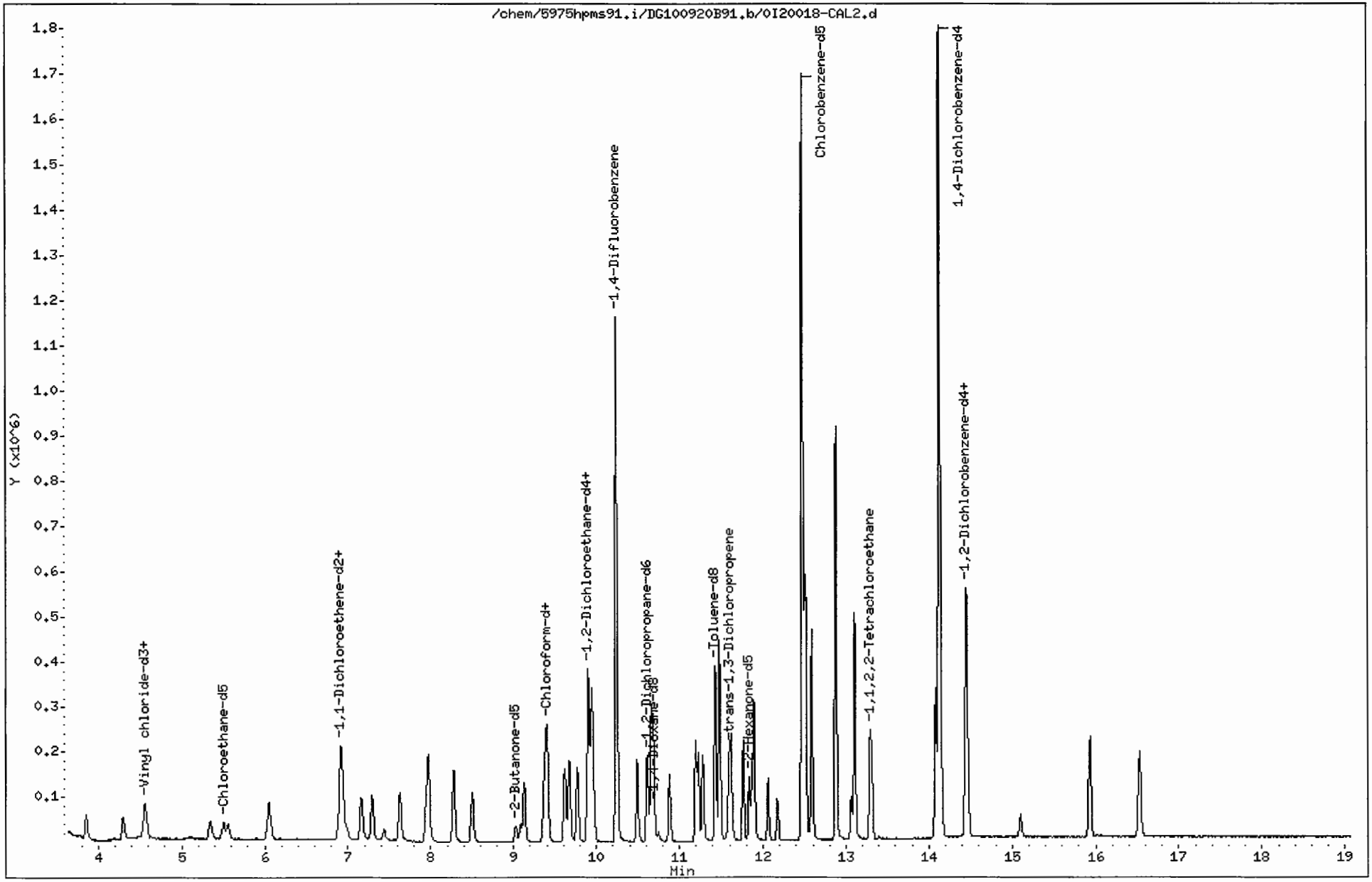
| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 42920 | 25.0000 | 25.0000 |
| 18 Dichlorodifluoromethane | 85 | 3.856 | 3.856 | (0.376) | 36385 | 25.0000 | 25.0000 |
| 19 Chloromethane | 50 | 4.295 | 4.295 | (0.419) | 34716 | 25.0000 | 25.0000 |
| 20 Vinyl chloride | 62 | 4.563 | 4.570 | (0.445) | 32031 | 25.0000 | 25.0000 |
| 21 Bromomethane | 94 | 5.350 | 5.338 | (0.522) | 18023 | 25.0000 | 25.0000 |
| 22 Chloroethane | 64 | 5.563 | 5.557 | (0.543) | 17990 | 25.0000 | 25.0000 |
| 23 Trichlorofluoromethane | 101 | 6.057 | 6.045 | (0.591) | 49373 | 25.0000 | 25.0000 |
| 24 1,1-Dichloroethene | 96 | 6.941 | 6.935 | (0.677) | 21982 | 25.0000 | 25.0000 |
| 25 1,1,2-Trichloro-1,2,2-trifluo | 101 | 6.910 | 6.898 | (0.675) | 22333 | 25.0000 | 25.0000 |
| 26 Acetone | 43 | 6.984 | 6.984 | (0.682) | 16569 | 50.0000 | 50.0000 |
| 27 Carbon disulfide | 76 | 7.295 | 7.295 | (0.712) | 76491 | 25.0000 | 25.0000 |
| 28 Methyl acetate | 43 | 7.441 | 7.441 | (0.726) | 15273 | 25.0000 | 25.0000 |
| 29 Methylene chloride | 84 | 7.630 | 7.630 | (0.745) | 27392 | 25.0000 | 25.0000 |
| 30 trans-1,2-Dichloroethene | 96 | 7.977 | 7.977 | (0.779) | 27946 | 25.0000 | 25.0000 |
| 31 Methyl tert-butyl ether | 73 | 7.953 | 7.953 | (0.776) | 39736 | 25.0000 | 25.0000 |
| 32 1,1-Dichloroethane | 63 | 8.502 | 8.502 | (0.830) | 52949 | 25.0000 | 25.0000 |
| 33 cis-1,2-Dichloroethene | 96 | 9.123 | 9.124 | (0.891) | 20884 | 25.0000 | 25.0000 |
| 34 2-Butanone | 43 | 9.087 | 9.087 | (0.887) | 14923 | 50.0000 | 50.0000 |
| 35 Bromochloromethane | 128 | 9.361 | 9.361 | (0.914) | 14109 | 25.0000 | 25.0000 |
| 36 Chloroform | 83 | 9.410 | 9.410 | (0.918) | 60295 | 25.0000 | 25.0000 |
| 37 1,1,1-Trichloroethane | 97 | 9.617 | 9.617 | (0.771) | 52155 | 25.0000 | 25.0000 |
| 38 Cyclohexane | 56 | 9.672 | 9.672 | (0.776) | 16898 | 25.0000 | 25.0000 |
| 39 Carbon tetrachloride | 117 | 9.770 | 9.770 | (0.783) | 48743 | 25.0000 | 25.0000 |
| 40 Benzene | 78 | 9.940 | 9.940 | (0.797) | 111079 | 25.0000 | 25.0000 |
| 41 1,2-Dichloroethane | 62 | 9.965 | 9.959 | (0.973) | 48111 | 25.0000 | 25.0000 |
| 42 1,4-Dioxane | 88 | 10.745 | 10.751 | (1.049) | 3996 | 500.000 | 500.000 |
| 43 Trichloroethene | 95 | 10.495 | 10.495 | (0.842) | 25185 | 25.0000 | 25.0000 |
| 44 Methylcyclohexane | 83 | 10.666 | 10.666 | (0.855) | 23163 | 25.0000 | 25.0000 |
| 45 1,2-Dichloropropane | 63 | 10.690 | 10.684 | (0.857) | 31480 | 25.0000 | 25.0000 |
| 46 Bromodichloromethane | 83 | 10.885 | 10.885 | (0.873) | 42425 | 25.0000 | 25.0000 |
| 47 cis-1,3-Dichloropropene | 75 | 11.227 | 11.227 | (0.900) | 37455 | 25.0000 | 25.0000 |
| 48 4-Methyl-2-pentanone | 43 | 11.282 | 11.276 | (0.905) | 36514 | 50.0000 | 50.0000 |
| 49 Toluene | 91 | 11.483 | 11.483 | (0.921) | 123308 | 25.0000 | 25.0000 |
| 50 trans-1,3-Dichloropropene | 75 | 11.617 | 11.617 | (0.932) | 40798 | 25.0000 | 25.0000 |
| 51 1,1,2-Trichloroethane | 97 | 11.763 | 11.763 | (0.943) | 26871 | 25.0000 | 25.0000 |
| 52 Tetrachloroethene | 164 | 11.897 | 11.891 | (0.954) | 26409 | 25.0000 | 25.0000 |
| 53 2-Hexanone | 43 | 11.867 | 11.867 | (0.952) | 30864 | 50.0000 | 50.0000 |
| 54 Dibromochloromethane | 129 | 12.062 | 12.062 | (0.967) | 28457 | 25.0000 | 25.0000 |
| 55 1,2-Dibromoethane | 107 | 12.172 | 12.172 | (0.976) | 23226 | 25.0000 | 25.0000 |
| 56 Chlorobenzene | 112 | 12.489 | 12.489 | (1.001) | 100434 | 25.0000 | 25.0000 |
| 57 Ethylbenzene | 91 | 12.513 | 12.513 | (1.003) | 129686 | 25.0000 | 25.0000 |
| 58 m,p-Xylene | 106 | 12.586 | 12.586 | (1.009) | 44227 | 25.0000 | 25.0000 |
| 59 o-Xylene | 106 | 12.879 | 12.873 | (1.033) | 41634 | 25.0000 | 25.0000 |
| 60 Styrene | 104 | 12.879 | 12.879 | (1.033) | 67777 | 25.0000 | 25.0000 |
| 61 Bromoform | 173 | 13.062 | 13.062 | (0.925) | 16496 | 25.0000 | 25.0000 |
| 62 Isopropylbenzene | 105 | 13.110 | 13.104 | (1.051) | 91214 | 25.0000 | 25.0000 |
| 63 1,1,2,2-Tetrachloroethane | 83 | 13.312 | 13.312 | (1.067) | 37055 | 25.0000 | 25.0000 |

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL1.d
Report Date: 28-Sep-2010 12:05

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 64 1,3-Dichlorobenzene | 146 | 14.080 | 14.080 | (0.997) | 51550 | 25.0000 | 25.0000 |
| 65 1,4-Dichlorobenzene | 146 | 14.141 | 14.147 | (1.001) | 75362 | 25.0000 | 25.0000 |
| 66 1,2-Dichlorobenzene | 146 | 14.464 | 14.458 | (1.024) | 59287 | 25.0000 | 25.0000 |
| 67 1,2-Dibromo-3-chloropropane | 75 | 15.098 | 15.098 | (1.069) | 6970 | 25.0000 | 25.0000 |
| 68 1,2,4-Trichlorobenzene | 180 | 15.933 | 15.933 | (1.128) | 29372 | 25.0000 | 25.0000 |
| 69 1,2,3-Trichlorobenzene | 180 | 16.531 | 16.531 | (1.171) | 28220 | 25.0000 | 25.0000 |

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL2.d
Date : 21-SEP-2010 00:18
Client ID: VSTD010FR
Sample Info: 0I20018-CAL2:TD
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: TD
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL2.d
Report Date: 28-Sep-2010 12:05

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL2.d
Lab Smp Id: 0I20018-CAL2 Client Smp ID: VSTD010FR
Inj Date : 21-SEP-2010 00:18
Operator : TD Inst ID: 5975hpms91.i
Smp Info : 0I20018-CAL2:TD
Misc Info : VSTD010FR
Comment :
Method : /chem/5975hpms91.i/DG100920B91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 10:55 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 00:18 Cal File: 0I20018-CAL2.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 774298 | 250.000 | |
| 2 Chlorobenzene-d5 | 117 | 12.471 | 12.470 | (1.000) | 778526 | 250.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 14.123 | 14.123 | (1.000) | 459598 | 250.000 | |
| 4 Vinyl chloride-d3 | 65 | 4.551 | 4.551 | (0.444) | 72803 | 50.0000 | 48.9561 |
| 5 Chloroethane-d5 | 69 | 5.502 | 5.502 | (0.537) | 49327 | 50.0000 | 48.1348 |
| 6 1,1-Dichloroethene-d2 | 63 | 6.917 | 6.917 | (0.675) | 120763 | 50.0000 | 48.4738 |
| 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 42407 | 100.000 | 117.541 |
| 8 Chloroform-d | 84 | 9.392 | 9.386 | (0.917) | 147954 | 50.0000 | 50.0860 |
| 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 91220 | 50.0000 | 51.2853 |
| 10 Benzene-d6 | 84 | 9.910 | 9.904 | (0.795) | 252486 | 50.0000 | 52.5573 |
| 11 1,2-Dichloropropane-d6 | 67 | 10.617 | 10.611 | (0.851) | 73971 | 50.0000 | 51.1240 |
| 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 229000 | 50.0000 | 53.9011 |
| 13 trans-1,3-Dichloropropene-d4 | 79 | 11.599 | 11.593 | (0.930) | 89020 | 50.0000 | 53.6737 |
| 14 2-Hexanone-d5 | 63 | 11.836 | 11.830 | (0.949) | 35096 | 100.000 | 123.766 |
| 15 1,4-Dioxane-d8 | 96 | 10.709 | 10.702 | (1.045) | 10786 | 1000.00 | 1127.71 |
| 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 94567 | 50.0000 | 52.3201 |

Sm 9-28-10

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL2.d
Report Date: 28-Sep-2010 12:05

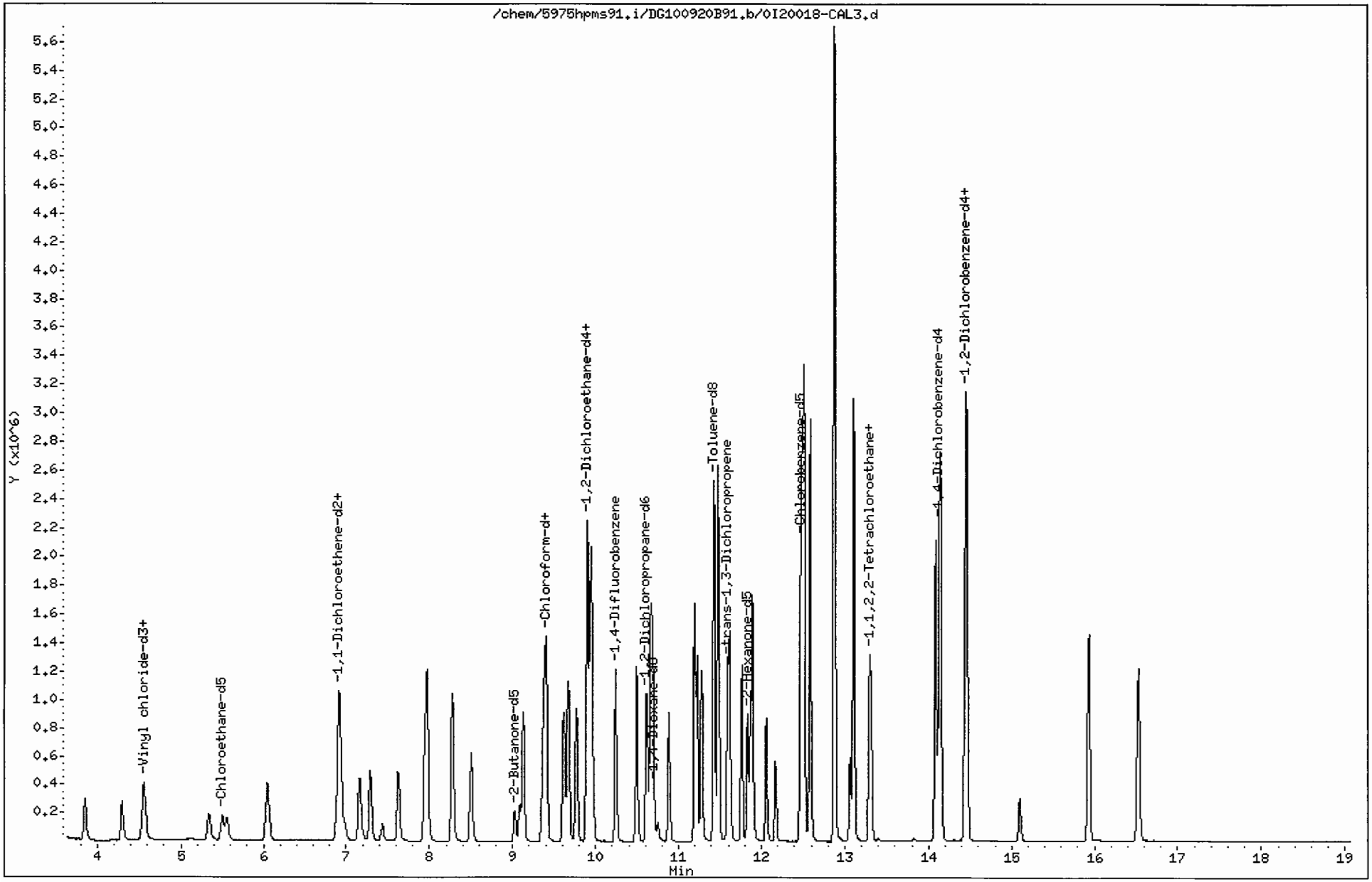
| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 98144 | 50.0000 | 50.7904 |
| 18 Dichlorodifluoromethane | 85 | 3.856 | 3.856 | (0.376) | 72035 | 50.0000 | 48.6279 |
| 19 Chloromethane | 50 | 4.295 | 4.295 | (0.419) | 65267 | 50.0000 | 47.3373 |
| 20 Vinyl chloride | 62 | 4.570 | 4.570 | (0.446) | 63665 | 50.0000 | 48.7262 |
| 21 Bromomethane | 94 | 5.350 | 5.338 | (0.522) | 36369 | 50.0000 | 49.1045 |
| 22 Chloroethane | 64 | 5.563 | 5.557 | (0.543) | 35247 | 50.0000 | 48.3674 |
| 23 Trichlorofluoromethane | 101 | 6.051 | 6.045 | (0.591) | 100618 | 50.0000 | 49.3509 |
| 24 1,1-Dichloroethene | 96 | 6.935 | 6.935 | (0.677) | 44738 | 50.0000 | 49.3177 |
| 25 1,1,2-Trichloro-1,2,2-trifluo | 101 | 6.905 | 6.898 | (0.674) | 48123 | 50.0000 | 50.7450 |
| 26 Acetone | 43 | 6.984 | 6.984 | (0.682) | 36517 | 100.000 | 102.617 |
| 27 Carbon disulfide | 76 | 7.295 | 7.295 | (0.712) | 157021 | 50.0000 | 49.5328 |
| 28 Methyl acetate | 43 | 7.441 | 7.441 | (0.726) | 33367 | 50.0000 | 51.0895 |
| 29 Methylene chloride | 84 | 7.630 | 7.630 | (0.745) | 52707 | 50.0000 | 47.9163 |
| 30 trans-1,2-Dichloroethene | 96 | 7.977 | 7.977 | (0.779) | 62147 | 50.0000 | 51.5329 |
| 31 Methyl tert-butyl ether | 73 | 7.959 | 7.953 | (0.777) | 110555 | 50.0000 | 57.0860 |
| 32 1,1-Dichloroethane | 63 | 8.502 | 8.502 | (0.830) | 112668 | 50.0000 | 50.4306 |
| 33 cis-1,2-Dichloroethene | 96 | 9.130 | 9.124 | (0.891) | 55133 | 50.0000 | 55.7956 |
| 34 2-Butanone | 43 | 9.087 | 9.087 | (0.887) | 43058 | 100.000 | 115.950 |
| 35 Bromochloromethane | 128 | 9.361 | 9.361 | (0.914) | 29182 | 50.0000 | 49.7212 |
| 36 Chloroform | 83 | 9.410 | 9.410 | (0.918) | 132062 | 50.0000 | 51.1530 |
| 37 1,1,1-Trichloroethane | 97 | 9.617 | 9.617 | (0.771) | 110676 | 50.0000 | 50.0440 |
| 38 Cyclohexane | 56 | 9.678 | 9.672 | (0.776) | 57133 | 50.0000 | 61.4806 |
| 39 Carbon tetrachloride | 117 | 9.770 | 9.770 | (0.783) | 101541 | 50.0000 | 49.5818 |
| 40 Benzene | 78 | 9.947 | 9.940 | (0.798) | 257411 | 50.0000 | 52.2436 |
| 41 1,2-Dichloroethane | 62 | 9.965 | 9.959 | (0.973) | 109488 | 50.0000 | 52.1090 |
| 42 1,4-Dioxane | 88 | 10.751 | 10.751 | (1.049) | 10948 | 1000.00 | 1134.17 |
| 43 Trichloroethene | 95 | 10.495 | 10.495 | (0.842) | 54740 | 50.0000 | 50.6429 |
| 44 Methylcyclohexane | 83 | 10.666 | 10.666 | (0.855) | 74675 | 50.0000 | 60.3474 |
| 45 1,2-Dichloropropane | 63 | 10.690 | 10.684 | (0.857) | 70505 | 50.0000 | 51.3922 |
| 46 Bromodichloromethane | 83 | 10.885 | 10.885 | (0.873) | 90602 | 50.0000 | 50.2027 |
| 47 cis-1,3-Dichloropropene | 75 | 11.227 | 11.227 | (0.900) | 99881 | 50.0000 | 55.7300 |
| 48 4-Methyl-2-pentanone | 43 | 11.282 | 11.276 | (0.905) | 110256 | 100.000 | 117.541 |
| 49 Toluene | 91 | 11.483 | 11.483 | (0.921) | 286366 | 50.0000 | 52.2973 |
| 50 trans-1,3-Dichloropropene | 75 | 11.617 | 11.617 | (0.932) | 102983 | 50.0000 | 54.3714 |
| 51 1,1,2-Trichloroethane | 97 | 11.763 | 11.763 | (0.943) | 57863 | 50.0000 | 50.4100 |
| 52 Tetrachloroethene | 164 | 11.897 | 11.891 | (0.954) | 60953 | 50.0000 | 52.1429 |
| 53 2-Hexanone | 43 | 11.867 | 11.867 | (0.952) | 94932 | 100.000 | 118.434 |
| 54 Dibromochloromethane | 129 | 12.062 | 12.062 | (0.967) | 64181 | 50.0000 | 51.5666 |
| 55 1,2-Dibromoethane | 107 | 12.172 | 12.172 | (0.976) | 52142 | 50.0000 | 51.4513 |
| 56 Chlorobenzene | 112 | 12.489 | 12.489 | (1.001) | 206358 | 50.0000 | 49.2371 |
| 57 Ethylbenzene | 91 | 12.513 | 12.513 | (1.003) | 323862 | 50.0000 | 54.1051 |
| 58 m,p-Xylene | 106 | 12.586 | 12.586 | (1.009) | 116621 | 50.0000 | 55.4524 |
| 59 o-Xylene | 106 | 12.879 | 12.873 | (1.033) | 117188 | 50.0000 | 57.0584 |
| 60 Styrene | 104 | 12.879 | 12.879 | (1.033) | 189423 | 50.0000 | 56.8843 |
| 61 Bromoform | 173 | 13.062 | 13.062 | (0.925) | 39751 | 50.0000 | 52.0997 |
| 62 Isopropylbenzene | 105 | 13.105 | 13.104 | (1.051) | 281099 | 50.0000 | 59.2635 |
| 63 1,1,2,2-Tetrachloroethane | 83 | 13.312 | 13.312 | (1.067) | 85334 | 50.0000 | 52.0873 |

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL2.d
Report Date: 28-Sep-2010 12:05

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 64 1,3-Dichlorobenzene | 146 | 14.080 | 14.080 | (0.997) | 139347 | 50.0000 | 54.9570 |
| 65 1,4-Dichlorobenzene | 146 | 14.147 | 14.147 | (1.002) | 174015 | 50.0000 | 51.0338 |
| 66 1,2-Dichlorobenzene | 146 | 14.458 | 14.458 | (1.024) | 150839 | 50.0000 | 53.4530 |
| 67 1,2-Dibromo-3-chloropropane | 75 | 15.104 | 15.098 | (1.069) | 16914 | 50.0000 | 52.2746 |
| 68 1,2,4-Trichlorobenzene | 180 | 15.933 | 15.933 | (1.128) | 82041 | 50.0000 | 55.7666 |
| 69 1,2,3-Trichlorobenzene | 180 | 16.531 | 16.531 | (1.171) | 77616 | 50.0000 | 55.3856 |

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL3.d
Date : 21-SEP-2010 02:07
Client ID: VSTD050FR
Sample Info: 0I20018-CAL3:TD
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: TD
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL3.d
Report Date: 28-Sep-2010 12:05

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL3.d
Lab Smp Id: 0I20018-CAL3 Client Smp ID: VSTD050FR
Inj Date : 21-SEP-2010 02:07
Operator : TD Inst ID: 5975hpms91.i
Smp Info : 0I20018-CAL3:TD
Misc Info : VSTD050FR
Comment :
Method : /chem/5975hpms91.i/DG100920B91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 10:55 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 02:07 Cal File: 0I20018-CAL3.d
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 841844 | 250.000 | |
| 2 Chlorobenzene-d5 | 117 | 12.470 | 12.470 | (1.000) | 866277 | 250.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 14.123 | 14.123 | (1.000) | 506865 | 250.000 | |
| 4 Vinyl chloride-d3 | 65 | 4.551 | 4.551 | (0.444) | 367128 | 250.000 | 234.228 |
| 5 Chloroethane-d5 | 69 | 5.502 | 5.502 | (0.537) | 242583 | 250.000 | 227.517 |
| 6 1,1-Dichloroethene-d2 | 63 | 6.917 | 6.917 | (0.675) | 616047 | 250.000 | 234.492 |
| 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 242375 | 500.000 | 572.871 |
| 8 Chloroform-d | 84 | 9.392 | 9.386 | (0.917) | 802956 | 250.000 | 250.007 |
| 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 490657 | 250.000 | 252.469 |
| 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 1537258 | 250.000 | 273.858 |
| 11 1,2-Dichloropropane-d6 | 67 | 10.617 | 10.611 | (0.851) | 428297 | 250.000 | 260.461 |
| 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 1479355 | 250.000 | 288.707 |
| 13 trans-1,3-Dichloropropene-d4 | 79 | 11.593 | 11.593 | (0.930) | 590419 | 250.000 | 292.642 |
| 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 257647 | 500.000 | 674.260 |
| 15 1,4-Dioxane-d8 | 96 | 10.709 | 10.702 | (1.045) | 74208 | 5000.00 | 6246.57 |
| 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 497909 | 250.000 | 248.374 |

SM 9-28-10

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL3.d
Report Date: 28-Sep-2010 12:05

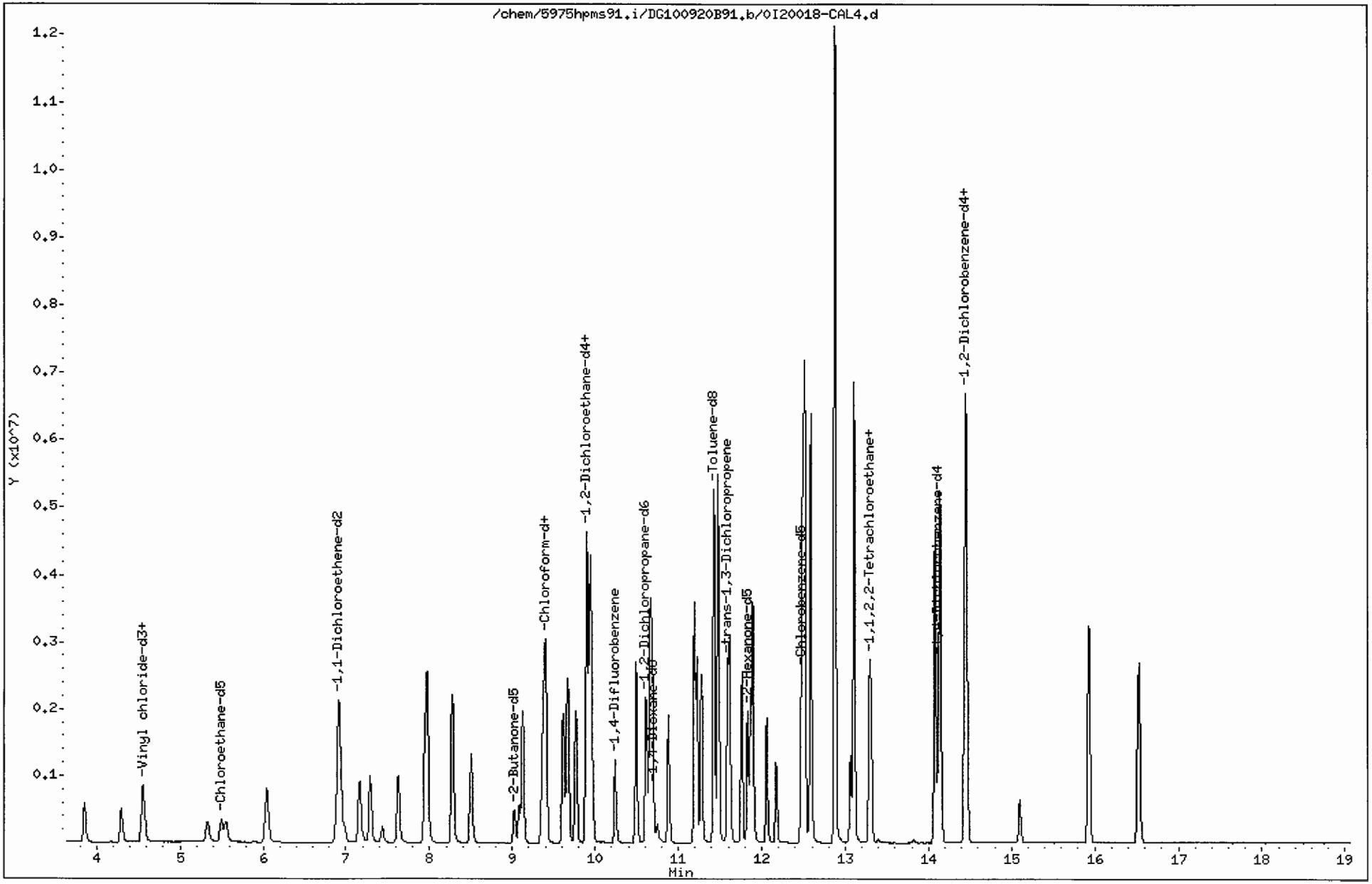
| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 578676 | 250.000 | 263.961 |
| 18 Dichlorodifluoromethane | 85 | 3.856 | 3.856 | (0.376) | 389836 | 250.000 | 244.641 |
| 19 Chloromethane | 50 | 4.295 | 4.295 | (0.419) | 356481 | 250.000 | 241.736 |
| 20 Vinyl chloride | 62 | 4.570 | 4.570 | (0.446) | 346268 | 250.000 | 245.801 |
| 21 Bromomethane | 94 | 5.344 | 5.338 | (0.522) | 178985 | 250.000 | 230.804 |
| 22 Chloroethane | 64 | 5.557 | 5.557 | (0.542) | 183187 | 250.000 | 237.149 |
| 23 Trichlorofluoromethane | 101 | 6.045 | 6.045 | (0.590) | 516834 | 250.000 | 238.513 |
| 24 1,1-Dichloroethene | 96 | 6.935 | 6.935 | (0.677) | 226930 | 250.000 | 236.364 |
| 25 1,1,2-Trichloro-1,2,2-trifluo | 101 | 6.905 | 6.898 | (0.674) | 235075 | 250.000 | 234.886 |
| 26 Acetone | 43 | 6.984 | 6.984 | (0.682) | 162576 | 500.000 | 443.811 |
| 27 Carbon disulfide | 76 | 7.289 | 7.295 | (0.711) | 833044 | 250.000 | 244.406 |
| 28 Methyl acetate | 43 | 7.441 | 7.441 | (0.726) | 171862 | 250.000 | 244.630 |
| 29 Methylene chloride | 84 | 7.630 | 7.630 | (0.745) | 249617 | 250.000 | 220.878 |
| 30 trans-1,2-Dichloroethene | 96 | 7.977 | 7.977 | (0.779) | 387648 | 250.000 | 278.687 |
| 31 Methyl tert-butyl ether | 73 | 7.953 | 7.953 | (0.776) | 876357 | 250.000 | 340.704 |
| 32 1,1-Dichloroethane | 63 | 8.502 | 8.502 | (0.830) | 662302 | 250.000 | 264.665 |
| 33 cis-1,2-Dichloroethene | 96 | 9.130 | 9.124 | (0.891) | 398348 | 250.000 | 319.356 |
| 34 2-Butanone | 43 | 9.087 | 9.087 | (0.887) | 306098 | 500.000 | 646.830 |
| 35 Bromochloromethane | 128 | 9.361 | 9.361 | (0.914) | 179223 | 250.000 | 269.763 |
| 36 Chloroform | 83 | 9.410 | 9.410 | (0.918) | 746248 | 250.000 | 260.354 |
| 37 1,1,1-Trichloroethane | 97 | 9.617 | 9.617 | (0.771) | 637489 | 250.000 | 255.963 |
| 38 Cyclohexane | 56 | 9.672 | 9.672 | (0.776) | 474020 | 250.000 | 358.731 |
| 39 Carbon tetrachloride | 117 | 9.770 | 9.770 | (0.783) | 582306 | 250.000 | 253.662 |
| 40 Benzene | 78 | 9.941 | 9.940 | (0.797) | 1597878 | 250.000 | 276.187 |
| 41 1,2-Dichloroethane | 62 | 9.965 | 9.959 | (0.973) | 613594 | 250.000 | 262.099 |
| 42 1,4-Dioxane | 88 | 10.751 | 10.751 | (1.049) | 77245 | 5000.00 | 6359.56 |
| 43 Trichloroethene | 95 | 10.495 | 10.495 | (0.842) | 366918 | 250.000 | 284.202 |
| 44 Methylcyclohexane | 83 | 10.666 | 10.666 | (0.855) | 563843 | 250.000 | 337.687 |
| 45 1,2-Dichloropropane | 63 | 10.690 | 10.684 | (0.857) | 399027 | 250.000 | 257.482 |
| 46 Bromodichloromethane | 83 | 10.885 | 10.885 | (0.873) | 549357 | 250.000 | 265.231 |
| 47 cis-1,3-Dichloropropene | 75 | 11.227 | 11.227 | (0.900) | 692816 | 250.000 | 307.474 |
| 48 4-Methyl-2-pentanone | 43 | 11.282 | 11.276 | (0.905) | 732747 | 500.000 | 618.700 |
| 49 Toluene | 91 | 11.483 | 11.483 | (0.921) | 1747138 | 250.000 | 273.355 |
| 50 trans-1,3-Dichloropropene | 75 | 11.617 | 11.617 | (0.932) | 671029 | 250.000 | 291.784 |
| 51 1,1,2-Trichloroethane | 97 | 11.763 | 11.763 | (0.943) | 336472 | 250.000 | 258.802 |
| 52 Tetrachloroethene | 164 | 11.891 | 11.891 | (0.954) | 329235 | 250.000 | 252.070 |
| 53 2-Hexanone | 43 | 11.867 | 11.867 | (0.952) | 607002 | 500.000 | 607.443 |
| 54 Dibromochloromethane | 129 | 12.062 | 12.062 | (0.967) | 408739 | 250.000 | 278.383 |
| 55 1,2-Dibromoethane | 107 | 12.172 | 12.172 | (0.976) | 328331 | 250.000 | 276.015 |
| 56 Chlorobenzene | 112 | 12.489 | 12.489 | (1.001) | 1178919 | 250.000 | 251.858 |
| 57 Ethylbenzene | 91 | 12.513 | 12.513 | (1.003) | 1987491 | 250.000 | 280.311 |
| 58 m,p-Xylene | 106 | 12.586 | 12.586 | (1.009) | 776641 | 250.000 | 299.213 |
| 59 o-Xylene | 106 | 12.873 | 12.873 | (1.032) | 781874 | 250.000 | 304.700 |
| 60 Styrene | 104 | 12.879 | 12.879 | (1.033) | 1309250 | 250.000 | 310.553 |
| 61 Bromoform | 173 | 13.062 | 13.062 | (0.925) | 256766 | 250.000 | 284.247 |
| 62 Isopropylbenzene | 105 | 13.105 | 13.104 | (1.051) | 1920340 | 250.000 | 315.897 |
| 63 1,1,2,2-Tetrachloroethane | 83 | 13.312 | 13.312 | (1.067) | 487132 | 250.000 | 261.224 |

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL3.d
Report Date: 28-Sep-2010 12:05

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 64 1,3-Dichlorobenzene | 146 | 14.080 | 14.080 | (0.997) | 853685 | 250.000 | 284.328 |
| 65 1,4-Dichlorobenzene | 146 | 14.147 | 14.147 | (1.002) | 943845 | 250.000 | 250.660 |
| 66 1,2-Dichlorobenzene | 146 | 14.458 | 14.458 | (1.024) | 870260 | 250.000 | 269.007 |
| 67 1,2-Dibromo-3-chloropropane | 75 | 15.098 | 15.098 | (1.069) | 92933 | 250.000 | 256.861 |
| 68 1,2,4-Trichlorobenzene | 180 | 15.933 | 15.933 | (1.128) | 547227 | 250.000 | 302.124 |
| 69 1,2,3-Trichlorobenzene | 180 | 16.531 | 16.531 | (1.171) | 495040 | 250.000 | 292.856 |

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL4.d
Date : 21-SEP-2010 01:40
Client ID: VSTD100FR
Sample Info: 0I20018-CAL4:TD
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: TD
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL4.d
Report Date: 28-Sep-2010 12:05

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL4.d
Lab Smp Id: 0I20018-CAL4 Client Smp ID: VSTD100FR
Inj Date : 21-SEP-2010 01:40
Operator : TD Inst ID: 5975hpms91.i
Smp Info : 0I20018-CAL4:TD
Misc Info : VSTD100FR
Comment :
Method : /chem/5975hpms91.i/DG100920B91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 10:55 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:40 Cal File: 0I20018-CAL4.d
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 875881 | 250.000 | |
| * 2 Chlorobenzene-d5 | 117 | 12.470 | 12.470 | (1.000) | 910164 | 250.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 14.123 | 14.123 | (1.000) | 530610 | 250.000 | |
| $ 4 Vinyl chloride-d3 | 65 | 4.551 | 4.551 | (0.444) | 739727 | 500.000 | 464.379 |
| $ 5 Chloroethane-d5 | 69 | 5.496 | 5.502 | (0.536) | 478073 | 500.000 | 446.366 |
| $ 6 1,1-Dichloroethene-d2 | 63 | 6.911 | 6.917 | (0.675) | 1235688 | 500.000 | 463.174 |
| $ 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 565399 | 1000.00 | 1199.16 |
| $ 8 Chloroform-d | 84 | 9.392 | 9.386 | (0.917) | 1664862 | 500.000 | 498.667 |
| $ 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 1016731 | 500.000 | 502.121 |
| $ 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 3202535 | 500.000 | 531.580 |
| $ 11 1,2-Dichloropropane-d6 | 67 | 10.611 | 10.611 | (0.851) | 896371 | 500.000 | 513.988 |
| $ 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 3141427 | 500.000 | 560.123 |
| $ 13 trans-1,3-Dichloropropene-d4 | 79 | 11.593 | 11.593 | (0.930) | 1273039 | 500.000 | 571.808 |
| $ 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 583619 | 1000.00 | 1305.60 |
| $ 15 1,4-Dioxane-d8 | 96 | 10.709 | 10.702 | (1.045) | 171027 | 10000.0 | 12625.9 |
| $ 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 1033054 | 500.000 | 492.821 |

Son 9-28-10

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL4.d
Report Date: 28-Sep-2010 12:05

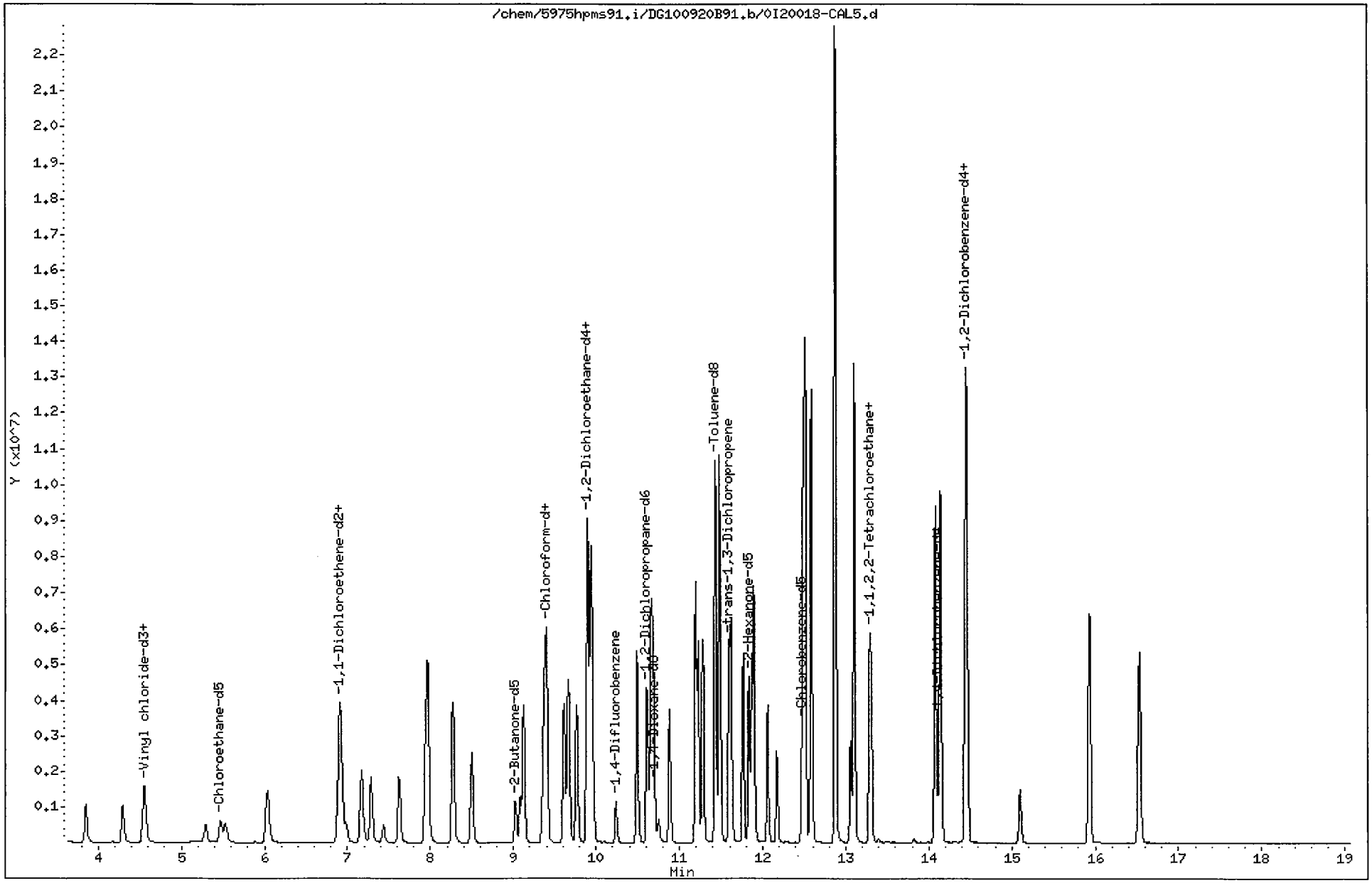
| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 1205564 | 500.000 | 518.742 |
| 18 Dichlorodifluoromethane | 85 | 3.856 | 3.856 | (0.376) | 787917 | 500.000 | 481.199 |
| 19 Chloromethane | 50 | 4.295 | 4.295 | (0.419) | 701640 | 500.000 | 467.281 |
| 20 Vinyl chloride | 62 | 4.563 | 4.570 | (0.445) | 702570 | 500.000 | 484.346 |
| 21 Bromomethane | 94 | 5.332 | 5.338 | (0.520) | 329164 | 500.000 | 427.647 |
| 22 Chloroethane | 64 | 5.551 | 5.557 | (0.542) | 366543 | 500.000 | 466.319 |
| 23 Trichlorofluoromethane | 101 | 6.045 | 6.045 | (0.590) | 1051347 | 500.000 | 474.315 |
| 24 1,1-Dichloroethene | 96 | 6.935 | 6.935 | (0.677) | 462168 | 500.000 | 471.473 |
| 25 1,1,2-Trichloro-1,2,2-trifluo | 101 | 6.898 | 6.898 | (0.673) | 485190 | 500.000 | 474.028 |
| 26 Acetone | 43 | 6.984 | 6.984 | (0.682) | 323806 | 1000.00 | 882.791 |
| 27 Carbon disulfide | 76 | 7.289 | 7.295 | (0.711) | 1704623 | 500.000 | 485.371 |
| 28 Methyl acetate | 43 | 7.441 | 7.441 | (0.726) | 352257 | 500.000 | 486.318 |
| 29 Methylene chloride | 84 | 7.630 | 7.630 | (0.745) | 504876 | 500.000 | 445.102 |
| 30 trans-1,2-Dichloroethene | 96 | 7.977 | 7.977 | (0.779) | 814338 | 500.000 | 545.590 |
| 31 Methyl tert-butyl ether | 73 | 7.953 | 7.953 | (0.776) | 1970064 | 500.000 | 658.405 |
| 32 1,1-Dichloroethane | 63 | 8.502 | 8.502 | (0.830) | 1383642 | 500.000 | 523.212 |
| 33 cis-1,2-Dichloroethene | 96 | 9.130 | 9.124 | (0.891) | 841698 | 500.000 | 603.722 |
| 34 2-Butanone | 43 | 9.087 | 9.087 | (0.887) | 676627 | 1000.00 | 1256.67 |
| 35 Bromochloromethane | 128 | 9.361 | 9.361 | (0.914) | 371982 | 500.000 | 528.071 |
| 36 Chloroform | 83 | 9.410 | 9.410 | (0.918) | 1562689 | 500.000 | 517.795 |
| 37 1,1,1-Trichloroethane | 97 | 9.617 | 9.617 | (0.771) | 1341349 | 500.000 | 509.395 |
| 38 Cyclohexane | 56 | 9.672 | 9.672 | (0.776) | 1105400 | 500.000 | 693.501 |
| 39 Carbon tetrachloride | 117 | 9.770 | 9.770 | (0.783) | 1222068 | 500.000 | 504.996 |
| 40 Benzene | 78 | 9.940 | 9.940 | (0.797) | 3328318 | 500.000 | 534.832 |
| 41 1,2-Dichloroethane | 62 | 9.965 | 9.959 | (0.973) | 1267012 | 500.000 | 514.982 |
| 42 1,4-Dioxane | 88 | 10.751 | 10.751 | (1.049) | 174132 | 10000.0 | 12589.7 |
| 43 Trichloroethene | 95 | 10.495 | 10.495 | (0.842) | 796990 | 500.000 | 562.912 |
| 44 Methylcyclohexane | 83 | 10.666 | 10.666 | (0.855) | 1320427 | 500.000 | 668.250 |
| 45 1,2-Dichloropropane | 63 | 10.690 | 10.684 | (0.857) | 824134 | 500.000 | 504.599 |
| 46 Bromodichloromethane | 83 | 10.885 | 10.885 | (0.873) | 1158645 | 500.000 | 523.930 |
| 47 cis-1,3-Dichloropropene | 75 | 11.227 | 11.227 | (0.900) | 1474442 | 500.000 | 586.779 |
| 48 4-Methyl-2-pentanone | 43 | 11.276 | 11.276 | (0.904) | 1588776 | 1000.00 | 1194.17 |
| 49 Toluene | 91 | 11.483 | 11.483 | (0.921) | 3694582 | 500.000 | 536.711 |
| 50 trans-1,3-Dichloropropene | 75 | 11.617 | 11.617 | (0.932) | 1439585 | 500.000 | 568.561 |
| 51 1,1,2-Trichloroethane | 97 | 11.763 | 11.763 | (0.943) | 712275 | 500.000 | 515.909 |
| 52 Tetrachloroethene | 164 | 11.897 | 11.891 | (0.954) | 711891 | 500.000 | 513.939 |
| 53 2-Hexanone | 43 | 11.867 | 11.867 | (0.952) | 1292883 | 1000.00 | 1164.08 |
| 54 Dibromochloromethane | 129 | 12.062 | 12.062 | (0.967) | 877414 | 500.000 | 549.865 |
| 55 1,2-Dibromoethane | 107 | 12.172 | 12.172 | (0.976) | 713195 | 500.000 | 551.176 |
| 56 Chlorobenzene | 112 | 12.489 | 12.489 | (1.001) | 2473853 | 500.000 | 502.259 |
| 57 Ethylbenzene | 91 | 12.513 | 12.513 | (1.003) | 4382333 | 500.000 | 563.405 |
| 58 m,p-Xylene | 106 | 12.586 | 12.586 | (1.009) | 1719181 | 500.000 | 591.817 |
| 59 o-Xylene | 106 | 12.873 | 12.873 | (1.032) | 1702694 | 500.000 | 592.575 |
| 60 Styrene | 104 | 12.879 | 12.879 | (1.033) | 2860785 | 500.000 | 601.956 |
| 61 Bromoform | 173 | 13.062 | 13.062 | (0.925) | 564477 | 500.000 | 569.335 |
| 62 Isopropylbenzene | 105 | 13.104 | 13.104 | (1.051) | 4389785 | 500.000 | 628.447 |
| 63 1,1,2,2-Tetrachloroethane | 83 | 13.312 | 13.312 | (1.067) | 1015588 | 500.000 | 513.635 |

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL4.d
Report Date: 28-Sep-2010 12:05

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 64 1,3-Dichlorobenzene | 146 | 14.080 | 14.080 | (0.997) | 1923471 | 500.000 | 579.520 |
| 65 1,4-Dichlorobenzene | 146 | 14.147 | 14.147 | (1.002) | 2041645 | 500.000 | 513.336 |
| 66 1,2-Dichlorobenzene | 146 | 14.458 | 14.458 | (1.024) | 1887372 | 500.000 | 541.777 |
| 67 1,2-Dibromo-3-chloropropane | 75 | 15.098 | 15.098 | (1.069) | 203024 | 500.000 | 526.548 |
| 68 1,2,4-Trichlorobenzene | 180 | 15.933 | 15.933 | (1.128) | 1249060 | 500.000 | 610.304 |
| 69 1,2,3-Trichlorobenzene | 180 | 16.524 | 16.531 | (1.170) | 1108334 | 500.000 | 589.117 |

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL5.d
Date : 21-SEP-2010 01:12
Client ID: VSTD200FR
Sample Info: 0I20018-CAL5:TD
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: TD
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL5.d
Report Date: 28-Sep-2010 12:05

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL5.d
Lab Smp Id: 0I20018-CAL5 Client Smp ID: VSTD200FR
Inj Date : 21-SEP-2010 01:12
Operator : TD Inst ID: 5975hpms91.i
Smp Info : 0I20018-CAL5:TD
Misc Info : VSTD200FR
Comment :
Method : /chem/5975hpms91.i/DG100920B91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 10:55 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 820692 | 250.000 | |
| * 2 Chlorobenzene-d5 | 117 | 12.471 | 12.470 | (1.000) | 909979 | 250.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 14.123 | 14.123 | (1.000) | 541133 | 250.000 | |
| $ 4 Vinyl chloride-d3 | 65 | 4.545 | 4.551 | (0.444) | 1402804 | 1000.00 | 951.302 |
| $ 5 Chloroethane-d5 | 69 | 5.472 | 5.502 | (0.534) | 914740 | 1000.00 | 927.929 |
| $ 6 1,1-Dichloroethene-d2 | 63 | 6.911 | 6.917 | (0.675) | 2358170 | 1000.00 | 954.165 |
| $ 7 2-Butanone-d5 | 46 | 9.020 | 9.026 | (0.880) | 1379460 | 2000.00 | 2807.34(A) |
| $ 8 Chloroform-d | 84 | 9.386 | 9.386 | (0.916) | 3323187 | 1000.00 | 1049.24(A) |
| $ 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 2061060 | 1000.00 | 1067.88(A) |
| $ 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 6344463 | 1000.00 | 1042.20(A) |
| $ 11 1,2-Dichloropropane-d6 | 67 | 10.611 | 10.611 | (0.851) | 1797956 | 1000.00 | 1024.79(A) |
| $ 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 6425476 | 1000.00 | 1113.42(A) |
| $ 13 trans-1,3-Dichloropropene-d4 | 79 | 11.593 | 11.593 | (0.930) | 2655838 | 1000.00 | 1148.78(A) |
| $ 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 1395000 | 2000.00 | 2806.63(A) |
| $ 15 1,4-Dioxane-d8 | 96 | 10.709 | 10.702 | (1.045) | 389013 | 20000.0 | 27699.7(A) |
| $ 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 2221423 | 1000.00 | 1047.39(A) |

Sm9280

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL5.d
Report Date: 28-Sep-2010 12:05

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 2466191 | 1000.00 | 1032.17(A) |
| 18 Dichlorodifluoromethane | 85 | 3.850 | 3.856 | (0.376) | 1422371 | 1000.00 | 940.809 |
| 19 Chloromethane | 50 | 4.295 | 4.295 | (0.419) | 1434286 | 1000.00 | 1015.50(A) |
| 20 Vinyl chloride | 62 | 4.564 | 4.570 | (0.445) | 1287062 | 1000.00 | 957.111 |
| 21 Bromomethane | 94 | 5.289 | 5.338 | (0.516) | 479905 | 1000.00 | 713.136(H) |
| 22 Chloroethane | 64 | 5.533 | 5.557 | (0.540) | 681174 | 1000.00 | 938.979 |
| 23 Trichlorofluoromethane | 101 | 6.039 | 6.045 | (0.589) | 1969562 | 1000.00 | 958.225 |
| 24 1,1-Dichloroethene | 96 | 6.929 | 6.935 | (0.676) | 855713 | 1000.00 | 944.557 |
| 25 1,1,2-Trichloro-1,2,2-trifluo | 101 | 6.898 | 6.898 | (0.673) | 894390 | 1000.00 | 945.323 |
| 26 Acetone | 43 | 6.984 | 6.984 | (0.682) | 701697 | 2000.00 | 2033.21(A) |
| 27 Carbon disulfide | 76 | 7.289 | 7.295 | (0.711) | 3201499 | 1000.00 | 978.194 |
| 28 Methyl acetate | 43 | 7.435 | 7.441 | (0.726) | 745775 | 1000.00 | 1077.54(A) |
| 29 Methylene chloride | 84 | 7.624 | 7.630 | (0.744) | 944399 | 1000.00 | 908.830 |
| 30 trans-1,2-Dichloroethene | 96 | 7.971 | 7.977 | (0.778) | 1540387 | 1000.00 | 1079.53(A) |
| 31 Methyl tert-butyl ether | 73 | 7.947 | 7.953 | (0.776) | 4054066 | 1000.00 | 1327.58(A) |
| 32 1,1-Dichloroethane | 63 | 8.502 | 8.502 | (0.830) | 2655190 | 1000.00 | 1056.44(A) |
| 33 cis-1,2-Dichloroethene | 96 | 9.124 | 9.124 | (0.891) | 1638071 | 1000.00 | 1193.34(A) |
| 34 2-Butanone | 43 | 9.087 | 9.087 | (0.887) | 1558373 | 2000.00 | 2785.60(A) |
| 35 Bromochloromethane | 128 | 9.361 | 9.361 | (0.914) | 718167 | 1000.00 | 1069.24(A) |
| 36 Chloroform | 83 | 9.410 | 9.410 | (0.918) | 3038454 | 1000.00 | 1058.72(A) |
| 37 1,1,1-Trichloroethane | 97 | 9.617 | 9.617 | (0.771) | 2634489 | 1000.00 | 1000.55(A) |
| 38 Cyclohexane | 56 | 9.672 | 9.672 | (0.776) | 2166403 | 1000.00 | 1268.26(A) |
| 39 Carbon tetrachloride | 117 | 9.770 | 9.770 | (0.783) | 2386803 | 1000.00 | 989.172 |
| 40 Benzene | 78 | 9.941 | 9.940 | (0.797) | 6438515 | 1000.00 | 1027.67(A) |
| 41 1,2-Dichloroethane | 62 | 9.965 | 9.959 | (0.973) | 2524461 | 1000.00 | 1074.64(A) |
| 42 1,4-Dioxane | 88 | 10.751 | 10.751 | (1.049) | 419224 | 20000.0 | 28792.7(A) |
| 43 Trichloroethene | 95 | 10.495 | 10.495 | (0.842) | 1608202 | 1000.00 | 1105.99(A) |
| 44 Methylcyclohexane | 83 | 10.666 | 10.666 | (0.855) | 2484473 | 1000.00 | 1195.99(A) |
| 45 1,2-Dichloropropane | 63 | 10.684 | 10.684 | (0.857) | 1598168 | 1000.00 | 982.905 |
| 46 Bromodichloromethane | 83 | 10.885 | 10.885 | (0.873) | 2323991 | 1000.00 | 1040.47(A) |
| 47 cis-1,3-Dichloropropene | 75 | 11.227 | 11.227 | (0.900) | 2927395 | 1000.00 | 1127.97(A) |
| 48 4-Methyl-2-pentanone | 43 | 11.282 | 11.276 | (0.905) | 3560257 | 2000.00 | 2506.93(A) |
| 49 Toluene | 91 | 11.483 | 11.483 | (0.921) | 7338003 | 1000.00 | 1052.27(A) |
| 50 trans-1,3-Dichloropropene | 75 | 11.617 | 11.617 | (0.932) | 2921781 | 1000.00 | 1119.66(A) |
| 51 1,1,2-Trichloroethane | 97 | 11.763 | 11.763 | (0.943) | 1437191 | 1000.00 | 1032.68(A) |
| 52 Tetrachloroethene | 164 | 11.891 | 11.891 | (0.954) | 1405683 | 1000.00 | 1011.98(A) |
| 53 2-Hexanone | 43 | 11.867 | 11.867 | (0.952) | 2973354 | 2000.00 | 2507.74(A) |
| 54 Dibromochloromethane | 129 | 12.062 | 12.062 | (0.967) | 1817278 | 1000.00 | 1108.27(A) |
| 55 1,2-Dibromoethane | 107 | 12.172 | 12.172 | (0.976) | 1486436 | 1000.00 | 1115.74(A) |
| 56 Chlorobenzene | 112 | 12.489 | 12.489 | (1.001) | 4885490 | 1000.00 | 993.660 |
| 57 Ethylbenzene | 91 | 12.513 | 12.513 | (1.003) | 8711405 | 1000.00 | 1093.89(A) |
| 58 m,p-Xylene | 106 | 12.586 | 12.586 | (1.009) | 3426691 | 1000.00 | 1138.89(A) |
| 59 o-Xylene | 106 | 12.873 | 12.873 | (1.032) | 3218078 | 1000.00 | 1093.89(A) |
| 60 Styrene | 104 | 12.879 | 12.879 | (1.033) | 5507535 | 1000.00 | 1123.36(A) |
| 61 Bromoform | 173 | 13.062 | 13.062 | (0.925) | 1237286 | 1000.00 | 1171.27(A) |
| 62 Isopropylbenzene | 105 | 13.105 | 13.104 | (1.051) | 8653760 | 1000.00 | 1182.58(A) |
| 63 1,1,2,2-Tetrachloroethane | 83 | 13.306 | 13.312 | (1.067) | 2180625 | 1000.00 | 1080.80(A) |

SM 9-28-10

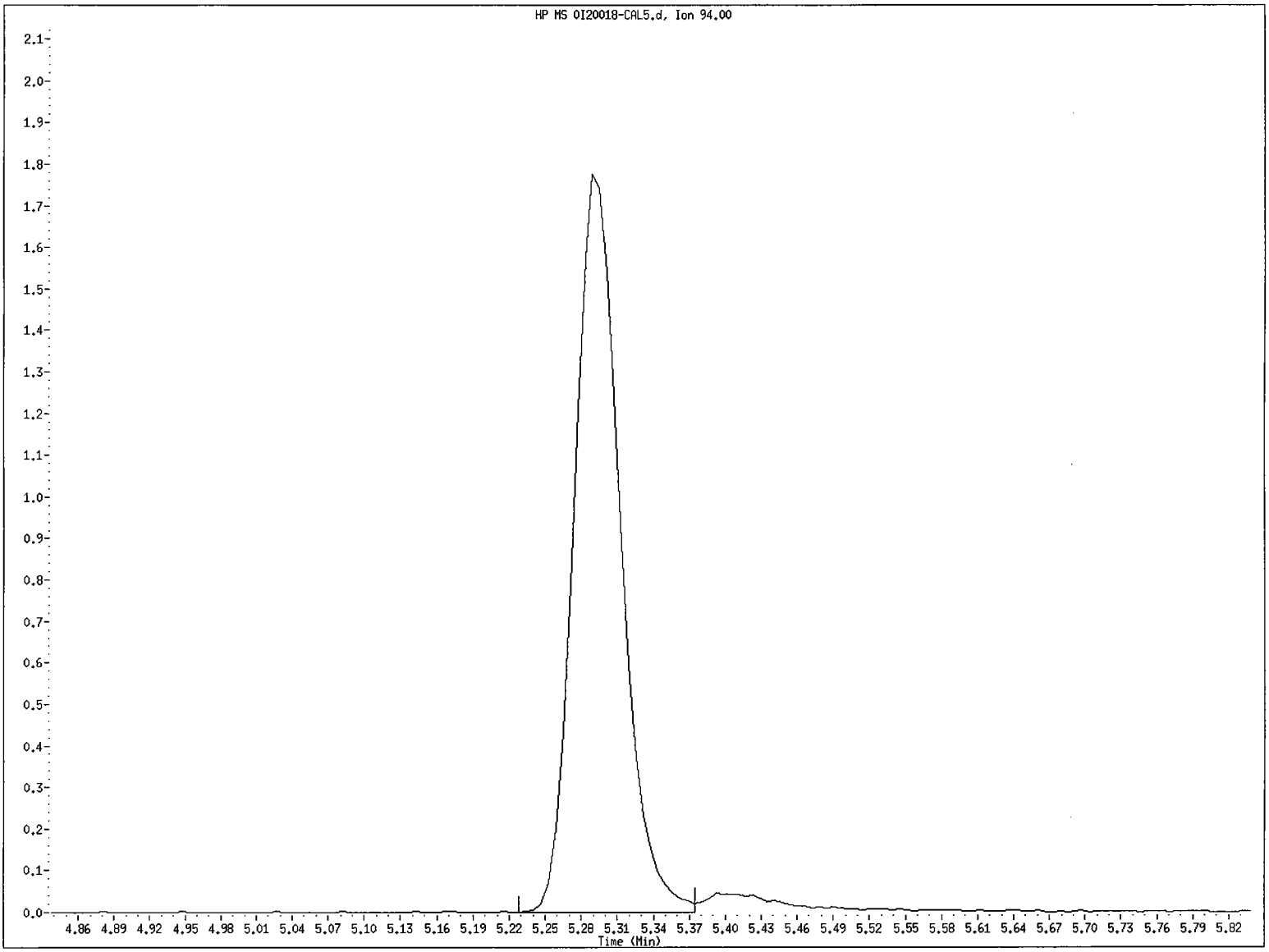
Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL5.d
Report Date: 28-Sep-2010 12:05

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 64 1,3-Dichlorobenzene | 146 | 14.080 | 14.080 | (0.997) | 3916198 | 1000.00 | 1121.75(A) |
| 65 1,4-Dichlorobenzene | 146 | 14.147 | 14.147 | (1.002) | 4099879 | 1000.00 | 1008.62(A) |
| 66 1,2-Dichlorobenzene | 146 | 14.458 | 14.458 | (1.024) | 3792905 | 1000.00 | 1053.35(A) |
| 67 1,2-Dibromo-3-chloropropane | 75 | 15.098 | 15.098 | (1.069) | 474895 | 1000.00 | 1159.53(A) |
| 68 1,2,4-Trichlorobenzene | 180 | 15.933 | 15.933 | (1.128) | 2495176 | 1000.00 | 1150.49(A) |
| 69 1,2,3-Trichlorobenzene | 180 | 16.525 | 16.531 | (1.170) | 2225909 | 1000.00 | 1124.13(A) |

QC Flag Legend

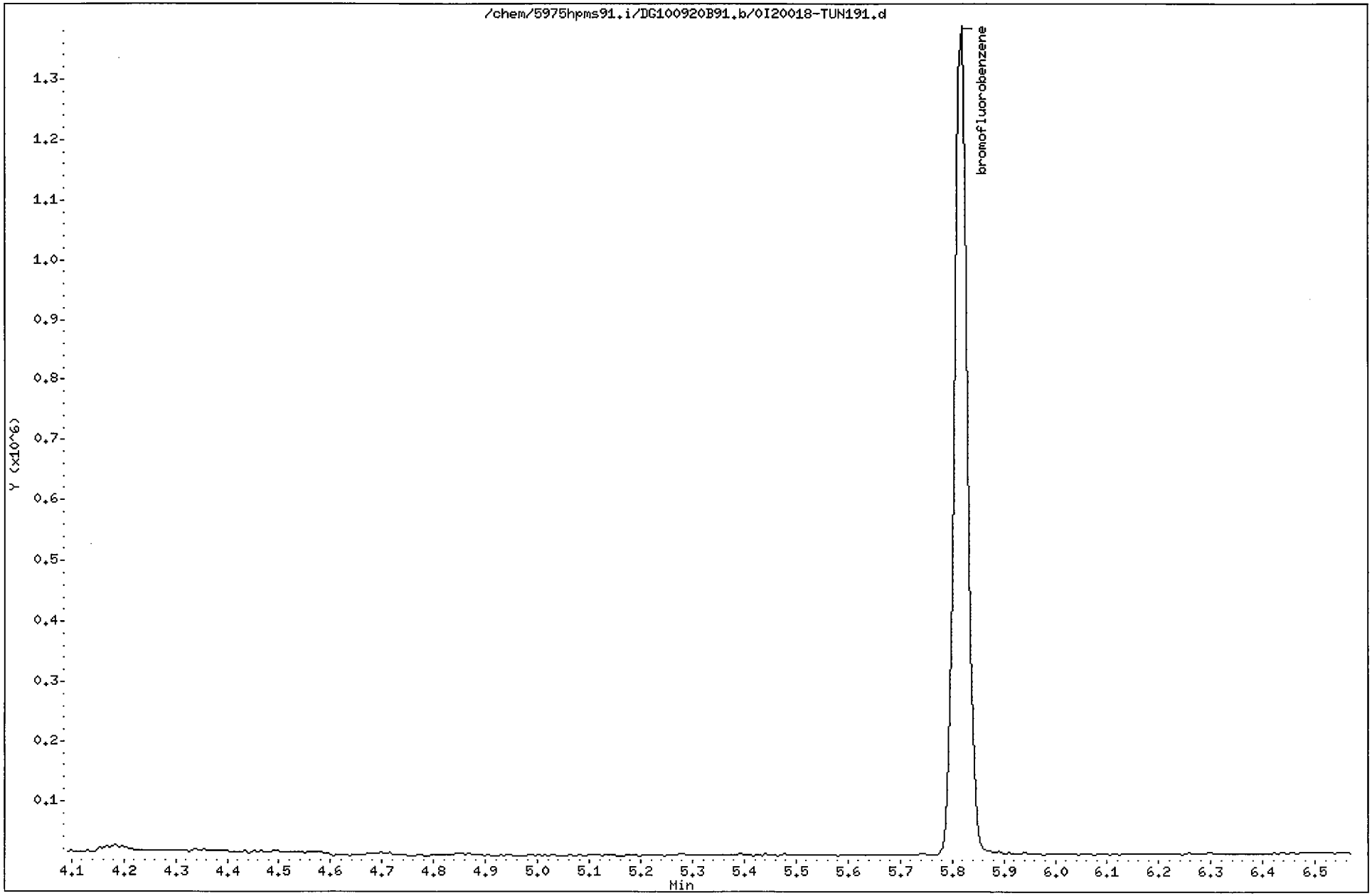
A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Bromomethane CAS Number 74-83-9 Area = 479905  User selected hit




File name: /chem/5975hpms91.i/DG100920B91.b/0I20018-CAL5.d
Client ID: VSTD200FR
Instrument ID: 5975hpms91.i
Injection Date and Time: 21-SEP-2010 01:12
Retention Time: 5.29
Operator ID: TD

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-TUN191.d
Date : 21-SEP-2010 00:00
Client ID: BFBFR
Instrument: 5975hpms91.i
Sample Info: 0I20018-TUN1:TD
Volume Injected (uL): 2.0
Operator: TD
Column phase: SPB-624
Column diameter: 0.32



**COMPUCHEM** a Division of Liberty Analytical Corp
**GC/MS VOLATILE RUN LOG**
COMPUCHEM LOGBOOK 23 BB 8 (5975hpms91)

DATE 9/21/10

INITIAL TIME OF TUNE 0000 SHIFT/S (A)____ (B) X (C)____
TIME TUNE EXPIRES 1200
METHOD: 8260B 8OM012 (Circle one) or Other: WATER + MA1647

PREVENTIVE MAINTENANCE

Tune 0092105

119

| | RETIRED | FILE NAME | RETIRED | pH | Vial | DATE | TIME | Client ID | SDG# | INJ. VOL.* | DF+ | CHEMIST | COMMENTS(ETC.)/ DISPOSITION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | OI20018-TUN1 | / | — | — | 9/21/10 | 0000 | BFBFR | — | 2ml | — | B | WP=SOP |
| 2 | | CAL2 | / | — | — | / / | 0018 | VSTD010 FR | — | 5mL | — | | Wtn Sm |
| 3 | | 1 | / | — | — | / / | 0045 | 005 FR | — | | — | | |
| 4 | | 5 | / | — | — | / / | 0112 | 200 FR | — | | — | | |
| 5 | | 4 | / | — | — | / / | 0140 | 100 FR | — | | — | | |
| 6 | | 3 | / | — | — | / / | 0207 | 050 FR | — | | — | | |
| 7 | / | 1R | RU | — | — | / / | 0234 | 005 FR | — | | — | | |
| 8 | | 0092070-BLK1 | / | — | — | / / | 0301 | VBLK FR | VARIOUS | | — | | |
| 9 | | 1009159-01R | / | 7 | B | / / | 0328 | Y7447 | Y7447 | | — | | |
| 10 | | 02R | / | 7 | | / / | 0355 | Z0 | | | — | | |
| 11 | | 03R | / | 7 | | / / | 0423 | Z1 | | | — | | |
| 12 | | 04R | / | 7 | | / / | 0450 | Z2 | | | — | | |
| 13 | | TA-21-10 05RD | / | 7 | | / / | 0517 | Z3 | TA-21-10 | 2.5mL | 2 | | |
| 14 | | 06R | / | 7 | | / / | 0544 | Z4 | | 5mL | — | | |
| 15 | | 07R | / | 7 | | / / | 0611 | Z5 | | | — | | |
| 16 | | 08R | / | 7 | | / / | 0638 | Z6 | | | — | | |
| 17 | | 09 | / | 1 | A | / / | 0705 | VHBLKYB | | | — | | |
| 18 | | OI20018-CCV1 | / | — | — | / / | 0732 | VSTD050FS | — | | — | | |
| 19 | | CCVIR | / | — | — | / / | 0800 | | — | | — | | Wtn Sm |
| 20 | | | | | | / / | | | | | | | |
| 21 | | | | | | / / | | | | | | | |
| 22 | | | | | | / / | | | | | | | |
| 23 | | | | | | / / | | Sm 9-21-10 | | | | | |
| 24 | | | | | | / / | | | | | | | |

*On-column sample aliquot +Not applicable to soil matrix

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

Tune (ID #7008) Lot No.: 67586
Internal Standard Lot No.: 67623

Calibration Group Code / Lot No.: SO237
Surrogate Lot No.: 67620

REVIEWED BY: Sm

Date 9-21-10

05/03/10:jad

## b. Continuing Calibration Data
## (Form VII VOA-1, VOA-2, VOA-3, VOA- SIM)

If more than one instrument is used, forms shall be arranged in order by instrument. If multiple continuing calibration standards from the same instrument are used, they shall be in chronological order.

(1) Reconstructed Ion Chromatograms and quantitation reports for all continuing (12-hour) calibrations. Spectra not required.

(2) EICPs displaying each manual integration.

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: _____ SDG No.: 1009181

Instrument ID: 5975hpms91 Calibration Date: 09/21/2010 Time: 0800

Lab File ID: 0I20018-CCV1R91.d Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD#####): VSTD050FS Init. Calib. Time(s): 0018 0207

Heated Purge: (Y/N) N GC Column: SPB-624 ID: 0.32 (mm) Length: 60 (m)

Purge Volume: 5.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF50 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.461 | 0.447 | 0.010 | -2.9 | 40.0 |
| Vinyl chloride | 0.410 | 0.406 | 0.100 | -0.9 | 25.0 |
| Chloroethane | 0.221 | 0.217 | 0.010 | -2.0 | 40.0 |
| 1,1-Dichloroethene | 0.276 | 0.264 | 0.100 | -4.3 | 25.0 |
| Methylene chloride | 0.317 | 0.304 | 0.010 | -4.1 | 40.0 |
| trans-1,2-Dichloroethene | 0.435 | 0.441 | 0.010 | 1.4 | 40.0 |
| 1,1-Dichloroethane | 0.766 | 0.766 | 0.200 | 0.1 | 25.0 |
| cis-1,2-Dichloroethene | 0.418 | 0.465 | 0.010 | 11.2 | 40.0 |
| 1,1,1-Trichloroethane | 0.723 | 0.698 | 0.100 | -3.5 | 25.0 |
| Benzene | 1.721 | 1.813 | 0.400 | 5.3 | 25.0 |
| 1,2-Dichloroethane | 0.716 | 0.731 | 0.100 | 2.1 | 25.0 |
| Trichloroethene | 0.399 | 0.399 | 0.300 | -0.1 | 25.0 |

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: _____ SDG No.: 1009181

Instrument ID: 5975hpms91 Calibration Date: 09/21/2010 Time: 0800

Lab File ID: 0I20018-CCV1R91.d Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD#####): VSTD050FS Init. Calib. Time(s): 0018 0207

Heated Purge: (Y/N) N GC Column: SPB-624 ID: 0.32 (mm) Length: 60 (m)

Purge Volume: 5.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF50 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,2-Dichloropropane | 0.447 | 0.462 | 0.010 | 3.4 | 40.0 |
| Tetrachloroethene | 0.382 | 0.375 | 0.100 | -1.7 | 25.0 |
| Chlorobenzene | 1.351 | 1.358 | 0.500 | 0.5 | 25.0 |
| 1,4-Dichlorobenzene | 1.878 | 1.753 | 0.500 | -6.6 | 25.0 |

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: _____ SDG No.: 1009181

Instrument ID: 5975hpms91 Calibration Date: 09/21/2010 Time: 0800

Lab File ID: 0I20018-CCV1R91.d Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD#####): VSTD050FS Init. Calib. Time(s): 0018 0207

Heated Purge: (Y/N) N GC Column: SPB-624 ID: 0.32 (mm) Length: 60 (m)

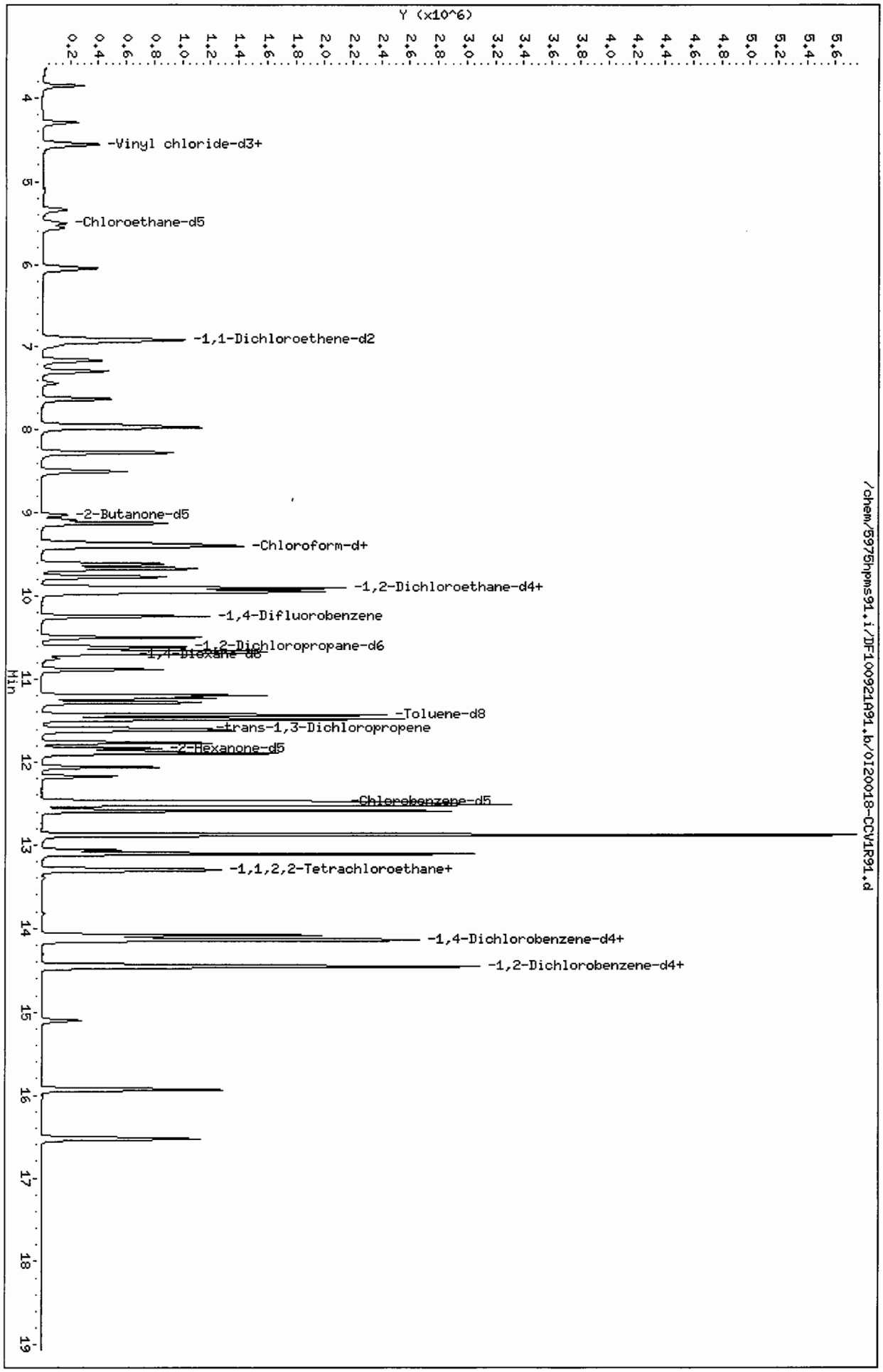
Purge Volume: 5.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF50 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Vinyl chloride-d3 | 0.449 | 0.434 | 0.010 | -3.5 | 25.0 |
| Chloroethane-d5 | 0.300 | 0.289 | 0.010 | -3.9 | 40.0 |
| 1,1-Dichloroethene-d2 | 0.753 | 0.705 | 0.010 | -6.4 | 25.0 |
| 2-Butanone-d5 | 0.150 | 0.129 | 0.010 | -13.6 | 40.0 |
| Chloroform-d | 0.965 | 0.950 | 0.010 | -1.5 | 25.0 |
| 1,2-Dichloroethane-d4 | 0.588 | 0.578 | 0.010 | -1.7 | 25.0 |
| Benzene-d6 | 1.672 | 1.728 | 0.010 | 3.3 | 25.0 |
| 1,2-Dichloropropane-d6 | 0.482 | 0.491 | 0.010 | 1.9 | 40.0 |
| Toluene-d8 | 1.585 | 1.655 | 0.010 | 4.4 | 25.0 |
| trans-1,3-Dichloropropene-d4 | 0.635 | 0.635 | 0.010 | 0.0 | 25.0 |
| 2-Hexanone-d5 | 0.137 | 0.141 | 0.010 | 3.5 | 40.0 |
| 1,4-Dioxane-d8 | 0.004 | 0.004 | 0.005 | 1.9 | 50.0 |
| 1,1,2,2-Tetrachloroethane-d2 | 0.583 | 0.562 | 0.010 | -3.5 | 25.0 |
| 1,2-Dichlorobenzene-d4 | 1.104 | 1.068 | 0.010 | -3.3 | 25.0 |

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: /chem/5975hpms91.i/DF100921A91.b/OI20018-CCV1R91.d
Date : 21-SEP-2010 08:00
Client ID: VSTD050FS
Sample Info: OI20018-CCV1:TD
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: TD
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DF100921A91.b/0I20018-CCV1R91.d
Report Date: 28-Sep-2010 12:06

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/0I20018-CCV1R91.d
Lab Smp Id: 0I20018-CCV1 Client Smp ID: VSTD050FS
Inj Date : 21-SEP-2010 08:00
Operator : TD Inst ID: 5975hpms91.i
Smp Info : 0I20018-CCV1:TD
Misc Info : VSTD050FS
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 817818 | 250.000 | |
| * 2 Chlorobenzene-d5 | 117 | 12.470 | 12.470 | (1.000) | 855823 | 250.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 14.123 | 14.123 | (1.000) | 515018 | 250.000 | |
| $ 4 Vinyl chloride-d3 | 65 | 4.551 | 4.551 | (0.444) | 354593 | 250.000 | 241.310 |
| $ 5 Chloroethane-d5 | 69 | 5.502 | 5.502 | (0.537) | 236099 | 250.000 | 240.345 |
| $ 6 1,1-Dichloroethene-d2 | 63 | 6.917 | 6.917 | (0.675) | 576488 | 250.000 | 234.079 |
| $ 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 211514 | 500.000 | 431.966 |
| $ 8 Chloroform-d | 84 | 9.386 | 9.386 | (0.916) | 776945 | 250.000 | 246.168 |
| $ 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 472601 | 250.000 | 245.726 |
| $ 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 1478691 | 250.000 | 258.275 |
| $ 11 1,2-Dichloropropane-d6 | 67 | 10.611 | 10.611 | (0.851) | 420235 | 250.000 | 254.679 |
| $ 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 1416119 | 250.000 | 260.915 |
| $ 13 trans-1,3-Dichloropropene-d4 | 79 | 11.593 | 11.593 | (0.930) | 543777 | 250.000 | 250.094 |
| $ 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 241982 | 500.000 | 517.656 |
| $ 15 1,4-Dioxane-d8 | 96 | 10.702 | 10.702 | (1.045) | 71335 | 5000.00 | 5097.27 |
| $ 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 481233 | 250.000 | 241.258 |

Am 9-28-10

Data File: /chem/5975hpms91.i/DF100921A91.b/0I20018-CCV1R91.d
Report Date: 28-Sep-2010 12:06

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 549859 | 250.000 | 241.801 |
| 18 Dichlorodifluoromethane | 85 | 3.856 | 3.856 | (0.376) | 365868 | 250.000 | 242.849 |
| 19 Chloromethane | 50 | 4.295 | 4.295 | (0.419) | 338408 | 250.000 | 240.440 |
| 20 Vinyl chloride | 62 | 4.570 | 4.570 | (0.446) | 332151 | 250.000 | 247.869 |
| 21 Bromomethane | 94 | 5.338 | 5.338 | (0.521) | 168835 | 250.000 | 251.770 |
| 22 Chloroethane | 64 | 5.557 | 5.557 | (0.542) | 177103 | 250.000 | 244.989 |
| 23 Trichlorofluoromethane | 101 | 6.045 | 6.045 | (0.590) | 499149 | 250.000 | 243.698 |
| 24 1,1-Dichloroethene | 96 | 6.935 | 6.935 | (0.677) | 215905 | 250.000 | 239.159 |
| 25 1,1,2-Trichloro-1,2,2-trifluo | 101 | 6.898 | 6.898 | (0.673) | 228069 | 250.000 | 241.904 |
| 26 Acetone | 43 | 6.984 | 6.984 | (0.682) | 153479 | 500.000 | 446.277 |
| 27 Carbon disulfide | 76 | 7.295 | 7.295 | (0.712) | 795709 | 250.000 | 243.977 |
| 28 Methyl acetate | 43 | 7.441 | 7.441 | (0.726) | 165719 | 250.000 | 240.281 |
| 29 Methylene chloride | 84 | 7.630 | 7.630 | (0.745) | 248299 | 250.000 | 239.787 |
| 30 trans-1,2-Dichloroethene | 96 | 7.977 | 7.977 | (0.779) | 360609 | 250.000 | 253.609 |
| 31 Methyl tert-butyl ether | 73 | 7.953 | 7.953 | (0.776) | 786228 | 250.000 | 258.370 |
| 32 1,1-Dichloroethane | 63 | 8.502 | 8.502 | (0.830) | 626626 | 250.000 | 250.196 |
| 33 cis-1,2-Dichloroethene | 96 | 9.124 | 9.124 | (0.891) | 380306 | 250.000 | 278.027 |
| 34 2-Butanone | 43 | 9.087 | 9.087 | (0.887) | 292038 | 500.000 | 523.854 |
| 35 Bromochloromethane | 128 | 9.361 | 9.361 | (0.914) | 169400 | 250.000 | 253.098 |
| 36 Chloroform | 83 | 9.410 | 9.410 | (0.918) | 725303 | 250.000 | 253.613 |
| 37 1,1,1-Trichloroethane | 97 | 9.617 | 9.617 | (0.771) | 597154 | 250.000 | 241.143 |
| 38 Cyclohexane | 56 | 9.672 | 9.672 | (0.776) | 453879 | 250.000 | 282.524 |
| 39 Carbon tetrachloride | 117 | 9.770 | 9.770 | (0.783) | 545075 | 250.000 | 240.192 |
| 40 Benzene | 78 | 9.940 | 9.940 | (0.797) | 1551741 | 250.000 | 263.350 |
| 41 1,2-Dichloroethane | 62 | 9.959 | 9.959 | (0.972) | 597514 | 250.000 | 255.251 |
| 42 1,4-Dioxane | 88 | 10.751 | 10.751 | (1.049) | 71809 | 5000.00 | 4949.23 |
| 43 Trichloroethene | 95 | 10.495 | 10.495 | (0.842) | 341519 | 250.000 | 249.732 |
| 44 Methylcyclohexane | 83 | 10.666 | 10.666 | (0.855) | 525207 | 250.000 | 268.827 |
| 45 1,2-Dichloropropane | 63 | 10.684 | 10.684 | (0.857) | 395273 | 250.000 | 258.484 |
| 46 Bromodichloromethane | 83 | 10.885 | 10.885 | (0.873) | 528206 | 250.000 | 251.447 |
| 47 cis-1,3-Dichloropropene | 75 | 11.227 | 11.227 | (0.900) | 648053 | 250.000 | 265.505 |
| 48 4-Methyl-2-pentanone | 43 | 11.276 | 11.276 | (0.904) | 701687 | 500.000 | 525.354 |
| 49 Toluene | 91 | 11.483 | 11.483 | (0.921) | 1704443 | 250.000 | 259.885 |
| 50 trans-1,3-Dichloropropene | 75 | 11.617 | 11.617 | (0.932) | 639518 | 250.000 | 260.578 |
| 51 1,1,2-Trichloroethane | 97 | 11.763 | 11.763 | (0.943) | 329137 | 250.000 | 251.464 |
| 52 Tetrachloroethene | 164 | 11.891 | 11.891 | (0.954) | 320916 | 250.000 | 245.653 |
| 53 2-Hexanone | 43 | 11.867 | 11.867 | (0.952) | 586345 | 500.000 | 525.819 |
| 54 Dibromochloromethane | 129 | 12.062 | 12.062 | (0.967) | 394323 | 250.000 | 255.695 |
| 55 1,2-Dibromoethane | 107 | 12.172 | 12.172 | (0.976) | 313281 | 250.000 | 250.034 |
| 56 Chlorobenzene | 112 | 12.489 | 12.489 | (1.001) | 1162111 | 250.000 | 251.319 |
| 57 Ethylbenzene | 91 | 12.513 | 12.513 | (1.003) | 1961773 | 250.000 | 261.929 |
| 58 m,p-Xylene | 106 | 12.586 | 12.586 | (1.009) | 756169 | 250.000 | 267.222 |
| 59 o-Xylene | 106 | 12.873 | 12.873 | (1.032) | 779825 | 250.000 | 281.854 |
| 60 Styrene | 104 | 12.879 | 12.879 | (1.033) | 1291500 | 250.000 | 280.095 |
| 61 Bromoform | 173 | 13.062 | 13.062 | (0.925) | 247367 | 250.000 | 246.043 |
| 62 Isopropylbenzene | 105 | 13.104 | 13.104 | (1.051) | 1860435 | 250.000 | 270.325 |
| 63 1,1,2,2-Tetrachloroethane | 83 | 13.312 | 13.312 | (1.067) | 473505 | 250.000 | 249.537 |

Data File: /chem/5975hpms91.i/DF100921A91.b/0I20018-CCV1R91.d
Report Date: 28-Sep-2010 12:06

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 64 1,3-Dichlorobenzene | 146 | 14.080 | 14.080 | (0.997) | 805630 | 250.000 | 242.464 |
| 65 1,4-Dichlorobenzene | 146 | 14.147 | 14.147 | (1.002) | 902969 | 250.000 | 233.405 |
| 66 1,2-Dichlorobenzene | 146 | 14.458 | 14.458 | (1.024) | 856242 | 250.000 | 249.851 |
| 67 1,2-Dibromo-3-chloropropane | 75 | 15.098 | 15.098 | (1.069) | 91926 | 250.000 | 235.834 |
| 68 1,2,4-Trichlorobenzene | 180 | 15.933 | 15.933 | (1.128) | 483845 | 250.000 | 234.406 |
| 69 1,2,3-Trichlorobenzene | 180 | 16.531 | 16.531 | (1.171) | 460740 | 250.000 | 244.483 |

**COMPUCHEM** a Division of Liberty Analytical Corp
**GC/MS VOLATILE RUN LOG**
COMPUCHEM LOGBOOK 23 BB 8 (5975hpms91)

DATE 9/21/10

INITIAL TIME OF TUNE 0800 SHIFT/S (A) ✓ (B) ____ (C) ____
TIME TUNE EXPIRES 2000
METHOD: 8260B SOM01.2 (Circle one) or Other: H2O-Med

PREVENTIVE MAINTENANCE None

| | REPEAT | FILE NAME | REPEAT | pH | Vial | DATE | TIME | Client ID | SDG# | INJ. VOL.* | DF+ | CHEMIST | COMMENTS(ETC.) DISPOSITION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | OI20018-CCVIR | / | – | – | 9/21/10 | 0800 | VSTD050FS | – | 5mL | – | TD | LCD=SCD |
| 2 | | 0092101-BLK1 | / | – | – | / / | 0855 | VBLKFS | Various | ↓ | – | STM | |
| 3 | | 0092101-BLK1R | / | – | – | / / | 0922 | ↓ | ↓ | ↓ | – | ↓ | |
| 4 | | 1009181-01R | / | 1 | B | / / | 1038 | S-1 | 1009181 | 5mL | – | ↓ | |
| 5 | | 1009181-02R | / | 1 | B | / / | 1105 | S-2 | ↓ | ↓ | – | ↓ | |
| 6 | | 1009181-03R | / | 1 | B | / / | 1133 | S-3 | ↓ | ↓ | – | ↓ | |
| 7 | | 1009181-04R | / | 1 | B | / / | 1200 | S-4 | ↓ | ↓ | – | ↓ | |
| 8 | | 1009181-05R | / | 1 | B | / / | 1227 | S-5 | ↓ | ↓ | – | ↓ | |
| 9 | | 1009181-06R | / | 1 | B | / / | 1254 | S-6 | ↓ | ↓ | – | ↓ | |
| 10 | | 1009181-07 | / | 1 | A | / / | 1321 | Trip Blank | ↓ | ↓ | – | ↓ | |
| 11 | | 1009181-08 | / | 1 | A | / / | 1348 | VHBLKXF | ↓ | ↓ | – | ↓ | |
| 12 | / | 0092101-BLK2 | SL | – | – | / / | 1437 | VBLKFT | Various | 100ul/5mL | – | ↓ | MEOH#50172 |
| 13 | / | 0092101-BLK2R | SL | – | – | / / | 1505 | VBLKFT | ↓ | ↓ | – | ↓ | ↓ |
| 14 | | 0092101-BLK2R2 | / | – | – | / / | 1546 | VBLKFT | ↓ | ↓ | – | ↓ | ↓ |
| 15 | | 1009118-8D | / | – | B | / / | 1630 | JD020 | JCZY6 | 100ul | 5.39 | ↓ | |
| 16 | | 1009187-04D | / | – | C | / / | 1700 | B8606 | B8C98 | ↓ | 4.35 | ↓ | |
| 17 | | 1009187-05D | / | – | C | / / | 1727 | B8607 | ↓ | ↓ | 4.31 | ↓ | |
| 18 | | 1009187-06D | / | – | C | / / | 1754 | B8608 | ↓ | ↓ | 5.04 | ↓ | |
| 19 | / | OI20018-CCV2 | OT | – | ~~C~~ | / / | 1822 | VSTD050FU | – | 5mL | – | ↓ | not use wtn B |
| 20 | | OI20018-CCV2R | / | – | – | / / | 1849 | VSTD050FU | – | 5mL | – | ↓ | ↓ |
| 21 | | | | | | / / | | | | | | | |
| 22 | | | | | | / / | | | | | | | |
| 23 | | | | | | / / | | | | | | | TB 9-21-10 |
| 24 | | | | | | / / | | | | | | | |

*On-column sample aliquot +~~Not applicable to soil matrix~~

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

Tune (ID #7008) Lot No.: –
Internal Standard Lot No.: 67623

Calibration Group Code / Lot No.: 50237
Surrogate Lot No.: 67620

REVIEWED BY: TB

Date 9-21-10

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: _____ SDG No.: 1009181

Instrument ID: 5975hpms91 Calibration Date: 09/21/2010 Time: 1849

Lab File ID: 0I20018-CCV2R91.d Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD#####): VSTD050FU Init. Calib. Time(s): 0018 0207

Heated Purge: (Y/N) N GC Column: SPB-624 ID: 0.32 (mm) Length: 60 (m)

Purge Volume: 5.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF50 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.461 | 0.412 | 0.010 | -10.6 | 50.0 |
| Vinyl chloride | 0.410 | 0.350 | 0.010 | -14.5 | 50.0 |
| Chloroethane | 0.221 | 0.191 | 0.010 | -13.4 | 50.0 |
| 1,1-Dichloroethene | 0.276 | 0.225 | 0.010 | -18.6 | 50.0 |
| Methylene chloride | 0.317 | 0.266 | 0.010 | -15.9 | 50.0 |
| trans-1,2-Dichloroethene | 0.435 | 0.413 | 0.010 | -5.0 | 50.0 |
| 1,1-Dichloroethane | 0.766 | 0.720 | 0.010 | -5.9 | 50.0 |
| cis-1,2-Dichloroethene | 0.418 | 0.439 | 0.010 | 4.9 | 50.0 |
| 1,1,1-Trichloroethane | 0.723 | 0.670 | 0.010 | -7.4 | 50.0 |
| Benzene | 1.721 | 1.714 | 0.010 | -0.4 | 50.0 |
| 1,2-Dichloroethane | 0.716 | 0.710 | 0.010 | -0.8 | 50.0 |
| Trichloroethene | 0.399 | 0.372 | 0.010 | -7.0 | 50.0 |

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: _____ SDG No.: 1009181

Instrument ID: 5975hpms91 Calibration Date: 09/21/2010 Time: 1849

Lab File ID: 0I20018-CCV2R91.d Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD#####): VSTD050FU Init. Calib. Time(s): 0018 0207

Heated Purge: (Y/N) N GC Column: SPB-624 ID: 0.32 (mm) Length: 60 (m)

Purge Volume: 5.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF50 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,2-Dichloropropane | 0.447 | 0.438 | 0.010 | -1.9 | 50.0 |
| Tetrachloroethene | 0.382 | 0.357 | 0.010 | -6.5 | 50.0 |
| Chlorobenzene | 1.351 | 1.298 | 0.010 | -3.9 | 50.0 |
| 1,4-Dichlorobenzene | 1.878 | 1.779 | 0.010 | -5.3 | 50.0 |

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: _____ SDG No.: 1009181

Instrument ID: 5975hpms91 Calibration Date: 09/21/2010 Time: 1849

Lab File ID: 0I20018-CCV2R91.d Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD#####): VSTD050FU Init. Calib. Time(s): 0018 0207

Heated Purge: (Y/N) N GC Column: SPB-624 ID: 0.32 (mm) Length: 60 (m)

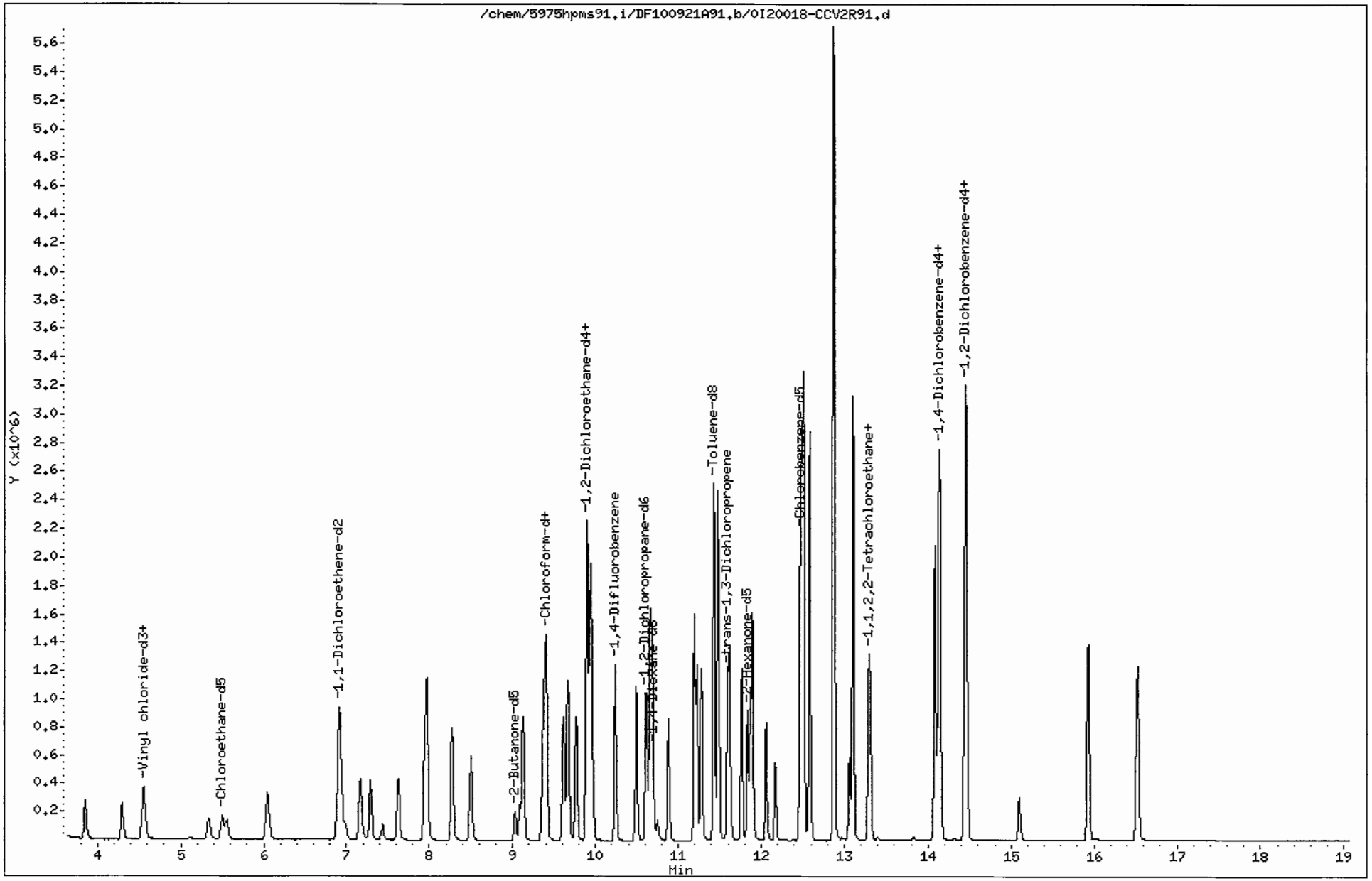
Purge Volume: 5.0 (mL)

| COMPOUND | $\overline{RRF}$ | RRF50 | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| Vinyl chloride-d3 | 0.449 | 0.406 | 0.010 | -9.6 | 50.0 |
| Chloroethane-d5 | 0.300 | 0.265 | 0.010 | -11.6 | 50.0 |
| 1,1-Dichloroethene-d2 | 0.753 | 0.643 | 0.010 | -14.6 | 50.0 |
| 2-Butanone-d5 | 0.150 | 0.135 | 0.010 | -9.8 | 50.0 |
| Chloroform-d | 0.965 | 0.956 | 0.010 | -1.0 | 50.0 |
| 1,2-Dichloroethane-d4 | 0.588 | 0.583 | 0.010 | -0.8 | 50.0 |
| Benzene-d6 | 1.672 | 1.756 | 0.010 | 5.0 | 50.0 |
| 1,2-Dichloropropane-d6 | 0.482 | 0.493 | 0.010 | 2.4 | 50.0 |
| Toluene-d8 | 1.585 | 1.658 | 0.010 | 4.6 | 50.0 |
| trans-1,3-Dichloropropene-d4 | 0.635 | 0.639 | 0.010 | 0.6 | 50.0 |
| 2-Hexanone-d5 | 0.137 | 0.150 | 0.010 | 9.5 | 50.0 |
| 1,4-Dioxane-d8 | 0.004 | 0.005 | 0.0050 | 7.6 | 50.0 |
| 1,1,2,2-Tetrachloroethane-d2 | 0.583 | 0.574 | 0.010 | -1.5 | 50.0 |
| 1,2-Dichlorobenzene-d4 | 1.104 | 1.067 | 0.010 | -3.4 | 50.0 |

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: /chem/5975hpms91.i/DF100921A91.b/0I20018-CCV2R91.d
Date : 21-SEP-2010 18:49
Client ID: VSTD050FU
Sample Info: 0I20018-CCV2:STM
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: STM
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DF100921A91.b/0I20018-CCV2R91.d
Report Date: 28-Sep-2010 12:06

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/0I20018-CCV2R91.d
Lab Smp Id: 0I20018-CCV2 Client Smp ID: VSTD050FU
Inj Date : 21-SEP-2010 18:49
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 0I20018-CCV2:STM
Misc Info : VSTD050FU
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 20 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 847994 | 250.000 | |
| * 2 Chlorobenzene-d5 | 117 | 12.470 | 12.470 | (1.000) | 879418 | 250.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 14.123 | 14.123 | (1.000) | 526385 | 250.000 | |
| $ 4 Vinyl chloride-d3 | 65 | 4.545 | 4.551 | (0.444) | 344392 | 250.000 | 226.028 |
| $ 5 Chloroethane-d5 | 69 | 5.496 | 5.502 | (0.536) | 225134 | 250.000 | 221.027 |
| $ 6 1,1-Dichloroethene-d2 | 63 | 6.911 | 6.917 | (0.675) | 545328 | 250.000 | 213.547 |
| $ 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 229108 | 500.000 | 451.248 |
| $ 8 Chloroform-d | 84 | 9.392 | 9.386 | (0.917) | 810348 | 250.000 | 247.615 |
| $ 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 494681 | 250.000 | 248.054 |
| $ 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 1543978 | 250.000 | 262.442 |
| $ 11 1,2-Dichloropropane-d6 | 67 | 10.611 | 10.611 | (0.851) | 433991 | 250.000 | 255.959 |
| $ 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 1457726 | 250.000 | 261.375 |
| $ 13 trans-1,3-Dichloropropene-d4 | 79 | 11.593 | 11.593 | (0.930) | 561703 | 250.000 | 251.408 |
| $ 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 263030 | 500.000 | 547.586 |
| $ 15 1,4-Dioxane-d8 | 96 | 10.702 | 10.702 | (1.045) | 78066 | 5000.00 | 5379.73 |
| $ 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 504656 | 250.000 | 246.212 |

Sm 9/28/10

Data File: /chem/5975hpms91.i/DF100921A91.b/0I20018-CCV2R91.d
Report Date: 28-Sep-2010 12:06

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 561585 | 250.000 | 241.625 |
| 18 Dichlorodifluoromethane | 85 | 3.856 | 3.856 | (0.376) | 349323 | 250.000 | 223.616 |
| 19 Chloromethane | 50 | 4.295 | 4.295 | (0.419) | 333183 | 250.000 | 228.304 |
| 20 Vinyl chloride | 62 | 4.563 | 4.570 | (0.445) | 296962 | 250.000 | 213.723 |
| 21 Bromomethane | 94 | 5.338 | 5.338 | (0.521) | 146433 | 250.000 | 210.593 |
| 22 Chloroethane | 64 | 5.557 | 5.557 | (0.542) | 162203 | 250.000 | 216.394 |
| 23 Trichlorofluoromethane | 101 | 6.045 | 6.045 | (0.590) | 439651 | 250.000 | 207.011 |
| 24 1,1-Dichloroethene | 96 | 6.935 | 6.935 | (0.677) | 190529 | 250.000 | 203.540 |
| 25 1,1,2-Trichloro-1,2,2-trifluo | 101 | 6.898 | 6.898 | (0.673) | 207795 | 250.000 | 212.557 |
| 26 Acetone | 43 | 6.984 | 6.984 | (0.682) | 154941 | 500.000 | 434.496 |
| 27 Carbon disulfide | 76 | 7.289 | 7.295 | (0.711) | 696256 | 250.000 | 205.886 |
| 28 Methyl acetate | 43 | 7.435 | 7.441 | (0.726) | 163892 | 250.000 | 229.177 |
| 29 Methylene chloride | 84 | 7.630 | 7.630 | (0.745) | 225646 | 250.000 | 210.156 |
| 30 trans-1,2-Dichloroethene | 96 | 7.977 | 7.977 | (0.779) | 350184 | 250.000 | 237.513 |
| 31 Methyl tert-butyl ether | 73 | 7.953 | 7.953 | (0.776) | 819708 | 250.000 | 259.786 |
| 32 1,1-Dichloroethane | 63 | 8.502 | 8.502 | (0.830) | 610843 | 250.000 | 235.215 |
| 33 cis-1,2-Dichloroethene | 96 | 9.130 | 9.124 | (0.891) | 371906 | 250.000 | 262.211 |
| 34 2-Butanone | 43 | 9.087 | 9.087 | (0.887) | 305664 | 500.000 | 528.785 |
| 35 Bromochloromethane | 128 | 9.361 | 9.361 | (0.914) | 170740 | 250.000 | 246.022 |
| 36 Chloroform | 83 | 9.410 | 9.410 | (0.918) | 718259 | 250.000 | 242.212 |
| 37 1,1,1-Trichloroethane | 97 | 9.617 | 9.617 | (0.771) | 589164 | 250.000 | 231.533 |
| 38 Cyclohexane | 56 | 9.672 | 9.672 | (0.776) | 461338 | 250.000 | 279.462 |
| 39 Carbon tetrachloride | 117 | 9.770 | 9.770 | (0.783) | 539931 | 250.000 | 231.542 |
| 40 Benzene | 78 | 9.940 | 9.940 | (0.797) | 1507613 | 250.000 | 248.996 |
| 41 1,2-Dichloroethane | 62 | 9.965 | 9.959 | (0.973) | 601716 | 250.000 | 247.899 |
| 42 1,4-Dioxane | 88 | 10.751 | 10.751 | (1.049) | 82081 | 5000.00 | 5455.90 |
| 43 Trichloroethene | 95 | 10.495 | 10.495 | (0.842) | 326766 | 250.000 | 232.533 |
| 44 Methylcyclohexane | 83 | 10.666 | 10.666 | (0.855) | 538013 | 250.000 | 267.993 |
| 45 1,2-Dichloropropane | 63 | 10.684 | 10.684 | (0.857) | 385404 | 250.000 | 245.269 |
| 46 Bromodichloromethane | 83 | 10.885 | 10.885 | (0.873) | 524748 | 250.000 | 243.098 |
| 47 cis-1,3-Dichloropropene | 75 | 11.227 | 11.227 | (0.900) | 646356 | 250.000 | 257.705 |
| 48 4-Methyl-2-pentanone | 43 | 11.276 | 11.276 | (0.904) | 736264 | 500.000 | 536.452 |
| 49 Toluene | 91 | 11.483 | 11.483 | (0.921) | 1651026 | 250.000 | 244.985 |
| 50 trans-1,3-Dichloropropene | 75 | 11.617 | 11.617 | (0.932) | 636456 | 250.000 | 252.373 |
| 51 1,1,2-Trichloroethane | 97 | 11.763 | 11.763 | (0.943) | 336776 | 250.000 | 250.396 |
| 52 Tetrachloroethene | 164 | 11.891 | 11.891 | (0.954) | 313726 | 250.000 | 233.706 |
| 53 2-Hexanone | 43 | 11.867 | 11.867 | (0.952) | 606317 | 500.000 | 529.141 |
| 54 Dibromochloromethane | 129 | 12.062 | 12.062 | (0.967) | 390654 | 250.000 | 246.520 |
| 55 1,2-Dibromoethane | 107 | 12.172 | 12.172 | (0.976) | 321265 | 250.000 | 249.527 |
| 56 Chlorobenzene | 112 | 12.489 | 12.489 | (1.001) | 1141188 | 250.000 | 240.172 |
| 57 Ethylbenzene | 91 | 12.513 | 12.513 | (1.003) | 1961602 | 250.000 | 254.879 |
| 58 m,p-Xylene | 106 | 12.586 | 12.586 | (1.009) | 754512 | 250.000 | 259.482 |
| 59 o-Xylene | 106 | 12.873 | 12.873 | (1.032) | 779818 | 250.000 | 274.289 |
| 60 Styrene | 104 | 12.879 | 12.879 | (1.033) | 1280534 | 250.000 | 270.265 |
| 61 Bromoform | 173 | 13.062 | 13.062 | (0.925) | 254598 | 250.000 | 247.767 |
| 62 Isopropylbenzene | 105 | 13.104 | 13.104 | (1.051) | 1924901 | 250.000 | 272.188 |
| 63 1,1,2,2-Tetrachloroethane | 83 | 13.306 | 13.312 | (1.067) | 492867 | 250.000 | 252.772 |

Data File: /chem/5975hpms91.i/DF100921A91.b/0I20018-CCV2R91.d
Report Date: 28-Sep-2010 12:06

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | AMOUNTS CAL-AMT ( ng) | AMOUNTS ON-COL ( ng) |
|---|---|---|---|---|---|---|---|
| 64 1,3-Dichlorobenzene | 146 | 14.080 | 14.080 | (0.997) | 844296 | 250.000 | 248.614 |
| 65 1,4-Dichlorobenzene | 146 | 14.147 | 14.147 | (1.002) | 936441 | 250.000 | 236.830 |
| 66 1,2-Dichlorobenzene | 146 | 14.458 | 14.458 | (1.024) | 890579 | 250.000 | 254.258 |
| 67 1,2-Dibromo-3-chloropropane | 75 | 15.098 | 15.098 | (1.069) | 96257 | 250.000 | 241.614 |
| 68 1,2,4-Trichlorobenzene | 180 | 15.933 | 15.933 | (1.128) | 513984 | 250.000 | 243.630 |
| 69 1,2,3-Trichlorobenzene | 180 | 16.531 | 16.531 | (1.171) | 504634 | 250.000 | 261.991 |

4. Raw QC Data

   a. BFB Data

   b. Blank Data

   c. Matrix Spike Data

   d. Matrix Spike Duplicate Data

# a. BFB Data

BFB shall be arranged in chronological order, by instrument. For each 12 hour period, include:

- Bar Graph spectrum and Tabulated Relative Abundances

- Mass listing

- Reconstructed total ion chromatogram

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-TUN191.d

Date : 21-SEP-2010 00:00

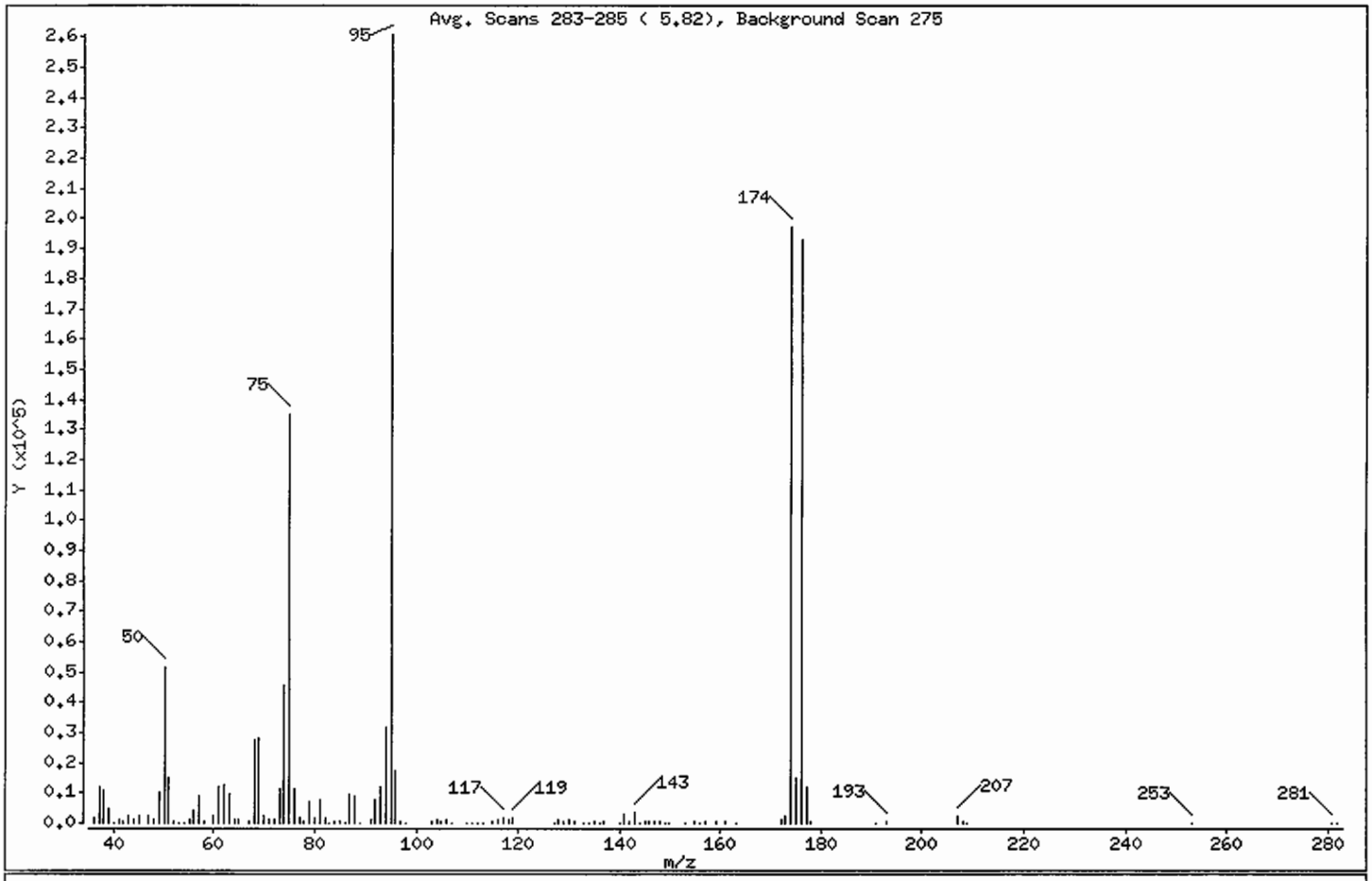
Client ID: BFBFR | Instrument: 5975hpms91.i

Sample Info: 0I20018-TUN1:TD

Volume Injected (uL): 2.0 | Operator: TD

Column phase: SPB-624 | Column diameter: 0.32

1 bromofluorobenzene




| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 95 | Base Peak, 100% relative abundance | 100.00 |
| 50 | 15.00 - 40.00% of mass 95 | 19.73 |
| 75 | 30.00 - 80.00% of mass 95 | 51.78 |
| 96 | 5.00 - 9.00% of mass 95 | 6.75 |
| 173 | Less than 2.00% of mass 174 | 0.84 ( 1.11) |
| 174 | 50.00 - 120.00% of mass 95 | 75.61 |
| 175 | 5.00 - 9.00% of mass 174 | 5.75 ( 7.60) |
| 176 | 95.00 - 101.00% of mass 174 | 73.94 ( 97.78) |
| 177 | 5.00 - 9.00% of mass 176 | 4.69 ( 6.34) |

Data File: /chem/5975hpms91.i/DG100920B91.b/0I20018-TUN191.d

Date : 21-SEP-2010 00:00

Client ID: BFBFR | Instrument: 5975hpms91.i

Sample Info: 0I20018-TUN1:TD

Volume Injected (uL): 2.0 | Operator: TD

Column phase: SPB-624 | Column diameter: 0.32

Data File: 0I20018-TUN191.d
Spectrum: Avg. Scans 283-285 ( 5.82), Background Scan 275
Location of Maximum: 95.00
Number of points: 116

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 1908 | 69.00 | 28056 | 104.00 | 1380 | 147.00 | 503 |
| 37.00 | 11952 | 70.00 | 2585 | 105.00 | 503 | 148.00 | 709 |
| 38.00 | 10768 | 71.00 | 957 | 106.00 | 1325 | 149.00 | 128 |
| 39.00 | 4803 | 72.00 | 1308 | 107.00 | 202 | 150.00 | 207 |
| 40.00 | 220 | 73.00 | 11310 | 110.00 | 198 | 153.00 | 116 |
| 41.00 | 1413 | 74.00 | 45704 | 111.00 | 244 | 155.00 | 536 |
| 42.00 | 477 | 75.00 | 135040 | 112.00 | 286 | 156.00 | 91 |
| 43.00 | 2125 | 76.00 | 11447 | 113.00 | 298 | 157.00 | 457 |
| 44.00 | 1400 | 77.00 | 1778 | 115.00 | 489 | 159.00 | 392 |
| 45.00 | 2409 | 78.00 | 860 | 116.00 | 968 | 161.00 | 457 |
| 47.00 | 2587 | 79.00 | 7435 | 117.00 | 1898 | 163.00 | 96 |
| 48.00 | 1352 | 80.00 | 2008 | 118.00 | 965 | 172.00 | 1331 |
| 49.00 | 9910 | 81.00 | 7644 | 119.00 | 1629 | 173.00 | 2184 |
| 50.00 | 51472 | 82.00 | 1682 | 127.00 | 91 | 174.00 | 197248 |
| 51.00 | 14996 | 83.00 | 296 | 128.00 | 1093 | 175.00 | 15000 |
| 52.00 | 816 | 84.00 | 308 | 129.00 | 497 | 176.00 | 192832 |
| 53.00 | 229 | 85.00 | 501 | 130.00 | 942 | 177.00 | 12228 |
| 54.00 | 87 | 86.00 | 188 | 131.00 | 448 | 178.00 | 495 |
| 55.00 | 1021 | 87.00 | 9638 | 133.00 | 248 | 191.00 | 1 |
| 56.00 | 4215 | 88.00 | 9003 | 134.00 | 203 | 193.00 | 466 |
| 57.00 | 9232 | 89.00 | 255 | 135.00 | 794 | 207.00 | 2672 |
| 58.00 | 321 | 91.00 | 1156 | 136.00 | 97 | 208.00 | 458 |
| 60.00 | 2521 | 92.00 | 8019 | 137.00 | 627 | 209.00 | 251 |
| 61.00 | 12078 | 93.00 | 11950 | 140.00 | 190 | 253.00 | 237 |
| 62.00 | 12412 | 94.00 | 31944 | 141.00 | 2915 | 281.00 | 272 |
| 63.00 | 9686 | 95.00 | 260864 | 142.00 | 501 | 282.00 | 219 |
| 64.00 | 1064 | 96.00 | 17600 | 143.00 | 3336 | | |
| 65.00 | 1029 | 97.00 | 668 | 144.00 | 99 | | |
| 67.00 | 757 | 98.00 | 101 | 145.00 | 457 | | |
| 68.00 | 27288 | 103.00 | 388 | 146.00 | 371 | | |

## b. Blank Data

Arranged by type of blank (method, storage, instrument) in chronological order, by instrument. Shall include:

- Tabulated Results (Form I, VOA-1, VOA-2, VOA-SIM)

- Tentatively Identified Compounds (Form I VOA-TIC)

- Reconstructed Ion Chromatogram and quantitation report.

- Target compound spectra with lab-generated standard spectra.

- Quantitation/Calculation of TIC concentrations.

- GC/MS library search spectra for TICs.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKFS

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0092101-BLK1

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 0092101-BLK1R91.d

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/L | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 75-09-2 | Methylene chloride | 5.0 | U |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 79-01-6 | Trichloroethene | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLKFS

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 0092101-BLK1

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 0092101-BLK1R91.d

Level: (TRACE or LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

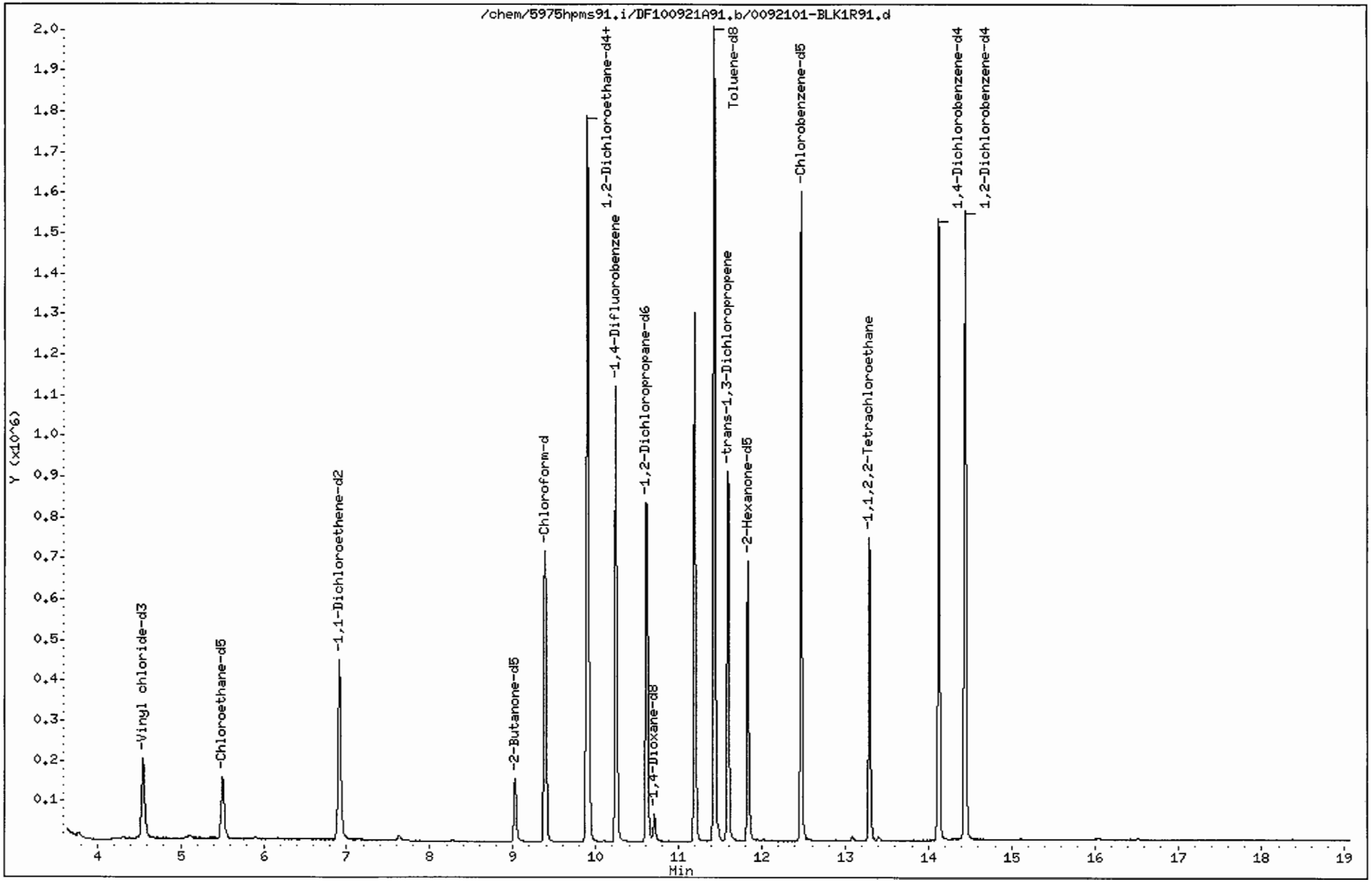
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Data File: /chem/5975hpms91.i/DF100921A91.b/0092101-BLK1R91.d
Date : 21-SEP-2010 09:22
Client ID: VBLKFS
Sample Info: 0092101-BLK1:STM
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: STM
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DF100921A91.b/0092101-BLK1R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/0092101-BLK1R91.d
Lab Smp Id: 0092101-BLK1 Client Smp ID: VBLKFS
Inj Date : 21-SEP-2010 09:22
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 0092101-BLK1:STM
Misc Info : VBLKFS
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 745406 | 250.000 | |
| * 2 Chlorobenzene-d5 | 117 | 12.470 | 12.470 | (1.000) | 756112 | 250.000 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 14.122 | 14.123 | (1.000) | 391179 | 250.000 | |
| $ 4 Vinyl chloride-d3 | 65 | 4.545 | 4.551 | (0.444) | 302951 | 226.194 | 45.2388 |
| $ 5 Chloroethane-d5 | 69 | 5.502 | 5.502 | (0.537) | 206948 | 231.135 | 46.2270 |
| $ 6 1,1-Dichloroethene-d2 | 63 | 6.910 | 6.917 | (0.675) | 399269 | 177.869 | 35.5739 |
| $ 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 172659 | 386.868 | 77.3737 |
| $ 8 Chloroform-d | 84 | 9.386 | 9.386 | (0.916) | 598496 | 208.050 | 41.6099 |
| $ 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 385015 | 219.633 | 43.9267 |
| $ 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 1193561 | 235.964 | 47.1929 |
| $ 11 1,2-Dichloropropane-d6 | 67 | 10.617 | 10.611 | (0.851) | 334287 | 229.308 | 45.8616 |
| $ 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 1135902 | 236.886 | 47.3771 |
| $ 13 trans-1,3-Dichloropropene-d4 | 79 | 11.592 | 11.593 | (0.930) | 426087 | 221.809 | 44.3618 |
| $ 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 179338 | 434.239 | 86.8478 |
| $ 15 1,4-Dioxane-d8 | 96 | 10.709 | 10.702 | (1.045) | 39245 | 3076.68 | 615.337 |
| $ 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 352203 | 199.856 | 39.9711 |

Am 9-28-10

Data File: /chem/5975hpms91.i/DF100921A91.b/0092101-BLK1R91.d
Report Date: 28-Sep-2010 12:07

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.446 | 14.446 | (1.023) | 414067 | 239.731 | 47.9462 |
| 18 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 20 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 22 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 24 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 29 Methylene chloride | 84 | Compound Not Detected. | | | | | |
| 30 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 33 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 40 Benzene | 78 | Compound Not Detected. | | | | | |
| 41 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 43 Trichloroethene | 95 | Compound Not Detected. | | | | | |
| 45 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 56 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 65 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |

Data File: /chem/5975hpms91.i/DF100921A91.b/0092101-BLK1R91.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/0092101-BLK1R91.d
Lab Smp Id: 0092101-BLK1 Client Smp ID: VBLKFS
Inj Date : 21-SEP-2010 09:22
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 0092101-BLK1:STM
Misc Info : VBLKFS
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLKXF

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-08

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-0891.d

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/L | Q |
|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 75-01-4 | Vinyl chloride | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 75-09-2 | Methylene chloride | 1.6 | J |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |
| 79-01-6 | Trichloroethene | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |

Report 1,4-Dioxane for Low-Medium VOA analysis only

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VHBLKXF

Lab Name: COMPUCHEM Contract: WATAUGA COUNTY

Lab Code: LIBRTY Case No.: 1009181 Mod. Ref No.: SDG No.: 1009181

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: 1009181-08

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: 1009181-0891.d

Level: (TRACE or LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/21/2010

GC Column: SPB-624 ID: 0.32 (mm) Dilution Factor: 1.0

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

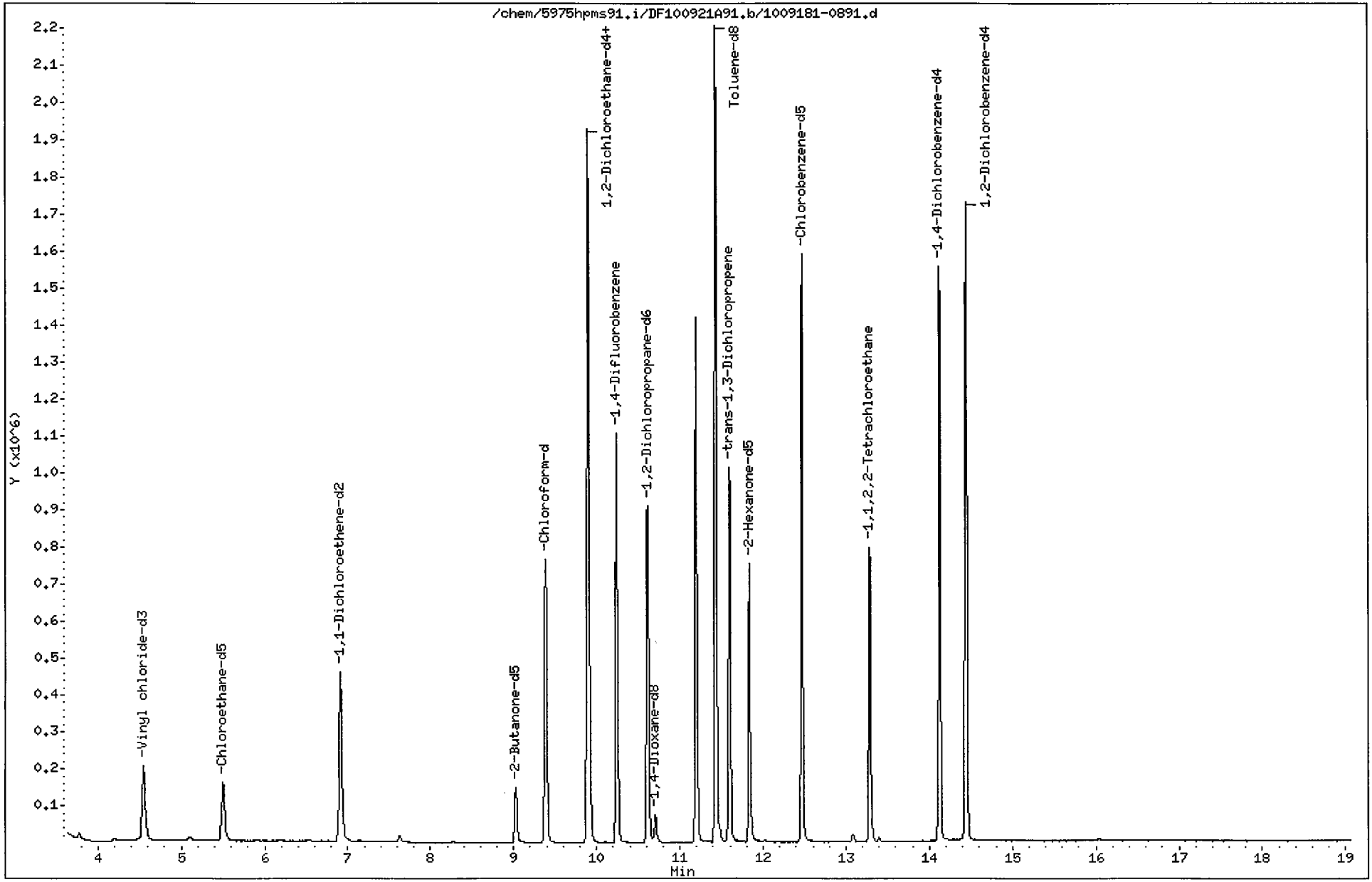
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 5.0 (mL)

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| | E966796[1] | Total Alkanes | N/A | | |

[1]EPA-designated Registry Number.

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-0891.d
Date : 21-SEP-2010 13:48
Client ID: VHBLKXF
Sample Info: 1009181-08:STM
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5975hpms91.i
Operator: STM
Column diameter: 0.32



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-0891.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-0891.d
Lab Smp Id: 1009181-08 Client Smp ID: VHBLKXF
Inj Date : 21-SEP-2010 13:48
Operator : STM Inst ID: 5975hpms91.i
Smp Info : 1009181-08:STM
Misc Info : VHBLKXF
Comment :
Method : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem Quant Type: ISTD
Cal Date : 21-SEP-2010 01:12 Cal File: 0I20018-CAL5.d
Als bottle: 12 QC Sample: STORAGEBLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Watauga.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

| Name | Value | Description |
|---|---|---|
| DF | 1.00000 | Dilution Factor |
| Vo | 5.00000 | Sample Volume purged (mL) |
| DF | 1.00000 | |

Cpnd Variable Local Compound Variable

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| * 1 1,4-Difluorobenzene | 114 | 10.245 | 10.245 | (1.000) | 722672 | 250.000 | |
| 2 Chlorobenzene-d5 | 117 | 12.470 | 12.470 | (1.000) | 742952 | 250.000 | |
| 3 1,4-Dichlorobenzene-d4 | 152 | 14.122 | 14.123 | (1.000) | 388075 | 250.000 | |
| 4 Vinyl chloride-d3 | 65 | 4.545 | 4.551 | (0.444) | 314038 | 241.848 | 48.3696 |
| 5 Chloroethane-d5 | 69 | 5.502 | 5.502 | (0.537) | 215636 | 248.415 | 49.6830 |
| 6 1,1-Dichloroethene-d2 | 63 | 6.910 | 6.917 | (0.675) | 415023 | 190.704 | 38.1408 |
| 7 2-Butanone-d5 | 46 | 9.026 | 9.026 | (0.881) | 168267 | 388.888 | 77.7776 |
| 8 Chloroform-d | 84 | 9.386 | 9.386 | (0.916) | 638443 | 228.918 | 45.7835 |
| 9 1,2-Dichloroethane-d4 | 65 | 9.892 | 9.892 | (0.965) | 410575 | 241.582 | 48.3164 |
| 10 Benzene-d6 | 84 | 9.904 | 9.904 | (0.794) | 1282102 | 257.959 | 51.5917 |
| 11 1,2-Dichloropropane-d6 | 67 | 10.617 | 10.611 | (0.851) | 354018 | 247.144 | 49.4288 |
| 12 Toluene-d8 | 98 | 11.428 | 11.428 | (0.916) | 1232426 | 261.568 | 52.3135 |
| 13 trans-1,3-Dichloropropene-d4 | 79 | 11.592 | 11.593 | (0.930) | 467797 | 247.835 | 49.5671 |
| 14 2-Hexanone-d5 | 63 | 11.830 | 11.830 | (0.949) | 198542 | 489.254 | 97.8507 |
| 15 1,4-Dioxane-d8 | 96 | 10.708 | 10.702 | (1.045) | 43440 | 3512.69 | 702.538 |
| 16 1,1,2,2-Tetrachloroethane-d2 | 84 | 13.287 | 13.287 | (1.065) | 385668 | 222.722 | 44.5443 |

Sm 9-28-10

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-0891.d
Report Date: 28-Sep-2010 12:07

| Compounds | QUANT SIG MASS | RT | EXP RT | REL RT | RESPONSE | CONCENTRATIONS ON-COLUMN ( ng) | FINAL ( ug/L) |
|---|---|---|---|---|---|---|---|
| $ 17 1,2-Dichlorobenzene-d4 | 152 | 14.439 | 14.446 | (1.022) | 466147 | 272.042 | 54.4085 |
| 18 Dichlorodifluoromethane | 85 | Compound Not Detected. | | | | | |
| 20 Vinyl chloride | 62 | Compound Not Detected. | | | | | |
| 22 Chloroethane | 64 | Compound Not Detected. | | | | | |
| 24 1,1-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 29 Methylene chloride | 84 | 7.624 | 7.630 | (0.744) | 7159 | 7.82382 | 1.56476(a) |
| 30 trans-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 32 1,1-Dichloroethane | 63 | Compound Not Detected. | | | | | |
| 33 cis-1,2-Dichloroethene | 96 | Compound Not Detected. | | | | | |
| 37 1,1,1-Trichloroethane | 97 | Compound Not Detected. | | | | | |
| 40 Benzene | 78 | Compound Not Detected. | | | | | |
| 41 1,2-Dichloroethane | 62 | Compound Not Detected. | | | | | |
| 43 Trichloroethene | 95 | Compound Not Detected. | | | | | |
| 45 1,2-Dichloropropane | 63 | Compound Not Detected. | | | | | |
| 52 Tetrachloroethene | 164 | Compound Not Detected. | | | | | |
| 56 Chlorobenzene | 112 | Compound Not Detected. | | | | | |
| 65 1,4-Dichlorobenzene | 146 | Compound Not Detected. | | | | | |

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-0891.d

Date : 21-SEP-2010 13:48

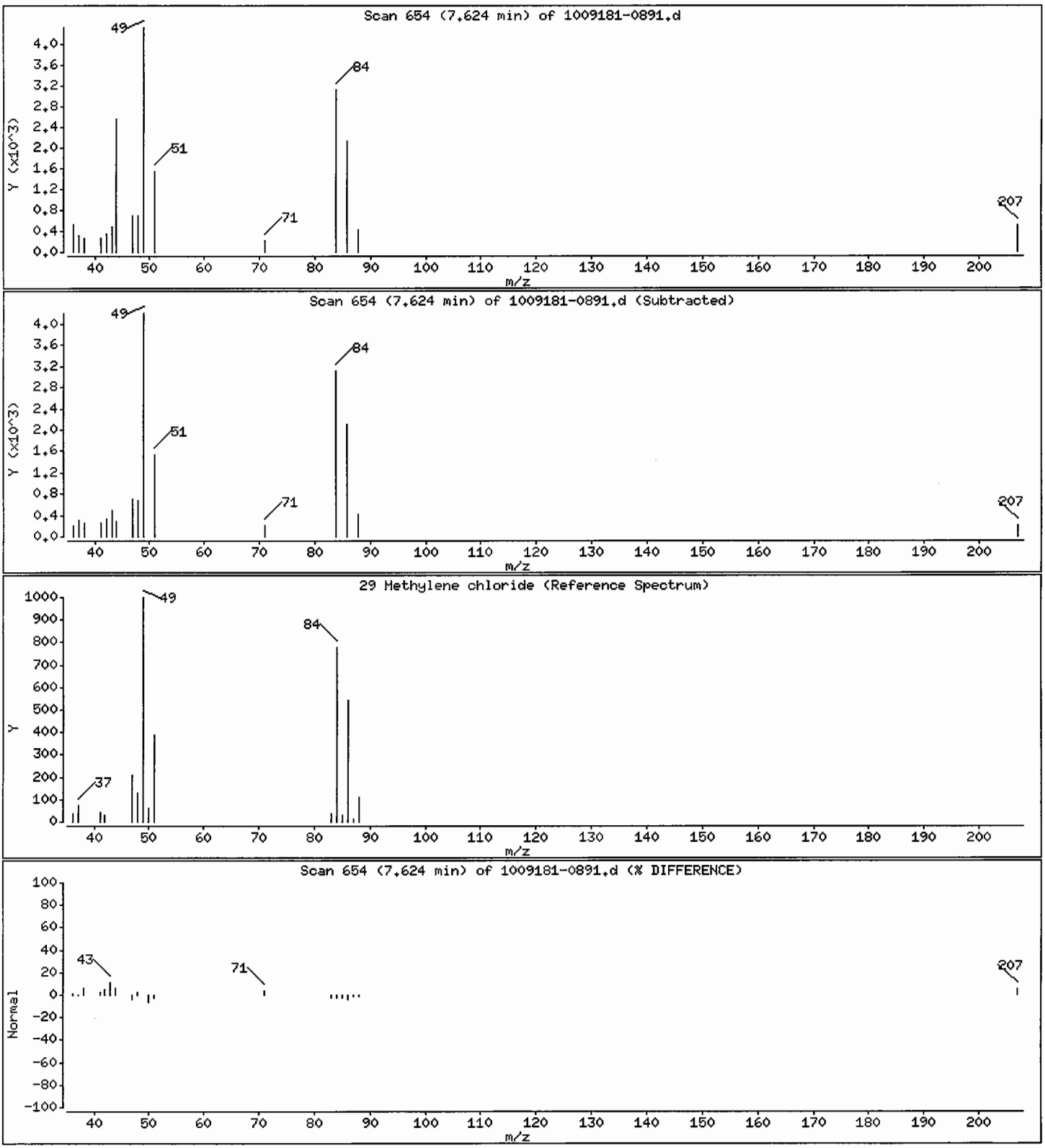
Client ID: VHBLKXF | Instrument: 5975hpms91.i

Sample Info: 1009181-08:STM

Purge Volume: 5.0 | Operator: STM

Column phase: SPB-624 | Column diameter: 0.32

29 Methylene chloride | Concentration: 1.56476 ug/L



Data File: /chem/5975hpms91.i/DF100921A91.b/1009181-0891.d
Report Date: 28-Sep-2010 12:07

CompuChem

SOM1.2 QUANT AND RATIO REPORT

```
Data file : /chem/5975hpms91.i/DF100921A91.b/1009181-0891.d
Lab Smp Id: 1009181-08                    Client Smp ID: VHBLKXF
Inj Date  : 21-SEP-2010 13:48
Operator  : STM                           Inst ID: 5975hpms91.i
Smp Info  : 1009181-08:STM
Misc Info : VHBLKXF
Comment   :
Method    : /chem/5975hpms91.i/DF100921A91.b/SOM01.2_WATERv2.m
Meth Date : 28-Sep-2010 11:10 smitchem    Quant Type: ISTD
Cal Date  : 21-SEP-2010 01:12             Cal File: 0I20018-CAL5.d
Als bottle: 12                            QC Sample: STORAGEBLANK
Dil Factor: 1.00000
Integrator: HP RTE                        Compound Sublist: Watauga.sub
Target Version:  3.50
```

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

## c. Matrix Spike Data

- Tabulated Results (Form I, VOA-1, VOA-2)

- Reconstructed Ion Chromatogram and quantitation report

## d. Matrix Spike Duplicate Data

- Tabulated Results (Form I, VOA-1, VOA-2)

- Reconstructed Ion Chromatogram and quantitation report